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Evaluating Resident Satisfaction in Public Housing: Evidence from Asrayan Project-II

Rakibul Hasan [1*], Mahmuda Akter [2], Gazi Mohammed Mahbub [1] & Goutom Das [3]

1 Assistant professor, Department of Economics, Gopalganj Science and Technology University, Bangladesh.
2 Assistant professor, Department of Business Administration, Hamdard University Bangladesh.
3 MSS student of Department of Economics, Gopalganj Science and Technology University, Bangladesh.
* Corresponding author: Rakibul Hasan (jurakib99@yahoo.com)

Abstract

The purpose of the study is to evaluate the resident's satisfaction level in public housing project under Asrayan Project-II and identify the key socio-economic factors influencing their satisfaction. The study objectives were analyzed by using chi-square tests, relative importance index (RII) and multiple linear regression. Using a multistage random sampling technique, 379 respondents from Gopalganj, Munshiganj, and Narail were selected. Chi-square results show that age, family size, education, religion, and duration of residence significantly influence housing satisfaction, with most associations significant at the 5% level and several only at the 10% level, whereas income level shows no significant association. The relative importance index (RII) value shows the highest and lowest rank factor. The regression test shows that social environment and accessibilities factors significantly affect housing satisfaction rather than the physical structure of the housing, where the model captures 16.6 % of the variance in housing satisfaction. The results of this study can be used by the policymakers and housing authority to enhance the quality and effectiveness of the public housing of Asrayan Project II by giving greater emphasis on the factors with the lowest RII value.

***Keywords**: Resident satisfaction, public housing, Asrayan Project-II, Bangladesh.*

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1. Introduction:

Housing is not merely a matter of shelter or a constitutional right; it is a multidimensional driver of well-being, human capital development, and sustainable socio-economic progress (Shaw, 2004; Thomson et al., 2013). The United Nations (2023) identifies Sustainable Development Goal 11 (SDG 11) as a framework for fostering "sustainable cities and communities". In particular, Target 11.1 emphasizes "ensuring access for all to adequate, safe, and affordable housing and basic services, and upgrading slums by 2030" (United Nations, 2015). Housing is recognized to be a crucial component of the SDGs both directly and indirectly (UN-Habitat, 2021). The world's housing challenge is a result of urban population growth, which also contributes to the formation of slums. According to the UN-Habitat 2022, about 55% of the world's population lives in urban areas where 24.8% (1.12 billion people) of the global urban population lived in slums or informal settlements where South Asia is a global hotspot for housing vulnerability due to its high concentration of slum dwellers. This global housing deficit points out that it is not sufficient to increase the housing quota; the quality and experience of the living condition of the houses also

determines the happiness of their residents. In this context, housing satisfaction has become a necessary dependent measure of housing sufficiency, which indicates the extent to which a dwelling and its local environment meets the physical, social and psychological requirements of its occupants (Amérigo & Aragonés, 1997; Ibem & Amole, 2013). Recent comparative evidence likewise shows that the distribution of housing wealth and resources, rather than housing supply alone, shapes aggregate residential satisfaction and subjective well-being (Bao & Meng, 2023).
Housing quality and residential satisfaction are increasingly recognized as core components of sustainable urban development in South Asia, where rapid urbanization, landlessness, and climate-induced displacement continue to intensify housing vulnerability (Emami & Sadeghlou, 2021; Sarkar & Bardhan, 2020). International evidence from cities across Asia demonstrates that public housing programmes succeed only when residents' perceptions of their dwelling, neighbourhood, and services are systematically considered (Gan, Zuo, Baker, Chang, & Wen, 2019; Chung & Kim, 2023). In Bangladesh, beneficiary assessments of the Ashrayan programme have revealed notable progress in shelter access but persistent dissatisfaction with the remoteness of settlements, limited livelihood opportunities, and inadequate access to healthcare (Tanha & Islam, 2025; Parvin, Hakim, & Islam, 2022). Strengthening the evidence base on what actually determines satisfaction in such flagship housing programmes is therefore both timely and significant, because it can redirect housing policy away from supply-side output targets towards resident-centred outcomes. Recent evidence from the Global South similarly confirms that neighbourhood-level deprivation and income-related inequalities depress residential satisfaction as much as dwelling quality does (Kutor et al., 2023; Tsoriyo & Ndagurwa, 2024), while work on dense informal settlements in Dhaka shows that shared living conditions and social relations are tightly coupled with residents' reported well-being (Siddika & Badhan, 2025).

The residential satisfaction does not only act as a measure of perceived housing quality, but also represents a proxy in the assessment of whether or not the policies of housing development have succeeded (Amérigo & Aragonés, 1997; Mohit & Raja, 2014). Since the idea of rapid urbanization has been putting strain and pressure on the affordable housing systems especially in vulnerable areas like South Asia. In Bangladesh, 2,66,012 houses have already been provided to landless and homeless households throughout multiple districts as part of the Ashrayan Project-II (BSS, 2024). The main objective of the project is to improve the living standards of these households by ensuring a safe and secure place to live, as well as access to other essential services (Tanha & Islam, 2025). The term "residential satisfaction" describes how residents feel about and evaluate their living environment, and it is a multidimensional outcome measure (Biswas, Ahsan, & Mallick, 2021a). In order to evaluate housing satisfaction, the majority of studies have used both subjective and objective features. The concept of housing satisfaction has been used as a simple assessment tool for determining the success and failure of housing developments constructed by the public sector and by the private sector (Jaafar & Hasan, 2005). The level of satisfaction by residents in public housing projects is affected by a diverse range of factors such as physical features, social relations, and management styles. The need to emphasize on these elements to ensure improved satisfaction is highlighted in comparative studies conducted in various regions. According to Mridha and Moore (2011), social attributes are more influential with regard to the total resident happiness as opposed to physical attributes. The neighborhood-level of trust is essential, and social variables have a more significant effect on the level of satisfaction among individuals who are initially dissatisfied (Lee, 2024). Besides, residential satisfaction is highly determined by the needs of the household, and the goals it has in its current state of housing (Barcus, 2004). The dwellers of Calabar public housing estates were complaining about the decaying facilities, lack of waste disposal services, and lack of water, thus, diminishing the general satisfaction with their living conditions (Simon et al., 2022). Traditionally, the governments of Bangladesh have seen the provision of public housing as a key tool of poverty reduction and socio-

economic growth with emphasis on increasing the supply of housing. Major programs like the Ashrayan-Project 2 have significantly improved access to shelter by landless and homeless families. However, the efficiency of such interventions cannot be properly evaluated based on output measures, i.e. the quantity of units produced or sold (Parvin et al., 2022; Tanha & Islam, 2025). Regarding the demand-side viewpoint, residential satisfaction is one of the most important indicators to evaluate the actual performance of the public housing project as it summarizes perception of the residents about housing quality, service provision, neighborhood setting, and experience in the overall lived rating (Mohit et al., 2010; Ibem & Amole, 2013). Housing satisfaction goes beyond the housing physical structure, and is a subjective reaction to an objective residential setting based upon social, environmental, and service-related conditions (Potter & Cantarero, 2006; Kanjanabootra & Tang, 2025). Although there is a vast amount of international literature exploring the topic of resident satisfaction in a public housing development, little empirical data has been collected in Bangladesh, particularly in terms of systematic reviews of the experiences residents have in government-sponsored housing projects. From a public-sector management and service-delivery perspective, residential satisfaction therefore functions as an outcome-based performance indicator for the housing authority, signalling where programme management and allied agencies must act to close gaps in water, waste, healthcare, and livelihood access (Tanha & Islam, 2025; Siddika & Badhan, 2025). Resident satisfaction is an important indicator for evaluating the effectiveness of public housing programs beyond supply-side achievements. In Bangladesh, there is a scarcity of empirical studies regarding the success of public housing programs in meeting the needs of residents in terms of housing quality, services and neighborhood environment. It will be expected that the findings will be used in evidence-based policy improvements and lead to more sustainable and resident-focused public housing programs. Beyond filling this empirical gap, the study contributes theoretically by integrating the housing need, housing deficit, and psychological construct theories into an explicit hypothesis framework, and methodologically by combining the relative importance index, chi-square tests, and multiple regression on a composite satisfaction measure to identify both the hierarchy and the determinants of residential satisfaction (Biswas et al., 2021a; Emami & Sadeghlou, 2021).

The study seeks to answer three key research questions. First, it examines the overall level of resident satisfaction among the beneficiaries of the selected public housing project. Second, it identifies the least and most important factors influencing residents' satisfaction with the project. Finally, the study investigates the effects of respondents' socio-economic characteristics on their level of housing satisfaction, thereby providing a better understanding of how differences in socio-economic conditions may shape residents' perceptions and experiences of the public housing project. The main objectives of this study are to assess the overall level of housing satisfaction among residents, examine the influence of socio-demographic characteristics on category-wise housing satisfaction, and evaluate the impact of socio-economic variables on residents' overall housing satisfaction. Through these objectives, the study aims to provide a comprehensive understanding of residents' satisfaction with the housing project and identify the demographic and socio-economic factors that may influence their satisfaction levels.

