



Consumer Behavior Analysis in Purchase of Freshwater Fish in Bandung City (Case Study in the Traditional Market of Kosambi)

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

This research aimed to analyze the relationship of factors that influence consumer behavior in the purchase decision of freshwater fish in Kosambi Traditional Market. The research was conducted in March 2019 to March 2020. The method used in this research was a case study. The sampling technique was used accidental sampling method with 100 respondents. To analyze the behavior of consumers used attitude measurement analysis as measured by a Likert Scale. Correlation of qualitative data is used to analyze the relationship of factors that influence consumer behavior in freshwater fish purchasing decisions. The results showed that four factors that influenced the purchase decision of freshwater fish products had a significant relationship with the correlation coefficient values as follows: Cultural factors of 0.243, Social factors of -0.278, Personal factors of 0.631, and psychological factors of 0.427. Personal factor is the more dominant variable influencing and being considered by consumers in deciding to purchase freshwater fish because the personal factors are defined as psychological characteristics of a person that is different from others that causes relatively consistent and long-lasting responses to the environment.

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1. INTRODUCTION

Bandung City has the potential to meet the needs of the community's large enough fish consumption, especially the needs of freshwater fish. This is supported by the location of the City of Bandung, which is close to 3 large reservoirs, namely Cirata Reservoir, Jatiluhur Reservoir, and Saguling Reservoir. According to data on the number of fish production, Cirata Reservoir is able to produce fish around 100 tons / day, Saguling Reservoir produces around 15 tons / day, and Jatiluhur Reservoir produces around 60 tons / day [1]. The types of fish produced from the three reservoirs vary from goldfish, tilapia to catfish which are then sold to the city of Bandung.

The magnitude of this potential is in fact not followed by a high level of community fish consumption. According to data from [2] fish consumption in Bandung in 2014 was 33.95 kg / cap / year, in 2015 it was 34.20 kg / cap / year, in 2016 36.94 kg / cap / year, in 2017 it was 38.11 kg / cap / year, in 2018 it would be 39.84 kg / cap / year. This amount has not yet reached the national per capita fish consumption target of 50.65 kg / cap / year [3]. The low consumption of community fish is indicated by the low demand for fishery products. Some of the causes are the lack of availability of menu variations and processed fish in the market, lack of public knowledge about the nutritional content and benefits of eating fish and there are still wrong perceptions about fish in the community. Public attitudes towards fish also need to be studied. Attitude is one of the factors that influence consumer behavior in providing fish as a family menu.

According to Rossanty et al. [4], consumer behavior as a decision-making process requires individual activities to evaluate, obtain, use or regulate goods and services. Consumer behavior in purchasing decision making is influenced by several factors. These factors cause differences in consumer behavior with one another, in buying something and can change at any time.

2. METHODOLOGY

This research conducted case study method. Types and sources of data are primary data and secondary data. Primary data was collected by using accidental sampling techniques. Accidental

sampling method was conducted by researchers who met coincidentally with respondents who were purchasing freshwater fish products, meaning anyone who accidentally met with the researcher and according to the characteristics, then that person could be used as a sample [5]. Secondary data was obtained from the Central Statistics Agency Bandung City Office, Department of Food and Agriculture, and PD. Pasar Bermartabat. Consumer behavior was analyzed using descriptive methods measured by Likert scale, while to find out the factors that influence consumers were analyzed using qualitative data correlation analysis. The number of respondents in this research was 100 respondents.

2.1 Research Location

This research took place in Pasar Tradisional Kosambi, which is located at Jl. Ahmad Yani No.221-223, Sub-district Sumur Bandung, Bandung of City, West Java Province, Indonesia.

