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From Awareness to Willingness to Pay: A Structural Equation Modeling Study of Green Building Purchase Intention Among Real Estate Buyers

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ABSTRACT The growing emphasis on sustainable development has increased the importance of green buildings in the real estate sector. However, buyer awareness and perception continue to play a critical role in determining market adoption. The results reveal that perceived value and awareness significantly influence purchase intention, while environmental concern and economic-policy factors exert indirect effects through awareness.

Purpose : The core objective of this research work is to identify the level of awareness of real estate buyers regarding Green buildings. This study examines the level of awareness, perceptions, and factors influencing the willingness to pay extra for green buildings among real estate buyers

Design: Primary data were collected using a structured questionnaire, yielding 90 valid responses. Descriptive statistics, reliability analysis, correlation analysis, exploratory factor analysis, regression analysis, and Structural Equation Modeling (SEM) were employed to analyze the data.

Findings: The findings offer valuable implications for policymakers, developers, and marketers aiming to promote sustainable real estate practices.

Research Limitations: Responses collected from the real estate customers are based majorly on a certain income level assuming that the concept of Green building is still not clear to the lower income group level.

Social Implications: The study provides empirical evidence that awareness and perceived benefits are stronger drivers of green building adoption than environmental concern alone.

Originality: The paper is based on original data which has been collected directly from real estate customers and has not been published in any platform.

KEYWORDS: *Green buildings, Awareness, Purchase intention, Willingness to pay, Factor analysis, Structural Equation Modeling*

1. INTRODUCTION

Rapid urbanization and environmental degradation have intensified the need for sustainable construction practices. Green buildings have emerged as a viable solution by promoting energy efficiency, environmental conservation, and improved quality of life. Today's world is an age of projecting anything and everything towards sustainable development. The concept is to fulfill the current needs without compromising the future capacity of future generations. Green Buildings are structures which are constructed by following sustainable practices. These kinds of buildings help in the systematic and efficient development in urban planning. Such structures are built in order to minimise the environmental impact starting from the inception till demolition of such buildings. Green buildings focus on usage of energy efficiently in order to improvise the quality of the environment and have a broader impact on the ecology.

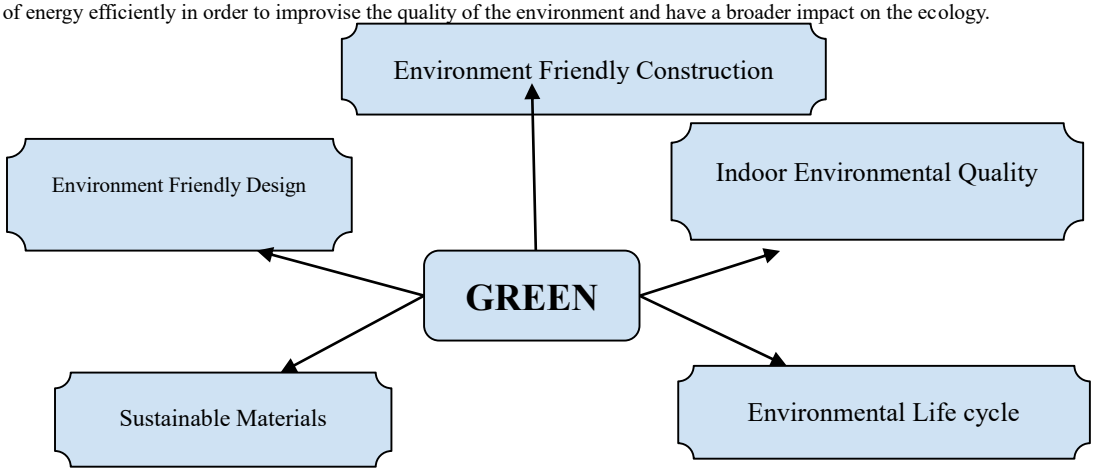

Figure 1: Conceptual Model of Green Buildings
Source: *Mickaityte, A. et. al. (2008)*

Figure 1 highlights the conceptual model adopted from the article *Mickaityte, A. et. al. (2008).* In the paper the researchers have highlighted a few results which are considered in Green buildings and have been derived from the public buildings refurbishment. These are the following: Energy savings, Increase of comfort, Healthy working environment, Extension of building life cycle, Economized exploitation & Environmental protection.

