

POST OCCUPANCY EVALUATION OF RESIDENTIAL SATISFACTION IN GATED COMMUNITIES - AN EMPIRICAL STUDY OF NAYA NAZIMABAD IN KARACHI, PAKISTAN

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ABSTRACT

International literature has revealed that the post-occupancy evaluation (POE) of gated communities provides valuable insights into the effectiveness of these developments in meeting residential satisfaction and improving urban living conditions. Gated communities, especially in the Global South cities, have proliferated as responses to increasing concerns about safety, privacy, and the quality of urban life, for the growing middle class of people. Karachi, one of the largest and most populous cities in Pakistan, exemplifies many of these concerns. Despite, many gated community projects being completed, limited POE research has been conducted in Karachi, Pakistan. Therefore, this study aims to explore the POE of the emerging gated community of Naya Nazimabad, to assess the living quality, amenities, safety, and community dynamics from the residents' perspective. Data was collected from 300 residents through a structured questionnaire survey which focused on the residents' socio-demographic profiles and key determinants of the neighbourhood and housing environment within the gated community to identify strengths and areas for improvement. The research findings highlight that while Naya Nazimabad often provides enhanced safety, better amenities, and a sense of exclusivity for the middle and upper-middle class, it also raises concerns regarding social segregation, inequality, and the exclusion of lower-income groups in the neighbouring urban environment. Finally, this evaluation contributes to understanding how gated communities function post-occupancy and offers recommendations for improving their design and management related to community engagement and integration with the wider urban fabric.

Keywords: Gated Communities, Global South Cities, Naya Nazimabad, Karachi, Post Occupancy Evaluation, Residential Satisfaction.

INTRODUCTION

Gated communities are widespread across the world as housing developments with gates and boundaries that limit access from the surrounding region (Blakely & Snyder, 1997a) (Borgoni, et al., 2018) . Post-occupancy evaluation (POE) of gated communities in the Global South provides a comprehensive understanding of how well these developments meet the expectations and needs of residents (Dowling, et al., 2010; Al Omari, 2015).

The concept of 'Global South Cities' is often marked by informal settlements, a growing middle class, and the increasing influence of the private sector in urban development (Bandouko, et al., 2022) . Recently, gated communities have become a desirable living option in the Global South cities (Omar & Khalid, 2015; Kalantari, et al., 2017) which can also be termed "residential satisfaction" that affects the entire family's activity, well-being, social life, employment, and education in addition to defining the linkages with the urban environment (Molin, 2011; Wanas,

et al., 2014). Research has shown that gated community residents in the Global South cities like Rio de Janeiro, Johannesburg, and Cairo, often report satisfaction with security provisions and improved living standards (Breetzke, et al., 2014, Caldiera, 2000, Khamis, et al., 2023), however, they often contribute to urban fragmentation, reinforcing social inequality and reducing engagement with surrounding urban areas (Almatarneh, 2013, Breetzke, et al., 2014). Despite the growing popularity of gated communities the Global South cities (Almatarneh, 2013, Nazmy, et al., 2016), few studies have cited the factors affecting the preferences of residing in gated communities, particularly in Karachi, a Global South city of Pakistan, using a POE approach (Nadeem, et al., 2013).

In Karachi, globalization, sporadic urbanization, insufficient land availability, and inadequate public infrastructure are fundamental reasons directing the implementation of an intensified population density approach for housing projects (Nadeem, et al., 2013). These conditions have led to a growing demand for secure, self-contained living spaces, where middle and upper-middle-class residents seek to escape the unpredictability of the city's informal settlements and congested neighborhoods (Kaker, 2014). This demand has fueled the development of gated communities, which offer enhanced security, modern amenities, and a controlled environment (Hasan, 2008; Ahmed, 2010).

As the figure of gated communities is rising in Karachi, POE-based studies of emerging gated communities need to be conducted. Thus, this research study aims "To evaluate the satisfaction levels of the occupants in Naya Nazimabad through a post-occupancy evaluation". Naya Nazimabad is a developing middle-income gated community. In addition to providing input for housing research, the paper's findings will assist in defining areas that require additional modification to guarantee that the gated community's design is user responsive. The conduction of an appraisal of the Naya Nazimabad after occupation will help the professionals better understand the end user's outlooks.

RESIDENTIAL SATISFACTION

The concept of residential satisfaction

Residential satisfaction is the notion of comfort and happiness when one has completed what one wants or aspires in a living environment (Mohit & Raja, 2014). Residential satisfaction can also be outlined as a yardstick of residents' opinion of the overall quality of life, and it can imply that an individual's anticipation of housing is fulfilled (Tan,

2016). Evaluating residential satisfaction has become a critical tool for determining the success of residential developments (Borgoni, et al., 2018; Tan, 2016). Studies about residential satisfaction may vary in terms of conditions, inhabitants, ethnicity, and most importantly for assessing the pros and cons of housing projects (Kuriakose, 2014), reviewing the needs and choices of the residents (Ibem, et al., 2013) to mark as a life quality index (Addo, 2015). It is crucial to design thriving housing developments and employ effective housing policies (Addo, 2015).

Residential Satisfaction in Gated Communities

Multitudinous studies have examined residential satisfaction in gated communities. Numerous studies indicate that living in gated communities can occasionally be linked to disappointments and unfulfilled desires due to elements like expensive maintenance and service fees and extreme social exclusion (Ilesanmi, 2012; Manzelat, 2016; Mohd, et al., 2016) the majority of the research, however, indicates that people who dwell in gated communities are generally content with their environment. For instance, according to a study done in Istanbul, Turkey, people who live in gated communities are generally happier with the amount of security, diversity of amenities, proximity to green spaces, and upkeep of their residential neighbourhoods (Berköz, 2008). According to a study done in Malaysia, monetary benefits, societal status, and lifestyle amenities are especially linked to the comparatively high levels of residential satisfaction among residents of gated communities (Tan, 2016). Likewise, in the context of Egypt, two studies done in Cairo (El Sayed, 2016) and Alexandria reveal that inhabitants tend to be happy with their move to gated communities principally with an improved lifestyle, enhanced status, and the protection of their real estate investing. As observed in Medan City, the spatial satisfaction criteria were the characteristics of housing namely place and design along with the communal amenities provided, while safekeeping, social interaction among inhabitants, and housing tenancy formed the socio-economic satisfaction component (Aulia & Ismail, 2016). A study on residential satisfaction in the Nigerian context discovered that according to the facilities provided in the gated communities, tenure, household size, provision of facilities, safety, location, size of the gated community, and proximity to the workplace were some of the important factors in satisfaction (Ogunbayo, et al., 2018; Ajibola, et al., 2011). Moreover, a survey of public gated communities in the Maldives showed that the success of the housing project is not assured by only the physical provision of housing, it is vital to converge the capacities and preferences of the

residents also (Mohit & Azim, 2018). However, the determinants of residential satisfaction may vary across contexts.

