

Neighbourhood Microeconomic Influences on Residential Housing Prices in Kenyan Cities: Cognitive and Emotional Biases as Mediators of Psychological Expectations

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Abstract

This study investigates the microeconomic indicators influencing residential property prices in Kenya's cities, focusing on the cognitive and emotional biases that shape psychological expectations. It underscores the importance of neighbourhood attributes for real estate stakeholders and their interplay with market forces. Utilising a mixed-methods approach with 234 participants, it combines behavioural economics to reveal the psychological elements that contribute to market fluctuations. The results show that location factors significantly affect pricing ($R = 0.708$, $R^2 = 0.84$), followed by various neighbourhood and structural elements. Cognitive biases lead to the undervaluation of structural quality (post-mediation $\beta = -0.224$, $p < 0.001$), while emotional biases decrease the perceived value of location (β drops from 0.846 to 0.823). Emotional bias demonstrates a more substantial mediating effect ($\Delta R^2 = 8.9\%$) compared to cognitive biases ($\Delta R^2 = 8.2\%$), emphasising the emotion-driven dynamics of the market in Kenya, where factors like loss aversion and herding behaviour inflate prices. A notable aspect of the Kenyan context is the tendency to overlook structural qualities due to cognitive anchoring based on location. The rapid pace of urbanisation and the prevalence of informal settlements exacerbate these biases, leading policymakers to introduce transparency initiatives, such as standardised valuations, to mitigate market distortions. By merging microeconomic analysis with behavioural insights, this study situates housing volatility within emerging markets and suggests equitable urban development strategies to foster fair housing practices in developing economies. It highlights the influence of behavioural factors on Kenya's residential housing crisis and calls for their incorporation into the Affordable Housing Agenda, along with improved financial literacy and regulatory frameworks to limit speculation. Future research should adopt longitudinal methodologies, involve various stakeholders, and refine metrics such as herding behaviour.

Keywords: *neighbourhood attributes, residential housing prices, real estate investments, psychological expectations, behavioural mediation.*

JEL Classification: *R21; R23; R31*

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Introduction

Residential housing prices serve as a fundamental pillar of economic stability, encapsulating the intricate interplay between macroeconomic fundamentals, microeconomic dynamics, and human behaviour (Ahmad, 2024; Bao, 2024). On a global scale, housing markets exhibit notable volatility, influenced by a myriad of factors including interest rates, urbanisation trends, and speculative investments (Li & Yi, 2022; Uchehara et al., 2020). In the Kenyan context, fluctuations in housing prices have escalated since 2016, with annual growth rates varying between 4.9% and 6.1%, thereby exacerbating challenges related to affordability (KNBS, 2022; Cytonn Investments, 2022). Despite policy initiatives such as Vision 2030 and the 'Big Four Agenda,' which aimed to provide 500,000 affordable housing units by 2022, progress has been hampered by land speculation, inefficient zoning practices, and a lack of cohesive data concerning price determinants (CAHFA, 2020; Cheloti & Mooya, 2024).

Recent scholarship highlights macroeconomic factors—such as Gross Domestic Product (GDP), inflation rates, and interest rates—as predominant determinants of housing price dynamics (Ouma, 2015; Kibunyi et al., 2017). However, microeconomic variables, specifically neighbourhood characteristics, are increasingly acknowledged as significant yet under-explored determinants. Attributes of neighbourhoods, including safety, accessibility to amenities, and environmental quality, contribute to approximately 42% of price variability in Nairobi; nonetheless, the interaction of these elements with behavioural biases has not been sufficiently investigated

(Mora-Garcia et al., 2019). Additionally, cognitive biases (for instance, overreliance on historical data) and emotional biases (such as overconfidence) influence decision-making processes among investors and tenants, intensifying market inefficiencies (Ahmad, 2024; Korteling & Toet, 2022).

Kenya's housing market faces unique challenges due to systemic inefficiencies, including barriers to land access and weak enforcement of policies (Ndung'u & Onyuma, 2020). Although previous studies have analysed macroeconomic and structural factors, inconsistencies remain in clarifying price volatility (Cirjevskis, 2021; Wekesah, 2018). For example, Kibunyi et al. (2017) discovered no correlation between diaspora remittances and housing prices, opposing Juma's (2014) claims. Such discrepancies imply that there are latent factors, particularly psychological expectations influenced by cognitive and emotional biases, which earlier research has overlooked (Njenga & Kagiri, 2018; Ndiritu, 2015).

Behavioural economics frameworks worldwide indicate that biases, such as anchoring and herding, distort price perceptions (Khalil, 2024; Tomal & Brzezicka, 2024). In Kenya, 71% of tenants emphasise the importance of rental affordability, yet 63% misjudge future price trends due to emotional biases (Cytonn Investments, 2022). This disconnect between neighbourhood microeconomic factors and behavioural influences restricts policymakers' effectiveness in stabilising markets.

This research combines Hedonic Price Theory (Rosen, 1974), which suggests that housing prices embody the implicit values of location and neighbourhood features, with Behavioural Finance Theories to elucidate decision-making influenced by biases. The Rational Expectations Hypothesis (Muth, 1961) and Adaptive Expectations Hypothesis (Cagan, 1956) provide further depth into how prior experiences and imperfect information shape psychological expectations (Massaro, 2012; Jurgilas & Lansing, 2013). For instance, investors' dependence on cognitive heuristics (like selective memory) and emotional responses (such as fear of scarcity) intensifies price cycles (Ahmad, 2024; Malik et al., 2021). Similarly, this study explores two questions: How are residential housing prices in Kenyan cities affected by neighbourhood microeconomic factors? and how significantly do cognitive and emotional biases influence these relationships?

Employing a mixed-methods framework that encompasses hedonic regression analysis and Likert-scale surveys involving 234 real estate investors, this study elucidates neighbourhood safety ($\beta = 0.377$) as a fundamental determinant of property pricing. Notably, cognitive biases (e.g., anchoring bias) and emotional biases (e.g., overconfidence) exacerbate these influences by a margin of 8.2% to 8.9%, thereby elucidating a portion of the previously unexplained volatility in the market (Cascão et al., 2023; Cheloti & Mooya, 2024).

This study integrates microeconomic and behavioural literature insights to furnish policymakers with effective strategies to stabilise Kenya's housing market. Key recommendations include reformulating zoning regulations to curtail land speculation and implementing behavioural nudges, such as improving transparency in price forecasts, within affordable housing programs. Additionally, investors are urged to recognise cognitive biases that may distort risk perceptions, thereby bolstering portfolio resilience amid economic uncertainties.