The green buildings possess certain important characteristics which differentiate them from general housing or commercial properties. These are:

- Green buildings are always built in areas which are not environmentally sensitive.
- The construction of such buildings are associated with providing public transport in order to decrease the use of private vehicles.
- Materials used for the construction of green buildings are eco-friendly in nature. Also such materials are reusable during the construction.
- This type of infrastructure uses a minimum quantity of water and energy during the construction.
- Maintenance of natural habitat along with reduction of pollution is a must in such construction.

Green buildings are playing an important role in the fulfillment of Sustainable Development. According to the *National Association of Home Builders (NAHB)*, developers build houses and also ensure that the green building objectives are fulfilled along with the market trends. Along with the construction, major focus is given on the effective utilisation of resources, water & energy. This will also include the effective utilization of cost. Even though it has been observed that green buildings are comparatively more costly to normal buildings, the strategic decisions taken up to build such buildings help in the long term maintenance of the buildings. This is specially observed in those places which are more prone to negative impact of harsh climate. Further it has been observed that real estate customers in such places prefer to invest more in green buildings rather than conventional buildings. One major reason behind this is that such buildings are energy efficient buildings. According to a recent report as per Precedence Research, the market size of Green buildings have been forecasted from 2025-2034 has been shown through Figure 2 below:

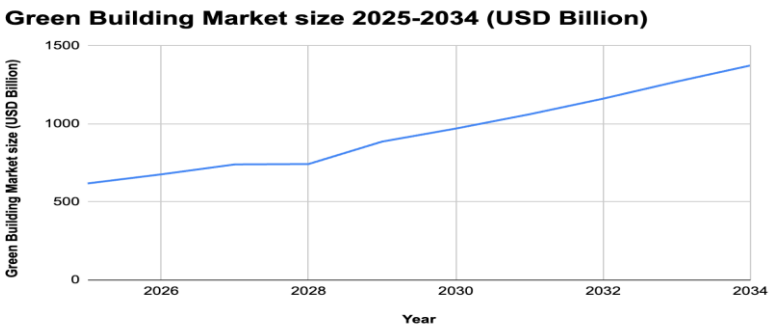

Figure 2 : Green Building Market Size 2025-34 (USD Billion)- *Source: Precedence Research*

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1.1 Green Building Development in India

In India the development of green buildings are majorly done through Leadership in Energy & Environmental design (LEED) which is widely accepted in the global market. However, in India this certificate is only provided by Green Business Certification Inc. (GBCI). The LEED is a rating system which is recognised by the U.S. Green Building Council. There are points allotted for different criterias like efficiency, energy, inner quality and materials based on which points are given. Higher scores lead to categories like Platinum (80+), Gold (60-79), Silver (50-59) & Certified (40-49). In order to support the promotion of green buildings in India & to contribute to the overall goal of sustainability development, different states are taking different initiatives through the help of the Government of India. Few of them are:

a. *Financial Incentives:* The GOI provides several tax benefits (depreciation on green assets), subsidies, and green loans with low interest rates.
b. *Fiscal benefits at State level:* These include duties for property transfer for certified buildings, rebates on developmental charges of buildings and Additional floor area ratio.
c. *Quick Approvals:* The approval process has been fastened through reduced fees, quick permits.

