



EXAMINATION OF DOMINANT FACTORS AFFECTING THE DECISION TO PURCHASE PERSONAL MEDICAL DEVICES

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ABSTRACT

This study aims to analyze the effect of product quality, price perception, advertising, and distribution channels on purchasing decisions for personal health devices. In addition, this study also aims to determine the dominant factors that influence purchasing decisions for medical devices. This research was conducted in Denpasar City by taking a research sample of 100 (one hundred) people using purposive sampling technique. This study uses multiple linear regression analysis techniques, t test and F test and test of determination. The result of the research is product quality, price perception has a positive and significant effect on purchasing decisions, while distribution channels have no significant effect on purchasing decisions. The implication of this research is that manufacturers who provide medical devices must be able to carry out price strategies in improving purchasing decisions and controlling market share in the health industry.

Keywords: product quality, price perception, advertising, and distribution channels; purchasing decisions, Personal medical devices.

INTRODUCTION

Trends regarding health are intensifying during the pandemic. People become aware and pay attention to health. Health-related matters are highly sought after by the public. Health promotion efforts continue to be made to improve. During the pandemic, healthy people are advised not to come to clinics or hospitals. Of course, this makes it very difficult for people to know their health early, so they need medical equipment that can be used personally. In addition, people also become more willing to check their health at home. Personal health devices are currently widely available and traded in

general to the public. Medical devices such as electronic blood pressure meters, electronic blood sugar checks are health tools that are often used to detect a person's health condition early. Of course, there are a few things that prospective buyers need to consider before making a purchase of these tools.

The buying decision process has been broadly defined as a dynamic set of actions and factors that begins with the identification of a stimulus to act and ends with a specific commitment to action (Soriton, 2016). Understanding buyer behavior is not easy because several factors can influence consumer behavior

before making a purchase decision. In some cases, consumers tend to spend less time thinking about buying low or high value products, because they consider meeting their needs more important (Hanaysha, 2018)

Several factors are often considered by someone in making a buying decision. Product quality is something that is often considered by someone in deciding to buy (Nadhifah and Adinugraha, 2020). A product that has quality that meets predetermined quality standards, and quality is a condition that continues to change as tastes, or consumer expectations for a product are always changing (Sitanggang, et al., 2019). In addition to product factors, price is also an element that consumers consider in buying products. Price has a relative effect: some consumers are price sensitive, while others do not consider price when making purchasing decisions (Albari, 2018).

Companies in industrial competition, of course, must carry out good communication with consumers or potential customers. To carry out the marketing function properly, advertising activities must, of course, more than just providing information to the public. Advertising should be able to persuade potential consumers to be able to decide to choose and buy the products or services offered by marketer. The purpose of serving ads in the media is to introduce a product or service to potential consumers to be interested in making purchases (Ratu, 2020). This makes advertising very important in improving purchasing decisions. In addition, location selection has a strategic function because it can help determine the achievement of business

entity goals. Location refers to various marketing activities that seek to facilitate and facilitate the delivery or distribution of goods and services from producers to consumers (Hartuti, et al, 2020). Of these factors, there must be a dominant factor that can influence a person's decision to buy health products that can be used personally. These factors are the main thing for marketers to be able to develop strategies to increase sales of medical devices. The purpose of this study was to determine the dominant factors that influence purchasing decisions for personal medical devices. This study analyzes the effect of product quality, price perception, distribution channels and *advertising* on purchasing decisions of personal medical devices.

LITERATURE REVIEW AND HYPOTHESES

Consumer behavior

Understanding behavior is critical to effective marketing, helping managers identify the right people to target and design and communicate attractive offers (Moutinho et al., 2011). Every element of a marketing plan benefits from understanding the customer, and with the fast pace of change in today's consumer market it will only become more important. Consumer behavior is the activity that involves a person acquiring, consuming, and ordering a product or service (Oke et al., 2016). Consumer behavior is a process: The topics of selecting, purchasing, consuming, and recalling goods imply the processing of consumer behavior. The consumption process involves three steps: pre-purchase activity,

purchasing activity and post-purchase activity (Gilaninia et al., 2013).