THE DETERMINANTS OF RESIDENTIAL SATISFACTION

Residential satisfaction is a multifaceted paradigm, that hinges on satisfaction with the singular modules and traits of the housing conditions (Berkoz, 2008; Galster & Hesser, 1981; Molloy, et al., 2018). Residential satisfaction requires to be considered and assessed through the attributes and individualities of the neighbourhood and housing environments using the socio-demographic characteristics of the residents (Mohit & Raja, 2014). The neighbourhood components of residential satisfaction concern the physical

environment of the neighborhood contiguous to the residence (Waziri, et al., 2014, Molloy, et al., 2018). The housing elements are also important measurements of residential satisfaction that include social relations and relations with the living atmosphere (Berkoz, 2008, Molloy, et al., 2018). Research that summarized the empirical studies on residential satisfaction in gated communities at a cross-cultural level (Mohit & Raja, 2014) was based on the research (Amerigo & Aragones, 1997) which consists of three components;

- socio-demographic characteristics of the residents
- housing environment
- neighbourhood environment

The determinants of each component are mentioned below (Figure 1).

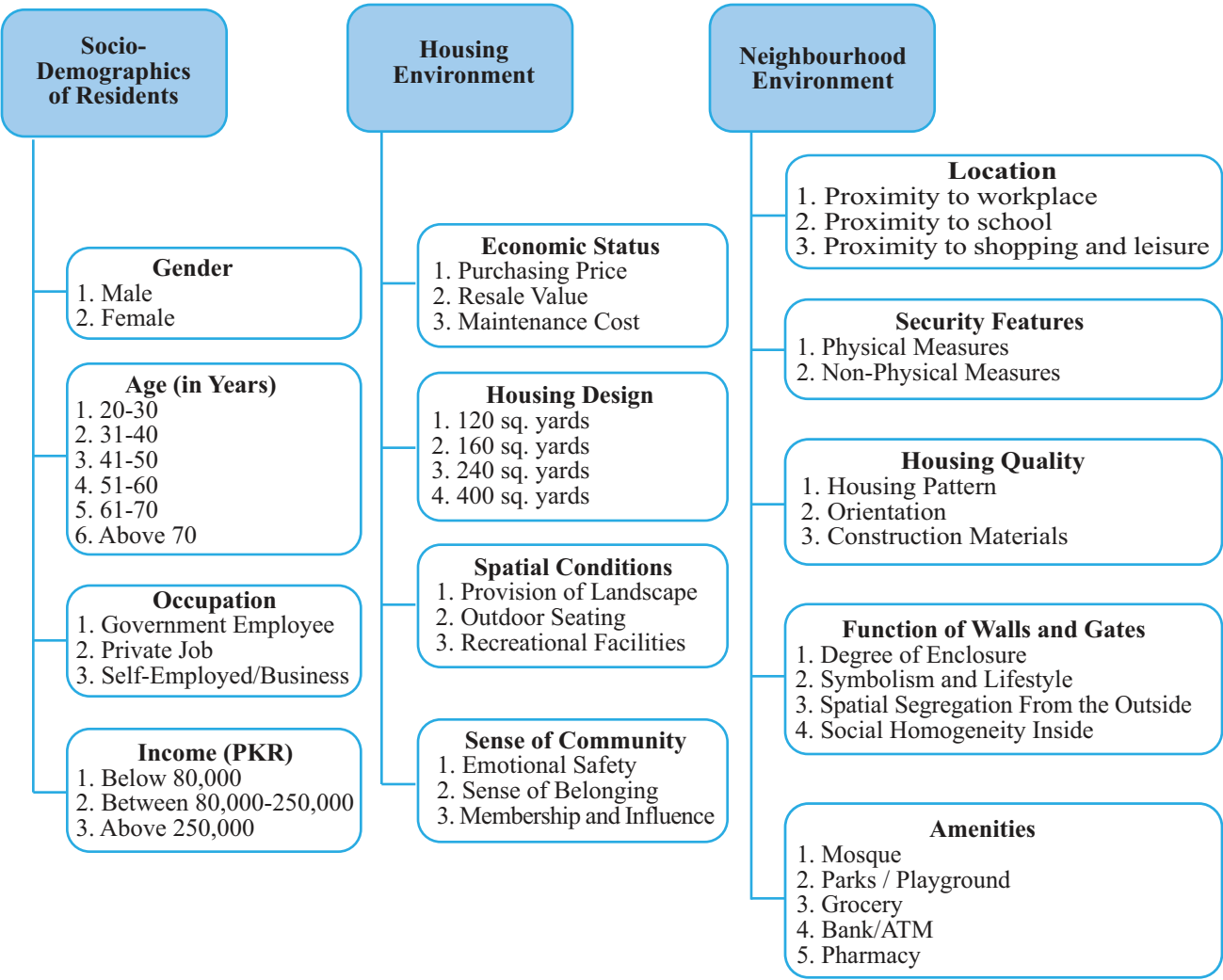


Figure-1: Determinants of Residential Satisfaction.
Source: Author

RESEARCH METHODOLOGY

This research aims to conduct a POE in Naya Nazimabad, Karachi, to evaluate the residential satisfaction levels of its occupants. A review of extant literature indicates that in the past studies on “residential satisfaction”, a POE approach was pragmatic to investigate the presence and interrelation of the factors contributing to living in gated communities (Preiser, et al., 2015), as it provides a logical compilation and evaluation of the execution of any housing project after the occupation (Stevenson, 2008).

