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RESIDENTS' PERCEPTION OF LIVABILITY: A CASE STUDY OF QUAID-E-AZAM TOWN (TOWNSHIP), LAHORE, PAKISTAN

Siddiqa Amin¹, Hafiza Saba Islam², Attiya Haseeb³, Atia Saleemi⁴

*^{1,2,3,4} Faculty of City and Regional Planning Department,
LAHORE COLLEGE FOR WOMEN UNIVERSITY, LAHORE*

Abstract

Livability is a concept that has various dimensions and is used to measure the Quality of Life (QOL). In the context of Pakistan, most of the cities/neighbourhoods are not planned to look like livable cities/neighbourhoods. Lahore, the capital of Punjab, was ranked at 199th position in 2015 as per Economist Intelligent Unit's (EIU) livability ranking. This research article focused on a planned neighbourhood (Quaid-e-Azam Town (Township) Scheme) to assess the perception of residents' regarding livability in their area. A framework of research has been developed based on seven indicators of livability: Housing, Neighbourhood, Transportation, Environment, Health, Engagement, and Opportunities. A total 998 respondents were surveyed for each indicator and analysed using Statistical Package for Social Sciences (SPSS). The analysis showed that Health and Environmental indicators are at the lowest level as compared to other indicators of livability. Moreover, livability can be improved if road networks are made efficient and recreational activities are increased as livable neighbourhoods can help to improve the QOL of residents, which is one of the determining factors in achieving liveability in general and QOL as whole.

Keywords: Livability; Residents' Perception; Quality of Life; Quaid-e-Azam Tow

¹ Assistant Professor at Lahore College for Women University, Lahore. Email: plnr_sidika302@hotmail.com

INTRODUCTION

The concept of livability was first introduced in the United Nation's Habitat Conference in 1996, that every city should be habitable (Worawej Onnom, 2018). The ideology of livability was also adopted by The Electors Action Movement (TEAM), an urban reform party in Vancouver, in the last 70's. The TEAM used the term livability to replace the growth-centred approach by socially progressive humane policy (Kaal, 2011). In general, the term livability has no precise definition, but is used as synonymous with QOL. The definition varies from one culture to another and from time to time (Benjamin L., 2014).

Sometimes, describing livability seems to be like sketching a utopia, a place which is safe and secure, socially stable, economically viable, and environment friendly (Kaal, 2011). The coin of livability has two faces. One is livelihood and the other is sustainability. For a city to be livable, it must put both sides of the coin together providing the livelihood for its citizens in ways to preserve the environment (Evans, 2002). Livability can be termed as an umbrella with a variety of meanings. These meanings vary with objects of measurement and perspective of those who are taking these measurements (Rania Nasr Eldi, 2017). To sum up livability or livable city, it can be an ideal situation where every resident/citizen enjoys all the perspectives of life in general and maintains QOL as whole (P. Setikanti, 2011).

The contemporary planning approaches are linked to livability since World War-II when Gross Domestic Product (GDP) was the standard measure of economic development. The drawback of GDP was that it did not account for factors such as pollution, environmental degradation, resource depletion, and human liberty. Consequently, several other city development indices have been developed in addition to GDP and livability index (Worawej Onnom, 2018). Numerous indices and measurement tools were developed over the last three decades to rank cities according to their amenities and opportunities. Various rankings have been published annually, among which the most notable include the Economist Intelligence Unit's (EIU) livability ranking (EIU (Economist Intelligence Unit), 2014), the Mercer Quality of Living Survey, and the Organisation for Economic Cooperation and Development (OECD) Better Life Index (BLI) (Kashef, 2016).

Researchers have defined numerous key dimensions of livability. For instance, Heylen defined livability as an individual's perception about the environment and their living/housing conditions. Throsby described livability in terms of tangible and intangible features such as housing, public infrastructure, and social network. His focus was also on cultural capital that can improve the livability (Hashim, 2010). Kevin Lynch presented five dimensions of a livable city, i.e., vitality, sense, fit, access, and control. Meanwhile, Balsas summed up all dimensions with viability. Balsas defended it in economic terms that it is the ability of a city which attracts continuous investment (Balsas, 2010). All these

aspects are covered in Wheeler's description of livability, i.e., safe public places, affordable and decent housing, proper recreational facility, and accommodating community (Hashim, 2010).

