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Analysis of Consumer Preferences of Fisheries Products in Bandung City (Case Study in Sederhana Market and "X" Supermarket).

Vinesca Triyansa Putri[1], Zuzy Anna[2], Achmad Rizal[2], Atikah Nurhayati[2]

[1]Students of the Faculty of Fisheries and Marine Sciences, University of Padjadjaran Jl. Bandung-Sumedang Km. 21 Jatinangor, Sumedang, West Java, Indonesia. E-mail: muhamad15016@mail.unpad.ac.id
[2]Lecturer at the Faculty of Fisheries and Marine Sciences, University of Padjadjaran Jl. Bandung-Sumedang Km. 21 Jatinangor, Sumedang, West Java, Indonesia.

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Logistic Regressions, Supermarket, Traditional Market, Preference

ABSTRACT

This research was conducted at the Sederhana Market and "X" Supermarkets in Bandung, West Java. The purpose of this research is to analyze consumer preferences for Sederhana Market and Bandung "X" Supermarkets in Bandung and analyze the factors that influence consumer preferences between fresh and processed fish, consumer preferences between fresh sea fish and freshwater fish, and selection of processed fish species. The method used is a case study with quantitative and qualitative data analysis. The sampling technique uses accidental sampling method with a total of 50 respondents each. Based on binary logistic regression analysis, at the "X" Supermarket and Sederhana Market that the Wald test shows an educational variable, and age influences the preference between fresh fish and processed fish. Wald's test results for the preference between fresh sea fish and freshwater fish only influenced education in the "X" Supermarket. At the Sederhana Market that the results of the Wald test the age variable influences the preference between fresh sea fish and freshwater fish. Based on multinomial logistic regression analysis, the factors that influence the selection of processed fish compared with jelly fish in the "X" Supermarket are income, sex, and age.

INTRODUCTION

Fish is a food that has a high nutritional value. Fish contains protein, carbohydrates, vitamins, minerals, omega 3 fatty acids which are good for the human body. Fish is recommended for consumption compared to animal meat, especially for those who suffer from cholesterol and blood pressure or heart problems [1]. The level of fish consumption in the city of Bandung is increasing every year. Fish consumption in Bandung City 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 amounted to 39.84 kg / cap / year [2]. Increased fish consumption is supported by the socialization and the Fish Eating Movement. However, the increase in fish consumption is still far from the national target. The central government increases national fish consumption to 54.46 kg per capita in 2019 [3].

Increasing the level of fish consumption must pay attention to the wants and needs of consumers. Taste or preference will affect the level of consumption [4]. There are various kinds of fishery products as choices for consumption. Each consumer must have a different level of preference for the product. Consumer preferences for fishery products must be considered. Fishery products such as fresh fish, boiled processed fish, jelly fish, salted fish, and others are easily found in traditional markets and supermarkets.

Traditional markets are visited by consumers with an economic level that is in the lower middle class, while supermarkets are visited by consumers with an economy in the upper middle class. In 2015 the number of supermarkets in the city of Bandung reached 63 modern markets [5]. There are 40 traditional markets in Bandung [6]. The existence of traditional markets in the midst of modern market growth may be displaced by modern markets [7].

Supermarkets in the Regol sub-district are used as research sites. One of the supermarkets in regol district that provides fresh and processed fish products is located in Supermarkets X. The Supermarkets have a strategic location so that visitors are always crowded to shop. One of the traditional markets in Bandung is the Sederhana market, which is located in the middle of a modern market that makes traders in the Sederhana Market have strong competitors in selling their wares. The author chooses traditional markets and supermarkets as research locations for consumer preferences for fishery products. It is expected to be information on consumer preferences for fishery products from each of these economic classes, so that it can be information as marketing measures for fishery products. The purpose of this study is to analyze consumer preferences for fishery products both in the Sederhana Market and in the "X" Supermarkets and determine the factors that influence them.

