

FACTORS AFFECTING THE COMMUNITY IN CONSUMING SPICERY PRODUCTS (*JAMU*) POST-PANDEMIC

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Abstract Spicery products (*jamu*) can boost the body's immune system because of their properties. It causes the demand for herbal medicine to increase during the pandemic. The study aimed to analyze the factors influencing the public to consume post-pandemic spicery products (*jamu*). Researchers conducted research in the city of Malang. The sample was selected using the convenience sampling method with 100 respondents. This type of data uses primary data obtained from questionnaires. The questionnaire was assessed using a likert score and then analyzed using multiple linear regression. The results obtained, the value of Adjusted R Square (R^2) is 88.5%, then all variables can explain the influence on consumption decisions on spicery products (*jamu*). Factors that have a significant effect include income (x_1), social class (x_3), motivation (x_5), location (x_8), time (x_9), scent (x_{12}), texture (x_{13}), and price (x_{14}). In contrast, the factors that have no significant effect include work variables (x_2), tradition (x_4), perception (x_6), health (x_7), shape (x_{10}), and taste (x_{11}). Knowing these factors will produce recommendations for producers to increase their sales, especially in implementing product marketing strategies.

Keywords: *Consumption Decisions, Spicery Products (Jamu), Post-Pandemic*

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INTRODUCTION

Spices are one of the abundant natural resources in Indonesia. To build the Indonesian economy, spices are developed if they are cultivated properly. One of the spice plant groups that have been widely used is *Zingiberaceae* or ginger plants. This plant is widely used for cooking spices, medicines, essential ingredients for making herbal medicine, drink ingredients, and so on. This plant generally has medicinal properties, so it is widely used as an essential ingredient for herbal medicine (Luchman, 2015).

Spicery products, more commonly known as *jamu*, have become part of Indonesia's culture and natural wealth. The results of the Basic Health Research that have been carried out show that the use of herbal medicine in Indonesia is more than 50%. The use of herbal medicine is a tradition of

traditional medicine that has developed widely, especially in Indonesia. Indonesia has a wealth of medicinal plants which are used as herbal medicine. *Jamu* is a genetic heritage that is used as a medicine. The research results show that 95.6% of people can feel the benefits of herbal medicine. Among the 95.6%, as many as 55.3% of the people consumed herbal medicine in liquid form, and 44.7% consumed herbal medicine in powder form (Badan Litbang Kesehatan, 2010).

The existence of this pandemic has made people aware of the importance of health by paying more attention to the consumption of products for their bodies. People have become aware that maintaining health is not only during a pandemic. Nevertheless, health is the main thing always to be maintained and cared for because if the body is not in a healthy condition, it will not be able to do any

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activity. After the pandemic, people started to rethink how to increase their immune systems to avoid diseases. Spice products (jamu) are considered capable of becoming herbal remedies because of the properties contained in spices. Herbal medicine is made from natural ingredients with diverse types and properties and has been used for generations for treatment (Susi *et al.* 2021).

During the pandemic, consumption of spice products increases because these products have properties that can increase the body's immune system. Therefore, the demand will increase with spice products (jamu) (Asma & Trisna, 2021). It is because people still want to maintain their health during the pandemic, so they are not easily attacked by viruses (Pertiwi *et al.*, 2020). Therefore, manufacturers are increasing their production to meet the demand for spice products (jamu) (Pertiwi *et al.*, 2020). Therefore, manufacturers are increasing their production to meet the demand for spice products (jamu) (Sutana & Dwipayana, 2020). However, in reality, the need for spice products (jamu) is higher than the output produced. It is also in line with the research of Abdillah (2019), that the demand for spice products is increasing, but the amount of product produced is different from the demand. Therefore, to meet market demand, producers need to increase the amount of output adjusted to demand and factors that can influence people to consume spice products (jamu).

Several factors influence society as consumers in determining consumption decisions. The influencing factors to be considered by the public before consuming the product include economic, social, cultural, psychological, location, time, and product attributes. It is in line with the research Elfariyanti *et al.* (2020), which states that the factors influencing herbal medicine are economic, social, cultural, and psychological factors. In addition, research conducted by Rasmulia (2016), found that location and time can also be factors that influence people in consuming a product. In a study by Sefti Sinta *et al.* (2018), product attributes determine the decision to consume spice products (jamu).

Spicery products (jamu) are considered healthy food classified as traditional beverages (Harmayani *et al.*, 2019). Most Indonesians consume spice products reaching 55.3%, and 95% reported that herbal medicine provides health benefits (Badan Penelitian dan Pengembangan Kesehatan, 2010).

