

Determinants of Perceived Service Quality: An Empirical Investigation of Fitness and Recreational Facilities

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ABSTRACT

This study investigates fitness and recreational services using a quantitative approach. The findings of this study help property developers gain a better insight into facility management services and product offerings to improve customer experience. A critical review of literature focused on physical environment quality, outcome quality, and interaction quality from a consumer's perspective. The quantitative study was based on a survey conducted with a sample of 75 respondents using a structured questionnaire. The results of this study enhance our understanding of the service quality dimensions with reference to recreational services provided in large residential areas of premium properties, which have a significant effect on purchase intention of consumers.

Keywords: Properties, Recreational Facilities, Service Quality

INTRODUCTION

Housing has an important role in the economic growth of Hong Kong. The rapidly changing business-operating environment and the increasing demand of customers on the product quality have alerted product marketers to place a bigger focus on these factors to better understand the customers' attitudes toward purchase behavior. In a highly competitive property market, property developers need to

improve product offering and related values to attract customers. Therefore, residential property developers are required to understand the customers' preferences and identify the determinants of perceived service quality. Amongst the various value-adding activities, facility management services include health club and fitness services along with recreational and maintenance services. Residents are likely to have direct experience with these services. Therefore, they may have a significant effect on customers' perceptions of premium facility services.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This study aimed to identify various factors that determine the service quality of facility management and recreational services in large residential complexes. The proposed research model incorporates a multidimensional model adapted from Ko and Pastore (2005) for evaluating the service quality of recreational facilities. The research model includes various dimensions of the three-component model proposed by Rust and Oliver (1994). It comprises three primary dimensions, namely interaction quality, outcome quality, and physical environment quality. In Hong Kong, premium properties are often defined as residential complexes that include premium services in facility management. These include health club, fitness centre, and recreational facilities. Consumer perception of service quality is an important factor that distinguishes premium properties in Hong Kong. Therefore, this study incorporates the outcome quality, interaction quality, and several sub-dimensions of physical environment quality in the research model. The multidimensional conceptual model proposed in this study provides a useful tool to evaluate the various dimensions of service quality. The proposed research model addresses the specific aspects of recreational facilities, and it can be applied effectively in various environments.

Physical Environment Quality

Premium fitness and recreational facilities are 'add-on' facilities that are constructed to enhance consumer experience with their living environment. Therefore, it is important to study the service quality that these environments offer to meet customer expectations. Ambience represents the first sub-dimension of the physical environment quality. It covers various components of a facility service, including lighting, music, decors, color, and even fragrance. These elements are essential in enhancing the overall service quality provided by facility management (Krishna Reddy & Suresh Reddy, 2012). According to Clemes et al. (2010), the physical environment, including ambient conditions of the recreational facilities, influence service quality. Thus, it is also important to investigate the ambient conditions of the

physical environment to understand consumer adoption of various services and products. Facility design is the second sub-dimension of the physical environment quality. Facility design includes the layout and architecture of the fitness and recreational facilities. It also includes the practical aspects of the functions of these facilities. Design also includes the aesthetic components that would be visually appealing to consumers (Bitner, 1992; Brady & Cronin Jr, 2001). Facility design is also one of the important elements of service setting (Bitner, 1992) that affects overall perceptions of service quality. Braddy and Cronin (2001) included facility design as a major component of the hierarchical model to measure physical environment quality. They also proposed that facility design has a significant influence on the perception of overall service quality of the service encounter. Facilities that are constructed to serve the residents of premium properties, including fitness centers and recreational facilities, comprise the last component of physical environment quality. According to Bitner (1992) and Clemes et al. (2010), these elements have a significant influence on the overall perception of service quality. Based on the above arguments, we therefore proposed the following hypotheses:

- H1: Ambient condition will be positively associated with overall service quality perceptions.
- H2: Facility design will be positively associated with overall service quality perceptions.
- H3: Fitness and recreational facilities will be positively associated with overall service quality perceptions.

