



ANALYSIS OF THE VISIT RATE AT THE IRIAN MARELAN SUPERMARKET DURING THE COVID-19 PANDEMIC

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ABSTRACT

Currently our country is experiencing a disaster due to a very dangerous virus that has claimed many lives or commonly referred to as COVID-19. The government had limited the operating hours of public places to prevent the spread of the virus. This has resulted in disruption of economic activities, one of which is the Irian Supermarket & Dept Store. This research was conducted to determine how the level of visits to Irian with the Spearman Rank Correlation method. From the results of the Spearman Rank correlation analysis carried out, the calculated value is 0.307 with a positive sign which indicates a low level of relationship and it is concluded that the level of visits is not influenced by the application of health protocols but is influenced by facilities and sales techniques, This can also be seen in the results of the t-test. The result of count obtained is 3.20 shows that the variable level of visits has a significant correlation with purchasing decisions.

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1. INTRODUCTION

Currently our country is experiencing a disaster due to a very dangerous virus that has claimed many lives or commonly referred to as COVID-19. According to Ibadurahman (2020) COVID-19 is an infectious disease caused by acute respiratory syndrome. This disease was first discovered in the city of Wuhan, China and has since spread globally, resulting in the 2019 coronavirus pandemic. Several policies implemented by the government to stop the spread of this virus are implementing the COVID-19 health protocol. The health protocol is a rule that must be followed by all parties so that they can carry out their activities safely and avoid the transmission of COVID-19. We must follow the government's recommendations for the safety of many people. This is one of the reasons that underlies researchers to conduct research in one of the public places, namely supermarkets because supermarkets are public places where there are usually many people, so of course they are vulnerable to the spread of COVID-19. Researchers conducted research in Irian Supermarket & Dept store.

After the Pandemic, the Irian Supermarket & Dept Store experienced a decrease in the number of visits, resulting in several changes, such as: the closure of the I Zone facilities, Cafes that did not allow visitors to eat on site, the closure of several Food Centers, and a decrease in consumer visits as seen from the Parking Areas that were not busy as usual. After the implementation of this new normal, the situation in Irian Supermarket & Dept. Store began to show a change in visits. To know thoroughly how the visit rate of Irian Supermarket & Dept Store during the COVID-19 Pandemic is certainly needed a research.

Therefore, researchers are interested in conducting research on visits in Irian Supermarkets & Dept Stores during the COVID-19 Pandemic.

2. RESEARCH METHODE

2.1 Theoretical Basis

2.1.1 COVID-19 Pandemic

Before discussing the COVID-19 pandemic, the researcher will explain what COVID-19 is. As explained in the background, COVID stands for corona virus disease which means it is a disease caused by the corona virus, and this disease occurred in 2019 so that the emergence of COVID-19. This disease is an easily contagious disease whose sufferers have characteristics such as fever above 38°C, cough and rapid and irregular breathing. At first this virus only occurred in China, so this virus occurred in an epidemic, but due to an increase in cases and this virus began to spread to various countries, it is said that this virus is a pandemic. So a pandemic is a significant increase in the number of cases that occur not only in a region, but even a continent. So that the COVID-19 pandemic discovered a disease caused by the corona virus and occurred in 2019 where the spread of this disease was not only in one region but on a continent.

2.1.2 Irian Supermarket

Irian Supermarket & Dept. Store is the largest supermarket in Marelan which is located on Jl. Marelan Raya Pasar II No. 188. Irian Supermarket & Dept. This store is one of the companies engaged in retail / sales that sells various consumer needs. This supermarket is equipped with a shopping center / dept store, a family entertainment center or known as the I Zone and other facilities such as a Food Center and a large parking area like a modern development center.

2.1.3 Supermarket Visit

According to Asri (1991) Supermarket or supermarket is a form of business that provides various kinds of consumer needs. In KBBI, the meaning of the word consumer is the user of manufactured goods. In this case, it is necessary to know what consumer behavior is. Consumer behavior is the things that consumers have to make purchasing decisions, and in the decision-making process in the purchases they make. Consumer behavior is divided into two, namely rational which means a consumer in purchasing goods and services which are aspects of needs. Irrational consumer behavior is consumer behavior that is easily persuaded by marketing appeals from a product without aspects of need or interest.

