

The Effect of Marketing Mix and Health Consciousness on Purchase Decisions of Sanitary Products



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ABSTRACT: The COVID-19 pandemic has raised public awareness of the link between health and sanitation, which has resulted in a rise in the demand for sanitation supplies like hand sanitizer and hand soap. Consumer behavior towards sanitary products has changed. The long-term impact of the pandemic on the effect of the marketing mix and health consciousness on consumer decisions to buy sanitary products in Indonesia still needs to be analyzed.

The purpose of this study is to look at the effect of the marketing mix (product, price, place, and promotion) and health consciousness on sanitary product purchases. Measurement of these variables was carried out using relevant indicators with a Likert scale of 1-5. The data were analyzed using Lisrel 8.80 software, which included a structural equation model (SEM). Data collection was carried out through questionnaires (online surveys) by applying purposive sampling techniques. The research sample consisted of 250 respondents with characteristics as all Indonesian people aged at least 12 years old, had purchased sanitary products in Indonesia.

Based on analysis using the SEM Lisrel 8.80 method, it was discovered that purchasing decisions are significantly positively affected by the marketing mix. Marketing mix has a significant effect but a weakening effect on health consciousness. Health consciousness has a positive and significant effect on purchasing decisions. Health consciousness has been shown to mediate the effect of the marketing mix on purchasing decisions, but it is weakened. Thus, it is possible to conclude that the marketing mix and health consciousness are essential factors in enhancing sanitary product purchasing decisions.

KEYWORDS: Marketing Mix, Health Consciousness, Purchase Decision, Sanitary Products

I. INTRODUCTION

The Corona Virus Disease 2019 (COVID-19) pandemic has had a significant effect on economies across the globe, including Indonesia. As the virus rapidly spread across the globe, Indonesia was not spared, experiencing significant implications on its trade and investment sectors. In response to this pandemic, various measures, including the implementation of health protocols, have been undertaken to prevent the further transmission of the virus. The 3M health protocols, which include wearing masks, maintaining physical distance, and performing regular handwashing, are among the most important protocols that have become embedded in society. These simple but effective techniques for reducing COVID-19 transmission have been extensively used. The 3M health protocols have become a mandatory requirement until the pandemic subsides.

Amidst this pandemic, the demand for personal protective equipment (PPE) has surged, particularly in the healthcare sector. PPE plays an important role in protecting individuals against COVID-19, and its availability is essential for healthcare professionals. The Solidarity Movement Against COVID-19 has identified Indonesia's need for 3.8 million units of PPE, highlighting the importance of adequate protective gear for healthcare workers. The necessary PPE includes masks, hand sanitizers, eye protection, face shields, medical gowns, gloves, head covers, and shoe covers. Furthermore, consumer behavior has changed significantly as a result of the COVID-19 pandemic, both globally and in Indonesia. Consumers have shifted their preferences towards products and services that prioritize personal health and hygiene. Maintaining personal health and hygiene has become paramount, and individuals are increasingly aware of the importance of sanitation practices.

Sanitation, defined as efforts to create and maintain a healthy environment, has gained heightened importance during the pandemic. It has an important function in preventing and reducing the danger of COVID-19 transmission. Consequently, sanitation products have become more crucial than ever before. Before the pandemic, consumers might not have paid much attention to sanitation products such as handwashing soap, hand sanitizers, wet wipes, and gloves, except in certain contexts,

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such as illness or travel to high-risk areas. However, the COVID-19 pandemic has compelled individuals to take their health and hygiene seriously, resulting in a surge in demand for sanitation products. Effective marketing strategies can significantly influence customer purchasing decisions both before and after the pandemic. Companies that develop and market products with competitive pricing, effective promotion, and seamless delivery meet consumer expectations. Popular sales promotion tactics such as discounts and influencer marketing have been widely employed during the pandemic by companies marketing sanitation products. Effective promotion strategies leveraging social media and online platforms have a profound effect on consumer purchasing decisions.

In this context, the marketing of sanitation products has shifted its focus from general health and hygiene promotion to addressing the new habits and expectations of consumers in maintaining their health. The purpose of this paper is to investigate how effective marketing methods influence customer purchasing decisions for sanitation products, both during and post-pandemic, with a specific focus on the Indonesian market. By examining consumer behavior and analyzing marketing strategies, this research seeks to provide insights into the evolving dynamics of the sanitation product market and offer recommendations for companies operating in this sector. Overall, understanding the effect of effective marketing strategies on consumer purchasing decisions for sanitation products is vital for businesses to navigate the changing landscape brought about by the COVID-19 pandemic. By adapting their marketing approaches to meet consumer demands, companies can not only address public health concerns but also seize the opportunities presented by this dynamic market.

II. LITERATURE REVIEW

A. Marketing Mix

The marketing mix, often known as the 4Ps (product, price, promotion, and place), plays a critical role in influencing consumer behavior and purchasing decisions. These four factors are combined, and they are all related to one another and have an impact on one another (Dharmesta & Handoko, 2000). The marketing mix is critical in developing effective strategies that prioritize customer satisfaction and achieve organizational goals.

A product is anything that can be provided to the market to attract attention and then acquired, used, or consumed to satisfy customer needs or desires. Packaging, price, quality, brand, and related services are examples of tangible and intangible features that fall under this category (Kotler & Armstrong, 1997; Stanton, 1996; Tjiptono, 2008). Price is the amount of value that is exchanged for ownership or use of a product or service. It influences consumer perceptions and purchasing decisions significantly. Costs, competition, customer demand, and perceived value should all be considered when developing pricing strategies to ensure profitability and customer satisfaction. Promotion includes a variety of activities that communicate and promote the value and benefits of a product or service. It includes advertising, sales promotion, public relations, and personal selling. According to Kotler and Armstrong (1997), the implementation of efficient promotional methods is vital to raise awareness, stimulate interest, and affect customer behavior. Place describes the locations and distribution routes that customers can use to access products and services. It involves decisions about availability, logistics, and physical distribution. Products are delivered to clients quickly and easily with the use of an efficient location strategy, which improves accessibility and customer satisfaction (Kotler & Armstrong, 1997). Organizations may create successful marketing strategies, cultivate enduring customer connections, and achieve sustainable growth and profitability by comprehending and optimizing the marketing mix.