2.2 Data Analysis Method

Analysis of the data used in this research was the analysis of quantitative and qualitative data. Qualitative data analysis was used to describe the general description of the research location, the characteristics of consumers in the Kosambi Traditional Market in Bandung, and consumer behavior in the decision to purchase freshwater fish in the form of data tabulation. Quantitative analysis was presented in tables, and diagrams or graphs are then analyzed descriptively. Descriptive analysis is a statistical analysis used to describe or analyze the results of research. Consumer behavior was analyzed using descriptive methods while to find out the factors that influence consumers are analyzed using qualitative data correlation analysis. Data analysis using software support for IBM SPSS Statistics 25 and Microsoft Office Excel 2016.

2.3 Analysis of Relationship Factors Influencing Consumer Behavior

Qualitative data correlations are used to examine and see the degree of relationship between the factors that influence consumer behavior with consumer purchasing decisions. The following are formulas and tables according to [6] to interpret the results of the correlation study as follows:

$$r_{xy} = \frac{N \sum XY - (\sum X) (\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$$

Information:

- r = Correlation coefficient
- x = Independent variable
- y = Dependent variable
- N = Number of Samples

2.4 Variables and Measurements

There are four independent variables and one dependent variable which is measured with the Likert scale. The variables in this research are:

2.4.1 Independent variables

- X1: Culture Factor
- X2: Social Factor
- X3: Personal Factor
- X4: Psychological Factor

2.4.2 Dependent variable

- Y: Buying Decision

3. RESULTS AND DISCUSSION

3.1 Consumer Characteristics

The number of respondents interviewed was 100 people with accidental sampling method.

3.1.1 Based on gender

Characteristics of consumers by sex are divided into two groups, male and female. Characteristics of consumers by sex can be seen

in Fig. 1. The results showed that the majority of respondents were women with 64 people and the remaining 36 people were men out of a total of 100 respondents found. Based on the results majority of consumers in Kosambi Traditional Market were female. According to [7] women always pay attention to detail when shopping. In addition, married women have duties and responsibilities as a wife and a mother in their family, one of the tasks is providing food in the family menu so that women are considered as determining the family menu [8]. This causes women to tend to be more often encountered when shopping.

3.1.2 Based on respondents' age

The age of consumers is diverse between 21 to 69 years old. According to [9] the population aged 15 – 64 years old is a working age population that is considered productive and the level of productivity will increase according to age and will decline again before the age of 65 years old. Fig. 2 shows that, the age of consumers who are in the Traditional Market Kosambi can be grouped into seven age groups. The fourth age group 42-48 years old is the age group where there are the most consumers, as many as 24 people out of 100 people. The age group is an adult age group that tends to think rationally, where consumers in buying freshwater fish already have certain considerations in making decisions and understanding about freshwater fish to be chosen that is in accordance with consumer tastes.

3.1.3 Based on consumer education

The level of education determines a person in receiving knowledge and information.

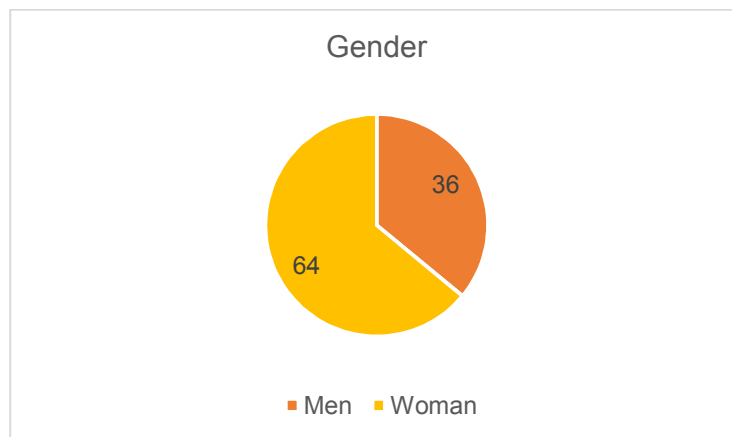


Fig. 1. Respondents' gender

Consumers who have better education will be very responsive to information [10]. The results showed that consumers had various levels of education. The highest level of education is consumers with a high school education level of 53 people. This shows that consumers in Kosambi Market have received sufficient education because most respondents have completed 12 years of compulsory education. According to [11] the 12 year compulsory education program is the minimum education that must be followed by Indonesian citizens for the responsibility of the Government and Local Government in order to develop their potential. The characteristics of consumers based on their education level can be seen in Fig. 3.

