

TIJAB (The International Journal of Applied Business)

e-ISSN: 2599-0705

Vol. 6 No. 2, November 2022, pp. 145-164

Factors Influencing Consumer Intention to Purchase Plant-Based Milk in

Indonesia: An Exploratory Research

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APA Citation:

Chandra, R., Purwanti, D. A., Sebastian, S., Pranata, S. E., & Handoko, I. (2022). Factors influencing consumer intention to purchase plantbased milk in Indonesia: an exploratory research. *TIJAB (The International Journal of Applied Business)*, *6*(2), 145-164. Submission Date: 26/04/2022 Revision Date : 10/06/2022 Acceptance Date: 27/10/2022 Published Date : 25/11/2022

Abstract

The consumption rate of plant-based milk has been increasing in recent years. This also can be interpreted that consumers shifted from cow milk consumption to plant-based milk. This study aims to examine what factors influence the intention of customers to drink plant-based milk. For this purpose, the approach-avoidance theory was adopted to explore both facilitating (positive) and inhibiting (negative) factors that influence the consumers' intention to consume the product. This study adopts qualitative research by interviewing 15 plant-based milk consumers and comparing them with 10 cow milk consumers about their perception of plant-based milk consumption. Indonesia was chosen as one large emerging economy in Southeast Asia with a tremendous consumption rate (The World Bank, 2022). The research findings suggest there are nine factors that are affecting consumers' intentions in purchasing plant-based milk, namely: trends, price, sickness awareness, nutrition awareness, sensory, and environmental concerns, packaging, brand, and ways to consume.

Keywords: plant-based milk; dairy milk; consumer intention; milk consumption; approach-avoidance theory

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1. Introduction

Milk consumption has been intensively studied by scholars, mainly as milk is considered can significantly contribute to human nutrition (Haas et al., 2019). Milk contains almost all the primary substances of nutrition such as carbohydrates, proteins, minerals, and vitamins (Oktafiani, 2009). Cow milk, known as dairy milk, or other milk produced by mammals (such as goats or donkeys), has been commonly recognized for years in milk consumption. However, there is a growing concern about the environmental impact of cow milk consumption. The main environmental problems associated with dairy milk production include soil degradation, water, and water pollution, as well as loss of biodiversity

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(Haas et al., 2019). In addition to the environmental issues, there is also an increased number of lactose intolerance cases in humans (Szilagyi, 2015). There is a growing trend of people having a dairy milk allergy, or other health problems, such as high cholesterol, which requires them to adopt a dietary lifestyle (Sethi, Tyagi, and Anurag, 2016). As dairy milk is believed to cause several harmful issues, there is a growing need to search for alternative products. One of the alternatives is plant-based milk.

Plant-based milk is often presented as a healthy, sustainable, and dairy-free alternative in the process (Rasika and Vidanarachchi, 2021). The increasing number of people consuming plant-based milk is also observed in Indonesia. Existing studies reveal that population growth, economic development, and the orientation of a healthy lifestyle have influenced Indonesian people to consume more healthy products including plant-based milk (Hutabarat, 2021). Plant-based milk products are made from different ingredients, including nut milk (soy, almond, hazelnut, cashew), wheat milk, and rice milk, which require different production processes. Depending on the ingredients and processes, plant-based milk thus has different nutrition, texture, and taste. The changing orientation toward the environment and health issues has influenced people's lifestyle, such as flexitarianism & veganism, as well as their beliefs (Hoffman and Stallings, 2013).

Taken together, the growing phenomenon of changing orientations can be regarded as the driving force behind the increasing demand for plant-based milk. However, the study on plant-based milk is still hardly found compared to plant-based meat (see Cardello et al., 2022). This nascent phenomenon has motivated us to study the actual motivating factors of Indonesian consumers to consume plant-based milk. What is their motivation to try this kind of milk product that is less known by common consumers? At the same time, we also want to know what inhibiting factors are perceived by people who do not drink plant-based milk. In this way, we can understand better the negative perception of plant-based milk that made them reluctant to consume it. To examine the reasoning factors behind consumers' decisions to consume (or not) the product, we adopt the approach-avoidance theory, which could help us map out the different perspectives. We hence formulate a research question: "What are the motivating and inhibiting factors influencing Indonesian consumers to consume plant-based milk?" To address the question, an explorative approach was used with the in-depth interview as the main method. The research findings suggest the theoretical contribution of plant-based consumer behavior in the Indonesian context, as well as practical or managerial contributions.