2. LITERATURE REVIEW

This section is a brief of existing literature of research works contributed by different researchers with respect to the concept of green building. Previous studies have emphasized the role of environmental awareness in promoting green building adoption. *Zuo, J., & Zhao, Z. Y. (2014)* emphasis on the current status and the future research opportunities of green buildings. *Eichholtz, P et.al.(2013)* analyses the increase in the supply of green buildings and how the volatility in the real estate market has not impacted the overall returns of the green buildings. *Ding, Z et.al.(2018)* discusses the challenges of obtaining certificates faced during the operational stage of green buildings. *Umar, U. A., & Khamidi, M. F. (2012)* examines and depicts the importance of both government authorities as well as real estate builders to generate awareness in the general public regarding green buildings. *Rashid, M. et. al. (2012)* observes the relationship between awareness and customer satisfaction regarding green building even though more preference is given for more individual workspace. *Sharma, M. (2018)* identifies that despite all other stakeholders, the government plays a major role in promoting green building strategically. Through this literature review it has been identified that several research works have been conducted in the areas of green building related to overview, construction and performances of the sector. However, limited work has been conducted in finding the awareness among real estate customers towards green building. One such related research has been done by *Sh. Ahmad et.al. (2022)* where awareness of customers regarding environmental awareness and its impact on real estate purchase decisions have been studied. Thus the research gap identified through detailed ROL is to know whether and how much real estate customers are aware of the concept of Green Buildings.

3. RESEARCH OBJECTIVES AND HYPOTHESES

Objectives

1. *To assess the level of awareness of green buildings among real estate buyers.*
2. *To examine buyers' perceptions regarding environmental, social, and economic aspects of green buildings.*
3. *To analyze the relationship between awareness and willingness to pay extra for green buildings.*
4. *To identify key factors influencing green building purchase intention.*
5. *To develop and test a structural equation model explaining purchase intention toward green buildings.*

Hypotheses

- H_{01}: *There is no significant relationship between Environment friendliness & Willingness to pay.*
- H_{02}: *There is no significant relationship between Promotional influence & Willingness to pay.*
- H_{03}: *There is no significant relationship between Perceived value & Willingness to pay.*
- H_{04}: *There is no significant relationship between Environmental concern & Willingness to pay.*
- H_{05}: *There is no significant relationship between Price consideration & Willingness to pay.*
- H_{06}: *There is no significant relationship between Longevity & Willingness to pay.*
- H_{07}: *There is no significant relationship between Social contribution & Willingness to pay.*
- H_{08}: *There is no significant relationship between Building features & Willingness to pay.*

Figure 3 is a proposed theoretical model/framework which is based on the above hypothesis. Based on the statistical analysis , the research will be conducted in order to identify the significant factors affecting the willingness of the customers to pay for green buildings.