The world is becoming more urbanised in the last few decades. It is projected that the cities will be accommodating 70% of the world's population in urban areas by 2050. The overgrowth of urban population varies from region to region; however, it is expected that half of the urban population will be in Asian cities (Tan Khee Giap, 2014). Similar phenomenon has been observed in Pakistan. It has experienced rapid urbanisation (57%) in a few decades. As per census 2017, total population was 207.774 million with annual growth 2.4, and 36% of this population live in urban areas. The comparative status of the urban population of provinces shows a similar trend with a slight increase in Punjab. However, amongst the provinces, Sindh is the most urbanised province with 50.02 percent population living in urban areas (Ministry of Statistics, 2017). This increase in urban concentrations has raised the need to focus QOL in cities. Cities are dominant for living and working, and are continuously going through the process of degradation of environment over pollution which in turn affects their livability (Sofeska, 2017). Therefore, livability has become a vital factor for large cities, particularly in developed countries where environment and sustainability are the main concerns (Jiao WANG, 2011). The Economist Intelligence Unit's (EIU) published its annual Global Liveability Ranking 2017, which ranked 140 cities for their urban QOL based on assessments of their stability, healthcare, culture and environment, education, and infrastructure. As per report, Karachi was ranked at 134th position among the ten least livable cities in the world. (EIU, 2017). The Mercer Quality of Living Survey is the world's largest human resources consulting firm that creates livable cities' ranking. Mercer analysed 450 cities throughout the world. As per the ranking report 2017, Islamabad stood at 194th position, Lahore ranked at 202, and Karachi came at 204. Hence, there is a dire need to find out the factors which ranked our cities at the lowest positions.

The purpose of this research paper was to analyse the perception of the residents in evaluating various attributes and variable dimensions of livability. Some of the parameters were evaluated in terms of identification of needs and some in the form of satisfaction levels but not in total. Regarding social services, the quality of the services, from poor to excellent mode, was also assessed. That was why we did not limit the title under the heading "the identification of needs or satisfactions". This paper will help in finding out the ways and means to improve the livability of the city as in the EIU ranking of 2015, Lahore stood at 199th position.

There are numerous factors which contribute toward making a city worth living. The constituents of livability are complex. They include natural, socio-economic, and environmental factors. Residential patterns, commercial

activities, and workplace environment can make a city a desirable place to live (Southworth, 2016). There are different techniques to assess the cities' livability, which depend upon the unique characteristics of the area. A single indicator can measure a component of livability while indices evaluate the overall livability of an area. A framework for this research has been developed on the basis of various literature reviews which are most relevant to the case study area (Table-1).

Table-1: The selected livability indicators and sub indicators

Sr. No.	Indicator	Sub-Indicator
1	Housing	Type of Housing (Permanent or Temporary) Problems Faced during the Last 12 Months
2	Neighbourhood	Proximity To Destinations, like Grocery, Parks, Libraries, and Workplaces Safe and Walkable Neighbourhood
3	Transportation	Convenient Transport Options Street Signs
4	Health	Health Behaviours Health-Care Services Quality of Health Services
5	Environment	Air Quality Water Quality
6	Engagements	Civic and Social Engagements, like Cultural, Art, and Entertainment Institutions
7	Opportunity	a) Economic and Educational Opportunities

MATERIAL AND METHODS

The methodology used for the research started with a review of literature regarding basic concepts of livability, its origin, and indicators. This research was undertaken in Quaid-e-Azam Town, commonly known as Township, a neighbourhood comprising 2,775 acres, and located in the Nishtar Town (Figure-1). A drain (Sattu Katla) passes in the middle of the scheme and the neighbourhood is surrounded by major roads, i.e.,

North: PECO Road (150 Feet)
 East: Madar-e-Millat Road (60 Feet)
 West: College Road (100 Feet)
 South: Muhammad Hussain Road.