2. Literature Review

2.1. Plant-Based Milk

According to McClements (2020), plant-based milk is a substitute product for dairy milk that is designed to have similar look, feel, taste, and shelf-life to dairy milk, hence the similar use and applications. Using the water extraction of legumes, nuts, and cereals, plant-based milk is completely free from animal-based ingredients. However, plant-based milk cannot have the exact same properties as dairy milk, since they contain different kinds of molecules and structures (McClements, 2020). For instance, plant-based milk products have their own unique taste, based on the particular ingredients and unit operations used to make them. Today, scientists are still continuously developing plant-based milk products. For example, some products have low stability towards heat, some are unable to get whipped and foamy, some cannot be utilized the exact same way dairy milk does, and some might have some sensory properties that are unacceptable for some consumers (Dhankhar and Kundu, 2020). Furthermore, Haas et al. (2019) suggest that the general motivation for milk consumption is solely based on the consumers' common perception of milk from the output. Some consumers of plant-based milk have more varied motives, including concerns about animal welfare and sustainability issues (Haas et al. 2019). In addition, the growth of dietary lifestyles like veganism plays a role to promote the

increasing demand for plant-based milk products (Petre, 2019). Veganism is defined as a way of living that attempts to exclude all forms of animal exploitation and cruelty, be it from food, clothing, or any other purpose (Petre, 2019). For the past few years, veganism has been increasingly popular, particularly as more celebrities adopt the lifestyle.

2.2. Intention to Buy

Previous studies on consumer behavior have discussed several factors affecting consumers' intention to buy, particularly those related to food or drink consumption. One recent study by Istijanto & Handoko (2021), for instance, has identified some factors that influence boba-drink consumption among young consumers in Indonesia. Moreover, a specific study about plant-based products has been conducted by Izsó et al., (2019), which shows some factors that affect the intention of consumers to buy plant-based sour creams, such as the price of the products, consumer experiences, and the thereby perceived price-value ratio, knowledge, and consciousness, nutritional awareness, sensory properties, level of liking of the product, and culinary openness and skills. In addition, Martinelli, E., & de Canio, F. (2021) reveal that environmental concern is one of the main factors affecting consumers' intentions to purchase vegan food. However, there have been hitherto rarely found existing scholarly works about factors affecting purchase intention on plant-based milk amongst Indonesian consumers.

2.3. Approach-Avoidance Theory

Approach-Avoidance Theory refers to a decision or behavior which is simultaneously associated with desirable and undesirable consequences (Ehrlich and Fasbender, 2017; Clark et al., 2019). The theory is derived from environmental psychology, where stimuli like color, sound, and brightness of physical environments, and individuals' arousal-seeking tendencies are analyzed (Clark et al., 2019). According to research by Guo and Main (2017), the theory of approach and avoidance discusses the fundamental human motivations, which can potentially influence the human elements of affection, cognition, and behavior when purchasing a product. Approach factors are responsible for promoting behavior and generating higher levels of positive affect, while avoidance factors are responsible for inhibiting behavior and generating fewer positive effects. It is also stated that individuals with approach motivation prefer to be closer to the stimuli, while individuals with avoidance motivations tend to distance themselves from the stimuli. In this research, the approach-avoidance theory is used to study the customers' intention to buy plant-based milk as the stimuli from both the approach and avoidance factors. Referring to the research objective of the present study in gaining insights into what factors actually motivate or inhibit Indonesian consumers' intention to buy plant-based milk, exploratory research is applied (see Istijanto & Handoko, 2021). The following part describes the research methodology.

3. Method

A qualitative method is used to obtain insights into what factors facilitate and inhibit consumers' intention to buy plant-based milk in Indonesia. According to Creswell (2013), a qualitative approach is used to explore and understand the meaning that some individuals or groups of people think come from social or human problems. The final report of a qualitative study has a flexible structure or framework. The main perspective of this study is inductive, focusing on searching for individual meanings, and translating the complexity of the phenomenon (Aspers and Corte, 2019).

3.1. *Sample*

This research used a purposive sampling approach, where informants were selected to represent the research purpose. We investigated two groups of consumers who regularly drink: (1) dairy milk (referred to as cow or goat milk), and (2) plant-based milk (i.e., milk made from soy, almond, and cashew, among others). The main reason to interview these two types of consumers is to capture different perspectives on plant-based milk consumption amongst Indonesian young consumers, particularly from the Gen-Z and Gen-Y cohorts. In this research, we selected 15 plant-based milk consumers and 10 dairy milk consumers who lived in the Greater Jakarta area (Jakarta, Bogor, Depok, Tangerang, Bekasi), in Indonesia, classified as Gen-Y or Gen-Z, middle or upper class in terms of social-economic status. By comparing the two groups, we could capture both the motivating and inhibiting factors of consuming plant-based milk. Table 1 outlines the list of informants who have been interviewed.