B. Purchase Decision

The purchase decision-making process is an important component of consumer behavior and marketing strategy. It involves a variety of elements that influence the decisions made by customers when purchasing goods or services (Engel et al., 1994). Purchase decisions are greatly influenced by psychological variables like perception and attitudes as well as personal characteristics like age, money, and lifestyle. Consumer decisions are also influenced by social variables, such as culture, family, and peer groups (Nurmawati, 2019). Purchase decisions are also greatly influenced by the components of the marketing mix, which include place, price, promotion, and product. Purchase decisions are greatly influenced by the marketing mix, which consists of place, price, promotion, and product (Kotler, 2016). Product characteristics, quality, packaging, and brand reputation can all affect consumer perceptions of value. Pricing strategies, such as discounts or promotional offers, can sway consumers' decision-making process. Effective promotional activities, including advertising or sales promotions, can create awareness and affect consumers' purchase decisions. Decision-making about product purchases is also influenced by the accessibility and availability of the products via distribution channels (place).

For businesses to create marketing strategies that work, it is essential to understand the elements influencing consumer purchasing decisions. Psychological factors, social influences, environmental circumstances, and marketing mix all have a substantial effect on customer decision-making (Swastha and Irawan, 2017). Businesses can adjust their marketing

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strategies to match customer needs, build brand loyalty, and eventually affect buying choices by taking these aspects into account. Finally, the marketing mix elements - product, price, promotion, and place - affect consumers' perceptions of value and accessibility.

H_{1(a-d)} : The effect of the 4Ps marketing mix (product, price, promotion, place) on purchasing decisions

H_{2(a-d)} : The effect of the 4P marketing mix (product, price, promotion, place) on health consciousness

C. Health Consciousness

Health consciousness can be defined as an individual's awareness of, concern for, and active participation in preserving and promoting their physical, mental, and emotional well-being. It encompasses a range of behaviors, attitudes, and beliefs related to healthy living, preventive healthcare, and self-care practices (Gould et.al in Hye Hyun Hong, 2009). Various measurement scales have been developed to assess health consciousness, including self-report questionnaires and observational methods, to capture its multidimensional nature (Becker et al., 1984).

Health consciousness has a big impact on people's well-being. According to research, those who have higher levels of health consciousness are more likely to engage in healthy behaviors like regular physical activity, balanced nutrition, and preventative healthcare consumption. They exhibit greater self-efficacy in managing their health, experience improved physical and mental health outcomes, and report higher levels of subjective well-being. Health-conscious individuals also tend to adopt positive coping strategies, engage in stress management techniques, and prioritize self-care practices, leading to enhanced overall well-being (Gould, 1988).

Moreover, health consciousness has a significant effect on public health initiatives and treatments. Higher health consciousness increases the likelihood that people will actively seek out health information, follow health recommendations, and take part in health promotion activities. (Gould, 1988). They are receptive to health campaigns, interventions, and educational programs aimed at improving health outcomes and reducing the burden of chronic diseases. Understanding the factors that shape health consciousness can assist policymakers and public health practitioners in designing targeted interventions that promote healthy behaviors and prevent disease.

In conclusion, health consciousness is a multifaceted concept that encompasses individuals' consciousness, attitudes, and behaviors toward maintaining and promoting their well-being. It affects individual lifestyle choices, preventive healthcare practices, and overall subjective well-being (Kraft and Goodell in Hye Hyun Hong, 2009). By Understanding the factors that affect health consciousness, policymakers and public health practitioners can develop effective interventions to foster healthy behaviors and improve population-level health outcomes. Further research is needed to explore the dynamic nature of health consciousness and its effect on individual and public health.

H₃ : The effect of health consciousness on purchasing decisions

H_{4(a-d)} : Mediation of Health Consciousness on the effect of 4Ps marketing mix (product, price, promotion, place) and Purchasing Decisions

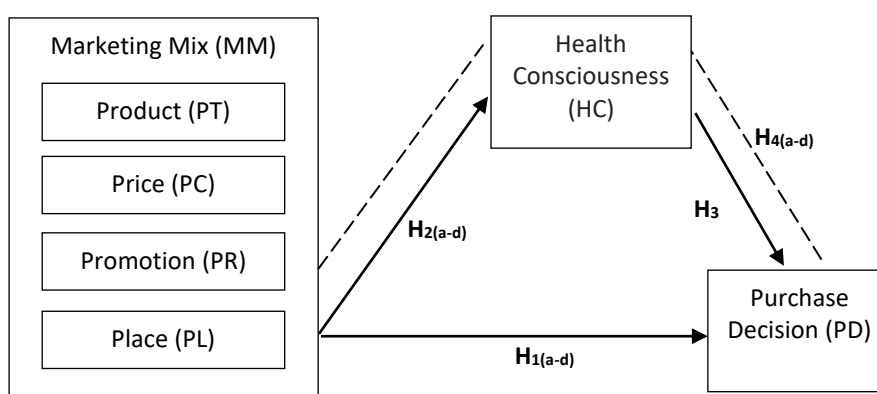


Figure 1. Conceptual Model

III. MATERIAL AND METHODS

This prospective comparative study was conducted on consumers who had purchased sanitary products in Indonesia from December 2023 to January 2024. A total of 250 respondents (both female and male) were involved in this study.

A. Study Design: Quantitative research uses the survey method of a questionnaire

B. Study Location: This study is based in Indonesia

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C. Study Duration: December 2023 to January 2024

D. Sample size: 250 respondents

E. Sample size calculation: The target of our sample was considered 250 samples. We assumed that the confidence interval of 10% and the confidence level of 95%. The sample size obtained for this study was 250 consumers of sanitary products in Indonesia.

F. Subjects & selection method: The population of this study are consumers who have transacted sanitary products in Indonesia between December 2023 and January 2024.

G. Inclusion criteria:

1. Consumers who have transacted and shopped for sanitation products (hand sanitizer, hand wash, wet tissue, medical gloves, and others) in Indonesia.
2. Be at least 12 years old

H. Procedure methodology

This research uses a survey method to collect data from respondents. We used Google Forms to collect respondents from Indonesia. Our questionnaire includes three variables, namely marketing mix (product, price, promotion, and place), health consciousness, and purchase decision. We used a 5-point Likert scale to measure each item (1 = strongly disagree, 5 = strongly agree). We distributed the questionnaires through social media daily. Our sample was consumers who had already transacted sanitary products in Indonesia. We also provided specific questions to ensure the suitability of potential respondents asking if they have ever transacted and shopped for sanitary products (hand sanitizer, hand wash, wet tissue, medical gloves, etc.) in Indonesia.