Survey Questionnaire Design: Data collection involved a structured survey questionnaire which permits a varied and detailed examination of the perceptions of the residents which quantifiable approaches may not have the capacity to offer (Hennink, et al., 2020). The survey questionnaire was divided into 3 sections, based on residents’ profiles, factors determining the neighbourhood environment, and factors determining the housing environment. As suggested by (Camparo, 2013) the design of the questionnaire used a 5-point Likert scale (ranging from 1-5) along with multiple-choice questions, allowing for a comprehensive analysis of residents’ perceptions and experiences.

Sampling method: A stratified random sampling method, targeting a representative sample of residents from different age groups, income levels, and types of housing units within Naya Nazimabad, for post-occupancy household surveys, specifically in the occupied Blocks of A, B, C, and D. Respondents were owners of housing units as perceived that owners conveyed more connection towards their home environment and neighbourhoods (Zhang & Lin, 2012). This approach ensures that diverse perspectives are captured and helps generalize the findings across the entire population.

Survey Methodology: To begin, an estimate of the total number of households or residents in Naya Nazimabad was needed, since the population may vary as the community grows, we can use an approximate population estimate. For example, if the population is around 100,000 people (as suggested previously), and assuming each household has an average of 5 members, there may be around 20,000 households in total. Based on the population estimate, households in Naya Nazimabad were assigned random numbers, and a questionnaire was given out in person. As Naya Nazimabad is being developed in phases, some blocks may have higher occupancy rates, especially those that have been completed earlier, and other blocks of the development may still be under construction, leading to lower occupancy in those zones. As the current growing population cannot

be determined, based on 50% of conservative value, 350 questionnaires were initially distributed, out of which 300 residents volunteered and hence, 300 complete questionnaires were gathered. Tables were used to present the data, and a rationale was furnished. Concerning the questionnaire data, narrative analysis was utilized to present the results in a way that was descriptive and reflected the pertinent factors of the neighbourhood and housing environment concerning residents’ profiles.

STUDY AREA

Within the administrative divisions, District West was chosen because it is not densely populated with gated communities in Karachi, within which the area of Manghopir was chosen due to the presence of Naya Nazimabad, which is a recently developing gated community in Karachi as derived from the of the mapping data (Figure 2). Naya Nazimabad is a gated community that is being developed around Manghopir Lake. The master plan of Naya Nazimabad has a total area of 50 hectares (1300 acres) and it is developed by Javedan Corporation Limited, which is a part of the Arif Habib Group, Mr.Haji Ghani Usmani and Mr. Shunaid Qureshi (Figure 2).

It has been chosen as a case study for the following purposes:

- The area has densified from low population density to high population density
- Typical case of gated communities in the Global South involving the number of units, amenities and security provided, etc.
- Provides for a variety of higher middle and middle-income classes.
- A recent developing gated community

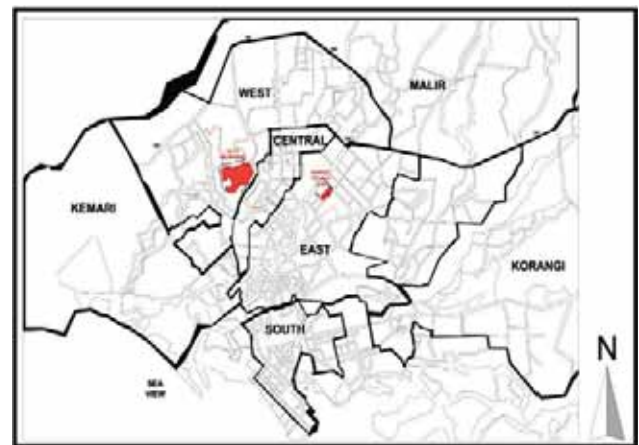


Figure-2: Location of Naya Nazimabad in District West - Karachi.

Survey Results

Residents' Profile

This part presents the socio-demographic characteristics of the residents residing in Naya Nazimabad. These are related to the gender, age, occupation, and income (Table 1).

Gender

The findings indicate that out of the respondents who contributed to the survey, 43% were female and 57% were male. This specified that one-fourth of the sample were females, whereas, three-fourths of the residents' family leaders, whether renters or owners were males. As the male population dominated, therefore, they were the main decision holders and contributors towards the attainment of residential satisfaction.

Age of the Respondents

According to the results in Table 1, the larger sample of the population belonged to the age brackets range namely 31-40 years at 33% and 41-50 years at 23%, while 17% were aged up to 30 years and 10% and 3% respectively were aged between 61-70 years and above 70 years. This entails that most of the people (33% + 23% = 56%) living in Naya Nazimabad are in the middle age group, who are young families and have decided to reside in a gated community and raise their children there.

Occupation

This portion discusses the occupation of the residents in Naya Nazimabad. The occupation factor was split into two main groupings. These were formal employment (Government and private) and self-employment. According to the results, most of the household heads (males) were formally employed (23+60=83) and they had to leave the gated community for work. Therefore, the accessibility of Naya Nazimabad and the safety of their families were their main priorities for residing there.

Income Level

The findings suggest that 11% of the respondents indicated that they had monthly earnings of below 80,000 PKR. 27% of the people had a monthly income between 80,000-250,000 PKR and 62% of the respondents had a monthly income of over 250,000 PKR. This indicates that most of the residents are middle-income earners ranging from low to high, as the

Table-1: Frequency Distribution of Demographic Attributes of Residents.

Rresidents' Profile	Frequency	Percentage
Gender		
Male	170	57
Female	130	43
Total	300	100
Age (in Years)		
20-30	50	17
31-40	100	33
41-50	70	23
51-60	40	14
61-70	30	10
Above 70	10	3
Total	300	100
Occupation		
Government Employee	70	23
Private Job	180	60
Self-Employed/Bussines	50	17
Total	300	100
Income (PKR)		
Below 80,000	35	11
80,000-250,000	80	27
Above 250,000	185	62
Total	300	100

administrators of Naya Nazimabad indicate it to be a thriving middle-income neighbourhood.

