

Yeh's Satisfaction Index Modelling of Tenants in Rental Apartments: A Case Study of Latifabad, Hyderabad

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Abstract:

The population of urban areas has been rapidly growing over the last few decades. This has increased the housing demand including rental apartments in Pakistan. Although the satisfaction of tenant accommodated in an apartment is a big challenge. There are also many problems like income and affordability, lack of building bylaws for those tenants. This study finds the satisfaction level of the tenant living in apartments. A standardized closed-ended questionnaire survey was used to collect the data. The analysis was done in two parts: (1) analysis of frequency ranking of all amenities, services, and facility types, (2) Yeh's satisfaction index model to find the satisfaction level of tenants toward particular amenity, service, or facility. Findings revealed issues like; water supply, ventilation, sunlight, age of apartment, electricity, improper cleaning, insufficient parking, minimum play area, isolation, over rent, price of services, maintenance, and management, suffocation, congestion, etc. This result implies that rents are more likely to base be on provided amenities rather than on unit size which reconfirms that rent is driven by provided amenities.

Keywords: Yeh's satisfaction index; amenities; services; rent.

1. Introduction

The population of urban areas has been growing at a rapid scale from the last few decades, and it is expected that about 60% world population will live in cities by 2050 so that the housing demand increasing including rental apartments [1]. Public rental accommodation is viewed as an important aspect of the overheated real estate industry in addressing housing issues. At the end of 2016, the initiative has helped a total of 11.3 million households with housing problems, and their housing conditions had changed dramatically [2]. In developing nations, typical central areas of urban centers are notorious for low housing standards and a declining community

climate. There is however a lack of observational research on the degree to which inhabitants of such regions are satisfied with their housing conditions [3]. The prevalence of inadequate housing conditions not only impacts the quality of life of people but also threatens the pursuit of the aim of "sufficient housing for all" [4]. The events of recent years have made renter apartments more critical because of observing that rental is a big deal, this is because many households that were foreclosed upon have been forced to move into rental apartments. For mobile people that don't wish up-to-date the fixed prices of owning and busy people that don't want up-to-date the management price of owning, a rental apartment is a fundamental choice [5]. A

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people satisfaction survey helped measure the quality of housing according to its technological and practical criteria, as well as the degree of partnership between consumers and contractors/builders [6]. Investors widely use rental yields, central bankers, researchers, and policymakers to assess and detect disorders in apartment markets [7]. Also, external factors such as traffic congestion, proximity to work, and access to public transportation may have significant impacts on rent [8, 9]. Research measuring the effect of these factors on apartment rent should have essential implications for anyone setting rents, controlling vacancies, marketing apartment projects, and designing and planning new apartment housing [8]. Therefore, the identification of determinants of this satisfaction has become an important consideration for service assessment in recent years for managers and practitioners in their studies [10, 11]. Satisfaction with the level of service quality offered by the service providers is expected. This is determined by the combined knowledge of a tenant in all points of communication with the business [12]. According to R. Negi, service providers must understand which added value and satisfaction attributes of the service can only meet minimal requirements and mitigate dissatisfaction [13].

A field survey is conducted to find ethnic discrimination in a rental apartment. Such a field survey has made use of personal approaches. Generally, two testers are matched and trained so that they make equivalent inquiries when speaking to renters in their apartments [14]. This method is used by researchers in this research to conduct the survey related to measuring apartment rent, services, and amenities such as utilities, maid services, and location facilities. Susilawati's research in 2002 highlighted the need to identify satisfaction for tenants to match the success of the organization [15-20]. Leader happiness conceptualizes human perception of a certain service meeting as an interactional means. Tenant depends on the awareness of

service providers and the performance of the service equally [21, 22]. Furthermore, fulfillment on the part of the occupant by finishing a commercial tenancy value or cost and benefits review [23]. According to Amérigo and J. I. Aragonés find the satisfaction behavior of tenants toward particular amenity or services by using the satisfaction index method given by Yeh's with the help of a questionnaire within the study area [21, 24-27].

2. Methodology

2.1. Study Area

Hyderabad city is comprised of three Talukas. For this study, the researcher has selected Latifabad Taluka as a case study area. As per the 2017 population census, the population of Hyderabad is 1,732,693 in which Latifabad Taluka contains 672,504. The Latifabad Taluka is distributed in 12 zones, which are commonly called Units. The study had collected data from the tenants residing in 6 and 7 Units (zones) of Latifabad Taluka. The purpose of selecting these two units was that half of the population of 6 and 7 Units are living in the apartments.