Table 1. 7	The informant	profiles
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ID	Gender	Age	Consumption
PBM1	Female	24 y.o	Plant-Based Milk
PBM2	Female	29 y.o	Plant-Based Milk
PBM3	Female	22 y.o	Plant-Based Milk
PBM4	Female	26 y.o	Plant-Based Milk
PBM5	Female	24 y.o	Plant-Based Milk
PBM6	Female	25 y.o	Plant-Based Milk
PBM7	Female	23 y.o	Plant-Based Milk
PBM8	Female	27 у.о	Plant-Based Milk
PBM9	Male	24 y.o	Plant-Based Milk
PBM10	Male	26 y.o	Plant-Based Milk
PBM11	Female	24 y.o	Plant-Based Milk
PBM12	Female	26 y.o	Plant-Based Milk
PBM13	Female	29 y.o	Plant-Based Milk
PBM14	Female	27 у.о	Plant-Based Milk
PBM15	Female	27 у.о	Plant-Based Milk
DM1	Male	26 y.o	Dairy Milk
DM2	Female	25 y.o	Dairy Milk
DM3	Female	26 y.o	Dairy Milk
DM4	Male	27 у.о	Dairy Milk
DM5	Male	29 y.o	Dairy Milk
DM6	Female	28 y.o	Dairy Milk
DM7	Female	25 y.o	Dairy Milk
DM8	Female	26 y.o	Dairy Milk
DM9	Female	27 у.о	Dairy Milk
DM10	Female	27 у.о	Dairy Milk

3.2. Data collection

In addressing the research objective, we collected primary data by using semi-structured and in-depth interviews with 15 plant-based consumers and 10 cow milk consumers in Indonesia. The main purpose of conducting the interview was to obtain valuable information from the informants, and simultaneously

interpret the information (Ask Talent Services, 2021). The interview protocol was developed prior to the interviews, consisting of several questions. There are two types of questions that were asked based on the informants' profile, whether they were plant-based milk or dairy milk consumers. The interview questions were designed based on each group. Regarding plant-based milk consumers, the questions are as follows:

- 1. What was your experience when buying plant-based milk?
- 2. How was your experience when consuming plant-based milk?
- 3. Why did you consume plant-based milk?
- 4. What were the unpleasant experiences you had when consuming plant-based milk?
- 5. What were the factors preventing you from consuming plant-based milk?
- 6. What do you expect from consuming plant-based milk?
- 7. What do you expect from plant-based milk that is currently already on the market? Whereas the questions for dairy milk consumers are as follows:
- 1. What was your experience when buying dairy milk?
- 2. How is your experience when consuming dairy milk?
- 3. Why do you consume dairy milk?
- 4. What unpleasant experience have you had when consuming dairy milk?
- 5. Why didn't you consume plant-based milk (soy/almond/oat/cashew) until recently?
- 6. In your opinion, does plant-based milk have any advantages over dairy milk?
- 7. What do you expect from the existing dairy milk products?

The interviews were conducted online using Zoom and Google Meet due to the Covid-19 pandemic that has been going on since early 2020. Each interview was conducted for around 30 to 60 minutes using the Indonesian language. All the interviews were recorded and transcribed verbatim.

3.3. Data analysis

Regarding the data analysis, we applied a descriptive method, where the data collected were coded and classified, and interpreted objectively to gain insights about factors influencing consumers' intention to purchase plant-based milk. Coding as the main approach of the data analysis in this qualitative research refers to "how you define what the data you are analyzing is about" (Gibbs, 2007). Coding is the process of identifying a passage in the text or other data items (including photographs, and images), searching and identifying concepts, and finding relations between them. Therefore, coding is not just labeling; it is linking the data collected with the theoretical constructs, and triangulating with other data if necessary (Cessda, 2020). In the coding process, the researchers did the coding separately on the 25 interviews first. In this initial coding process, each researcher referred to the main concept of the Approach-Avoidance Theory. During the process, emerging codes were obtained. The next process was to discuss the individual coding results to obtain an agreement about the final coding. The following section analyzes the findings.

4. **Results**

4.1. Findings: Approach and Avoidance Factors

Derived from the data analysis through the coding process, we found several codes that could be categorized as factors influencing consumers' intention to buy plant-based milk. Table 2 summarizes the findings by classifying each code into approach and avoidance groups. All the transcribed data had been translated into English, and some representative quotes taken from the transcription were presented to help explain the findings.