METHOD

The method used is the case study method. Case studies can be carried out on individuals, groups of individuals (for example a family), a group of people (teachers, tribes), human environment or social institutions [8]. The data used consists of primary data and secondary data. Primary data obtained directly in the form of questionnaires or interviews with relevant parties and documentation. Secondary data were obtained through documents and information from various agencies related to research such as libraries, the Central Statistics Agency of Bandung, the Department of Food and Agriculture Security, Regional Company Dignified Market, and West Java Fisheries and Maritime Services. Analysis of the data used in this study is quantitative and qualitative data analysis, while the analysis used is binary logistic regression analysis and multinomial logistic regression.

RESULTS AND DISCUSSION

Overview of Consumer Preferences of Fisheries Products in the City of Bandung

Description of consumer preferences for fishery product preferences, preferences between fresh fish and processed fish, preferences between fresh sea fish and fresh fresh fish, and processed fish selection. This general description is the frequency distribution of respondent selection. The frequency distribution of respondents based on fish products that are consumed more often in "X" and Sederhana Markets can be seen in Figure 1.

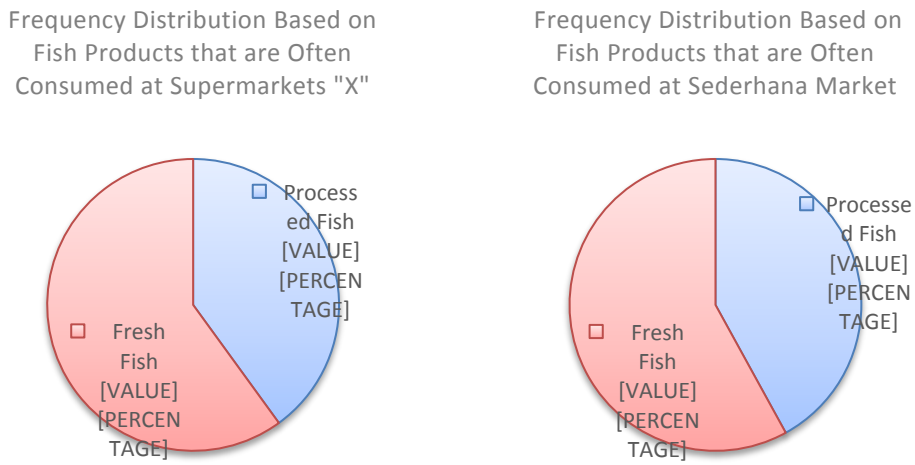

Figure 1. Frequency Distribution Based on Fish Product

The majority of respondents in the "X" Supermarkets as many as 30 people or 60.00% are respondents who more often consume fresh fish. In Sederhana Market it is known that the majority of respondents as many as 29 people or 58.00% are respondents who more often consume fresh fish. Based on these data, the majority of supermarkets and traditional markets, the majority of respondents often consume fresh fish. This is in accordance with the preference pattern in the research which shows a homogeneous pattern, namely 78.00% fresh fish like freshwater fish and seawater compared to processed fish by 22 .00% [9].

