

# Customers' Purchase Intentions on Herbal Products and Supplements During the COVID-19 Pandemic

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## ABSTRACT

The research aimed to extend the Theory of Planned Behavior (TPB) by including health consciousness and health value as predictors of purchase intention on herbal products and supplements. The research applied quantitative hypothesis testing. Then, the convenience sampling technique was used in collecting research data. The survey was conducted on 260 herbal and supplement customers in West Sumatra. The research instrument was adapted from previous studies. Then, the research data were analyzed using Structural Equation Modelling (SEM) techniques with the software SmartPLS 3.0. The testing of extended TPB in the research finds that health consciousness and health value have a positive and significant effect on customers' attitudes and purchase intentions. Among the three main predictors of purchase intention in TPB (customer attitude, subjective norm, and behavioral control), only control behavior positively and significantly affects purchase intention. This extended TPB contributes to the theory of purchase intention by including health consciousness and health value as new predictors in customers' purchase intentions, especially for herbal products and supplements. The research implications are that marketers and other stakeholders need to carry out effective marketing communications about products and events that support the development of healthy patterns and lifestyles and spend some effort to facilitate consumers' access to herbal products and supplements.

**Keywords:** purchase intention, herbal products and supplements, COVID-19 pandemic

## INTRODUCTION

The declaration of COVID-19 as a pandemic in March 2020 certainly had a huge impact on people's behavior, especially the selection of products to consume. Currently, various media posts about healthy behaviors and products that can increase the body's immunity. Consequently, this pandemic has affected people's intention to regularly consume herbal products and supplements, especially for people who have not previously consumed these products (Rahayu, 2020). The increase in sales of herbal products and

supplements in April 2020 in Indonesia reached 50% from the previous period and was expected to continue in the following months (Dimiyati, 2020). This surge in demand has resulted in the availability of stocks decreasing and the end prices being difficult to control. Intentionally, according to Henry (2020), consuming herbal products and supplements is the new lifestyle in the midst of the COVID-19 pandemic, as there is an increase in demand in e-commerce.

The spread of COVID-19 is very massive in areas throughout Indonesia. West Sumatera Province is one of the affected provinces, so the government has

imposed Large Scale Social Restriction (Pembatasan Sosial Berskala Besar (PSBB)) or physical distancing program to stop the spread of COVID-19. This news certainly worries the public like what happens in Padang city. Concerns in the community have resulted in an increase in sales of healthy products, especially herbal products and supplements. The phenomenon is that people who previously did not consume herbs and supplements start to consume them regularly (Al Ansori, 2022)

However, only a few previous research studies have shown the effect of health value on purchase intention. There are limited studies that have tried to extend the Theory of Planned Behavior (TPB) by investigating health consciousness and health value simultaneously as predictors of attitude and intention, especially during the COVID-19 pandemic. Therefore, the research wants to investigate customers' purchase intentions using extended TPB. It also includes health value and health consciousness to complement subjective norm, attitude, and perceived behavioral control as predictors of consumers' purchase intention on herbal products and supplements during the COVID-19 pandemic. The research wants to address two research objectives. Firstly, the research investigates the effect of health consciousness and value on customer attitude. Secondly, the research wants to test the effect of subjective norm, perceived behavioral control, attitude, health consciousness, and health value on customers' purchase intention.

Purchase intention is an indication of an individual's readiness to perform a given behavior based on attitudes toward behavior, subjective norms, and perceived behavioral control (TPB) (Ajzen, 1991). In general, many previous studies have applied TPB to predict consumers' purchase intention on products and services. Besides using TPB, previous researchers have also investigated the important role of health consciousness (Geovanca et al., 2023; Parashar et al., 2023; Xu et al., 2020) and health value (Ahsan & Ferdinando, 2022; Widyaningrum et al., 2021; Liao et al., 2020; Chinomona, 2016; Ghazali et al., 2017) to predict consumer purchase intention on organic and green product.