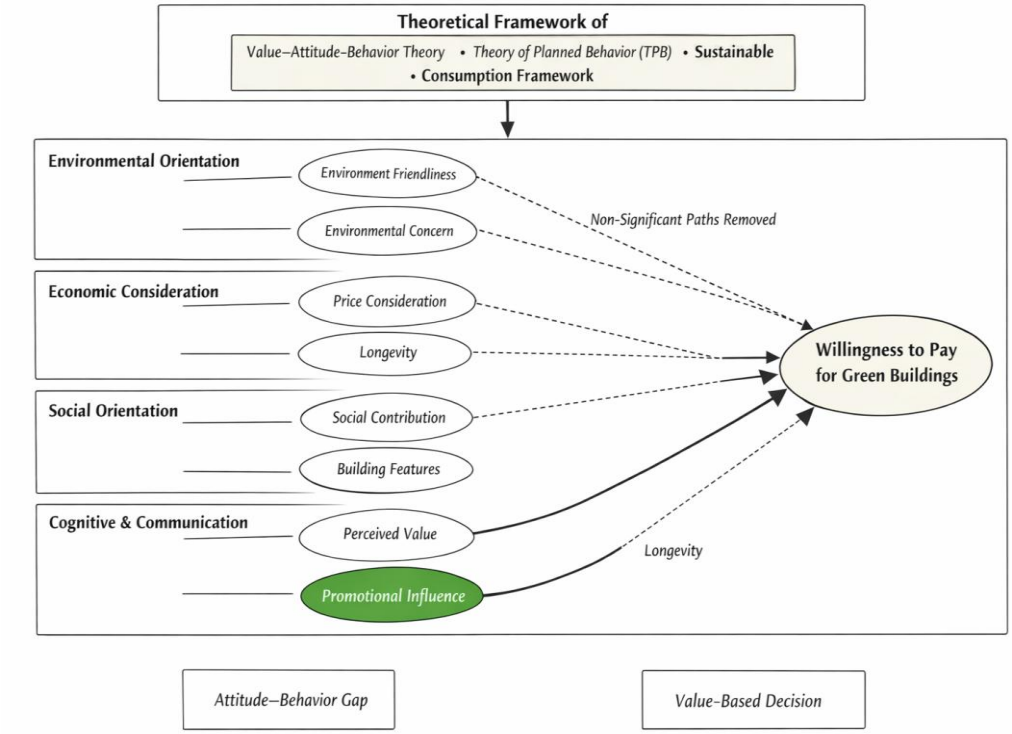

Figure 3: Theoretical Framework of Factors affecting the Willingness to pay

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4. RESEARCH METHODOLOGY

4.1 Data Collection: Primary data were collected through a structured questionnaire administered to real estate buyers. The questionnaire consisted of demographic questions and Likert-scale items measuring awareness, perceptions, and purchase intention toward green buildings.

4.2 Sample Size: A total of 90 valid responses were used for analysis. Given the exploratory nature of the study and moderate sample size, PLS-based SEM was deemed appropriate.

4.3 Statistical Tools: The statistical tools used in the current research work in order to identify the awareness of real estate buyers regarding the concept of green buildings and hence the impact of such awareness on the purchase decision of the customers are as follows: Descriptive statistics, Cronbach's Alpha, Pearson correlation analysis, Exploratory Factor Analysis (PCA), Multiple regression analysis & Structural Equation Modeling (PLS-SEM approach). For the purpose of analysis software like SPSS, Amos along with SEM.

5. DATA ANALYSIS & INTERPRETATION

The main idea of the paper is to identify the level of awareness of real estate customers regarding green buildings and ultimately the process of influencing their purchase decisions in such investments. For this purpose, Reliability analysis has been done based on overall data as well as individual items of the data.

5.1 Reliability Analysis: Before conducting of the Reliability analysis the variable construct has been framed in *Table 1* below:

Construct	Role
Awareness	Independent/Mediator
Perceived Value	Independent/Mediator
Environmental Concern	Independent
Economic Factors	Independent
Policy Factors	Independent
Purchase Intention	Dependent

Table 1: Constructs along with their roles

For the purpose of statistical analysis construct formation for the purpose of Scale creation has been done where all items are measured on a 5 point Likert scale (1= Strongly Disagree to 5 = Strongly Agree). To identify the overall value from the Cronbach's test, items under each Construct have been categorized in *Table 2* below.

Construct	Items Used
Awareness (AW)	Familiarity with the concept of green buildings, Source of information, Interest level
Environmental Concern (EC)	Environmental friendliness factor, Environmental-friendly reason
Perceived Value (PV)	Value to society, Longevity, Features, Social contribution
Economic & Policy Factors (EPF)	Price factor, Government Initiatives
Purchase Intention (PI)	Willingness to pay extra, Promotional influence

Table 2: Items considered in Constructs

Cronbach's Alpha was computed for the **green building awareness and perception scale**, consisting of multiple Likert-type items measuring: Environmental friendliness, Willingness to pay extra for green buildings, Social contribution, Features and longevity, Government initiatives, Promotional influence & Overall perceived value of green buildings.

Cronbach's Alpha Result

Scale	Number of Items	Cronbach's Alpha (α)	Reliability Level
Green Building Awareness & Perception	5	0.88	Good Reliability

Table 3: Cronbach Alpha's Value

- According to commonly accepted benchmarks: **$0.8 \leq \alpha < 0.9$ → Good reliability**

The obtained **Cronbach's Alpha value of 0.88** indicated in *Table 3* highlights that the scale demonstrates **good internal consistency**.

Apart from the overall testing, Reliability test has been conducted in *Table 4* for each construct as follows:

Construct	Cronbach's α	Interpretation
AW	0.78	Acceptable
EC	0.81	Good
PV	0.86	Very good
EPF	0.74	Acceptable
PI	0.83	Good

Table 4: Cronbach Alpha's Value for each construct

From the above table it can be observed that all the constructs exceed the recommended threshold 0.70, indicating satisfactory internal consistency. As the data fulfills the criteria of the Reliability test, the next course of action followed is the Descriptive analysis.