I. Statistical Analysis

This research uses a Structural Equation Model (SEM) with Linear Structural Relation (LISREL) v8.80 software. SEM is a statistical model used to find relationships between variables. SEM will analyze the structure of the relationship expressed in a set of equations that resemble multiple regression equations. All relationships between constructs (dependent and independent variables) in the research are shown in the analysis.

Table 1. Demographics of Respondents (n=250)

Items		Frequency	Percentage
Purchased Products	1-3 products	202	81%
	3-5 products	41	16%
	More than 5 products	7	3%
Number of products purchased	Hand sanitizer, Hand Antiseptic, Hand Rub	163	65%
	Hand wash	56	22,5%
	Wet tissue	28	11%
	More (Handscoon, etc)	3	1,5%
Gender	Male	85	34%
	Female	165	66%
Age	12-18 years	4	2%
	18-24 years	37	15%
	25-34 years	131	52%
	More than 35 years	78	31%
Education	SHS	50	20%
	Bachelors (S1)	167	67%
	Master (S2)	32	12,6%
	PhD (S3)	1	0,4%
Domicile	Western Indonesia	202	81%
	Central Indonesia	40	16%
	Eastern Indonesia	8	3%

Table 1 presents demographic information about the respondents of this study. The majority of respondents, 66% were female (n=165) and 34% were male (n=85). The majority of respondents in this study were aged 25-34 years (n=131). The majority of respondents' education level was undergraduate (n=167). The majority of respondents are located in Western Indonesia (n=202). The majority of respondents of the sanitation products most frequently purchased is hand sanitizer (n=163) and the number of products purchased in a purchase is 1-3 products (n=202).

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J. Measurement Items

Researchers will use 15 items derived from research (Madhyamapurush, et al., 2021), 4 items from (Hanaysha, et al., 2021), and 6 items from (Tran et al., 2020) to determine the effect of the marketing mix and health consciousness on purchasing decisions.

Table 2. Measurement Items

Items	STDEV	MEAN	G. MEAN	References
Products				
Self-sanitizing products are certified based on safety standards	0,82	4,28	3,98	(Madhyamapuru sh et al. 2021)
The personal sanitary products used are from well-known brands	0,95	3,73		
The self-sanitizing products used have many types	0,74	3,90		
Self-sanitizing products used can affect consumers' perceptions of these products (quality and benefits)	0,79	4,03		
Price				
Self-sanitizing products have prices that match the quality of the product	0,70	4,23	4,21	(Madhyamapuru sh et al. 2021)
The price of personal hygiene products is determined based on their type	0,63	4,20		
Price tags on personal hygiene products are clearly displayed	0,62	4,19		
Self-sanitizing products can be paid with various types of payments	0,64	4,22		
Promotion				
Self-sanitizing products are publicized through social media	0,83	3,99	4,21	(Madhyamapuru sh et al. 2021)
There are bonuses or bundling in product purchases	0,84	4,12		
There are special discounts that attract attention to shopping	0,73	4,26		
There is a promotion of self-sanitizing products at certain events or events	0,71	4,26		
Place				
There are various marketing media (website, social media) to find details of personal sanitation products	0,69	4,24	4,30	(Madhyamapuru sh et al. 2021)
Easily accessible in various places both offline stores or online stores in purchasing personal sanitation products	0,60	4,33		
Consumers can make payments both directly (cash) and digitally (online)	0,58	4,34		
Purchase Decision				
I often buy personal sanitation products to fulfill my personal sanitation needs.	0,78	4,14	3,96	(Hanaysha et al. 2021)
I usually buy several self-sanitizing products from well-known brands	0,91	3,81		

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I would recommend personal hygiene products from a particular brand to others.	0,87	3,74		
Overall, I am satisfied with my purchase of personal hygiene products from my preferred brand.	0,60	4,17		
Health Consciousness				
I am concerned about harmful chemicals in my personal hygiene products.	0,96	3,82	4,08	(Tran et al. 2020)
I pay attention to the quality of my personal hygiene products	0,78	4,05		
I usually read the detailed elements of my personal sanitary products	0,73	4,04		
I read more health-related articles	0,67	4,12		
I am interested in information about my health	0,61	4,28		
I am always worried about my health condition	0,71	4,20		

IV. RESULTS

A. Validity and Reliability

The latent variables of this research are marketing mix 4ps (product, price, promotion, place), health consciousness, and purchase decision. The result is shown in Table 3, the indicator is valid when the standard loading factor (SLF) is ≥ 0.50 . The indicators are reliable when the value of construct reliability (CR) value ≥ 0.70 and the average variance extracted (AVE) is ≥ 0.50 . As shown in Table 3, all the indicators are valid and reliable.

Table 3. Validity and Reliability Test Results (n=250)

Latent Variable	Indicators	SLF	CR	AVE	Information
Product	PT1	0,72	0,76	0,51	Valid & Reliable
	PT2	0,66			Valid & Reliable
	PT3	0,52			<i>Dropped</i>
	PT4	0,76			Valid & Reliable
Price	PC1	0,75	0,82	0,53	Valid & Reliable
	PC2	0,76			Valid & Reliable
	PC3	0,7			Valid & Reliable
	PC4	0,71			Valid & Reliable
Promotion	PR1	0,54	0,78	0,54	<i>Dropped</i>
	PR2	0,82			Valid & Reliable
	PR3	0,74			Valid & Reliable
	PR4	0,63			Valid & Reliable
Place	PL1	0,49	0,75	0,60	<i>Dropped</i>
	PL2	0,76			Valid & Reliable
	PL3	0,79			Valid & Reliable
Purchase Decision	PD1	0,66	0,82	0,54	Valid & Reliable
	PD2	0,79			Valid & Reliable
	PD3	0,74			Valid & Reliable
	PD4	0,74			Valid & Reliable
Health	HC1	0,51	0,81	0,52	<i>Dropped</i>

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Consciousness	HC2	0,85			Valid & Reliable
	HC3	0,75			Valid & Reliable
	HC4	0,64			Valid & Reliable
	HC5	0,58			Valid & Reliable
	HC6	0,61			Valid & Reliable

B. Overall Model Fit

Table 4 shows the result of goodness-fit-measurement. This research measures the value of Chi-Square, NCP, RMR, RMSEA, GFI, ECVI AGFI, CFI, NFI, NNFI, IFI, RFI, and Critical N. The result shows that RMR meets the criteria (0,025) or a good fit with the criteria good fit value $\leq 0,05$ or $\leq 0,01$ and the RMSEA also reaches the good fit (0,032) with the criteria good fit value $\leq 0,08$. Meanwhile, the other indexes of goodness-fit-measurement meet the criteria (GFI, ECVI AGFI, CFI, NFI, NNFI, IFI, RFI) with the criteria good fit value $\geq 0,9$. From the result, the model of this research represented the relationship between latent variables