Township is one of the largest residential neighbourhoods in Lahore, which was conceived under Colombo Plan in 1962-63. The scheme was planned and designed by Punjab Housing and Town Planning Agency (PHATA). The allotment of the plots was started in 1971 and completed in 1986. After the completion of development works, it was taken over by Lahore Development Authority (LDA) for its management and maintenance. The town has been divided into five sub-divisions and eight sectors, as shown in Table-2. A total of 22,727 residential plots of various categories, ranging from 4.5 Marla to 4 Kanal, were planned besides provision of health, educational, commercial, religious, and recreational sites to cater the needs of the inhabitants. Industrial estate, spanning over two sectors for medium- and small-scale industries, ranging from 1 Kanal to 25 acres, was also planned to create job opportunities for the inhabitants of the scheme. A total number of 771 commercial sites, including mohallah shops, were provided in the scheme. Apart from the creation of the plots, the PHATA has also constructed 7,210 one-room nucleus houses on 4.5 Marla plots. All the residential plots have since been allotted. The scheme has fully been colonised (Lahore Development Authority, 2018).

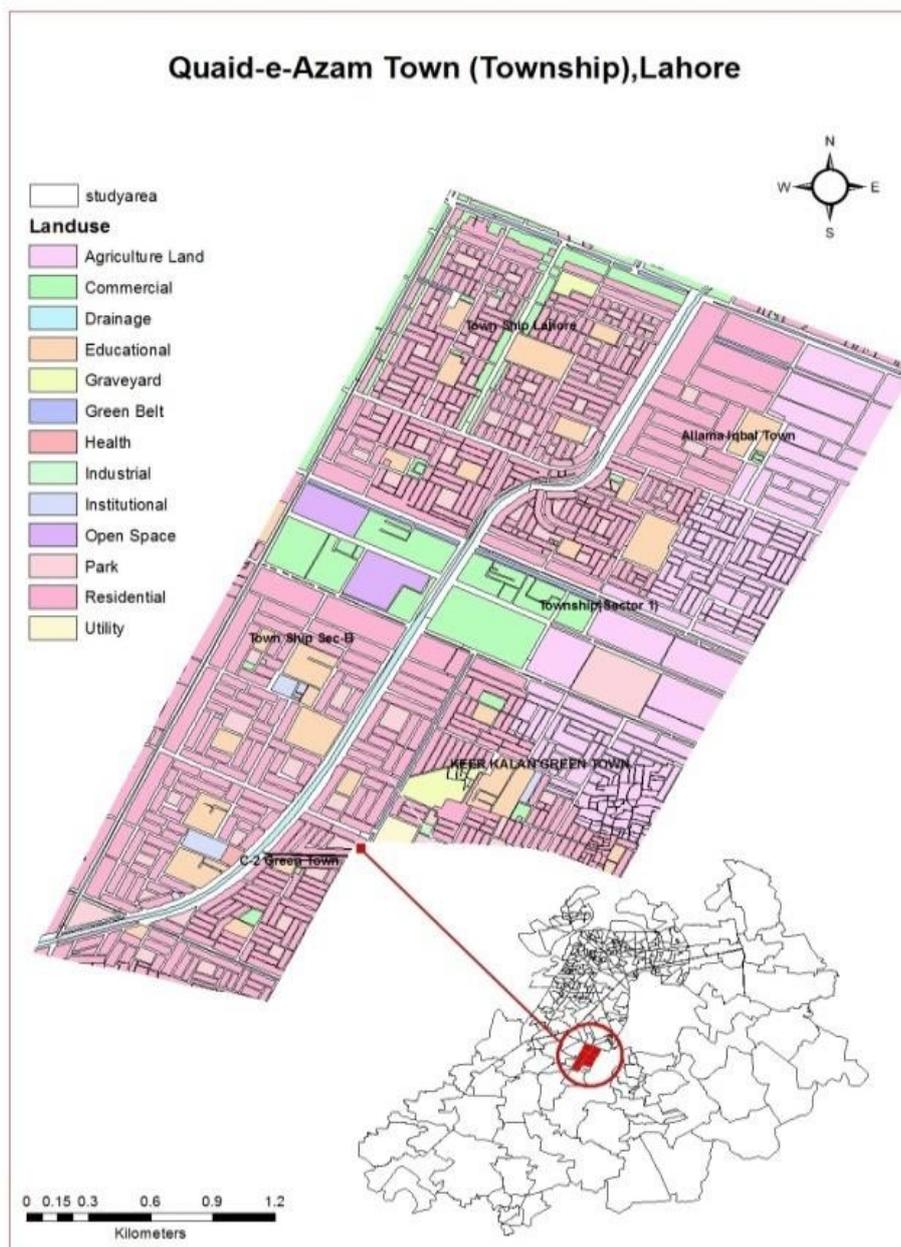


Figure-1: Map showing location and land uses of Quaid-e-Azam Town, Lahore

Table-2: Residential Sector of Quaid-e-Azam Town (Township)