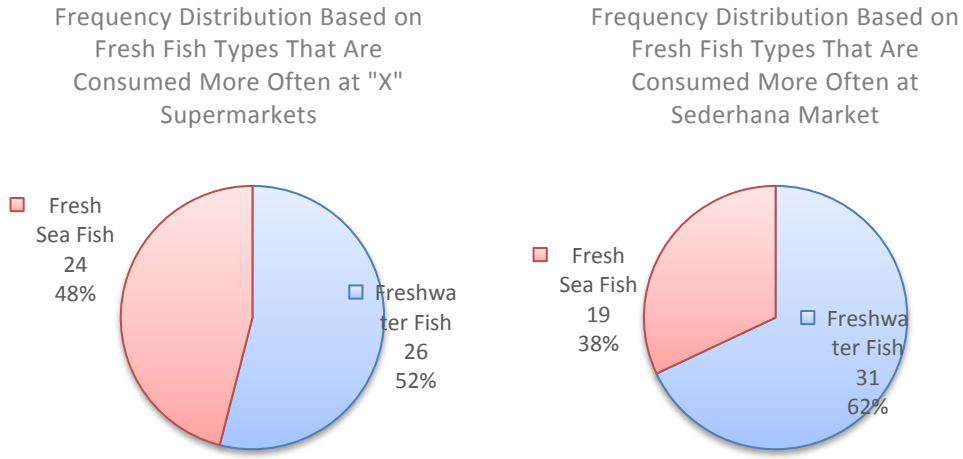

Figure 2. Frequency Distribution Based on Fresh Fish

The majority of respondents in the "X" Supermarkets as many as 27 people or 54.00% are the respondents who most often consume freshwater fish, and the rest are the respondents who most often consume sewater fish as many as 23 people or 46.00%. The types of fresh fish most often consumed at the Sederhana Market are freshwater fish as many as 31 people or 62.00%. In terms of nutrition also the protein content of freshwater fish is not different from that of sea fish but the levels of omega 3 fatty acids are much lower [10].

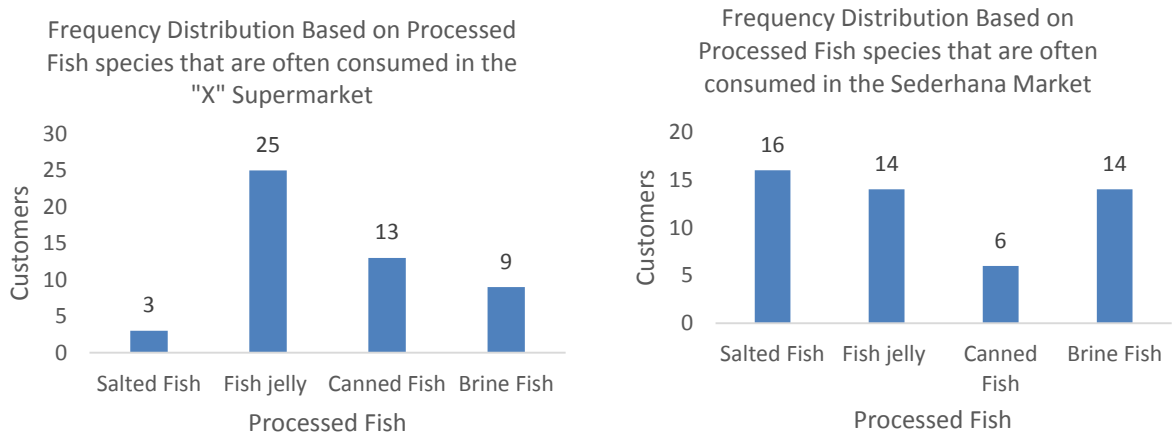

Figure 3. Frequency Distribution Based on Processed Fish

The majority of respondents in "X" Supermarkets as many as 25 people or 50.00% are respondents who most often consume fish jelly (fish meatballs, fish nuggets, fish / shrimp sausages, dumplings, surimi) and the least are respondents most often consume salted fish, 2 people or 4.00%. The majority of respondents in the Sederhana market as many as 17 people or 34.00% are more often consume salted fish, and the least is canned fish by 6.00% with a total of 3 people. At the Sederhana Market with the average middle class people prefer salted fish because of its cheap price. The price of salted fish is very economical, accessible to all. Salted fish or dried fish have an important role in fulfilling the needs of low-cost protein and fat sources for the community [11]. At the Supermarkets prefer fish jelly because there are more choices of fish jelly products in the "X" Supermarkets than other processed products, therefore many respond-en choose fish jelly.