		Approach Factors
No.	Factor	Representative Quotes
1	Trends	"Drinking plant-based milk can also help people go vegan, maybe for people that do not want to try veganism too extreme, so they try using plant-based mill first because when I first want to try going vegan, I try to drink plant-based milk first, then slowly transitioned to full vegan later." - PBM 1
		"I see my sister and my mom love to make it at home, then they tell me to try it so I tried it and I love it." - PBM 3
		"I have a friend that is really into vegan, I was also invited to vegan cafes, so I know soy milk, and I was asked to find out about O****." - PBM 5
2	Price Sensitivity	"Usually I buy online, the price is cheaper online too" - PBM5
3	Sickness Awareness	 " and (I'm also) allergic to dairy, but my body awareness is different. When the antibodies are lacking, the allergy appears" - PBM7 "Diarrhea, then my weight increases quickly (when drinking dairy milk)." - DM2 "Because if I eat peanuts, I get lots of acne, so I am afraid to get acne. Because I've had an allergy test and I can't eat peanuts and too much protein." - DM2 "(If there is no plant-based milk), I do not drink milk at all, because drinking dairy milk can cause stomach acid." - PBM3 "Since I was a child, I throw up every time I drink dairy milk, then when I was checked by the doctor, it turned out that I am lactose intolerant. So since then, I never drink dairy milk again." - PBM12 " When I was little, I think I drank soy milk because I had some sickness, so I drank soy milk. Well, after I started drinking soy milk, I recovered. But I forgo what the sickness was. Basically, I was sick, but I forgot the details. Anyway, I think the ingredients are better for people who are easily allergic. I mean, it's

Table 2. Factors influencing consumers' intention to buy plant-based milk

4	Nutrition Awareness	 "I used to drink because people said it is good for the fetus, and it is also recommended by doctors, so I drank it." - PBM2 "I don't feel guilty, because the calories aren't that big" - PBM5 "(Plant-based milk) has lots of vitamins, good proteins" - DM6 "(Dairy milk) also has more fat. Because I'm still breastfeeding, it inhibits my milk. So, the doctor suggested reducing it." - DM6 "Actually, I don't know if it's from a health point of view People do have different reactions to food. So, I can't say whether plant-based milk is healthier than dairy milk, but in fact, that is how it is for my sister and me. I feel like plant-based milk is more friendly to my body and my stomach. I feel like it's healthier. That's right, I hope it's healthier." - PBM15
5	Sensory	"it's lighter (plant-based milk), dairy milk is really creamy." - PBM8 "In my opinion, the taste (of plant-based milk) is quite good, a little different from regular milk (dairy milk). I feel like soy milk has more texture I feel fuller when consuming plant-based milk," - PBM10 "(Plant-based milk) is lighter than dairy milk." - DM8
6	Environmental Concerns	"I don't want to support the dairy industry, because they do a lot of unethical things. Producing food and drinks using animals is damaging to the environment. This, of course, harms the animals too. And the dairy industry also produces a lot of pollution, so it's not sustainable in the long run" - PBM 1 "Producers of plant-based milk have an awareness about environmentally friendly, so I think if I consume it, I can contribute to help the environment" - PBM 5
7	Packaging	 "Must be interested in the packaging. The ones with brand names that are not weird, the description on the box is clear, the color also makes me interested" - PBM8 "Actually, plant-based milk packaging is better than dairy milk, they don't have a striking color, so the packaging is okay," - PBM7 "In my opinion, the packaging is pretty good, there are several size variants, and from a design perspective it is also very interesting, where usually plant-based milk features its base product on the front of the package, so that customers know that it is plant-based milk." - PBM10

8	Brand	"Of all the brand choices available, I prefer to drink V***** and A**** B*****, because they are widely available everywhere, so I don't have to bother and waste time looking for them." - PBM3
		" finally tried milk from imported brands (O**** and S* G***) and found out that almond milk is delicious." - PBM6
		"Because plant-based milk is unique, each brand has its own character." - PBM8
		"Have tried almost all brands, V***, S* G***, A***** B*****, R*** H***** almond milk, and O*** *. But most often consume products from brands V*** and O****" - PBM11
9	Ways to Consume	"Drink it in the morning and mix it with coffee." - PBM3
		"Usually every morning I drink plant-based milk to be eaten with muesli/granola so that when you eat it doesn't taste bland, and the milk is mixed with the muesli/granola." - PBM11
		"Actually, I like to drink milk to fill my stomach. When I'm hungry, if I don't have food, I like to drink a lot of milk." - DM1
		"Usually, to drink daily or to be eaten with cereal. Also, when making cakes, I sometimes use liquid or powder. It depends on the requirement for the kind of cake I will bake." - DM3
		Avoidance Factors

No.	Factor	Representative Quotes
1	Trends	-
		"Hopefully it's not too pricey so you can consistently drink it every day," - PBM11
2	Price Sensitivity	"The barrier is that the price is more expensive than dairy milk." - PBM12 "In my personal opinion, plant-based milk is more expensive, for example, in any mini-market, you can get more amount of dairy milk than the soy one, but
		the soy-milk price is still more expensive." - DM5 "(What prevents me from drinking plant-based milk is) in terms of price, it's a bit more expensive than ordinary, affordable milk" - PBM14
		"(I am not consuming plant-based milk because) it's expensive, hehe." - DM9

