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Influencing Factors for the Decision to Buy Coffee at Cafe X

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Article Info

Abstract

This study aims to determine the variables that have a dominant influence on coffee buying decisions at Cafe X. The data used is primary data obtained by distributing questionnaires to residents or immigrants who visit Cafe X. By taking a total sample of 100 people who were tested by confirmatory factor analysis. The results of the study show that the Interior Point of Interest Display factor has the most significant influence from the proportion of variance followed by the Layout factor, then the Interior factor and finally the Exterior factor. For the most dominant Exterior indicator factor is Store Front, the most dominant Interior factor is Fixture, and the most dominant Interior Point of Interest Display Indicator factor is Wall Decoration.

1. Introduction

A gathering has become a new habit for Indonesian people, where this habit has become a lifestyle trend for teenagers. According to Kompasiana (2022) [4], an attractive and unique cafe design can be an attraction to many people from all circles of life to visit. In a busy environment, such as cafe proves to be more productive than working in a calm and quite environment. A study by Mehta *et al*., (2012) [6] from the University of Illinois Urbana-Champaign proves that noise levels can help to stimulate the brain to think more creatively. Sounds that are not to meaningful such as noises in a cafe environment are meaningful to stimulate the brain's creative performance.

Based on a research from Toffin Indonesia (2020) [9], which is a coffee business platform in Indonesia states that the number of cafes in Indonesia has tripled from around 1.000 outlets in 2016 to more than 2.950 outlets in 2019 and this will continue to grow. Cafe business owners are being increasingly competitive in their competition and must highlight the advantages of what is offered to the customers so that they are not inferior to other competitors.

According to Levy & Weitz (2014) [5], "Customer purchasing behavior is also influenced by the store atmosphere", which means that the atmosphere of the cafe is one of the determining factors for a level of customer satisfaction to visit a cafe. An interesting atmosphere has a special attraction for some people. According to Sophia & Sangadji (2016) [8], several things that are included in the assessment of a cafe atmosphere there are exterior, interior, store layout and interior Point of Display. According to Berman *et al*., (2021) [1], these four variables not only increase the value of the products sold in a cafe, but also create a pleasant shopping experience. The outside of the store is very influential on the choice of customers to visit the cafe. Where the outside of the cafe becomes an image of the cafe. There are several elements from exterior, that are storefront, symbol, entrance, display window, height and size building, uniqueness, surrounding area, and parking. Interior design is not less important for choosing a cafe, as long as the place visited is comfortable for the visitors it will make visitors do the next thing, which is purchasing. Furthermore, the layout of the room is the assessment for visitors. Cafe business people must have careful planning to determine the layout of the room which must be used as effectively as possible to determine sales space, employees and customers, and determine the flow of traffic in the store. The last variables is Interior Point of Display. Each of the decorations provides information to the buyer to influence the atmosphere of the cafe environment. According to Berman *et al*., (2021) [1] there are two aims of the Interior Point of Display, which to provide information to the customers and add to the atmosphere of the cafe.

Research conducted by Wardhana (2016) [10] in the city of Bandung, there are four factors that shape consumer perceptions in choosing store atmosphere there are factor exterior, factor interior, factor layout, and factor point-of-purchase displays. These factors are a priority for consumer choice in selecting cafes.

Taking into account the results of previous research, it appears that there are differences in methods of analysis, data sources, and research results. Different from previous studies, the analytical technique used was regression analysis, this study applied confirmatory factor analysis (CFA). Confirmatory factor analysis (CFA) is a statistical technique used to verify the factor structure of a set of observed variables.

2. Method

This study using primary data because the data collected directly from the main source. Analysis of the data used is quantitative data that distributing questionnaires to the respondents. The form of the question on the questionnaire already given alternative answers to the respondents so the respondents only choose according to their opinion. The type of scale used is a likert scale with intervals from strongly agree to strongly disagree.

To identify the determinants of the cafe atmosphere on coffee purchasing decisions using CFA, several steps are carried out as follows:

1. Create a survey questionnaire. There are 20 questions to find out the factors that influence coffee purchasing decisions.
2. Testing the validity and reliability of the questionnaire on 30 respondents.
3. Do a survey of 100 respondents who visited cafe X.
4. Conducting Confirmatory Factor Analysis to obtain factors that influence the decision to purchase coffee using R software with psych library.
5. Interpret the factors formed.

