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Residential Satisfaction in Gated Communities of Kolkata: An Empirical Assessment

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Abstract

The spatial distribution of gated communities in Kolkata is predominantly concentrated in specific urban zones, including Chowringhee, the EM Bypass corridor, Tangra, Topsia, Ballygunge and Behala. The central business district accommodates older commercial towers whereas EM Bypass are characterized by modern residential and mixed-use skyscrapers. This pattern is largely influenced by constraints of land availability, escalating property values, and the presence of robust infrastructural networks. Furthermore, regulatory frameworks, including enhanced Floor Area Ratios in planned townships, have facilitated vertical urban expansion to address population growth and commercial demand. In these gated communities, residential satisfaction performs a crucial role in assessing the characteristics of housing demand in Kolkata. This study assesses residents' perceived satisfaction across five key dimensions and explores the relationship between social interaction frequency, satisfaction levels, and mobility intentions. Additionally, it evaluates the influence of socio-demographic and economic variables on overall residential satisfaction.

Keywords: *Gated neighbourhoods, satisfaction level, living condition, social interactions, Kolkata.*

Introduction

Gated communities are privately governed residential enclaves characterized by restricted access and controlled entry points designed to exclude non-residents. These developments in the urban landscape effectively transform formerly public or semi-public urban space into exclusive private domains, justified on the grounds of enhanced security, lifestyle amenities, and social homogeneity. Proliferation of such enclaves in major urban centres of India has accelerated since the economic liberalization of the early 1990s. Developers and residents perceive gated communities as beneficial in view of inadequate municipal governance in rapidly growing cities.

It is important, however, to recognize that spatial segregation and exclusive residential arrangements are not entirely new phenomena in India. Long before the current wave of market-driven gated enclaves, the state itself created bounded residential zones for military cantonments for army, navy, and air force personnel, government colonies for civil servants, teachers, bank employees, police officers, and public-sector undertakings (e.g., oil company townships). These enclaves however are different in the sense that they typically lacked the sophisticated private