Residential Satisfaction Determinants

Neighbourhood Environment

The factors that were determined for residential satisfaction in the neighbourhood environment are location, security features, housing pattern, functions of walls and gates, and amenities (Table 2).

Location

Justification: Though Naya Nazimabad is a self-contained community, its citizens must have access to important business, educational, and medical facilities in Karachi. This determinant aids in assessing how effectively the community is integrated into the larger urban fabric and if locals feel alone or at home in the city's infrastructure.

The study sought to establish location as a determinant of neighbourhood characteristics based on the parameters of

Table-2: Frequency Distribution of Factors Affecting the Neighbourhood Environment.

Factors	Variables	Likert Scae Rating	Frequency	Percentage
Location	Proximity to workplace	Less	80	28
	Proximity to school	Less	120	40
	Proximity to shopping and leisure	More	195	35
Security features	Physical measures	More	50	50
	Nonphysical measures	More	150	50
Housing Quality	Housing pattern	More	140	47
	Orientation	More	100	33
	Construction materials	Adequate	115	20
Functions of walls and gates	Degree of enclosuere	More	100	33
	Symbolism and lifestyle	Neutral	75	25
	Spatial segregation from the outside	More	90	30
	Social homogeneity inside	Less	35	12
Amenities	Mosque	More	100	33
	Park/Playground	More	50	17
	Grocery	Less	30	10
	Bank/ATM	Adequate	10	3
	Pharmacy	Less	10	3

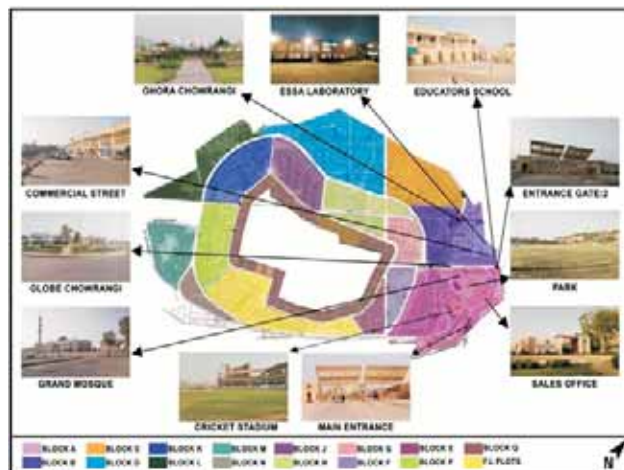


Figure-3: The Master Plan of Naya Nazimabad.



Figure-4: Accessibility and Connectivity of Naya Nazimabad.

propinquity to the workplace, closeness to school, and proximity to shopping and leisure (Figure 4). According to 28% of responses, Naya Nazimabad's location on the outskirts of Karachi can be inconvenient for residents who need to frequently travel to central business districts like Saddar, Korangi, or Karachi's industrial zones. The limited access to major roads connecting the area to central Karachi can result in time-consuming travel. However, the area is well-served by local and private transport vans, buses, and hiaces, providing accessibility for residents. This proximity allows

for integration between disadvantaged people and gated community inhabitants, primarily through employment opportunities and service offerings. 40% of responses highlighted that Naya Nazimabad is home to various amenities, such as Madina Masjid (Nusrat Bhutto Colony), Dove Foundation Public School (Shahra-e-Noor-Jahan Road), Holy Family Catholic Church (New Mianwali Colony), and several parks and schools. However, many residents must travel to other parts of the city for higher education and more specialized services, as the development

of these services in the area is still in progress. The survey also revealed that 35% of residents feel the commercial zone in Naya Nazimabad is underdeveloped. The lack of surrounding commercial zones, schools, and healthcare facilities forces residents to travel long distances for basic needs, which increases fuel costs and time spent navigating Karachi's notorious traffic, especially during peak hours.

Security Features

Justification: In a city like Karachi, where crime rates are on the rise, this determinant is essential for assessing how effectively Naya Nazimabad satisfies the aspirations of its residents for safety and peace of mind given their worries about crime and need for personal protection.

The study establishes the physical and nonphysical parameters of security as determinants of neighbourhood characteristics. All the respondents (50%+50%) agreed that two types of security features define the extent of enclosure of Naya Nazimabad that comprises a combination of physical and technological security measures, including entryways, boundary walls, lift-arm barriers, electric fencing, and security officers at the main entrance. Additionally, a central security system with CCTV cameras and WIFI radios is used by security personnel. While these measures can deter some types of intrusion, they do not eliminate the risk of more sophisticated criminal activities, such as break-ins or burglaries, as a few cases have been reported by residents.

Survey responses indicate that ID cards for residents and visitors are regularly checked, and patrols are conducted twice a day. However, some guards may lack proper training to effectively identify security threats, potentially leading to lapses in controlling unauthorized access. Block A and

Block B benefit from comprehensive security services, including static guards, mobile escorts, and nearby security teams. In contrast, Block C lacks specific guards or cameras, leaving it more vulnerable. Block D features higher, more solid walls with electric fences. The scenario presents an uneven distribution of security resources across the blocks creating vulnerabilities. The over-reliance on physical barriers and the lack of adequate surveillance in some areas compromise the overall safety of the community (Figure 5).

Housing Quality

Justification: Naya Nazimabad offers a range of housing options aimed at middle and upper-middle-class families, and satisfaction with the pattern, construction materials, and layout of these houses is crucial. Proper ventilation, natural light, and space optimization are important features that impact residents' comfort and long-term satisfaction.

The study builds upon housing quality as a determinant of neighbourhood characteristics based on the parameters of housing pattern and orientation, in addition to the construction materials. In Naya Nazimabad, the linear housing pattern design fosters social connectivity, with 47% of residents noting that the spatial layout enhances the overall community feel and accommodates diverse housing types (Figure 6). Additionally, 33% of respondents appreciate the ample natural light and fresh air in the units, as well as the pleasant views provided by the centrally located park and mosque. The construction quality is generally good, with only minimal issues like cracks, leaks, or insulation problems, as reported by 20% of residents. However, a downside is that the pre-built homes offer little flexibility for personalization, which may not appeal to those wanting customized spaces. Furthermore, some units suffer from inefficient layouts,



Figure-5: High Boundary Walls with Electric Fencing.