Health consciousness is a person's degree of awareness of the importance of a healthy body. It also indicates the level of individual awareness of the influence of lifestyle on the consumer's health (Xu et al., 2020). Health consciousness will lead consumers to have a positive attitude toward healthy products. In other words, individuals with high health consciousness will have a more positive attitude towards healthy products like organic products, herbal products, and nutritious supplements (Jayasinghe, 2020; Jonathan & Tjokrosaputro, 2022; Echhad, 2023; Uysal, 2023; Wathanakom, 2023).

They think organic foods are more nutritious, have higher quality, and are tastier. It is also argued that individuals with high health consciousness tend to have a more positive attitude towards health activities, such as doing medical check-ups regularly

and maintaining a healthy diet (Shimul et al., 2022). Previous studies find that health consciousness positively and significantly affects attitudes toward healthy products (Ghazali et al., 2017; Xu et al., 2020). Furthermore, previous researchers also mention the significant influence of health consciousness on attitude towards green furniture (Xu et al., 2020).

Health consciousness in society has tended to increase since the last decade. Due to the increase in people's welfare, they are more aware of their health and have a higher quality of life. The increase in health consciousness can be seen in the lifestyle of urban society that tends to engage in healthy activities. In other words, health consciousness can trigger healthy behavior in a society. According to Geovanca et al. (2023), individuals with high health consciousness tend to do more exercise and consume fruits and vegetables.

In marketing, customer value is the main driver of customers' purchase decisions. Perceived customer value is the difference between what customers get and what they give (Ghazali et al., 2017). In other words, perceived customer value is the difference between total benefit and cost. Individuals with a high knowledge of the health benefits (health value) of organic or herbal products produce a more favorable attitude towards those products. Previous research finds that health value has a positive significant effect on attitudes towards organic skincare in Malaysia (Ghazali et al., 2017). The main benefit of herbal and supplement products is related to health value. Health value has a positive significant effect on customers' purchase intentions. People with a high concern for nutrition tend to have a higher intention to buy food with health value (Liao et al., 2020).

Many previous studies have applied TPB to investigate customers' purchase intentions on personal care products, organic foods, and herbal products. Some studies have tried to extend the TPB model by investigating the effect of health consciousness on consumers' attitudes and purchase intentions (Jayasinghe, 2020; Jonathan & Tjokrosaputro, 2022; Echhad, 2023; Uysal, 2023; Wathanakom, 2023). Other studies have also tried to extend TPB by investigating the effect of health value on customer attitude (Ahsan & Ferdinando, 2022; Widyaningrum et al., 2021).

The first hypothesis is the effect of health consciousness on customers' attitudes toward purchasing herbal products and supplements. Health consciousness is a person's tendency to focus on health. Previous researchers find that the relationship between health consciousness and attitude toward herbal products and supplements are still divergent. In general, previous research finds that health consciousness has a positive and significant effect on customers' attitudes and intentions toward herbal products, supplements, and organic and green products (Geovanca et al., 2023; Parashar et al., 2023; Xu et al., 2020). However, some studies mention that health consciousness does not have a significant effect

on attitude toward herbal products, supplements, and organic and green products (Carolyn & Pusparini, 2013; Shimul et al., 2022). Based on the description above, the following research hypothesis can be formulated.

H1: Health consciousness has a significant effect on customers' attitudes in purchasing herbal and supplement products.

The second hypothesis in this study is the effect of perceived health value on customers' attitudes toward purchasing herbal products and supplements. Previous research reveals that customers who use organic, green, and herbal products as an alternative to maintaining health also believe in the benefits of these products (Widyaningrum et al., 2021; Liao et al., 2020; Chinomona, 2016). Furthermore, previous research also suggests that customers who believe in the benefits of a product will develop positive thoughts/attitudes and are likely to use them (Liao et al., 2020; Chinomona, 2016; Ghazali et al., 2017). Next, it is found that perceived personal benefits significantly affect attitudes and intentions to use a product (Liao et al., 2020; Chinomona, 2016; Ghazali et al., 2017; Ahsan & Ferdinando, 2022). According to Chinomona (2016), perceived benefits of herbal products have a significant effect on customers' attitudes towards these herbal products. Based on the description above, the research hypothesis can be formulated as follows.

