The Influence of Reference Groups, Location, and Price Perception on University Selection Decisions through Brand Image

Abdul Ahmad Hafidh Nurmansyah [1,] Ratih Huriyati [2] (ID),
Bambang Widjajanta[3] (ID)

[1, 2, 3]Universitas Pendidikan Indonesia, 40154 Bandung, Indonesia
aahafidhnurmansyah@upi.edu

Abstract. This research analyzes the influence of reference groups, location, and price perceptions on university selection decisions through brand image among new Jenderal Achmad Yani University students. The research method used was quantitative, with data collection through questionnaires distributed to 210 new students. Partial Least Squares – Structural Equation Modeling (PLS-SEM) is the analysis tool used. The research results show that Reference Group has a non-significant negative effect on Brand Image, Location has a significant positive impact on Brand Image, Price Perception has a significant positive effect on Brand Image, Reference Group has a significant positive effect on Selection Decisions, Price Perception has a significant positive impact on Selection Decisions, Brand Image has a significant positive effect on Selection Decisions. Brand image does not mediate the positive effects of reference groups on selection decisions. Brand image mediates the significant positive effect of location on selection decisions. Brand image mediates the significant positive effect of price perception on selection decisions

Keywords: Reference Groups, Location, Price Perception, Brand Image, University Selection Decisions

1 Introduction

Selecting a university is crucial for prospective students and families, significantly shaping their future academic and career paths. The decision-making process involves evaluating educational goals, financial capabilities, and personal preferences to ensure the chosen institution meets their needs. Reference groups, including family, friends, and educational consultants, are vital in guiding and influencing student choices through their experiences and recommendations [1]. Meanwhile, university location impacts accessibility, lifestyle, and proximity to job markets, making it a key student consideration [2], [3]. Price perception, encompassing tuition fees and related costs, directly affects the affordability and perceived value of the educational experience [4].

Brand image, representing a university's reputation and educational quality, is a significant mediator in decision-making [5]. A strong brand image enhances a university's

attractiveness to prospective students, influencing their choices [6], [7]. This study investigates how reference groups, location, and price perception interact with brand image to influence university selection decisions among new students at Universitas Jenderal Achmad Yani. Understanding these dynamics is crucial for universities seeking to attract and retain students in a competitive academic environment. By exploring these factors' interplay and their impact on student decision-making, this research aims to provide valuable insights for university administrators, marketers, and policymakers to develop effective strategies.

Based on the description above, the following hypotheses are formulated. H1: Reference Group affects Brand Image. H2: Location affects Brand Image. H3: Price Perception affects Brand Image. H4: Reference Group affects Selection Decisions. H5: Price Perception affects Selection Decisions. H6: Brand Image affects Selection Decisions. H7: Brand image mediates the positive effect of reference groups on selection decisions. H8: Brand image mediates the significant positive effect of location on selection decisions. H9: Brand image mediates the significant positive effect of price perception on selection decisions.

2   Methods

This study involves 210 new students randomly selected from Universitas Jenderal Achmad Yani. The sample characteristics encompass diverse academic and demographic backgrounds that reflect the university's incoming student diversity. The analytical tool employed for this research is Structural Equation Modeling with Partial Least Squares (SEM-PLS). It is used to examine the relationships among variables concurrently and understand their influence on university selection decisions. SEM-PLS was chosen for its flexibility in handling non-normally distributed data and its capability to manage complex models with a relatively small sample size, as in this study.