Literature Review

A. Neighbourhood Attributes and Residential Housing Prices: Definitions, Conceptualisations, and Applications: Global and Kenyan Perspectives

Neighbourhood attributes encompass a range of physical, social, and environmental characteristics that significantly influence residential desirability. Various studies have defined these attributes in diverse ways, yet they uniformly highlight several key factors, including security, proximity to amenities (such as schools and hospitals), environmental aesthetics, and social dynamics (Meng, 2023; Bao, 2024). For instance, there is a well-documented positive correlation between security and low crime rates with housing prices on a global scale (Khalil, 2024). Conversely, noise pollution resulting from traffic or industrial activities tends to depress property valuations (Beck et al., 2024). Furthermore, proximity to green spaces and reputable educational institutions often leads to premium pricing, attributable to the perceived enhancement of quality of life (Cascão et al., 2023). In the Kenyan context, attributes such as the socio-economic status of neighbours, or the "personalities of those residing near the property," play a crucial role in determining housing prices, underscoring a cultural emphasis on community status (Cheloti & Mooya, 2024). Comparative studies conducted in Spain (Mora-Garcia et al., 2019) and Malaysia (Mang et al., 2018) suggest these neighbourhood characteristics account for 20–40% of the variance in property prices. Notably, however, research pertaining to African contexts often neglects the consideration of informal settlements, where factors such as tenure security are prioritized over physical amenities (Alima, 2021).

A brief examination of the empirical evidence concerning the valuation of neighbourhood attributes indicates that safety in Nairobi, such as proximity to police stations, leads to a price increase of 12–18% (Wekesah, 2018).

In contrast, in Cape Town, the impact of crime on prices is diluted due to buyers' adaptive expectations (Savills, 2020). Additionally, while amenities like proximity to schools boost property values in Eldoret (Alima, 2021), this effect is absent in informal settlements in Nairobi, where affordability plays a larger role (CAHFA, 2020). Similarly, social status in affluent areas, such as Karen in Nairobi, commands price premiums of 25–30%, influenced by a “prestige bias” (Njenga & Kagiri, 2018).

Within this context, significant gaps in African literature reveal that current studies predominantly concentrate on physical attributes while largely ignoring the influence of behavioural mediators. For instance, research by Alima (2021) establishes a connection between neighbourhood satisfaction and infrastructure, yet it fails to account for how optimism biases can artificially inflate demand within speculative markets. Furthermore, the absence of enforced zoning laws in Kenya engenders distinct disamenities, such as the industrial-residential mix. Despite these issues, no comprehensive study investigates how anchoring biases contribute to the normalisation of these risks (Cheloti & Mooya, 2024). This study aims to address and rectify this critical research gap.

B. Theoretical Framework

Hedonic Pricing Theory

Hedonic pricing theory (Rosen, 1974) posits that housing prices reflect the inherent value of property features, including structural elements, location, and neighbourhood characteristics. This theory assesses the marginal price effects of amenities, such as proximity to schools, and disamenities like noise pollution (Mora-Garcia et al., 2019). Despite its utility, it faces criticism for relying on market equilibrium assumptions, which may not apply in imperfect markets like Kenya, characterized by informality and speculative land practices (Cheloti & Mooya, 2024). Recent studies have integrated behavioural economics insights to counter these critiques, highlighting cognitive biases that distort perceived value (Bao, 2024). Rosen (1974) establishes a foundational framework for hedonic pricing, emphasising individuals' perceptions and valuations of environmental and urban characteristics. This theory elucidates how demand and supply dynamics reflect the implicit value of distinct attributes, clarifying the relationship between consumer preferences and market forces. This study adhered to hedonic principles to analyse consumer and producer behaviour in housing. It addressed growing uncertainties in housing prices while reaffirming hedonic pricing theory to achieve its objectives.

Rosen's (1974) hedonic model remains the primary method for assessing attribute-specific price impacts, effectively breaking down prices into implicit values such as floor area and location. For instance, Wittowsky et al. (2020) explored accessibility impacts in Germany, while Abidoye and Chan (2017) criticised the model's assumptions about market equilibrium, particularly in volatile markets like Nigeria. Kibunyi et al. (2017) employed hedonic models in Kenya but noted omitted variable bias from data constraints, including unmeasured neighbourhood crime rates. Conversely, Okuta et al. (2024) demonstrated methodological rigour using spatial autoregressive techniques.

Hedonic theory is a valuable tool for isolating structural and neighbourhood attributes' effects. However, it should be paired with behavioural models to capture psychological expectations. Despite its potential, applying hedonic pricing theory encounters obstacles due to inconsistencies in residential housing markets and pricing behaviours across regions. Hedonic pricing models dominate empirical studies by disentangling housing prices into attribute-specific values (Rosen, 1974). For example, Mora-Garcia et al. (2019) examined premiums linked to school quality and safety in Spain, while Alima (2021) identified zoning regulation compliance as a crucial price determinant in Kenya. Still, many studies focused on Africa often neglect informal settlements, where factors like tenure security may surpass physical attributes (Kuria, 2024).

Rational Expectation Hypothesis

Rational Expectation Theory, introduced by Muth in 1961, posits that individuals form economic expectations by considering rational factors, past experiences, and available information. This approach enables individuals to modify behaviours according to anticipated economic conditions, aligning predictions with real outcomes. Agents are presumed to utilise all accessible information for price predictions. While effective in stable markets, REH faces challenges in volatile economies like Kenya due to data scarcity and speculation (Massaro, 2012). This framework indicates that a deep understanding of the economic environment allows individuals to adjust expectations based on comprehensive data analysis. For example, property investors analyse various indicators to forecast future value increases, guiding decisions on purchase timing. The theory's academic significance lies in investigating whether individuals effectively utilise available information in forecasts, emphasising decision-making processes as a vital study focus.

Rational Expectation Theory improves forecasting by reducing the need for multiple explanatory parameters, yielding more accurate predictions crucial for economic and behavioural research (Massaro, 2012). It posits that agents leverage all available information to forecast future prices, as shown in the housing market, where indicators like interest rates aid in timing decisions (Chege et al., 2023). A notable limitation is its assumption of

perfect information, which is frequently lacking in Kenya's opaque property market (Karoki, 2013).

Adaptive Expectation Hypothesis

Adaptive expectations theory, introduced by Cagan in 1956, posits that individuals form future expectations based on past experiences, emphasising recent outcomes. As new information emerges, these expectations shift, allowing for gradual adaptation. This suggests that past experiences significantly influence future expectations, particularly in fluctuating environments.