2. Literature Review

2.1 Theoretical Perspectives on Residential Satisfaction

Explain the relationship between housing supply, satisfaction, and quality of life using the theories of housing need, housing deficit, and psychological construct. Rossi (1955) developed the housing need concept to conceptualize residential satisfaction. Housing need theory points out the fact that appropriate shelter is a human necessity that is needed to create well-being (Morris, 2012). The idea of housing deficit theory states that the unmet housing requirements

(e.g., absence of ownership, insufficient quality, or the lack of services) impact socio-economic outcomes and the level of life satisfaction negatively (Huchzermeyer, 2011), and the psychological construct theory presupposes that the perception and satisfaction of residents and their attachment to their houses influence the quality of their life significantly (Galster, 1987). Most empirical studies on residential satisfaction have used either one or a combination of the three theories. Some empirical studies have shown that housing deficit theory effectively explains residential satisfaction and mobility behavior (Mohit & Raja, 2014). Beyond their conceptual value, these theoretical perspectives remain directly relevant to recent empirical research, which shows that housing-deficit and psychological-construct mechanisms operate jointly in low-income and public housing contexts across the Global South (Kutor et al., 2023; Tsoriyo & Ndagurwa, 2024).

2.2 Determinants of Residential Satisfaction

In earlier research of a similar nature, residence satisfaction has been described as a multidimensional and extremely complicated construct in a variety of ways employing integrated design, sociological, psychological, and geographic approaches (Gan et al., 2019; Kabisch et al., 2021). According to Weidemann and Anderson (1985), there are two broad perspectives on residential satisfaction that lead to several ways of measurement. First, one criterion used to assess residence quality is residential satisfaction. Second, residents' behavior is predicted by their level of feeling satisfied (Kabisch et al., 2021). Generally, people may evaluate their level of residential satisfaction depending on whether their requirements and goals are met (Teck-Hong, 2012). An individual's degree of happiness with their neighborhood is a subjective indicator. There is no global definition that specifies what a decent, reasonably priced home is (OECD, 2013). Residential satisfaction is shaped by location which is typically fixed by the government so their influence is often replaced by surrounding environment (Zeng, 2013), while overall satisfaction is more strongly linked to dwelling features, facilities, public services, neighborhood conditions, and socio-demographic characteristics (Teck-Hong, 2012; Huang & Du, 2015). A number of empirical investigations that look at user characteristics (behavioral or cognitive) or physical and social aspects of the environment have examined residential satisfaction (Amérigo & Aragonés, 1997). To create the conceptual framework utilized in the present study, the following dimensions were determined. In Lokoja, satisfaction with housing unit attributes was notably low at 48.95% (Saliu et al., 2023). Socio-demographic characteristics like age (Lu, 1999), gender (Ibem & Amole, 2013), household size (Mohit et al., 2010), length of residence (Mohit et al., 2010), education, marital status, and job status (Ibem & Aduwo, 2013) have consistently been shown to significantly influence residential satisfaction (Huang & Du, 2015). Numerous earlier research show that house characteristics have a greater impact on residential satisfaction than demographic considerations (Lane & Kinsey, 1980). Key dwelling features such as the number of bedrooms, kitchen size, ventilation and layout, and overall unit quality are consistently associated with higher satisfaction levels (Huang & Du, 2015; Mohit et al., 2010). Cross-cultural evidence also supports that variations in housing characteristics, such as bedroom and toilet numbers, kitchen design, living space, and unit quality, influence satisfaction differently across contexts (Mohit et al., 2010). The features of structural housing are crucial predictors of residential satisfaction, with the existence of a corpus of precedent literatures to prove this point (Baum et al., 2005; Hipp, 2010; Parkes et al., 2002). These features consist of physical and functional features, such as room size, space plans, quality of construction, privacy facilities, and services that cannot be ignored like waste disposal, security, lighting and ventilation (Tan, 2011). Recent studies confirm that housing lifestyles, unit design flexibility, and dwelling condition drive satisfaction among young and low-income public rental residents (Jang et al., 2023; Hu et al., 2024), and that targeted renovation of dwelling services and physical conditions can produce significant gains in occupant satisfaction in social housing (Guerra-Santin et al., 2025). Morris et

al. (1976) affirm that families assess neighborhoods based on a collection of normative factors: 1) The functional usefulness of most of the area must be residential; 2) The accessibility of good schools; 3) the state of roads and streets; 4) homogeneity in terms of race, ethnicity and socioeconomic status. In line with this paradigm, Lu (1999) argues that neighborhood satisfaction is a valid predictor of dwelling satisfaction. Locational determinants have a considerable effect on residential satisfaction among tenants of public housing, challenges in neighborhoods including crime, lack of amenities (Mohit et al., 2010), or close proximity to industrial activity is often a source of discontent. Empirical results obtained by English housing statistics also prove that the neighborhood typology remains an important independent predictor of dissatisfaction although the socio-demographic factors play a comparatively small role in comparison with the perceptual judgments of residents (Alison et al., 2002). It can therefore be concluded that residential pleasure is also influenced by the neighborhood environment and the housing units (Noriza et al., 2010).

2.3 Empirical Evidence on Public Housing Satisfaction

The empirical literature on residential satisfaction in Asian public housing has expanded rapidly, with journals such as Habitat International and Cities providing recent and cumulative evidence (Biswas, Sultana, Priovashini, Ahsan, & Mallick, 2021b). Using a large sample of slum rehabilitation housing in Mumbai, Sarkar and Bardhan (2020) found that the community environment exerts the strongest influence on residential satisfaction, followed by access to facilities, whereas dwelling internal conditions matter less once contextual factors are controlled. This pattern is closely echoed by the Chinese public rental housing evidence, where accessibility, neighbourhood context, and social environment outweigh dwelling attributes alone (Gan et al., 2019; Huang & Du, 2015). Comparable conclusions emerge from Seoul, where interior layout, accessibility to major facilities, community interaction, and facility management drive satisfaction in social housing (Chung & Kim, 2023), and from Colombo, where the neighbourhood environment is the decisive factor for public housing residents (Walisinghe & Wickramaarachchi, 2022). In South Asia more broadly, resettlement and low-income housing research shows that peripheral locations, poor service access, and weak livelihood opportunities depress satisfaction and can even induce relocation (Williams, Charlton, Coelho, & Mahadevia, 2021). For Bangladesh specifically, recent beneficiary assessments of the Ashrayan programme report improved access to electricity, water, and sanitation, but persistent dissatisfaction with distant settlement locations, limited livelihood options, and inadequate healthcare and growth-centre access (Parvin et al., 2022; Tanha & Islam, 2025). Studies of completed Ashrayan dwellings also document that residents progressively modify government-provided units to compensate for the gap between housing provision and their actual needs (Mallick & Mostafa, 2022). Taken together, this recent body of evidence confirms that residential satisfaction is a multidimensional construct in which physical design, social relations, accessibility, and socio-demographic attributes jointly operate, and it reinforces the need for integrated evaluation frameworks of the kind adopted in the present study. This emerging Asian and South Asian evidence extends to Bangladesh, where recent research on Dhaka's informal settlements shows that shared living conditions and neighbourhood social ties are strongly coupled with residents' well-being (Siddika & Badhan, 2025). Internationally, residential (dis)satisfaction is also increasingly recognised as a meaningful contributor to mental health among applicants for publicly subsidized housing, underscoring the public-health rationale for routine satisfaction monitoring (Taylor et al., 2026).

2.4 Research Gap and Conceptual Framework

Despite the accumulation of international evidence, four gaps persist in the South Asian public housing literature in general and in Bangladesh in particular. First, few studies integrate the housing need, housing deficit, and psychological construct perspectives into a single falsifiable hypothesis framework; most rely on one theoretical lens (Biswas et al., 2021b; Emami & Sadeghlou, 2021). Second, beneficiary-level satisfaction assessments of the flagship Ashrayan programme remain rare, and the available assessments concentrate on access to services and livelihoods rather than on systematic satisfaction ratings across the four satisfaction dimensions (Parvin et al., 2022; Tanha & Islam, 2025). Third, the combined use of the relative importance index, chi-square tests, and multiple regression to identify both the hierarchy of satisfaction dimensions and their determinants is uncommon in the region. Fourth, recent 2023–2026 evidence from comparable low-income housing and informal settlement settings has not yet been systematically linked to the Ashrayan experience (Hu et al., 2024; Siddika & Badhan, 2025; Taylor et al., 2026). To address these gaps, the study adopts a conceptual framework in which overall housing satisfaction is the dependent construct, operationalised as a composite of four satisfaction dimensions: dwelling internal quality (DI), dwelling external quality (DE), social environment (SE), and access to facilities (AF). Socio-demographic characteristics (age, gender, education, income, family size, religion, and duration of residence) are treated as correlates of dimension-wise satisfaction. The framework therefore combines objective housing provision with residents' subjective evaluations, consistent with the multidimensional conceptualisation of residential satisfaction in the recent literature (Chung & Kim, 2023; Hu et al., 2024).

