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FACTORS INFLUENCING MUSLIMS' PURCHASE INTENTION OF HALAL-CERTIFIED OVER-THE-COUNTER (OTC) MEDICINES IN BEKASI, INDONESIA

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ABSTRACT

Self-medication in Indonesia has recently increased; consumers can easily purchase non-prescription medicines, many people use over-the-counter (OTC) medicines as an alternative for self-medication. In this study, the researchers have chosen to address the gap in the literature pertaining to purchase intention on halal pharmaceuticals, whereas, the focus is on purchase intention of halal certified OTC medicines. This study was conducted in Bekasi, Indonesia. 325 Muslim consumers in Bekasi, Indonesia, participated in this study. The information was gathered using questionnaires with convenient sampling techniques. Through utilizing the theory of consumption value, which consists of the factors of functional value (price), functional value (quality), social value (pharmacist advice), emotional value (halal logo), conditional value, and epistemic value of respondents' intentions to purchase halal-certified OTC medicines. The findings of this study, three factors: functional value (quality), emotional value, and epistemic value, have a significant relationship with the purchase intention of halal-certified OTC medicines in Bekasi, Indonesia.

Keywords: Halal Products, Halal Industry, Halal Purchase Intention Factors, Halal Pharmaceuticals

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INTRODUCTION

Health is one indicator that describes the level of success in one country. The primary purpose of health development is to achieve the maximal health level in society. The effort to increase health in the community must be made by policymakers, producers, and the community (Departemen Kesehatan RI, 1992).

Medicine is one of the salient parts of health services. It plays a role in prevention, diagnosis, and treatment/medication recovery. Therefore, medicine has become one of the main components of medication (Bigger, 2018). Thus, the medicine must be approved for safety, quality, and efficacy. According to Indonesian Health Ministry Regulation No 917/Menkes/Per/X/1993, over-the-counter (OTC) medicine is a medicine that might be purchased without a prescription in the market found in pharmacies and supermarkets. Halal pharmaceuticals are drug products that come from a permissible source, like animals, plants, organic or inorganic substances, and are made in a way that is in line with the rules of Islam (Saha, Rifat & Shimanto, 2019). They should be free of haram ingredients, but they should also be *toyyib*.

Nowadays, in many countries, such as the United States of America, the United Kingdom, Ireland, Indonesia, and India, people are trying to improve their health by self-medicating (Amparo, 2018). Self-medication is a person's initiative to use non-prescription medicines to improve or heal their health issues. People are self-medicating by purchasing non-prescription drugs or OTC medicines.

Self-medication practises are widely practised in many countries. Economic, political, and cultural factors have contributed to increased self-medication worldwide, making it a major public health issue

(Patil et.al., 2014). The global OTC drugs market reached USD 175.47 billion in 2019, and the value is expected to reach USD 264.46 billion by 2024 (Over The Counter Drugs Market, 2019).

The Central Agency on Statistics in Indonesia (*Badan Pusat Statistik*) published the Health Statistic Profile 2019, stating that about 71.46% of the Indonesian population practised self-medication, whereas in 2018, it was 70.74% (Badan Pusat Statistik, 2019). The global data survey, the Indonesian pharmaceutical market will be the largest in the ASEAN region in 2021, with IDR 141.6 billion (USD 10.11 billion) (Cekindo.com.id, 2021). The pharmaceutical industry is expected to grow at a rate of 12–13 per cent per year, with the pharmaceutical market valued at IDR 84 trillion (USD 6 billion) and expected to reach $10.11 billion by 2021, and OTC pharmaceuticals valued at IDR 48.8 trillion (USD 3.483 million) in 2018 and expected to grow at a rate of 1.3 per cent per year (the compound annual growth rate/CAGR 2018–2021) (Indonesia.go.id, 2021). OTC pharmacies generate an income per person of IDR 183,250 (USD 13.08) in comparison to the total population. As a result, it indicates that OTC medicines are widely used in Indonesia.

Furthermore, the future demand for OTC medicines products will grow optimistically. Indonesia's broad domestic population needs lower OTC medicine prices than prescription medicines. The Association of Pharmacy Entrepreneurs (GP Pharmacy) recorded growth of OTC medicines reaching 5–6% in the first quarter of 2019. The pharmaceutical industry started to work faster in 2019 to catch up with growth. The market especially needs to focus on non-prescription drugs or OTC medicines, including limited OTC medicines. One of the efforts is to provide halal certification for these pharmaceutical products (Wijayanto, 2019). This halal certification can provide added value and guarantees for consumers when utilising medical products.