Table 4. Overall Model Fit Test Result

Goodness of Fit	Cut off Value	Results	Information
Absolute Fit Measures			
Chi-square (df.161)	< 2df	202,91	Good Fit
Non-centrality Parameter (NCP)	$\approx 9,54 ; 82,43$	41,91	Good Fit
Root Mean Square Residual (RMR)	$\leq 0,05$	0,025	Good Fit
Root Mean Square Error of Approximation (RMSEA)	$\leq 0,08$	0,032	Good Fit
Goodness of Fit Index (GFI)	$\geq 0,9$	0,93	Good Fit
Expected Cross Validation Index (ECVI)	ECVI for Saturated Model ≈ 1.86	1,38	Good Fit
Incremental Fit Measures			
Adjusted Goodness of Fit Index (AGFI)	$\geq 0,9$	0,90	Good Fit
Comparative Fit Index (CFI)	$\geq 0,9$	0,99	Good Fit
Normed Fit Index (NFI)	$\geq 0,9$	0,96	Good Fit
Non-Normed Fit Index (NNFI)	$\geq 0,9$	0,99	Good Fit
Incremental Fit Index (IFI)	$\geq 0,9$	0,99	Good Fit
Relative Fit Index (RFI)	$\geq 0,9$	0,95	Good Fit
Other GOFI			
Critical N (CN)	> 200	256,91	Good Fit

C. Structural Model

This research uses SEM-LISREL v8.80 to calculate the T-value and path coefficient to obtain the results. Figure 1 shows the results of the structural model of this research. We tested whether a good marketing mix can generate health consciousness to create purchasing decisions, and also tested the effect of the marketing mix and health consciousness which might increase purchasing decisions. This research uses a significance level of 0.05 or a confidence level of 95%. Items at a significance level of 0.05 must have a t value > 1.96 . The research results show that product, price, promotion, and place have a significant effect on purchasing decisions (2.62; -5.33; -2.25; 2.27) product, price, promotion, and place have a significant but weakening effect on health consciousness (6.8; 4.04; 2.36; -2.25), health consciousness has a significant effect on purchasing decisions (4.33) and mediation test of the effect of the marketing mix (product, price, promotion, and place) on purchasing decisions through health consciousness has a significant but debilitating effect (3.87; 2.9; 2.02; -2.08)

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These results show that H₁ and H₃ are supported and have a positive and significant effect, and H₂ and H₄ are supported and have a negative and significant effect. This considers that the marketing mix and health consciousness have a significant effect on purchasing decisions for sanitation products. This structural model represents the results of the relationship between variables.

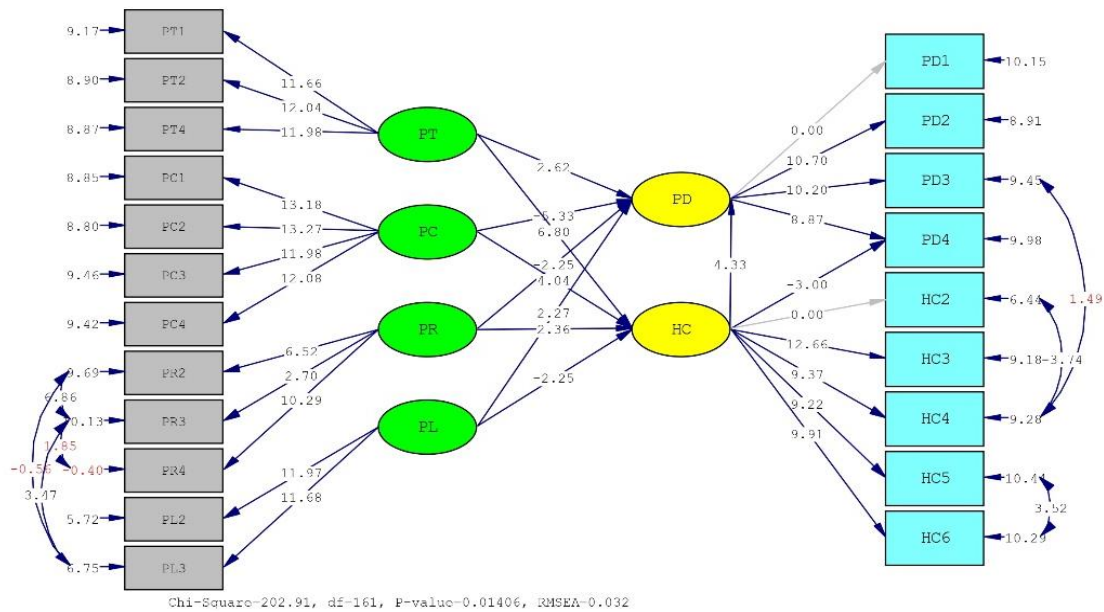


Figure 2. Structural Model

V. DISCUSSION

This research uses the LISREL v8.8 SEM analysis tool. After carrying out descriptive analysis, analysis was carried out to determine the relationship between variables. This research consists of four hypotheses consisting of marketing mix (product, price, promotion, and place), health consciousness, and purchase decisions. The research results show that all hypotheses are accepted. After seeing the model's validity, reliability, and goodness of fit, hypothesis testing is carried out. Hypothesis Test Results can be seen in Table 6 below:

Table 6: Hypothesis Testing

Hypothesis	T-table	T-value	Result
H _{1a} Product → Purchase Decision	1,96	2,62	Supported
H _{1b} Price → Purchase Decision	1,96	-5,33	Supported
H _{1c} Promotion → Purchase Decision	1,96	-2,25	Supported
H _{1d} Place → Purchase Decision	1,96	2,27	Supported
H _{2a} Product → Health Consciousness	1,96	6,8	Supported
H _{2b} Price → Health Consciousness	1,96	4,04	Supported
H _{2c} Promotion → Health Consciousness	1,96	2,36	Supported
H _{2d} Place → Health Consciousness	1,96	-2,25	Supported
H ₃ Health Consciousness → Purchase Decision	1,96	4,33	Supported
H _{4a} Product → Health Consciousness → Purchase Decision	1,96	3,87	Supported
H _{4b} Price → Health Consciousness → Purchase Decision	1,96	2,9	Supported
H _{4c} Promotion → Health Consciousness → Purchase Decision	1,96	2,02	Supported
H _{4d} Place → Health Consciousness → Purchase Decision	1,96	-2,08	Supported