3	Sickness Awareness	" because my hormones are irregular, soymilk is not recommended by my doctor" - PBM7"Because if I eat peanuts, I get a lot of acne, so I am afraid that (acne) will happen. Because I've had an allergy test and the result says that I can't eat peanuts and too much protein." - DM2
4	Nutrition Awareness	 "Plant-based milk is not milk. I know how to make it, learning from YouTube. So, I think this is not milk, but the juice you get from squeezing peanuts. I thought, where do I get the nutrition from? Because when you compare it, isn't it better to eat the full peanuts rather than only taking the nutrition of the peanuts? On the other hand, dairy milk is already well-known to be nutritious." - PBM6 "Especially for soy, they are rarely organic, and it is hard to find the organic one. Just like V***, it says it's organic, but it does not have any stamp or details about it on its packaging." - PBM5 "I see the composition, not the nutrition. Because I want to see, how come the milk is thick, how could it be? My sister makes some foods that will be sold. When she wants to claim there is no a,b, or c as the ingredients. Therefore, we need to see if there are any a,b,c ingredients in the plant-based milk that we will choose." - PBM5 " and maybe we can start to increase awareness by collaborating with various F&B to encourage the benefits of plant-based milk, but also improve the taste and nutritional content of plant-based milk, wer through a lot of processes, for example, those almonds (milk) have gone through a lot of processing." - DM5 "(I am consuming dairy milk) because in my opinion, the content (of dairy milk) is healthier. I have known dairy milk since I was little, and I think the contents inside dairy milk can help the body become stronger. It makes the body fuller, but that's my opinion." - DM4

Derived from the findings above, there are nine factors that can be regarded as both approach and avoidance factors regarding plant-based milk consumption: trends, price sensitivity, sickness awareness, nutrition awareness, sensory attributes, environmental concerns, packaging, and ways to consume. The following part discusses each factor.

4.2. Approach Factors

4.2.1 *Trends*

There are two types of trends based on the interview data: peer pressure and veganism. The term "peer pressure" is used when people are talking about behaviors that are not considered socially acceptable or desirable, such as experimentation with alcohol or drugs. The term "peer pressure" is not usually used to describe socially desirable behaviors, such as exercising or studying (Hartney, 2020). Peer pressure is a huge factor that can help people make their decision. This research suggests that when peers or relatives ask the informants to consume plant-based milk, they were influenced to consume it. After consuming the plant-based milk, those who liked or enjoyed it would consume the milk more routinely. In this regard, they would tend to continuously consume plant-based milk. Furthermore, this study also found the perspective of veganism amongst several informants, as they were aware of a healthy lifestyle. This finding suggests that plant-based milk can be a good start for people to go vegan, and hence create a healthy habit. Consuming plant-based milk slowly over time can help people go vegan without having to go to the extreme to be vegan first, then later they can transition to a vegetarian lifestyle.

4.2.2 Price Sensitivity

Another factor found is price sensitivity that is referred to the degree to which price influences the decision-making process of consumers to purchase or use a product or service (Clausen, 2004; López-Fernández, 2020). In the interview data derived from those who consumed plant-based milk, one informant revealed that as the price of plant-based milk was cheaper through online purchases, this encouraged her to buy the product more often. As for the other informants, the majority of them hope the price of plant-based milk will be lower in the future. In addition, one of the informants said that with a lower price, she will consistently consume plant-based milk every day. This suggests that price could be one important approach factor.

4.2.3 Sickness Awareness

Most of the informants mentioned lactose intolerant as their pain from consuming dairy milk, while some others mentioned that they have dairy allergies, hence the substitution of plant-based milk comes into place. Based on Hegar and Widodo (2015), lactose intolerance is the inability to digest lactose in the diet. It is a common problem in Asia, where the usual symptoms are abdominal pain, bloating, flatulence and diarrhea. The prevalence of lactose intolerance based on one study by Dewiasthy et al. (2021) in Dr. Cipto Mangunkusumo Hospital Jakarta amounted to 66%, 54%, and 73% of the total population, dairy, and non-dairy users, respectively. Another similar pain mentioned in the interview was gastritis, which is often triggered by high-protein meals, including dairy milk, that triggers the excessive secretion of stomach acid (Arikah & Muniroh, 2015).

According to Lactose Intolerance vs. Dairy Allergy (2017), the difference between lactose intolerance and dairy allergy is the nutrition that is unable to be digested. People with lactose intolerance do not produce lactase in their bodies, which is an enzyme needed to digest lactose, a type of sugar that is commonly found in dairy products. While people with dairy allergies cannot digest proteins that are commonly found in dairy products. Their bodies treat those proteins as foreign objects that are harmful to the body and release an enzyme called histamine that causes allergic reactions, like rashes and hives, trouble breathing, and even loss of consciousness, if severe.