Marketing mix

According to Kotler and Armstrong, the marketing mix is a set of marketing tools that the company uses to continuously achieve its company goals in the target market (Mulyati, 2023). Marketing mix is marketing tools consisting of seven factors of service marketing mix, namely product, price, place, promotion, people, physical evidence, and process, all of which can be controlled and manipulated by a company to achieve competitive advantage (Hardiyanti, 2017).

Purchase decision.

Purchase decision is an integration process used to combine knowledge to evaluate two or more alternative behaviors and choose one of them (Bondarenko et al., 2019). Consumer decisions are a problem-solving approach to human activities to buy goods or services to fulfill their wants and needs. The decision-making process is a problem adjustment approach that consists of five stages carried out by consumers, the five stages are problem recognition, information search, alternative evaluation, decision making, and post-purchase behavior.

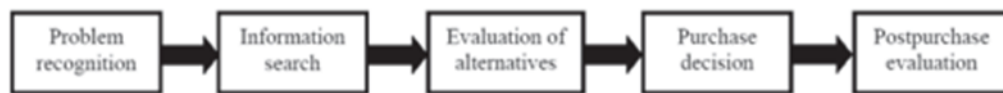


Figure 1 Purchasing Decision Process

RESEARCH HYPOTHESIS

Effect of product quality on purchasing decisions

Product quality is the ability of a product to perform its function. Capabilities include durability, reliability, resulting accuracy, easy to operate, and repair as well as other valuable attributes for all products (Taiwo et al., 2017). Someone in buying a product will certainly pay attention to the benefits of a product that is tailored to his needs at that time. Product quality has a great influence on a person's decision to buy a product (Imaningsi, 2018). Product quality is a

very important consideration for someone in making a purchase decision (Arianto, et al., 2016). Product quality indicators in this study are performance, durability, conformance to specifications, features, reliability, aesthetics, and impression of quality. From this statement, the hypothesis in this study is as follows.

H₁: Product quality has a significant effect on purchasing decisions.

The effect of price perception on purchasing decisions

Price perception relates to how price information is fully understood by

consumers and gives deep meaning to them. Thus, the assessment of product prices is said to be expensive, cheap or ordinary, each individual is not the same, because it depends on individual perceptions that are motivated by the environment and individual conditions (Rommy et al, 2018). Price perception is measured by the suitability of price with product quality, price suitability with product benefits and competitive prices with similar products (Arianto et al., 2016). A positive perception of product prices will be able to increase a person's desire to shop (Rachmawati and Muflikhati, 2017). The value of benefits that are proportional to the money sacrificed to get an item will affect how someone makes a purchase decision (Dwiarta & Ardiansyah 2021). Price perception indicators in this study are price suitability with product quality, price suitability with benefits and competitive prices. From this statement, the hypothesis in this study is as follows.

H₂ : Price perception has a significant effect on purchasing decisions

The influence of advertising on purchasing decisions

Advertising is one of the promotions mix which is a communication tool used by companies to introduce their products. Several studies reveal that advertising has a strong influence on purchasing decisions (Anggoro & Purba, 2020). The purchase of electronic goods is strongly influenced by strong advertising activity (Furaji, 2013). Indicators that measure advertising is the ease of product discovery, clarity of information on the media used, the message contained in the media can be

trusted. From this statement, the hypothesis in this study is as follows.

H₃ : *Advertising* has a significant effect on purchasing decisions

The influence of distribution channels on purchasing decisions

A consumer will be happier if the goods needed are available anytime and anywhere. Consumers will make purchasing decisions tailored to the needs and availability of these goods. This causes the selection of distribution channels to be very important to be able to prepare goods according to consumer needs. Marketing channels can be seen as a set of interdependent organizations that are seen in the process of providing a product or service for use or consumption (Ramadhani et al., 2022). The better the distribution channel design, the higher the consumer's decision to buy the product (Ikbal et al, 2021). Distribution channels are activities to facilitate the flow of goods from producers to consumers, so that the more distribution channels, the faster consumers can get the products they need (Maulana et al., 2023). The distribution channel indicators in this study are the availability of the product at the desired location, the availability of the product at the desired time, the availability of the product and a definite answer to the characteristics of the product. From this statement, the hypothesis in this study is as follows.