2.1.4 Factors Affecting Supermarket Visits.

In this study, the factors that influence supermarket visits are the facilities provided by the supermarket, the completeness of the product, the price given, the promotions offered, and the completeness of the health protocol provided by the Irian Supermarket & Dept. Store.

2.2 Correlation Coefficient

According to Sarwono (2011) Correlation coefficient is a statistical measurement of covariance or association between two variables. The magnitude of the correlation coefficient ranges from +1 to -1. The correlation coefficient shows the strength (strength) of the relationship and the direction of the relationship between two variables.

TABLE 3.2 Level of relationship in correlation analysis analysis

Interval Koefisien	Relation Level
0,00 - 0,19	Very Low
0,20 - 0,39	Low
0,40 - 0,59	Medium
0,60 - 0,79	Strong
0,80 - 0,99	Very Strong
1	Perfect

In this study, researchers used the Spearman Rank Correlation test.

1. Spearman Rank Correlation

Quoted from the book (Siregar, 2017) Spearman rank correlation is used to test the relationship between two research variables for non-parametric statistics (ordinal scale). In the Spearman rank correlation, ranking is carried out on the data, after which the correlation test is carried out.

Spearman rank correlation test formula:

$$r_s = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}$$

If there are many equal scores using the correction formula:

$$r_s = \frac{\sum x^2 + \sum y^2 + \sum d_i^2}{2\sqrt{\sum x^2 \sum y^2}}$$

3. RESULT AND ANALYSIS

The results in the research that has been done are:

1. A description of the research site during the COVID-19 pandemic before and after the new normal, a description of the visit to Irian Supermarket & Dept. Store before and after the new normal, a description of COVID-19 health protocol before and after the new normal.
2. Description of Characteristics Analysis of Respondents based on age and gender in tabular form.
3. A description of the descriptive statistical analysis of research variables based on the results of respondents' answers regarding the level of visits and the implementation of the COVID-19 health protocol in tabular form.
4. Perform spearman rank correlation test.

Because many scores are the same, the formula used is:

$$r_s = \frac{\sum x^2 + \sum y^2 - \sum d_i^2}{2\sqrt{\sum x^2 \sum y^2}}$$

With formula: $\sum x^2 = \frac{N^3 - N}{12} - \sum T_x$ $\sum y^2 = \frac{N^3 - N}{12} - \sum T_y$

and to find $\sum T$ using the formula:

$$\sum T = \frac{t^3 - t}{12}$$

TABLE 4.7 Conversion from Interval Data to Ordinal Data

RESPONDENT	Raw Data in the Form of Intervals				Data Converted To Original Form		d	d ²
	Not Sorted		Already Sorted		RANGKING X	RANGKING Y		
	X	Y	X	Y				
1	27	21	36	27	1	1,5	-0,5	0,25
2	31	21	34	24	4	18,5	-14,5	210,25
3	31	21	34	23	4	34,5	-30,5	930,25
4	27	21	34	24	4	18,4	-14,4	207,36
5	27	21	34	22	4	54	-50	2500
6	30	27	34	23	4	34,5	-30,5	930,25
7	27	20	33	24	10	18,5	-8,5	72,25
8	25	20	33	24	10	18,5	-8,5	72,25
9	28	21	33	22	10	54	-44	1936
10	31	25	33	19	10	100	-90	8100
11	36	27	33	22	10	54	-44	1936
12	31	24	33	23	10	34,5	-24,5	600,25
13	31	21	33	22	10	54	-44	1936
14	31	22	32	22	20	54	-34	1156
15	26	21	32	25	20	7	13	169
16	33	24	32	25	20	7	13	169
17	28	20	32	23	20	34,5	-14,5	210,25
18	32	22	32	23	20	34,5	-14,5	210,25
19	34	24	32	20	20	95	-75	5625
20	28	21	32	21	20	78,5	-58,5	3422,25

