




# Dominant Factors Influencing Consumer's Purchase Decision of Monstera Plant

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**Abstract.** The purpose of this research is analyze the dominant factors that influence consumers to buy Monstera plants. The research method used a questionnaire with a total of 100 respondents. The analytical tools used are Factor Analysis with Principal Component Analysis. The results of this research is dominant factors influencing the purchase decision of Monstera are Social Class Factors, Surrounding Environmental Factors, Belief Factors, and Lifestyle Factors .

**Keywords:** Factors Influencing Consumer's Purchase Decision · Monstera · Principal Components Analysis

## 1 Introduction

The Corona Virus Disease pandemic that emerged at the end of 2019 had an impact on the paralysis of every human activity. In order to maintain health, so as not to contract this virus, the government in Indonesia has decided to lock down and work at home (WFH). This results in changes in activities, work patterns, food consumption patterns [1], consumer habits in shopping, and hobbies [2].

Various new trend hobbies have sprung up to fill time at home productively, one of which is by collecting ornamental plants. [3] it is stated that planting ornamental plants, in the sense of buying, collecting Monstera or better known as Janda Bolong became a new trend during the covid-19 pandemic. The existence of this trend encourages people to use their yards to become home gardening, so that the house becomes more comfortable, and beautiful to make homeowners feel at home. Ornamental plants have various shapes, colors, and types that are able to attract the community. Some types of ornamental plants grown include types of monstera, anthurium, aglaonema, philodendron, and others.

Ornamental plants are much loved and hunted by consumers, namely monstera ornamental plants. This plant is much loved because it is beautiful, has a shape that is hollow on the leaves so that it is unique compared to other ornamental plants. The trend of people taking care of this plant has made this plant difficult to find in the market. This is certainly a business opportunity by ornamental plant producers to increase the quantity of monstera plants offered. The large amount of public interest in buying this plant has resulted in high prices in the market. Despite this, consumers are willing to buy at any level of any kind. Given the high demand, research on how the level of consumer

liking for buying monstera ornamental plants and the dominant factors that influence the purchasing decision of monstera plants is important. This is useful as a reference for producers to be able to find out the level of business sustainability, and to formulate a business strategy that can still exist despite the loss of the trend. Consumer purchasing behavior can be described as a collection of decision-making processes influenced by internal and external factors [4].

## 2 Research Methods

In this study, the data collection methods used include Literature Studies, Dissemination of Questionnaires directly and through google forms, and interviews directly. The number of samples taken in this study was 100 respondent with the criteria of having purchased Monstera ornamental plants before at least once. The analytical tool used is Factor Analysis / Principal Component Analysis to answer the purpose of research on the dominant factors that influence the purchasing decisions of monstera ornamental plant consumers.

## 3 Result and Discussion

### 3.1 Dominant Factors Influencing Purchasing Decisions

Factor analysis is carried out by the *Principal Component Analysis* (PCA) extraction method which is a statistical technique to transform from most of the original variables used that correlate with each other into a new set of smaller and mutually free variables. So the analysis of the main components is useful for reducing data, so that it is easier to interpret these data [5].

After the results of the validity and reliability test state that all variables are valid and reliable, then enter the factor analysis stage with the *Principal Component Analysis* method. Factor analysis is used to determine factors that can describe the *interrelationship* between the variables of origin or in other words, factor analysis aims to interpret the meaning of the variables in a data set [6]. According to [7], Factor analysis consists of several stages, namely:

**Formulating the Problem.** In the first stage, the formulation of the problem needs to be done clearly and the variables to be included must be applied based on the research, theory and opinion of the researcher himself [7]. the variables used amounted to 18 (eighteen) variables obtained based on factors that influence the process to the consumer purchase decision and consist of personal factors, environmental factors, and psychological factors [8].

**Create a Correlation Matrix.** The second stage is to determine the variables that are mutually correlated and worthy of being extracted into new factors. Should not yet entered into factor extraction, it is necessary to know the feasibility of the data for factor analysis. Feasibility determination begins by looking at the measurement results of *the kaiser meyer olkin* (kmo) *measure of sampling adequacy* (msa) and *barlett's test*. Factor analysis is said to be feasible if  $kmo \geq 0.5$  [7]

The KMO MSA value of 0.812 (greater than 0.5) means that the adequacy of the sample meets the factor analysis. Meanwhile, the significance resulting from *Bartlett's Test of Sig. Sphericity* is 0.000 (less than 0.05), which means that the correlation between the variables is quite significant. Based on the results of the analysis, it is known that the variables and samples used allow for further analysis to be carried out. Furthermore, to determine the correlation matrix, inter variable correlation is seen through the MSA value of each variable. The first analysis has resulted in an overall MSA value above 0.5 which means that there is no need for reduction and the whole is feasible for the factor to be extracted.