Sub division	Sectors	Blocks
Township A	A1 A2	A1: Government Employees Co-operative Housing Estate (GECH), A2: Blocks 1,2,3,4,5,6
Township B	B1 B2	Blocks 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
Township C	C1 C2	Residential
Township D	D1 D2	Residential

Source: Lahore Development Authority, 2018

Table-3: Plot Distribution in Quaid-e-Azam (Township)

Sr. No.	Plot Category	No.	Percentage
1	4 Kanal	246	1
2	2 Kanal	357	2
3	1.5 Kanal	40	0.2
4	1 Kanal	1079	5
5	10 Marla	3739	16
6	5 Marla	8572	38
7	Quarters	8694	38
Total		22,727	100

Source: Lahore Development Authority, 2018

A checklist was prepared and used for assessment of livability indicators in a case study which involved different indicators and sub-indicators, like Housing Neighbourhood, Transportation, Environment, Health, Engagement, and Opportunities. According to these criteria, for the level of availability and satisfaction of respondents, each parameter and its sub-indicators were framed. After completion of the assessment process, levels were altogether used for scoring the society (Figure-7). A comprehensive questionnaire was formulated on the basis of livability indicators defined in the earlier section. Apart from this, the questionnaire also contained demographic questions that included socio demographic information. Among them, open-ended questions were used to gauge information regarding livability, perceptions of facilities, experiences living in the neighbourhood, and opinions about livability. A pilot test was carried out before the actual survey to test the workability and communicability of the questions. Changes to the survey were minimal and involved clarifying unclear

items. This research used a random sampling technique for interviewing the residents. A total of 998 questionnaire-based interviews were conducted to gauge peoples' satisfaction level towards livability in their community. For the effectiveness of the survey, residents from all categories of plots were selected to provide more appropriate data for the evaluation of the livability indicators. The results obtained were analysed using SPSS software to get the correlation matrix between different variables.

RESULTS & DISCUSSION

From April 2018 to June 2018, a total of 998 questionnaires were completed. The respondents were composed of 87% males and 13% females. The number of Households (HH) ranged from 2-3 while household size varied from 2-5 persons.

Table- 4: Socio Demographic Information of Quaid-e-Azam Town (Township)

Category		Frequency	Percentage
Gender	Male	868	87
	Female	130	13
Livability	Familiar	519	52
	Unknown	479	48
Ownership Status	Owned	938	94
	Rented	60	6
Family structure	Single	569	57
	Nucleus	40	4
	Joint	389	39
Family Size	2 Persons	50	5
	3 Persons	180	18
	4 Persons	90	9
	5 Persons	659	66
	6 Persons	20	2
Years of Residence	10 years	60	6
	20 Years	160	16
	30 Years	349	35
	40 Years	399	40
	50 Years	30	3

About fifty percent of the respondents were living in the case study area for more than 30 years. Plot size ratio was considered while surveying, i.e., 70% of the survey were conducted on the residents of smaller plots. Trends of owned

houses are prominent in our culture and were found the same in the case study area, i.e., more than 90% of the residents owned houses.

Before taking their perception regarding the different variables of livability, the residents were asked about their awareness of the term “livability”. The results revealed that 52% of the respondents were familiar with this terminology. Analysis of all livability indicators are presented under the following sub-heads.

I. HOUSING INDICATORS

The first and foremost aspects which come under housing are its adequacy and affordability. The residents were asked about the various problems faced throughout last year. The contours of housing problems included affordability, security, adequacy, and suitability. Majority of the respondents (48%) were of the view that housing is not affordable as they have to spend more than thirty percent of their income for the maintenance of their houses. Meanwhile, 29% identified security as their main concern. 12% responded that suitability is a major problem. Inadequacy was the interest of 11% respondents. As indicated earlier, HH varied from 2-3, which in turn, reflects the inadequacy (Figure: 2).