Preference between Fresh Fish and Processed Fish

Table 1. Logit Model Estimation Results in "X" Supermarkets

Variables in the Equation

		B	S.E.	*Wald*	df	Sig.	Exp(B)	90% C.I.for EXP(B)	
								Lower	Upper
Step 1a	Income_X1	.000	.000	.385	1	.535	1.000	1.000	1.000
	Education_X2	2.128	.752	8.004	1	.005	8.398	2.437	28.941
	Gender_X3	-.284	.825	.119	1	.731	.753	.194	2.923
	Age_X4	.087	.041	4.440	1	.035	1.091	1.019	1.168
	Tribes_X5	-.869	.815	1.136	1	.286	.420	.110	1.603
	Constant	-7.257	2.462	8.686	1	.003	.001		

a. Variable(s) entered on step 1: Income_X1, Education_X2, Gender_X3, Age_X4, Tribes_X5.

The logistic regression model formed the Probability Logit Model as follows:

$$\pi(x) = \frac{e^{-7257 + 0{,}000\,X1 + 2{,}128\,X2 - 0{,}284\,X3 + 0{,}087\,X4 - 0{,}869\,X5}}{1 + e^{-7257 + 0{,}000\,X1 + 2{,}128\,X2 - 0{,}284\,X3 + 0{,}087\,X4 - 0{,}869\,X5}}$$

Table 2. Logit Model Estimation Results in Sederhana Market

Variables in the Equation

		B	S.E.	*Wald*	df	Sig.	Exp(B)	90% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Income_X1	.000	.000	.194	1	.659	1.000	1.000	1.000
	Education_X2	.862	.502	2.952	1	.086	2.368	1.038	5.403
	Gender_X3	.032	.740	.002	1	.966	1.032	.306	3.487
	Age_X4	.047	.025	3.667	1	.056	1.048	1.007	1.092
	Tribes_X5	1.170	.848	1.904	1	.168	3.223	.799	13.007
	Constant	-2.974	1.644	3.272	1	.070	.051		

a. Variable(s) entered on step 1: Income_X1, Education_X2, Gender_X3, Age_X4, Tribes_X5.

The logistic regression model formed the Probability Logit Model as follows:

$$\pi(x) = \frac{e^{-2,974 + 0,000\,X1 + 0,862\,X2 + 0,032\,X3 + 0,047X4 + 1,170\,X5}}{1 + e^{-2,974 + 0,000\,X1 + 0,862\,X2 + 0,032\,X3 + 0,047X4 + 1,170\,X5}}$$

Based on Table 1 the educational variables in the "X" Supermarket have a Wald test value of 8.004 and a significance value of 0.005. The age variable at the "X" Supermarket has a Wald test value of 4.440 and a significance value of 0.035. When compared with a significance level of 0.10 or (10%), the sig. (p-value) is smaller than α. This means that it can be concluded that H_0 is rejected, thus it is evident that education and age influence the preference between fresh fish and processed fish at the "X" Supermarket. Based on Table 2 the education variables in the Sederhana Market have a Wald test value of 2.952 and a significance value of 0.086. The age variable in the Sederhana Market has a Wald test value of 3,667 and a significance value of 0.056. When compared with a significance level of 0.10 or (10%), the sig. (p-value) is smaller than α. This means that it can be concluded that H_0 is rejected, thus it is evident that education and age influence the preference between fresh fish and processed fish in the Sederhana Market.

Preference between Seawater Fish and Freshwater Fish

Table 3. Logit Model Estimation Results in "X" Supermarkets

Variables in the Equation

		B	S.E.	*Wald*	df	Sig.	Exp(B)	90% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Income_X1	.000	.000	.122	1	.727	1.000	1.000	1.000
	Education_X2	1.252	.628	3.970	1	.046	3.498	1.244	9.834
	Gender_X3	-.007	.699	.000	1	.993	.993	.315	3.138
	Age_X4	-.009	.033	.075	1	.785	.991	.938	1.047
	Tribes_X5	.185	.664	.078	1	.780	1.203	.403	3.590
	Constant	-2.733	1.833	2.222	1	.136	.065		

a. Variable(s) entered on step 1: ncome_X1, Education_X2, Gender_X3, Age_X4, Tribes_X5.