3.1.4 Based on respondents' occupation

Occupation influences individual buying behavior. The income earned from their occupation becomes an important determinant in their buying behavior [12]. Fig. 4 shows consumers in the Kosambi Traditional Market consisting of various occupation backgrounds. Consumers with occupation background as a housewife are the most types of occupation in the Kosambi Traditional Market as many as 36 people out of 100 people. This is because housewife's daily activities are taking care of the household so they have more free time to do housework and manage family expenses or needs, including shopping for freshwater fish as a food menu in the family.

3.1.5 Based on respondent's income

The level of consumer income has an important factor in determining the pattern of demand for various types of goods. Changes in income always lead to changes in demand for various types of products. power of the product. The characteristics of consumers based on income at the Traditional Market Kosambi can be seen in Fig. 5.

Based on the results, total consumer income varies, ranging from \leq Rp1,000,000.00 / month to \geq Rp4,100,000.00 / month. Freshwater fish consumers in Kosambi Traditional Market mostly have an income of Rp. 2,100,000.00 - Rp. 4,000,000.00 / month with a total of 45 customers. The amount of income is included in the amount of the minimum wage in the city of Bandung. According to [13], the minimum wage of Bandung City in 2020 is Rp 3,623,778. It can be concluded that freshwater fish products can be consumed by people with various income

levels. The large amount of income will describe the amount of purchasing power of consumers. According to [14] consumer purchasing power is the ability of consumers to buy a large number of goods requested in a particular market, at a certain price level, at a certain level of income, and in a certain period.

3.1.6 Based on number of family members

Number of family members is one of the factors that influence in making purchasing decisions related to the amount to be purchased. The more the number of family members, the needs in the family tend to be greater so that consumers will buy a product in greater quantities [10]. Characteristics of consumers based on the number of family members can be seen in Fig. 6.

Fig. 6 shows that consumers who purchase freshwater fish at Kosambi Tradisional Market have diverse number of members. Most consumers who buy freshwater fish products have a total of 4 members with a number of consumers of 36 people, while consumers who buy the smallest freshwater fish products are in the number of family members of 7 with a number of consumers of 2 people.

3.1.7 Based on ethnic groups

Ethnic groups are a group of people whose members identify themselves with each other. The human group usually sees based on the lineage that is considered the same. Ethnic identity is also marked by recognition from others of the group's characteristics and by cultural, linguistic, religious, behavioral, or biological characteristics [15]. Characteristics of consumers based on ethnic types can be seen in Fig. 7.

Based on results, consumers who buy freshwater fish products at Kosambi Traditional Market consist of various ethnic groups. Consumers with Sundanese ethnic groups are as many as 66 people and the remaining 34 people are other ethnic types such as Ambonese, Batak, Betawi, Javanese, Minang, and Palembang Malay. Consumers with Sundanese ethnicity are the most number because the research location is in the city of Bandung in the province of West Java, which is the dominant Sundanese ethnic group. This is in accordance with the statement of [16] that Sundanese tribe is an ethnic group found in the administrative areas of West Java, Banten, parts of DKI Jakarta, and parts of Central Java also people in Sunda tribe are known as Sundanese.