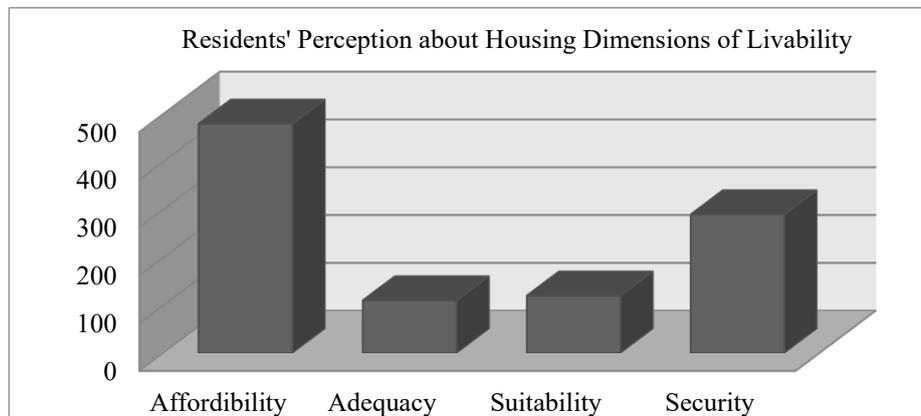


Figure 2 - SEQ Figure * ARABIC 1: Residents' Perception about Housing Dimension of Livability

II. NEIGHBOURHOOD INDICATORS

A wide range of potential indicators, which play an important role in livability of a neighbourhood, were identified and assessed under the category of neighbourhood indicators which included accessibility and proximity to schools, parks, libraries, shopping areas, as well as, easy and convenient transportation services for job places. The most reachable thing as per the views of the residents (97%) was access to shopping (grocery/stores) while the least reachable was the

libraries as the neighbourhood does not have a single library. As far as accessibility to parks is concerned, these were accessible as stated by 87% of the respondents. Nevertheless, they were not satisfied with the maintenance and management of the parks. The accessibility to workplaces through various public modes of transportation was satisfactory as stated by the 99% of the respondents.

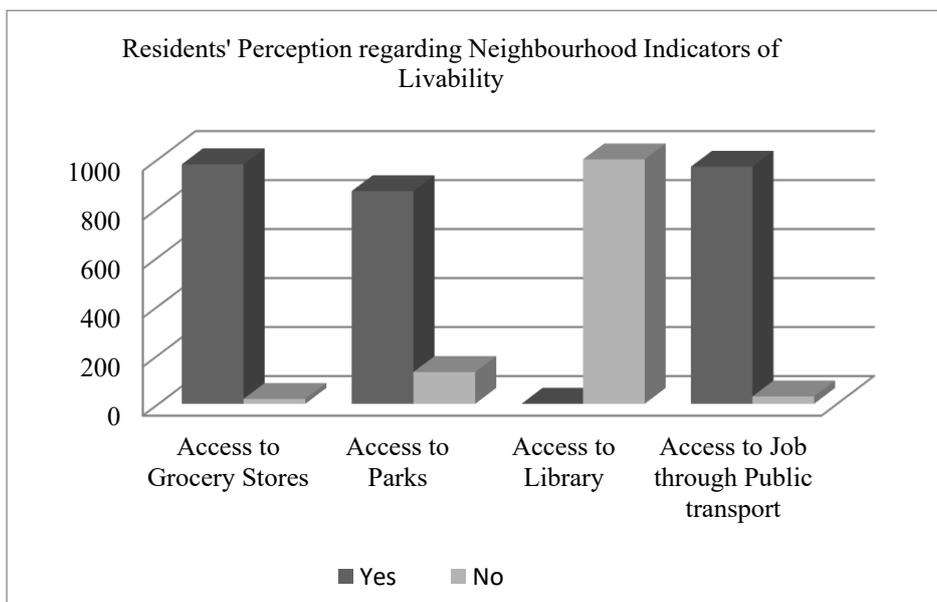


Figure-3: Residents' Perception regarding Neighbourhood indicators

III. TRANSPORTATION INDICATORS

The perceptions of the residents for convenient transport options were also evaluated. As far as the availability of local public transport services was concerned, most of the residents (94%) were satisfied with their availability, but satisfaction regarding the frequency of transport serviced was low as compared to its availability, i.e., 67%. The element of congestion was present in the case study area as mentioned by 90% of the respondents while 88% of them had experienced good walking trips in the same area.

Aged people are particularly vulnerable during community disasters because of their limited mobility. Indicators for the transportation matrix were safe streets for elderly people and safe driving conditions. The streets were not safe and driving conditions were not suitable as the respondents showed dissatisfaction due to absence of speed breakers and high crash rate (Figure-4).