The product affects consumers' decisions to buy, according to the findings of testing the first hypothesis (H_{1a}), with a t-value of 2.62 which is higher than 1.96. According to earlier studies (Vanaprak & Boontheingtham, 2019; Buakhao, 2019; and Madhyamapurush et al., 2021), the outcomes of this hypothesis test are consistent. Price (H_{1b}) has a negative and significant effect on purchase decisions, according to the findings of the hypothesis test, with a t-value of -5.33, which is higher than 1.96. This study contradicts studies by Hanaysha et al. (2021), Voravodhi et al. (2018), Novela et al. (2016), and Siriporn et al. (2022) that demonstrate the positive effect of pricing considerations on the process of making a purchase decision. This research reveals that the price has a negative and significant effect. Therefore, the findings of this study align with those of Abdelhady et

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al.'s 2019 research, which demonstrates a statistically significant (negative) relationship between price and the choice to buy. With a t-value of -2.25, which is higher than 1.96, the testing of the H_{1c} hypothesis reveals that promotions have a negative and significant effect on purchasing decisions. Research by Abdelhady et al., 2019 and Madhyamapurush et al., 2021, which demonstrates that there is a statistically significant (positive) relationship between promotions and purchasing decision-making, is not consistent with this study. Nonetheless, the outcomes of this hypothesis test are consistent with the research results of Hanaysha et al.'s 2018 investigation. The results of the study indicate that purchasing decisions are negatively affected by sales promotions. Eleboda (2017) also found that sales promotions have a negative effect on customer purchase decisions. The place has a positive and significant effect on purchase decisions, according to the testing of the H_{1d} hypothesis, with a t-value of 2.27, which is higher than 1.96. This research is supported by other inquiries, including Hanaysha et al., 2018, Hanaysha et al., 2021, Ho et al., 2017, and Voravodhi et al., 2018. Place makes a significant positive difference in what people decide to purchase. Overall, the H_1 hypothesis's results indicate that purchase decisions are significantly affected by the marketing mix, which consists of product, price, promotion, and place. Product and place have a positive significant effect on purchasing decisions when examined from the four dimensions of the marketing mix factors; price and promotion have a negative and significant effect.

With a t-value of 6.80, which is higher than 1.96, the product has a positive and significant effect on health consciousness, according to the results of testing the H_{2a} hypothesis. Thus, in general, the product significantly and positively affects public health consciousness. The 4Ps marketing mix (product, price, promotion, and place) has a positive and significant effect on health consciousness, according to studies by Tran et al., 2021; Hsu et al., 2016; and others. With a t-value of 4.04, which is higher than 1.96, hypothesis H_{2b} , the subject of the next hypothesis testing, indicates that price has a positive and significant effect on health consciousness. These results support a study conducted in 2020 by Tran et al. that found a positive relationship between price and health consciousness. With a t-value of 2.36, which is higher than 1.96, the next hypothesis testing result, H_{2c} , indicates that promotion has a positive and significant effect on health consciousness. Therefore, promotion typically has a positive effect on raising public awareness of the significance of health-related items. Research by Tran et al., 2020, which claims that this marketing mix may affect the level of public knowledge of the importance of health if applied effectively, represents a piece of research that supports this claim. The following hypothesis testing result, H_{2d} , has a t-value of -2.25, which is higher than 1.96, and indicates that place has a substantial negative effect on health consciousness. The hypothesis test's results demonstrate how place has a negative effect on health consciousness. This contradicts studies by Hsu et al. (2016), Chaiorawan (2016), and Tran et al. (2020) that found that place was a significant factor. This indicates that when a consumer wants to purchase a product, place is the most crucial factor. People can access products more easily when they are available in multiple locations (Tran, et al., 2020). This study, however, is consistent with Huang et al.'s 2020 research, which found that the marketing mix elements of place, price, promotion, and product had little effect on health consciousness. Product, price, promotion, and place are the four dimensions of the marketing mix variables that have a significant effect on health consciousness, according to the overall results of the H_2 hypothesis test. Of these, the place has a significant negative effect on health consciousness, while the other three dimensions have positive and significant effects.

The test results for hypothesis H_3 reveal that health consciousness has a positive and significant effect on purchase decisions, with a t-value of 4.33, which is higher than 1.96. This indicates that the more the public's awareness of the importance of health, the more likely they are to purchase health-promoting products. The results of this research are in line with research conducted by Tran, et al., 2020 which found that health consciousness had a significant positive effect on purchasing decisions. Health consciousness is a person's level of awareness of the importance of health and a healthy lifestyle. The result that health consciousness is an important factor in purchasing decisions is also following research by Hsu et al., 2016.

The results of the H_{4a} hypothesis test indicate that health consciousness may act as a mediator between product effect and purchase decisions. The indirect coefficient value (indirect effect) of 0.36, which is higher than the direct coefficient value (direct effect) of 0.33, and the t-value of 3.87, which is higher than 1.96, both support this. This suggests that health consciousness acts as a mediator between items' positive effects on purchasing decisions. This is consistent with a study by Tran et al., 2020, which shows these two elements have a mediating function in the relationship between purchase decisions and the marketing mix. The results of the H_{4b} hypothesis test indicate that health consciousness may act as a mediator between price and purchase decisions. This is proven by the indirect coefficient (indirect effect) of 0.19, which is higher than the direct coefficient value (direct effect) of -0.52, and the t-value of 2.9, which is higher than 1.96. This indicates the level of health consciousness influences the positive effect of price on purchasing decisions. Purchase decisions will be affected by the rising health consciousness that results from more reasonably priced sanitation products. This is consistent with a study by Tran et al., 2020, which reveals that health consciousness has a mediating role in the direct connection between the marketing mix (product, price, promotion, and place) and consumer decision-making. The H_{4c} hypothesis was tested, and the results showed that health