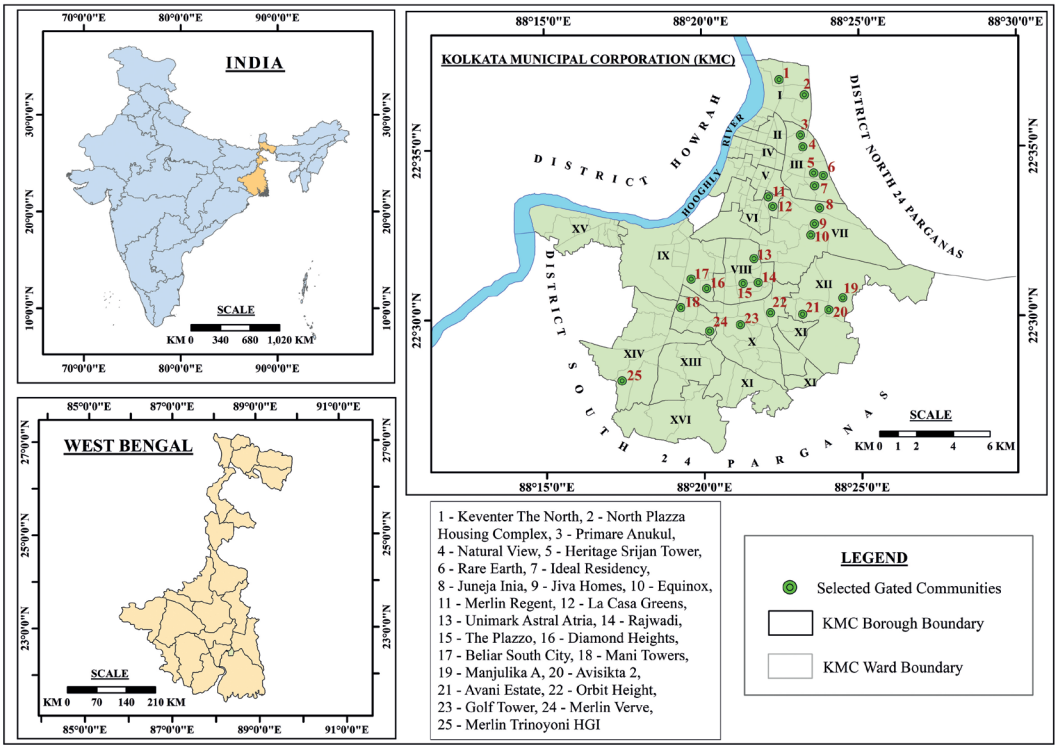

Fig. 1: Location of selected gated communities

Source: Field survey, 2022-23 and KMC Map, 2024

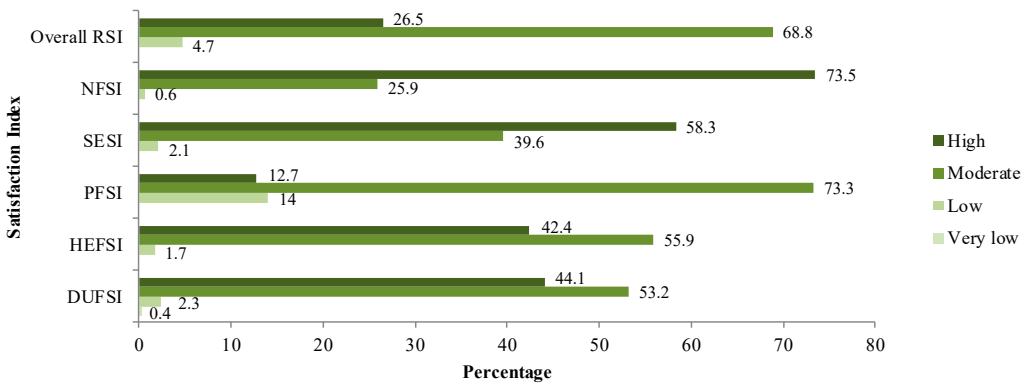

Fig. 2: Level of satisfaction

Source: Computed by the Author from primary field survey, 2022-23

Note: DUFSI= Dwelling Unit Features Satisfaction Index; HEFSI= Housing Estate Features Satisfaction Index; PFSI= Public Facilities Satisfaction Index; SESI= Social Environment Satisfaction Index; NFSI= Neighbourhood Features Satisfaction Index; RSI= Residential Satisfaction Index.

security apparatus like armed guards, CCTV surveillance, biometric access systems—that defines contemporary gated communities (Bal *et al.*, 2017; Balakrishnan & Muthulakshmi, 2016; Jecob & Chander, 2020). Here, residential satisfaction is an important metric for evaluating the characteristics of housing demand in gated communities in Kolkata. The quality of life of individuals residing in a particular residential location has been analysed by considering residential satisfaction factors. Furthermore, it serves as a significant determinant that impacts individuals' choice for moving to a new residence.

Global critical perspectives on gating and inequality

Most researchers interpret the rise of gated communities as part of broader transformations in urban society, particularly the intensification of socio-economic inequality and the growing dominance of market-led development. Coy (2006) argues that the declining capacity of public authorities to regulate urban change has enabled private actors to shape cities, resulting in fragmented and exclusionary urban spaces. In this context, gating emerges not merely as a residential preference but as a spatial strategy embedded within neoliberal urban restructuring. Building on this, Vesselinov (2008) and Vesselinov *et al.* (2007) emphasize that gated communities are both a product and a mechanism of urban inequality. By restricting access and creating enclaves defined by income, race, and ethnicity, they reinforce existing social hierarchies. Thus, gated communities do not simply reflect inequality; they actively reproduce and deepen it by institutionalizing separation within the urban fabric. Similarly, Blandy and Lister (2005) highlight how gating produces socially homogeneous spaces through selective criteria such as income and age, fostering "social sorting" and limiting interaction across diverse social groups. Comparative studies underline the global nature of these processes. Roitman (2005) in Argentina and Genis (2007) in Istanbul show that gated communities intensify socio-cultural divisions and fragment urban space by establishing clear boundaries between "insiders" and "outsiders." Extending this perspective, Atkinson and Flint (2004) argue that gating reshapes everyday practices and mobility patterns, producing a lived experience of separation that goes beyond physical barriers.

Taken together, these perspectives position gated communities at the intersection of inequality, privatization, and spatial segregation. Rather than isolated residential forms, they are part of a broader urban transformation in which social divisions are increasingly inscribed into space, simultaneously reflecting and magnifying structural inequalities.