Figure-6: Linear Housing Pattern.

leading to inadequate ventilation and uncomfortable living conditions for certain residents. While the overall housing design has its merits, there are still areas where improvements could be made, particularly in ventilation and customization options.

Functions of Walls and Gates

Justification: In Naya Nazimabad, walls and gates play an important role in defining the neighborhood's safety, privacy, visual appeal, and community relations. These physical barriers are more than just structural aspects; they influence people's everyday experiences, interactions, and overall contentment with their living conditions.

The study determines the functions of walls and gates as a determinant of neighbourhood characteristics corresponding to the parameters of the degree of enclosure, symbolism, lifestyle, spatial segregation from the outside, and social homogeneity inside. In Naya Nazimabad, 33% of residents note that the development is designed with five gates (Figure 7), though only two are operational. While the modest design of the main entryway, as described by 30% of respondents, fosters a sense of enclosure and encourages social homogeneity within the community, it also creates a sense of spatial segregation from the outside, potentially isolating residents. Additionally, 25% of residents view the gates and walls as "ornamental gating," symbolizing exclusivity and a lifestyle previously inaccessible to them.

This sense of exclusivity is further enhanced by amenities like entertainment facilities, private spaces, and consistent

services such as waste removal, water, and electricity, as reported by 30% of respondents. However, a downside is that the underutilization of gates and walls may lead to a lack of connectivity with surrounding neighborhoods, reinforcing the physical and social separation. Furthermore, the reliance on the gated structure for security and convenience may lead to complacency, creating a false sense of complete safety and security.

Amenities

Justification: The daily lives of people living in Naya Nazimabad are directly impacted by the availability of clean roads, electricity, water, garbage disposal, and recreational amenities. It improves living quality and guarantees convenience. Many residents believe that these elements enhance the community's attraction and increase its capacity for self-sufficiency.

The study brings forth the basic amenities as a determinant of neighbourhood characteristics and the survey results reported that Naya Nazimabad has catered to most of the basic and high-end facilities of the residents (Figure 8). In Naya Nazimabad, 33% of residents note that Block A is conveniently located near key amenities such as a mosque, cricket stadium, parks, mart, meat shops, and salons, with these facilities within walking distance. This accessibility is enhanced by a 100-foot-wide road between Block A and the commercial zone, although only 10% of the commercial area is developed, leaving the rest under construction. Block A's faster development has led to a well-established, self-sustained environment. However, Block B lacks any amenities, requiring residents to travel outside the area for basic services, while the Mohalla Masjid in Block C offers a spiritual landmark. Additionally, 50% of the youth are

enthusiastic about the newly built football stadium, promoting



Figure-7: Gates of Naya Nazimabad.

Gate 1: Main Entrance

Gate 2: Lal Gate

Gate 3: Connecting Karachi Ijtama Gah

Gate 4: Connecting Mir Muhammad Goth

Gate 5: Connecting MPR Colony



Figure-8: Amenities in Naya Nazimabad.

fitness. The residents share the costs for community maintenance, and the neighbourhood is perceived as safe, with facilities and services fostering a secure, convenient lifestyle. However, the underdevelopment of commercial areas, limited amenities in certain blocks, and reliance on shared maintenance costs can be seen as drawbacks. The lack of amenities in Block B and the slow development of commercial infrastructure may hinder the overall convenience for residents.

Housing Environment

The factors that were determined for residential housing satisfaction in the housing environment are economic status, dwelling unit size, spatial conditions, and sense of community (Table 3).

Economic Status

Justification: While Naya Nazimabad is marketed to middle and upper-middle-class people, affordability remains an important factor in residential satisfaction. Residents look over the financial accessibility of housing, maintenance fees, and other living expenses to match their financial capacities according to the community amenities provided and quality of life.

The study interprets the economic status of the residents based on the parameters of purchasing price, resale value, and maintenance costs of the residential properties. According to the 33% of responses, Naya Nazimabad has

become a popular choice for middle and lower-middle-class residents who purchased land a decade ago, as the area's development has increased their living standards, elevating them to the upper-middle class. Initially affordable, the market value of plots and bungalows has risen by 33% since 2011, with resale values now ranging from Rs. 1,000,000 to Rs. 3,000,000 depending on plot size. The neighborhood's affordability, especially for genuine buyers and investors, has made it an attractive option. Maintenance fees, ranging from 2,500 PKR to 4,000 PKR per month, cover essential services like electricity, water, gas, sewage, and maintenance personnel, relieving residents from environmental upkeep concerns and providing convenient access to facilities. However, the rise in property values has also made the area less affordable for new buyers, potentially leading to socio-economic segregation. The increasing prices could limit access for lower-income groups, and the burden of maintenance fees may be challenging for some residents. Additionally, the growing property values may attract speculation, impacting long-term affordability and stability in the market. Despite the development, there is a risk that overcrowding and strain on resources could become a concern as the area continues to grow.

Housing Design

Justification: In a rapidly developing gated community like Naya Nazimabad, where the population is growing and the demand for quality housing is high, housing design directly impacts how well residents' needs are met in terms of comfort, aesthetic appeal, functionality, and overall living

Table-3: Frequency Distribution of Factors Affecting the Housing Environment.

Factors	Variables	Likert Scae Rating	Frequency	Percentage
Economic Status	Purchasing Price	Adequate	100	33
	Resale Value	More	120	34
	Maintenance Cost	More	80	27
Housing Design	120 sq yards	More	50	17
	160 sq yards	Very Less	50	17
	240 sq yards	Adequate	100	33
Spatial Conditions	400 sq yards	Less	100	33
	Provision of Landscape	More	130	40
	Outdoor Seating	More	85	30
Sense of Community	Recreational Facilities	More	85	30
	Emotional Safety	Adequate	140	45
	Sense of Belonging	Less	85	30
	Membership and Influence	Adequate	75	25

experience.