**Factor Extraction.** In this third stage, extraction is carried out to determine the number of factors based on the magnitude of *the eigen value, the percentage of variance* which has an *eigen value*  $> 1$  [7]. Factor extraction begins with *extraction communalities*. Extraction values that are less than 0.5 are reduced, so they are not used in the following analysis Table 1.

Based on the Table 2, it can be seen that all variables have large Extraction Communalities (more than 0.5) so that the whole variable shows that the factor is able to explain each of these variables by more than 50% or the components formed (extracted) are enough to represent the variables well. The number of factors to be used is determined by looking at the eigenvalues on each factor. Only a factor that has an eigenvalues greater than 1.0 is considered a factor that can be formed. The number of factors formed can be seen below in Table 3.

In the Table 3, it can be seen that only components/factors one to four that meet the eigen value criterion  $> 1.0$ . The total variance of the four factors would explain  $36,513 + 11,601 + 9,071 + 6,477 = 63,662$ . These four factors will explain 63.662% of the variability of the original variable Table 4.

**Rotation of Factors.** In the fourth stage, namely the rotation of factors, it is necessary to first know the matrix of factors that are formed to be then transformed into a simpler matrix with varimax rotation so that it is easy to interpret [7]. *Component matrix* shows the distribution of the 18 variables on 4 factors formed based on the value of *the loadings factor* where the value indicates the degree of closeness of the variable to the factor formed [9].

The Table 5 shows the distribution of the 18 variables on the 4 factors formed. The numbers in the table are *factor loadings*, which show the value of the correlation between a variable and the factor formed. The correlation between factor/component variables if it is above 0.5 is considered strong, but if it is below 0.5, it is considered less/weak. In component 3 the whole variable is not closely correlated with component 3 (the value of *factor loadings* is more than 0.5). Sulit to decide which variable is high-correlated with component 3, then if there is still confusion in the number of *factor loadings*, it is necessary to carry out a rotation process. The usual rotation factor is *varimax*. The results of the factor rotation show changes in the *component matrix* table.

After rotation with varimax rotation, four main components of the results of the factor analysis that have been carried out are formed, namely:

**First Main Component:** Middle Class and Above, Middle Class, Pandemic Situation, Trend/Viral, Basic Income, Additional Income.

**Table 1.** KMO MSA and Barlett's Test

Information		Factor Analysis
KMO		0,812
<i>Bartlett's Test of Sig. Sphericity</i>		0,000
<i>Measure of Sampling Adequacy</i>	Intermediate to Upper	0,851
	Intermediate	0,848
	Middle to Bottom	0,849
	Family Influence	0,792
	Influence of Friends	0,782
	Seller Offers	0,825
	Pandemic Situation	0,795
	Trend/Viral	0,799
	Main Income	0,809
	Additional Income	0,806
	Hobby	0,678
	Work	0,795
	Prestige	0,849
	Aesthetic	0,813
	Knowledge	0,815
	Experience	0,846
	Quality Confidence	0,793
	Belief Benefits	0,811

Source: Processed Primary Data, 2021

**Second Key Component:** Family Influence, Friend Influence, Seller Offer, Job, Prestige.

**Third Main Component:** *Beauty (Aesthetic)*, Knowledge, Experience, Quality Confidence, Benefit Belief.

**Fourth Main Component:** Lower Middle Class, Hobby.

**Factor interpretation.** Last stage this is the essence of factor analysis where the results of the rotation of the dominant factors arranged will then be interpreted and given names on the factors that have been formed based on *the loading* factor of a variable against the factor of formation (Supranto, 2004).

***First Main Component.***

The first main component of the factor analysis results *consists of the middle and upper social class, middle social class, pandemic situation, trend/season situation, basic income and additional income of consumers.* This component means that social classes (middle and middle to upper), Consumer Resources (basic and additional income) and Trends (Viral during a Pandemic) have the first major dominant effect on consumers'

**Table 2.** Communalities

No.	Variable	Extraction
1	Intermediate to Upper	,621
2	Intermediate	,555
3	Middle to Bottom	,537
4	Family Influence	,518
5	Influence of Friends	,790
6	Seller Offers	,715
7	Pandemic Situation	,523
8	Trend/Viral	,661
9	Main Income	,766
10	Side Income	,757
11	Hobby	,703
12	Work	,515
13	Prestige	,551
14	Aesthetic	,593
15	Knowledge	,629
16	Experience	,571
17	Quality Confidence	,730
18	Belief Benefits	,723

Source: Processed Primary Data, 2021

purchasing decisions of Monstera ornamental plants. This component can then be named as a factor of economic condition.