3. Results
Questionnaire Testing

Testing the validity and reliability of the questionnaire was carried out on 30 visitors to cafe X. A questionnaire is said to be reliable if a person's answers to statements are consistent or stable from time to time (Ghozali, 2013) [2]. This test was carried out using statistical tests Cronbach Alpha. If value Alpha Cronbach > 0.6 then it is said to be reliable.

Table 1: Reliability Test

Item	Cronbach Alpha	Information
Question 1	0.91	Reliable
Question 2	0.91	Reliable
Question 3	0.916	Reliable
Question 4	0.915	Reliable
Question 5	0.913	Reliable
Question 6	0.911	Reliable
Question 7	0.911	Reliable
Question 8	0.908	Reliable
Question 9	0.908	Reliable
Question 10	0.916	Reliable
Question 11	0.914	Reliable
Question 12	0.916	Reliable
Question 13	0.917	Reliable
Question 14	0.91	Reliable
Question 15	0.911	Reliable
Question 16	0.912	Reliable
Question 17	0.913	Reliable
Question 18	0.917	Reliable
Question 19	0.912	Reliable
Question 20	0.91	Reliable

Coefficient value Alpha Cronbach = 0.916 has also exceeded the recommended lower limit. Taking this into account, the questionnaire is appropriate for use in primary data collection.

Profile Respondent

Figure 1 shows the frequency distribution of the gender and age of the respondents. Respondents aged 17-25 years have the largest percentage of respondents. Female respondents out number male respondents.
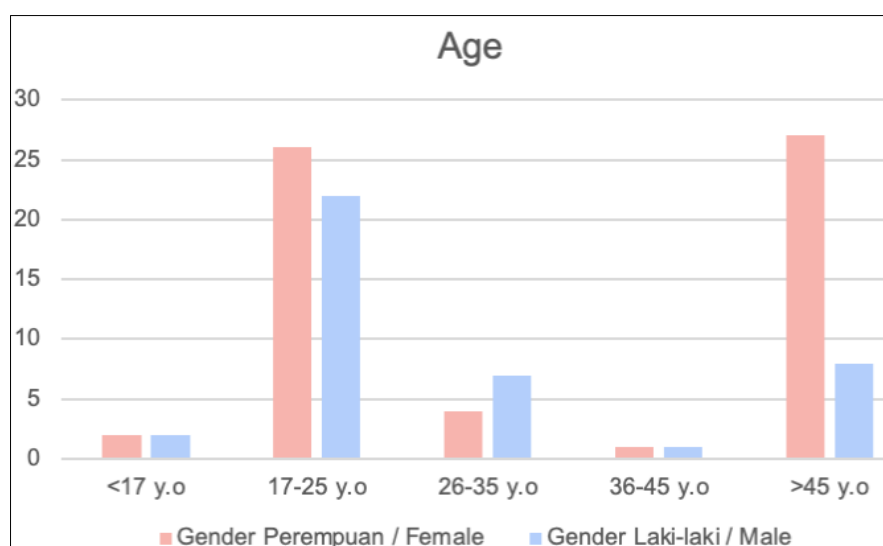

Fig 1: Frequency distribution by gender and age group

Judging from the nationality of the respondents who filled out the questionnaire, more than half of the respondents were Indonesian citizens.
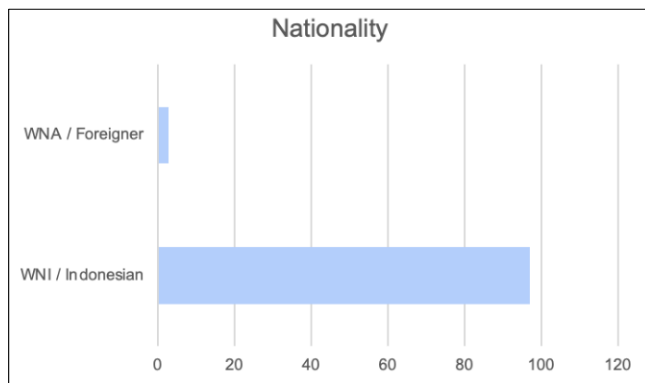
Fig 2: Nationality frequency distribution