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consciousness can operate as a mediator between the effect of promotions on purchasing decisions. The indirect coefficient value (indirect effect) of 0.08, which is more than the direct coefficient value (direct effect) of -0.12, and the t-value of 2.02, which is greater than 1.96, both demonstrate this. It indicates that health consciousness plays a role in mediating and influencing the positive effect of promotions on purchase decisions. Overall, the results of this hypothesis test indicate that health consciousness acts as a mediating factor between promotions and positive purchasing decisions. This is consistent with studies by Rahamat et al., 2022, and Tran et al., 2020, which show that consumers' purchase decisions are highly influenced by their level of health consciousness and the interaction between the marketing mix (product, price, promotion, and place). The testing of the H_{4d} hypothesis's results shows that health consciousness is not a significant mediator between place's effect on purchase decisions and health consciousness. This is supported by the t-value of -2.08, which is lower than the t-value of place on purchase decisions, which is 2.27. In addition, the direct coefficient value (direct effect) is 0.16, and the indirect coefficient value (indirect effect) is -0.09. This contradicts a study by Tran et al., 2020, which analyzed the direct positive effects of health consciousness and the 4Ps of marketing mix (product, price, promotion, and place) on purchasing decisions. The results of this hypothesis test indicate that there is a negative and significant effect of health consciousness as a mediator on place and purchase decisions. This is in line with research by Huang et al., 2022, which shows that, aside from the fact that health consciousness does not reinforce the positive connection between the marketing mix and consumers' tendency to make purchases, health consciousness is not a significant factor in product purchasing decisions. The results of the hypothesis test H₄ reveal that health consciousness has a significant effect on purchase decisions across all dimensions of the marketing mix factors (product, price, promotion, and place) (Tran et al., 2020; Chairawan, 2016). According to Huang et al. (2022), this indicates that health consciousness operates as a mediator between the marketing mix's effect on purchase decisions and place, but its negative effect decreases the relationship between both of them.

VI. CONCLUSION

The marketing mix, which includes product, price, promotion, and site, has significant effects on consumers' purchasing decisions for sanitation products. The study reveals that products with safety certifications and promotions through discounts and health events are perceived as most satisfying. However, renowned brands and social media publicity do not have optimal effects, and pricing, despite unclear labeling, is deemed appropriate. Consumers prefer accessible offline and online sales channels with flexible payment options. Furthermore, the marketing mix positively affects health consciousness but weakens it through the dimension of place. Health consciousness, on the other hand, significantly affects purchase decisions for sanitation products, as heightened consciousness of health leads to increased interest in health-related products. It acts as a mediating variable between the marketing mix variables and purchase decisions, with larger indirect effects compared to direct effects. Ultimately, for businesses to effectively design strategies that meet customer demands and preferences in the sanitation product market, they must comprehend the interaction between the marketing mix and health consciousness.

VII. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Although this study offers insightful information about how health consciousness and the marketing mix affect sanitary product purchases in Indonesia, it must be acknowledged that it has limitations. The limited generalizability of the results could be due to the small sample size and selective sampling technique. Furthermore, there is a chance of self-reporting bias due to the use of self-report measures. The cross-sectional design precludes the determination of causality and comprehension of dynamic interactions. Future studies could make use of larger and more varied populations, random sampling strategies, objective data-gathering methodologies, and longitudinal designs to overcome these constraints. In addition, investigating moderating factors, conducting comparative analyses across different regions, taking into account additional elements of the marketing mix, and designing intervention studies would help to gain a more complete understanding of consumer behavior and decision-making concerning sanitary products.

REFERENCES

- 1) Abadhanny Pribadi, R. (2019). Marketing Mix And Brand Image On Purchase Decision And Post Purchase Behaviour: Case Study Of Jogja Bay Waterpark. *Proceedings on Engineering Sciences*, 1(2), 883–900. <https://doi.org/10.24874/PES01.02.094>
- 2) Abdelhady, M. R. R., Fayed, H. A. K., & Fawzy, N. M. (n.d.). *The Influence of Airlines' Marketing Mix Elements on Passengers' Purchasing Decision- Making: The Case of FSCs and LCCs*.

The Effect of Marketing Mix and Health Consciousness on Purchase Decisions of Sanitary Products