Residential satisfaction in gated communities

The study of residential satisfaction can be seen as a logical extension of the above debate, shifting the focus from macro-level processes of inequality to the lived experiences within gated environments. If gating restructures urban space and social relations, residential satisfaction provides a micro-level lens to assess how these transformations are perceived by residents.

Residential satisfaction is widely conceptualized as a multidimensional construct shaped by dwelling characteristics,

neighbourhood conditions, and social relations. Lu (1999) defines it as a cognitive evaluation of how well housing meets individual needs, while Galster and Hesser (1981) emphasize the interplay between subjective perceptions and objective residential conditions. Together, these perspectives highlight that satisfaction is both experiential and structural. A major trend in the literature is the use of composite indices to measure satisfaction. Adriaanse (2007), Amerigo and Aragones (1997), and Ogu (2002) developed frameworks incorporating housing quality, environmental conditions, and neighbourhood attributes, reflecting efforts to standardize assessment. At a more detailed level, studies identify key determinants of satisfaction. Jiboye (2012) and Addo (2016) stressed the importance of adequate space and access to infrastructure, while Mohit *et al.* (2010) showed that satisfaction extends beyond the dwelling unit to include services, facilities, and the social environment. Socio-demographic factors also play a role, with Rioux and Werner (2011) and Varady and colleagues (1998, 2000) highlighting variations based on age, cost, and social interaction. Additionally, researchers distinguish between physical factors (location, design, utilities) and non-physical ones (security, tenure, social relations), a distinction particularly relevant in gated communities. Empirical studies further link satisfaction to broader urban transformations. Fang (2006) and Buys and Miller (2012) demonstrate how market shifts, density, safety, and neighbourhood conditions shape residential experiences. In India, Jecob and Chander (2020) note rising elderly preference for gated living, with high satisfaction in physical aspects but less attention to social dimensions.

Overall, the literature moves from defining and measuring residential satisfaction to situating it within broader urban processes. However, a key gap remains in explicitly linking satisfaction to the structural logic of gating. While many studies assess satisfaction within specific housing contexts, few critically examine how exclusion and privatization shape these perceptions. Addressing this gap is essential to determine whether gated communities merely enhance living conditions or also reproduce underlying urban inequalities.

Objectives

This research analyses the various components and assesses their impact on the overall satisfaction process. The specific objectives are:

a) To assess the level of residential satisfaction as expressed by residents of selected gated communities in Kolkata.

b) To analyse the socio-demographic parameters and the specific services and amenities that have an impact on the level of residential satisfaction among the residents.

c) To examine the correlation between the frequency of social interactions among residents and their degree of residential satisfaction, as well as their intention of moving to a different residence.

Methodology

There are gated communities all across Kolkata, varying in size, design, and type. Therefore, it is necessary to look into how satisfied residents are with their overall satisfaction components.

Selection and sample

The current study examines five components of residential satisfaction, namely: (1)

dwelling unit features with 8 variables; (2) housing estate features with 10 variables; (3) public facilities with 10 variables; (4) social environment features with 5 variables; and (5) neighbourhood facilities with 8 variables (Table 1).

The study adopted a quantitative methodology and incorporated primary data sources. Primary data was collected by a questionnaire survey and a perception study. This study employed snowball sampling to optimise data collecting and overcome time constraints. A comprehensive enumeration identified a total of 488 "type 3" and "type 4" gated communities within the administrative boundaries of the Kolkata Municipal Corporation (KMC) (Sarkar & Sivaramakrishnan, 2024). From this population, a stratified sample comprising 5% or 25 gated communities was selected for detailed investigation. Within each selected community, 15% of the total households were systematically sampled to ensure adequate representation. Consequently, the survey encompassed 528 households distributed across 25 enclosed residential complexes situated within the jurisdiction of the KMC (Fig. 1).

Data collection entailed administering a questionnaire that included inquiries specifically targeting the residential contentment of individuals residing in gated communities. There are also inquiries regarding the sufficiency of their living conditions, the frequency of social interaction among residents, and their mobility. Housing satisfaction and adequacy have been assessed using a five-point likert scale ranging from "1" representing very dissatisfied to "5" representing very satisfied. The index value of residential satisfaction level and adequacy of living condition level have been classified into c four levels: very low (20-39), low (40-59), moderate (60-79) and high (80-100).