Factor Analysis Feasibility Test
The initial stage of factor analysis is to check the feasibility of the matrix. One of the commonly used tests to evaluate the feasibility factor analysis is the Bartlett Test which examines the determinants of the correlation matrix. If the p-value is less than the specified significance level (0.005).
A Kaiser Meyer Olkin (KMO) examination was also performed to check the feasibility of a factor analysis. The formula for calculating KMO is as follows:

$$KMO = \frac{\Sigma_i^p \Sigma_{j \neq i}^p r_{ij}^2}{\Sigma_i^p \Sigma_{j \neq i}^p r_{ij}^2 + \Sigma_i^p \Sigma_{j \neq i}^p a_{ij}^2} \qquad (1)$$

Research data is said to be feasible for analysis with factor analysis if the KMO value is > 0.50 (Hair *et al*., 2019) [3].

Confirmatory Factor Analysis (CFA)
1. Exterior
Testing starts from the reliability and validity test. According to the calculations, the respective r.drop results were 0.715, 0.603, 0.624, and 0.547. All of these R drop values are greater than 0.30, which indicates that each item makes an important contribution to the total reliability of the instrument. Furthermore, the assumption test was carried out, the first to be carried out was the KMO test which obtained a value of 0.754. Then test the second assumption, namely test Bartlett. According to the results, the p-value given is close to 0. This indicates that the p-value resulting from Bartlett's statistical test is less than 0.005. This shows that the correlation matrix is not an identity matrix and there is a correlation between the variables.
The next analysis is checking Measure of Sampling Adequacy (MSA). The MSA test aims to determine the feasibility of variables for analysis with factor analysis. MSA value results 0.708, 0.704, 0.774, 0.823 where overall data resulting value is greater than > 0.5 then all variables can be carried out factor analysis.
Then perform factor analysis using the minimum residual method. The resulting test analysis is as shown in Table 2.

Table 2: Results of Construct Analysis Exterior

Construct	Indicator	MR1	h2
External	Q1	0,85	0,71
	Q2	0,69	0,48
	Q3	0,71	0,50
	Q4	0,61	0,37
Proportion of Variance			52%

MR1: Standardized factor loading
h2: communality

Based on Table 2, it is known that all indicators are in the construct Exterior value of Standardized factor loading greater than 0.55. This means that all the indicators tested, namely Q1 (Store Front), Q2 (Symbol), Q3 (Entrance) and Q4 (Parking Area) meet the criteria as indicators of supporting exterior factor. For the percentage value of variability of 52% which has exceeded the limit of 50%. The most dominant indicator on the exterior factor is storefront as seen from the largest factor loading.

2. Interior
Testing starts from the reliability and validity test. The results of each r.drop were obtained which can be seen in Table 3.

Table 3: Results of r.drop Preliminary Construct Test Interior

	r.drop
R1	0,5362690
R2	0,6506068
R3	0,6005295
R4	0,6883584
R5	0,6945189
R6	0,5773155
R7	0,2558314
R8	0,4087833
R9	0,2676734
R10	0,2411518

R7 (Air Temperature), R9 (Personel), and R10 (Technology) have r.drop below the minimum threshold of 0.30. Then these items need to be removed in the factor analysis. Then a final test is carried out after being revised to test the validity and reliability again and produce a new r.drop value where all of these r.drop values are greater than 0.30, which indicates that each item makes an important contribution to the total reliability of the instrument.
Furthermore, the assumption test was carried out, the first to be carried out was the KMO test with a value of 0.866, so the data was feasible for factor analysis. Then Bartlett test and get the result of a p value close to 0. Shows that the correlation matrix is not an identity matrix and there is a correlation between the variables. The next analysis is MSA. Overall, the MSA value is more than > 0.5, so all variables can be carried out by factor analysis.
Then perform factor analysis using the minimum residual method. The resulting test analysis is as shown in Table 4.

Table 4: Results of Construct Analysis Interior

Construct	Indicator	MR1	h2
Internal	R1	0,67	0,453
	R2	0,77	0,593
	R3	0,78	0,616
	R4	0,87	0,765
	R5	0,89	0,795
	R6	0,66	0,438
	R8	0,30	0,089
Proportion of Variance			54%

MR1: Standardized factor loading
h2: communality

Based on Table 4, it is known that all indicators are in the construct internal value of factor loading more than 0.55. This means that the indicators R1 (Cleanliness), R2 (Flooring), R3 (Color and Lighting), R4 (Scent and Music), R5 (Fixture), R6 (Wall of Texture) and R8 (Width of Aisles) which were tested

met the criteria as indicators of supporting Interior factor. Interior have value proportion of variance above 50%, the interior construct is included in one of the factors of the cafe atmosphere that influences purchasing decisions. The most dominant indicator for the interior is the indicator R5 fixture because it has the highest factor loading value.