Currently, to register a halal certification must be through the Indonesian halal authority known as Badan Pemeriksa Jaminan Produk Halal (BPJPH) or the Halal Product Guarantee Inspection Agency overseen by the Ministry of Religion; the BPJPH will be assisted by another organization, namely Lembaga Pemeriksa Halal (LPH) or the Halal Inspection Agency; then the Indonesian Ulama Council issues a halal fatwa based on the result of the LPH audit; and finally, BPJPH issues a halal certificate.

Unfortunately, the expansion of halal certification for the pharmaceutical industry is still lagging (Katadata, 2021). The number of halal-certified medicines and vaccines is approximately 2,586 products; this figure is very low; namely, 0.5 per cent of all halal-certified products, totalling 575,560 products and LPPOM MUI stated that only 20–30 pharmaceutical companies out of 150 producers, or approximately 20% of the national pharmaceutical industry, have halal certificates for their products (Dinda Wulandari, 2019). Furthermore, the low number of halal logos on the products is because of the producers' lack of halal awareness (Silvinia Ayu, 2019). The producers are not eager to apply for a halal certificate because of the complicated procedures involved in the halal certification process. Additionally, there is no demand from Indonesian customers, who still do not know the importance of the halal logo on pharmaceutical products. The development of halal-certified OTC medications is critical, yet little study has been performed on this issue.

The researchers in Malaysia, Indonesia, the United Kingdom, India, Singapore, Thailand, Turkey, Bangladesh, Iran, Saudi Arabia, China, and Spain are also interested in studying the purchase intention of halal products, which is the main focus of the studies. These were halal food, halal meat, halal cosmetics, and halal finance (Fatmi, Ahmad & Kartika, 2020). Based on Scopus data, finding studies written in the last ten years on the purchase intention of halal-certified medicines is still hard to find (Fatmi et. al., 2020). Only one studied of halal vaccination purchase intention in Malaysia and Pakistan (Bukhari, Mohd Isa & Goh Yee Nee, 2020).

LITERATURE REVIEW

Halal And Thoyyib

Halal is the standard term used in the Qur'an to define lawful or permitted, or acceptable types. Halal in the Islamic religion means permission to use and use those things wisely. For example,

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consumed goods must be formulated, prepared, processed, and manufactured using utensils or ingredients permitted under Shariah Law. Besides planning, processing, and storage, there should be no exposure or proximity to impurities or *najs* under the Shariah Rule (Ambali & Bakar, 2012).

The term "haram" is the standard term used in the Qur'an to define what is unlawful or prohibited. Haram is defined as an act, event, or behavior prohibited by absolute proof in the Qur'an or hadith. The meaning of haram is "anything which the Lawgiver has prohibited; the doer is liable for punishment in this world or the Hereafter." Doing haram is punishable, and omitting it is awarded (Kamali, 2013).

The Arabic word "*toyyib*" describes nutritious foods in several ways. *Toyyib* is translated as "good," meaning pleasing to taste, pure, clean, safe, and nourishing (Othman, Md.Shaarani & Bahron, 2016). Therefore, Allah permits halal and *toyyib* items only for Muslim consumption.

Halal-Certified Over-The-Counter (OTC) Medicines

The word "pharmaceutical" refers to a drug or medicine prepared or dispensed by a pharmacy and used in medical treatments (Definitions.net, n.d). In the pharmaceutical industry, any substances derived from preparing, preserving, or compounding medicinal drugs, vitamins, or similar materials enhancing personal health are called pharmaceutical products, whereas OTC medicines become part of pharmaceutical products. Pharmaceutical dosage forms include capsules, tablets, pills, liquids such as syrup, suspension, emulsion, and semi-solids such as suppositories, creams, and gels (Dinkes, 2021).

OTC medicines consist of painkillers such as paracetamol, anti-allergy, and skin creams. It also covers analgesics, fevers, heartburn, cough/cold/flu, gastrointestinal, dermatological remedies, vitamin, and minerals (Roumie & Griffin, 2004).

Halal pharmaceuticals are drug products derived from a permissible source, such as animals, plants, organic or inorganic substances, and are prepared, manufactured, and extracted in accordance with Islamic guidelines (Saha et. al., 2019).

Halal pharmaceutical products should be free of haram ingredients and toyyib. As a result, a pharmaceutical product must be halal and clean according to Islamic law.Halal pharmaceuticals are those that contain Shariah-compliant ingredients and meet the following criteria (Saha et. al., 2019):

i. Does not contain any non-halal animal parts or products, or animal parts or products that have not been slaughtered in accordance with Islamic law.
ii. Non-poisonous, non-intoxicant, or non-hazardous to human consumption
iii. According to Shariah Law, no najs-contaminated equipment is used to manufacture or process the product.
iv. According to Islamic law, it does not contain *najs*.
v. Does not contain any human parts or derivatives prohibited under Islamic law.
vi. During the preparation, processing, handling, packaging, and distribution of food, it is physically separated from any other food that does not meet the requirements stated in the law or from anything else that Shariah law has deemed as najs.