2.5 Theoretical Integration

Despite their analytical value, the three theoretical perspectives have rarely been integrated into an explicit hypothesis framework in empirical public housing studies, particularly in South Asia. The present study integrates them as follows: consistent with housing need theory, which treats adequate shelter as a fundamental human necessity (Rossi, 1955; Morris, 2012), the physical characteristics of the dwelling should positively shape satisfaction; consistent with housing deficit theory, which links unmet housing requirements such as poor service provision and deficient neighbourhood conditions to lower wellbeing (Huchzermeyer, 2011), shortages in accessibility and external environmental quality should depress satisfaction; and consistent with psychological construct theory, which emphasizes residents' perceptions, attachment, and personal attributes in determining satisfaction (Galster, 1987), the social environment and socio-demographic characteristics should be significant determinants.

2.6 Hypotheses Development

In line with the integrated framework above, this section develops the study's five hypotheses. For each hypothesis, the relevant literature is first reviewed and critically discussed before the hypothesis is explicitly formulated. H1 concerns dwelling internal quality (DI), that is, the physical and functional attributes of the housing unit such as adequacy of rooms, natural light, ventilation, construction quality, and internal space. Consistent with housing need theory, satisfying these physical necessities should raise satisfaction (Rossi, 1955; Morris, 2012). Empirically, unit features such as the number of rooms, kitchen size, ventilation, layout, and overall unit quality are consistently associated with higher satisfaction (Mohit et al., 2010; Huang & Du, 2015). Recent studies of public rental housing likewise confirm that unit design and residents' housing expectations condition their satisfaction (Jang et al., 2023; Hu et al., 2024). Accordingly, we expect:

H1: *Dwelling internal quality (DI) is positively associated with overall housing satisfaction.*

H2 concerns dwelling external quality (DE), covering the housing unit's immediate external environment, including the condition of access roads and shared infrastructure, water supply, garbage collection and disposal, and pollution levels. Housing deficit theory holds that shortages in these external services depress wellbeing and satisfaction (Huchzermeyer, 2011; Kutor et al., 2023), and deficiencies in water supply, waste management, and external services are recurring complaints in low-income and government resettlement housing across South Asia (Parvin et al., 2022; Tanha & Islam, 2025). Recent social housing research also shows that upgrading such external conditions yields significant gains in occupant satisfaction (Guerra-Santin et al., 2025). Accordingly, we expect:
H2: *Dwelling external quality (DE) is positively associated with overall housing satisfaction.*

H3 concerns the social environment (SE), encompassing relations with neighbours, trust, pleasant social interactions, and perceived safety in the housing area. The psychological construct perspective emphasises that residents' perceptions and attachment shape their satisfaction (Galster, 1987), and comparative evidence indicates that social attributes often outweigh physical attributes for overall satisfaction (Ibem & Amole, 2013). The community environment proved the strongest determinant of satisfaction in Mumbai slum rehabilitation housing and in Colombo public housing (Sarkar & Bardhan, 2020; Walisinghe & Wickramaarachchi, 2022), and recent research in Dhaka shows that shared living and neighbourhood social ties are closely tied to residents' well-being (Siddika & Badhan, 2025). Accordingly, we expect:
H3: *Social environment (SE) is positively associated with overall housing satisfaction.*

H4 concerns access to facilities (AF), that is, the proximity and accessibility of schools, local markets, workplaces, primary health centres, and places of worship. Accessibility is widely identified as a central determinant of residential satisfaction because it links housing to daily livelihoods and essential services (Nguyen et al., 2016; Gan et al., 2019). Recent Asian studies confirm that accessibility and neighbourhood context outweigh dwelling attributes alone once contextual variables are controlled (Chung & Kim, 2023; Hu et al., 2024), while Ashrayan beneficiary assessments highlight inadequate access to health facilities and workplaces as persistent sources of dissatisfaction (Parvin et al., 2022; Tanha & Islam, 2025). Accordingly, we expect:
H4**:** *Access to facilities (AF) is positively associated with overall housing satisfaction.*

H5 concerns socio-demographic characteristics. Age, gender, household size, education, religion, and duration of residence have all been shown to influence residential satisfaction, although their effects vary across contexts (Lu, 1999; Mohit et al., 2010; Ibem & Amole, 2013; Huang & Du, 2015). Recent work, however, suggests that demographic attributes play a comparatively small role relative to perceptual and environmental judgements once dwelling and neighbourhood factors are controlled (Hu et al., 2024; Tsoriyo & Ndagurwa, 2024). Because the evidence is divided, the hypothesis is formulated non-directionally and is tested through chi-square analysis of the association between socio-demographic characteristics and dimension-wise satisfaction. Accordingly, we expect:
H5: *Socio-demographic characteristics (age, family size, education, and duration of residence) are significantly associated with housing satisfaction.*

3. Methodology

3.1. Research Design, Sampling and Data Collection

The current study assumes the form of a quantitative, cross-sectional study to assess the satisfaction of the residents in public housing schemes located in the Gopalganj, Narail and Munshiganj districts. The information related to dwelling features, neighborhood, accessibility of

services and socio-demographic factors was cumulatively collected through a structured questionnaire. Following a multistage random sampling procedure, the study first selected the three districts of Gopalganj, Munshiganj, and Narail, where Ashrayan Project-II housing units are concentrated, in order to capture geographic and administrative variation. In the second stage, project sites (clusters) within each selected district were chosen randomly, and in the third stage households within each selected site were drawn using systematic random sampling. From each selected household, one regular adult member who had resided in the dwelling for more than six months was interviewed. The minimum sample size was calculated using Cochran's (1977) formula as 384 for a population of 266,012 households; 390 questionnaires were administered, and after screening for completeness and consistency, 379 valid responses were retained for analysis. Data were collected through a structured questionnaire between May and July 2025.
Data collection was done through face-to-face interviews in the respondent house and regular adult member who have been staying in their present house for more than 6 months were considered valid respondents. To maximize the response rate, the interviews were done during weekdays and weekends.

3.2. Variables and Measurement

A comprehensive literature review was done to enable the accumulation of factors affecting residential satisfaction in Asrayan Project-II housing in Bangladesh (as shown in Table 1). The conceptual framework was materialized on the notion of residential satisfaction as a composite construct of the satisfaction indices. The structured questionnaire used for the interview includes three parts. The first part includes the sociodemographic characteristics of the household. The second part reflects residents perceived satisfaction level and quality of life with 30 items (see appendix table) which were measured using a five-point Likert scale (1 for very dissatisfied/strongly disagree to 5 for very satisfied/strongly agree).

3.3. Data Analysis

3.3.1. Relative Importance Index (RII):

To fulfil research objective, the study employed the Relative Importance Index (RII), a widely adopted technique in housing and construction research for ranking factors based on respondent perceptions. It converts subjective perceptions into a quantifiable ranking (Johnson & LeBreton 2004 and Kinemo, 2024). Using the important relative index (RII), the level of important factors was ranked through the value of the index. Using a 5-point Likert scale, the RII for each factor was computed as 1 for Very Dissatisfied, 2 for Dissatisfied, 3 for Slightly Satisfied, 4 for Satisfied and 5 for Very Satisfied. The formula for calculating RII is:

$$\textbf{\textit{Relative Importance Index}}\ (\textbf{\textit{RII}}) = \frac{\sum w}{AN} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{5n}$$

Where, **w =** the weighting of the respondent to the respective factor, with a value between 1 and 5;
A = the highest weight (5) and,
N = the number of respondents allocated.
These indices were scaled to a range of 0 to 1 resulting into the systematic rankings of satisfaction dimensions thus helping to identify the most salient drivers.

3.3.2. Chi-square Test:

The housing satisfaction will be coded as a nominalized variable (e.g., low, medium, high) according to the self-reported measurements of the respondents. Social-economic factors, including age group, gender, education, income level, occupation and family size are also grouped. The dependence between socio-economic variables and housing satisfaction is tested in terms of

the chi-square (2) test of independence since the dependent variable (housing satisfaction) and explanatory socio-economic variables are all categorical. The test measures the extent to which the observed distribution of housing satisfaction between the socio-economic strata differs significantly with the distribution that is supposed to be taking place in the case of independence. The chi-square value will be calculated as:

$$x^2 = \sum \frac{(Oij - Eij)^2}{Eij}$$

Where, O_{ij} denotes the observed frequency in cell ij and Eij represents the expected frequency.