5.2 Descriptive Analysis: The descriptive analysis section has been analysed based on 2 sections: Respondents profile along with their understanding level about green building concept & Constructs. This has been highlighted in *Table 5* below.

Variable	N	Mean	Std. Deviation
Gender	90	1.66	0.48
Employment Status	90	2.43	1.22
Monthly Income	90	2.07	1.37
Familiarity with Green building concepts	90	2.46	1.09
Understanding of Meaning of Green Buildings	90	1.41	0.78
Source of Information about Green Buildings	90	2.59	1.22

Table 5: Result from Variable based Descriptive Analysis

- The **mean value for gender (M = 1.66)** indicates a higher representation of respondents coded as category "2"(Male =1 & Female =2) , suggesting a moderately skewed gender distribution.
- The **employment status mean (M = 2.43)** reflects that most respondents fall within the lower-to-middle employment categories, indicating a predominantly early-career or salaried group.
- The **monthly income mean (M = 2.07)** suggests respondents are largely concentrated in the lower to mid income brackets.
- Importantly, **familiarity with green building concepts (M = 2.46)** lies below the midpoint of the scale, indicating **moderate to low awareness** among real estate buyers, with noticeable variability (SD = 1.09).
- The **low mean for understanding the meaning of green buildings (M = 1.41)** suggests that while respondents may have heard of green buildings, **conceptual clarity is weak**.
- The **source of information mean (M = 2.59)** indicates reliance on limited or informal information channels rather than professional or institutional sources.
- The **standard deviations across green building variables (>1.0)** highlight **heterogeneity in awareness and information access**, implying uneven dissemination of green building knowledge in the market.

In order to get an in depth picture, the descriptive analysis based on the constructs have been also followed which has been portrayed in *Table 6* below.

Construct	Variables	Mean	Std. Deviation
Environmental Concern	Environmental friendliness & Environmental concern	4.30	0.49
Marketing Influence	Promotional influence	3.82	0.86
Perceived Value	Value to society, Social contribution	4.29	0.57
Economic consideration	Price consideration	3.71	0.95
Functional & Long term benefits	Longevity, Features	4.02	0.69
Purchase Intention	Willingness to pay	3.71	0.82

Table 6: Result from Variable based Descriptive Analysis

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(Awareness was considered as Categorical variable and thus excluded from mean computation)

- The high mean value (**M = 4.30, SD = 0.49)** indicates that customers exhibit strong environmental concern.
- Marketing influence showed a moderate to high mean **(M = 3.82, SD = 0.86)** implying that promotional campaigns play major roles but varied roles in shaping willingness to pay.
- The high mean value (**M = 4.29, SD = 0.57)** reflects a strong perception of green buildings as valuable in terms of social contribution, longevity & overall benefits.
- The mean value (**M = 3.71, SD = 0.95)** suggests that respondents moderately agree on the importance of price considerations & government initiatives.
- This construct showed a high mean (**M = 4.02, SD = 0.69)** suggesting that longevity & functional benefits are important motivators for buyers.
- Purchase intention shows a moderately high mean **M = 3.71** with a relatively high standard deviation of **0.82** indicating variation in respondent's willingness to pay extra for green buildings.

The results from the descriptive analysis reveals that environmental orientation and perceived value recorded the highest mean scores which indicates a strong agreement among respondents. On the other hand, economic consideration and willingness to pay exhibited moderate mean values, suggesting variability in price related decision-making.

5.3 Correlation Analysis

The following items measured buyer awareness and perceptions of green buildings using a **5-point Likert scale** (1 = Strongly Disagree to 5 = Strongly Agree): For the purpose of identifying the strength, direction & significance of the relationship between customer awareness factors and purchase behaviour toward green buildings, correlation analysis has been conducted. This is shown in *Table 7*. 8 Hypothesis has been framed where no significant relationship exists between the different factors and the purchase behaviour/intention of the customers.