20	28	21	32	21	20	78,5	-58,5	3422,25
21	31	22	32	22	20	54	-34	1156
22	28	22	32	21	20	78,5	-58,5	3422,25
23	25	20	32	23	20	34,5	-14,5	210,25
24	28	21	32	24	20	18,5	1,5	2,25
25	32	25	32	23	20	34,5	-14,5	210,25
26	31	21	32	20	20	95	-75	5625
27	31	21	31	21	34	78,5	-44,5	1980,25
28	27	21	31	21	34	78,5	-44,5	1980,25
29	26	21	31	25	34	7	27	729
30	33	24	31	24	34	18,5	15,5	240,25
31	28	20	31	21	34	78,5	-44,5	1980,25
32	28	24	31	22	34	54	-20	400
33	34	23	31	22	34	54	-20	400
34	26	20	31	21	34	78,5	-44,5	1980,25
35	27	21	31	21	34	78,5	-44,5	1980,25
36	30	21	31	21	34	78,5	-44,5	1980,25
37	24	23	31	21	34	78,5	-44,5	1980,25
38	29	22	31	23	34	34,5	-0,5	0,25
39	29	23	31	24	34	18,5	15,5	240,25
40	30	21	31	24	34	18,5	15,5	240,25
41	29	23	31	20	34	95	-61	3721
42	31	21	30	27	49,5	1,5	48	2304
43	32	25	30	21	49,5	78,5	-29	841
44	33	22	30	21	49,5	78,5	-29	841
45	32	23	30	22	49,5	54	-4,5	20,25
46	32	23	30	23	49,5	34,5	15	225
47	31	21	30	24	49,5	18,5	31	961
48	28	24	30	25	49,5	7	42,5	1806,25
49	30	22	30	22	49,5	54	-4,5	20,25
50	30	23	30	24	49,5	18,5	31	961
51	30	24	30	22	49,5	54	-4,5	20,25
52	28	24	30	22	49,5	54	-4,5	20,25
53	28	24	30	22	49,5	54	-4,5	20,25
54	33	19	30	24	49,5	18,5	31	961
55	33	22	30	22	49,5	54	-4,5	20,25
56	29	22	30	24	49,5	18,5	31	961
57	34	24	30	24	49,5	18,5	31	961
58	29	22	29	22	64	54	10	100
59	27	26	29	23	64	34,5	29,5	870,25
60	32	20	29	23	64	34,5	29,5	870,25
61	30	25	29	22	64	54	10	100
62	28	23	29	22	64	54	10	100
63	32	21	29	21	64	78,5	-14,5	210,25
64	31	23	29	23	64	34,5	29,5	870,25
65	28	22	29	22	64	54	10	100
66	32	22	29	22	64	54	10	100
67	30	22	29	25	64	7	57	3249
68	32	21	29	22	64	54	10	100
69	34	22	29	21	64	78,5	-14,5	210,25
70	29	21	29	21	64	78,5	-14,5	210,25
71	31	24	28	21	78,5	78,5	0	0

72	30	24	28	20	78,5	95	-16,5	272,25
73	28	24	28	21	78,5	78,5	0	0
74	29	23	28	22	78,5	54	24,5	600,25
75	30	22	28	21	78,5	78,5	0	0
76	30	22	28	20	78,5	95	-16,5	272,25
77	28	22	28	24	78,5	18,5	60	3600
78	33	23	28	24	78,5	18,5	60	3600
79	29	22	28	24	78,5	18,5	60	3600
80	32	23	28	24	78,5	18,5	60	3600
81	31	24	28	23	78,5	34,5	44	1936
82	34	23	28	22	78,5	54	24,5	600,25
83	28	22	28	24	78,5	18,5	60	3600
84	32	24	28	22	78,5	54	24,5	600,25
85	29	22	28	22	78,5	54	24,5	600,25
86	30	22	28	26	78,5	3,5	75	5625
87	30	24	27	21	90	78,5	11,5	132,25
88	29	25	27	21	90	78,5	11,5	132,25
89	26	22	27	21	90	78,5	11,5	132,25
90	32	23	27	21	90	78,5	11,5	132,25
91	31	20	27	20	90	95	-5	25
92	29	22	27	20	90	95	-5	25
93	29	21	27	20	90	95	-5	25
94	30	22	26	20	95,5	95	0,5	0,25
95	29	21	26	20	95,5	95	0,5	0,25
96	30	24	26	20	95,5	95	0,5	0,25
97	30	24	26	20	95,5	95	0,5	0,25
98	33	22	25	20	98,5	95	3,5	12,25
99	28	26	25	20	98,5	95	3,5	12,25
100	32	20	24	23	100	34,5	65,5	4290,25
TOTAL								112312,11

In table 4.7 it is known that as many as 10 samples have the same score, therefore the formula used is the second formula, but before looking for the formula, it is necessary to find T_x and $T_y \cdot T_y$ and

T_x : Score 34 has the same five digits, so $t = 5$, score of 33 has the same seven digits, so $t = 7$, score 32 has the same thirteen digits, so $t = 13$, score of 31 has fifteen equal numbers, so $t = 15$, score of 30 has the same sixteen digits, so $t = 16$, score 29 has the same twelve digits, so $t = 12$, score 28 has the same sixteen digits, so $t = 16$, score of 27 has the same seven digits, so $t = 7$, score 26 has the same four digits, so $t = 4$, score of 25 there are two numbers that are the same, so $t = 2$.