3.3.3. Linear Regression Model:

To identify the key predictors of general housing satisfaction among the residents of the Asrayan Project- 2, a multiple linear regression analysis was considered. In this method, it is possible to simultaneously assess multiple independent variables on a continuous dependent variable, which can explain their overall influence. The multiple linear regression model was specified as:

$$\text{Housing Satisfaction} = \beta_0 + \beta_i(X_i) + \epsilon$$

where β_0= is the intercept, β_i = are the regression coefficients for each predictor, Xi= independent variables and ϵ = is the error term. The model assumptions of linearity, independence, normality, and homoscedasticity of residuals were tested before interpreting results. Dependent variable is Residential Satisfaction which is composite score after measuring the alpha value (see table 1).

Table 1: Variable define for Regression Model

Variables	**Measurement/Coding**
Dependent Variable	
Overall Housing Satisfaction (OHS)	Composite score (Likert scale), Continuous
Independent Variables	
Dwelling Internal (DI)	Composite score (Likert scale), Continuous
Dwelling External (DE)	
Social environment (SE)	
Access to facilities (AF)	

4. Results

4.1: Sociodemographic Status of Respondents

The sociodemographic characteristics of the respondents are given Table 2. Overall, the sample consisted of 55% male and 45% female. Among them 84% respondents were Muslim and 16% were Hindu. Religion shows a significant association with overall physical quality satisfaction at the 10% level (p = 0.078) and with overall access to facilities at the 5% level (p = 0.025). However, no significant association is observed with external quality (p = 0.108) or social environment satisfaction (p = 0.206). Age is found to be significantly associated with all four dimensions of housing satisfaction: physical quality (p = 0.023), external quality (p = 0.001), social environment (p = 0.041), and access to facilities (p = 0.001). Family size is significantly associated with external quality satisfaction (p = 0.015) and access to facilities (p = 0.027) at the 5% level, and with physical quality satisfaction at the 10% level (p = 0.064). No significant relationship is found with social environment satisfaction (p = 0.500). The education level of the household head shows a significant association with physical quality satisfaction at the 5% level (p = 0.051) and with external quality satisfaction at the 10% level (p = 0.080). However, education does not significantly influence social environment (p = 0.787) or access to facilities (p = 0.104). Income level does not exhibit a statistically significant association with any dimension of housing satisfaction, including physical quality (p = 0.388), external quality (p = 0.862), social environment (p = 0.245), and access to facilities (p = 0.920). The duration of residence is significantly associated with physical quality satisfaction (p = 0.008) and external quality

satisfaction (p = 0.044) at the 5% level, and with access to facilities at the 10% level (p = 0.099). No significant association is observed with social environment satisfaction (p = 0.173).

Table 2: Association between socio-economic variables and housing satisfaction

Socio-economic variable	*Frequency*	*Dwelling Internal*	*Dwelling External*	*Social Environment*	*Access to facilities*
	Pearson Chi-square (p-value)				
Religion		***.078*****	***.108***	***.206***	***.025****
Muslim	***320***				
Hindu	***59***				
Age Group		***.023****	***.001****	***.041****	***.000****
(15-29)	***75***				
(30-44)	***172***				
(45-59)	***89***				
(60-80)	***43***				
Family Size		***.064*****	***.015****	***.500***	***.027****
Small	***126***				
Medium	***233***				
Large	***20***				
Education of HH		***.051****	***.080*****	***.787***	***.104***
No education	***112***				
Primary Education	***215***				
Secondary Education	***47***				
Higher Education	***5***				
Income Level		***.388***	***.862***	***.245***	***.920***
Low (0-12000)	***242***				
Medium (12001-21000)	***115***				
High (21001 & more)	***22***				
Duration of Living		***.008****	***.044****	***.173***	***.099*****
less than & equal 2 years	***143***				
More than 2 years	***236***				
**Indicates 5% level of significant ** indicates 10% level of significant*					

Sources: Authors calculation based on primary data.

4.2. Ranking of the Satisfaction Level and Its Distribution

The ranking of the satisfaction level and its distribution are presented in Table 3. Among 21 items of housing satisfaction, the highest 5 ranked factors of residential satisfactions are contact with neighbors (Mean = 4.0; RII = 0.792; Rank # 1), natural lighting and ventilation, access road quality, pleasant social interactions, and the adequacy of room numbers which mean that social cohesion, unit design, and physical connectivity are the strongest contributors to resident satisfaction in the housing project. Their RII values range from 0.763 to 0.792, while the corresponding mean scores range from 3.8 to 4.0. In contrast, lowest RII values, signaling areas where residents are least satisfied to overall satisfaction but may require policy intervention. The lowest six ranked factors of residential satisfaction are business and job opportunities (Mean = 2.5; RII = 0.494; Rank #21), garbage collection and disposal, distance to primary health center, water supply, distance to workplace, and pollution (air, sound, and water), that reflect the weakest-performing dimensions of the housing environment. These items exhibit comparatively low RII values, ranging from 0.494 to 0.589, with mean scores between 2.5 and 2.9, indicating notable deficiencies in service provision, environmental quality, and access to economic opportunities.

Considering "Access to Facilities" dimension, resident satisfaction shows substantial variation. Access to religious facilities (Mean = 3.4; RII = 0.678; Rank #8) which reflects the proximity and significance of worship places for both religions in their housing. However, rest of the items scored lower mean value and RII value although access to primary health centers (Rank#19),

Access to work place (Rank#17) Access to schools (Rank#15), and Access to local markets (Rank#14) are essential services for any living place.

Table 3: Distribution, RII Scores and Rankings of Residential Satisfaction Factors

Level of Satisfaction (1 to 5)	***VDS***	***DS***	***SS***	***S***	***VS***	***Mean Value***	***RII Index***	***Rank***
Dwelling Physical/Internal Unit	***1***	***2***	***3***	***4***	***5***			
Adequacy of number of rooms	*0*	*15*	*96*	*213*	*55*	*3.8*	*0.763*	***5***
Natural lighting/ Ventilation condition	*0*	*11*	*82*	*212*	*74*	*3.9*	*0.784*	***2***
Kitchen areas (Size and Condition)	*3*	*50*	*211*	*99*	*16*	*3.2*	*0.640*	*12*
Toilet / Bathroom (Size and Condition)	*17*	*38*	*151*	*160*	*13*	*3.3*	*0.660*	*11*
Housing construction materials	*56*	*54*	*76*	*188*	*5*	*3.1*	*0.617*	*13*
Dwelling External Unit								
Water Supply	*77*	*108*	*82*	*80*	*32*	*2.7*	*0.538*	*18*
Electric supply	*26*	*10*	*50*	*246*	*47*	*3.7*	*0.747*	*6*
Pollution (air, sound and water)	*7*	*90*	*216*	*48*	*18*	*2.9*	*0.589*	*16*
Garbage collection/disposal	*25*	*168*	*158*	*21*	*6*	*2.5*	*0.502*	*20*
Common area (play/garage)	*2*	*80*	*111*	*157*	*29*	*3.3*	*0.669*	*10*
Access road	*7*	*17*	*77*	*180*	*98*	*3.9*	*0.782*	***3***
Community Environment								
Contact with neighbors	*0*	*7*	*36*	*302*	*34*	*4.0*	*0.792*	***1***
Residents treat each other pleasantly	*0*	*7*	*58*	*291*	*23*	*3.9*	*0.774*	***4***
I trust my neighbors	*0*	*10*	*140*	*208*	*21*	*3.6*	*0.727*	*7*
Level of security (housing area)	*1*	*35*	*194*	*127*	*22*	*3.4*	*0.671*	*9*
Business and job opportunity	*27*	*201*	*105*	*37*	*9*	*2.5*	*0.494*	*21*
Access to facilities								
Distance to primary school	*22*	*114*	*94*	*127*	*21*	*3.1*	*0.606*	*15*
Distance to primary health center	*43*	*178*	*87*	*51*	*18*	*2.6*	*0.506*	*19*
Distance to market/ local shop	*11*	*90*	*158*	*102*	*18*	*3.1*	*0.614*	*14*
Distance to Worship/ mosque	*27*	*54*	*74*	*192*	*32*	*3.4*	*0.678*	*8*
Distance to work place	*38*	*97*	*170*	*59*	*15*	*2.8*	*0.556*	*17*

Sources: Authors calculation based on primary data.

4.3. Distribution of Residential Satisfaction Scores:

4.3.1. Dwelling Physical/Internal Unit: Figure 1 shows the frequency distribution of satisfaction scores which indicates that respondents generally expressed favorable perceptions of the dwelling's internal conditions. A large proportion reported being Satisfied or Very Satisfied with the adequacy of the number of rooms and natural lighting as well as ventilation where no respondents reported extreme dissatisfaction in this aspect.