The logistic regression model formed the Probability Logit Model as follows:

$$\pi(x) = \frac{e^{-2,733 + 0,000\,X1 + 1,252\,X2 - 0,007\,X3 - 0,009X4 + 0,185\,X5}}{1 + e^{-2,733 + 0,000\,X1 + 1,252\,X2 - 0,007\,X3 - 0,009X4 + 0,185\,X5}}$$

Table 4. Logit Model Estimation Results in Sederhana Market

Variables in the Equation

		B	S.E.	*Wald*	df	Sig.	Exp(B)	90% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Income_X1	.000	.000	1.418	1	.234	1.000	1.000	1.000
	Education_X2	.161	.496	.105	1	.746	1.174	.519	2.654
	Gender_X3	-.359	.744	.233	1	.629	.698	.205	2.375
	Age_X4	.064	.029	4.912	1	.027	1.066	1.017	1.117
	Tribes_X5	1.315	.801	2.694	1	.101	3.724	.997	13.908
	Constant	-5.370	2.048	6.879	1	.009	.005		

a. Variable(s) entered on step 1: ncome_X1, Education_X2, Gender_X3, Age_X4, Tribes_X5.

The logistic regression model formed the Probability Logit Model as follows:

$$\pi(x) = \frac{e^{-5,370 + 0,000\,X1 + 0,161X2 - 0,359\,X3 + 0,064\,X4 + 1,315\,X5}}{1 + e^{-5,370 + 0,000\,X1 + 0,161X2 - 0,359\,X3 + 0,064\,X4 + 1,315\,X5}}$$

Based on Table 3 the education variable in the "X" Supermarkets has a Wald test value of 3.498 and a significance value of 0.046. When compared with a significance level of 0.10 or (10%), the sig. (p-value) is smaller than α. This means that it can be concluded that H_0 is rejected, thus it is proven that education influences the preference between fresh sea fish and fresh fresh fish at the "X" Supermarket. There is a significant or strong relationship between education and consumer preferences in choosing sea fish [12]. Based on Table 4 the age variable in the Sederhana Market has a Wald test value of 1.066 and a significance value of 0.027. When compared with a significance level of 0.10 or (10%), the sig. (p-value) is smaller than α. This means that it can be concluded that H_0 is rejected, thus it is evident that age influences the preference between seawater fish and freshwater fish in the Sederhana Market.

Preference for Selection of Processed Fish

Table 5. Choice of Processed Fish with Comparison of Jelly Fish in "X" Supermarkets