Interaction Quality

Sports and recreational facilities provide services delivered through client-employee interactions. They represent 'how' these services are provided through the service delivery process. Since the delivery of these service facilities cannot be fully automated, they are often delivered through client-employee interactions in the service delivery process. Brady and Cronin (2001) included interaction quality as one of the major dimensions in a hierarchical model designed to measure service quality. They evaluated the interaction quality in terms of attitude, behavior, and expertise of the front-end staff to deliver the service. The importance of the process dimension of service facilities has been well researched in the service quality literature through the investigation of the SERVQUAL model (Parasuraman, Zeithaml, & Berry, 1985). In this study, interaction quality is measured through the expertise and behavior of front-end staff (Ko & Pastore, 2005). For service delivery relating to sports and recreational facilities, knowledge and behavior of customer-contact staff are important for enhancing the interaction quality of service

delivery. Therefore, we proposed the following hypothesis:

H4: Interaction quality will be positively associated with overall service quality perceptions.

Outcome Quality

Outcome quality relates to the technical quality provided by the service provider. It indicates 'what' the consumers actually receive or gain from the service, and it is the outcome of the service encounter. The concept has been defined as a major dimension of service quality (Brady & Cronin Jr, 2001; Ko & Pastore, 2005). Fitness and recreation facilities enhance the living experience of the residents and provide recreational amenities to enhance the physical ability of the residents. Fournier (1998) demonstrated that if a product is able to meet the quality expectation of a consumer, it would produce psychological associations with the product, enhancing the overall service quality perceptions. Therefore, the resulting hypothesis is as follows:

H5: Outcome quality will be positively associated with overall service quality perceptions.

Purchase Intention

Purchase intention comes from consumers' perception of the benefits obtained from the service encounter. Lee et al. (2011) considered service quality of fitness and sport facilities as one of the contributing factors that affect purchase intention, and various researchers supported this view. Therefore, the following hypothesis is proposed:

H6: Overall service quality perceptions will be positively associated with purchase intention.

RESEARCH FRAMEWORK

The research framework proposed this study is depicted in Figure 1. It identifies the relationship among interaction quality, outcome quality, the three dimensions of physical environment quality, overall service quality perception, and purchase intention.