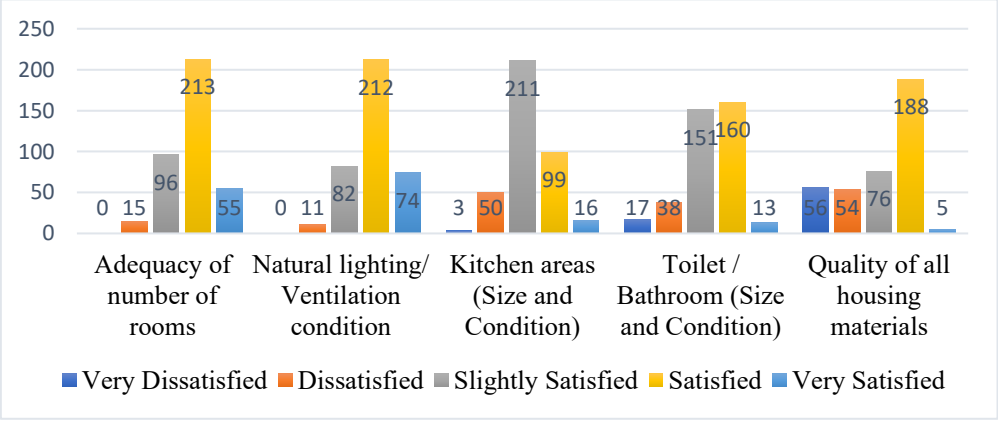

Figure 1: Satisfaction level of Housing physical /internal quality

So, with satisfaction levels clearly outweighing dissatisfaction. In contrast, the quality of housing materials emerged as a critical concern, as frequencies in the Very Dissatisfied and Dissatisfied categories were comparatively high, and very few respondents reported high satisfaction.

4.3.2. Dwelling External Unit: In regard to the external unit of the dwelling figure -2 shows, the water supply attracted a high percentage of responses of Very Dissatisfied and Dissatisfied, indicating severe gaps in water provisions. Garbage collection, and garbage disposal also raised high levels of dissatisfaction. The answers regarding pollution were mostly grouped in the "Slightly Satisfied and to the Dissatisfied groups.

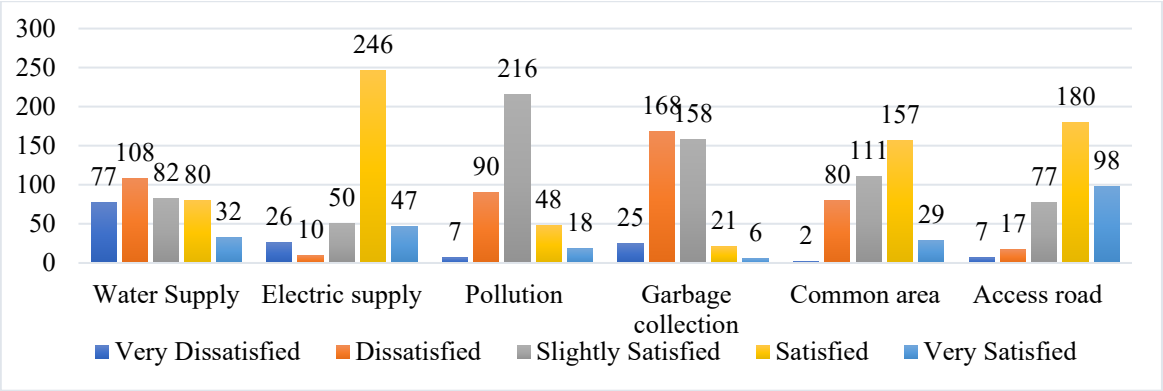

Figure 2: Satisfaction level of Housing External facilities

4.3.3. Community Environment: Distribution of Residential satisfaction about community environment represent in figure 3. Where, Strong social cohesion and desirable interpersonal relations characterize the community environment. Most of the respondents said that they were satisfied with their relations with the neighbors and similar tendencies were observed with regards to attitudes towards nice social behavior in the community.

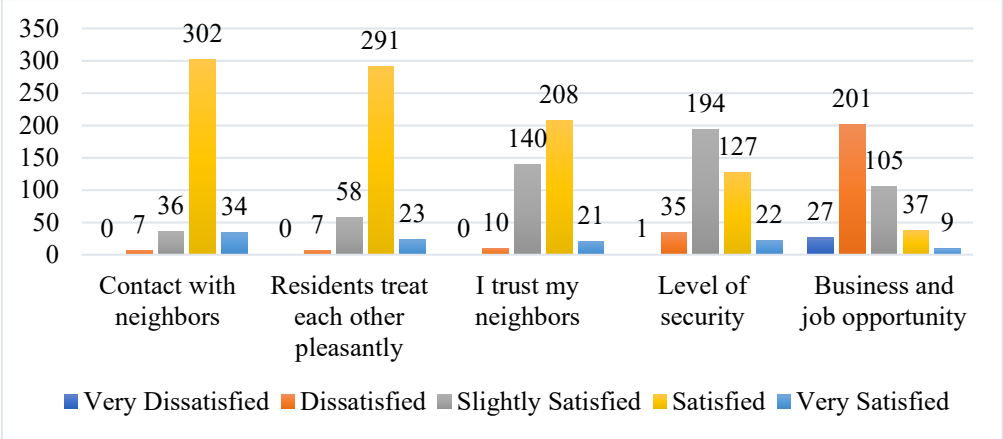

Figure 3: Satisfaction level of Housing Social Environment

Among the neighbors, trust was rated positively in general, despite a relatively small percentage of those who have only reported mild satisfaction. The actual safety perceptions in the housing area were moderately good with occasional cases of dissatisfaction being an indicator of the remaining safety concerns. Conversely, business and employment opportunities were rated negatively and the majority of the responses fell within the dissatisfied and very dissatisfied categories thus highlighting poor economic opportunities in the locality.

4.3.4. Access to Facilities: Access-related indicators, which are analytically examined, present disproportional satisfaction rates in figure 4. The distance towards primary school and markets or local shops were rated as moderately satisfactory and the answers were centered on the Slightly Satisfied and satisfactoriness groups. The results of access to places of worship were also rated highly, and a significant portion of the participants expressed satisfaction.

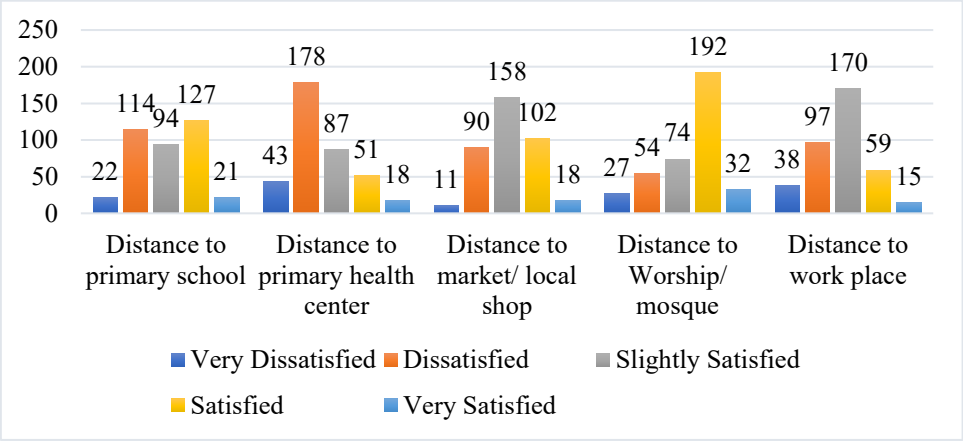

Figure 4: Satisfaction level of Housing Access to facilities

Conversely, distance to primary health centers was frequently rated as unsatisfactory, with many respondents expressing dissatisfaction or extreme dissatisfaction. Similarly, distance to workplaces attracted predominantly moderate to negative evaluations, indicating commuting challenges. Overall, the findings suggest that while basic daily and religious facilities are relatively accessible, healthcare and employment-related access remain key areas of concern.

4.4. Multiple Linear Regression Model:

After considering alpha value with fulfilling mandatory assumption for linear regression like linearity, normality, homoscedasticity, autocorrelation and multicollinearity. I analyze the factor affecting housing satisfaction through multiple linear regression. Table 4 and 5 shows the descriptive statistics about variable and estimated outcome of multiple linear regression.

