

Institute for Advanced Science, Social and Sustainable Future MORALITY BEFORE KNOWLEDGE

# Pure honey and health awareness: Unveiling the drivers of muslim consumer behavior

#### Kholilah Qultsum<sup>1</sup>, Gita Gayatri<sup>2,\*</sup>

- <sup>1</sup> Islamic Business Studies Program, Faculty of Economics and Business, Universitas Indonesia, Depok, West Java 16424, Indonesia;
- <sup>2</sup> Department of Management, Faculty of Economics and Business, Universitas Indonesia, Depok, West Java 16424, Indonesia.
- \*Correspondence: gita.gayatri@ui.ac.id

Received Date: December 8, 2024 Revised Date: February 28, 2025 Accepted Date: February 28, 2025

#### ABSTRACT

Background: The increasing awareness of health among consumers has led to a growing interest in natural products such as pure honey. Particularly among Muslim consumers, the decision to consume pure honey is often influenced by beliefs regarding its health benefits. Methods: This study employed a quantitative approach using survey data collected from Muslim consumers. A total of 300 respondents were analyzed to understand the relationship between health awareness and the consumption of pure honey. The study utilized statistical analysis to examine the impact of health awareness on consumers' attitudes, reasons for consumption, and reasons for non-consumption. Additionally, a mediation analysis was conducted to explore the role of consumption reasons in the relationship between health awareness and attitudes. Findings: The results indicated that health awareness positively influenced consumers' attitudes toward pure honey and their reasons for consuming it. However, health awareness did not significantly affect reasons for non-consumption. The reason for consumption acted as a partial mediator in the relationship between health awareness and attitudes. Consumers with high health awareness were more likely to believe in the benefits of pure honey and were less concerned about doubts regarding the product's authenticity. Over half of the respondents identified health as the primary motivation for consuming pure honey, with regular consumption observed among the majority. **Conclusion:** This study emphasizes the significant role of health awareness in shaping the consumption behavior of pure honey among Muslim consumers. Health awareness positively influences consumers' attitudes and motivations to consume pure honey, highlighting the importance of transparency and product certification in marketing. Businesses in the pure honey industry can enhance consumer trust and market position by focusing on the health benefits and authenticity of their products. Novelty/Originality of this article: It provides novel insights into the mediating role of consumption motivations in the relationship between health awareness and product attitudes, offering practical implications for marketing strategies in the health-conscious consumer market.

KEYWORDS: attitudes; health awareness; honey consumption; motivations; pure honey.

#### **1. Introduction**

Health and environmental issues are now a major concern of the global community (Gineikiene et al., 2017; Thieme et al., 2015). Awareness about the importance of maintaining health has encouraged many individuals to change their lifestyles in a healthier direction (Edington et al., 2016). The COVID-19 pandemic has further strengthened this awareness, making people better understand the urgency of healthy living and encouraging

Cite This Article:

Qultsum, K, & Gayatri, G. (2025). Pure honey consumption: the role of health awareness in shaping muslim consumers behavior. *The Journal of Religion and Communication Studies*, 2(1), 1-14. https://doi.org/10.61511/jorcs.v2i1.2025.1376

**Copyright:** © 2025 by the authors. This article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

lifestyle changes in that direction (McBride et al., 2021). In addition, environmental awareness has also increased, with many people starting to adopt pro-environmental behaviors to reduce negative impacts on the planet (Balundė et al., 2019). This changing lifestyle has a direct impact on people's consumption patterns (Demirtas, 2019). Consumers now tend to choose products that are considered healthier and environmentally friendly such as natural products (Kumar et al., 2021a; Sreen et al., 2021), local products (Kumar et al., 2021b), and green products (Salehzadeh et al., 2021; Ogiemwonyi, 2022). These shifting preferences indicate a significant change in consumer behavior aligned with the need for a more health- and environmentally-responsible lifestyle.

One impact of these lifestyle changes is the increasing demand for natural sweeteners as an alternative to sugar (Castro-Muñoz et al., 2022; Saraiva et al., 2020). Consumers are increasingly interested in more natural options to support their health, and honey is becoming one of the most popular natural sweeteners among the public (González-Montemayor et al., 2019). This is influenced not only by the perceived healthier benefits of honey compared to regular sugar, but also by its eco-friendly nature. Honey is often regarded as a product that is in line with sustainability principles as its production process involves nature directly. In addition, this trend is also supported by the growing number of studies showing the health benefits of natural sweeteners such as honey. As a result, manufacturers are starting to offer a wider variety of honey-based products to meet market demand. This shift in preference reflects the influence of changing healthy and ecoconscious lifestyles on consumers' daily choices.

Honey is a natural sweetener produced by bees by processing flower nectar. The main ingredients that give honey its sweetness are fructose and glucose, which have the same level of sweetness as regular sugar (Singh & Kashyap, 2020). Honey has a long history as a natural sweetener, even being the only sweetener used by humans before being replaced by industrialized sugar in the 1800s (Bogdanov et al., 2008). In addition to its role as a sweetener, honey is also known to have various health benefits. Several studies have shown that honey can help cure various chronic diseases, such as lung disorders, heart problems, diabetes, hypertension, and others (Hossain et al., 2020). The antibacterial, anti-inflammatory and antioxidant properties of honey are also known to play a role in strengthening the body's immune system and accelerating the wound healing process (Oryan et al., 2016). More interestingly, honey is said to have the potential to help prevent COVID-19 due to its ability to boost immunity and relieve symptoms of associated morbidity (Hossain et al., 2020). In addition to health benefits, honey also supports environmental sustainability as bee breeding activities make a positive contribution to a sustainable food ecosystem (Sillman et al., 2021).