H₄ : Distribution channel significant effect on purchasing decisions

RESEARCH METHOD

This type of research is quantitative descriptive research. This research was conducted in the city of Denpasar by

taking the population who are consumers who have purchased and used personal health equipment. The sampling technique used was purposive sampling with the condition that the respondents were people who had bought and used medical devices. The data collection technique used a

questionnaire distributed online via google form. Respondents in this study amounted to 100 people. The data analysis technique used is multiple linear regression analysis technique, t test, F test and determination test. The research concept framework is shown in the following figure.

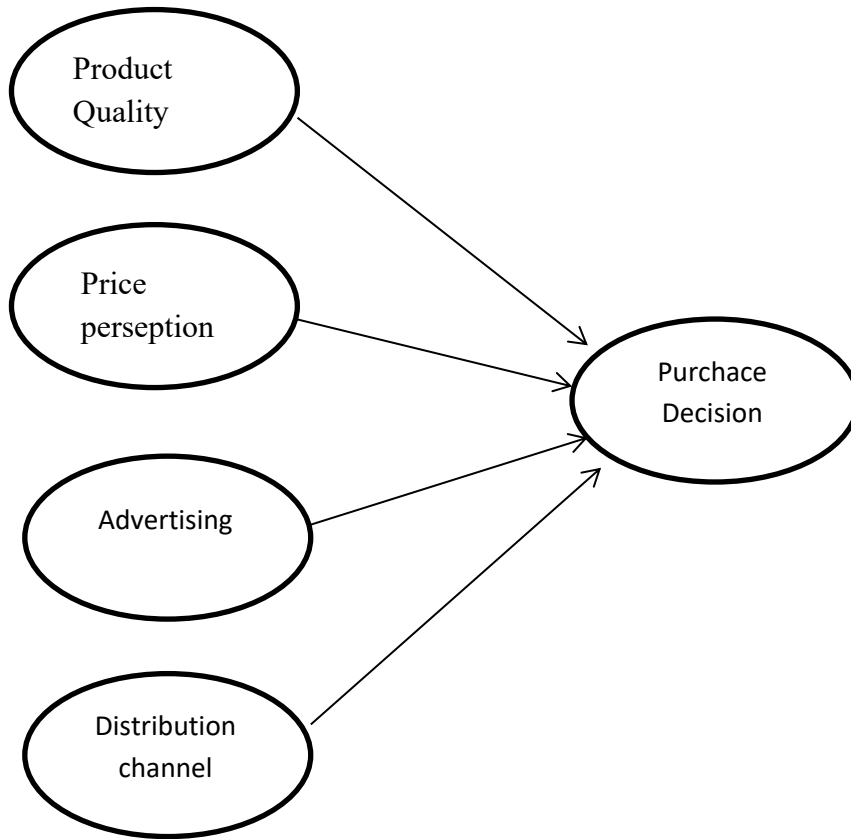


Figure 2 Conceptual framework

RESULTS AND DISCUSSION

Results of data analysis

The data analysis technique used multiple linear regression analysis for 100

respondents. The results of data analysis can be seen in Table 1

Tabel 1 Results of Multiple Linear Regression Analysis

Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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	B	Std. Error	Beta		
(Constant)	0.110	1.651		0.067	0.947
Product quality	0.161	0.067	0.220	2.391	0.019
Price perception	0.391	0.111	0.336	3.5383	0.001
advertising	0.233	0.078	0.268	3,000	0.003
Distribution channel	0.150	0.097	0.124	1.543	0.126
F Test	28.849				
Sig	0.000				
R	0.741				
R Square	54.8				

From the statement above, the formulation of the linear regression analysis of the influence of product quality, price perception, advertising and distribution channels on purchasing decisions is as follows:

$$Y = 0.110 + 0.161X_1 + 0.391X_2 + 0.233X_3 + 0.150X_4$$

Y = Purchase decision

X₁ = Product quality

X₂ = Price perception

X₃ = Advertising

X₄ = Price perception

From the results of the multiple analysis, it can be stated that:

1) The regression coefficient value of product quality is 0.161 which is positive. The significance value is 0.019, which is smaller than 0.05, which means that product quality has a significant effect on purchasing decisions. This means that improving the quality of medical device

products will be able to improve purchasing decisions.