### ***Second Main Component.***

The second main component of the results of the factor analysis consists of *the influence of family, the influence of friends, the influence of sellers, as well as work and prestige (prestige)*. This component means that the influence of others (family, friends, as well as sellers), Job Relevance and prestige (*prestige*) have the second main dominant influence on the purchase decision of monstera houseplants by consumers. This component can then be called the ambient influence factor and prestige.

### ***Third Main Component.***

The third main component of the results of factor analysis is named psychological factor. The component-forming variable is the *variable of beauty, knowledge of the product, experience of buying a product, confidence in quality and confidence in its benefits*. This component means that consumers' knowledge and experience and confidence (skin and benefits) of Monstera ornamental plants have the third major dominant effect on their decision to buy Monstera ornamental plants. The variable of beauty is also closely related

**Table 3.** Total Variance Explained

Component	Eigenvalue		
	Total	% Varians	% Cumulative
1	6,572	36,513	36,513
2	2,088	11,601	48,114
3	1,633	9,071	57,185
4	1,166	6,477	63,662
5	,921	5,117	68,779
6	,901	5,006	73,784
7	,721	4,006	77,790
8	,694	3,853	81,643
9	,623	3,462	85,106
10	,486	2,699	87,804
11	,409	2,271	90,075
12	,391	2,171	92,245
13	,386	2,142	94,388
14	,301	1,671	96,059
15	,242	1,343	97,402
16	,187	1,040	98,442
17	,154	,856	99,299
18	,126	,701	100,000

Source: Processed Primary Data, 2021

to this component where beauty is something that is synonymous with ornamental plants. So consumers psychologically believe in the quality and benefits and beauty of *Monstera* ornamental plants so they buy this trending *Monstera* ornamental plant. The knowledge and underlying experience they have that belief.

#### ***Fourth Main Component.***

The fourth main component of the factor analysis results consists of *the lower middle social class and hobbies*. This component means that the lower middle social class is in line with hobbies forming the fourth main component or forming one factor. This component can then be called the hobby factor.

**Table 4.** Component Matrix

Variable	Component Correlation Value			
	1	2	3	4
Intermediate to Upper	,692	-,357	-,078	-,094
Intermediate	,570	-,135	-,450	,096
Middle to Bottom	,514	-,025	,296	,430
Family Influence	,597	-,243	,207	-,244
Influence of Friends	,649	-,428	,407	-,139
Seller Offers	,617	-,380	,397	,181
Pandemic Situation	,581	-,009	-,419	,098
Trend/Viral	,560	-,469	-,304	-,189
Main Income	,741	-,059	-,421	,189
Side Income	,750	-,099	-,302	,306
Hobby	,291	,449	,106	,637
Work	,518	-,013	,493	,062
Prestige	,722	-,117	,055	-,114
Aesthetic	,427	,527	-,310	-,194
Knowledge	,617	,391	,128	-,283
Experience	,528	,487	,215	,092
Quality Confidence	,668	,466	,010	-,256
Belief Benefits	,650	,471	,131	-,249

Source: Processed Primary Data, 2021

**Table 5.** Rotated Component Matrix

Variable	Component Correlation Value			
	1	2	3	4
Intermediate to Upper	,554	,538	,131	-,091
Intermediate	,726	,099	,128	,037
Middle to Bottom	,180	,449	,071	,546
Family Influence	,231	,622	,247	-,127
Influence of Friends	,184	,862	,103	-,042
Seller Offers	,218	,779	-,021	,246
Pandemic Situation	,677	,061	,227	,094

*(continued)*

**Table 5.** (continued)

Variable	Component Correlation Value			
	1	2	3	4
Trend/Viral	,651	,386	,011	-,298
Main Income	,806	,167	,232	,188
Side Income	,756	,255	,162	,308
Hobby	,096	-,062	,203	,806
Work	-,031	,609	,255	,280
Prestige	,408	,520	,339	,019
Aesthetic	,310	-,200	,675	,031
Knowledge	,126	,265	,735	,054
Experience	,051	,180	,600	,420
Quality Confidence	,228	,178	,799	,085
Belief Benefits	,129	,241	,796	,121

Source: Processed Primary Data, 2021

## 4 Conclusion

Based on the data that has been obtained through various sources and then processed and analyzed by researchers, it can be concluded that several things are in the form of 4 dominant factors influencing the purchase decision of *Monstera* ornamental plants, namely social class, environmental factors, confidence factors, and lifestyle.

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