In this study, researchers reviewed the factors that influence people in consuming spice products (jamu) in terms of economic, social, cultural, psychological, time, and location factors and product attributes. By knowing this, it can be taken into consideration by producers in developing products tailored to the community's wishes and become a consideration for the government, as well as in developing local processed products based on research results.

RESEARCH METHODS

Researchers conducted research in the city of Malang. The sample was selected by the convenience sampling method with a sample of 100 respondents. This type of data uses primary data obtained from questionnaires, including the community's characteristics and preferences in consuming spice products (jamu). The questionnaire was assessed using a Likert score and then analyzed using multiple linear regression. The stages in multiple linear regression analysis include the coefficient of determination (R²), F test, and multiple linear regression. According to Sugiyono (2018), the multiple linear regression equation models, namely:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + \beta_{14} X_{14} + \dots + e$$

Information:

Y = Consumption decision

α = Constanta

$\beta_1 - \beta_{14}$ = Regression coefficient of variable x to be calculated

X_1 = Income variable

X_2 = Job variable

X_3 = Social class variable

X_4 = Tradition variable

X_5 = Motivation variable

X_6 = Perception variable

X_7 = Health variable

X_8 = Location variable

X_9 = Time variable

X_{10} = Shape variable

X_{11} = Flavor variable

X_{12} = Scent variable

X_{13} = Texture variable

X_{14} = Price variable

e = error

RESULTS AND DISCUSSION

A. Characteristics of Respondents

Characteristics of respondents are the identity or profile of the object of research that can provide results in a study. The determination of respondents in this study is the people of Malang City, with a total sample of 100 respondents. There are several characteristics of respondents in this study, namely age, education level, profession, and income. The results obtained can be seen in the following explanation:

Age

Age is the age of the individual calculated at birth; the older a person is, the more mature the level of maturity and strength in thinking and working is balanced with experience and mental maturity (Wawan & Dewi, 2010). Characteristics of respondents based on age can be seen in Table 1.

Table 1. Characteristics of Respondents by Age

Age (years)	Total (soul)	Percentage (%)
20-29	30	30
30-39	32	32
40-49	12	12
50-59	14	14
>60	12	12
Total	100	100

Source: Primary Data, 2022 (processed)

Based on Table 1, it can be seen that 32% of those aged 30-39 years consume more spice products (jamu). It shows that the higher a person's age, the more mature the thought process that can be considered in the consumption of a product, especially during a pandemic.

Education Level

According to Wawan & Dewi (2010), education can influence a person's behaviour towards lifestyle in building the nature and thoughts of each individual; the higher a person's education, the easier it is to receive information. Characteristics of respondents based on education level can be seen in Table 2.

Based on Table 2, the education level of the respondents is undergraduate, with as many as 49 people or 49%. It shows that higher education will affect the level of information capture, attitudes, knowledge, and behaviour during a pandemic to pay more attention to health by maintaining body immunity (Wawan & Dewi, 2010).

Table 2. Characteristics of Respondents by Education Level

Education Level	Total (soul)	Percentage (%)
SD/MI	0	0
SMP/MTS	0	0
SMA/MA	32	32
Sarjana	49	49
Pascasarjana	19	19
Total	100	100

Source: Primary Data, 2022 (processed)

Occupation

The work owned is related to the income earned and greatly affects a person's attitude (Wawan & Dewi, 2010). Characteristics of respondents based on occupation can be seen in Table 3.

Table 3. Characteristics of Respondents by Occupation

Occupation	Total (soul)	Percentage (%)
Ibu Rumah Tangga	18	18
Pelajar/Mahasiswa	10	10
Pegawai Negeri Sipil (non pendidik)	21	21
Pegawai Swasta	13	13
Pensiunan	11	11
Pendidik: Guru/Dosen Wiraswasta	20	20
Total	100	100

Source: Primary Data, 2022 (processed)

Table 3 shows that most of the respondents have jobs as civil servants (non-educators), as many as 21 people or 21%. It shows that the majority of jobs held by each respondent are civil servants (non-educators).

Income

Income is a form of remuneration obtained as a reward for one's performance in the production process. The amount of income will affect the expenditure; the greater a person's income, the greater the expenditure (Muhammad *et al.*, 2015). Characteristics of respondents based on income can be seen in Table 4.