Satisfaction index

Satisfaction index for a particular housing component has been measured by:

$$SIc = \frac{\sum_{i=1}^{N} yi}{\sum_{i=1}^{N} Yi} \times 100$$

Where SI is a respondent's satisfaction index with a residential environment component, c, and N is the number of variables scaled under c. In addition, yi is the respondent's actual score on the ith variable and Yi is the scale's maximum score.

Residential satisfaction index

Residential satisfaction index is the sum total of the component satisfaction indices:

$$SIr = \frac{\sum_{i=1}^{N1} di + \sum_{i=1}^{N2} hi + \sum_{i=1}^{N3} pi + \sum_{i=1}^{N4} sei + \sum_{i=1}^{N5} ni}{\sum_{i=1}^{N1} Di + \sum_{i=1}^{N2} Hi + \sum_{i=1}^{N3} Pi + \sum_{i=1}^{N4} SEi + \sum_{i=1}^{N5} Ni} \times 100$$

where SIr is a respondent's satisfaction index with residential environment, N1, N2, N3, N4, and N5 are the variables selected for scaling under each component, and di, hi, pi, sei, and ni are the respondent's actual score on the ith variable. The maximum scores for the ith variable in dwelling unit characteristics, housing estate features, public facilities, social environment features, and neighbourhood facilities are Di, Hi, Pi, SEi, and Ni.

Adequacy of living condition index

$$ALCIx = \frac{\sum_{i=1}^{N} ay'x}{\sum_{i=1}^{N} Ay'x} \times 100$$

ALCIx is the adequacy of living condition (Ogu, 2002) of variable x, N is the number of respondents (528), and ay'x is the yth respondent's five-point score on the xth variable. 'A' represents the maximum possible score that respondent y' could give to variable x on the five-point likert scale.

Gated community in Kolkata

Kolkata is one of the oldest metropolitan cities in India and covers an area of 206.08 km^2, encompassing 144 wards distributed across 16 boroughs (Kolkata Municipal Corporation, 2024). Since 2000, several major builders' companies have constructed luxury private gated communities. During the past twenty years, several gated communities have emerged in Kolkata. Regrettably, there has been a lack of extensive research on residential satisfaction in gated communities, especially in Kolkata, despite proliferation and acceleration in the recent times.

Results and discussion

Respondent characteristics

Respondents of the gated communities of Kolkata are predominantly male (61.2%), majority are Hindus (88.4%), with 10% are Muslims; over 84% from upper caste, 5.1% from Scheduled Caste and Scheduled Tribe, and 10.8% from the other backward caste. Majority (65.9%), of the respondents were 40-60 years old followed by the older persons above 60 years (24.3%) while younger than 40 years constituted 9.8% in the sample. Over half (53.6%) of the families had 4 to 5 members and the remaining consisted of fewer numbers, often 1 to 3 members each. Large proportion (38.5%) of the respondents was post graduates, 32.2% had professional degree. Very few (3.2%) of the respondents were unmarried though 10.4% were separated, divorced and widowed.

Largest proportion (46.4%) of the respondents worked in private sector followed by government sector (18%). Some of them (16.1%) were self-employed or worked (19.5%) in other sectors. Understandably, most of them belonged to relatively higher income group earning more than Rs 1 lakh per month.

Residential satisfaction

Respondent's level of satisfaction with residential environment consisting of 41 variables divided in 5 residential satisfaction components is presented in Table 1. The majority of the respondents perceived moderate level of satisfaction (68.8%) in terms of overall satisfaction (RSI). However, a little over a quarter (26.5%) reported high level of satisfaction. Very few (4.7%) experienced low level of satisfaction in overall RSI. (Fig. 2)

Across the dimension of dwelling unit features, respondents generally expressed high level of satisfaction. The residential units are characterized by modern architectural design, ensuring adequate ventilation and spacious interiors, including bedrooms, kitchens, dining areas, and balconies. Residents willingly pay premiums for such amenities, which collectively contribute to their overall residential comfort. Housing units were developments are equipped with essential services such as elevators, reliable water and electricity supply, drainage infrastructure, firefighting systems, and adequate outdoor seating. These facilities are professionally managed and maintained, resulting in minimal service interruptions. Gated communities also provide a range of shared public amenities accessible to all residents. These include open spaces for walking, designated play areas for children and adults, parking facilities, community halls for social events, gyms, swimming pools,