2.2. Methods for Data Collection

Researchers used the primary data collection method where they conducted the questionnaire survey from the tenants of Latifabad Unit 6 and Unit 7. The sample consists of 384 individuals/Apartments by using cluster sampling techniques from various parts of Latifabad using different focus groups. The sample is selected about the existing situation of tenants residing over different areas of Latifabad. The purpose of the study is to know the satisfaction level of tenants in a rental apartment for this researcher has taken 15% of all samples 384, which is 58 to know the satisfaction level of tenants from different areas, through the Cluster sampling technique [28-30].

2.3 Methods for Data Analysis

The collected data was analyzed through Microsoft Excel and Yeh's satisfaction index Model. Microsoft Excel helps to obtain the frequencies that determine the number of responses on the given variables based on the existing condition of apartments in Latifabad Unit 6 and 7 that show either respondents were satisfied with the existing condition or not. Whereas Yeh's Satisfaction index is also a very helpful tool that is used to highlight the level of satisfaction and dissatisfaction.

2.3.1 Satisfaction Index Method

In this research work, researchers used the satisfaction index model of Kyle and Baird (1995) to analyze the satisfaction level of respondents regarding rent payment, amenities, and services while living in rental apartments by using the satisfaction index method given by Yeh's [17] with the help of a questionnaire within the study area.

$$YSI = \frac{\text{Satisfied} - \text{Dissatisfied}}{\text{total respondents}} \times 100$$

YSI = Yeh's satisfaction Index

Through this formula, the researcher is come to know about the satisfaction level of tenants regarding apartment rent, amenities, and services

By using this Index researcher obtained numerical values which may be positive or negative or zero, these positive and negative or zero values may show that there is no satisfaction if the answer comes under 0 or it may show minimum, moderate, or strong satisfaction if the answer comes under 25% or 50% or 75%. Similarly, if the answers come under negative values such as -25%, -50%, or -75% then it will come under minimum dissatisfaction, moderate dissatisfaction or strong dissatisfaction and so on that will help the researcher to decide that how much response is satisfying or dissatisfying based on following criteria as mentioned in Table I:

TABLE I. Shows the criteria for the satisfaction and dissatisfaction level of tenants

S. No.	Criteria for Satisfaction and Dissatisfaction level of tenants	
	Percentages	Level of satisfaction and dissatisfaction
01	0	No satisfaction/dissatisfaction
02	0.25 or 25%	Minimum satisfaction
03	0.50 or 50%	Moderate satisfaction
04	0.75 or 75%	Strong satisfaction
05	0.90> or 90% and above	Highly strong satisfaction
06	0	No satisfaction/dissatisfaction
07	-0.25 or -25%	Minimum dissatisfaction
08	-0.50 or -50%	Moderate dissatisfaction
09	-0.75 or -75%	Strong dissatisfaction
10	-0.90> or -90% and above	Highly strong dissatisfaction

3 Results

All the responses obtained from Latifabad Unit 6 and 7 are based on various research variables that are combined and presented in the form of tables and graphs.

Fig 1 shows that tenants who are residing in Latifabad Unit 6 are satisfied to some extent with the availability of basic services and amenities available to them but these tenants are not highly satisfied even they are paying rent and utility bills for the services available to them. Most of the responses related to the availability of hygienic services and ventilation the apartment shows that 45 respondents are satisfied and 15 are dissatisfied out 58, the question related to the condition of electricity shows that 48

respondents are satisfied and 10 are dissatisfied and services charges indicate that 48 responses are dissatisfied whereas 10 respondents are satisfied, satisfaction with the location of plaza shows that 11 respondents are dissatisfied and 47 are satisfied, and current rent payment shows that 37 respondents are not satisfied with the amount of rent whereas 21 responses showed there satisfaction.

Fig 2 shows the responses obtained from Latifabad Unit 7. Most of the responses indicate that tenants who are residing in Latifabad Unit 7 are not satisfied with the existing living condition and services and amenities available to them, they are paying more than they consume. Collected responses were based on the variables such as sufficient apartment area, availability of hygienic services, ventilation in the apartment, proper cleaning system, condition of electricity, availability of sufficient drinking water, satisfaction with the location plaza, sufficient parking space within the plaza, sufficient play area, overall beneficial area for the tenants, feeling of isolation in the apartment, available facilities in the apartment, services charges, hygienic services, quality of basic services, the safety of tenants in the apartment, benefits of the area and current rent payment. The responses related to these variables indicate that related to sufficient apartment area 50 respondents are satisfied and 8 respondents are dissatisfied, however, for the availability of hygienic services and ventilation in the apartment 45 respondents are dissatisfied and 15 are satisfied, condition of electricity and services charges shows 47 respondents are dissatisfied and 11 responses are satisfied out of 58. Similarly all the other responses on variables indicates that majority of tenants are not satisfied with their existing condition.