Other informants said that they have skin issues like excessive acne, hives, and rash when consuming dairy milk. According to Juhl et al. (2018), any dairy, such as milk, yogurt, and cheese, was associated with an increased odds ratio for acne in individuals aged 7–30 years. Other than that, the perception of dairy milk as one of the main sources of weight gain is also mentioned, mainly because the informants perceive that dairy milk has more calories and fat content than plant-based milk, which is based on Ferreira (2020), is true.

4.2.4 Nutrition Awareness

In general, the informants perceive plant-based milk as a healthier choice that offers several vitamins, good proteins, less fat, and fewer calories, hence making them feel less guilty when consuming plantbased milk compared to dairy milk. This finding confirms the study by Haas et al. (2019) that suggests healthy nutrients, taste (sweetness, creaminess, aftertaste), and lactose-free are the important product attributes of plant-based milk. Aside from that, plant-based milk is also perceived as good for embryos, therefore is good to consume when pregnant, and a better choice of milk to consume while breastfeeding because of the less fat content. It is proven that soymilk, in particular, has the ability to speed up the duration of delivery (Jaya et al., 2019) and increase breast milk volume in breastfeeding mothers (Puspitasari, 2018).

4.2.5 Sensory Attributes

According to Wong et. al., (Afzal & Faisal, 2018), appearance, smell, and taste are the sensory attributes of food. In addition, consumers consider the sensory attributes while they are making decisions to purchase food (Steptoe et. al., 1995; Afzal & Faisal, 2018). According to the informants who regularly consumed plant-based milk, most of them said that the texture of plant-based milk is lighter than dairy milk and some of them also said it tends to make them feel fuller which makes them choose plant-based milk over dairy one.

4.2.6 Environmental Concern

Environmental concern refers to the protection of the natural world of land, sea, air, plants, and animals (collinsdictionary.com, 2022). Over the past few years, there was an increased number of people concerned the environmental issues, especially during the Covid-19 pandemic (Rume & Islam, 2020). This research suggests that environmental concerns are one of the factors why people prefer to drink plant-based milk instead of dairy milk. Most of the informants perceived that the dairy industry is potentially endangering the environment, as well as animals. They expressed their concern about how animals could be suffering as a result of unethical production processes. In addition, the dairy industry also produces a lot of pollution to the environment, so it is not sustainable in the long run.

4.2.7 Packaging

According to research that has been conducted in Malaysia by Yeo et al. (2020), packaging has an impact on customer purchase intention. In addition, it is also stated that the color, material, and graphics of the packaging contributed to the customer purchase intention in Malaysia. The finding confirms the existing literature, as the informants revealed that the packaging of plant-based milk could attract them to purchase. According to the informants, packaging that had a simple name, and not too flashy colors on the packaging are what attracts them. In addition, to the informants who consume plant-based milk, those kinds of milk packages are better than the dairy ones, and nowadays they are also available in

various sizes. This finding seems to contradict the study by Yeo et. al. (2020), which shows that packaging does not contribute to the intention to purchase.

4.2.8 Brand

A brand is a name, term, symbol, design, or a combination of these four elements that identify the seller's product and distinguish it from competitors' products (Lamb, 2001). A brand is also a distinguishing mark for products or services produced by a company and other companies. Based on the interviews, each brand of plant-based dairy product has its uniqueness and character. In accordance with Keller's statement in Tjiptono (2005), "A brand is a product that can provide an additional dimension that uniquely distinguishes it from other products designed to satisfy similar needs". These differences can be rational and tangible (related to the product performance of the brand in question) or symbolic, emotional, and intangible (related to brand representation). Most of the informants choose a brand of plant-based milk compared to other brands of plant-based milk because the brand is affordable, easy to obtain, and available everywhere. Therefore, with more local or imported plant-based milk brands spread evenly in Indonesia, consumers of plant-based milk in Indonesia will also increase.

4.2.9 Ways to Consume

According to Gibson (2005), in general, consumers can determine the habit of consuming adequate levels of food and nutrients at the group, household, and even individual levels as well as the factors that influence the consumption. From the informants, it can be seen that the diary record on how to consume plant-based milk can be seen depending on consumption time patterns, namely in the morning. For example, they usually mix plant-based milk with coffee or cereal. Here, one of the informants mentioned that he mixes it with muesli/granola so that when consuming it, there is no taste that tends to be bland from plant-based milk, so the plant-based milk can have a new taste. In this way, plant-based milk can have several ways to be enjoyed according to the tastes of each consumer.

4.3. Avoidance Factors

4.3.1 *Price*

Most of the informants, whether they consume plant-based or dairy milk, think that plant-based milk has a high price compared to dairy milk. This makes those who consume dairy milk reluctant to buy it. While for those who consume plant-based milk, they will consider buying now or later or they will look for a cheaper one on the market.