Parameter Estimates

Ikan_olahan_Y3[a]		B	Std. Error	Wald	df	Sig.	Exp(B)	90% Confidence Interval for Exp(B) Lower Bound	Upper Bound
Salted Fish	Intercept	-17.274	3.020	32.724	1	.000			
	Income_X1	.000	.000	.509	1	.476	1.000	1.000	1.000
	Age_X4	-.001	.075	.000	1	.990	.999	.883	1.131
	[Education_X2=2.00]	.246	1.392	.031	1	.860	1.279	.130	12.618
	[Education_X2=3.00]	0[b]	.	.	0	.	.	.	.
	[Gender_X3=.00]	-.852	1.490	.326	1	.568	.427	.037	4.953
	[Gender_X3=1.00]	0[b]	.	.	0	.	.	.	.
	[Tribes_X5=.00]	17.880	.000	.	1	.	58260856.605	58260856.605	58260856.605
	[Tribes _X5=1.00]	0[b]	.	.	0	.	.	.	.
Canned Fish	Intercept	-2.476	2.320	1.139	1	.286			
	Income_X1	.000	.000	3.112	1	.078	1.000	1.000	1.000
	Age_X4	.029	.047	.391	1	.532	1.030	.953	1.113
	[Education_X2=2.00]	.058	.828	.005	1	.944	1.060	.271	4.139
	[Education_X2=3.00]	0[b]	.	.	0	.	.	.	.
	[Gender_X3=.00]	-1.754	.936	3.508	1	.061	.173	.037	.808
	[Gender_X3=1.00]	0[b]	.	.	0	.	.	.	.
	[Tribes_X5=.00]	-.025	.892	.001	1	.978	.976	.225	4.231
	[Tribes _X5=1.00]	0[b]	.	.	0	.	.	.	.
Brine Fish	Intercept	-4.178	3.243	1.660	1	.198			
	Income_X1	.000	.000	.199	1	.655	1.000	1.000	1.000
	Age_X4	.124	.063	3.905	1	.048	1.132	1.021	1.254
	[Education_X2=2.00]	-.826	.962	.738	1	.390	.438	.090	2.130
	[Education_X2=3.00]	0[b]	.	.	0	.	.	.	.
	[Gender_X3=.00]	-.793	1.057	.563	1	.453	.452	.080	2.573
	[Gender_X3=1.00]	0[b]	.	.	0	.	.	.	.
	[Tribes_X5=.00]	-.153	.927	.027	1	.869	.858	.187	3.945
	[Tribes _X5=1.00]	0[b]	.	.	0	.	.	.	.

a. The reference category is: Fish Jelly.

b. This parameter is set to zero because it is redundant.

The multinomial logistic regression equation that is formed is as follows:

$g_1(x) = -17{,}274_0 + 0{,}000_{X1} + 0{,}246_{x2} - 0{,}852_{x3} - 0{,}001_{x4} + 17{,}880_{x5}$

$g_2(x) = -2{,}476_0 + 0{,}000_{X1} + 0.058_{x2} - 1{,}754_{x3} + 0{,}029_{x4} - 0{,}025_{x5}$

$g_3(x) = -4{,}178_0 + 0{,}000_{X1} - 0{,}826_{x2} - 0{,}793_{x3} + 0{,}124_{x4} - 0{,}153_{x5}$

Variables are said to be significant if they have a significance value of less than 0.10 (10% α). Due to the partial testing on g1 (x) p value for all variables > 0.10, it can be concluded that each variable is not suitable for the choice of processed fish. Partial testing on g2 (x) p value on income variable <0.10 and gender variable <0.10, it can be concluded that income and gender variables influence the selection of processed fish. In accordance with the research that income influences fish consumption in Turkey [13]. Odd ratio value on income is 1.00. This shows that if the consumer's income increases Rp. 1 then the opportunity to choose canned fish 1,00 times compared to fish jelly. Odd ratio value for sex is 0.173. This shows that women have the opportunity to choose canned fish 0.173 times compared to jelly fish. Partial testing on g3 (x) p value on the age variable < 0.10, it can be concluded that the age variable influences the selection of processed fish. The odds ratio value for age is 1,132. This shows that if the age of consumers increases by 1 year, the opportunity to choose brine fish is 1,132 times compared to fish jelly.

Table 5. Choice of Processed Fish with Comparison of Salted Fish in Sederhana Market