The popularity of honey among the public continues to increase, as awareness of its diverse benefits grows (Wu et al., 2017). The demand for honey is reported to be growing due to the public's view of it as a natural sweetener that is healthier and able to prevent various diseases (U.S. International Trade Commission, 2021). People's habit of adopting a healthy diet is also one of the main drivers of increased honey consumption. This is particularly evident in the growing consumer preference for organic and non-GMO honey (U.S. International Trade Commission, 2021). The market potential for honey is promising, with the global market value recorded at \$8.17 billion in 2020 (Fortune Business Insight, 2021). This figure is expected to grow to USD 11.88 billion by 2028 (Fortune Business Insight, 2021). This trend reflects the changing consumption patterns of people who are more concerned about health and environmental sustainability. With growing demand, the honey industry has a great opportunity to continue to grow and contribute to the fulfillment of the need for healthy natural products in the global market.

Previous research has shown the importance of understanding consumer values in predicting their behavior, as these values tend to be stable over time (Rahman & Reynolds, 2019; de Groot & Thøgersen, 2018). Nowadays, more and more consumers are aware of the importance of health, so they tend to choose food products that are more natural and healthy (Iqbal et al., 2021). Honey is often used by the public as one of the natural products that have health benefits (Purnomo et al., 2021). Consumers' health consciousness is one of

the main factors that influence their decision to buy food products (Coricelli et al., 2019). In addition, environmental concerns also contribute to consumers' decisions to consume healthy and natural foods, including honey (Shin et al., 2019; Sreen et al., 2021). The honey in focus in this context is pure honey, as it is considered healthier and produced without additives such as colorings, artificial flavors, or synthetic substances (Eteraf-Oskouei & Najafi, 2013). Consumers who are concerned about the environment tend to choose products that support pro-environmental activities, including the consumption of natural foods. These health and environmental sustainability factors are further driving the increasing demand for honey. An in-depth understanding of consumer preferences regarding pure honey is essential for companies to meet market expectations and improve their competitiveness.

Based on the various factors identified in previous research, this study uses the Behavioural Reasoning Theory (BRT) model to analyze consumer behavior. BRT is a theoretical model that explains the relationship between values, reasons, motives, intentions, and behavior (Sahu et al., 2020). One of the main reasons for choosing BRT is its excellence in identifying "reasons for" and "reasons against," two aspects that not only contradict each other but also present unique perspectives that significantly influence intentions and behaviors (Sahu et al., 2020). These two aspects enable a deeper understanding of consumer decision-making. In addition, the implementation of BRT has proven effective in explaining consumer behavior towards various healthy and environmentally friendly products, such as natural products (Sreen et al., 2021), organic food (Tandon et al., 2020), and local food (Kumar et al., 2021c). Another advantage of BRT is its focus on the role of values or beliefs in predicting consumer reasons, intentions, and behavior (Sahu et al., 2020). Therefore, BRT is an ideal choice to analyze the factors that influence the purchase of pure honey.

This study also aims to explore the factors that influence honey purchase decisions among Muslim consumers. This is motivated by the fact that the global Muslim population is one of the largest groups of people, with Islam being the fastest growing religion in the world (Rassool, 2014). In a business context, this means that companies are likely to interact with Muslim consumers in the process of marketing their products (Rassool, 2014). Furthermore, Islamic teachings pay special attention to human health and place honey as one of the recommended medicines. Islam refers to the principle of maqashid al-syari'ah, which directs humans to maintain health so that the soul, mind, and offspring remain well protected. In this perspective, honey is considered a product that has great benefits for health (Shidiq, 2009). Therefore, understanding how Islamic values influence honey consumption behavior is an important aspect of this study.

In Islam, consumption behavior is regulated based on the principle of maqashid sharia, which prioritizes benefits and avoids harm to consumers. Consumption should consider the quality of the product, which should be pure, harmless, moral, blessed, and provide good for the consumer. This becomes relevant in the context of pure honey, which is processed without additives and is considered one of the most natural and beneficial foods. Consumption activities in Islam are also geared towards supporting health and well-being in accordance with religious teachings. By understanding the factors that drive Muslim consumers to purchase pure honey, companies can not only improve their product marketing but also encourage consumption that is oriented towards maqashid sharia. This can ultimately strengthen the link between religious values and consumer behavior, providing long-term benefits to society and business.

This research specifically focuses on the Muslim consumer segment in Indonesia, which is the country with the largest Muslim population in the world. With a significant population, Indonesia has a huge market potential, mainly due to the high level of consumer spending that is expected to grow to USD 400 billion in the next decade (Tonby & Wibowo, 2021). In addition, Indonesia is also home to the largest bee diversity in Asia, providing enormous potential for the development of a commercial apiary industry (Purnomo et al., 2021). Although this sector has not yet received significant attention, honey products are already popular among Indonesians, whether for health, lifestyle, or other benefits (Purnomo et al., 2021). As part of this research, an analysis will be conducted to explore whether health consciousness influences Muslim consumers' "reasons for" and "reasons against" purchasing pure honey. Furthermore, this research also aims to assess how health consciousness affects consumers' attitude towards pure honey products. By integrating the health consciousness aspect as a key factor, this research not only contributes to the understanding of Muslim consumer behavior in Indonesia but also provides strategic insights for businesses in tapping this huge market potential.

## 2. Methods

## 2.1 Research design

This research adopts a quantitative approach, which aims to measure phenomena accurately and objectively (Cooper & Schindler, 2014). In the context of business research, quantitative approaches are often used to measure consumer behavior, knowledge levels, opinions, or attitudes (Cooper & Schindler, 2014). This methodology answers questions such as "how much," "how often," "when," and "who," which are relevant in data-driven analysis. In addition, quantitative research is often used to test pre-existing theories (Cooper & Schindler, 2014). In this study, a quantitative approach is used to analyze the influence of Health Consciousness, Reasons, and Attitude, on Repurchase Intention for pure honey. The focus of this study is to validate previous theories and evaluate the relationship between variables in the context of pure honey consumption. Thus, this research makes a significant contribution to the understanding of consumer behavior in the pure honey market.