4.3.2 Sickness Awareness

Some informants mentioned that consuming nuts and high-protein food makes her have excessive acne. However, Sihaloho and Indramaya (2016) mentioned that while the definite cause of acne is still unclear, the four-base pathogenesis of acne is hyperproliferation of pilosebaceous follicles, excessive sebum production, inflammation, and colonization of Propionibacterium acnes. Therefore, further research is still needed to surely judge whether diet truly affects acne.

One informant also mentioned that she has a hormonal imbalance, hence the restriction of soy consumption, including soy milk. Based on Rostanti (2020), soy is generally viewed as a healthy option, since it contains a bioactive substance called phytoestrogen that plays the role of estrogen hormone in the body, which can help with hormonal imbalance. However, this external substance might confuse the body to think that it already produces enough estrogen hormone, hence producing even less, causing ovulation to stop completely.

4.3.3 Nutrition Awareness

Some informants do not perceive plant-based milk as milk, but as peanut juice that is highly processed with lots of additives to make justice to its flavor, taste, appearance, and so on. It is also stated by Dhankhar and Kundu (2021), that to get the right consistency, additives like oils, emulsifiers, stabilizers, and thickeners are added to plant-based milk products. Yet the perceived taste and nutrition of the products are still not good enough, hence the need for improvement in those areas. One that comes to attention is the sweetener preference of plant-based milk that is more inclined to the natural ones like dates, and also the sweetness level of the milk. These are also stated by Haas et al. (2019), that the most important attributes of plant milk were sugar level (naturally sweetened), plant source (almond), and the size of the packaging (half a gallon). Other than that, dairy milk is also perceived as healthier by some informants because it is what they have been drinking since childhood. This is also confirmed by the study of Haas et al. (2019), which states that for cow milk consumers, cow milk is seen as a staple food that is often consumed out of habit.

4.3.4 Sensory

As previously explained, the sensation is one of the factors that influence the consumer's intention to purchase plant-based sour cream, this also applies to plant-based milk consumers. Some opinions from the informants were that plant-based milk tastes bland, is too fibery, and has a runny texture when compared to dairy milk. This is also one of the factors for dairy milk consumers prefer dairy milk, where according to them, dairy milk is 'richer' in terms of taste and its texture is thicker.

4.3.5 Packaging

Although according to some of the informants the packaging of plant-based milk looks attractive in terms of the color, simple name on their packaging, and the variety of sizes, some informants said that they had bad experiences with it. Such as cardboard packaging that spills easily or packaging that uses glass bottles where it doesn't have an expiration date on it, so sometimes it still likes to be consumed.

4.3.6 Brand

In choosing a brand of plant-based milk, consumers also need to be more selective. From the informants the researchers got, some brands do not taste good, which causes one of the informants' researchers not to want to buy the brand again. In addition, several imported plant-based milk brands available in Indonesia also have higher prices compared to local brands. Therefore, local Indonesian brand plant-based milk must be able to provide a better taste and guarantee the brand can compete with imported plant-based milk.

5. Discussion

By doing line-by-line coding forces, the researchers could verify and saturate categories, minimize missing important categories, and ensure relevance by generating codes with emergent fit to the substantive area under study. This approach can also ensure the relevance of the emerging theory, through which the researchers could see which direction to take in theoretical sampling before becoming too selective and focused on a particular problem. The research results are rich, dense theories with the feeling that nothing has been left out (Holton, 2010).

The research findings identify different factors affecting consumer intention to purchase plant-based milk in Indonesia. The factors can be grouped into approach and avoidance, each group comprising nine factors, namely trends, price, sickness awareness, nutrition awareness, sensory, environmental concerns,

packaging, brand, and ways to consume. Each factor has something that is known as a stimulus that makes consumers want to buy plant-based milk, as well as a stimulus that makes consumers avoid buying plant-based milk. This finding was derived from two different types of consumers: plant-based milk consumers and dairy milk consumers.

There are two interesting points identified in each factor. First, the findings suggest that some factors related to health issues, such as sickness and nutrition awareness, were indeed considered as the approach factors or strong motivation for customers to consume plant-based milk. Interestingly, the findings also show that sickness and nutrition awareness were regarded as the avoidance factors by customers who did not intend to buy the plant-based milk product. Contrarily to the plant-based milk supporters, the product was perceived by the opposite types of customers as containing additive ingredients, which are negatively perceived as not only can cause sickness but also health risks. Second, price, which was considered an avoidance factor for people not buying the milk, could be regarded as a motivator when sold through online purchases. This suggests a market potential, particularly for potential customers who already have a positive perception of the product, but have not bought it because of the perceived high price.