Table 4 shows that most of the respondents' income levels in one month are > Rp 4,000,000 with a percentage of 60% or 60 people. It shows that the respondents' income level can affect the decision to consume spice products (herbal medicine) in one month.

Table 4. Characteristics of Respondents by Income

Income	Total (soul)	Percentage (%)
< Rp 2.000.000	10	10
Rp 2.000.000 – < Rp 3.000.000	18	18
Rp 3.000.000 – Rp 4.000.000	12	12
> Rp 4.000.000	60	60
Total	100	100

Source: Primary Data, 2022 (processed)

B. Factors Influencing People in Consuming Spicery Products (*jamu*)

In determining consumption decisions on a product, some factors influence it to be taken into consideration by the community before consuming the product, including economic, social, cultural, psychological factors, location, time, and product attributes. For example, multiple linear regression analysis results can view the factors influencing people's consumption of spice products (*jamu*). There are several stages in multiple linear regression analysis, including the coefficient of determination (R^2), F test, and multiple linear regression.

Coefficient of Determination (R^2)

According to Agus Widardjono (2017), the coefficient of determination (R^2) test is a test to explain the variation in the proportion of the dependent variable defined by the independent variable. The results of the calculation of the multiple linear regression analysis that has been carried out are reviewed from the model summary. The results of the coefficient of determination can be seen in Table 5.

Table 5. Results of the Coefficient of Determination (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Waston
1	.949 ^a	0,901	0,885	0,758	1,936

Source: Primary Data, 2022 (processed)

Table 5 shows that the model's ability to explain the influence of the independent variable on the dependent variable is large; it can be seen in the Adjusted R Square (R^2) value of 88.5%. It shows that all variables can explain the influence on consumption decisions on spice products (*jamu*). Furthermore, the results of multiple linear regression analysis of each variable show that there are multiple correlations (R) of 0.949, which means that there is a strong relationship..

F Test

A simultaneous test determines whether the independent variable influences the dependent variable. For example, f test hypothesis testing aims to determine whether income, occupation, social class, tradition, motivation, perception, health, location, time, shape, taste, aroma, texture, and price simultaneously or together influence consumption decisions on spice products (herbal). The results of the F test can be seen in Table 6.

Table 6. F Test Results

Alternative Hypothesis (H_a)	F _{Table}	Information
There is a simultaneous influence of income, occupation, social class, tradition, motivation, perception, health, location, time, shape, taste, scent, texture, and price variables on consumption decisions on spice products (<i>jamu</i>).	F _{value} = 55,310 F _{table} = 1,81 Sig. F = 0,000	H _a accepted

Source: Primary Data, 2022 (processed)

Table 6 shows the results of the F test using $DF_1 = 14$ and $DF_2 = 86$ at an alpha of 5% obtained a Sig F_{value} <0.05 (Sugiyono, 2012). So, H_a is accepted, meaning that simultaneously the variables of income, employment, social class, tradition, motivation, perception, health, location, time, shape, taste, aroma, texture, and price affect consumption decisions on spice products (*jamu*).

Multiple Linear Regression

According to Kurniawan (2019), regression analysis is used to comprehensively understand the relationship between the dependent and independent variables. Multiple linear regression analysis in this study used SPSS (Statistical Package for Social Science) software, which can be seen in Table 7.

Table 7. Results of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	β	Std. Error	Beta			
(Constant)	0,165	0,854			0,193	0,847
Pendapatan (x_1)	0,775	0,109	0,342	7,080	0,000*	
Pekerjaan (x_2)	-0,010	0,070	-0,007	-0,149	0,882	
Kelas Sosial (x_3)	0,368	0,109	0,154	3,383	0,001*	
Tradisi (x_4)	-0,061	0,080	-0,039	-0,764	0,447	
Motivasi (x_5)	0,327	0,085	0,201	3,860	0,000*	
Persepsi (x_6)	0,095	0,175	0,030	0,545	0,587	
Kesehatan (x_7)	-0,104	0,102	-0,062	-1,017	0,312	
Lokasi (x_8)	0,458	0,109	0,190	4,210	0,000*	
Waktu (x_9)	0,298	0,060	0,239	4,979	0,000*	
Bentuk (x_{10})	-0,018	0,062	-0,015	-0,297	0,767	
Rasa (x_{11})	0,090	0,054	0,098	1,662	0,100	
Aroma (x_{12})	-0,257	0,091	-0,170	-2,839	0,006*	
Tekstur (x_{13})	0,441	0,079	0,315	5,566	0,000*	
Harga (x_{14})	0,246	0,084	0,136	2,906	0,005*	
Keterangan : *) $\alpha = 5\%$						