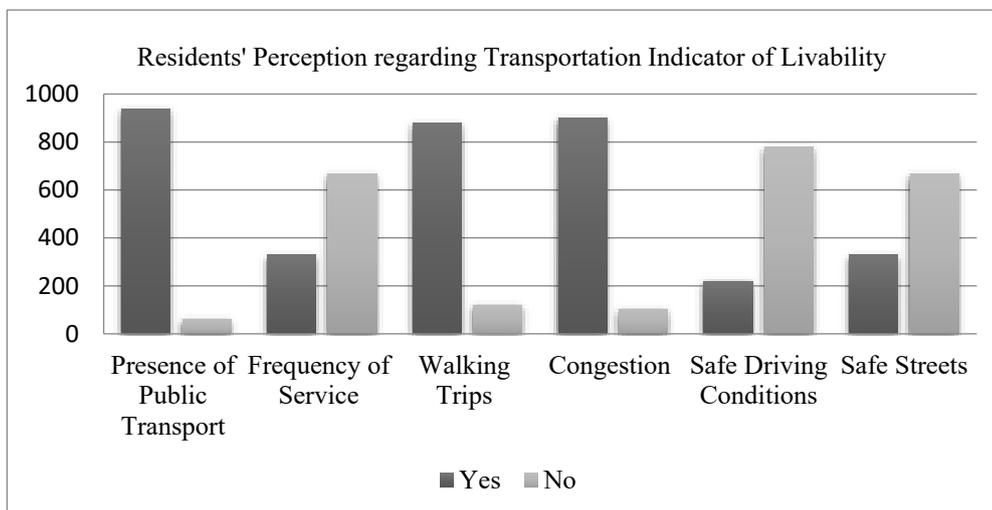


Figure-4: Residents' Perception about Transport Indicators of Livability

III. ENVIRONMENTAL INDICATORS

Air quality is one of the main indicators under environmental concerns. Majority of the residents (52%) were satisfied with the air quality in their area while 48% residents were dissatisfied. Most of these were the roadside residents who were facing air pollution due to vehicular emissions. Water quality is a measure of the conditions of water relative to the requirements of human need or purpose. The residents were not satisfied (83.7%) regarding the quality of drinking water provided in the area (Figure-5).

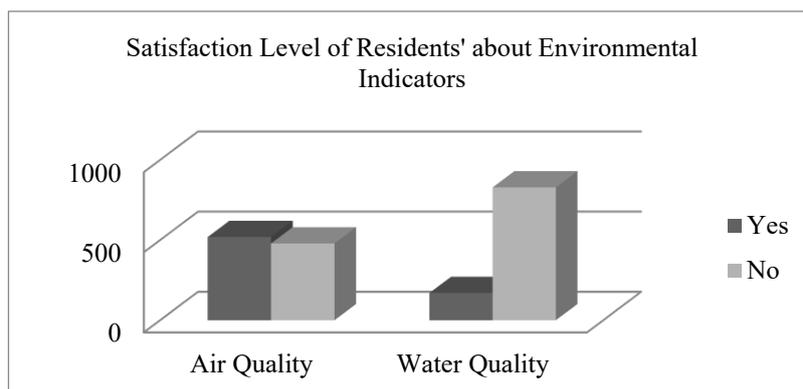


Figure-5: Residents' Perception about Environmental Indicators of Livability

IV. HEALTH INDICATORS

The factors which were examined under the category of healthy behaviours included availability of healthy food, access to health care and quality of services, and access to exercise opportunities. Different opinions were received from the residents. With respect to availability of healthy food, the majority of the people (88%) seemed satisfied. As far as the access to health care services was considered, diverse responses were received. 55% of the respondents considered their neighbourhood as a healthcare professional shortage area. Satisfactory responses were received from 62% of the respondents regarding the presence of health care units (basic health units). Meanwhile, for the Presence of Preventive Health Program, 58% respondents were satisfied. The number and type of health care providers in a community, as well as access to hospitals and preventative services, can indicate how well a community is able to meet the medical needs of its residents. In the township, accessibility to hospital was poor, i.e., 71% of the respondents were dissatisfied as there is no public sector hospital available in the near vicinity and residents have to travel to Jinnah hospital for the medical services. In terms of access to exercise facilities, half of the respondents were satisfied while half of them were not (Figure-6).