Purchase Intention Purchase Intention

Purchase intention can be defined as "the decision to act or the physiological action that shows an individual's behavior according to the product" (Wang & Yang, 2008). At the same time, intentions are distinct from attitudes. Whereas attitudes are summary evaluations, intentions represent "the person's motivation in the sense of his or her conscious plan to exert effort to carry out behavior" (Eagly & Berkeley, 2007).

As per the statements, the concise definition of purchase intentions is as follows:

"Purchase intentions are a personal's conscious strategy to buy a product".

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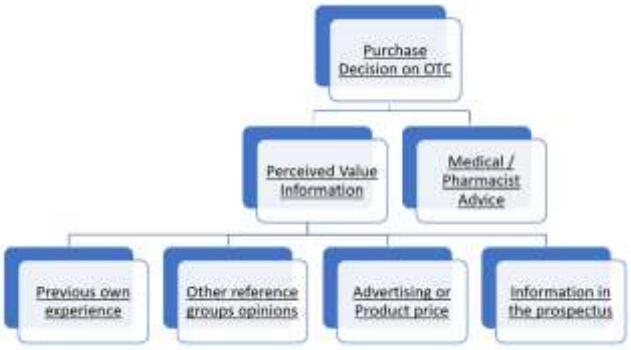
Purchase Decision On OTC

The purchase decision is affected by two salient factors: physician or pharmacist advice and the perceived value of OTC information (Feier et. al., 2017). As shown in Figure 1, the perceived value of information is contained by one's previous experience, opinions of other reference groups, the written statement in the prospectus, product price, or existing advertising.

Figure 1. Factors that Influence the Purchase Decision on OTC (Feier et. al., 2017)



According to the study in Jordan, internal and external factors influence the purchase intention of OTC medicines (Habash & Al-Dmour, 2020). The external factors that they analysed were brand advertising, brand packaging, price, and drug availability, while for internal factors, they analysed brand experience, age, education, and gender. Another researcher in Ethiopia, studied factors that affect consumers' purchase decisions on OTC consist of pharmacist recommendation, family and friends' recommendations, perceived country of origin, price, and previous experience; the result showed that pharmacist recommendation, perceived country of origin, and price had a significant relationship with purchase decisions on OTC medicines in Ethiopia (Temechewu, 2020). Studied in Bangladesh found that brand reputation, consumers' knowledge, brand preference, brand favourability, and willingness to pay had a significant relationship with consumers' purchase decisions towards OTC medicines (Hassan, Md Zillur & Siddique, 2018).

Moreover, in Egypt, studied factors driving consumers' purchase intention using social media towards particular OTC medicines, such as cold and flu medicines (Mekawie & Hany, 2019). It showed that the E-Words of Mouth (E-WOM), such as sharing, friends' likes, and comments, are the only significant factors influencing the purchase of cold and flu drugs on Facebook. There was no significant relationship between participants' attitudes regarding Facebook advertising, benefits awareness, business reputation, celebrity endorsement, and purchase decisions.

Theory Related To OTC Purchase Intention

OTC purchase intention studied found that one of the TPB factors, subjective norms, influences repeat purchase behavior (Lodorfos, Mulvana & Temperly, 2006). Most researchers did not use any theories to predict OTC purchase intention (Dadhich & Dixit, 2017; Hanna & Hughes, 2011; Simoens et.al., 2009; Villako, Volmer & Raal, 2012) . Instead, they directly chose the factors for their research without using any theories. The factors that influenced purchase intention of OTC medicine were medical/pharmacist advice, which included consultation and service (Feier, 2017). However, patients need advice from a health expert about their health concerns. Other factors such as reference groups' opinions, advertising, price, brands, and information are also important factors for the purchase intention of OTC to improve their health (Shohel, 2013). Health must be taken seriously because it is related to life. Purchasing OTC medicines necessitates different considerations than regular products.

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Theory Of Consumption Value (TCV)

The theories of planned behavior and reasoned action have been extensively used to postulate environmental behavior and attitudes based on subjective norms, behavior intention, and perceived behavior control. These theoretical perspectives have been widely used for forecasting a wide range of environmental behaviors, including green products, food consumption, organic foods, household recycling, and other general pro-environmental behaviors (Amin & Tarun, 2021).