The study launched the housing design of residential properties and according to the survey results, it was found that Naya Nazimabad offers a well-developed community with four residential blocks, A, B, C, and D. Blocks A, B, and C are 80% developed and inhabited, while Block D is still under development. The residential units, which cater primarily to middle-income groups, range in size from 120 sq. yards to 400 sq. yards, connected by 40-foot-wide roads and well-integrated infrastructure. The community features single and double-stored bungalows with moderate facilities and a uniform architectural style that ensures cohesion across the area. These features contribute to an ideal community living environment, with access to essential services and amenities. However, the limited variety of dwelling unit sizes may not meet the needs of larger families or higher-income groups, and the standard architectural design might lack individuality, restricting customization options. The ongoing development of Block D also creates inconvenience for residents in the more developed blocks. Furthermore, as the area grows, overcrowding may become a concern, particularly in higher-density housing, potentially straining resources and impacting the overall quality of living.

Spatial Conditions

Justification: In Naya Nazimabad, the emphasis on green spaces and environmentally friendly design helps improve the aesthetic appeal of the community and contributes to residents' mental and physical health and overall satisfaction with the community environment.

The study dwells upon the spatial conditions of Naya Nazimabad, relative to the parameters of landscape, outdoor seating, and recreational facilities. Although Naya Nazimabad claims to have a balanced ratio of 50% open and green spaces and 50% covered space, 40% of residents feel that this strategy has primarily served as a marketing tool to attract potential buyers. The neighbourhood offers pedestrian walkways, jogging tracks, and playgrounds, with street furniture, lighting, and soft landscape components like open green areas and diverse plants that contribute to a healthy and aesthetically pleasing environment.

30% of residents appreciate the green pockets and parks within the blocks, which feature benches for seating. However, while the walkways and footpaths have palm trees, they lack shade trees, making walks uncomfortable during the day. Additionally, trash bins are placed every two houses,

and streetlights are installed along pedestrian pathways to maintain cleanliness and order. Concerning recreation, 30% of residents report having access to playgrounds, stadiums, and gyms, contributing to personal and social well-being. Despite these benefits, there are drawbacks such as the lack of sufficient shade, which impacts outdoor comfort, and the perception that the green space ratio is more of a selling point than a fully realized environmental benefit. Moreover, the rapid increase in the area's value may lead to affordability concerns, potentially pricing out future residents.

Sense of community

Justification: In Naya Nazimabad, this determinant is reflected in the physical design and social infrastructure facilitating positive interactions among neighbours in community spaces such as parks, recreational areas, and community centers.

The study aimed to recognize whether Naya Nazimabad contributes to a sense of community, focusing on the parameters of emotional safety, sense of belonging, and membership and influence. The results showed that 45% of the residents enjoyed living within the boundaries of Naya Nazimabad, as they felt they could trust their fellow citizens. The presence of children playing together also fostered a sense of security, as they were always under adult supervision, which helped build trust, safety, and strong community bonds. Additionally, 55% of residents reported an improved sense of community and belonging, as living within the boundaries allowed them to form closer relationships with neighbors. Many also believed that working together could influence community decisions and help maintain a positive living environment. However, while the sense of community is strong, some residents may feel socially isolated from the wider city due to the closed nature of the gated community. The reliance on close-knit relationships could also limit interaction with diverse groups outside the boundaries, potentially fostering insularity. Furthermore, the sense of security might create a false sense of safety, leading to complacency about broader security challenges or neglect of important neighborhood issues outside the community's direct influence.

DISCUSSION OF THE RESULTS

While Naya Nazimabad has made tremendous progress in providing a modern and secure living environment, there are still areas for development that can boost residents' satisfaction and contribute to the community's long-term success. These

areas for development are based on resident feedback, urban planning best practices, and common issues encountered by similar gated communities in Karachi and many Global South cities. The following are significant areas where improvements could be made to ensure long-term residential satisfaction and also promote Naya Nazimabad as a model for future gated communities in Karachi and beyond.

Despite being a self-contained community, Naya Nazimabad doesn't offer the best connectivity to other parts of Karachi. It may present difficulties for residents who use public transport regularly to access other parts of the city. To ensure improved transportation infrastructure, dedicated bus routes can be introduced to connect Naya Nazimabad to major destinations of Karachi, and also ride-sharing and shuttle services can be introduced, in addition to better quality of road networks for reducing travel time and cultivating traffic flow.

Naya Nazimabad predominantly marks the middle-income and upper-middle-income families, however, considering a rise in future housing demand, affordability may pose an issue for a wider range of potential residents. Integration of lower income groups within Naya Nazimabad could help attract a more diverse population by providing economically accessible units without compromising on basic amenities and security by offering flexible financing options.

To maintain the quality of regular upkeep the environmental quality of the community, a resident feedback system can be introduced to report maintenance issues promptly for timely action. For capitalizing on sustainable practices and eco-friendly infrastructure, sustainable practices such as recycling, composting, and green energy solutions can benefit both aesthetics and environmental responsibility. Also, integrate eco-friendlier building materials and energy-efficient systems into housing units and community buildings (e.g., solar panels, rainwater harvesting systems).

Gated communities, such as Naya Nazimabad, have the potential to create close-knit communities, but if they are not planned with social interaction in mind, they can occasionally create a sense of isolation. For this reason, community events can be held where residents can interact with their neighbours. Also, form a residents' committee to allow residents to voice concerns and suggestions along with generating some welcome programs for new residents by including them in social activities. There is a need to strengthen resident engagement in decision-making process by involving them in the governance of Naya Nazimabad through feedback surveys or community meetings. Such meetings can help to promote transparency in managing maintenance schedules,

changes in fees, and community developments. This will help to resolve the grievances of residents, and they will not feel ignored and dissatisfied.

As the population grows and ages, Naya Nazimabad will need to expand its healthcare facilities by providing more walking and cycling tracks for exercise, and recreational use and promoting active lifestyles. There will also be a need to establish more healthcare clinics, with specialized services.