TABLE II shows the results in the form of percentages obtained from the tenants of

Latifabad Unit 6. The showed results are calculated through Yeh's Satisfaction Index which brings positive and negative values. With the help of these positive and negative values researchers come to know the satisfaction and dissatisfaction levels of tenants according to the criteria mentioned in Table 1. However, the calculations show that tenants are highly strong satisfaction with the apartment area, response related to the availability of hygienic services and ventilation in the apartment shows that tenants are moderately satisfied, related to proper cleaning system, availability of sufficient drinking water, sufficient parking space within the plaza, sufficient play area and quality of basic services shows that tenants are minimum satisfied. Tenants are strongly satisfied with the condition of electricity, satisfaction with the location of the plaza, overall beneficial area for the tenants, and services charges.

TABLE III shows the results in the form of percentages obtained from the tenants of Latifabad Unit 7. The showed results are calculated through Yeh's Satisfaction Index which brings positive and negative values. With the help of these positive and negative values researchers come to know the satisfaction and dissatisfaction levels of tenants according to the criteria mentioned in Table 1. However, the calculations show that tenants are highly strongly satisfied with the apartment area, response related to the availability of hygienic services and ventilation in the apartment shows that tenants are moderately dissatisfied, related to proper cleaning system, availability of sufficient drinking water, sufficient parking space within the plaza, sufficient play area and quality of basic services, shows that tenants have minimum dissatisfaction.