Parameter Estimates

Ikan_olahan_Y3[a]		B	Std. Error	Wald	df	Sig.	Exp(B)	90% Confidence Interval for Exp(B) Lower Bound	Upper Bound
Fish Jelly	Intercept	-31.946	3665.559	.000	1	.993			
	Income_X1	.000	.000	.192	1	.661	1.000	1.000	1.000
	Age_X4	-.072	.043	2.839	1	.092	.930	.867	.998
	[Education_X2=.00]	-3.335	5171.328	.000	1	.999	.036	.000	.b
	[Education_X2=1.00]	18.199	1.726	111.224	1	.000	80145260.178	4689727.412	1369645219.247
	[Education_X2=2.00]	16.359	.000	.	1	.	12723002.731	12723002.731	12723002.731
	[Education_X2=3.00]	0c	.	.	0	.	.	.	.
	[Gender_X3=.00]	20.851	3665.558	.000	1	.995	1136314912.773	.000	.b
	[Gender_X3=1.00]	0c	.	.	0	.	.	.	.
	[Tribes_X5=.00]	-2.579	1.507	2.928	1	.087	.076	.006	.905
	[Tribes_X5=1.00]	0c	.	.	0	.	.	.	.
Canned Fish	Intercept	2.134	4.914	.189	1	.664			
	Income_X1	.000	.000	.002	1	.961	1.000	1.000	1.000
	Age_X4	-.042	.049	.740	1	.390	.958	.884	1.039
	[Education_X2=.00]	-21.481	9054.992	.000	1	.998	4.685E-10	.000	.b
	[Education_X2=1.00]	.496	2.884	.030	1	.863	1.642	.014	188.617
	[Education_X2=2.00]	-2.122	2.259	.883	1	.348	.120	.003	4.922
	[Education_X2=3.00]	0c	.	.	0	.	.	.	.
	[Gender_X3=.00]	3.276	1.840	3.170	1	.075	26.480	1.283	546.376
	[Gender_X3=1.00]	0c	.	.	0	.	.	.	.
	[Tribes_X5=.00]	-2.349	1.553	2.288	1	.130	.095	.007	1.228
	[Tribes_X5=1.00]	0c	.	.	0	.	.	.	.
Brine Fish	Intercept	-2.533	3.422	.548	1	.459			
	Income_X1	.000	.000	.560	1	.454	1.000	1.000	1.000
	Age_X4	.006	.031	.041	1	.839	1.006	.956	1.059
	[Education_X2=.00]	1.385	1.935	.512	1	.474	3.993	.166	96.236
	[Education_X2=1.00]	2.736	2.107	1.686	1	.194	15.429	.482	493.880
	[Education_X2=2.00]	.868	1.459	.354	1	.552	2.381	.216	26.239
	[Education_X2=3.00]	0c	.	.	0	.	.	.	.
	[Gender_X3=.00]	.047	.852	.003	1	.956	1.048	.258	4.253
	[Gender_X3=1.00]	0c	.	.	0	.	.	.	.
	[Tribes_X5=.00]	-.266	1.210	.048	1	.826	.766	.105	5.610
	[Tribes_X5=1.00]	0c	.	.	0	.	.	.	.

a. The reference category is: Ikan Asin.

b. This parameter is set to zero because it is redundant.

The multinomial logistic regression equation that is formed is as follows:

$g_1(x) = 31{,}946_0 + 0{,}000_{X1} - 3{,}335_{x2} + 18{,}199_{x2.1} + 16{,}359_{x2.2} + 20{,}851_{x3} - 0{,}072_{x4} - 2{,}579_{x5}$

$g_2(x) = 2{,}134_0 + 0{,}000_{X1} - 21{,}481_{x2} + 0{,}496_{x2.1} - 2{,}122_{x2.2} + 3{,}276_{x3} - 0{,}042_{x4} - 2{,}349_{x5}$

$g_3(x) = -2{,}533_0 + 0{,}000_{X1} + 1{,}385_{x2} + 2{,}736_{x2.1} + 0{,}868_{x2.2} + 0{,}047_{x3} + 0{,}006_{x4} - 0{,}266_{x5}$