Table 1: Distribution of residential satisfaction variables by level of satisfaction and Pearson (r)

Satisfaction with	Very low	Low	Moderate	High	SD	Pearson (r)
Spatial layout	0.6	0.4	16.9	82.2	12.073	0.664**
Natural ventilation	-	-	21.2	78.2	11.757	0.480**
Living space	-	1.9	5.3	92.8	10.654	0.720**
Dining space	0.4	1.1	25.8	72.8	13.638	0.668**
Bedroom	0.4	0.6	6.4	92.6	10.500	0.739**
Kitchen	0.4	6.6	23.5	69.5	14.018	0.749**
Bathroom and toilet	-	2.3	11.2	86.6	9.952	0.652**
Balconies	1.9	7.8	36.7	53.6	15.364	0.684**
Dwelling unit features (DUFSI)	**0.4**	**2.3**	**53.2**	**44.1**	**8.213**	**1**
Corridors	-	3.0	19.8	77.2	12.154	0.582**
Lift	0.8	0.6	7.0	91.6	12.133	0.387**
Electricity supply	-	-	0.4	99.6	10.063	0.604**
Water supply	1.1	0.6	2.5	95.8	13.218	0.480**
Sewerage and drainage	-	0.8	7.4	91.8	9.556	0.555**
Fire fighting system	-	3.6	26.3	70.1	12.493	0.597**
Landscaping	-	1.5	43	55.5	13.305	0.610**
Outdoor seating adequacy	-	5.1	42.8	52.1	13.545	0.665**
Outdoor seating location	-	4.4	47.7	47.9	13.267	0.649**
Maintenance and service charges	0.6	4.0	32	63.4	14.011	0.652**
Housing estate features (HEFSI)	**-**	**1.7**	**55.9**	**42.4**	**7.184**	**1**
Open space	-	0.4	14.4	85.2	9.902	0.463**
Playing area	-	3.4	48.1	48.5	12.804	0.512**
Parking	-	0.9	7.0	92.1	12.133	0.590**
Community hall	-	2.5	7.2	90.3	13.976	0.623**
Perimeter roads	-	1.1	24.4	74.5	12.338	0.459**
Pedestrian walkway	-	1.9	43.6	54.5	12.954	0.498**
Local shops and food stall	1.5	8.7	49.6	40.2	14.729	0.355**
Gym	1.0	6.7	45.7	46.6	16.646	0.572**
Swimming pool	1.1	11.2	54.3	33.4	27.504	0.731**
Library	1.6	38.9	44.7	14.8	29.528	0.632**
Public facilities (PFSI)	**-**	**14.0**	**73.3**	**12.7**	**9.277**	**1**
Noise	3.2	5.9	22.3	68.6	16.181	0.609**
Crime	-	-	6.4	93.6	9.740	0.662**
Safety and security	-	-	1.5	98.5	10.581	0.615**
Community relation	0.4	2.5	18.2	78.9	13.375	0.615**
Homogeneity	0.4	4.7	30.1	64.8	13.746	0.591**

Social environment (SESI)	**-**	**2.1**	**39.6**	**58.3**	**7.796**	**1**
Distance to city	-	1.7	20.5	77.8	10.509	0.615**
School	-	0.6	20.1	79.3	11.294	0.668**
Police	-	-	13.8	86.2	9.955	0.610**
Hospital	-	-	9.7	90.3	11.355	0.747**
Market	-	-	6.1	93.9	10.283	0.730**
Shopping	-	0.4	7.2	92.4	12.281	0.817**
Bus and taxi stand	-	-	6.6	93.4	10.686	0.789**
Other connectivity	-	-	4.7	95.3	8.280	0.687**
Neighbourhood facilities (NFSI)	**-**	**0.6**	**25.9**	**73.5**	**7.528**	**1**
Overall RSI	-	4.7	68.8	26.5	6.253	-

**significant at 0.01 level *Source: Computed by Author from primary field survey, 2023*
Notes: Level of satisfaction: Very low =20–39; Low=40–59; Moderate=60–79; High=80–100

food kiosks, and libraries. While satisfaction with these amenities is moderate, concerns persist regarding issues of cleanliness and overcrowding which limit overall contentment. In terms of social environment features, residents report moderate to high satisfaction. The presence of comprehensive security arrangements—such as round-the-clock guards and CCTV surveillance—contributes to a heightened sense of safety and low perceived crime risk. Frequent community gatherings, including religious and cultural celebrations, play a significant role in fostering positive neighborhood interactions and strengthening social ties among residents. Additionally, the availability of neighborhood facilities significantly influences residential satisfaction. These gated communities are strategically located in areas with strong connectivity and proximity to essential urban services—including hospitals, schools, shopping centres, and public transportation networks. Real estate developers actively highlight such locational advantages in marketing strategies, as accessibility and service proximity are major drivers influencing residents' decisions to choose gated communities as their preferred living environment.