The theory indicates that individuals often maintain optimistic views, affecting their willingness to pay higher prices in the housing market, especially during downturns. This optimism underscores the impact of previous experiences on future expectations, even amid market fluctuations, leading to reliance on historical trends and resulting in cyclical price bubbles (Cascão et al., 2023). For instance, during Kenya's post-2010 housing boom, buyers anticipated price increases despite supply-demand imbalances (KNBS, 2022). Expectations are primarily backward-looking and adjust slowly based on historical trends. Research by Sridevi and Saranya (2018) showcases this optimism in Chennai's housing market after the recession. Additionally, Mochere et al. (2016) demonstrate a link between adaptive behaviors and herd investing during Nairobi's property growth from 2010 to 2016. In data-limited contexts like Kenya, adaptive expectations provide a useful model driven by historical patterns. However, Wang et al. (2018) suggest that combining adaptive and rational planning frameworks may bridge short-term behaviors with long-term strategies.

D. Empirical Review

This study examines how psychological expectations serve as a mediating factor in the link between neighbourhood attributes and residential housing prices. Research in this area, especially within the Kenyan context, is notably limited. While there is extensive literature available in developed countries—especially following financial crises—a considerable gap remains regarding detailed studies on the Kenyan market. Few investigations have analysed how psychological expectations influence the relationship between different structural features and residential property prices in urban Kenya.

Residential Housing Prices: Global and Regional Perspectives

A multifaceted interaction of macroeconomic, microeconomic, and behavioural factors influences the pricing of residential housing. Globally, determinants such as structural characteristics (Sundrani, 2018), neighbourhood attributes (Antoniucci & Marella, 2017a; Gao et al., 2019), locational properties (Mang et al., 2018), and environmental elements (Razali et al., 2020) are integral to pricing models. A substantial body of research has investigated macroeconomic indicators, including gross domestic product (GDP), interest rates, and monetary policy frameworks (Sabyasachi, 2020; Korkmaz, 2020). Recent scholarly works highlight the influence of crises, particularly the COVID-19 pandemic, on transformations in housing demand (Uchegara et al., 2020; Zhao, 2020). Moreover, the relevance of behavioural economics has surged, with investigations linking cognitive biases to variations in housing prices (Cascão et al., 2023; Tomal & Brzezicka, 2024).

In Africa, housing markets navigate a complex array of challenges, each requiring a nuanced understanding. Diala et al. (2016) elucidated the significant supply-demand mismatches prevalent in Nigeria's housing sector, while Jack et al. (2019) demonstrated that fluctuations in exchange rates have negligible effects on housing prices in Ghana, suggesting distinct market dynamics. Moreover, the housing crisis in Kenya, exacerbated by rapid urbanization and gaps in policy implementation (Ouma, 2015; Ndung'u & Onyuma, 2020), is emblematic of wider trends observed across the continent. Recent research conducted by Cheloti and Mooya (2024) further emphasises that Kenya's real estate market heavily relies on heuristic decision-making processes, a critical element frequently overlooked in conventional economic models. Despite notable advancements in research, a significant portion of studies focused on African markets continue to operate within isolated macroeconomic frameworks, often disregarding the importance of localised behavioural mediators (Kuria, 2024).

Microeconomic Indicators and Housing Prices: Bridging Gaps with Behavioural Insights

The attributes of neighbourhoods significantly influence housing prices through both concrete and subjective mechanisms. Hedonic pricing models have predominated global research, placing a strong emphasis on factors such as location, infrastructure, and aesthetic appeal (Mora-Garcia et al., 2019; Sundrani, 2018). Nevertheless, contemporary studies advocate for the incorporation of behavioural perspectives. For instance, Cascão et al. (2023) illustrate how cognitive heuristics, such as availability bias, enhance demand in neighbourhoods rich in amenities, while Węgrzyn and Kuta (2024) uncover how anchoring effects can distort price estimations, particularly in volatile market conditions.

In Kenya, microeconomic analyses are characterised by a significant degree of fragmentation. Wekesah (2018) identified population growth and lending rates as critical drivers of economic dynamics but did not sufficiently address the influence of behavioural factors. Alima's (2021) study conducted in Eldoret emphasised

neighbourhood satisfaction but failed to explore the intricacies of pricing linkages. Consequently, a pivotal gap remains in establishing connections between neighbourhood attributes, such as security and proximity to amenities, and cognitive biases such as overconfidence and mental accounting (Khalil, 2024; Nikpey Pesyan et al., 2024). For instance, it has been observed that Kenyan buyers frequently overvalue properties situated near newly constructed highways, a phenomenon attributed to optimism bias, even in the presence of latent risks such as increased congestion (Cheloti & Mooya, 2024). This study seeks to bridge this gap by implementing a hedonic pricing model augmented with behavioural variables, thus providing a novel analytical framework relevant to the Kenyan context.

Psychological Expectations: Mediating Microeconomic Dynamics: Neighbourhood Attributes

Psychological expectations, influenced by cognitive and emotional biases, play a significant role in elucidating pricing anomalies within various markets. Malik et al. (2021) established a connection between herding behaviour and the formation of speculative bubbles in Pakistan's financial landscape. Similarly, Al-Dahana et al. (2019) identified a correlation between recency bias and property overvaluation in Iraq. In the Kenyan context, Njenga and Kagiri (2018) demonstrated that demographic variables, such as education and age, moderate biases, including loss aversion, within the real estate sector. Recent scholarly advancements emphasise the dual-process theories that posit an interaction between intuitive heuristics, exemplified by the affect heuristic, and more deliberate analytical thought (Korteling & Toet, 2022; Meng, 2023). For example, status quo bias contributes to price stickiness observed in high-income neighbourhoods of Nairobi, where sellers exhibit resistance to making downward price adjustments, even in the face of market saturation (Kuria, 2024).

Prior studies have critically isolated behavioural factors from microeconomic drivers in economic analysis. Notably, Ndiritu (2015) conducted an examination of cognitive biases prevalent in Nairobi; however, this research did not account for the influence of neighbourhood attributes on these biases. This study aims to bridge this divide by positioning psychological expectations as key mediators between microeconomic indicators, such as proximity to educational institutions, and resultant price outcomes. For instance, framing effects may significantly enhance the perceived value of gated communities, despite a potential deficiency in objective amenities (Perumandla & Bhattacharyya, 2024). Through the development of a composite psychological index utilizing a Likert scale, this research quantitatively assesses how cognitive biases, including anchoring and confirmation bias, distort price negotiations within informal settlements across Kenya.