CONCLUSIONS AND RECOMMENDATIONS

The original Nazimabad, like many parts of Karachi, faced swift urbanization and overpopulation, especially as the city's population swelled due to migration from rural areas and other provinces, putting pressure on housing, infrastructure, and public services, thus, weakening living standards. The development of Naya Nazimabad sought to address these problems by offering a planned, secure, and attractive alternative for middle and upper-middle-class families, providing a better quality of life in a growing and increasingly urbanized city. By addressing the shortcomings of the old Nazimabad, Naya Nazimabad aimed to provide a model of better urban planning and infrastructure for future developments, in addition to providing a safe and secure environment. The gated community appealed to buyers looking for a better return on investment in a community with improved prospects and more reliable and well-integrated civic services.

Conclusions

Nevertheless, the central thesis of the Post-Occupation Evaluation (POE) of Naya Nazimabad is that, while the development represents a modern approach to urban living through its design, infrastructure, and amenities, this evaluation also examines how Naya Nazimabad aligns with or deviates from the prevailing urban trends and the implications it holds for future residential developments in Karachi. Firstly, Naya Nazimabad, like other gated communities in Karachi, tends to reinforce social stratification, creating divisions between residents within gated developments and those outside them. This trend highlights the broader shift toward urban enclaves that often exclude lower-income groups, further exacerbating inequality in the city. Next, Naya Nazimabad's integration of sustainable design features—such as energy-efficient systems, green spaces, and waste management—mirrors growing global concerns about environmental sustainability. However, questions remain about the true effectiveness of these

initiatives and whether such developments can be sustained in the long term, especially in a rapidly urbanizing city like Karachi. Thirdly, the POE reflects a shift in housing preferences, as residents increasingly seek more controlled, secure, and self-contained living environments. This trend points to broader urban shifts in Karachi, where more affluent populations are increasingly drawn to private, gated spaces that promise safety, and exclusive, and modern amenities. In this way, Naya Nazimabad raises concerns about the concentration of resources in these areas and the potential neglect of neighboring, less affluent areas. The POE underscores the challenge of ensuring the equitable distribution of urban resources and maintaining efficient connectivity to avoid creating isolated or fragmented urban zones.

Recommendations

The rise of gated communities in Karachi has sparked important discussions about urban equity, sustainability, and the long-term consequences for both the residents within these communities and the broader city context. In essence, the POE of Naya Nazimabad suggests that the development model needs to evolve to address these issues, and a future research agenda should aim to explore these aspects in-depth to provide insights into more equitable and sustainable urban planning. The following research areas are suggested to guide future investigations:

- Investigate the socio-economic disparities between residents of gated communities and those in non-gated areas of Karachi, particularly regarding access to basic services

(healthcare, education, transportation, etc.), public space, and job opportunities.

- Examine the environmental, economic, and social sustainability of gated communities in Karachi over time to promote sustainable urban living.
- Investigate the allocation and quality of infrastructure and public services in gated communities compared to the wider urban sprawl of Karachi to analyze whether resources are disproportionately allocated to gated communities and the consequences of this for urban planning.
- Investigate the role of governance structures within gated communities and their impact on the broader urban governance framework of Karachi. The research focuses on how these communities interact with local and municipal authorities, and how policy shapes their development and functioning.
- Study the impact of gated communities on urban mobility and connectivity, with a particular focus on how they affect the flow of people, goods, and services between gated and non-gated neighbourhoods.

By focusing on these key areas, researchers can provide valuable insights that help shape future urban policies and guide the development of more inclusive, sustainable, and socially cohesive communities in Karachi.

REFERENCES

- Addo, I. A., 2016. Assessing Residential Satisfaction Among Low Income Households in Multi-Habited Dwellings in Selected Low Income Communities in Accra. *Urban Studies*, 53(4), pp. 631-650.
- Ahmed, N., 2010. From Development Authorities to Democratic Institutions: Studies in Planning and Management Transition in Karachi Metropolitan Region. *Common Wealth Journal of Local Governance*, Volume 7, pp. 120-134.
- Ajibola, M., Oloke, O. & Ogungbemi, A., 2011. Impact of gated communities on residential property values: A comparison of ONIPETESI Estate and its neighbourhoods in IKEJA, Lagos State, Nigeria. *Journal of Sustainable Development*, 4(2), p. 72.
- Al Omari, O., 2015. The Emergence of Residential Communities in Jordan. *Research Journal of Applied Sciences, Engineering and Technology*, 11(3), pp. 293-298.

Almatarnah, R., 2013. Choices and changes in the Housing market and Community Preferences: Reasons for the Emergence of Gated communities in Egypt: A Case Study of the Greater Cairo Region, Egypt. *Ain Shams Engineering Journal*, 4(3), pp. 563-583.

Amerigo, M. & Aragonés, J., 1997. A Theoretical and Methodological Approach to the Study of Residential Satisfaction. *Journal of Environment and Psychology*, Volume 17, pp. 47-57.

Aulia, D. N. & Ismail, A. M., 2016. The Criteria of Residential Satisfaction in Gated Community: Medan City. *Asian Journal of Behavioural Studies*, 1(3), pp. 41-50.

Bandouko, E., Arku, G. & Flimpong, H. N., 2022. A Systematic Review of Gated Communities and the Challenge of Urban Transformation in the African Cities. *Journal of Housing and the Built Environment*, 37(1), pp. 339-368.

Berköz, L., 2008. Gated Communities: User Satisfaction in Housing Environment in Istanbul. In: *Building Comfortable and Liveable Environments for all- Urban Design at the Urban Scale*, Atlanta. Georgia Tech University.

Blakely, E. & Snyder, M., 1997a. *Fortress America*. Washington DC: Brookings Institute.

Borgoni, R., Michaelangeli, A. & Pirola, F., 2018. Residential Satisfaction for a Continuum of Households: Evidence from European Countries. *SSRN Electron J*, Volume 378, pp. 1-30.

Breetzke, G. D., Landman, K. & Cohn, E. G., 2014. Is it Safer Behind the Gates? Crime and Gated Communities in South Africa. *Journal of Housing and the Built Environment*, 29(1), pp. 123-139.