3   Results and Discussion

The basis used to test the hypothesis is the values found in the output result for inner weight. In PLS statistical testing, every hypothesized relationship is simulated using the bootstrapping method. This approach aims to minimize issues related to data non-normality in the research. The loading results and the t-statistic values obtained from the bootstrapping process using 5000 samples for resampling are as follows (see Fig 1).
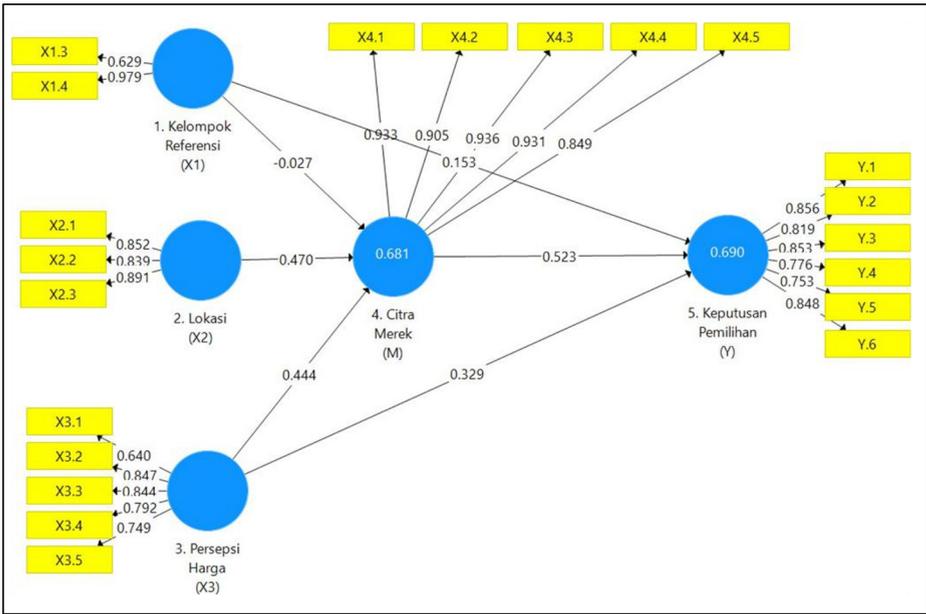
Fig 1. Bootstraping

Source: Author's work

Table 1. Resuls of Direct Effect Testing

Research Hypothesis	Construct Relation-ships	Original Sample (O)	T Statistic (Io/stdevI)	CR	P Value	Description of Research Hypothesis
H1	X1 → M	-0.027	0.598		0.550	Reject
H2	X2 → M	0.470	8.973	1.96	0.000	Accept
H3	X3 → M	0.444	8.875		0.000	Accept
H4	X1 → Y	0.153	3.427		0.001	Accept
H5	X3 → Y	0.329	4.387		0.000	Accept
H6	M → Y	0.523	7.362		0.000	Accept

Source: Author's work

Based on the Table 1 above, the conclusions can be summarized as follows:

1. Reference group (X1) has a non-significant negative effect on brand image (M) with a coefficient direction of -0.027, t-value of 0.598 < 1.96, and significance level of 0.550 > 0.05. Therefore, this study's first hypothesis (H1) is not rejected (accept Ho and reject Ha). Thus, (justification from the analysis results of X1 to M).
2. Location (X2) has a significant positive effect on brand image (M) with a coefficient direction of 0.470, t-value of 8.973 > 1.96, and significance level of 0.000 < 0.05.

Therefore, this study's second hypothesis (H2) is accepted (reject Ho and accept Ha). Thus, (justification from the analysis results of X2 to M).

3. Price perception (X3) has a significant positive effect on brand image (M) with a coefficient direction of 0.444, a t-value of 8.875 > 1.96, and a significance level of 0.000 < 0.05. Therefore, this study's third hypothesis (H3) is accepted (reject Ho and accept Ha). Thus, (justification from the analysis results of X3 to M).

4. Reference group (X1) has a significant positive effect on selection decisions (Y) with a coefficient direction of 0.153, t-value of 3.427 > 1.96, and significance level of 0.001 < 0.05. Therefore, this study's fourth hypothesis (H4) is accepted (reject Ho and accept Ha). Thus, (justification from the analysis results of X1 to Y).