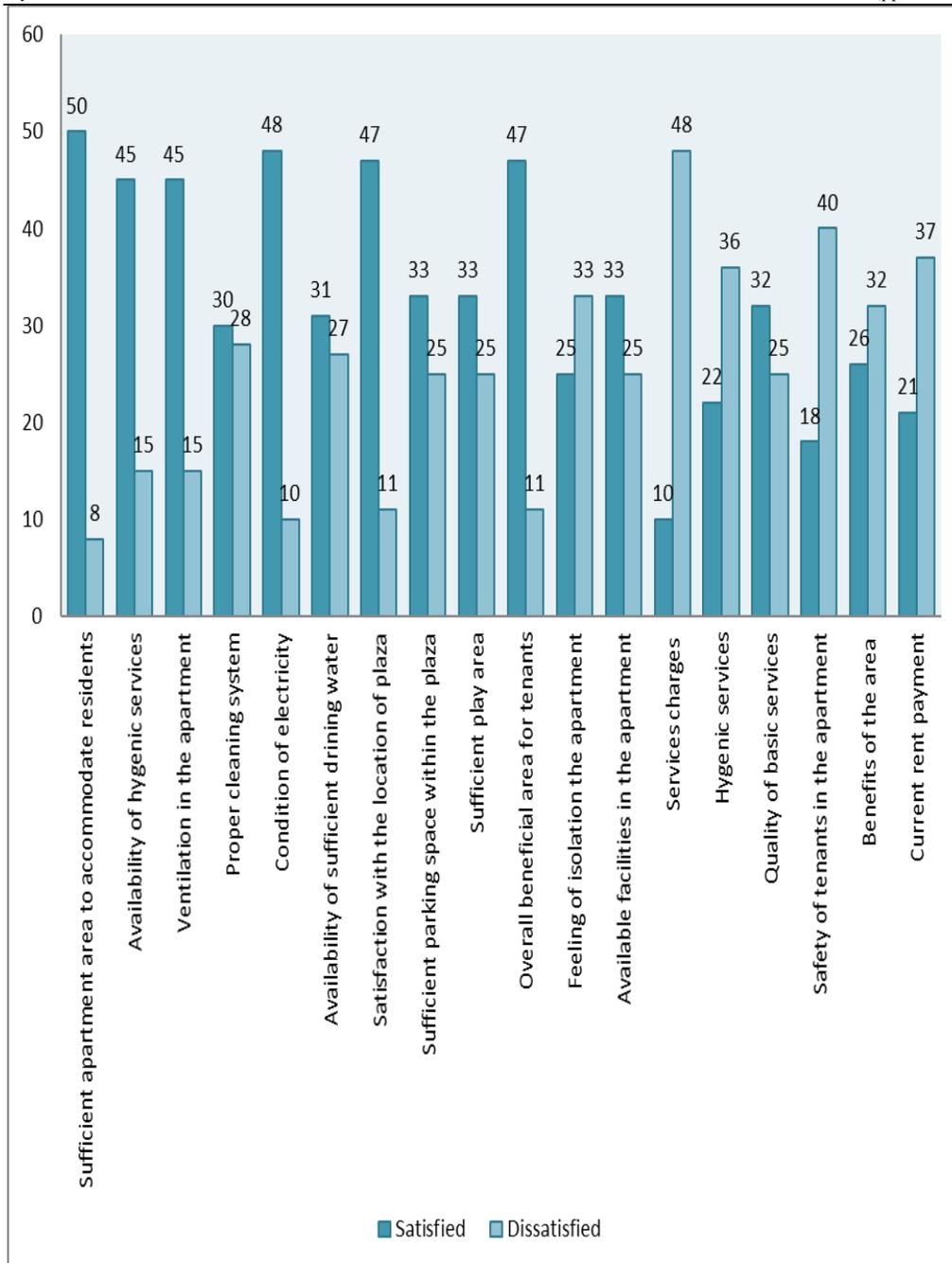


Fig. 1. Shows the satisfaction and dissatisfaction level of tenants residing in Latifabad Unit # 6