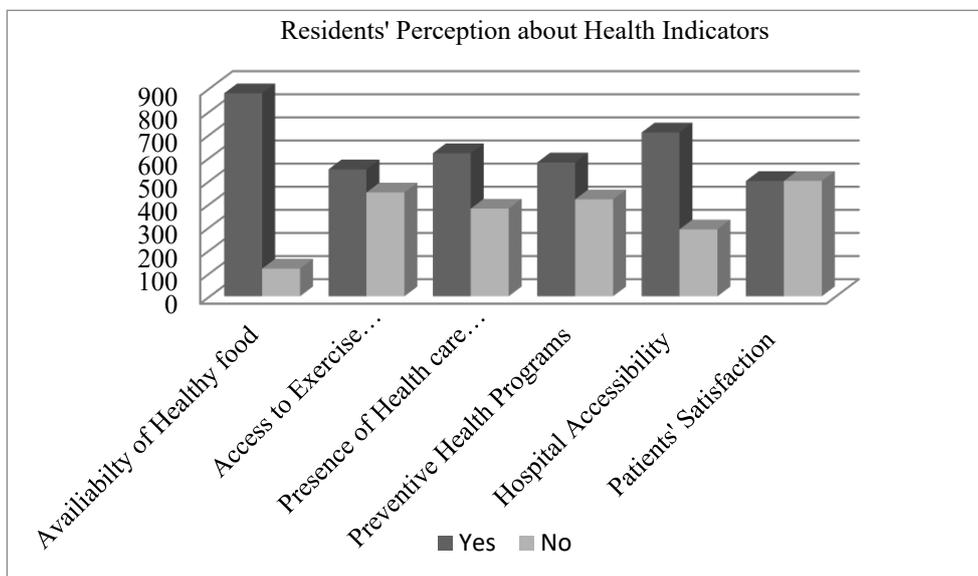


Figure-6: Residents' Perception about Health Indicators of Livability

VI. ENGAGEMENT INDICATORS

Identifying civic and social engagement arrangements in township schemes is very important to measure livability and helps older people to remain civically and socially engaged to maintain health and QOL in the neighbourhoods. Respondents were asked about their opportunities for civic involvement and majority (59%) were satisfied. About the presence of cultural, arts, and entertainment institutions, hundred percent of the residents were dissatisfied. However, cent percent were satisfied with the presence of general retail and services in the area.

VII. OPPORTUNITY INDICATORS

As the economic opportunity is one of the indicators in the opportunity matrix considered for equal opportunities for jobs/equal income distribution throughout all strata of society, on the contrary, the majority of the respondents in almost all sectors of township stated that income inequality existed in the area. Income resources were found to be distributed unevenly. Furthermore, the economic opportunity in terms of job availability, there were more-than-two- jobs holding people in some of the houses. Considering collectively, 77% of the respondents were doing two jobs to meet their needs.