The strategy applied in this study is a survey, which is a method designed to collect information from individuals to describe, compare, or explain their knowledge, attitudes, and behaviors (Sekaran & Bougie, 2016). Data was collected using a questionnaire designed for cross-sectional studies, where information is collected once in a period of time, such as a few days, weeks, or months, from a representative number of respondents (Sekaran & Bougie, 2016). The use of surveys allows researchers to obtain rich and relevant data in answering research questions. Data analysis was conducted using the Structural Equation Modeling (SEM) method with the help of AMOS software. This technique allows testing complex relationships between variables simultaneously, thus providing more in-depth and comprehensive results.

#### 2.2 Data collection and sampling

This study uses primary data obtained directly from the original source for research purposes. The data collection method used is a questionnaire, which was chosen because it is effective in collecting information systematically from respondents. The questionnaire used in this study was distributed through a personally administered questionnaire using the Google Form platform. This allowed the researcher to reach a wide range of respondents with time and cost efficiency. Primary data collected through questionnaires provides a strong basis for empirical analysis, especially in measuring relevant variables in the study. In this research design, the questionnaire focused on obtaining in-depth information from respondents regarding their habits in consuming pure honey. This approach helps to ensure that the data obtained is relevant to the research objectives, thus supporting accurate and reliable analysis.

Respondents in this study are Muslim Indonesians who are at least 18 years old and have consumed pure honey in the past three months. The purity of the honey in question can be identified through the composition, labeling, or information from product advertisements. As there is no official data estimating the number of pure honey consumers among the Muslim population in Indonesia, this study used a non-probability sampling technique. This technique was chosen because elements in the population do not have a definite chance of being selected (Sekaran & Bougie, 2016). More specifically, the type of non-probability sampling used is purposive sampling, which allows researchers to select

respondents based on certain criteria relevant to the research (Sekaran & Bougie, 2016). The minimum sample size was determined based on the guidelines of Hair et al. (2014), which is five times the number of research indicators, resulting in a minimum of 135 samples ( $5 \times 27$ ). However, to increase the validity of the results and meet the requirements of SEM analysis using AMOS, the target sample was increased to 200 respondents, as suggested by Dash & Paul (2021).

#### 2.3 Research model

This study modifies the model developed by Sreen et al. (2021) in their article entitled "Behavioral reasoning perspectives to brand love toward natural products: Moderating role of environmental concern and household size" published in the Journal of Retailing and Consumer Services. The original article focuses on analyzing the factors that shape brand love towards natural products. In this study, the model was modified by adding the independent variable repurchase intention, referring to the Behavioral Reasoning Theory (BRT) framework proposed by Westaby (2005). The addition of this variable aims to broaden the scope of the research, particularly in exploring the relationship between brand love and consumer repurchase intention. This modification is expected to provide a more comprehensive understanding of the factors that drive consumer behavior in choosing natural products.

In addition, moderating variables such as household size and environmental concern in the relationship between attitude and brand love used in the research of Sreen et al. (2021) were not included in this model. The decision was based on the findings of the original article which showed that both moderating variables were not significant. This study also specifies the context of natural products to be pure honey, as recommended by the reference article. By focusing on pure honey, this study aims to make an empirical contribution to understanding the dynamics of consumer behavior towards products that have high health value and authenticity. This approach also allows for more in-depth testing of the concepts of brand love and repurchase intention in a more specific product context.

#### 2.4 Data analysis

The stages in the data analysis method in this study include several main steps, namely questionnaire wording test, questionnaire pretest, frequency distribution and descriptive analysis, Structural Equation Model (SEM) analysis, and PROCESS analysis with SPSS to test mediation and moderation. The wording test aims to ensure that there are no writing errors or ambiguities in the questionnaire questions. This is important because the questionnaire used was translated from English to Bahasa Indonesia. This process was carried out by asking four respondents to provide feedback on questions that were considered difficult to understand or confusing. The feedback was then used to improve the quality of the questionnaire before proceeding to the next stage.

After the wording test was completed, a pretest of the questionnaire was conducted to test its feasibility before being widely used. At this stage, 30 respondents were asked to fill out the questionnaire to get an initial idea of the reliability of the research instrument (Hogg & Tanis, 2005). The data from this pretest was then analyzed to test the validity and reliability of each construct used in the study. This process is important to ensure that all measured constructs have met the necessary standards before the main data is collected. With these steps, researchers can minimize potential bias and improve the quality of data that will be used for further analysis.

Validity testing is an important step to ensure that the data collected reflects the true area of investigation in accordance with the research objectives (Ghauri & Gronhaug, 2005). This process involves several important measures, namely the Keiser-Meyer-Olkin Measure of Sampling Adequacy (KMO), Bartlett's Test, Anti-Image, and Component Matrix (Hair et al., 2010). In order for the items in the questionnaire to be declared valid, the KMO, Anti-Image, and Component Matrix values must be more than 0.5. In addition, the result of

Bartlett's Test should show a significance value of less than 0.05 to ensure the validity of the questionnaire items (Hair et al., 2010). Through these steps, researchers can evaluate the extent to which the questionnaire covers the desired constructs so that the resulting data can be used for further analysis.