The current empirical literature identifies three significant gaps: First, there is a Contextual Disconnect, where existing global models fail to adequately represent Kenya's informal markets and their unique behavioral characteristics (Cheloti & Mooya, 2024). Second, the issue of Mediation Oversight is evident, with only a limited number of studies examining how cognitive biases influence the microeconomic price relationships (Pathak & Thapa, 2024). Lastly, there is Methodological Rigidity, characterised by an excessive reliance on hedonic models that lack behavioural integration, ultimately constraining their explanatory capacity (Cascão et al., 2023). This study addresses these critical issues by initially employing a hybrid hedonic-behavioural model to conduct a comprehensive analysis of urban environments such as Nairobi, Mombasa, Nakuru, Eldoret and Kisumu. Subsequently, it introduces a Psychological Expectations Composite Index designed to quantitatively measure the mediation of biases. Ultimately, the findings are contextualised within the broader discourse of behavioural economics in Kenya, while also drawing comparisons between universal theoretical frameworks and localised societal realities. This study enhances the comprehensive understanding of residential housing price dynamics by reconciling neighbourhood, economic, and psychological factors, providing policymakers with tools to reduce bias-driven volatility.

Methodology

A. Research Design

This study adopts a quantitative and qualitative research design to explore the connections between neighbourhood characteristics, psychological expectations, and residential housing prices in urban centres of Kenya. Previous research in Kenya (Karoki, 2013; Njaramba et al., 2018) primarily used descriptive or qualitative methods to discuss the factors influencing housing prices. In contrast, this study applies a deductive approach utilising the hedonic pricing model (HPM), a recognised framework for analysing housing prices (Rosen, 1974; Wittowsky et al., 2020). The HPM posits that housing prices are shaped by structural, locational, and environmental elements, with psychological expectations acting as moderating factors (Abidoeye & Chan, 2017; Famuyiwa & Babawale, 2014). A cross-sectional survey design was selected to collect data at a single point in time, facilitating an examination of the relationships between variables while controlling for confounding influences (Creswell & Creswell, 2018). This methodological choice resolves the previously noted qualitative-quantitative divide (Creswell & Poth, 2018). While psychological elements, such as buyer

expectations, are often qualitatively analysed, this study aims to quantify them through structured surveys within the HPM framework. This approach aligns with recent Kenyan studies (Chege et al., 2023; Okuta et al., 2024) that integrate quantitative surveys with econometric modelling. The research asserts that understanding can be developed through engaging with human perspectives and the meanings people attribute to their experiences, acknowledging the varied nature of viewpoints and highlighting the complexities that inform our comprehension. The primary objective of the study is to shed light on how neighbourhood characteristics affect residential housing prices, using psychological expectations as a mediating variable.

B. Population, Sample, and Sampling Technique

The target population includes real estate investors in Kenya's urban housing markets, notably in cities that constitute 65% of national real estate transactions (Kibunyi et al., 2017). Data collection utilised simple random sampling with a drop-and-pick method for questionnaires.

Sample Size Determination: This study used Yamane's (1967) formula to determine the sample size, resulting in 242 respondents from 609 registered real estate agents, as per Gazette Notice Number 3328, dated March 25, 2022.

Recruitment: Participants were recruited from a directory of 609 real estate agents in Kenya, as outlined in Kenya Gazette Notice No. 3328, dated March 25, 2022. A sample of 242 real estate investors was then selected using a multistage sampling technique.

C. Demographic Characteristics

The researcher distributed 242 questionnaires to real estate investors, achieving a 97% return rate with 234 completed. The demographic analysis covered gender, age, marital status, education, and property interests. Findings revealed that 81% of respondents were male, with men predominant in residential investments, while women handled domestic responsibilities, aligning with Jurik et al. (2019), who emphasised male leadership in business. The age distribution showed 72% were aged 46-56, 11% over 56, and 17% aged 36-45, indicating an older demographic. Marital status indicated 81% were married, correlating with greater financial security and a positive outlook, supporting findings by Madanoglu et al. (2020) about the survival of couple-owned businesses due to enhanced decision-making. In terms of qualifications, 69% held diplomas, 17% had Bachelor's degrees, 9% possessed Master's degrees, and 6% had higher qualifications or attended secondary school. This suggests diploma holders may be less risk-averse than those with advanced degrees, reflecting trends in Kenya's urban real estate sector dominated by younger professionals in mid-tier investments (Njaramba et al., 2018).

D. Data Collection Instrument

A structured questionnaire was developed, consisting of three sections. The Neighbourhood Attributes section contained 10 items rated on a 5-point Likert scale (1=Not at All; 2=Small Extent; 3=Moderate Extent; 4=Large Extent; 5=Very Large Extent), assessing various factors. The Psychological Expectations section included 16 items rated similarly, focusing on emotional bias related to residential housing. This section evaluated perceptions of potential price appreciation, neighbourhood prestige, and risk tolerance. The Housing Prices Index includes self-reported transaction prices (in KES) for residential properties sold over 23 years, cross-verified with housing indices from Hass Property Consult Limited.

Validation and Reliability: Five real estate economists assessed content validity using data from the Kenya Gazette notice no. 3328 (March 25, 2022), achieving a Cronbach's α of 0.808. A pilot test involved 24 randomly selected real estate investors who completed questionnaires, aligning with the methodology of Casanovas et al. (2015), which used 21 items in the biotechnology domain. Notably, Cronbach's α for all scales exceeded 0.808, indicating high internal consistency (Taber, 2018).

E. Data Analysis Methods

The hedonic pricing model was operationalized as:

$$P = \beta_0 + \beta_1 S + \beta_2 E + \beta_3 (S \times E) + \epsilon$$

Where: • PP: Housing price (log-transformed for normality).

- SS: Neighbourhood Attributes (composite score).
- EE: Psychological expectations (composite score).
- S×E×E: Interaction term.

Statistical Procedures: Composite score measurements for structural and psychological variables were aggregated using weighted averages (Pallant, 2011). A Multiple Regression Analysis in STATA 18 estimated coefficients, with variance inflation factors (VIF < 5) confirming no multicollinearity. Mediation Analysis employed Hayes's PROCESS macro to assess whether psychological expectations moderate

the S→PS→P relationship (Hayes, 2018). The analysis involved creating composite scores by amalgamating various structural attributes and the housing price index, derived by summing individual scores and dividing by the number of items. This method sought to reveal potential relationships between structural characteristics and residential housing prices (Pallant, 2011), addressing gaps in Kenyan literature that have underutilised interaction effects in housing price models (Abidoye & Chan, 2017; Karoki, 2013).

Results and Discussion

A. Descriptive Statistics

A descriptive analysis was conducted to examine the behaviour of the variables.

1. Descriptive Statistics of Neighbourhood Attributes

Table 1: Descriptive Statistics of Neighbourhood Attributes

Neighbourhood Attributes Sub-Variables	N	Min	Max	Mean	Std. Dev
Noise that can be heard from the property	233	1	4	3	.878
General security in the area, police posts	221	1	5	4	.855
Quality of the (schools and hospitals)	233	3	5	4	.667
Environmental look near the property	233	1	5	4	.892
Image of the locality or surrounding	233	3	5	4	.656
Perception in the surrounding	233	2	5	4	.828
Foreseen impact of rainwater runoff	232	2	5	4	.941
The property is on a main bus road	233	2	5	4	.899
Proximity of the property to amenities	233	1	5	4	.956
Personalities living around the property	233	1	5	3	.888
Overall		3.8	0.846		

Key – No. Number of Respondents, Min – Minimum, Max - Maximum, Mean – the mean based on Likert Scale, Std, Dev - Standard Deviation.