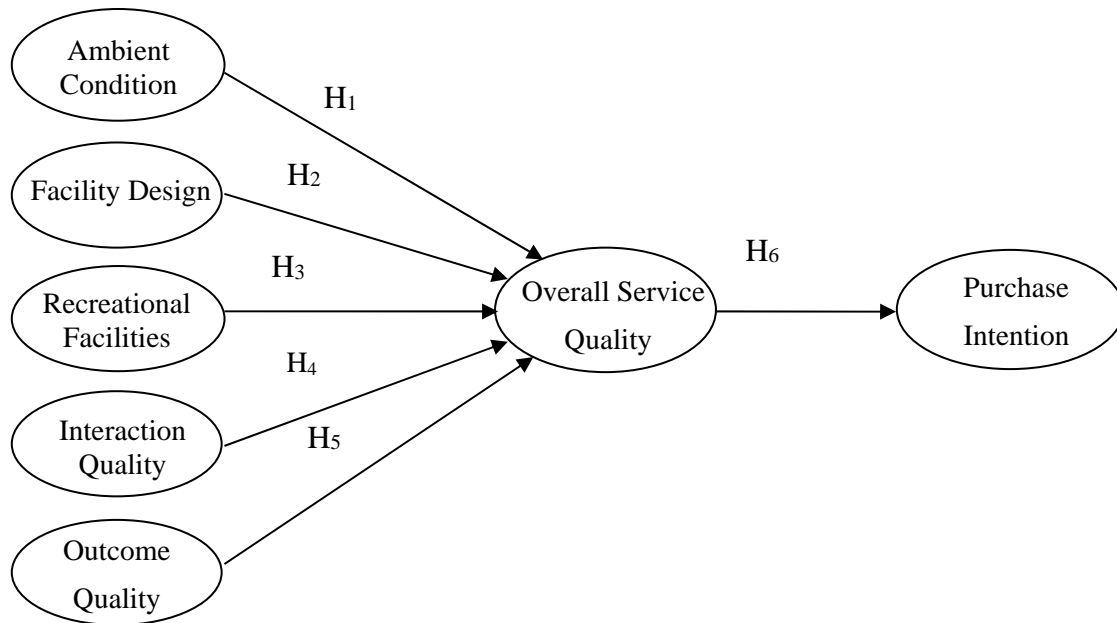


Figure 1 The Research Framework

RESEARCH METHOD AND DATA ANALYSIS

The study was conducted in a residential complex of a property developer in Hong Kong with the purpose to understand the various factors of service quality of facility management and recreational services in large residential complexes and their effects on customer perceived service quality. This research employed a quantitative approach using a structured questionnaire. The questionnaire items were measured on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). A purposive sampling approach was adopted to collect the data. Overall, 75 completed questionnaires were collected from the respondents, and the SmartPLS statistical package was employed to analyze the data. The data collected were used to investigate the relationship among the various dimensions of service quality and purchase intention.

The structural model was assessed using variance explained (the R^2 value), the structural paths, and t-statistics. The significances of the paths were confirmed utilizing a bootstrap re-sampling procedure with 75 cases and 1000 bootstrap re-samples. The hypotheses presented in the model were examined using the PLS method to test the path significance in terms of the paths coefficients and the variance explained (R^2) by each path.

Table 1 The Path Coefficients

Path	β	t	Sig.	R ²	Hypotheses Supported
H_1 : Ambient Condition \rightarrow Overall Service Quality	0.05	0.40			No
H_2 : Facility Design Quality \rightarrow Overall Service Quality	0.27	3.04	**		Yes
H_3 : Recreational Facilities \rightarrow Overall Service Quality	0.32	2.18	*	0.54	Yes
H_4 : Interaction Quality \rightarrow Overall Service Quality	0.53	4.45	***		Yes
H_5 : Outcome Quality \rightarrow Overall Service Quality	0.35	2.28	*		Yes
H_6 : Overall Service Quality \rightarrow Purchase Intention	0.63	7.56	***	0.39	Yes

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 1 shows the path coefficients. The research results showed that five out of the six paths in the research model showed a significant relationship. Overall, facility design, recreational facilities, customer-employee interaction quality, and outcome quality predicted overall service quality, accounting for 54% ($R^2 = 0.54$) of the variance in overall service quality. Therefore, H_2 , H_3 , H_4 , and H_5 were supported. The overall service quality predicted purchase intention, and the perception of overall service quality explained 39% ($R^2 = 0.39$) of the variance in purchase intention. Therefore, H_6 was supported. According to the results, client-employee interaction quality had the highest effect on overall service quality perceptions ($\beta = 0.53$, $p < 0.001$). However, the ambient condition of the service facilities did not show a significant influence on overall service quality; thus, H_1 was not supported.

CONCLUSIONS

This paper proposes a research model to conceptualize the various factors affecting the service quality perceptions. The research model was designed to address the specific aspects of fitness and recreational services. The constructs in the research model were adopted from the literature by considering various conceptualizations of service quality, including the research models adapted from Parasuraman et al. (1985), Bitner (1992), Rust and Oliver (1994), Clemes et al. (2010), and Ko and Pastore (2005). A quantitative study was used to validate the proposed research model. The results supported the validity of a research model comprising interaction, outcome, and physical environment quality for the fitness and recreational segment, echoing Ko and Pastore's (2005) arguments for applying a multi-dimensional model in such environments. As the client-employee interaction quality was found to be the major factor affecting overall service quality, future studies could incorporate other factors

from the SERVQUAL model (Parasuraman et al., 1985) and other dimensions to investigate interaction quality in the research model.

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