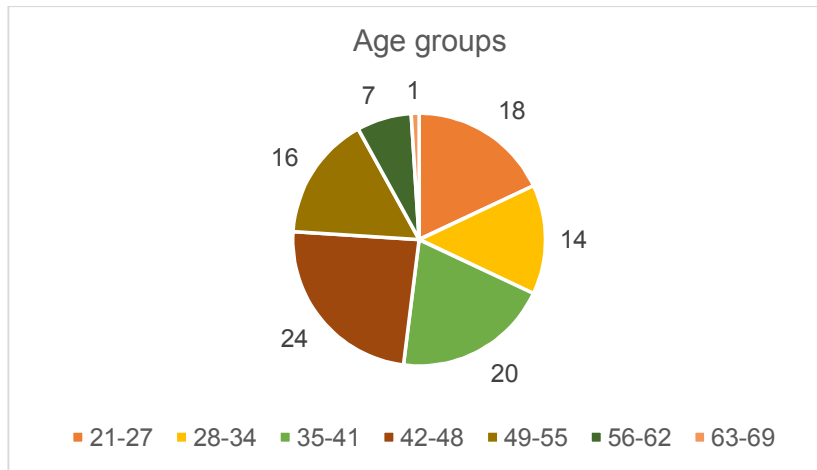


Fig. 2. Respondents' age groups

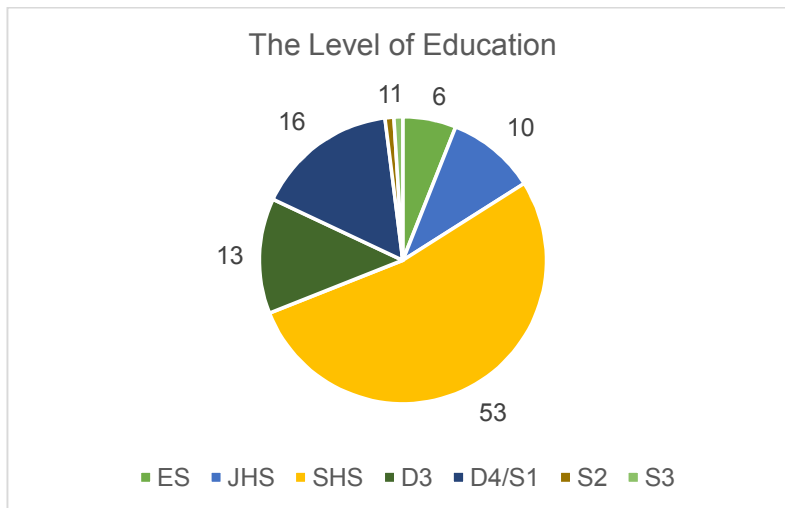


Fig. 3. Respondent's education

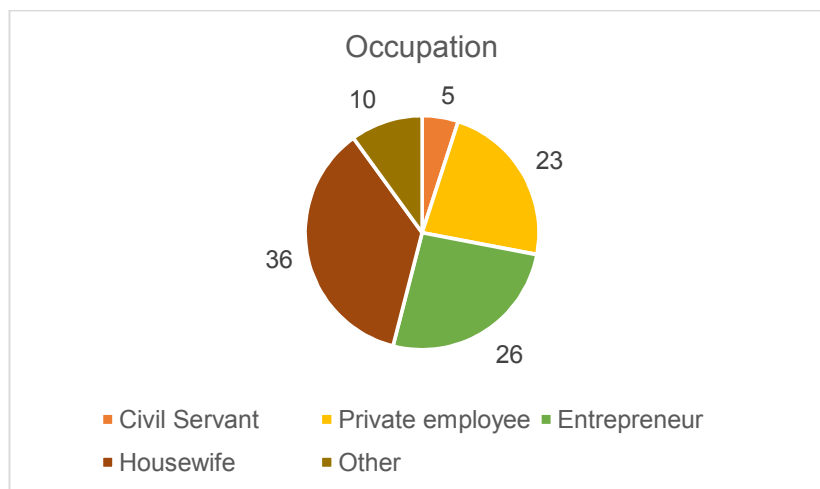


Fig. 4. Respondent's occupation

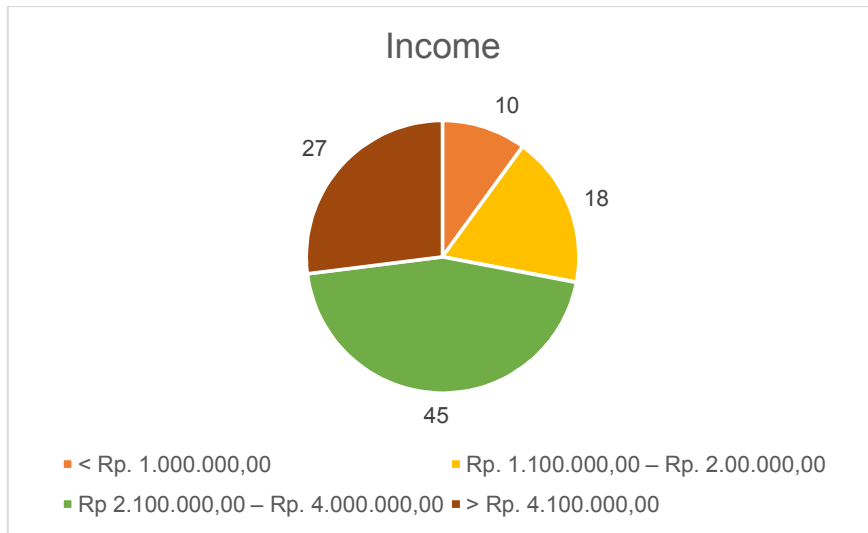


Fig. 5. Respondent's income

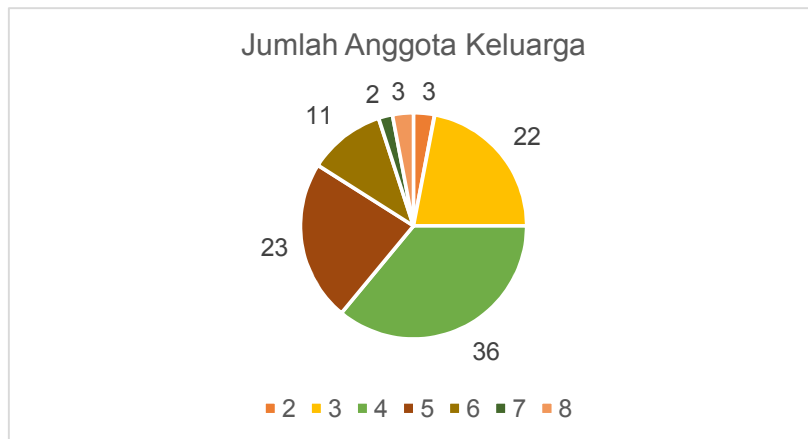


Fig. 6. Respondent's number of family