H2: Perceived health value has a significant effect on customers' attitudes in purchasing herbal and supplement products.

The third hypothesis is the effect of health consciousness on customers' purchase intentions of herbal products and supplements. Health consciousness refers to the degree to which people play an active role in maintaining their health. Furthermore, customers have the motivation to maintain or improve their lifestyle, which is inspired by healthy behaviors, such as purchasing and consuming healthy food (nutritious supplements, organic food, antioxidant food and herbal) (Jayasinghe, 2020; Jonathan & Tjokrosaputro, 2022; Echchad, 2023; Uysal, 2023; Wathanakom, 2023). Customers concerned about and focusing on their health expect positive results from a healthy diet. Awareness and concern for health greatly influence customer purchase intentions (Parashar et al., 2023; Xu et al., 2020). According to Geovanca et al. (2023), if the awareness of health increases, the customers' intentions to consume organic products will also increase. However, the relationship between health consciousness and customers' purchase intentions toward herbal products and supplements is still divergent. In general, previous research has found that health consciousness has positive and significant effect on customers' purchase intention toward herbal products, supplements, and organic and green products (Widyaningtyas et al., 2023; Handayani &

Darmawan, 2022; Wahab & Tajuddin, 2020; Parashar et al., 2023; Damberg, 2022; Shah et al., 2021; Tan et al., 2019). Meanwhile, some researchers fail to find the significant effect of health consciousness on customers' purchase intention toward herbal products, supplements, and organic and green products (Sultan et al., 2019; Asteria & Hati, 2023; Echchad, 2023). Based on the description above, the following research hypothesis can be formulated.

H3: Health consciousness has a significant effect on customers' purchase intentions of herbal products and supplements.

The fourth hypothesis is the effect of perceived health value on customers' purchase intentions of herbal products and supplements. Perceived benefits are related to the positive belief in a certain behavior (Ahsan & Ferdinando, 2022; Liao et al., 2020). Individuals who choose herbal products to improve their health are less satisfied with conventional medicines (Ahsan & Ferdinando, 2022). Meanwhile, perceived benefits have a significant effect on customers' intentions to purchase herbal cosmetics (Chinomona, 2016). Furthermore, respondents believe that herbal products benefit them (Liao et al., 2020). In addition, health value positively affects customers' intention to purchase halal food (Nurhasah et al., 2017). The benefit of green pesticides significantly affects customers' purchase intention (Ataei et al., 2021). However, it is also found that health value does not have a significant effect on customer purchase intention (Widyaningrum et al., 2021). Based on the description above, the following research hypothesis can be formulated.

H4: Perceived health value has a significant effect on customers' purchase intentions of herbal products and supplements.

The fifth hypothesis is the effect of attitude on customers' purchase intentions. According to the multi-attribute model approach, attitude is the tendency to like a product or brand because the brand has superior value in overall attributes compared to its competitors. If someone has a positive attitude toward a product, there will be a purchase intention to it (Ahsan & Ferdinando, 2022; Liao et al., 2020; Fitriani & Winda, 2023). Several previous studies find that customers' attitudes have a significant effect on the purchase intention of herbal products, supplements, and organic and green products (Ahsan & Ferdinando, 2022; Liao et al., 2020; Fitriani & Winda, 2023; Ghazali et al., 2017; Chinomona, 2016; Shimul et al., 2022; Jung et al., 2020; Siaputra & Isaac, 2020; Hafiz & Permana, 2021; Tan & Keni, 2020; Jain, 2020; Hasan & Suciarto, 2020). However, previous research are also fails to find the significant effect of attitude on purchase intention (Xu et al., 2020). Based on the discussion above, the following hypothesis can be formed.

H5: Customers' attitudes have a significant effect on the purchase intention of herbal products and supplements.