Caldiera, P., 2000. *City of Walls: Crime, Segregation and Citizenship in Sao Paulo*. California: University of California Press.

Camparo, J., 2013. Camparo, J., 2013. A Geometrical Approach to the Ordinal data of Likert Scaling A Geometrical Approach to the Ordinal data of Likert Scaling and Attitude Measurements: The density matrix in psychology. *Journal of Mathematical Psychology*, 57(1-2), pp. 29-42.

Dowling, R., Atkinson, R. & McGuirk, P., 2010. Pivatism, Privatisation and Social Distinction in Master-Planned Residential Estates. *Urban Policy and Research*, 28(4), pp. 391-410.

El Sayed, E., 2016. Residents' Satisfaction in Gated Communities in Egypt. *International Journal of Scientific and Engineering Research*, 7(4), pp. 1185-1196.

Galster, G. C. & Hesser, G. W., 1981. Residential Satisfaction. *Environ Behav*, 13(6), pp. 735-758.

Hasan, A., 2008. Housing security and Related Issues: the Case of Karachi. Unpublished Paper, October, UN Habitat.

Hennink, M., Huttler, I. & Bailey, A., 2020. *Qualitative Research Methods*. Sage.

Ibem, E. O., Opoko, A. P., Adeboye, A. B. & Amole, D., 2013. Performance Evaluation of Residential Buildings in Public Housing Estates in Ogun State, Nigeria: User's Satisfaction Perspective. *Frontiers of Architectural Research*, Volume 2, pp. 178-190.

Ilesanmi, A., 2012. The Roots and Fruits of Gated Communities in Lagos, Nigeria: Social Sustainability or Segregation. *Sustainable Futures, Architecture and Urbanism in the Global South*. Kampala-Uganda, pp.27-30.

Kaker, S., 2014. Enclaves, Insecurity and Violence in Karachi. *South Asian History and Culture*, 5(1), pp. 93-107.

Kalantari, S., Rafieian, M., Aghasafari, A. & Khalil, H., 2017. Investigation of Gated Communities in Tehran City. *Journal of Research in Ecology*, 5(2).

Khamis, I., Elshater, A., Afifi, S. & Baher, M., 2023. Residents' Responses to Social Interactions and Social Sustainability of Gated Communities in Gated Communities of the Greater Cairo Region. *HBRC Journal*, 19(1), pp. 543-562.

Kuriakose, B., 2014. *Housing the rural poor in Kerala: A Revisit to Understand Success*. Indian Institute of Technology. Madras, Chennai.

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- Manzelat, R., 2016. Gated Communities and Sense of Community: A Review on the Social Features of Gated Communities. *Int J Civil Environ Struct Constr Archit Eng*, 10(5), pp. 671-676.
- Mohd, T., Johari, N. & Abdul Ghani, R., 2016. Satisfaction Level of Gated and Guarded Community residents (case study: Meru Hills, Ipoh). *Procedia Soc Behav Sci*, Volume 222, pp. 747-752.
- Mohit, M. A. & Azim, M., 2018. Residents' Satisfaction with Public Housing in Hulhumale, Area of Male, Maldives. *Asian Journal of Environment-Behaviour Studies*, 3(9), pp. 125-135.
- Mohit, M. & Raja, A., 2014. Residential Satisfaction Concepts , Theories and Emipiral Studies. *Planning Malaysia*, Volume 3, pp. 47-66.
- Molin, E., 2011. *The Measurement and Analysis of Housing Preference and Choice*. Springer Nature, 2011.
- Molloy, R., Healy, S. & Mooney, R., 2018. Drivers of Residential Satisfaction and Aspirations in Ireland. *Integrating Environmental Sustainability in Regeneration Processes*, p.320.
- Nadeem, O. et al., 2013. Residents' Perception and Analysis of the Contemporary Neighbourhood Design Practices in Lahore, Pakistan. *Journal of Engineering and Applied Sciences*, Volume 12, pp. 143-158.
- Nazmy, E., Fahmi, . S. & Sayed, E., 2016. Residents Satisfaction at Gated Communities in Egypt. *International Journal of Science and Engineering Research*, Volume 7, pp. 1185-1196.
- Ogunbayo, B. F. et al., 2018. Resident's Facilities Satisfaction in Housing Project Delivered by Public Private Partnership (PPP) in Ogun state Nigeria. *Journal of Civil Engineering and Technology (IJEICT)*, 9(1), pp. 562-577.
- Omar & Khalid, 2015. The emergence of the Residential Gated Communities in Jordan. *Research Journal of Applied Sciences, Engineering and Technology*, 11(3), pp. 293-298.
- Preiser, W. F., White, E. & Rabinowitz, H., 2015. *Post Occupancy Evaluation* (Routledge Revivals). Routledge.
- Sadiq, A., Shakir, M.M. & Ahmed, S., 2010 Gated living in the context of Karachi. *Journal of Research in Architecture & Planning*, 9(1),pp.50-64.
- Salah, V. M., & Ayad, H.M., 2018. Why People Choose Gated Communities. *Alexandria Engineering Journal*, 54(4),pp.2743-2753.
- Stevenson, F., 2008. Post Occupancy Evaluation of Housing. *In Corporate Social Responsibility.(CSR) Conference*.
- Tan, T. H., 2016. Residential Satisfaction in Gated Communities: Case Study of Desa Park City, Kuala Lumpur, Malaysia. *Property Management*, 34(2), pp. 84-99.
- Wanas, A., Mostafa, Y. & Murshed, S., 2014. Social Cohesion in Cairo: Toward a Better Understanding of the Potentila Role of Urban Design. *Journal of Engineering and Applied Science*, 61(1), pp. 1-24.
- Waziri, A. G., Yusof, N. A. & Abd Rahim, N., 2014. Occupants Housing Satisfaction: Does Age Really Matter. *Urban Plan Transp*, 21(1), pp. 341-353.
- Zhang, H. & Lin, S. H., 2012. Sense of Community in Taiwan and its Relationships with the Residential Environment. *Procedia-Social and behavioral Sciences*, Volume 35, pp. 335-343.