5. Price perception (X3) has a significant positive effect on selection decisions (Y) with a coefficient direction of 0.329, t-value of 4.387 > 1.96, and significance level of 0.000 <0.05. Therefore, this study's fifth hypothesis (H5) is accepted (reject Ho and accept Ha). Thus, (justification from the analysis results of X3 to Y).

6. Brand image (M) has a significant positive effect on selection decisions (Y) with a coefficient direction of 0.523, t-value of 7.362 > 1.96, and significance level of 0.000 <0.05. Therefore, this study's sixth hypothesis (H6) is accepted (reject Ho and accept Ha). Thus, (justification from the analysis results of M to Y).

Meanwhile, the results of brand image mediating the influence of reference group, location, and price perception on university selection decisions can be explained in the Table 2 below.

Table 2.Indirect Effect Test Results

Research Hypothesis	Construct Relationships	Original Sample (O)	T Statistic (Io/stdevI)	CR	P Value	Description of Research Hypothesis
H7	$X_1 \rightarrow M \rightarrow Y$	-0.014	0.591		0.555	Reject
H8	$X_2 \rightarrow M \rightarrow Y$	0.246	5.333	1.96	0.000	Accept
H9	$X_3 \rightarrow M \rightarrow Y$	0.232	0.041		0.000	Accept

Source: Author's work

Based on the Table 2 above, the conclusions regarding the mediation hypotheses in this study are as follows:

1. Brand image (M) does not mediate the positive effect of the reference group (X1) on selection decisions (Y) with a coefficient direction of -0.014, t-value of 0.591 < 1.96, and a significance level of 0.555 > 0.05, thus indicating that the seventh hypothesis (H7) in this study is rejected (accept Ho and reject Ha).

2. Brand image (M) mediates the significant positive effect of location (X2) on selection decisions (Y) with a coefficient direction of 0.246, t-value of 5.333 > 1.96, and significance level of 0.000 < 0.05, thus indicating that the eighth hypothesis (H8) in this study is accepted (reject Ho and accept Ha).

3. Brand image (M) mediates the significant positive effect of price perception (X3) on selection decisions (Y) with a coefficient direction of 0.232, t-value of 5.631 > 1.96, and significance level of 0.000 < 0.05, thus indicating that the ninth hypothesis (H9) in this study is accepted (reject Ho and accept Ha).

Meanwhile, the results of the total effect of brand image mediating the influence of reference group, location, and price perception on university selection decisions can be presented in the Table 3.

Table 3. The Results of Total Effect

Construct Relationships	Original Sample	95% CIBC	
		2.5	97.5
$X_1 \rightarrow M \rightarrow Y$	-0.014	-0.062	0.032
$X_2 \rightarrow M \rightarrow Y$	0.246	0.161	0.341
$X_3 \rightarrow M \rightarrow Y$	0.232	0.161	0.325

*) Confidence Interval Bias Corrected
Source: Author's work

Based on the Table 3 above, the information obtained regarding the total influence of each tested exogenous predictor reveals that location is the predictor with the strongest relative total effect on university selection decisions among new students at Universitas Jenderal Achmad Yani.

4   Conclusion

The research found that location and price perception play a significant role in shaping a university's brand image, which ultimately influences students' decisions when choosing a university. Meanwhile, the influence of reference groups on brand image was found to be insignificant, suggesting that social factors may not always be the primary consideration in forming a university's image.

Based on these findings, the researchers offer several recommendations for the management of Jenderal Achmad Yani University. From a scientific perspective, future researchers are encouraged to explore other factors that may influence university selection decisions, such as academic quality, faculty reputation, or digital marketing strategies. Additionally, future studies could expand the scope by considering cultural factors or regional differences that may affect students' decision-making processes.

From a managerial standpoint, it is recommended that the university strengthen its marketing strategy by emphasizing its strategic location and competitive pricing to build a stronger brand image. Furthermore, implementing an effective branding strategy can enhance the university's appeal to prospective students.

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