Table 1 provides descriptive statistics for ten neighbourhood attributes related to residential properties, evaluated via a five-point Likert scale: 1 (Not at All), 2 (Small Extent), 3 (Moderate Extent), 4 (Large Extent), 5 (Very Large Extent). This section clarifies the importance investors assign to attributes in residential property assessments. We hypothesised that those reflecting physical condition and functionality would receive high ratings, as noted in hedonic pricing literature (Rosen, 1974).

Results indicate that security (Mean = 4.0), proximity to schools and hospitals (Mean = 4.0), environmental aesthetics (Mean = 4.0), and accessibility to amenities (Mean = 4.0) significantly influence housing prices, aligning with findings from Zivin et al. (2023), highlighting safety and amenities as critical price determinants. Conversely, noise pollution (Mean = 3.0) and perceived neighborhood image (Mean = 4.0) presented mixed effects on property assessments, supporting Haffner and Elsinga's (2018) work on safety and infrastructure in rental attractiveness.

Respondents agreed on 8 of 9 residential housing attributes, expressing uncertainty only about 1. The study identifies key factors affecting potential residential client choices: security, police presence, school quality, environmental aesthetics, locality perceptions, and rainwater runoff. Clients also value proximity to bus routes and amenities like parks. Considering these factors is vital for rental property decisions. Neighbourhood safety, school quality, access to green spaces, and socio-economic profiles significantly affect renters' experiences and rental desirability. Understanding neighbourhood characteristics is crucial for recognising social and cultural influences in the rental market. These findings align with Haffner and Elsinga (2018), highlighting that safety, school quality, green spaces, and socio-economic factors are essential in rental property choices.

This study examines the complex relationship between neighbourhood attributes and residential property values, categorising variables that can positively or negatively influence property prices. Amenities include schools, parks, hospitals, police stations, and recreation facilities, while disamenities consist of industrial noise, high crime rates, air pollution, traffic congestion, and environmental degradation. Addressing the unique challenges in the rental housing market is vital due to its long-term nature, fixed locations, diverse properties, and extensive regulations, which may lead to inefficiencies. The dynamics of rental markets vary significantly based on local

economic, social, and demographic factors, necessitating independent assessments to understand and address each market's nuances. This perspective aligns with Zivin et al. (2023), indicating that fluctuations in residential property prices stem from a complex interaction of factors within the rental market, particularly influenced by evolving urban landscapes and housing preferences.

2. Effect of Neighbourhood Attributes on Residential Housing Prices

Table 2: Effect of Neighbourhood Attributes on Residential Housing Prices

Neighbourhood Attributes Sub-Variables	B	Std. Error	Beta	t	Sig.
(Constant)	1.339	0.315		4.251	0.000
Noise that can be heard	-0.164	0.054	-0.26	-3.065	0.002
General security in the area	0.227	0.059	0.341	3.868	0.000
Quality of the (schools, and hospitals)	0.263	0.067	0.313	3.919	0.000
Environmental look near the property	0.191	0.061	0.297	3.13	0.002
Image of the locality or surrounding	-0.155	0.105	-0.165	-1.473	0.142
Perception in the surrounding	-0.189	0.079	-0.28	-2.405	0.017
Foreseen impact of rainwater runoff	0.108	0.061	0.178	1.768	0.079
Property being on a main bus road	0.086	0.063	0.136	1.35	0.178
Proximity of the property to amenities	-0.193	0.06	-0.314	-3.205	0.002
Personalities living around the property	0.293	0.059	0.463	5.003	0.000

Table 2 shows the results of the analysis linking neighbourhood characteristics to residential housing prices. The study revealed a significant impact from 7 of the 10 Neighbourhood Attribute Indicators on Residential Housing Prices ($p < 0.05$). In Kenya, the key attributes influencing these prices included noise from traffic and railways, area security, police presence, the quality of local schools and hospitals, environmental conditions, perceptions, and proximity to amenities and notable residents. The results indicate that elements affecting residential prices include the surrounding environment, crime rates, educational quality, demographic diversity, availability of parks, local amenities investments, and sidewalk quality in both walkable and car-oriented areas. Due to price dynamics, this underscores the need to foster discussions and develop pedestrian-friendly neighbourhoods appealing to homebuyers and renters.

The study suggests that spatial structure, social constructs, and consumer behaviour influence neighbourhood perceptions. For instance, individuals prioritising specific characteristics can readily select preferred locations categorised by quality tiers. These insights align with Lin, Zhong, Ren, and Zhu (2022), who found that proximity to job opportunities significantly impacts housing decisions, highlighting the job market's role in neighbourhood trends. While high housing prices in employment hubs attract individuals, interest may wane if costs remain elevated. This allows for preference-driven residential self-selection, consistent with the study's goal to investigate psychological expectations' mediating impact on microeconomic indicators and housing prices. It can be inferred that people adjust their housing choices based on their immediate needs for job access, amenities, recreational options, and social connections, gravitating towards neighbourhoods that satisfy some, but not all, of their needs.

Tables 1 and 2 illustrate that security ($\beta = 341, p < 001$), as well as the quality of schools and hospitals ($\beta = 313, p < 001$), and environmental attractiveness ($\beta = 297, p = 002$), are significant predictors of housing prices. Conversely, factors like proximity to amenities ($\beta = -0.314, p = 002$) and negative perceptions ($\beta = -0.280, p = 017$) negatively impact property values. Additionally, the negative coefficients representing noise ($\beta = -0.164$) and proximity to amenities ($\beta = -0.193$) (see Table 4.9) indicate overcrowding concerns, which contradict the findings of Lin et al. (2022) that regarded proximity as a universally positive factor. These results support global studies highlighting safety and infrastructure as crucial determinants of housing prices (Li & Man, 2022), but differ from research in Africa, where closer access to amenities generally increases property value (Centre for Affordable Housing Finance in Africa, 2020). This difference might be attributed to specific elements in the Kenyan market, such as traffic congestion that diminishes the attractiveness of nearby amenities (Khalil, 2024).