However, this study is based on the theory of consumption values, which acknowledges the importance of consumer values in predicting purchase behavior. The theoretical underpinnings for this study were drawn specifically from this theory because the consumption values theory is regarded as an integrated model that incorporates several consumer values from other theories and assumes that consumer purchasing behavior is a function of various consumption values (Amin & Tarun, 2021). This study contributes to the design of a critical model to investigate the purchase intention of Muslim consumers towards halal-certified OTC medicines to better understand the relationship between consumption values and behavior intention toward halal-certified OTC medicines.

TCV is a theory that explains how consumers judge and use a specific product or service (Sheth, Newman & Gross, 1991). TCV synthesizes existing economics, sociology, psychology, marketing, and consumer behavior findings. It applies to individual choices involving a full range of products and services, both tangible and intangible. In its essence, TCV posits that (1) consumer choice decision-making is influenced by multiple consumption values, (2) the consumption values make differential contributions in any choice situation, and (3) the consumption values are independent (Sheth, Newman & Gross, 1991).

The positive side of TCV theory is that it can identify the main value-adding elements in the choice of halal-certified OTC medicine or the primary drivers and motivators for choosing a halal-certified OTC medicine product. This identification enables them to develop practical strategies that address actual market conditions. On the other hand, TCV's main limitation applies only to situational cases of individual, voluntary, rational, or systematic decision-making (Sheth, Newman & Gross, 1991). Therefore, TCV cannot predict the behavior of two or more individuals, and it is restricted to the context of individual end-user or consumer acceptance.

The theory outlined here has been applied and validated in more than 200 contexts or products, such as organic products, green products, food stamps, cocaine, computer dating, toothpaste, aspirin, and automobiles (Sheth, Newman & Gross, 1991).

As per the consumption values theory, five key consumption values influence customer behavior and preferences. These are functional, conditional, social, emotional, and epistemic values in a sequence. At one time, only one or more of these consumption values can impact customer behavior (Sheth, Newman & Gross, 1991).

Figure 2. Conceptual Framework of the Theory Consumption Value

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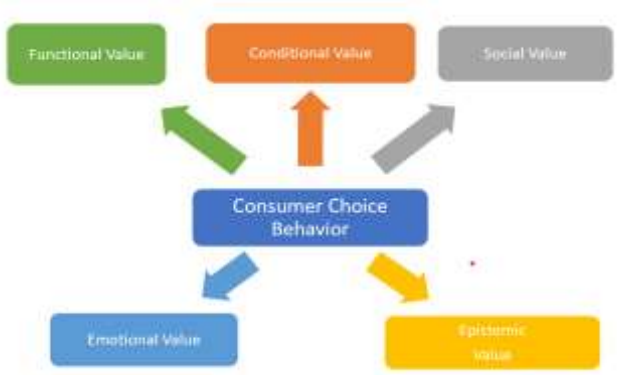

Functional Value

Functional value is the primary factor in consumer preference. It is linked to practical and physical factors such as reliability, stability, and price (Sheth, Newman & Gross, 1991). In this study, functional value is interpreted into two factors: functional value-quality and functional value-price.

Functional Value Price

A product's price is the amount of money that has to be paid to acquire a given product. Thus, the amount one is prepared to pay for a product represents its value; price is also a value measure (Szabó, 216).

A product's price image significantly affects consumer decisions to purchase a product (Safitri, 2018). This effect is because the perception of price explains a product and provides a deep meaning for consumers. Hence, price is a significant factor in the purchasing decision, especially for frequently purchased products, and in turn, influences the choice of which store, product, and brand to patronize. Additionally, consumers can also judge the advantages they expect to receive from purchasing products or services they pay for (Rahman, Robel & Al-Mamum, 2014).

Price value focuses on the consumer's internal and external reference prices when deciding to buy (Yeo, Mohamed & Muda, 2016).

Functional Value Quality

Quality is the continuous process of developing and maintaining relationships by evaluating, anticipating, and meeting defined and implied needs (Dorner, 2001). Quality value refers to the product attributes measured, such as product's sustained quality and texture (Yeo, Mohamed & Muda, 2016).

Pharmaceutical quality is the basis that enables patients and customers to trust their treatments' safety and efficacy (FDA, 2022). The quality of halal-certified OTC medicine must be maintained by following Good Manufacturing Practice (GMP) and the Halal Assurance System (HAS). Thus, all products entering, circulating, and being traded in Indonesia must meet the intended criteria, policies, and procedures to obtain halal certification and labeling.

Social Value

Social value is the perceived usefulness of an alternative association with one or more selective groups of people (Sheth et. al., 1991). For example, consumers may believe that family, friends, colleagues, and others will influence their beliefs regarding a specific behavior.