The sixth hypothesis is the effect of subjective norm on consumer purchase intention. According to Ajzen (1991), a subjective norm is an individual perception of the importance of paying attention to other people's perceptions. The relationship between subjective norm and customers' purchase intentions toward herbal products and supplements is still divergent. In general, previous research finds that subjective norm has positive and significant effect on customers' purchase intention toward herbal products, supplements, and organic and green products (Bai et al., 2019; Ghazali et al., 2017; Chinomona, 2016; Ahsan & Ferdinando, 2022; Shimul et al., 2022; Jung et al., 2020; Fitriani & Winda, 2023; Siaputra & Isaac, 2020; Tan & Keni, 2020; Jain, 2020; Xu et al., 2020). Furthermore, the subjective norm is formed from normative beliefs to obey the wishes of other people who are considered important, such as reference groups who can influence someone in making purchasing decisions (Carolyn & Pusparini, 2013). However, some researchers fail to find the significant effect of subjective norm on purchase intention (Ghazali et al., 2017; Hasan & Suciarto, 2020). Based on the description above, the following research hypothesis can be formulated.

H6: Subjective norm has a positive significant effect on customers' purchase intentions.

The last hypothesis is the effect of perceived behavioral control on consumers' purchase intentions. Perceived behavioral control is a person's perception of ease or difficulty in carrying out a behavior (Carolyn & Pusparini, 2013). Apart from that, behavioral control is a belief about whether or not there are factors that facilitate or hinder the behavior (Ajzen, 1991). However, the relationship between perceived behavioral control and customer purchase intention toward herbal products and supplements is still divergent. It is found that perceived behavioral control has positive and significant effect on customers' purchase intention toward herbal products, supplements, and organic and green products (Bai et al., 2019; Chinomona, 2016; Ghazali et al., 2017; Ahsan & Ferdinando, 2022; Fitriani & Winda, 2023; Siaputra & Isaac, 2020; Jain, 2020; Hasan & Suciarto, 2020; Xu et al., 2020). However, it is also found that perceived behavioral control does not have a significant effect on purchase intention (Shimul et al., 2022). Based on the discussion above, the following hypothesis can be formed.

H7: Perceived behavioral control has a positive significant effect on customers' purchase intentions.

## METHODS

The research applies quantitative hypothesis testing. Unit analysis of the research is the individual customers. The population is all customers who are familiar with herbal products and supplements in West Sumatra. Convenience sampling technique is used in collecting research data. The survey with one-time data collection is applied to 260 research respondents in West Sumatra. Google Forms questionnaire is distributed through WhatsApp (individual WhatsApp and group WhatsApp) to respondents in West Sumatra. The screening question regarding respondents' knowledge and awareness of herbal products and supplements has been provided in the initial part to ensure that eligible respondents fill out this questionnaire.

The research variable consists of four exogenous variables (subjective norm, perceived behavioral control, health consciousness, and health value) and two endogenous variables (attitude and purchase intention). The research instrument is adapted from Carolyn and Pusparini (2013) and Ghazali et al. (2017). The measures of health consciousness, attitude toward purchasing herbal products and supplements, subjective norm, behavioral control, and purchase intention are adapted from Carolyn and Pusparini (2013). Health consciousness consists of five indicators. Then, attitude toward the purchase of herbal products and supplements has six indicators. Subjective norm includes four indicators. Then, behavioral control and purchase intention have five and six indicators, respectively. Meanwhile, the measures of health value are adapted from Ghazali et al. (2017), consisting of six indicators. The research instrument uses a five-point Likert scale (1–5) ranging from strongly disagree (1) to strongly agree (5).

Next, descriptive statistical analysis is used to analyze the respondents' profiles. Meanwhile, Structural Equation Modelling-Partial Least Square (SEM-PLS) analysis is used to analyze the relationship between variables in the research model. SEM-PLS analysis consists of two stages. Firstly, measurement model analysis tests the validity and reliability of research data. Secondly, structural model analysis tests the significance level of influence between the variables contained in the research model.