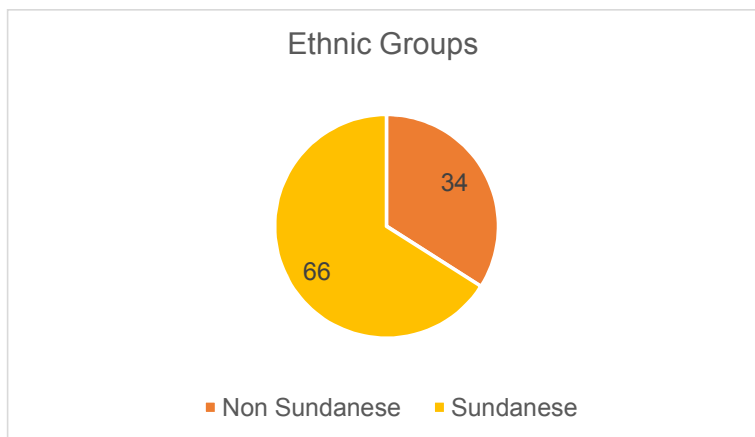


Fig. 7. Respondent's ethnic groups

3.2 Factors That Influence Consumer Behavior towards Purchasing Decisions

This research uses four variables consisting of cultural, social, personal, and psychological to determine the effect of these factors on the purchase decision of freshwater fish at Kosambi Traditional Market. Following about these variables:

3.2.1 Cultural factor

Culture is a variable that influences consumer behavior which is reflected in the way of life, lifestyle, habits, and traditions in the demand for various goods and services offered. Based on the Table 1, shows that the value of the correlation of cultural factors on purchasing decisions has a value of 0.243. This value shows that there is a real positive relationship between cultural factors on consumer decisions in purchasing freshwater fish, where if the influence of cultural factors is high, it will increase consumer purchasing decisions on freshwater fish products. According to [17] the level of closeness of the relationship at a correlation coefficient of 0.243 is included in the low correlation level which is in the range of 0.20-0.399.

Table 1. Correlation coefficient factors that influence purchasing decisions

Variable	Correlations	Connection
Cultural (X1)	0,243	Low
Social (X2)	-0,278	Low
Personal (X3)	0,631	Strong
Psychology (X4)	0,427	Medium

3.2.2 Social factor

Social factors have an influence on consumer decisions in purchasing freshwater fish at Kosambi Traditional Market, where these factors include the influence of the social environment, family, and the role and status in society. The influence of the community environment on freshwater fish purchasing decisions usually arises when the neighborhood has a trust in a product, besides that the family becomes a very big influence in the purchase decision of a product, and its role and status in the community who want to be appreciated, so choosing the type of product the best freshwater fish.

Based on Table 1, the value of the correlation of social factors on purchasing decision is -0.278.

This value shows that there is a significant negative relationship between social factors on consumer decision in purchasing freshwater fish. If there is an increase on social factor influence, it will reduce consumer purchasing decisions on freshwater fish products. According to [17] the level of closeness of the correlation coefficient of -0.278 is included in the low correlation level which is in the range of 0.20-0.399.

3.2.3 Personal factor

Personal factors are the more dominant variable influencing and being considered by consumers in deciding to make a purchase. Decisions in buying consider several things by looking at the characteristics of age, needs, jobs, economic conditions, and trust when using the product. Based on Table 1, the value of the correlation of personal factors on purchasing decisions is 0.631. This value shows that there is a real positive relationship between personal factors on consumers decisions in purchasing freshwater fish. If there is an increase on personal factor influence, it will also increase consumer decision in purchasing freshwater fish products. According to [17] the level of closeness of the relationship at the correlation coefficient of 0.631 is included in the level of strong correlation which is in the range of 0.60-0.799.

3.2.4 Psychological factor

Psychological factors become factors that need to be considered by a company or market, because these factors are influenced by motivation in buying, perceptions of advertisements, knowledge of a product, beliefs and attitudes in purchasing decisions of a product. based on Table 1, the value of the correlation of psychological factors on purchasing decision is 0.427. This value shows that there is a real positive relationship between psychological factors on consumer decisions in purchasing freshwater fish, where if the influence of psychological factors is higher, it will increase consumer purchasing decisions on freshwater fish products. According to [17] the level of closeness of the relationship on the value of the correlation coefficient of 0.427 is included in the level of moderate correlation which is in the range of 0.40-0.599.

4. CONCLUSION

Based on the results of the research, the consumers of freshwater fish in Kosambi Market based on gender are mostly women. Based on

the age of most consumers are in the age group 42-48 years. Based on education, the majority of consumers are high school graduates. Based on work, most Kosambi Market consumers work as housewives. Based on consumer income, the majority of consumers have income of Rp. 2,100,000.00 - Rp. 4,000,000.00 / month. There are four factors that influence the purchase decision of freshwater fish in Kosambi Market, namely cultural, social, personal, and psychological factors. Personal factors are the factors most consumers consider in making freshwater fish purchases. Personal factors have a real and positive relationship to consumer purchasing decisions with a correlation coefficient of 0.631 which indicates strong correlation.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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