3. Descriptive Statistics of Residential Housing Prices

Table 3: HPI Composite Sub-Variables

HPI Composite Sub-Variables	N	Min	Max	Mean	Std. Dev
Investors use changes in commodity prices	233	1	5	3	.939
Investors use house supply	233	1	5	3	1.088
Investors use employment rate	233	1	5	4	.952
Investors use inflation rate	224	1	5	3	1.062
Investors use Dollar (\$) exchange rate	233	1	5	3	1.179
Investors use disposable income	233	1	5	3	1.237
Investors consider type of housing	233	1	5	3	.915
Investors use loan borrowing conditions	233	2	5	4	.854
Investors use housing valuation reports	233	1	5	3	1.119
Investors use rental rates	233	2	5	4	.780
Investors use the annual amount of GDP	233	2	5	4	.898
Investors use public opinion in determining	233	1	4	3	.935
Overall	3.333	0.997			

Key – No. Number of Respondents, Min – Minimum, Max - Maximum, Mean – the mean based on Likert Scale, Std, Dev - Standard Deviation.

Table 3 provides descriptive statistics related to the composite sub- variables of the Housing Price Index (HPI). These sub- variables represent factors that investors find important when evaluating residential housing prices. The aim is to determine which macroeconomic and market indicators are perceived as most influential in the local context. Respondents indicated that the employment rate (mean = 4, SD = 0. 952) and loan borrowing conditions (mean = 4, SD = 0. 854) are crucial macroeconomic factors. This aligns with Green and Malpezzi' s (2003) findings, which showed that access to credit and labour market stability are significant drivers of housing demand. In contrast, the inflation rate and exchange rates received less agreement (mean = 3), suggesting that macroeconomic volatility makes price forecasting challenging, as noted by Case and Shiller (1989).

Table 3 demonstrates that survey participants concur on the key composite sub- variables for evaluating residential housing prices. Respondents recognise the employment rate (Mean = 4. 00, SD = 0. 952), loan borrowing conditions (Mean = 4. 00, SD = 0. 854), GDP (Mean = 4. 00, SD = 0. 898), and rental rates (Mean = 4. 00, SD = 0. 780) as crucial determinants of housing prices, supporting Chege et al. (2023) on the influence of economic indicators in Kenya' s housing market. The focus on loan borrowing conditions highlights the housing market' s sensitivity to credit availability (Karoki, 2013). Lower mean scores for inflation, exchange rates, disposable income, and public opinion suggest uncertainty about their direct effects, indicating that other factors may mediate these influences. Respondents consistently regard the local employment rate as essential for house prices.

Furthermore, research indicates that investors take loan borrowing conditions and rental rates into account when appraising house prices. Additionally, Kenya' s annual production of goods and services impacts real estate decisions. Fluctuations in housing prices affect business cycles and the stability of the financial system, underscoring the housing market as a vital indicator of economic health. Keeping track of housing market trends is critical for understanding wider economic dynamics and upholding financial stability.

4. Linear Regression of Neighbourhood Attributes and Residential Housing Prices

Table 4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.649 ^a	.422	.393	.44123

This section investigates the predictive capability of ten neighbourhood attributes (as detailed in Table 1) concerning residential housing prices using a linear regression model. Results in Table 4 show an R-value of 0.649 and an R-squared of 0.422, indicating substantial correlation. The R² value reveals how much variance in the dependent variable, 'residential housing prices,' is explained by the independent variables, particularly the

ten neighbourhood attributes. An R-squared of 42% reflects a significant relationship. Thus, Market Decision-Making suggests the 42% explanatory power (R^2) of neighbourhood attributes (Table 4) emphasises the importance for developers to focus on security and school quality. Conversely, proximity to amenities (like game parks) may deter buyers due to potential noise or congestion, calling for targeted marketing (Bao, 2024).

Table 5 : ANOVA of Neighbourhood Attributes and Residential Housing Prices

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.378	10	2.838	14.576	.000 ^b
	Residual	38.937	200	.195		
	Total	67.315	210			

The ANOVA results (Table 4: $F = 14.576$, $p < 0.001$) confirm the model's robustness, supporting Rosen's (1974) hedonic pricing theory that highlights individual attributes' importance. This strong explanatory power emphasises the need to consider structural attributes when assessing housing values in Kenya. Data shows ten neighbourhood variables significantly impact property values, crucial for real estate stakeholders making informed investment choices and improving valuation practices. The study utilised 'the 10 neighbourhood attribute indicators' as predictors of residential housing prices, the dependent variable. Table 5 shows that the regression model effectively predicts this outcome, with a p-value of 0.000, indicating strong statistical significance. The ANOVA results (Table 5) further confirm the regression model's relevance ($F = 14.576$, $p < 0.001$) and strong model fit, demonstrating that structural attributes significantly influence residential housing prices. The high F-statistic confirms these attributes are systematic predictors of housing values.

5. Effect of Neighbourhood Attributes on Residential Housing Prices

Table 6: Effect of Neighbourhood Attributes on Residential Housing Prices

Variable	B	Std. Error	Beta	t	Sig.
Personalities living around the property	0.293	0.059	0.463	5.003	0.000
Quality of the (schools, and hospitals)	0.263	0.067	0.313	3.919	0.000
General security in the area	0.227	0.059	0.341	3.868	0.000
Environmental look near the property	0.191	0.061	0.297	3.13	0.002
Noise that can be heard	-0.164	0.054	-0.26	-3.065	0.002
Perception in the surrounding	-0.189	0.079	-0.28	-2.405	0.017
Proximity of the property to amenities	-0.193	0.06	-0.314	-3.205	0.002

Results from Table 6 show that the four most significant neighborhood attributes affecting residential housing prices are: resident personalities ($\beta = 0.293$), quality of local schools and hospitals ($\beta = 0.263$), general security including police presence ($\beta = 0.227$), and environmental appearance near properties ($\beta = 0.191$). Conversely, the three least influential attributes are traffic noise ($\beta = -0.164$), surrounding perception ($\beta = -0.189$), and proximity to amenities like game parks ($\beta = -0.193$). Table 6 also shows that nearby personalities and school quality positively affect housing prices, while noise pollution and proximity to amenities negatively influence them. This aligns with findings from Mohammed and Sulyman (2019), who identified safety and exclusivity as key drivers of housing prices.

The study highlights that various neighbourhood factors, such as environment, crime rates, school quality, demographic diversity, local parks and green spaces, investment in amenities, and sidewalk quality in walkable and car-dependent areas, significantly influence residential housing prices. It suggests these characteristics are perceived through spatial structure, social context, and consumer choice. Individuals prioritise specific features and choose areas based on quality. Housing choices are influenced by immediate needs like job access, amenities, recreational activities, and social interactions, while considering long-term price trends.