Keterangan : ^{*} $\alpha = 5\%$

Source: Primary Data, 2022 (processed)

Multiple linear regression calculation predicts the magnitude of the independent variable on the dependent variable. The regression equation used is as follows:

$$Y = 0,165 + 0,775x_1 - 0,010x_2 + 0,368x_3 + 0,061x_4 + 0,327x_5 + 0,095x_6 - 0,104x_7 + 0,458x_8 + 0,298x_9 - 0,018x_{10} + 0,09x_{11} - 0,257x_{12} + 0,441x_{13} + 0,246x_{14}$$

Based on Table 7, the results obtained indicate that eight factors have a significant effect, including income (x_1), social class (x_3), motivation (x_5), location (x_8), time (x_9), scent (x_{12}), texture (x_{13}), and price (x_{14}). Meanwhile, six variables have no significant effect, including work variables (x_2), tradition (x_4), perception (x_6), health (x_7), shape (x_{10}), and taste (x_{11}).

The income variable (x_1) has a positive and significant effect, where income can determine consumption decisions on spice products (jamu) because by consuming these products, people are aware of the importance of health during a pandemic. Income significantly affects decisions to use herbal products because a person's income can affect consumption decisions (Sabirin & Rini, 2021).

The motivation variable (x_5) has a positive and significant effect on the decision to consume spice products (jamu) because people consuming these products know the background or reasons for consuming them during the pandemic. It is because a person's motivation to consume a product is based on a person's reasons or background (Eka *et al.*, 2021).

The location variable (x_8) has a positive and significant effect. Location can determine consumption decisions on spice products (jamu) because they can see environmental conditions around which there are habits in consuming these products. The location significantly affects consumption decisions due to considerations of ease of access and the influence of habits on the surrounding environment (Wuryaningsih *et al.*, 2021).

The time variable (x_9) positively and significantly affects the decision to consume spice products (jamu) because people are more dominant in consuming these products during the pandemic to maintain and increase body immunity. Furthermore, time significantly affects a consumer's decision on a product because it can be adjusted to the conditions and situations currently being experienced (Fityan & Aldon, 2015).

The scent variable (x_{12}) has a significant effect on the decision to consume spice products (jamu) because people consuming these products pay attention to the aroma of spice products (jamu) and see from the side of the efficacy of the product is needed by the body. Aroma has a significant effect on the decision to consume a product because in

consuming a product, attention is paid to the scent, which can consider whether the product is feasible or not for consumption for body health (Ni Made *et al.*, 2017).

The texture variable (x_{13}) has a positive and significant effect on the decision to consume spice products (jamu) because people consuming these products pay attention to the texture of spice products (jamu) and see from the side the efficacy of the product that is needed by the body. Texture influences because the texture is the main thing in the consumption decision of a product. By paying attention to the texture of the product, it can be determined to consume based on the efficacy or benefits of the product for the health of the body (Pradiptya & Anam, 2017).

The price variable (x_{14}) has a positive and significant effect on the decision to consume spice products (jamu) because people consuming these products are willing to buy spice products (jamu) at a predetermined price and see from the side the efficacy of the product that is needed by the body. Price has a significant effect because in making decisions, people are willing to buy products at a predetermined price (Dharma *et al.*, 2021).

This research can be related to the health sector. However, the results obtained that the health variable did not significantly affect consumption decisions on spice products. It is because people assume that not only consuming spice products (herbs) can increase the body's immune system and prevent infection with Covid, but they also pay more attention to the types of products consumed to maintain health during the pandemic. Health does not have a significant effect because paying attention to the type of product consumed during the pandemic, can indirectly maintain body health (Herianto *et al.*, 2021)

CONCLUSION

Based on the research, the factors that influence people in consuming spice products (jamu) are income, social class, motivation, location, time, aroma, texture, and price. In contrast, factors that have no significant effect include work, tradition, perception, health, shape, and taste. By knowing the factors influencing people in consuming spice products (jamu), producers in implementing product marketing strategies can consider affordable selling prices and improve the quality of aroma and product texture while maintaining the characteristics of spice products (jamu). In addition, producers need to pay attention to increasing people's motivation to consume spice products (jamu) by highlighting their properties, adjusting to the conditions and situations required by the community during the pandemic, and choosing locations that are easily accessible to potential consumers.

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