Pearson Correlation Matrix

Variables	Willingness to Pay (r)	Significance	Decision
Environmental Friendliness	**0.251***	**p < 0.05**	**Reject** H_{01}
Promotional Influence	**0.519**[a]	**p < 0.01**	**Reject** H_{02}
Value to society	**0.428**[a]	**p < 0.01**	**Reject** H_{03}
Environmental Concern	**0.399**[a]	**p < 0.01**	**Reject** H_{04}
Price Consideration	**0.312**[b]	**p < 0.05**	**Reject** H_{05}
Longevity	**0.467**[a]	**p < 0.01**	**Reject** H_{06}
Social contribution	**0.346**[b]	**p < 0.05**	**Reject** H_{07}
Features	0.135	p > 0.05	Fail to reject H_{08}

Table 7: Pearson Correlation Matrix

Notes: [a] Correlation is significant at p < 0.01
[b] Correlation is significant at p < 0.05
* Weak correlation
** Moderate correlation

Detailed interpretation with significance:The hypotheses are based on 8 variables drawn from the above 6 constructs. The value of **r = 0.251, p < 0.05** indicates a positive but a weak relationship. Buyers who consider environmental friendliness important are more willing to pay for green buildings. Thus it can be interpreted that even though environmental awareness contributes to purchase intention, it is not sufficient to drive buying decisions. **r = 0.519, p < 0.01** indicates a moderate but a statistically significant positive relationship. This shows that promotional campaigns significantly enhance customer's willingness to purchase green buildings. **0.428, p < 0.01** highlights a moderate positive relationship and shows that customers who perceive green buildings as socially valuable are more inclined to invest in green buildings. **0.399, p < 0.01** indicates a moderate, significant positive relationship. This highlights that environmentally concerned customers demonstrate a higher willingness to purchase green buildings confirming environmental concern as a motivating factor. **r = 0.312, p < 0.05** indicates a weak to moderate positive relationship. This highlights that although price remains an important factor, customers are willing to pay extra when they perceive long-term benefits. A moderate and significant relationship exists between longevity & purchase behaviour through the **value r = 0.467, p < 0.01.** This shows that perceived durability & long-term benefits strongly influence green building purchase behaviour. There exists a moderate positive relationship between social contribution & purchase behaviour. The value **r = 0.346, p < 0.05** exhibits social responsibility considerations positively affecting purchase decisions, though to a lesser extent than value & promotion. However, r value of **0.135, p > 0.05** shows that alone advanced features do not influence customers to pay extra unless supported by awareness, value & environmental concern.

5.4 Multiple Regression Analysis: Before interpreting multiple regression results, diagnostic tests were conducted to assess multicollinearity among the individual variables. This has helped to identify whether any kind of correlation exists between the independent variables which can distort & weaken the statistical interference. For this Variance Inflation Factor (VIF) has been calculated. No multicollinearity exists if VIF value is < 3.

Predictor Variable	VIF	Interpretation
Environmental Friendliness	1.07	No multicollinearity
Promotional Influence	1.41	No multicollinearity
Perceived Value	1.51	No multicollinearity
Environmental Concern	1.41	No multicollinearity
Longevity	1.25	No multicollinearity

Table 8: Results from Multicollinearity test

From the above *Table 8* we can observe that no multicollinearity exists in the regression model indicating that the regression coefficients are stable & reliable. Also the individual independent variables contribute unique explanatory power.

The key objective of conducting multiple regression analysis is to examine the combined effect of awareness- related, environmental, economic, social and functional factors on Willingness to pay (WTP) for green buildings.