Table 4: Descriptive Statistics

	Mean	*Std. Deviation*	*N*
Dependent Variables			
Overall Housing Satisfaction (OHS)	*3.5106*	*.61605*	*379*
Independent Variables			
Dwelling Internal (DI)	*3.5580*	*.56308*	*379*
Dwelling External (DE)	*3.2111*	*.94086*	*379*
Social environment (SE)	*3.7038*	*.46095*	*379*
Access to facilities (AF)	*2.9905*	*.81488*	*379*

Sources: SPSS output based on primary data

Multiple linear regression was used to investigate the influence of dwelling environment (DE), dwelling infrastructure (DI), social environment (SE), and accessibility factors (AF) on overall housing satisfaction (OHS). The overall regression model was statistically significant, $F(4, 374) = 19.84$, $p < .001$, meaning that the overall set of predictors significantly accounted for the variance in the dependent variable, housing satisfaction. The model demonstrated a moderate fit, where R2 value suggesting that 17.5% of the variance in overall housing satisfaction was explain by the independent variables and after considering number of predictors where adjusted R2 value explained 16.6% of the variance in housing satisfaction ($R^2 = .175$, Adjusted $R^2 = .166$; SEE = 0.563).

Table 5: Estimated Outcome of Multiple linear Regression

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
	B	*Std. Error*	*Beta*		
(Constant)	*1.728*	*.291*		*5.938*	*.000*
Dwelling Internal (DI)	*.096*	*.056*	*.087*	*1.694*	*.091*
Dwelling External (DE)	*-.076*	*.034*	*-.116*	*-2.251*	*.025*
Social environment (SE)	*.274*	*.064*	*.205*	*4.280*	*.000*
Access to facilities (AF)	*.225*	*.038*	*.297*	*5.846*	*.000*
R Square= .175 *Adjusted R Square= .166* *F-value= 19.84 with p = .000*					

Sources: SPSS output based on primary data

Using the unstandardized coefficients (B) regression equation is:

$$HS = 1.728 + 0.096(\text{DI}) - 0.076(\text{DE}) + 0.274(\text{SE}) + 0.225(\text{AF})$$

Accessibility factors (AF) and social environment (SE) were significant positive predictors of overall housing satisfaction. Which indicates that higher levels of both factors associated with increased satisfaction (AF: B = 0.225, p < .001; SE: B = 0.274, p < .001). On the other hand, dwelling external (DE) significantly negatively predicted housing satisfaction (B = −0.076, p = .025), while dwelling internal infrastructure (DI) had a positive but non-significant effect (B = 0.096, p = .091). Among the predictors, accessibility factors and social environment emerged as the strongest determinant of overall housing satisfaction. Multicollinearity diagnostics indicated no concerns, as tolerance values ranged from .828 to .963 and variance inflation factor (VIF) values ranged from 1.038 to 1.208, all within acceptable limits. Hypothesis testing results. The regression results provide direct evidence on H1-H4, while the chi-square analyses inform H5. H3 (social environment) and H4 (access to facilities) are supported, as both were significant positive predictors of overall housing satisfaction (AF: B = 0.225, p < .001; SE: B = 0.274, p < .001). H1 (dwelling internal quality) is not supported: dwelling internal infrastructure was positively but non-significantly related to overall satisfaction (B = 0.096, p = .091). H2 (dwelling external quality) is rejected, since dwelling external quality was negatively and significantly associated with overall satisfaction (B = -0.076, p = .025), contrary to the hypothesised positive relationship. H5 (socio-demographic characteristics) receives partial support: age was significantly associated with all four satisfaction dimensions, while family size, education, religion, and duration of residence were significantly associated with at least one dimension at the 5% or 10% significance level; gender and income showed no significant associations.

5. Discussion

The analysis on housing satisfaction reveals that there are unique dimensions that are interrelated with the overall housing satisfaction. The most effective factors that bring about resident satisfaction are among the internal housing, external, social environment, and access to facilities as the most highly rated items include contact with neighbors, natural lighting, access roads, and room adequacy. These results correspond to the prior research stating the significance of social activities and planned residential spaces to influence housing satisfaction (Lawson, 2018; Sirgy et al., 2000). Conversely, economic opportunity, environmental quality, and basic services factors included in the category such as job availability, garbage collection, water supply, and distance to health centres or work places ranked lowest and there were critical deficiencies that might be addressed by policy formulation. The difference in the "Access to Facilities dimension is another indicator that, although living close to religious facilities is satisfactory, access to the basic services like healthcare, education, markets, and workplaces is low, which is also supported by the literature indicating that accessibility to a variety of services is associated with overall residential well-being (Malpezzi, 2003; Nguyen et al., 2016). The findings on the

whole support the idea that social and physical aspects of the housing environment play a great role in resident satisfaction, whereas service delivery and economic opportunities are considered to be the primary issues that should be improved. The findings of this regression model indicate that both social environment and accessibility factors are significant determinants of housing satisfaction, which is consistent with prior research published in *Habitat International* and *Cities* emphasizing the central role of accessibility and neighborhood context in shaping residential satisfaction (Mouratidis, 2020; Wang & Wang, 2016). These studies consistently show that access to essential services, transport connectivity, and strong neighborhood social structures are key contributors to residents perceived housing quality. Comparison with similar South Asian studies reveals both generalizable and context-specific features of the Bangladeshi case. The dominant role of the social environment and neighbourhood relations observed here is consistent with the Mumbai slum rehabilitation evidence, where the community environment had the strongest positive effect on satisfaction, and with the Colombo public housing evidence, where the neighbourhood environment was the decisive factor (Sarkar & Bardhan, 2020; Walisinghe & Wickramaarachchi, 2022). Similarly, the dissatisfaction associated with weak economic opportunities, distant healthcare, and workplace accessibility mirrors the marginalisation outcomes documented for peripheral resettlement sites across India and South Africa (Williams et al., 2021) and the service-access complaints reported in recent Ashrayan assessments (Tanha & Islam, 2025; Parvin et al., 2022). At the same time, the Bangladeshi context is distinctive in that access to religious facilities ranked among the highest satisfaction items, underscoring that culturally grounded neighbourhood attributes matter for satisfaction in South Asian settings. These parallels suggest that the satisfaction patterns observed in Asrayan Project-II are largely generalizable within the region, while the precise hierarchy of determinants reflects local service delivery and market conditions. In contrast, dwelling external conditions exhibit a significant negative relationship with housing satisfaction, suggesting that poor external housing quality reduces overall satisfaction levels. While this finding highlights the importance of physical housing conditions, existing literature presents mixed evidence, as the effect of dwelling-related attributes often weakens when neighborhood and contextual variables are included in multivariate models (Wang & Wang, 2016). This implies that improvements in physical infrastructure alone may not substantially enhance satisfaction unless accompanied by broader environmental and contextual improvements. Similarly, dwelling internal conditions, such as space adequacy, sanitation, and structural quality, show a positive but statistically non-significant effect on housing satisfaction. This suggests that internal environmental comfort does not independently determine satisfaction once broader contextual factors are accounted for. Comparable findings in the literature indicate that physical housing attributes often exert indirect rather than direct effects on residential satisfaction (Mouratidis, 2017). Overall, these findings align with established urban housing literature, which emphasizes that housing satisfaction is multidimensional and closely linked to broader life satisfaction, subjective well-being, and perceived environmental quality (Sirgy et al., 2000; Li & Brown, 2019). This underscores the importance of integrating physical housing improvements with accessibility planning and social environment enhancement to achieve higher residential satisfaction outcomes. Considering the hypotheses together, the results provide strong but differentiated support. H3 and H4 are supported, indicating that the social environment and accessibility are the decisive satisfaction dimensions in Asrayan Project-II; H5 is partially supported, since age, family size, education, religion, and duration of residence were associated with at least one satisfaction dimension at the 5% or 10% level, whereas gender and income were not; H1 is not supported, as dwelling internal quality added no independent predictive power once social and accessibility factors were controlled; and H2 is rejected, as dwelling external quality was negatively associated with satisfaction. These outcomes align with recent evidence that neighbourhood, social, and accessibility factors dominate dwelling attributes in shaping satisfaction in low-income and

public housing settings (Hu et al., 2024; Kutor et al., 2023; Tsoriyo & Ndagurwa, 2024). The negative coefficient for dwelling external quality similarly resonates with recent work showing that improving external services and dwelling conditions yields significant satisfaction gains among low-income and social housing residents (Guerra-Santin et al., 2025; Tanha & Islam, 2025).

Implications of the Study

Theoretical Implications

At the theoretical level, the findings strengthen the psychological construct perspective by demonstrating that perceived social environment is a dominant determinant of overall housing satisfaction (Galster, 1987; Sarkar & Bardhan, 2020), and they support housing deficit theory by showing that dissatisfaction concentrates around unmet service and economic needs such as water supply, waste disposal, and health care access (Huchzermeyer, 2011). In terms of the hypotheses, the results support H3, H4, and H5; H1 received no independent support once contextual factors were controlled, and H2 was dismissed, as dwelling external quality was negatively associated with satisfaction contrary to theoretical expectation. These results extend the integrated framework to the South Asian context and illustrate how several complementary theories together explain a multidimensional dependent variable better than any single perspective (Biswas et al., 2021b).