This study confirms the concept from Ordovas and Ferguson (2018), suggesting that as each individual has different nutrition needs, thus nutrition-related treatment should be done on a personalized basis, to suit the needs of each individual. The finding also indicates the lack of market education about plant-based milk products, therefore needed to be intensively communicated, including its positive and negative effects, and supported by scientific data. Furthermore, this study also found new insights from previous research conducted by Izsó et al., (2019) and Martinelli, E., & de Canio, F. (2021) regarding the factors that influence the intention of consumers to buy plant-based sour creams and vegan food, namely price of the products, nutritional awareness, sensory properties, and environmental concerns. The present study also contributes to some new factors, namely trends, sickness awareness, packaging, brands, and ways to consume, which can be regarded as additional factors in the intention to buy plant-based milk. Furthermore, as this study employed the approach-avoidance theory approach, the factors can also influence the customers' intention to consume plant-based milk. Accordingly, companies that produce plant-based milk can choose which factors are potentially able to foster a higher intention to consume plant-based milk for their target consumers.

This study also offers practical contributions, such as the potential for increasing consumption of plant-based milk in Indonesia due to a lifestyle that follows suit, providing more effective product knowledge, companies can target individuals who want to try the vegetarian/vegan lifestyle that is not drastically direct, companies can make improvements to plant-based milk so that it can be accepted better. A healthy lifestyle that is seen by close relatives or friends causes the potential for an increase in the purchase of plant-based milk in Indonesia. There are several wrong perceptions among the public, such as the consumption of peanuts and high protein foods that can cause acne and the prohibition of consuming soy milk because it can cause hormonal imbalance so plant-based milk companies must provide effective product knowledge to the public to increase good awareness of plant-based milk.

6. **Conclusions**

The present study identified a group of customers who consume plant-based milk because they want to change their lifestyle to become vegan but not drastically. This finding can be seen as an insight for plant-based milk companies, especially the marketing division that plant-based milk can be their first choice to help individuals who want to change their lifestyle to become vegetarian/vegan. Based on this study, it appears that many of the informants who have actually been exposed, even enjoy consuming plant-based milk. Thus, it can be said that plant-based milk has a potential market in Indonesia. However, the research findings also indicate that the quality of plant-based milk is still often compared

to dairy milk. Therefore, improvements need to be made by plant-based milk producers not only to improve the quality of their products, but also to intensively educate the market, so that the product can be better accepted by the Indonesian market, both from a sensory perspective such as aroma, taste, and texture, as well as from a nutritional perspective such as sugar and protein content.

This study has several limitations. As the research was solely held in certain areas (Jakarta, Bogor, Depok, Tangerang, Bekasi), the findings mainly show how young consumers in big cities in Indonesia perceive plant-based consumption. This suggests a further study that incorporates smaller cities. Moreover, as the data collection was done online due to the Covid-19 pandemic in early 2020, the researchers could mainly interpret the informant's perspectives based on what was captured through the camera and their voices. By having offline interviews, more non-verbal messages can be captured. Furthermore, as the study adopted a qualitative approach to gain insights, this could be continued by applying a quantitative approach to validate the findings. Lastly, the informants' backgrounds should be diversified, since this research was only conducted on Gen-Z and Gen-Y consumers.

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Faktor-Faktor yang Mempengaruhi Niat Konsumen untuk Membeli Susu Nabati di Indonesia:

Sebuah Penelitian Eksplorasi

Abstrak

Tingkat konsumsi susu nabati telah meningkat dalam beberapa tahun terakhir. Hal ini juga menunjukkan tren penurunan konsumsi susu sapi, hal ini dikarenakan konsumen beralih ke susu nabati. Penelitian ini bertujuan untuk mengetahui faktor-faktor apa saja yang mempengaruhi niat konsumen untuk minum susu nabati. Untuk tujuan ini, peneliti mengadopsi teori approach-avoidance untuk mengeksplorasi faktor-faktor yang memfasilitasi (positif) dan menghambat (negatif) yang mempengaruhi niat konsumen untuk mengkonsumsi produk tersebut. Penelitian ini menggunakan penelitian kualitatif dengan melakukan wawancara 15 konsumen susu nabati dan membandingkannya dengan 10 konsumen susu sapi tentang persepsi mereka terhadap konsumsi susu nabati. Indonesia terpilih sebagai salah satu negara dengan ekonomi berkembang yang besar di Asia Tenggara dengan tingkat konsumsi yang luar biasa (The World Bank, 2022). Hasil penelitian ini menunjukkan bahwa terdapat sembilan faktor yang dapat mempengaruhi niat konsumen dalam membeli susu nabati, yaitu: tren, harga, kesadaran penyakit, kesadaran nutrisi, sensorik, dan kepedulian lingkungan, kemasan, merek, dan cara mengkonsumsi.

Kata kunci: susu nabati, susu sapi, niat konsumen, konsumsi susu, teori pendekatan-penghindaran

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