- 3) Abidin, Z., & Triono, L. D. (2020). Fresh frozen fish consumer behavior: Effect of the mix and trust marketing on buying interest, purchase decision and customer satisfaction in E-commerce, silly fish Indonesia. *IOP Conference Series: Earth and Environmental Science*, 493(1), 012041. <https://doi.org/10.1088/1755-1315/493/1/012041>
- 4) Astuti, R., Silalahi, R. L. R., & Wijaya, G. D. P. (2015). Marketing Strategy Based on Marketing Mix Influence on Purchasing Decisions of Malang Apples Consumers at Giant Olympic Garden Mall (MOG), Malang City, East Java Province, Indonesia. *Agriculture and Agricultural Science Procedia*, 3, 67–71. <https://doi.org/10.1016/j.aaspro.2015.01.015>
- 5) Asyer, A. C., & Wijayadi, L. J. (2023). Kadar Hidrasi Kulit Tangan Akibat Penggunaan Hand Sanitizer Dan Cuci Tangan Pada Lansia Penghuni Dua Panti Werdha Jakarta Era Pandemi COVID-19. *Jurnal Penelitian*, 15(2).
- 6) Azzadina, I., Huda, A. N., & Sianipar, C. P. M. (2012). Understanding Relationship between Personality Types, Marketing-mix Factors, and Purchasing Decisions. *Procedia - Social and Behavioral Sciences*, 65, 352–357. <https://doi.org/10.1016/j.sbspro.2012.11.133>
- 7) Azize Sahin (2012), “The effects of Brand Experience and service quality on Repurchase Intention: The role of brand relationship quality”. *African Journal of Business Management* Vol.6 (45), pp. 11190-11201.
- 8) Banerjee. S.B. (2002). Corporate environmentalism: the construct and its measurement. *Journal of Business Research*, 55(3), 177-191.
- 9) Chai, Y.-C., Huang, Y.-F., & Dang, H.-S. (2017). Determining the Effects of Marketing Mix on Customers’ Purchase Decision Using the Grey Model GM(O,N)—Case Study of the Western style Coffeehouse Chains in Vietnam. *International Conference on System Science and Engineering*.
- 10) Chairawan, P. (n.d.). *FACTORS INFLUENCING THE PURCHASING INTENTION OF HEALTH CONSCIOUS CONSUMERS TO BUY ORGANIC FOOD*.
- 11) Chen, M.-F. (2011). The joint moderating effect of health consciousness and healthy lifestyle on consumers’ willingness to use functional foods in Taiwan. *Appetite*, 57(1), 253–262. <https://doi.org/10.1016/j.appet.2011.05.305>
- 12) Chang, K., Hsu, C., & Chen, M. 2019. How Green marketing, Perceived Motives and Incentives Influence Behavioural Intentions. *Journal Retailing Consumer Service*, 389-413.
- 13) DiPietro, R. B., Remar, D., & Parsa, H. G. (2016). Health consciousness, menu information, and consumers’ purchase intentions: An empirical investigation. *Journal of Foodservice Business Research*, 19(5), 497–513. <https://doi.org/10.1080/15378020.2016.1189744>
- 14) Fawi, N. M. T., & Abdalla, M. O. M. (2013). Milk Preferences of Consumers and Effect of the Marketing Mix on Consumers’ Purchase Decision of Dairy Products. *Indian Journal of Marketing*, 43(2), 57. <https://doi.org/10.17010/ijom/2013/v43/i2/34052>
- 15) Fuxman, L., Mohr, I., Mahmoud, A. B., & Grigoriou, N. (2022). The new 3Ps of sustainability marketing: The case of fashion. *Sustainable Production and Consumption*, 31, 384–396. <https://doi.org/10.1016/j.spc.2022.03.004>
- 16) Ghufuran, M., Ali, S., Ariyesti, F. R., Nawaz, M. A., Aldieri, L., & Xiaobao, P. (2022). Impact of COVID-19 to customers switching intention in the food segments: The push, pull and mooring effects in consumer migration towards organic food. *Food Quality and Preference*, 99, 104561. <https://doi.org/10.1016/j.foodqual.2022.104561>
- 17) Hair, J. F. (2019). *Multivariate data analysis* (Eighth edition). Cengage
- 18) Hanaysha, J. R. (2018). An examination of the factors affecting consumer’s purchase decision in the Malaysian retail market. *PSU Research Review*, 2(1), 7–23. <https://doi.org/10.1108/PRR-08-2017-0034>
- 19) Hanaysha, J. R., Al Shaikh, M. E., & Alzoubi, H. M. (2021). Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market: *International Journal of Service Science, Management, Engineering, and Technology*, 12(6), 56–72. <https://doi.org/10.4018/IJSSMET.2021110104>
- 20) Hiransomboon, K. (2012). Marketing Mix Affecting Accommodation Service Buying Decisions of Backpacker Tourist Traveling at Inner Rattanakosin Island in Bangkok, Thailand. *Procedia Economics and Finance*, 3, 276–283. [https://doi.org/10.1016/S2212-5671\(12\)00152-9](https://doi.org/10.1016/S2212-5671(12)00152-9)
- 21) Ho, C.-I., Liu, Y., & Chen, M.-C. (2022). Antecedents and consequences of consumers’ attitudes toward live streaming shopping: An application of the stimulus–organism–response paradigm. *Cogent Business & Management*, 9(1), 2145673. <https://doi.org/10.1080/23311975.2022.2145673>
- 22) Houghtaling, B., Serrano, E. L., Kraak, V. I., Harden, S. M., Davis, G. C., & Misyak, S. A. (2019). A systematic review of factors that influence food store owner and manager decision making and ability or willingness to use choice architecture and marketing mix strategies to encourage healthy consumer purchases in the United States, 2005–2017. *International Journal of Behavioral Nutrition and Physical Activity*, 16(1), 5. <https://doi.org/10.1186/s12966-019-0767-8>

The Effect of Marketing Mix and Health Consciousness on Purchase Decisions of Sanitary Products

- 23) Hoque, M., Alam, Md., & Nahid, K. (2018). Health Consciousness and Its Effect on Perceived Knowledge, and Belief in the Purchase Intent of Liquid Milk: Consumer Insights from an Emerging Market. *Foods*, 7(9), 150. <https://doi.org/10.3390/foods7090150>
- 24) Hsu, S.-Y., Chang, C.-C., & Lin, T. T. (2016). An analysis of purchase intentions toward organic food on health consciousness and food safety with/under structural equation modeling. *British Food Journal*, 118(1), 200–216. <https://doi.org/10.1108/BFJ-11-2014-0376>
- 25) Huang, Y., Meng, R., & Tan, J. (2022). *The Impact of Health Consciousness on Organic Lipstick Market: 2022 7th International Conference on Social Sciences and Economic Development (ICSSSED 2022)*, Wuhan, China. <https://doi.org/10.2991/aebmr.k.220405.027>
- 26) Kirmani, M. D., Shahzad, N., Ahmad, A., Uddin, S. M. F., Ayyub, S., & Adil, M. (2022). Socio-environmental considerations and organic food consumption: An empirical investigation of the attitude of Indian consumers. *Food Quality and Preference*, 100, 104604. <https://doi.org/10.1016/j.foodqual.2022.104604>
- 27) Kusumawati, R. D., Oswari, T., Yusnitasari, T., & Dutt, H. (2022). Analysis of Marketing Mix and Website Performance on E-marketplace of Agricultural Products. In S. Fong, N. Dey, & A. Joshi (Eds.), *ICT Analysis and Applications* (Vol. 314, pp. 437–444). Springer Nature Singapore. https://doi.org/10.1007/978-981-16-5655-2_42
- 28) Kom, N. S., Novela, E. S., & Scherly, H. (2016). Marketing mix analysis that influence the purchasing decisions of wine in DKI Jakarta and Tangerang. 2016 11th International Conference on Knowledge, Information and Creativity Support Systems (KICSS), 1–5. <https://doi.org/10.1109/KICSS.2016.7951430>
- 29) Komari, A., Indrasari, L. D., Tripariyanto, A. Y., & Rahayuningsih, S. (2020). Analysis of SWOT Marketing Strategies and 7P Influence on Purchasing Decision. *Journal of Physics: Conference Series*, 1569(3), 032002. <https://doi.org/10.1088/1742-6596/1569/3/032002>
- 30) Kotler, Philip and Armstrong, Garry, 1997. *Prinsip-Prinsip Pemasaran*. Alih bahasa : Imam Nurwaman, edisi ketiga, Penerbit Airlangga, Jakarta.
- 31) Kotler, Philip and Kevin Lane Keller. 2016. *Marketing Management 15th Edition*. New Jersey: Pearson Prentice Hall.
- 32) Kotler, Philip, and Kevin Lane Keller. 2018. *Marketing Management. 14th Edition*. New Jersey: Prentice Hall Inc. Leanne, Conny, Souhon, and Thi
- 33) Le, Q. H., Nguyen, K. H., & Nguyen, T. Y. (2022). effect of marketing mix 4cs on the domestic tourist's purchase decision - case study in Vietnam: Part 2_research result. *International Journal of Health Sciences*, 9384–9399. <https://doi.org/10.53730/ijhs.v6nS5.9562>
- 34) Lin, H.-C., & Kuo, S.-H. (2020). How does health consciousness influence attitudes of elderly people towards traceable agricultural products? Perspectives of the technology acceptance model. *Ageing and Society*, 40(8), 1808–1821. <https://doi.org/10.1017/S0144686X19000308>
- 35) Marcelina, Jesse dan Tantra, Billy. 2014. Pengaruh Marketing Mix (7p) Terhadap Keputusan Pembelian Pada Guest House Di Surabaya. Fakultas Ekonomi. Universitas Kristen Petra. Surabaya.
- 36) Madhyamapurush, W., Saksirikhun, P., Smerchuar, N., & Pinmongkhonkul, S. (2021). *MARKETING MIX FACTORS AFFECTING THE PURCHASE OF CULTURAL SOUVENIRS BY THAI CONSUMERS IN PHAYAO PROVINCE, THAILAND*. 24(1).
- 37) Makienko, I., & Rixom, J. (2022). Using Marketing Mix Elasticities to Demonstrate Consumer and Producer Perspectives in Marketing Management Class. *The International Journal of Management Education*, 20(3), 100689. <https://doi.org/10.1016/j.ijme.2022.100689>
- 38) Malhotra, N.K. (2014) *Basic marketing research. Person new international ed., 4. ed.* Harlow: Pearson.
- 39) Michaelidou, N., & Hassan, L. M. (2008). The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food. *International Journal of Consumer Studies*, 32(2), 163–170. <https://doi.org/10.1111/j.1470-6431.2007.00619.x>
- 40) Natasha, C., & Subakti, A. G. (2021). The effect of pricing on purchase decisions in Koultoura coffee. *IOP Conference Series: Earth and Environmental Science*, 729(1), 012062. <https://doi.org/10.1088/1755-1315/729/1/012062>
- 41) Ngai, E. W. T., & Wu, Y. (2022). Machine learning in marketing: A literature review, conceptual framework, and research agenda. *Journal of Business Research*, 145, 35–48. <https://doi.org/10.1016/j.jbusres.2022.02.049>
- 42) Nicholson, K. N., Neumann, K., & Sharma, S. (2019). The Impact of Precipitation on Drinking Water Resources in the Sagarmatha National Park (Mt. Everest Region), Nepal. *Journal of Water Resource and Protection*, 11(11), 1351–1368. <https://doi.org/10.4236/jwarp.2019.1111078>