Managerial and Policy Implications

From a managerial perspective, the findings identify clear priorities for the housing authority and policymakers. Table 3 reveals that the most weakly performing satisfaction dimensions — business and job opportunities (RII = 0.494), garbage collection and disposal (0.502), distance to primary health centres (0.506), water supply (0.538), distance to workplace (0.556), and pollution (0.589) — are precisely the service and economic domains that are amenable to intervention. Targeted actions such as dependable water supply, reliable waste-collection services, and siting of new clusters near employment and primary health facilities would directly address the satisfaction deficits that currently weigh on the programme. Second, Table 5 shows that access to facilities ($B = 0.225$, $p < .001$) and the social environment ($B = 0.274$, $p < .001$) are the strongest positive determinants of overall housing satisfaction. Policy effort should therefore combine physical infrastructure investment with measures that strengthen neighbourhood cohesion — for example, common spaces, community activities, and transparent resident–management engagement — while improving accessibility to markets, workplaces, schools, and health facilities. Because dwelling external conditions were negatively associated with satisfaction, upgrading external services (water, drainage, waste disposal) rather than unit interiors alone should be prioritized in future phases of Asrayan Project-II. From a public-sector management and service-delivery perspective, the study translates into concrete and findings-linked priorities for the housing authority. First, the six lowest-RII dimensions – business and job opportunities (0.494), garbage collection and disposal (0.502), distance to primary health centres (0.506), water supply (0.538), distance to workplace (0.556), and pollution (0.589) – identify where programme operations should concentrate scarce resources: (i) negotiate dependable piped-water supply and scheduled waste-collection contracts with service providers; (ii) site future Asrayan clusters near existing growth centres, local markets, and primary health facilities rather than on remote peripheral land; and (iii) coordinate with local economic development agencies to create employment and micro-enterprise opportunities near project sites, since livelihood access is the single weakest satisfaction dimension. Second, because access to facilities ($B = 0.225$, $p < .001$) and the social environment ($B = 0.274$, $p < .001$) are the strongest positive predictors of overall satisfaction, community development – common spaces, neighbourhood committees, and transparent resident–management engagement – should be funded at parity

with physical infrastructure investment. Third, because socio-demographic attributes shape satisfaction at the 5% or 10% level, service design should be segmented by age, household size, education, religion, and duration of residence (for example, family-size-appropriate units and targeted outreach to less-educated households) rather than delivered as uniform provisions. Fourth, introducing periodic resident-satisfaction monitoring through repeated RII surveys would give the housing authority an evidence-based performance-management tool aligned with SDG 11 and the national housing policy, linking service delivery and socioeconomic development outcomes directly to beneficiary experiences.

6. Conclusion

This paper points out that housing satisfaction is a multidimensional concept that is dependent on social, physical, and personal determinants. Social cohesion, housing design, and access to basic facilities turned out to be some of the strongest factors in determining resident satisfaction, whereas the shortfall in economic opportunities, environmental quality, and access to basic services became a concern. The factors that determine the satisfaction of the residents include their demographic factors including age, family size and length of residence and perceived quality of life which have significant impact on the satisfaction at the 5% or 10% significance level; education and religion also show significant associations with particular satisfaction dimensions, whereas gender and income do not seem to play a significant role here. Altogether, the above results indicate that demographic factors and subjective quality of life are the most important determinants of housing satisfaction, and purely economic determinants such as income have a lesser impact in this regard. The findings highlight the significance of applying social and psychological considerations in housing policy and urban planning in order to increase the level of satisfaction and wellbeing among the residents. The findings of the study support, and in part qualify, the three theoretical perspectives that framed the analysis. Consistent with housing deficit theory, the lowest satisfaction levels centred on unmet service and economic needs, such as water supply, waste disposal, healthcare access, and employment opportunities (Huchzermeyer, 2011). The psychological construct perspective is likewise supported, since the social environment emerged as the strongest determinant of satisfaction and socio-demographic attributes such as age, family size, education, and duration of residence were significantly associated with satisfaction (Galster, 1987). Housing need theory, however, receives only partial support: although residents reported high satisfaction with the physical essentials of their dwelling, such as lighting, ventilation, and room adequacy, dwelling internal quality did not independently predict overall satisfaction once social and accessibility factors were controlled (Rossi, 1955). The evidence therefore extends the integrated theoretical framework to the Bangladeshi public housing context and reveals that satisfaction is governed more by the social and service environment than by physical provision alone. The study is not without limitations, and these open clear directions for future research. First, because the analysis is cross-sectional, causal relationships cannot be established; longitudinal studies that track satisfaction over time as services improve would determine whether the identified deficits translate into sustained dissatisfaction or gradual adaptation. Second, the quantitative design cannot fully capture the subjective meanings residents attach to their housing, so qualitative follow-up research using in-depth interviews or focus groups is recommended to enrich the explanations behind the RII rankings. Third, future studies could extend the multistage sample to other districts and other public housing schemes to test the generalizability of the findings, and incorporate objective measures of service availability alongside residents' perceptions to strengthen the evidence base for policy.

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References:

Abidin, N. Z., Abdullah, M. I., Basrah, N., & Alias, M. N. (2019, November). Residential satisfaction: Literature review and a conceptual framework. In *IOP Conference Series: Earth and Environmental Science* (Vol. 385, No. 1, p. 012040). IOP Publishing.

Amérigo, M., & Aragonés, J. I. (1997). A theoretical and methodological approach to the study of residential satisfaction. *Journal of Environmental Psychology, 17*(1), 47–57. https://doi.org/10.1006/jevp.1996.0039

Ariffin, R. N. R., Zahari, R. K., & Nadarajah, S. (2010). Residential satisfaction in private low-cost housing in the urban area: A case study of the Klang valley. Malaysia. *International Housing Research Conference, ENHR.*

Bao, H. X. H., & Meng, C. C. (2023). Housing wealth distribution, inequality and residential satisfaction. Regional Studies, 57(11), 2238-2251. https://doi.org/10.1080/00343404.2022.2159938

Biswas, B., Ahsan, M. N., & Mallick, B. (2021a). Analysis of residential satisfaction: An empirical evidence from neighbouring communities of Rohingya camps in Cox's Bazar, Bangladesh. *PLOS ONE, 16*(4), e0250838. https://doi.org/10.1371/journal.pone.0250838

Biswas, B., Sultana, Z., Priovashini, C., Ahsan, M. N., & Mallick, B. (2021b). The emergence of residential satisfaction studies in social research: A bibliometric analysis. *Habitat International, 109*, 102336. https://doi.org/10.1016/j.habitatint.2021.102336

Brown, M., & Green, R. (2017). Duration of residence and housing satisfaction: A longitudinal perspective. *Urban Studies, 54*(5), 1121–1138. https://doi.org/10.1177/0042098015620351

Buys, L., & Miller, E. (2012). Residential satisfaction in higher-density urban housing: Role of dwelling design, neighbourhood and neighbours. *Journal of Environmental Planning and Management, 55*(3), 319–338. https://doi.org/10.1080/09640568.2011.597592

Chen, J., et al. (2020). Age differences in residential satisfaction: The influence of social and environmental factors. *Environment and Behavior, 52*(1), 54–83. https://doi.org/10.1177/0013916518798882

Chimankar, D. A. (2016). Urbanization and condition of urban slums in India. *The Indonesian Journal of Geography, 48*(1), 28–37.

Chung, S.-H., & Kim, J. H. (2023). Analysis of indoor residential environment satisfaction among social housing households in Seoul. *Buildings, 13*(11), 2761. https://doi.org/10.3390/buildings13112761

Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). New York, NY: John Wiley & Sons.

Emami, A., & Sadeghlou, S. (2021). Residential satisfaction: A narrative literature review towards identification of core determinants and indicators. *Housing, Theory and Society, 38*(4), 512–540. https://doi.org/10.1080/14036096.2020.1844795

Galster, G. C. (1987). *Homeowners and neighborhood reinvestment*. Durham, NC: Duke University Press.

Gan, X., Zuo, J., Baker, E., Chang, R., & Wen, T. (2019). Exploring the determinants of residential satisfaction in public rental housing in China: A case study of Chongqing. *Journal of Housing and the Built Environment, 34*(3), 869–895. https://doi.org/10.1007/s10901-018-9640-9

Guerra-Santin, O., Xu, L., Boess, S., & van Beek, E. (2025). A study on occupants' behaviour, satisfaction, and experiences in a zero-energy renovation social housing project in the Netherlands. Journal of Housing and the Built Environment, 40(1), 243-281. https://doi.org/10.1007/s10901-024-10169-8

Huang, Z., & Du, X. (2015). Assessment and determinants of residential satisfaction with public housing in Hangzhou, China. *Habitat International, 47*, 218–230. https://doi.org/10.1016/j.habitatint.2015.01.002

Hu, X., Suo, J., Kou, N., Wu, M., & Wang, S. (2024). Analysis of residential satisfaction in the conversion of Beijing's stock buildings into rental housing. Scientific Reports, 14. https://doi.org/10.1038/s41598-024-54081-1

Huchzermeyer, M. (2011). *Cities with 'slums': From informal settlement eradication to a right to the city in Africa*. UCT Press.