Individual attitudes toward halal-certified products are influenced by subjective norms or social influence, and this variable is the most important influencing factor on individual attitudes toward

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purchasing halal goods (Yeo et. al., 2016). From the points highlighted, this research's social value will be identified through the influence of pharmacist recommendations or references.

Emotional Value

Emotional value is the perceived utility gained from an option that arouses feelings or affective states (emotions) (Sheth et. al., 1991). One acquires emotional value when linked to a specific feeling or when precipitating or perpetuating those feelings. Thus, emotional value is based on the emotions of potential substitution (Sheth et. al., 1991).

Emotional value is often associated with aesthetic alternatives (e.g., religion and reasons). Emotional value is the advantage that comes from an emotional and sensational situation. This value is connected to the responses of buyers to the product. In this study, the emotional value in halal-certified OTC medicines, will investigate one factor, the halal Logo.

Halal Logo/Halal Certification

The fundamentals of halal are the absolute key to consumption. In this era, Muslim consumers face a wide selection of products and services, which is somehow doubtful (Ambali & Bakar, 2014). The halal logo itself is considered a significant indicator for Muslims to verify the product's permissibility, safety, and hygiene. Labelling is also important as a source of awareness about safe and hygienic consumables related to diet and health. Halal consumption is the primary aim of Allah to ensure a healthy life for people.

Conditional Value

Conditional value is the perceived utility obtained from an option because of a particular condition or a sequence of events the decision-maker faces (Sheth et. al., 1991). Conditional values can promote or restrain a decision. Likewise, many dependent values can stimulate the perceived value of the customer.

The advantage of conditional value arises from external factors because the variables that affect customer preferences and influence purchasing decisions occur due to an external environment. Time, place, and particular contexts such as availability, more choices, subsidies, promotions, and discounts of the products are the common factors defined under conditional factors (Candan & Yıldırım, 2013).

The study of conditional value in halal-certified OTC medicine is still scarce. The values assessed are health condition, discount, subsidy, availability, and choices as the values to measure.

Epistemic Value

Epistemic value is the perceived utility derived from a capacity option to create enthusiasm, provide novelty, or meet a desire for knowledge. The alternative option may be chosen because the consumer is bored, curious, or motivated to learn. The quest for innovation and variation is identified among the fundamental motivations of human behavior. In motivation theory, curiosity and the desire to learn from new experiences are natural human motivations. Therefore, marketing experts generally agree that consumer buying habits are influenced by the incentives for innovation and the quest for choice.

A customer may select substitutes that can satisfy something new or dissimilar. Referring to the terminology, customers might buy halal-certified OTC medicines because they want to experience a new and different product, perhaps because the halal brand offers a unique experience.

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PROPOSED MODEL

Based on the theory of consumption value, a general framework for studying the relationship between the variables examined in this study and testing the level of Muslim consumers' trust in the pharmacist's advice has been developed.

H1: There is a significant relationship between functional value-price and purchase intention of halal-certified OTC medicine

H2: There is a significant relationship between functional value - quality toward purchase intention of halal-certified OTC medicine among Muslim customers among Muslim customers

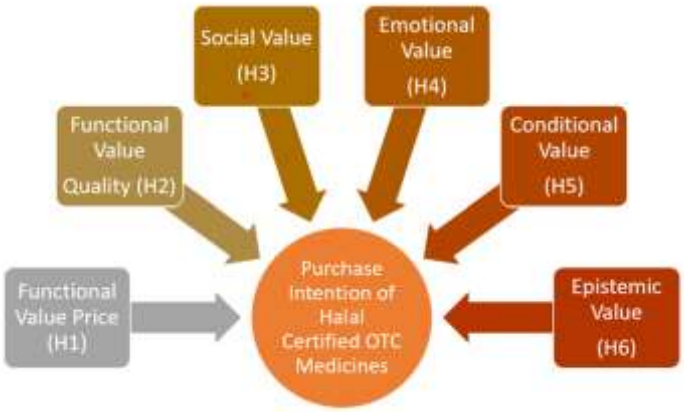
H3: There is a significant relationship between the social value and purchase intention of halal-certified OTC medicine among Muslim customers

H4: There is a significant relationship between emotional value and purchase intention of halal-certified OTC medicine among Muslim customers

H5: There is a significant relationship between conditional value and purchase intention of halal-certified OTC medicine among Muslim customers

H6: There is a significant relationship between epistemic value and purchase intention of halal-certified OTC medicine among Muslim customers.

Figure 3. Depict of Conceptual Mode



METHODOLOGY

The questionnaire is the instrument used for this analysis. Questionnaires were administered electronically. This study's research questionnaire was developed using the TCV model from various previous studies.

A total of 45 demographic and factor items were included in the survey; the instrument was divided into two parts. Whereas, 36 items were developed in the form of statements to obtain the participant's views on the current research topic, while the other eight items concentrated on the participant's demographic.