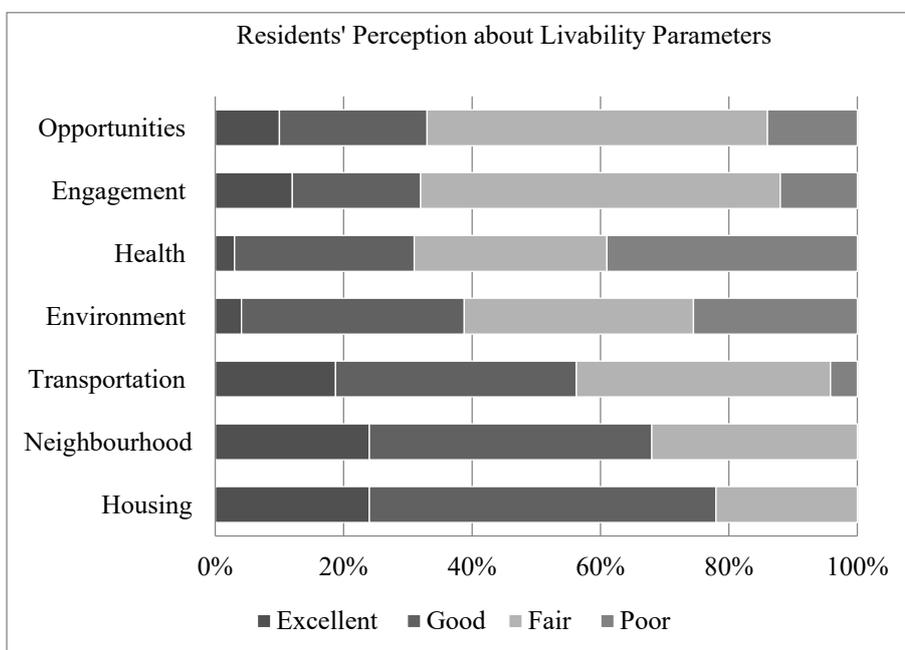
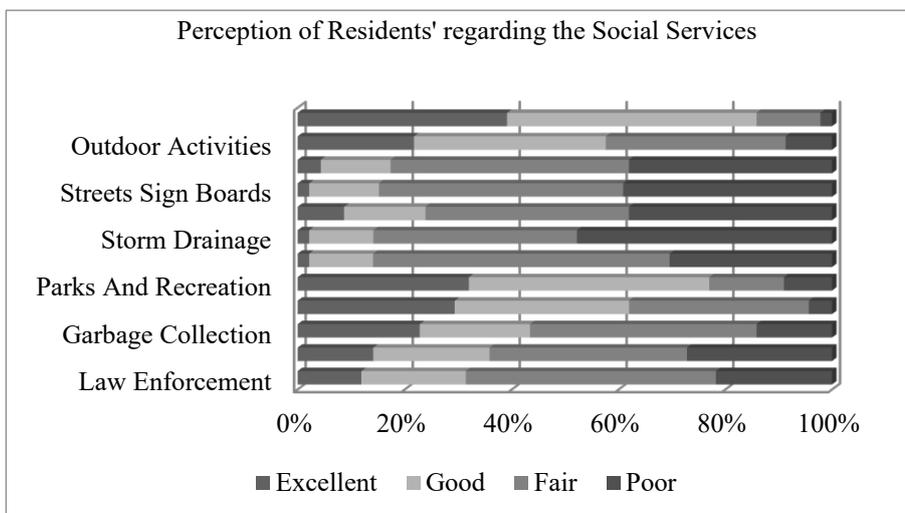
VIII. SCORING OF SOCIAL SERVICES

Residents were asked to score the social services as Excellent (10-07), Good (07-05), Fair (05-03), and Poor (03-0) in Township (Figure-7).

- Majority of the residents (48% & 37%, respectively) rated Law Enforcement and Neighbourhood Security as Fair.
- For the collection of Garbage, most of respondents (42%) scored it under Fair category.
- For the Road/Street System, 34% marked as Fair while 33% marked it as Good.
- For availability of Sidewalks and Pedestrian Safety, 55% rated under Fair category, whereas 30% rated it as Poor.
- 38% of the residents rated the Street Lighting as Poor and the same percentage of respondents marked it as Good.
- For availability of Streets Sign Boards, 46% residents rated it as Fair while 39% rated it as Poor.
- Most of the respondents (44%) rated fair for the information received through Public Sign Boards; however, 38% of the residents marked it under the Poor category.
- For the availability of Parks and recreational activities, most of the residents (44%) have rated them as Good, and 34% of the residents

marked this service as Excellent. Meanwhile, 4% of the respondents' rate was under the Poor category.

- For the Storm Drainage, the majority of the respondents (48%) rated it as Poor, i.e., below 3, while 38% rated it as Fair.
- To rate Outdoor Activities, the majority (36%) of the residents marked it as Good, 34% rated it as Fair, and only 8% rated it as Poor.



CONCLUSION

This study has assessed the perception of livability from the perspective of residents. The finding of this study has provided a better understanding of the issues related to livability in Quaid-e-Azam Town (Township). There are no rules or regulations for achieving liveability. The study's result suggests a lower satisfaction level for various livability indicators.

The major issues faced by the residents were inadequate health facilities, deteriorated road condition, fewer frequency of public transport, vehicular emissions causing air pollution, poor water quality, and poor law enforcement. The highest satisfaction level was observed for accessibility to shopping (grocery/stores). To improve the livability of the town, health services should be improved and the maintenance and management of parks/recreational areas be made. It is therefore recommended that while planning for a housing scheme/a neighbourhood, all aspects of livability must consider public authorities and private consultants.

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