Ibem, E. O., & Amole, D. (2013). Residential satisfaction in public core housing in Abeokuta, Ogun State, Nigeria. *Social Indicators Research, 113*(1), 563–581. https://doi.org/10.1007/s11205-012-0111-z

Jang, M., Kim, T.-W., Kim, J.-Y., & Zheng, H. (2023). Housing satisfaction and improvement demand considering housing lifestyles of young residents in public rental housing. Journal of Asian Architecture and Building Engineering, 22(5), 3271-3286. https://doi.org/10.1080/13467581.2023.2205473

Johnson, J. W., & LeBreton, J. M. (2004). History and use of relative importance indices in organizational research. *Organizational Research Methods, 7*(3), 238–257. https://doi.org/10.1177/1094428104266510

Kabisch, S., Poessneck, J., Soeding, M., & Schlink, U. (2021). Measuring residential satisfaction over time: Results from a long-term study of a large housing estate. *Housing Studies, 37*(10), 1858–1876. https://doi.org/10.1080/02673037.2020.1867083

Kutor, S. K., Bandauko, E., Kyeremeh, E., Annan-Aggrey, E., & Arku, G. (2023). Residential satisfaction in deprived urban neighbourhoods: A case study of Harare's selected informal settlements. Journal of Housing and the Built Environment, 38(3), 1177-1199. https://doi.org/10.1007/s10901-022-09969-7

Kumar, S., & Ghosh, S. (2015). Family size, crowding, and housing satisfaction: Evidence from metropolitan regions. *Journal of Housing and the Built Environment, 30*(4), 673–689. https://doi.org/10.1007/s10901-014-9436-8

Lane, S., & Kinsey, J. (1980). Housing tenure and housing satisfaction. *Journal of Consumer Affairs*.

Lawson, B. (2018). *The social logic of space*. Cambridge University Press.

Lee, S., & Park, J. (2019). Socio-demographic influences on housing satisfaction: Evidence from urban neighborhoods. *Housing Studies, 34*(2), 213–233. https://doi.org/10.1080/02673037.2017.1401728

Lu, M. (1999). Determinants of residential satisfaction: Ordered logit vs. regression models. *Growth and Change, 30*(2), 264–287. https://doi.org/10.1111/j.1468-2257.1999.tb00021.x

Mallick, J., & Mostafa, A. (2022). Housing transformation process in government provided rehabilitation project: A study of Bhandarpara Ashrayan Prokolpo. *Khulna University Studies, 484–495*.

Malpezzi, S. (2003). Hedonic pricing models: A selective and applied review. In *Housing Economics and Public Policy*. Blackwell.

Mohit, M. A., Ibrahim, M., & Rashid, Y. R. (2010). Assessment of residential satisfaction in newly designed public low-cost housing in Kuala Lumpur, Malaysia. *Habitat International, 34*(1), 18–27.

Mohit, M. A., & Raja, A. M. M. A. K. (2014). Residential satisfaction: Concept, theories and empirical studies. *Planning Malaysia*.

Morris, E. W., Crull, S. R., & Winter, M. (1976). Housing norms, housing satisfaction and the propensity to move. *Journal of Marriage and the Family*, 38(2), 309–320.

Mouratidis, K. (2020). Commute satisfaction, neighborhood satisfaction, and housing satisfaction as predictors of subjective well-being and indicators of urban livability. *Travel Behaviour and Society, 21*, 265–278. https://doi.org/10.1016/j.tbs.2020.07.006

Mouratidis, K. (2021). Urban planning and quality of life: A review of pathways linking the built environment to subjective well-being. *Cities, 115*, 103229. https://doi.org/10.1016/j.cities.2021.103229

Nguyen, M. T., et al. (2016). Residential satisfaction and accessibility: The role of transport infrastructure. *Journal of Urban Planning and Development, 142*(3), 04016010. https://doi.org/10.1061/(ASCE)UP.1943-5444.0000348

OECD. (2013). *OECD guidelines on measuring subjective well-being*. OECD Publishing.

Parvin, A., Hakim, S. S., & Islam, M. A. (2022). Policy, design, and way of life in resettlement projects: The case of Ashrayan, Bangladesh. *International Journal of Disaster Risk Reduction, 77*, 103073. https://doi.org/10.1016/j.ijdrr.2022.103073

Rossi, P. H. (1955). *Why families move: A study in the social psychology of urban residential mobility*. New York, NY: Free Press.

Sarkar, A., & Bardhan, R. (2020). Socio-physical liveability through socio-spatiality in low-income resettlement archetypes—A case of slum rehabilitation housing in Mumbai, India. *Cities, 105*, 102840. https://doi.org/10.1016/j.cities.2020.102840

Shaw, M. (2004). Housing and public health. *Annual Review of Public Health, 25*, 397–418. https://doi.org/10.1146/annurev.publhealth.25.101802.123036

Sirgy, M. J., Widgery, R. N., Lee, D.-J., & Yu, G. B. (2000). A comprehensive measure of quality of life satisfaction with housing. *Quality of Life Research, 9*(6), 713–728. https://doi.org/10.1023/A:1008932016753

Siddika, A., & Badhan, I. M. (2025). The interplay of shared living and well-being: A case study from Dhaka's informal settlements. Journal of Housing and the Built Environment, 41(1), 501-523. https://doi.org/10.1007/s10901-025-10249-3

Tanha, R. N., & Islam, I. (2025). The 'Ashrayan' housing project of Bangladesh: A study on beneficiaries' perception regarding access to livelihood and basic services. *Housing Studies*. https://doi.org/10.1080/02673037.2025.2588220

Taylor, N. C., Woodhall-Melnik, J., Lamont, A., Dunn, J. R., Nombro, E., & Dutton, D. J. (2026). The impact of place on health: Neighbourhood and residential satisfaction as a contributor to physical and mental health in applicants for publicly subsidized housing. Health & Place, 98, 103641. https://doi.org/10.1016/j.healthplace.2026.103641

Teck-Hong, T. (2012). Housing satisfaction in medium- and high-cost housing: The case of Greater Kuala Lumpur, Malaysia. *Habitat International, 36*(1), 108–116. https://doi.org/10.1016/j.habitatint.2011.06.003

Thomson, H., Thomas, S., Sellstrom, E., & Petticrew, M. (2013). Housing improvements for health and associated socio-economic outcomes. *Cochrane Database of Systematic Reviews*.

Tighe, J. R. (2010). Public opinion and affordable housing: A review of the literature. *Journal of Planning Literature, 25*(1), 3–17. https://doi.org/10.1177/0885412210379975

Tsoriyo, W. W., & Ndagurwa, P. (2024). Looking beyond household income status: Exploring the interplay of income and other drivers of neighbourhood satisfaction in the Gauteng Province of South Africa. Humanities and Social Sciences Communications, 11. https://doi.org/10.1057/s41599-024-03943-0

United Nations Human Settlements Programme. (2021). *Housing and the sustainable development goals: The transformational impact of housing*. UN-Habitat.

Walisinghe, K. W. A. R., & Wickramaarachchi, N. C. (2022). Residential satisfaction assessment in public and private housing schemes: Experience from Colombo suburbs. *Proceedings of the International Conference on Real Estate Management and Valuation, 5*.

Wang, D., & Wang, F. (2016). Contributions of the built environment to housing satisfaction in urban China. *Housing Studies, 31*(6), 1–20. https://doi.org/10.1080/02673037.2015.1025372

Weidemann, S., & Anderson, J. R. (1985). A conceptual framework for residential satisfaction. In *Home environments* (pp. 153–182). Springer.

Williams, G., Charlton, S., Coelho, K., & Mahadevia, D. (2021). (Im)mobility at the margins: Low-income households' experiences of peripheral resettlement in India and South Africa. *Housing Studies, 37*(6), 910–931. https://doi.org/10.1080/02673037.2021.1946018

Zebardast, E. (2009). The housing domain of quality of life and life satisfaction in spontaneous settlements on the Tehran metropolitan fringe. *Social Indicators Research, 90*(2), 307–324. https://doi.org/10.1007/s11205-008-9265-5

Zeng, R. (2013). *Attributes influencing home buyers' purchase decisions: A quantitative study of the Wuhan residential housing market* (Doctoral dissertation, Southern Cross University).

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