T_y : Score 27 has the same two digits, so $t = 2$, score of 26 has the same two digits, so $t = 2$, score 25 has the same five digits, so $t = 5$, score of 24 has seventeen equal numbers, so $t = 17$, score of 23 has the same fourteen digits, so $t = 14$, score 22 has the same twenty five digits, so $t = 25$, score 21 has the same twenty four digits, so $t = 24$, score of 20 has the same nine digits, so $t = 9$.

$$\begin{aligned} \sum T_x &= \frac{t^3 - t}{12} \\ &= \frac{5^3 - 5}{12} + \frac{7^3 - 7}{12} + \frac{13^3 - 13}{12} + \frac{15^3 - 15}{12} + \frac{16^3 - 16}{12} + \frac{12^3 - 12}{12} + \frac{16^3 - 16}{12} + \frac{7^3 - 7}{12} + \\ &\quad \frac{4^3 - 4}{12} + \frac{2^3 - 2}{12} \\ &= 10 + 28 + 182 + 280 + 340 + 143 + 340 + 28 + 5 + 0,5 \\ &= 1357 \end{aligned}$$

$$\begin{aligned} \sum T_y &= \frac{t^3 - t}{12} \\ &= \frac{2^3 - 2}{12} + \frac{2^3 - 2}{12} + \frac{5^3 - 5}{12} + \frac{17^3 - 17}{12} + \frac{14^3 - 14}{12} + \frac{25^3 - 25}{12} + \frac{24^3 - 24}{12} + \frac{9^3 - 9}{12} \end{aligned}$$

$$= 0,5 + 0,5 + 10 + 408 + 227,5 + 1300 + 1150 + 60$$

$$= 3157$$

So that:

$$\sum x^2 = \frac{100^3 - 100}{12} - 1357 \qquad \sum y^2 = \frac{100^3 - 100}{12} - 3157$$

$$= 81,969 \qquad \qquad \qquad = 80,168$$

5. Calculation of test statistic formula

$$r_s = \frac{\sum x^2 + \sum y^2 - \sum d_i^2}{2\sqrt{\sum x^2 \sum y^2}}$$

$$= \frac{81,969 + 80,168 - 112312,1}{2\sqrt{81,969 \cdot 80,168}}$$

$$= \frac{49,825}{162127} = 0,307$$

6. Calculating ρ table values

Because the sample from the research value is more than 30 samples, the table does not exist, so to find the ρ table using t count. After obtaining the t-count value, then for the significance test it is compared with the t-table value. Looking for a table with the t arithmetic formula, the results are as below.

$$t = rho_{xy} = 0,307 \sqrt{\frac{100-2}{1-0,307^2}}$$

$$= 0,307 \sqrt{\frac{98}{0,90}}$$

$$= 0,307 \cdot 10,43$$

$$= 3,20$$

From the results of the calculation of the test formula, it can be seen that the calculated value is 0.307 with a positive sign, where the variable coefficient is in the interval 0.20 - 0.39. In accordance with the interpretation of the strong correlation relationship according to ((Sugiono: 2014) in Ria, 2018) the interval coefficient of 0.20 - 0.39 indicates a low level of relationship. It can also be seen in the results of the t-test. The t-count results obtained are 3.20 and when compared with the t-table of 1.98. From these results it is known that t count $3.20 > 1.98$ t table shows that the variable level of visits is significantly correlated with purchasing decisions.

4. CONCLUSIOON

From the results of the correlation analysis that has been carried out, it is known that the correlation between the analysis of visits and the implementation of the COVID-19 protocol has a low, positive and significant relationship level, which means that there is a low relationship between the level and the implementation of the COVID-19 protocol but has a positive and significant direction. .

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