In addition to validity, the questionnaire must also go through a reliability test to ensure the stability and consistency of measurement of a particular phenomenon (Carmines & Zeller, 1979). One of the most commonly used methods to assess reliability is the Cronbach's Alpha coefficient, especially if the questionnaire uses a Likert scale (Whitley, 2002). This coefficient gives an idea of the extent to which the items in the questionnaire are internally correlated. Most literature agrees that a Cronbach's Alpha value of at least 0.70 is considered sufficient to declare a construct or indicator as reliable (Whitley, 2002). By meeting this requirement, researchers can ensure that the data generated from the questionnaire will have sufficient consistency to be used in statistical analysis.

At this stage, the researcher will organize information regarding the characteristics of the respondents who filled out the questionnaire, which includes data on gender, age, education level, occupation, monthly expenditure, and consumption patterns. The data will be grouped and presented in tabular form to provide a clear picture of the respondents' profiles. In addition, researchers will conduct a frequency distribution analysis by calculating the minimum, maximum, standard deviation, and average values on each indicator and variable studied. This analysis aims to provide insight into the patterns and trends in the answers given by respondents, as well as the range of answers used in the questionnaire. Thus, researchers can describe the general tendency of respondents in this study.

In data analysis, Structural Equation Modeling (SEM) is used as a multivariate statistical technique to explore the complex relationships between observed variables, both directly and indirectly (Li & Li, 2012). SEM is conducted in two main stages: first, the measurement model (outer model) that relates constructs to indicator variables; and second, the structural model (inner model) that describes the relationship between constructs or latent variables (Hair et al., 2017). The measurement model aims to ensure that the indicators used do measure the intended constructs, while the structural model will show how the constructs are interconnected. This process allows researchers to examine the relationship between variables in more depth and produce a more comprehensive understanding of the phenomenon under study.

## 3. Results and Discussion

#### 3.1 Hypothesis results

To test the hypotheses proposed in this study, the direct relationships between the relevant variables were analyzed. These hypotheses included the influence of health awareness on attitudes, reasons for consuming, and reasons for not consuming pure honey. Each relationship was tested using the Structural Equation Modeling (SEM) method to determine whether there is a significant influence between the independent and dependent variables.

Hypothesis		Estimate	t-value	p-value	Conclusion
H1a	Health consciousness is positively associated with attitude	0.229	2.766	0.006	Supported
H1b	Health consciousness is positively associated with reasons for consuming (reasons for)	0.372	3.811	0.000	Supported
H1c	Health consciousness is negatively associated with reasons for not consuming (reasons against)	0.057	0.694	0.487	Not Supported

Table 1. Hypothesis testing of direct relationship

Table 1 below shows the results of the hypothesis testing conducted, noting the estimated value, T-value, and p-value for each hypothesis. Based on these results, conclusions can be drawn as to whether or not the proposed hypotheses are supported by the available data. The hypothesis testing results presented in the table above show significant relationships between some of the variables tested. The first hypothesis (H1a), which tested the positive relationship between health awareness and consumer attitudes towards pure honey, was supported with a significant T-value (T-value = 2.766) and p-value of 0.006. Furthermore, the second hypothesis (H1b) testing a positive relationship between health awareness and reasons for consuming pure honey was also supported with a highly significant p-value (0.000), indicating that health awareness does influence consumers' reasons for consuming pure honey. However, the third hypothesis (H1c) testing the negative relationship between health awareness and reasons for not consuming pure honey was not supported, as the p-value was greater than 0.05 (p-value = 0.487).

Testing the mediation relationship hypothesis aims to identify whether reasons for consuming and reasons for not consuming act as mediators in the relationship between health awareness and consumer attitudes towards pure honey. This analysis provides a deeper insight into the mechanism linking health awareness and consumer attitudes. The first hypothesis (H5a) tests whether reasons for consuming pure honey can mediate the relationship between health awareness and attitudes towards the product. Meanwhile, the second hypothesis (H5b) evaluates whether reasons for not consuming pure honey mediate the relationship. The results of this test will provide information on how strong the mediating influence of the two reasons is in the formation of consumer attitudes. Hypothesis testing of mediation relationships can be seen in table 2.

Hypothesis		Indirect Effect		Conclusion
		LLCI	ULCI	
Н5а	Reasons for consuming (reasons for) mediate the relationship between health consciousness and attitudes.	0.0127	0.1041	Supported (Partial Mediation)
H5b	Reasons for not consuming (reasons against) mediate the relationship between health consciousness and attitude.	-0.0051	0.0077	Not Supported

Table 2. Hypothesis testing of mediation relationship

The table 2 above shows the results of testing the hypothesis of a mediating relationship between health awareness, reasons for consumption, and consumer attitudes. The first hypothesis (H5a) testing the mediation of reasons for consumption between health awareness and consumer attitudes was supported, with the interval of the indirect effect being between 0.0127 and 0.1041, indicating partial mediation. This means that reasons for consumption play an important role in bridging the relationship between health awareness and consumer attitudes towards pure honey. In contrast, the second hypothesis (H5b), which tested the mediation of reasons for not consuming, did not support significant results, with the indirect effect interval falling between -0.0051 and 0.0077, indicating that reasons for not consuming do not mediate the relationship between health awareness and consumer attitudes.

## 3.2 Analysis of hypothesis results

Hypothesis H1a, which suggested that consumers' health awareness influences their positive attitude towards pure honey, was accepted in this study. The results of the analysis show that the T-value obtained of 2.766 is greater than 1.645, which indicates a positive influence between health awareness and consumer attitudes towards pure honey. This finding is in line with the research of Sreen et al. (2021) which shows a positive relationship between health awareness and consumer attitudes towards natural products. Consumers

who are more aware of the importance of maintaining health usually tend to have a more positive view of products that they consider can support their health, such as pure honey which is known to have various benefits. Thøgersen (2018) also stated that consumers who have a high awareness of health will prefer products that are considered beneficial to their bodies. Pure honey, which is proven to have health benefits, is the right choice for consumers who prioritize health in their lives. In addition, according to Ajzen (1991), personal factors such as health awareness are very influential in shaping consumer attitudes towards certain products. In this case, health-conscious consumers tend to feel that consuming pure honey is the right choice and can provide benefits.