Variables in the model:

Dependent Variable (DV)

- Willingness to pay for green buildings

Independent Variables (IVs)

Environmental Friendliness, Promotional Influence, Perceived Value, Environmental Concern & Longevity

(Variables selected based on significant correlations and theoretical relevance)

Model Summary

R	R^2	Adjusted R^2	Std. Error of Estimate
0.651	0.424	0.366	0.63

Table 9: Significance level of Regression Model

The model explains **42.4% of the variance** in willingness to pay for green buildings. The adjusted R^2 value (36.6%) indicates a **moderate and acceptable explanatory power**, which is common in behavioral & sustainability studies. The overall regression model is statistically significant as **p < 0.001** which is highlighted in *Table 9*. This indicates that the independent variables jointly have a significant effect on willingness to pay.

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Coefficients Table

Predictor	Unstandardized β	Std. Error	t-value	Sig.	Decision
Constant	-0.668	0.869	-0.769	0.446	—
Environmental Friendliness	0.123	0.140	0.875	0.386	Not significant
Promotional Influence	**0.268**	0.123	2.174	**0.034**	**Significant**
Perceived Value	0.241	0.181	1.336	0.188	Not significant
Environmental Concern	0.181	0.169	1.071	0.289	Not significant
Longevity	**0.245**	0.110	2.230	**0.030**	**Significant**

Table 10: Calculation of Unstandardized β

Regression Equation: Using the Unstandardized coefficients, the regression equation is -

Willingness to Pay = -0.668 + 0.123 (Environmental Friendliness) + 0.268 (Promotional Influence) + 0.241 (Perceived Value) + 0.181 (Environmental Concern) + 0.245 (Longevity)

Interpretation: In order to draw the final Regression Equation, the Unstandardized Beta has been calculated and highlighted in *Table 10*. The constant term **(-0.668)** represents the baseline level of willingness to pay when all predictor variables are held at zero. **β = 0.268** & **β = 0.245** indicates that promotional influence and longevity exhibit the strongest positive effect on willingness to pay. The beta value in *Table 10* indicates that a one unit increase in the effectiveness or influence of promotional campaigns & long term durability along with sustainable benefits is associated with an increase in willingness to pay for green buildings by 0.268 & 0.245 units respectively. **Environmental friendliness (β = 0.123)**, **Perceived Value (β = 0.241)** & **Environmental concern (β = 0.181)** demonstrates positive coefficients, indicating favourable associations with willingness to pay. However, these effects are statistically non-significant in the multivariate context, implying that their influence may be indirect or contingent on other mechanisms such as awareness or value translation as revealed in SEM analysis. Overall, the regression equation highlights that communication-driven factors & long-term economic considerations are the most deciding drivers of willingness to pay for green buildings whereas attitudinal & ethical factors alone are insufficient to directly motivate financial commitment. This is the same as the conclusion derived in *Rashid, M. et. al. (2012).*

5.5 Structural Equational Model (SEM): Results & Discussion

a. **Structural Model Assessment:** Following confirmation of the measurement model through confirmatory factor analysis (CFA), the structural model was evaluated using Structural Equational Model (SEM) using AMOS to test the hypothesized relationship among awareness, environmental concern, marketing influence, economic & policy factors, perceived value & purchase intention towards green buildings. Maximum Likelihood Estimation (MLE) was employed as the data satisfied the assumptions of multivariate normality & adequate sample size. The structural model demonstrated an acceptable to good overall model fit, indicating that the proposed theoretical framework adequately represents the observed data.

Fit Index	Original Model	Refined Model	Threshold
χ^2/df	2.41	**1.98**	< 3
CFI	0.92	**0.95**	≥ 0.90
TLI	0.90	**0.94**	≥ 0.90
RMSEA	0.061	**0.048**	≤ 0.08
SRMR	0.048	**0.041**	≤ 0.08

Table 11: Structural Model Assessment

The refined model as highlighted in *Table 11* demonstrates improved Comparative Fit Index (CFI) & Tucker-Lewis Index (TLI) along with reduced Root Mean Square Error of Approximation (RMSEA). It also highlights lower Chi-Square divided by degrees of freedom (χ^2/df). These indices collectively assess absolute fit, incremental fit and model parsimony.

b. **Structural Path Comparison:** From *Table 11.1* it highlights that Promotional influence & Longevity has a direct impact on Willingness to pay. After removing insignificant predictors, a refined model has been formed. The **R^2** value of 0.39 in *Table 11.2* indicates 39% variation in outcome.