Adequacy of living condition

The adequacy of living condition index (ALCI) shows (Table 2) the perception of respondents on the adequacy level of the 22 selected variables in their gated communities for two components; i.e. housing unit features, and neighbourhood features. These gated communities provide high-quality housing facilities that serve as a major attraction for prospective residents. The architectural designs are distinctive and constructed with durable, premium materials, while the interiors feature contemporary layouts with spacious rooms. Strategic location and strong road connectivity further enhance the desirability of these developments. Additionally, they offer ample parking spaces, well-planned lighting throughout the premises, and comprehensive security measures including round-the-clock guards

and CCTV surveillance. Green landscapes and recreational amenities are also sufficiently integrated, contributing to an enhanced residential environment within these gated complexes. The value of ALCI in the housing unit features is 77.65 and for neighbourhood features it is 75.67. The overall ALCI value is 76.66 displaying moderate level of residential satisfaction.

Differential satisfaction

It may be worthwhile to relate level of satisfaction with diverse characteristics of the respondents. The Pearson correlation coefficient (r) analysis (Table 3) indicates a strong positive relationship between the Residential Satisfaction Index (RSI) and all five component indices—Dwelling Unit Features (DUFSI), Housing Estate Features (HEFSI), Public Facilities (PFSI), Social Environment (SESI), and Neighbourhood Facilities (NFSI). This suggests that improvements across these domains collectively enhance overall satisfaction. The analysis further reveals a clear positive association between RSI and key socio-economic variables such as income, occupation, and educational attainment. Individuals with higher income levels, stable employment, and better education tend to report greater satisfaction, likely due to their enhanced ability to access superior housing conditions and services. In contrast, RSI shows a negative relationship with age. As residents grow older, physical limitations and reduced social interaction—especially where working family members are often absent—may contribute to declining satisfaction levels. Similar patterns are evident across the component indices. DUFSI is positively correlated with education, occupation, and income, indicating that households with greater purchasing capacity are more likely to reside in well-designed units with modern amenities. However, it is negatively associated with age, suggesting reduced satisfaction among older residents. Housing estate features (HEFSI) and public facilities (PFSI) also show positive relationships with socio-economic status, while access to public amenities is additionally influenced by family size, reflecting greater use and reliance among larger households. Both indices, however, exhibit a negative correlation with age. The SESI shows a positive correlation primarily with occupation, implying that professional engagement may influence perceptions of social interaction and community life. The NFSI are positively associated with family size, occupation, and income, but negatively related to age, reinforcing the pattern of reduced engagement among older residents. Overall, the findings reveal that socio-economic advantages such as higher income, education, and occupation enhance residential satisfaction across multiple dimensions, while age tends to have a limiting effect. This suggests that while better resources improve access and utilization of housing and neighbourhood amenities, older residents may experience constraints that reduce their overall satisfaction within gated communities.

Residents' mobility

This section explores the relationship between residents' social interaction and their mobility intentions. In general, higher

Table 2: Adequacy of Living Condition Index (ALCI) of residential features

Adequacy of living condition features	ALCI
Condition of housing unit	78.33
Privacy in the house	80.87
Wall and floor material	78.71
Adequacy of no of rooms	78.63
Access to water supply	81.87
Generator supply during power cuts	79.88
Balconies	70.07
Corridors	74.88
Bathrooms and toilet	78.44
Natural ventilation	74.73
Housing Unit features	77.65
Road connectivity	80.19
Open space	77.05
Parking area	81.17
Playing area	68.37
Local shops and food stalls	66.47
Street lighting	77.61
Sewerage and drainage	78.18
Safety and security	84.2
Maintenance and environmental facilities	80.3
Recreational facilities	71.7
Green area	71.97
Outdoor seating location	70.87
Neighbourhood Unit features	75.67
Overall ALCI	76.66