Health awareness plays an important role in shaping consumers' positive evaluations of pure honey. Consumers who have knowledge and understanding of the importance of health will prefer products that support their healthy lifestyle. This may motivate consumers to choose pure honey as a more natural and healthy alternative. This research supports the view that health consciousness can increase preference for products that have health benefits. Furthermore, such awareness makes consumers feel satisfied with their decision to choose products that they perceive as healthy. Pure honey, which has a reputation as a natural product with various health benefits, is increasingly chosen by health-conscious consumers. Honey companies need to pay attention to this factor in their marketing strategies, emphasizing the health benefits of pure honey. In this way, they can reinforce consumers' positive attitudes towards their products, which in turn will drive purchasing decisions.

Hypothesis H1b, which states that consumers' health awareness has a positive effect on their reasons for consuming pure honey, was accepted in this study with a T-value of 3.811. This result shows that the higher consumers' awareness of health, the greater their belief that pure honey is the right choice for consumption. Consumers who have more understanding of health benefits tend to believe that pure honey is a nutrient-rich source and free from additives or artificial substances. This finding is in line with the research of Sreen et al. (2021), who also found a positive relationship between consumers' awareness of health and their reasons for choosing natural products such as pure honey. In addition, Han et al. (2017) argue that a person's personal beliefs are instrumental in shaping their reasons for taking an action, including in this case choosing to consume pure honey. Therefore, consumers with high health awareness are more likely to understand the content and benefits of pure honey as their reason for choosing the product. This suggests that health information can increase consumers' motivation to choose pure honey as part of their healthy consumption pattern. This awareness forms a strong basis for their decision to consume natural products that are considered more beneficial to the body.

Meanwhile, hypothesis H1c, which suggests that consumers' health awareness negatively affects their reasons for not consuming pure honey, was not accepted in this study. The obtained T-value of 0.694, lower than the set threshold of 1.645, indicates that there is no significant effect of health awareness on consumers' reasons for not consuming pure honey. This finding indicates that although consumers are aware of the importance of maintaining health, it does not make them feel doubtful or worried about the purity of pure honey on the market. Previous research by Sreen et al. (2021) also found that health awareness does not have a significant impact on consumers' reasons for avoiding pure honey. This is evident from the consumption patterns of respondents who showed a high level of consumption of pure honey, with more than 10 times consumption in the last three months and the last consumption occurring less than a month ago. Thus, consumers do not doubt the quality or authenticity of the pure honey they choose.

In addition, this finding is supported by an analysis of the total mean value of the Reasons for Not Consuming (RA) variable, which is in the medium category. This indicates that despite consumers' relatively high health awareness, they do not feel anxious about the authenticity or purity of pure honey. Most respondents feel confident in the quality of the pure honey they consume, which is reflected in the high frequency of consumption and lack of major concerns regarding counterfeit products. This suggests that while health awareness has a significant influence on consumers' decision to consume pure honey, this

factor does not affect their decision to avoid the product. Consumers seem to fully believe in the quality and purity of the pure honey they choose, so there is no hesitation that prevents them from consuming the product. Thus, although health awareness influences consumers' decision to choose pure honey, it does not lead to distrust of the product or hesitation in purchase.

Hypothesis H5a, which suggested that consumers' reasons for consuming pure honey mediate the influence between health awareness and their attitude towards the product, proved to be accepted in this study. This is reflected in the LLCI and ULCI values that do not include 0, indicating a partial mediation effect in the relationship. This finding supports previous research by Sreen et al. (2021), who also found that consumers' reasons for consuming a product can mediate the relationship between health awareness and attitude towards the product. Specifically, consumers' health consciousness plays a role in increasing their interest in pure honey, with the belief that the product is natural and nutrient-rich. Consumers with high health consciousness are more likely to value the product they consume, and believe in the health benefits it offers. Reasons for consuming pure honey, such as health benefits and natural ingredients, serve as the link between health consciousness and positive attitudes towards this product. Thus, the reasons for consuming pure honey act as a key factor in shaping consumers' attitudes towards the product.

Furthermore, the mediation effect found in this study is partial, which means that the reasons for consuming pure honey do not fully explain the relationship between health awareness and attitude towards the product, but still play an important role in strengthening the relationship. This finding is consistent with the research of Kumar et al. (2021c), which states that reasons for consuming a product can partially mediate the relationship between consumers' values and their attitudes towards the product. In the context of pure honey, reasons such as the natural content and nutritional value contained in it provide strong justification for consumers, especially for consumers who have high health awareness. This health consciousness drives consumers to choose products that are beneficial to their bodies, thus strengthening their emotional bond with pure honey as a healthy and natural choice. This indicates that the reason for consuming pure honey not only serves as a rationale, but also reinforces consumers' love for the product, which in turn contributes to their positive attitude towards pure honey.

In contrast, hypothesis H5b, which proposes that consumers' reasons for not consuming pure honey mediate the effect between health awareness and their attitudes towards the product, is rejected as both LLCI and ULCI values include 0. This finding suggests that reasons for not consuming do not have a mediating role in the relationship between health awareness and attitudes towards pure honey. This is in line with the findings of Sreen et al. (2021), which states that doubts or reasons not to consume a product do not prevent consumers who have high health awareness from forming a positive attitude towards the product. In this study, despite possible doubts about the quality or authenticity of pure honey, health-conscious consumers still showed a positive attitude towards the product. This indicates that consumers' health-consciousness values dominate in shaping their attitudes, with the main focus on the health benefits offered by pure honey, rather than on doubts regarding the quality or authenticity of the product. Health-conscious consumers prefer to consume pure honey for its benefits, despite potential doubts about the product.