Variables are said to be significant if they have a significance value of less than 0.10 (10%). Partial testing on g1 (x) p value on age, education and ethnicity variables <0.10, it can be concluded that the age and ethnic variables affect the selection of processed fish. Odd ratio value at age is 0.930, this shows that if the age of consumers increases by 1 year, it has the opportunity to choose fish jelly 0.930 times compared to salted fish. Odd ratio value in education is more than 8, this shows that junior high school education has the opportunity to choose fish jelly more than 8 times compared to salted fish. Odd ratio value in the tribe is 0.076, this shows that the Sundanese tribe has the opportunity to choose 0.076 fish jelly compared to salted fish. Partial test on g2 (x) p value on sex variable <0.10, it can be concluded that gender variable influences the choice of processed fish. Odd ratio value for sex is 26,480. This shows that female consumers have the opportunity to choose 26,480 canned fish compared to salted fish. Due to the partial testing on g3 (x) p value for all variables> 0.10, it can be concluded that each variable is not suitable for the choice of processed fish.

Conclusion

Based on binary logistic regression analysis, at the "X" and Sederhana Markets, the Wald test results show that education and age variables influence the preference between fresh fish and processed fish. Wald's test results for the preference between fresh sea fish and freshwater fish only influenced education in the "X" Supermarket. In Sederhana Market that Wald test results show that the age variable influences the preference between fresh sea fish and freshwater fish. Based on multinomial logistic regression analysis, the results of testing the factors that influence the selection of processed fish with fish jelly in the "X" Supermarkets are income, sex, and age. At the Sederhana Market the factors that influence the selection of processed fish compared to salted fish are age, education, ethnicity, and gender

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References

[1] Suhartini, S., and N. Hidayat. 2005, "Processed Fresh Fish", Trubus Agrisarana. Jakarta
[2] Dispangtan. 2019, "Data on Fish Consumption Level in Bandung City", Publisher: Dispangtan. Bandung
[3] Ministry of Maritime Affairs and Fisheries. 2018, "Annual Report of the Ministry of Maritime Affairs and Fisheries 2017", Jakarta. 68 p.Pratisti, C. 2017. Fish Consumption Model for Young Consumers [Study in Yogyakarta]. Faculty Of Economics And Business. IBI Darmajaya
[4] Jannah, M R ,. 2018, "Factors Affecting Rice Demand in Makassar City", Essay. Hasanuddin University. Makassar
[5] Department of Cooperatives, SMEs & Industry of Bandung. 2015, "Discussion of Modern Markets in Bandung City in 2013-2015", Bandung: DISKUKM and PERINDAG
[6] Dignified Market Regional Company of the City of Bandung. 2016, "Bandung city market data 2016", Bandung, West Java, Indonesia: Dignified Market Regional Company Bandung.
[7] Azimah, D., Martini, R., and Ghulam, D. M. 2013, "Contribution of Traditional and Modern Markets to the Original Revenue of the City of Semarang in 2011", Journal of Government Science. Volume 2. UNDIPZainudin, Z. 2018. Analysis of Service Quality Factors at Xyz Jakarta Restaurant. Journal of Management and Business Research (JRMB) Faculty of Economics UNIAT 3 (1); 53-58
[8] Nasution. 2009, "Research Methods (Scientific Research)", Jakarta: Earth Literacy.
[9] Sokib, N., Palupi, N.S., and Suharjo, B. 2012, "Strategies for increasing fish consumption in the City of Depok, West Java", IKM Management, 7 (2), 166-171.
[10] Khomsan, A. 2010,"Food and Nutrition for Health", Jakarta: PT. King. Grafindo Persada.
[11] Bank Indonesia. 2013,"Pattern of Financing of Umkm Fish Processing Business in Bengkulu City", Bank Indonesia Representative Office Bengkulu Province: Bengkulu.
[12] Resty, N. A., Kusai., And Zulkarnain. 2017, "Analysis of Sea Fish Consumer Behavior in Arengka Traditional Market in Pekanbaru City, Riau Province", Faculty of Fisheries and Marine Science. Riau University. Pekanbaru
[13] Can, M.F., A. Gunlu, dan H.Y. Can. 2015, "Fish Consumption Preferences and Factors Influencing It", Food Science and Technology' Vol 35 (2) :339–346