SECTION A: This section covers the construction of the functional value, the social value, the emotional value, the conditional value, and the epistemic value of the current TCV model. The ordinal scale used allows calculations based on the opinions of the respondents. They can choose their own opinion based

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on a scale of 5 Likert. There is no right or wrong choice for these items, as the goal is to receive genuine responses from the respondents on the subject.

SECTION B: This section deals with the demographic information of the respondents. Variables include gender, age, educational history, and average monthly salary. Additionally, occupation, employment status, the respondent's access to halal-certified OTC medicines, and the places to buy halal OTC medicines are included in this section. All items are based on a nominal scale as practically carried out in the survey design.

Questions in Section A are anchored to a 5-point Likert scale. All questions are closed-ended, allowing the participants to choose their degree of agreement or disagreement using a scale of 5 points. Thus, the ranking of 1 is "strongly disagree," 2 is "disagree," 3 is "neutral," 4 is "agree," and the highest score of 5 is "strongly agree."

Statistical analysis was carried out to analyze all the data gathered from the survey. First, all return data was entered into statistical software using the IBM Statistical Package for Social Sciences (SPSS) version 23. This process starts with descriptive analysis and multiple regression.

Regression analysis is a mathematical approach used to predict one attribute's value provided by the others' values. The multiple regression analysis analyses the association between two or more variables (Bryman & Bell, 2011). Multiple regression is a statistical technique for predicting the dependent variable using two or more independent variables. The researcher's primary goal in this analysis is to determine the relationship between the dependent and independent variables.

Some main parameters are required to prioritize the multiple regression study. These parameters involve meaning, gamma, adjusted R-square, and t-value. The important standard determines whether the theory is agreed upon or denied. The conclusion can only be accepted if the meaning is smaller than 0.5. If it is higher, the hypothesis would be denied. The consistent regression coefficient is defined by beta (Bryman & Bell, 2011). The beta (β-value) indicates how much the independent variables influence the dependent variable. The modified R-square represents the dependent variable's percentage illuminated using the dependent variable. To study the relationship between a dependent variable and several independent variables, the formula is represented as the equation below (Uyanık & Güler, 2013):

$$y = \beta_0 + \beta_1 X_1 + ... + \beta_n X_n + \varepsilon$$

Where

y = the dependent variable of the regression

β = slope of the regression

X1 = first independent variable of the regression

$\beta_1 X_1$ = the regression coefficient (β_1) of the first independent variable (X_1)

… = do the same for however many independent variables you are testing

$\beta_n X_n$ = the regression coefficient of the last independent variable

ϵ = model error (a.k.a. how much variation there is in our estimate of y)

DATA COLLECTION

Sampling Technique

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The sampling techniques used in this study are convenience sampling and snowball sampling because the selection of respondents was based on availability and the ease of getting them. The convenience sampling method was chosen for the study due to its advantages, such as being inexpensive and cost-effective, saving time and money as the data collection can be done within a short period, as this study is also using an online spread questionnaire.

The respondents are both male and female Muslims between the ages of 17 to 65 and above. Age as a variable can be divided into several ranges or groups, where each group describes the stage of human growth. The Indonesian Ministry of Health issued a division of age groups in 2009 (Al Amin, 2017). The ranges are as follows:

1. Toddler: 0–5 years,
2. Childhood: 6–11 years.
3. Early adolescence: 12–16 years.
4. Late adolescence: 17–25 years.
5. Early adulthood: 26–35 years.
6. Late adulthood: 36–45 years.
7. Early Elderly: 46–55 years.
8. Late elderly period: 56–65 years.
9. Old Age: 65–above.

Sample Size

The sample size is the number of respondents selected from the study population. The required sample size is five times the evaluated variables. The number of variables in this study is 45 (Hair, 1992). The minimum sample size would be 225 respondents (45 items multiplied by 5). The researcher targeted more than 225 respondents as the sample size to compensate for potential non-response or incomplete surveys.

In comparison, the author also uses the Raosoft calculator to know the appropriate number of samples; based on the Raosoft calculator and the number of Muslim consumers in Bekasi, 2,141,407 persons with a confidence level of 92.8%, the number of respondents that we needed for this study was 324 persons (Raosoft, n.d). The final results of the respondents that we received in this study were approximately 325 people.

RESULTS

Descriptive Analysis

In this research, descriptive analyses were utilised to describe and summarise data gathered in a relevant manner. It summarises and gives insight into all the factors, including the demographic profile.