Source: Field survey, 2023

Notes: Adequacy Level: Very low =20–39; Low=40–59; Moderate=60–79; High=80–100.

levels of interaction among neighbours foster a stronger sense of belonging, which reduces the likelihood of relocation. Table 4 clearly illustrate this pattern. Among respondents who reported daily social interaction, 98.5% had no plans to move within the next 2–3 years. Similarly, of those engaging in weekly interactions, 79.5% expressed no desire to move, whereas 12.3% indicated an intention to relocate and 8.2% remained uncertain. In contrast, respondents with limited or rare social interaction showed a much higher tendency to consider relocation. About 40.3% of this group planned to relocate, and 23.9%

Table 3: Correlation matrix between residential satisfaction components and socio- economic attributes

Variables	DUFSI	HEFSI	PFSI	SESI	NFSI	Age	Educational attainment	Family size	Occupation	Income
DUFSI	1					-0.197**	0.136**		0.203**	0.195**
HEFSI	0.485**	1					0.091*		0.209**	0.117**
PFSI	0.533**	0.568**	1			-0.267**	0.250**	0.126**	0.218**	0.193**
SESI	0.446**	0.503**	0.505**	1					0.108*	
NFSI	0.465**	0.551**	0.497**	0.577**	1	-0.140**		0.133**	0.117**	0.097*
RSI	0.755**	0.784**	0.813**	0.771**	0.781**	-0.195**	0.131**		0.221**	0.162**

Notes: **significant at 0.01 level, *significant at 0.05 level.
Source: Computed from field survey data, 2023

Variable definitions: DUFSI= Dwelling Unit Features Satisfaction Index; HEFSI= Housing Estate Features Satisfaction Index; PFSI= Public Facilities Satisfaction Index; SESI= Social Environment Satisfaction Index; NFSI= Neighbourhood Features Satisfaction Index; RSI= Residential Satisfaction Index.

Table 4: Chi-square test for relationship between residents' social interaction frequency and the residents' mobility intentions

Residents' social interaction frequency		Residents' mobility intentions in 2-3 year			Total	Chi-square value	P value
		Yes	No	Maybe			
Daily	Count	4	262	0	266	156.868	0.000**
	Row %	1.5	98.5	0	100		
	Column %	7.3	59.4	0	50.4		
weekly	Count	24	155	16	195		
	Row %	12.3	79.5	8.2	100		
	Column %	43.6	35.2	50	36.9		
Rarely	Count	27	24	16	67		
	Row %	40.3	35.8	23.9	100		
	Column %	49.1	5.4	50	12.7		
Total	Count	55	441	32	528		
	Row %	10.4	83.5	6.1	100		
	Column %	100	100	100	100		

Notes: **significant at 0.001 level
Source: Computed from field survey data, 2023

Table 5: Relationship between residents' social interaction frequency and rsatisfaction level

Residents' social interaction frequency		Residential Satisfaction Index (RSI)			Total	Chi-square value	P value
		Low	Moderate	High			
Daily	Count	8	212	46	266	33.351	0.000**
	Row %	3	79.7	17.3	100		
	Column %	32	58.4	32.9	50.4		
weekly	Count	10	116	69	195		
	Row %	5.1	59.5	35.4	100		
	Column %	40	32	49.2	36.9		
Rarely	Count	7	35	25	67		
	Row %	10.5	52.2	37.3	100		
	Column %	28	9.6	17.9	12.7		
Total	Count	25	363	140	528		
	Row %	4.7	68.8	26.5	100		
	Column %	100	100	100	100		

Notes: **significant at 0.001 level
Source: Computed from field survey data, 2023

expressed a possibility of doing so, while only 35.8% reported no intention to leave. The chi-square test confirms a strong and statistically significant association between social interaction and mobility intentions ($\chi^2 = 156.868$, $p < 0.001$). These findings suggest that frequent social interaction plays a crucial role in enhancing residential stability. Residents who are more socially engaged tend to develop stronger community ties, greater comfort, and a deeper sense of place attachment, all of which reduce their inclination to move. Conversely, limited interaction is associated with weaker social networks and lower emotional attachment, increasing the likelihood of relocation. Overall, the results highlight the importance of social cohesion in shaping both residential satisfaction and future mobility decisions.