2) Price perception regression coefficient value is 0.391 which is positive. The significance value is 0.001 which is smaller than 0.05, which means that price perception has a significant effect on purchasing decisions. This means that the better the perception of the price of medical devices will be able to improve purchasing decisions.

3) regression coefficient value *Advertising* is 0.233 which is positive. The significance value is 0.003 which is smaller than 0.05 which means that advertising a has a significant effect on purchasing decisions. This means that the more attractive the advertising is, the better the decision to buy personal medical devices will be.

4) The value of the distribution channel regression coefficient is 0.150 which is positive. The significance value is 0.126, which is greater than 0.05, which means that the distribution

channel has no significant effect on purchasing decisions.

- 5) The value of R^2 is equal to 0.548, which means 54.8 percent of personal health equipment purchasing decisions are influenced by product quality, price perception, advertising, and distribution channels. The remaining 45.2 percent is influenced by other variables.
- 6) The dominant factor influencing someone to decide to buy medical devices as seen from the *Standardized Coefficient beta* is the perception of the price with a coefficient of 3,538.

DISCUSSION

Effect of product quality on purchasing decisions

The results of the study state that product quality has a positive and significant influence on purchasing decisions. This means that the better the quality of personal medical equipment, the higher the purchasing decision for the product. Medical devices that have almost the same benefits as medical devices available in clinics or hospitals will be able to convince someone to buy these tools. In addition, the accuracy of medical devices and compliance with the technical specifications of the equipment will be able to increase someone's purchase of these products. A person no longer needs to come to a clinic or hospital to check blood sugar or cholesterol levels, because the tools purchased for these measurements can provide benefits that are almost the same as the results of laboratory tests. Medical devices that have good durability with various features that

are easy to understand will be able to make someone make a purchase decision on the product.

The effect of price perception on purchasing decisions

The results of the study state that price perceptions have a positive and significant influence. This means that the better the perception of the price of personal medical devices, the better one's purchasing decisions. Someone who feels that there is a match between the price of the equipment and the quality of the product, and the benefits of the product can cause someone to be able to buy other medical devices in the future. Price perception is the dominant variable influencing the decision to buy equipment. Currently, there are many personal health devices that are sold in the market with various brands. This has an impact on product price competition. Of course, this is very beneficial for consumers because they can choose the same product specifications at a lower price. Someone will prefer to compare the prices of one brand's product to another, so that they get a more affordable price than other products and the price becomes a person's main consideration in buying health products or devices.

The influence of advertising on purchasing decisions

The results of the study state that advertising has a positive and significant influence on purchasing decisions. This means that the better the advertising activity is carried out, the higher one's purchasing decisions will be. Clarity of information regarding product

specifications, how to use and benefits to be provided is very important in conveying information about medical devices. Of course, providers of medical devices who can provide reliable information through the media, either electronic media, print media or mass media, will be more easily trusted by consumers. Consumer trust that is formed from advertising activities will be able to improve one's purchasing decisions for medical devices.

Effect of distribution channels on purchasing decisions

Distribution channels in this study have no significant effect on purchasing decisions. This means that the availability of a product according to the place and time when it is needed has not been able to encourage someone to buy medical devices. Although medical devices are widely sold, only medical supply stores or pharmacies sell them. There are medical devices that are specific, so their availability must be ordered in advance. But although the level of availability is limited, it does not limit one's desire to get personal health equipment.

CONCLUSIONS

The results of the study reveal that product quality, price perception and advertising have a positive and significant influence on purchasing decisions for medical devices. However, distribution channels have no effect on purchasing decisions. In addition, the perception of price is the most considered variable by buyers in establishing product purchases. Product prices that are easily affordable, appropriate and at competitive prices will

strengthen someone to have a medical medical device product.

The implication of the research is that providers of medical devices must of course be able to give a good impression of the features on medical devices so that they can guarantee the accuracy of the tools at the time of use. In addition, price is the most dominant variable. Competitive prices will give potential buyers many choices so that providers of medical devices must also be able to compete with stores *online* that offer lower prices than conventional stores.

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