Furthermore, consumer health awareness was shown to be a key factor influencing the repurchase decision of pure honey, with a significant positive impact on reasons for consumption and attitudes towards the product. In the consumption pattern analysis, more than 50% of respondents stated that maintaining a healthy body was their main reason for consuming pure honey. This finding suggests that consumers with high health consciousness are more likely to choose pure honey as part of their efforts to maintain good health. Therefore, it is important for pure honey producers to consider the health awareness factor in designing their marketing strategies. Health consciousness not only influences the reason for consumption but also contributes to a positive attitude towards the product. This has the potential to increase customer loyalty and encourage repeat purchases, which can

strengthen the market position of pure honey. Strategies that capitalize on these health factors can provide a significant competitive advantage in the pure honey market.

Based on the research findings, pure honey businesses can focus on the segment of Muslim consumers with high health consciousness to maximize their market potential. In this case, an appropriate branding and positioning strategy is needed to create an image of pure honey as an exclusive product that suits the needs of health-conscious consumers. One way to do this is by obtaining the "Healthier Choice" certification or logo from BPOM, which will increase the level of consumer confidence in the quality and safety of pure honey. With this certification, pure honey will be more easily accepted by consumers who prioritize health, while also showing the producer's commitment to the quality of the products they offer. Consumers with high health awareness are more likely to choose products that have clear evidence of their safety and health benefits. Therefore, it is important for pure honey businesses to build effective communication about the benefits of their products, both through credible labels and certifications. This will strengthen relationships with consumers and increase their loyalty to the product. Such a strategy also provides a competitive advantage in a market that is increasingly selective about product quality and safety.

#### 4. Conclusions

This study reveals the significant role of health awareness in shaping the consumption behavior of pure honey among Muslim consumers. Statistical analysis shows that health awareness has a strong positive effect on consumer attitudes and reasons for consuming pure honey, but has no significant effect on reasons for not consuming. Another interesting finding shows that reasons for consuming act as a partial mediator in the relationship between health awareness and attitude towards pure honey, while reasons for not consuming have no mediating effect. The data indicates that consumers with high health awareness tend to have strong beliefs about the benefits of pure honey and are less affected by doubts about the authenticity of the product. More than half of the respondents consider health as the main motivation for consuming pure honey, which is reflected in the high frequency of consumption. Consumption patterns show that the majority of consumers consume pure honey regularly, with a frequency of more than ten times in the last three months. Aspects of product purity and nutritional content are the main considerations for consumers in choosing pure honey.

The implications of this study provide strategic guidance for pure honey businesses to optimize their product marketing. The findings underscore the importance of obtaining certification and the "Healthier Choice" logo from BPOM to increase consumer confidence in product quality. Transparency of the production process and clarity of composition information on product labels proved to be key factors in building consumer trust. Creating positive experiences through direct interaction with consumers and providing feedback channels can strengthen the emotional bond between consumers has also proven effective in expanding market reach. Branding strategies that emphasize health aspects and product purity need to be supported with valid evidence to maintain brand credibility. Involving consumers in the feedback process can increase satisfaction and loyalty to the product. The use of various communication channels to convey information on health benefits and product authenticity can strengthen the position of pure honey in the market.

#### Acknowledgement

The authors would like to express our sincere gratitude to the editorial team and reviewers for their invaluable contributions in evaluating and reviewing this scientific article. Their insightful comments, constructive feedback, and meticulous assessment have significantly enhanced the quality and rigor of this work.

## **Author Contribution**

The author contributed fully to the research.

## Funding

This research did not receive funding from anywhere.

#### **Ethical Review Board Statement**

Not available.

#### **Informed Consent Statement**

Not available.

## Data Availability Statement

Not available.

#### **Conflicts of Interest**

The authors declare no conflict of interest.

#### **Open Access**

©2025. The author(s). This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third-party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit: http://creativecommons.org/licenses/by/4.0/

#### References

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behaviour and Human Decision Processes*, 179–211. <u>https://doi.org/10.1080/10410236.2018.1493416</u>
- Balundė, A., Perlaviciute, G., & Steg, L. (2019). The relationship between people's environmental considerations and pro-environmental behavior in Lithuania. *Frontiers in Psychology*, *10*(OCT), 1–10. <u>https://doi.org/10.3389/fpsyg.2019.02319</u>
- Bogdanov, S., Jurendic, T., Sieber, R., & Gallmann, P. (2008). Honey for nutrition and health: A review. *Journal of the American College of Nutrition, 27*(6), 677–689. <u>https://doi.org/10.1080/07315724.2008.10719745</u>
- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment*. SAGE Publications, Inc. <u>https://www.doi.org/10.4135/9781412985642</u>
- Castro-Muñoz, R., Correa-Delgado, M., Córdova-Almeida, R., Lara-Nava, D., Chávez-Muñoz, M., Velásquez-Chávez, V. F., Hernández-Torres, C. E., Gontarek-Castro, E., & Ahmad, M. Z. (2022). Natural sweeteners: Sources, extraction and current uses in foods and food industries. *Food Chemistry*, 370(August 2021). https://doi.org/10.1016/j.foodchem.2021.130991
- Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods* 12th Edition. In Business Research Methods.
- Coricelli, C., Foroni, F., Osimo, S. A., & Rumiati, R. I. (2019). Implicit and explicit evaluations of foods: The natural and transf Shin ormed dimension. *Food Quality and Preference, 73*, 143–153. <u>https://doi.org/10.1016/j.foodqual.2018.11.014</u>
- Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, *173*(June), 121092. <u>https://doi.org/10.1016/j.techfore.2021.121092</u>