The frequency and percentage of respondents' gender, age, education background, work status, occupation, average monthly income, respondents' access to halal-certified OTC medicines, and the origin of halal OTC purchases were calculated. The results were obtained and are tabulated as below:

Table 1. Profile of Respondents

Demographic Description	Research Sample (n = 325)	
	Number of Respondents	Percentage (%)

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Gender	Male	83	25.5
	Female	242	74.5
Age	17–25 years old	35	10.5
	26–35 years old	59	18.2
	36–45 years old	110	33.8
	46–55 years old	79	24.3
	55–65 years old	36	11.1
	Above 65 years old	6	1.8
Education Level	Junior and senior high school	40	12.3
	Diploma and Undergraduate	221	68.0
	Post Graduate	64	19.7
Job Status	Full Time	149	45.8
	Part-Time	33	10.2
	Unemployed	65	20.0
	Other	78	24.0
Occupation	Government Employee	44	13.5
	Teacher	31	9.5
	Student	18	5.5
	Housewife	86	26.5
	Regular Employee (Non-Government Employee)	70	21.5
	Freelancer	7	2.2
	Entrepreneur	27	8.3
	Other	42	12.9
Average Monthly Salary	1.8 Million IDR and below	40	12.3
	1.8 - 5 Million IDR	77	23.7

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	5 - 8 Million IDR	77	23.7
	8 Million IDR and above	131	40.3

Results indicate that the majority of the respondents were 242 or 74% of female respondents. In this study sample, 10.5 per cent or 35 respondents were aged 17–25, 59 respondents (18.2%) were 26–35, 110 respondents (33.8%) were 36–45, 79 respondents (24.3%) were 46–55, 36 respondents (11.1%) were 56–65, and only six respondents (1.8%) were older than 65 years.

The educational levels of the respondents vary from junior and senior high school to postgraduate education. There were 68%, or 221 respondents, with diplomas and undergraduate degrees dominated the study. Approximately 20%, or 64 respondents, hold a postgraduate degree, and about 40, or 12% of respondents, have junior and senior high school education.

The highest respondents were full-time workers, 45.8% or 149 respondents, followed by unemployed workers, 20% or 65 respondents, and part-time workers, 10.2% or 33 respondents, and 24% or 78 respondents. There were 44 respondents (13.5%) who were government workers. The other respondents, at 31 people (9.5%), 18 people (5.5%), 86 people (26.5%), 70 people (21.5%), 7 people (2.25%), 27 people (8.3%), and 42 people (12.9%), were teachers, students, housewives, regular employees, freelancers, entrepreneurs, and others, respectively.

The monthly incomes of the respondents ranged from below 1.8 million IDR to above 8 million IDR. Subsequently, the salaries of 40 respondents (12.3%) were below 1.8 million IDR, 77 respondents (23.7%) were 1.8–5 million IDR, 77 respondents (23.7%) were 5–8 million IDR, and 131 respondents (40.3%) were more than 8 million IDR.

Multiple Regression Analysis

Regression analysis was performed between the dimensions of the independent variables and the dependent variable. The independent variables are functional value price, functional value quality, social value, conditional value, emotional value, and epistemic value. The dependent variable is the intention of purchase.

The t-value and *p*-value provide an approximate estimate of each predictor variable's effect. The t-value and *p*-value indicate how often a predictor variable influences the criteria. The results show that the epistemic value has the highest coefficient beta of 0.349, followed by functional value quality (β = 0.289) and emotional value (β = 0.215). The coefficient beta for functional value price (β = 0.068) and conditional value (β = 0.011) were tabulated. The lowest value in the formula was social value (β = -0.018), indicating that social value does not significantly influence the dependent variable. The following is the equation for the multiple regression model:

Y (Intention to Purchase) = β_0 + (β_1) (X_1) (Functional Value Price) + (β_2) (X_2) (Functional Value Quality) + (β_3) (X_3) (Social Value) + (β_4) (X_4) (Emotional Value) + (β_5) (X_5) (Conditional Value) + (β_6) (X_6) (Epistemic Value) + ε

So, if the values are put into the equation, the intention to purchase halal-certified OTC medicines values placed into the equation could be:

$$Y = 1.408 + 0.068\ X_1 + 0.289\ X_2 - 0.018\ X_3 + 0.215\ X_4 + 0.011\ X_5 + 0.349\ X_6 + \varepsilon$$

The p-value in Table 2 indicates whether these factors significantly affect the equation. The independent variable has a meaningful or beneficial interaction with the dependent variable if the p-value is equal to or less than 0.05. If it is greater than 0.05, the association between the dependent and independent variables is not statistically meaningful (Hair et al., 2014).