The Effect of Marketing Mix and Health Consciousness on Purchase Decisions of Sanitary Products

- 43) Rahamat, S., Jeong, E., Arendt, S. W., & Xu, Y. (2022). Menu labeling influence on purchase behaviors: Applying the theory of planned behavior and health consciousness. *Appetite*, 172, 105967. <https://doi.org/10.1016/j.appet.2022.105967>
- 44) Rahayu, S., & Satria, C. (2019). *The Effect of Supply Chain Strategy and Marketing Mixes on Purchase Decisions Sharia Productin Palembang Region*. 8(3).
- 45) Ramanakumar, K. P. V. 2012. Consumer Attitude Towards Green Products ff FMCG Sector: An Empirical Study. *International Journal of Research in Commerce and Management* 3 (2), pp: 34-38.
- 46) Riantini, R. E., Andini, S., Florencia, M. M., & Rabiah, A. S. (2019). E-Marketing Strategy Analysis of Consumer Purchase Decision in Indonesia Online Sports Stores. 2019 International Conference on Information Management and Technology (ICIMTech), 426–431. <https://doi.org/10.1109/ICIMTech.2019.8843808>
- 47) Santini, Z. I., Koyanagi, A., Tyrovolas, S., Mason, C., & Haro, J. M. (2015). The association between social relationships and depression: A systematic review. *Journal of Affective Disorders*, 175, 53–65. <https://doi.org/10.1016/j.jad.2014.12.049>
- 48) Schiffman, L.G. and Wisenblit, J. (2019) *Consumer behavior*. Twelfth edition. New York, NY: Pearson.
- 49) Sekaran. U., & Bougie. R. (2016). *Reaserch Methods for Business: A Skill Building Approach*. 7th Edition. Wiley & Sons. Sugiyono. 2017. *Metode Penelitian Kuantitatif dan Kualitatif*. Bandung : Alfabeta
- 50) Sumarwan, Ujang, A.G, Prihartono, A.W Sumarlin, D.A. Mamahit, E. Purnomo Hadi, J. Hasan, M. Ahmady, R. Wulandari, T. Haryono. 2012. *Riset Pemasaran dan Konsumen, Seri 2*. Bogor: PT Penerbit IPB Press.
- 51) Tanjung, I. (2021). Analysis of the Effect of Marketing Mix 7P on Purchase Decisions at Sentra Snack Stores. *International Journal of Review Management Business and Entrepreneurship (RMBE)*, 1(2), 125–133. <https://doi.org/10.37715/rmbe.v1i2.2421>
- 52) Tjiptono, Fandy. 2008. *Strategi Pemasaran*. Edisi III Andi, Yogyakarta.
- 53) Tjiptono, Fandy 2011. *Pemasaran Jasa*, Bayumedia Publishing: Malang.
- 54) Tran, T. A., Pham, N. T., Pham, K. V., & Nguyen, L. C. T. (2020). The Roles of Health Consciousness and Service Quality toward Customer Purchase Decision. *The Journal of Asian Finance, Economics and Business*, 7(8), 345–351. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO8.345>
- 55) Voravudhi, N., Srinuan, C., & Suwannamek, O. (2016). Relationship between Marketing Mix of Whey Protein and Consumer Buying Decision In Bangkok Metropolitan.
- 56) Wongleedee, K. (2015). Marketing Mix and Purchasing Behavior for Community Products at Traditional Markets. *Procedia - Social and Behavioral Sciences*, 197, 2080–2085. <https://doi.org/10.1016/j.sbspro.2015.07.323>
- 57) Yusmarni, Y., Putri, A., & Paloma, C. (2020). Marketing performance of Kopi Solok Radjo in industrial revolution 4.0 [a case study of Solok Radjo cooperative in Solok District. *IOP Conference Series: Earth and Environmental Science*, 497(1), 012044. <https://doi.org/10.1088/1755-1315/497/1/012044>
- 58) Yoyada, N., Kodrat, D.S. (2017). *Effect Of Marketing Mix (7p) On Decision Of Consumer Selection In Ny Dental Clinic Of Surabaya City*. The Fourth International Conference On Entrepreneurship | Book One



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