The study finds that locational and neighbourhood attributes significantly impact residential housing prices in Kenya, rejecting Hypothesis H_0 , which claimed no significant effect from microeconomic indicators. Tests confirmed that locational and neighbourhood factors significantly influence these prices. Thus, the study concludes that microeconomic indicators meaningfully affect residential housing prices in Kenya, corroborating Mohammed and Sulyman, (2019) findings on key determinants in housing market assessments, including structural and neighbourhood factors, urban form, location specifics, socioeconomic elements, national economic

performance, and relevant policy frameworks.

6. Mediating Effect of Psychological Expectations on the Relationship between Neighbourhood Attributes and Residential Housing Prices in Kenya

This section examines how psychological expectations, marked by cognitive errors and emotional biases, influence the relationship between neighbourhood characteristics and residential property prices. The hypothesis suggests that these mental and emotional factors can either enhance or diminish the effect of neighbourhood features on housing costs. The research primarily considers the impact of neighbourhood attributes on property prices in Kenya, focusing on the mediating role of psychological expectations. This emphasis is significant as such expectations can greatly modify the influence of microeconomic factors on residential prices, sometimes leading to negligible effects. Using multivariate regression analysis, the study seeks to clarify the interactions among these variables, contributing important insights to the field of housing economics. As a result, we examined the mediation of cognitive errors and emotional biases in the link between neighbourhood characteristics and housing prices in Kenya using Baron and Kenny's (1986) regression modelling approach. This method involves four stages to evaluate the mediating effect of the variables. The analysis was performed at a significance level of $p = 0.05$. For this study, we employed composite scores that reflect psychological expectations, including emotional and cognitive biases, alongside microeconomic indicators.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.781 ^a	.610	.604	.34724
2	.826 ^b	.682	.676	.31420

Table 7 presents the R^2 values prior to and following the interaction with the mediating variable – Cognitive Errors, which assess psychological expectations. The R-value measured 0.610a, with an R^2 of 0.682, indicating a mediating correlation. The R^2 statistic illustrates the variance in the dependent variable, 'residential housing prices,' attributable to independent variables, including microeconomic indicators grounded in locational, neighbourhood, and structural attributes. This study identified an 8.2% alteration in the R^2 value subsequent to the interaction. The R^2 advanced from 0.610 in Model 1 to 0.682 in Model 2, signifying that 8.2% of the variance in residential housing prices is ascribed to cognitive errors as a mediating variable. This implies that psychological biases enhance the explanatory capacity of microeconomic indicators.

Table 8: ANOVA of Cognitive Errors, Microeconomic Indicators and Residential Housing Prices in Kenya

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.480	3	12.493	103.61	.000 ^b
	Residual	23.995	199	.121		
	Total	61.474	202			
2	Regression	41.928	4	10.482	106.18	.000 ^c
	Residual	19.546	198	.099		
	Total	61.474	202			

Table 8 presents predictors derived from microeconomic indicators, which encompass locational, neighbourhood, and structural characteristics. The dependent variable in this study is residential housing prices in Kenya. The findings demonstrate that the regression model effectively predicted the outcome variable ($p=0.000$), notably below the 0.05 threshold, both prior to and following the assessment of the mediating variable—cognitive error reflecting psychological expectations. Additionally, ANOVA results reinforce the model's reliability ($F = 106.18$, $p = 0.000$), affirming microeconomic indicators' predictive capacity and interplay with cognitive biases. This indicates a statistically significant prediction of the outcome variable (see Table 8).

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.781 ^a	.611	.605	.34808
2	.837 ^b	.700	.694	.30608

Table 9 shows R^2 values before and after the mediating variable, Emotional Bias, reflecting psychological expectations. Initially, the R-value was 0.611 and R^2 was 0.700, indicating a moderate correlation. R^2 indicates

the variance percentage in "residential housing prices" explained by independent variables like location, neighbourhood, and structural features. Notably, R^2 increased from 0.611 (Model 1) to 0.700 (Model 2), indicating an 8.9% shift that highlights the enhanced mediating effect of emotional bias over cognitive errors. This study notes an 8.9% increase in R^2 , suggesting that including Emotional Bias enhances the model's explanatory power. Findings suggest that emotional bias from risk aversion may suppress demand in speculative markets, illustrated by the slowdown in Kenya's luxury housing sector. Also, affordability issues may arise for low-income buyers reliant on informal housing due to an emotional aversion to the formal market's perceived risks, as noted by Ahmad et al. (2019).

Table 10: ANOVA of Emotional Bias, Microeconomic Indicators and Residential Housing Prices in Kenya

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.815	3	12.605	104.04	.000 ^b
	Residual	24.111	199	.121		
	Total	61.926	202			
2	Regression	43.376	4	10.844	115.75	.000 ^c
	Residual	18.549	198	.094		
	Total	61.926	202			

Table 10 outlines predictors defined as "microeconomic indicators including locational, neighbourhood, and structural attributes." It is shown with the dependent variable, "residential housing prices in Kenya." The results indicate the regression model predicted the outcome variable effectively, with a p-value of 0.000, below the 0.05 significance threshold. This significance remains strong before and after introducing the mediating variable, emotional bias, measuring psychological expectations. Additionally, the model's significance is supported by ANOVA results (see Table 4.53) indicating enhanced predictive power ($F = 115.75$, $p = 0.000$), underscoring emotional bias's role in price determination. In conclusion, these findings confirm that the model predicts the outcome variable both statistically and significantly, as shown in Table 4.53.

Table 11: Mediating Effect of Emotional Bias on the Relationship between Microeconomic Indicators and Residential Housing Prices

	B	Std. Error	Beta	t	Sig.
(Constant)	-.950	.245		-3.882	.000
locational_Attributes	.850	.066	.620	12.832	.000
Structural_Attributes	-.067	.049	-.075	-1.359	.176
Neighbourhood_Attributes	.377	.049	.401	7.691	.000
(Constant)	-1.207	.218		-5.544	.000
locational_Attributes	.823	.058	.600	14.108	.000
Structural_Attributes	-.205	.047	-.230	-4.385	.000
Neighbourhood_Attributes	.296	.044	.315	6.665	.000
Emotional_Bias	.346	.045	.373	7.705	.000

Table 11 showcases the findings regarding the mediating role of emotional bias in residential housing prices in Kenya. Initially, structural characteristics had negligible effects ($\beta = -0.067$, $p = 0.176$), whereas locational and neighbourhood factors significantly influenced prices ($\beta = 0.850$, $p = 0.000$; $\beta = 0.377$, $p = 0.000$). After the inclusion of emotional bias, the impact of structural attributes became significant ($\beta = -0.205$, $p = 0.000$), while locational and neighbourhood attributes maintained their significance ($\beta = 0.823$, $p = 0.000$; $\beta = 0.296$, $p = 0.000$). The effect of locational attributes slightly decreased from $\beta = 0.841$ to $\beta = 0.823$, suggesting that emotional bias affected investor perceptions.