- de Groot, J. I., & Thøgersen, J. (2018). Values and pro-environmental behaviour. *Environmental psychology: An introduction*, 167-178. <u>https://doi.org/10.1002/9781119241072.ch17</u>
- Demirtas, B. (2019). Assessment of the impacts of the consumers' awareness of organic food on consumption behavior. *Food Science and Technology*, *39*(4), 881–888. https://doi.org/10.1590/fst.10518
- Edington, D. W., Schultz, A. B., Pitts, J. S., & Camilleri, A. (2016). The Future of Health Promotion in the 21st Century: A Focus on the Working Population. *American Journal of Lifestyle Medicine*, *10*(4), 242–252. <u>https://doi.org/10.1177/1559827615605789</u>
- Eteraf-Oskouei, T., & Najafi, M. (2013). Traditional and modern uses of natural honey in human diseases: A review. *Iranian Journal of Basic Medical Sciences*, *16*(6), 731–742. https://doi.org/10.22038/ijbms.2013.988
- Fortune Business Insight. (2021). The global honey market is forecasted to grow from \$8.17 billion in 2021 to \$11.88 billion in 2028 at a CAGR of 5.5% in forecast period, 2021-2028. From *Fortune Business Insight:* https://www.fortunebusinessinsights.com/industry-reports/honey-market-100551
- Ghauri, P. & Gronhaug, K. (2005). *Research Methods in Business Studies*. Harlow, FT/Prentice Hall.
- Gineikiene, J., Kiudyte, J., & Degutis, M. (2017). Functional, organic or conventional? Food choices of health conscious and skeptical consumers. *Baltic Journal of Management*, *12*(2), 139–152. <u>https://doi.org/10.1108/BJM-01-2016-0016</u>
- González-Montemayor, Á. M., Flores-Gallegos, A. C., Serrato-Villegas, L. E., López-Pérez, M. G., Montañez-Sáenz, J. C., & Rodríguez-Herrera, R. (2019). Honey and syrups: Healthy and natural sweeteners with functional properties. In *Natural beverages* (pp. 143-177). Academic Press. <u>https://doi.org/10.1016/b978-0-12-816689-5.00006-7</u>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks. Sage, 165.
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <u>https://doi.org/10.1108/EBR-10-2013-0128</u>
- Hair, J., Anderson, R., Babin, B., & Black, W. (2010). *Multivariate Data Analysis*. In Australia : Cengage: Vol. 8 edition (p. 758).
- Han, H., Hwang, J., & Lee, M. J. (2017). The value–belief–emotion–norm model: investigating customers' eco-friendly behavior. *Journal of Travel and Tourism Marketing*, 34(5), 590–607. <u>https://doi.org/10.1080/10548408.2016.1208790</u>
- Hogg, R. V., & Tanis, E. A. (2005). Probability and Statistical Inference (7th ed.). Pearson. https://www.pearson.com/us/highereducation/program/Hogg-Probabilityand-Statistical-Inference-7thEdition/PGM319365.html
- Hossain, K. S., Hossain, M. G., Moni, A., Rahman, M. M., Rahman, U. H., Alam, M., Kundu, S., Rahman, M. M., Hannan, M. A., & Uddin, M. J. (2020). Prospects of honey in fighting against COVID-19: pharmacological insights and therapeutic promises. *Heliyon*, 6(12), e05798. <u>https://doi.org/10.1016/j.heliyon.2020.e05798</u>
- Iqbal, J., Yu, D., Zubair, M., Rasheed, M. I., Khizar, H. M. U., & Imran, M. (2021). Health Consciousness, Food Safety Concern, and Consumer Purchase Intentions Toward Organic Food: The Role of Consumer Involvement and Ecological Motives. SAGE Open, 11(2). <u>https://doi.org/10.1177/21582440211015727</u>
- Kumar, S., Dhir, A., Talwar, S., Chakraborty, D., & Kaur, P. (2021). What drives brand love for natural products? The moderating role of household size. *Journal of Retailing and Consumer* Services, 58(May 2020), 102329. <u>https://doi.org/10.1016/j.jretconser.2020.102329</u>
- Kumar, S., Murphy, M., Talwar, S., Kaur, P., & Dhir, A. (2021). What drives brand love and purchase intentions toward the local food distribution system? A study of social mediabased REKO (fair consumption) groups. *Journal of Retailing and Consumer Services*, 60(October 2020), 102444. <u>https://doi.org/10.1016/j.jretconser.2021.102444</u>