3. Layout
Testing starts from the reliability and validity test. The R drop results were 0.6649941 and 0.6649941. All of these values are greater than 0.30, which indicates that each item makes an important contribution to the total reliability of the instrument. Then the first an assumption test was carried out which resulted in a value of 0.5, so the data could be used for factor analysis. Then test the second assumption, Bartlett test that earns the p value given is close to 0. This shows that the correlation matrix is not an identity matrix and there is a correlation between variables.
The next analysis is checking Measure of Sampling Adequacy (MSA). Overall, the MSA value is greater than > 0.5, so all the variables can be carried out by factor analysis. Then perform factor analysis using the minimum residual method. The resulting test analysis is as shown in Table 5.

Table 5: Results of Construct Analysis Layout

Construct	Indicator	MR1	h2
Layout	X1	0,82	0,66
	X2	0,82	0,66
Proportion of Variance			66%

MR1: Standardized factor loading
h2: communality

Based on Table 5, it is known that all indicators are in the internal value of factor loading more than 0.55. This means that all the indicators tested, X1 (Allocation of floor space) and X2 (Traffic Flow) meet the criteria as supporting layout factor. The value of the percentage of variability has exceeded the limit of 50%, which is 66%.

4. Interior Point of Display
Starting from conducting reliability and validity tests. All.r.drop values are greater than 0.30, so each item makes an important contribution to the total reliability of the instrument. Next, an assumption test was carried out, the first being the KMO test. The resulting KMO value is 0.82. So the data is feasible for factor analysis. Then Bartlett test earns p-value less than 0.005. This shows that the correlation matrix is not an identity matrix and there is a correlation between the variables. Next is the MSA test. Overall, the resulting MSA value is more than > 0.5, so all variables can be carried out by factor analysis. Then perform factor analysis using the minimum residual method. The resulting test analysis is as shown in Table 6.

Table 6: Results of Construct Analysis Interior Point of Interest Display

Construct	Indicator	MR1	h2
Interior Point of Interest Display	Y1	0,82	0,68
	Y2	0,63	0,39
	Y3	0,88	0,77
	Y4	0,92	0,85
Proportion of Variance			67%

MR1: Standardized factor loading
h2: communality

Based on Table 6, it is known that all indicators factor loading already greater than 0.55. This means that all the indicators tested are Y1 (Assortment Display), Y2 (Theme Setting Display), Y3 (Rack and Case Display) and Y4 (Wall Decoration) meet the criteria as supporting factor indicators Point of Interior Interest Display. For the percentage value of variability of 67% which has exceeded the limit of 50%. The most dominant indicator is Wall Decoration because it has value factor loading biggest between another indicator.

4. Discussion
Based on the results of the analysis using R for the four factors. Then it is obtained that the Interior Point of Interest Display factor has the most significant influence followed by the Layout factor, then the Interior factor and finally the Exterior factor. Each factor has supporting indicators where for Exterior be found Storefront, Marquee, Entrance, and Parking.
For Interior there are 7 indicators there are Cleanliness, Flooring, Color and Lighting, Scent and Sound, Fixture, Wall Texture and Width of Aisles. Next Layout factor consists of 2 indicators there are Allocation of floor space and Traffic Flow. And the last Interior Point of Interest Display there are 4 indicators Assortment Display, Theme Setting Display, Rack and Case Display and Wall Decoration.

5. Conclusion
Confirmatory factor analysis is used to determine the factors that are considered in determining the decision to buy coffee at Cafe X based on the atmosphere of the cafe. Based on the results of data processing and analysis that has been done, the factors are obtained Interior Point of Interest Display has the most significant influence followed by Layout factor, then the Interior factor and the last Exterior factor. For Exterior factor the most dominant indicator is Storefront, the most dominant Interior factor is Fixture, and the last for Interior Point of Interest Display factor the most dominant indicator is Wall Decoration.

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