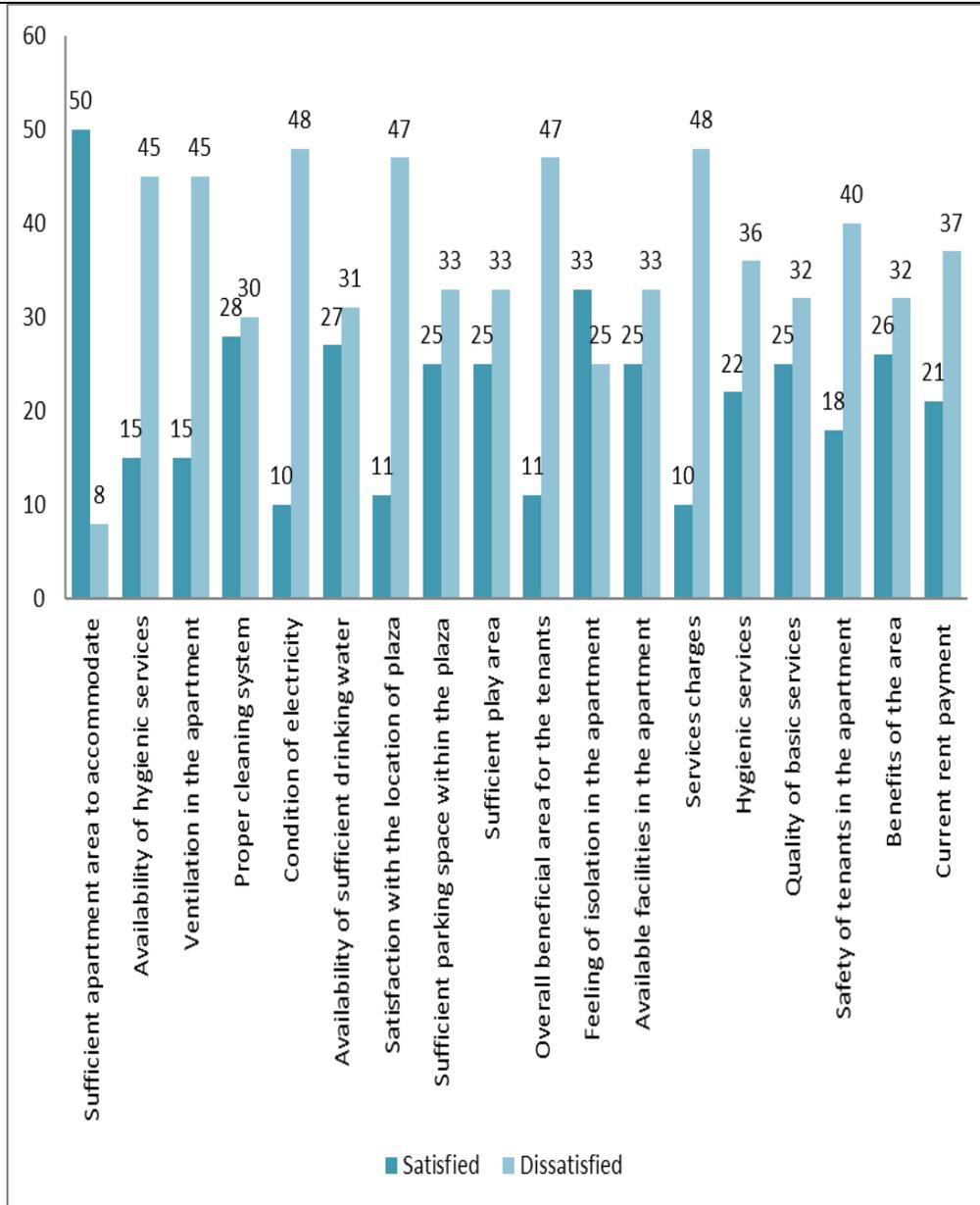


Fig. 2 Shows the satisfaction and dissatisfaction level of tenants residing in Latifabad Unit 7

TABLE III shows the results in the form of percentages obtained from the tenants of Latifabad Unit 7. The showed results are calculated through Yeh's Satisfaction Index which brings positive and negative values. With the help of these positive and negative values researchers come to know the satisfaction and dissatisfaction levels of tenants according to the criteria mentioned in Table 1.

TABLE II. Shows the Satisfaction and Dissatisfaction level of tenants residing in Latifabad Unit 6

Variables	Satisfaction and Dissatisfaction level determined through Yeh's Satisfaction Index	
	Satisfy	Dissatisfy
Sufficient apartment area to accommodate	72%	
Availability of hygienic services	51.72%	
Ventilation in the apartment	51.72%	
Proper cleaning system	3.44%	
Condition of electricity	65.5%	
Availability of sufficient drinking water	6.9%	
Satisfaction with the location of the plaza	62%	
Sufficient parking space within the plaza	13.79%	
Sufficient play area	13.79%	
Overall beneficial area for the tenants	62%	
The feeling of isolation in the apartment		-13.79%
Available facilities in the apartment		-13.79%
Services charges	65.5%	
Hygienic services		-24.14%
Quality of basic services	12.6%	
Safety of tenants in the apartment		-37.9%
Benefits of the area	10.34%	
Current rent payment		-27.58%

TABLE III. Shows the Satisfaction and Dissatisfaction level of tenants in Latifabad Unit 7

Variables	Satisfaction and Dissatisfaction level determined through Yeh's Satisfaction Index	
	Satisfy	Dissatisfy
Sufficient apartment area to accommodate	72%	
Availability of hygienic services		-51.72%
Ventilation in the apartment		51.72%
Proper cleaning system		-3.44%
Condition of electricity		-65.5%
Availability of sufficient drinking water		-6.89%
Satisfaction with the location of the plaza		-62.06%
Sufficient parking space within the plaza		-13.79%
Sufficient play area		-13.79%
Overall beneficial area for the tenants		-62.06%
The feeling of isolation in the apartment	13.79%	
Available facilities in the apartment		-13.79%
Services charges		-65.51%
Hygienic services		-24.13%
Quality of basic services		-13.79%
Safety of tenants in the apartment		-37.9%
Benefits of the area		-10.34%
Current rent payment		-27.58%

Table 1. However, the calculations show that tenants are highly strongly satisfied with the apartment area, response related to the availability of hygienic services and ventilation in the apartment shows that tenants are moderately dissatisfied, related to proper cleaning system, availability of sufficient drinking water, sufficient parking space within the plaza, sufficient play area and quality of basic services, shows that tenants have minimum dissatisfaction. Tenants are strongly dissatisfied with the condition of electricity, satisfaction with the location of the plaza, overall beneficial area for the tenants, and services charges. The results are calculated through Yeh's Satisfaction Index which indicates that most of the tenants are dissatisfied with the existing condition which is determined through the positive and negative values obtained through Yeh's Satisfaction Index and mentioned below in Table III.

4 Conclusion

This research aims to determine the satisfaction level of tenants in rental apartments based on data collected through the questionnaire on the selected site Latifabad unit 6 and 7 Hyderabad. Through which it has been derived that people who are living in rental apartments are mostly low and middle income that is migrated from rural areas for employment and education purposes. Due to their medium and low-income factor, they are not able to buy a home or get rented well-conditioned apartments through this factor they also did not have access to amenities and services. With the help of Yeh's satisfaction index, it has been concluded that people are not satisfied with the apartment rent and available basic services and amenities. Whereas the collected data also indicates that the satisfaction level of tenants living in Latifabad Unit 6 is much better than those who are living in the unit.

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