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Table 2 also reveals that the p-values for functional value quality, emotional value, and epistemic value views are lower than 0.05, indicating that these factors substantially impact the intention to buy halal-certified OTC medicine. The p-value of presumed social value and conditional value dominance, on the contrary, are 0.721 and 0.704 (> 0.05), indicating that this factor has little effect on the decision to buy halal-certified OTC medicine. This suggests that increasing social value and conditional value influence would not significantly improve the desire to purchase halal-certified OTC medicines.

Hypothesis Testing Results

Findings regarding six hypotheses are summarized in Table 2. The direct effects and indirect effects were investigated. Out of six postulated hypotheses in this multiple regression analysis, three were supported, while the other three were not.

Table 2. The Multiple Regression Analysis and Hypothesis Testing Results

Coefficients							Hyphothesis Testing Results
Model		Unstandardized Coefficients		Standardized Coefficients	t value	*p*-value	
		β	Std. Error	Beta			
1	(Constant)	1.408	1.232		1.143	0.254	
	Functional Value Price	0.068	0.068	0.053	1.000	0.318	Rejected
	Functional Value Quality	0.289	0.073	0.254	3.983	0.000	Accepted
	Social Value	-0.018	0.049	-0.015	-0.357	0.721	Rejected
	Emotional Value	0.215	0.052	0.248	4.099	0.000	Accepted
	Conditional Value	0.011	0.029	0.016	0.381	0.704	Rejected
	Epistemic Value	0.349	0.058	0.310	6.070	0.000	Accepted

a. Dependent Variable: Purchase Intention	

*Signature value (p-value) < 0.5: significant, signature value (p-value) > 0.5: not significant

DISCUSSION

A multiple linear regression was conducted to analyse variances in the purchasing intention of halal-certified OTC medicines for 325 Muslim's respondents in Bekasi, Indonesia.

The functional value quality, emotional value, and epistemic value play a significant role in purchasing halal-certified OTC medicines in Bekasi, Indonesia. This means that quality, halal certification, and consumers' willingness to learn about and seek halal OTC medicines are essential factors to consider before purchasing. OTC medicine manufacturers must consider these variables to increase sales.

Quality and halal certification are significant factors in the intention to purchase halal OTC medicines. As the awareness of the importance of halal products among Muslim consumers has grown, consumers require quality products for their health. In addition, the halal certification or halal logo provides Muslim consumers with peace of mind when carrying out religious orders. Furthermore, people have a natural urge to discover and learn new things, and epistemic value is an important factor in the purchase intention of halal OTC medicines. Therefore, producers must be more innovative in meeting consumer demands and offering new, more attractive halal products to suit consumers.

Functional value price, social value – pharmacist recommendation, and conditional value are not significantly related to Muslim purchase intention for halal-certified OTC medicines. Hypotheses three, five, and seven are significant; these factors are functional value quality, emotional value-halal logo, and epistemic value. Thus, respondents' functional value quality, emotional value-halal logo, and epistemic value should be improved to enhance intention and buy behavior. Regarding functional value quality, the producers of halal-certified OTC medicines should maintain their manufacturing process by purchasing halal materials, and their production process must follow GMP and Halal Assurance Systems.

As the emotional value of the halal logo is important, OTC manufacturers who have not yet registered their products are beginning to explore producing halal OTC medicines to boost product sales. The intention to purchase halal-certified OTC medicines may be the first and most important step for these companies seeking halal certification for their products. This effort is equally as important as raising consumer awareness of the advantages of buying halal-certified products.

Furthermore, this research showed that the epistemic value is significant. To fulfil Muslim consumers' curiosity about halal OTC medicines, manufacturers and the Indonesian government could promote the advantages of halal-certified OTC medicines via brochures, newspapers, television, radio, websites, and social media. These promotions or advertisements will give benefits to producers to increase their market share.

This research is expected to benefit OTC manufacturers directly as they can be more focused on the values that has a significant relationship with the purchase intention of OTC medicines. They must maintain the quality of their products, increase the number of halal products in their companies, promote and give information about the products regularly to the consumers while indirectly leveraging the findings of this study to help OTC makers strategize effective sales to increase profits.

CONCLUSION

The TCV in this research examined the influence of functional value-price, functional value-quality, social value-pharmacist recommendation, emotional value-halal logo, conditional value, and

epistemic value on their intentions to buy halal-certified OTC medicines among Muslim consumers in Bekasi, Indonesia.

In summary, this study shows a good level of trust toward pharmacists and Muslim consumers of halal-certified OTC medicine in Bekasi, Indonesia. However, three factors, social value quality, emotional value – halal logo, and epistemic value, have a significant relationship with halal-certified OTC medicine purchase intention in Bekasi, Indonesia. In conclusion, this research study has successfully fulfilled the proposed objectives.

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