Residents' social interaction frequency and satisfaction level

Regular interaction with neighbours tends to strengthen a sense of belonging, which positively influences satisfaction with the living environment. Table 5 reflects this association. Among residents who reported daily social interaction, 79.7% experienced a moderate level of RSI, 17.3% reported high satisfaction, and only 3% indicated low satisfaction. Similarly, among those engaging in weekly interactions, 59.5% reported moderate RSI, while a notable 35.4% experienced high satisfaction and just 5.1% reported low satisfaction. In contrast, residents with rare social interaction showed comparatively weaker outcomes, with 10.5% reporting low RSI, 52.2% moderate, and 37.3% high RSI. The chi-square test indicates

a statistically significant association between social interaction and residential satisfaction ($\chi^2 = 33.351$, $p < 0.001$). These findings suggest that frequent neighbourly interaction contributes to higher satisfaction levels by fostering a supportive social environment, enhancing perceived safety, and strengthening community attachment. Conversely, limited interaction may reduce these social benefits, leading to comparatively lower satisfaction. Overall, the results underscore the importance of social cohesion and interpersonal relationships as key determinants of how residents perceive and evaluate their living conditions within gated communities.

Conclusion

The majority of residents in Kolkata's gated communities' express moderate satisfaction with their overall residential environment. The higher satisfaction levels associated with public facilities can be attributed to their broad accessibility, frequent utilization, and direct influence on residents' daily activities. Well-maintained infrastructure, such as road networks, transportation services, and public safety amenities, tends to create a strong positive perception of the living environment. In comparison, satisfaction with housing units and dwelling features reflects more individualized experiences and is often constrained by economic capacities, building age, and quality of construction, leading to a more moderate level of approval. Moreover, neighbourhood facilities and the social environment often foster a stronger emotional connection among residents, contributing to a heightened sense of comfort, safety, and belonging. Social cohesion, community interaction, and access to recreational and cultural amenities play a crucial role in shaping subjective well-being. Therefore, high satisfaction in these domains indicates that residents place significant value on communal support networks and the overall sociocultural character of their gated community, which enhances the perceived quality of life. Public facilities show only a small percentage with low satisfaction, indicating generally positive perceptions. Correlation analysis reveals moderately positive relationships among the different components of satisfaction, and overall residential satisfaction. Socio-demographic and economic variables also play a role in shaping satisfaction levels: age shows a negative correlation with overall residential satisfaction, whereas educational attainment, occupation, and income demonstrate positive correlations. Inferential analysis further highlights significant associations between residents' frequency of social interactions, their mobility intentions, and overall residential satisfaction. Enhanced stronger social ties within the community contribute to higher satisfaction and reduced likelihood of relocation. Therefore, fostering opportunities for social engagement among residents through community events, shared spaces, and inclusive neighbourhood planning that can enhance satisfaction, nurture a sense of belonging, and strengthen community cohesion. Overall, the findings emphasize the need for integrated approaches to residential

management that prioritize both physical infrastructure and social dynamics to improve the living experience in Kolkata's gated communities.

Policy relevance

The findings have strong implications for urban housing and community development policies in Kolkata. The moderate satisfaction levels among residents highlight the need for a more balanced approach to gated community planning that goes beyond infrastructure provision. Policymakers and urban planners should focus on improving neighbourhood and social environment features, as these are key determinants of higher satisfaction. The positive relationship between social interaction frequency and residential satisfaction suggests that fostering social cohesion can enhance overall well-being and stability within communities. Therefore, policies should promote the creation of inclusive community spaces, such as parks, recreation areas, and cultural or social events, that encourage interaction among residents. Additionally, regulations could incentivize developers to integrate social design principles like shared courtyards, pedestrian-friendly layouts, and mixed-use amenities into gated community projects. Considering the positive correlation between income, education, and satisfaction, social housing policies must also address inequality by ensuring affordable access to quality residential environments. Lastly, the negative relationship between age and satisfaction calls for age-sensitive planning, including accessible infrastructure and senior-friendly amenities. Collectively, these insights support the formulation of socially responsive urban housing policies aimed at enhancing satisfaction, belonging, and community spirit in Kolkata's gated residential developments.

Competing interest

The corresponding author declares that they have no conflict of interest.

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