- Kumar, S., Talwar, S., Murphy, M., Kaur, P., & Dhir, A. (2021). A behavioural reasoning perspective on the consumption of local food. A study on REKO, a social media-based local food distribution system. *Food Quality and Preference, 93*(October 2020), 104264. https://doi.org/10.1016/j.foodqual.2021.104264
- Li, X., & Li, J. (2012). *Statistical Human Genetics*. 850(January), 411–421. https://doi.org/10.1007/978-1-61779-555-8
- McBride, E., Arden, M. A., Chater, A., & Chilcot, J. (2021). The impact of COVID-19 on health behaviour, well-being, and long-term physical health. *British Journal of Health Psychology*, *26*(2), 259–270. <u>https://doi.org/10.1111/bjhp.12520</u>
- Ogiemwonyi, O. (2022). Factors influencing generation Y green behaviour on green products in Nigeria: An application of theory of planned behaviour. *Environmental and Sustainability Indicators*, *13*(June 2021), 100164. <u>https://doi.org/10.1016/j.indic.2021.100164</u>
- Oryan, A., Alemzadeh, E., & Moshiri, A. (2016). Biological properties and therapeutic activities of honey in wound healing: A narrative review and meta-analysis. *Journal of Tissue Viability*, *25*(2), 98–118. <u>https://doi.org/10.1016/j.jtv.2015.12.002</u>
- Purnomo, D., Bunyamin, A., Gunawan, W., Faizah, N. A., Danuwidjaja, T. G., Rohman, L. N., & Annisa, R. (2021). Motivation, purpose, and purchasing frequency of honey consumption in West Java. *IOP Conference Series: Earth and Environmental Science*, 948(1). https://doi.org/10.1088/1755-1315/948/1/012070
- Rahman, I., & Reynolds, D. (2019). The influence of values and attitudes on green consumer behavior: A conceptual model of green hotel patronage. *International Journal of Hospitality* and *Tourism* Administration, 20(1), 47–74. https://doi.org/10.1080/15256480.2017.1359729
- Rassool, G. H. (2014). *Cultural Competence in Caring for Muslim Patients*. Macmillan International Higher Education.
- Sahu, A. K., Padhy, R. K., & Dhir, A. (2020). Envisioning the future of behavioral decisionmaking: A systematic literature review of behavioral reasoning theory. *Australasian Marketing Journal*, 28(4), 145–159. <u>https://doi.org/10.1016/j.ausmj.2020.05.001</u>
- Salehzadeh, R., Sayedan, M., Mirmehdi, S. M., & Heidari Aqagoli, P. (2023). Elucidating green branding among Muslim consumers: the nexus of green brand love, image, trust and attitude. *Journal of Islamic Marketing*, 14(1), 250-272. <u>https://doi.org/10.1108/JIMA-08-2019-0169</u>
- Saraiva, A., Carrascosa, C., Raheem, D., Ramos, F., & Raposo, A. (2020). Natural sweeteners: The relevance of food naturalness for consumers, food security aspects, sustainability and health impacts. *International Journal of Environmental Research and Public Health*, *17*(17), 1–22. <u>https://doi.org/10.3390/ijerph17176285</u>
- Sekaran, U., & Bougie, R. (2016). *Research methods for business : a skill-building approach / Uma Sekaran and Roger Bougie*. In Nucleic Acids Research.
- Shidiq, G. (2009). Teori Maqashid Al-Syari'Ah Dalam Hukum Islam. Majalah Ilmiah Sultan<br/>Agung,44(118),117–130.

https://jurnal.unissula.ac.id/index.php/majalahilmiahsultanagung/article/view/15

- Shin, J., & Mattila, A. S. (2019). When organic food choices shape subsequent food choices: The interplay of gender and health consciousness. *International Journal of Hospitality Management*, 76(March 2018), 94–101. <u>https://doi.org/10.1016/j.ijhm.2018.04.008</u>
- Sillman, J., Uusitalo, V., Tapanen, T., Salonen, A., Soukka, R., & Kahiluoto, H. (2021). Contribution of honeybees towards the net environmental benefits of food. *Science of the Total Environment*, 756, 143880. <u>https://doi.org/10.1016/j.scitotenv.2020.143880</u>
- Singh, P., & Kashyap, L. (2020). *Sugar and Sugar Derivatives: Changing Consumer Preferences*. Singapore: Spinger. <u>https://doi.org/10.1007/978-981-15-6663-9</u>
- Sreen, N., Dhir, A., Talwar, S., Tan, T. M., & Alharbi, F. (2021). Behavioral reasoning perspectives to brand love toward natural products: Moderating role of environmental concern and household size. *Journal of Retailing and Consumer Services*, 61(March), 102549. <u>https://doi.org/10.1016/j.jretconser.2021.102549</u>

- Tandon, A., Dhir, A., Kaur, P., Kushwah, S., & Salo, J. (2020a). Behavioral reasoning perspectives on organic food purchase. *Appetite*, *154*(May), 104786. https://doi.org/10.1016/j.appet.2020.104786
- Thieme, J., Royne, M. B., Jha, S., Levy, M., & Barnes McEntee, W. (2015). Factors affecting the relationship between environmental concern and behaviors. *Marketing Intelligence & Planning*, *33*(5), 675-690. <u>https://doi.org/10.1108/MIP-08-2014-0149</u>
- Tonby, O., & Wibowo, P. (2021, September 10). How digital natives are driving consumer spending in Indonesia. Retrieved from *The Jakarta Post*: https://www.thejakartapost.com/academia/2021/09/09/how-digital-natives-are-driving-consumer-spending-in-indonesia.html
- Westaby, J. D. (2005). Behavioral reasoning theory: Identifying new linkages underlying intentions and behavior. *Organizational Behavior and Human Decision Processes*, 98(2), 97–120. <u>https://doi.org/10.1016/j.obhdp.2005.07.003</u>

Whitley, B.E. (2002). Principals of Research and Behavioural Science. Boston: McGraw-Hill

Wu, L., Du, B., Vander Heyden, Y., Chen, L., Zhao, L., Wang, M., & Xue, X. (2017). Recent advancements in detecting sugar-based adulterants in honey–A challenge. *TrAC Trends in Analytical Chemistry, 86*, 25-38. <u>https://doi.org/10.1016/j.trac.2016.10.013</u>

## **Biographies of Authors**

**Kholilah Qultsum,** Islamic Business Studies Program, Faculty of Economics and Business, Universitas Indonesia, Depok, West Java 16424, Indonesia.

- Email: <u>kholilahqultsum14@gmail.com</u>
- ORCID: N/A
- Web of Science ResearcherID: N/A
- Scopus Author ID: N/A
- Homepage: N/A

**Gita Gayatri,** Department of Management, Faculty of Economics and Business, Universitas Indonesia, Depok, West Java 16424, Indonesia.

- Email: gita.gayatri@ui.ac.id
- ORCID: 0000-0001-5089-2164
- Web of Science ResearcherID: N/A
- Scopus Author ID: 57190130530
- Homepage: <u>https://scholar.ui.ac.id/en/persons/gita-gayatri</u>