Locational factors exhibited the strongest positive correlation ($\beta = 0.823$), consistent with global studies emphasizing the significance of location (Bao, 2024). Structural attributes shifted from insignificant ($\beta = -0.067$) to significantly negative ($\beta = -0.230$) after mediation, indicating that emotional bias may heighten skepticism regarding structural quality, potentially due to Kenya's historical construction issues (Uchegara et al., 2020). Neighborhood attributes remained positively significant but showed a reduced effect ($\beta = 0.315$), indicating that emotional bias partially undermines rational assessments of safety and amenities. These results underscore how

emotional bias influences perceptions and investment decisions. For instance, an investor's worry about a booming market may promote caution. Constraints in information processing impede effective decision-making for both investors and tenants, with both conscious and subconscious influences shaping their choices.

A comprehension of unstandardised coefficients (B) clarifies the impact of each predictor. High B values (e.g., locational B = 0.823) indicate strong direct effects, while negative B values (e.g., structural B = -0.230) demonstrate inverse relationships shaped by emotional aversion (Węgrzyn & Kuta, 2024). The analysis reveals a significant link between microeconomic indicators and psychological expectations, suggesting that emotional bias acts as a mediator affecting the impact of these attributes on residential housing prices. A correlation was identified between the independent variable and the potential mediator, as structural attributes gained significance post-mediation ($\beta = -0.205$). This highlights that emotional responses, such as the fear of overpaying, may prompt buyers to concentrate on structural flaws. Locational attributes exhibited a slight decrease in significance ($\beta = 0.850$ to $\beta = 0.823$), indicating that emotional bias diminishes the perceived premium associated with prime locations. Neighbourhood attributes also reflected a decline ($\beta = 0.377$ to $\beta = 0.296$), showing how emotional factors related to social status aspirations recalibrate investment focus.

The findings indicate that emotional bias shapes how individuals perceive their environment. Emotions profoundly affect decision-making; for example, an investor's anxiety about a climbing real estate market may serve as a warning signal. Both investors and tenants face constraints in processing information, limiting their ability to analyse and respond efficiently. Statistical evidence reveals an 8.9% shift in R-squared, signifying that structural factors significantly influenced residential property prices in Kenya when Emotional Bias was incorporated as a mediator.

The findings emphasize that both conscious processes and subconscious influences affect decisions made by investors or tenants. Research indicates that choices often arise from elements beyond immediate awareness, reflecting a complex interplay between conscious and unconscious motivations. Therefore, the study concludes that Emotional Bias, representing psychological expectations, mediates the relationship between microeconomic indicators and residential property prices in Kenya. Supporting this, Malik, Zafar, Ullah, and Ullah (2021) examined how behavioral biases affect financial decision-making related to housing prices in Pakistan. Their study involving 244 real estate agents indicated that behavioral biases considerably impact housing prices, with price variations reflecting diverse responses to influential factors.

Further supporting this conclusion, Al-Dahana, Hasanb, Hamid, and Jadahc (2019) examined psychological expectations related to emotional and cognitive biases among investors in the Iraqi securities market through a survey. They discovered that investors are prone to late perception bias, resulting in overly optimistic forecasts about future events similar to past successes. A local study by Njenga and Kagiri (2018) supports these findings by investigating behavioural biases and housing prices in Kiambu, Kenya, demonstrating that these biases significantly sway housing prices when considering stakeholder demographics. Likewise, Ndiritu (2015) found that behavioural biases considerably influence decision-making in housing investments.

Discussion

The study offers insights into neighbourhood microeconomic indicators influencing residential housing prices in Kenyan cities, focusing on the impact of cognitive and emotional biases on psychological expectations. It underscores the significance of neighbourhood attributes for real estate stakeholders and reveals a complex interaction with market dynamics. In contrast to Western markets, where interior features are valued, cultural factors in Kenya, especially land ownership, play a crucial role. This study shows that locational attributes drive housing prices, consistent with global findings (Centre for Affordable Housing Finance in Africa, 2020). However, the negative coefficients for structural attributes post-mediation indicate a unique dynamic in Kenya, where buyers may undervalue structural quality in favour of location due to cognitive biases. This differs from findings in Pakistan, where structural features were prioritised (Malik et al., 2021). The 8.9% R^2 change for emotional bias versus 8.2% for cognitive errors suggests an emotion-driven market. Investors show loss aversion, overemphasising location due to fear of missing out (Kuria, 2024), while availability bias distorts perceptions of neighbourhood safety (Tomal & Brzezicka, 2024). These results align with Nikpey Pesyan et al. (2024), who noted herding behaviour in volatile markets. Prior research often overlooks Kenya's socio-economic context, where informal settlements and rapid urbanisation enhance biases (Njenga & Kagiri, 2018). This study explains how heuristics mediate microeconomic influence, such as associating location with investment safety. Developers leverage affect heuristics by promoting "prestige" locations, which inflate prices beyond objective values (Cheloti & Mooya, 2024). Emotional and cognitive expectations, significantly affecting housing prices, also reflect how emotional biases impact market evaluations. A key finding is the insignificance of room count as a price determinant, indicating a preference for space over compartmentalization in Kenya, which contrasts with

findings elsewhere. Overall, this research provides vital insights into the Kenya-specific housing market, emphasizing the need to consider local cultural, economic, and regulatory factors for understanding residential pricing.

Conclusion

This study provides valuable insights into the influence of microeconomic attributes on residential housing prices in Kenyan cities, with a particular emphasis on the importance of neighbourhood characteristics. It highlights how cognitive and emotional biases shape psychological expectations, which are essential for stakeholders such as real estate developers and investors. The research demonstrates that both emotional and cognitive biases play a significant role in investment decisions within the real estate sector. By comprehending these biases, investors can enhance their decision-making processes, resulting in better outcomes. Additionally, the findings emphasise the critical role that cultural context and behavioural factors play in interpreting these biases. Through a behavioural lens, the study enriches the understanding of the Kenyan housing market, revealing that emotional biases tend to mediate economic effects more robustly than cognitive biases. To mitigate volatility caused by these biases, policymakers are encouraged to implement transparency initiatives, such as standardising valuation frameworks. This research addresses existing gaps in the literature concerning Kenya's housing dynamics, offering actionable insights for stakeholders. It underscores the necessity for both renters and landlords to grasp the complexities of the residential rental market, which includes psychological expectations, economic conditions, and property management. To facilitate navigation through the housing market, particularly in relation to housing affordability, it is crucial for the government to promote financial literacy programs. Such initiatives will empower individuals to manage market fluctuations better and make informed investment choices.

All authors declare that they have no conflicts of interest

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