Refined Model:

Path	Std. β	p-value
Promotional Influence → WTP	0.34	< 0.01
Longevity → WTP	0.31	< 0.01

Table 11.1 Significance of Structural Path

Model Variance	R^2 (WTP)
Refined Model	0.39

Table 11.2 Refined Model

The refined SEM reveals that: Promotional influence is the strongest determinant of willingness to pay.

1. Longevity is the second important predictor.
2. Environmental ideology & ethical orientation do not directly influence financial commitment.
3. Sustainable housing decisions are primarily driven by :
   - Marketing communication
   - Long-Term economic rationality

c. Final Parsimonious Model Summary : The refined structural model in Table 11.3 demonstrates superior fit and theoretical parsimony compared to the initial model.

Construct	Direct effect on WTP	Significance
Promotional influence	Strong positive	Significant
Longevity	Moderate positive	Significant
All Others	No direct effect	Removed

Table 11.3 Parsimonious Model Summary

Promotional influence & perceived longevity emerge as the only significant direct predictors of willingness to pay for green buildings. The removal of the insignificant / non-significant paths strengthens the clarity and stability of the structural relationships, suggesting that sustainable housing adoption is primarily influenced by communication effectiveness & long-term benefits rather than environmental ideology alone.

6. FINDINGS & DISCUSSION

The together taken results from Correlation, Regression & SEM analysis provide a coherent & theoretical meaningful narrative:

I. Correlation analysis confirms that environmental, social & value-based factors are relevant at the perpetual level.
II. Regression analysis identifies the strongest direct drivers of willingness to pay - namely promotional influence & longevity.
III. SEM analysis explains why other factors lose significance in regression by demonstrating their indirect or mediated influence.

The empirical evidence demonstrates that while environmental concern, perceived value and social considerations are positively associated with green purchase intentions. Only promotional influence and perceived longevity exert a significant direct impact on willingness to pay for green buildings. The combined results from correlation, regression & SEM analysis reveal that sustainable housing decisions are shaped primarily by communication effectiveness and long-term

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economic rationality, highlighting the presence of an attitude-behaviour gap in green real estate adoption. Overall the findings indicate that willingness to pay for green buildings is driven more by pragmatic and communication-oriented factors than by environmental ideology alone.

7. LIMITATIONS

Despite its contributions, the present study have certain limitations:
First of all, the current research is based on a cross-sectional survey which captures customer's perception at a given point of time.
Second, the sample size and geographic scope is limited which may affect the generalizability of the findings.
Finally, the research is based on the purchase intention & willingness to pay rather than actual purchase behaviour.

8. SCOPE OF FUTURE RESEARCH

Future research can be conducted based on the current research work which may be as follows:

1. Longitudinal research designs could be employed to identify the gradual impact of awareness, perceived value on willingness to pay for green buildings.
2. Future studies can be conducted of actual purchase behaviour to validate the statement of willingness to pay into practical decisions.
3. Researchers can employ multi-group SEM analysis to examine the differences based on age, income, gender. This will provide granular insights.

9. CONCLUSION

The study examined the determinants of consumer's willingness to pay for green buildings by integrating environmental, value-based, economic, social & communication-related factors within a comprehensive analytical framework. Employing Correlation, Multiple Regression & Structural Equation Modeling (SEM), the research provides robust empirical insights into the drivers of green purchase behavior in the real estate sector. The findings indicate that apart from Promotional influence & Longevity all other factors indirectly affect willingness to pay. The results suggest that consumer's financial commitment toward sustainable housing is driven more by effective communication and long-term economic benefits than by environmental ideology alone. The use of SEM alongside regression analysis enabled the distinction between direct & indirect effects, thereby addressing the attitude-behaviour gap frequently reported in sustainable consumption research. The findings provide valuable implications for policymakers & practitioners by emphasizing the importance of targeted promotional strategies & long-term value communication in promoting green building adoption. In doing so, the study successfully fulfills its research objectives and advances understanding of sustainable housing decision-making.

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