## RESULTS AND DISCUSSIONS

The first part of the research result explains the respondents' characteristics. The details of the respondents' characteristics can be seen in Table 1. As many as 260 valid data from research respondents are analyzed. Of the 260 respondents, the majority (64%) are between the ages of 26 and 45. Regarding education, most respondents (64%) graduate with master's degrees. Moreover, most respondents (57.8%) are male, and most (73.9%) are married. Meanwhile, from the income aspect, the majority of the respondents (59%) have an income of over five million Rupiah per month.



The second part of the research result is evaluating the measurement model. The measurement model is evaluated using validity and reliability tests. Evaluation of the measurement model includes the values of the factor loading, composite reliability, and discriminant validity. This measurement model includes construct validity tests (convergent and discriminant validity) and composite reliability analysis.

Construct validity refers to the degree to which a set of instruments actually describes the latent constructs that the instrument is designed to measure (Hair et al., 2010). In other words, construct validity focuses on the extent to which an instrument actually measures the construct it should measure. Meanwhile, construct reliability focuses on consistency rather than the set of variables by which it is intended to be measured (Hair et al., 2022). A reliable measure shows consistent evidence and refers to the extent of value obtained if the same scale is used on different occasions.

The research measures construct validity by analyzing discriminant and convergent validity. Convergent validity refers to the extent to which the latent scale or indicator loads on its latent variable. Convergent validity is measured using outer loading and Average Variance Extracted (AVE) value. The outer loading value indicates the correlation between indicators and their construct. A low outer loading value indicates that the indicator measurement model does not work. The expected outer loading value is greater than 0.60 (Hair et al., 2022). From Table 2, all

indicators of research variables have a loading value of more than 0.6. It means that all indicators are valid measures of latent variables in the research.

According to Hair et al. (2022), the AVE value must be greater than 0.5. Good convergent validity is achieved when the latent variable can explain 50% or more of the variance in the indicator of the latent variable (observed variable). From Table 3 all latent variables have an AVE value of more than 0.5. It means that all latent variables have good convergent validity.

Next, discriminant validity refers to the extent to which a construct differs from other constructs. Discriminant validity means that a scale for a particular construct does not have to load/converge appropriately with items in other constructs (Hair et al., 2022). If the scale for a construct has a high correlation with the scale for other constructs, it indicates that the scale measures the same construct rather than for different constructs. It can be said that variables with relatively low correlation indicate that discriminant validity has been achieved (Hair et al., 2022). In the research, discriminant validity analysis of the constructs is assessed using the Fornier and Locker criterion.

Based on this criterion, discriminant validity is achieved if the square root value of the AVE is higher than the correlation value between other variables. As seen in Table 4, the value of the square root of AVE for each construct is higher than the correlation value between other variables. Hence, discriminant validity in the research is fulfilled.

Table 1 The Respondents' Characteristics

Respondents' Profile	Details	Frequency	Percentage
Age	16–25 years	27	10.50%
	26–35 years	91	34.80%
	36–45 years	76	29.20%
	> 46 years	66	25.50%
Education	Senior High School	3	1.20%
	Diploma	10	3.70%
	Bachelor	81	31.10%
	Master's Degree	166	64.00%
Gender	Male	150	57.80%
	Female	110	42.20%
Marital Status	Married	192	73.90%
	Not Married	68	26.10%
Income	<Rp3 million	40	15.38%
	Rp3.1 - Rp5 million	66	25.38%
	Rp5.1 - Rp10 million	62	23.85%
	>Rp10 million	92	35.38%

Table 2 The Results of Loading Values in the Indicators

Code	Indicators	Squared Loading
Att1	Buying products is fun	0.630
Att2	Buying products is good	0.826
Att3	Buying products is useful	0.895
Att4	Buying products is positive	0.883
Att5	Buying products is healthy	0.833
Att6	The product has good quality	0.806
BC1	Ease of obtaining products	0.903
BC2	Ability to purchase products	0.946
BC3	Sufficiency of resources to purchase products	0.945
BC4	Sufficiency of product knowledge	0.828
BC5	Full control of purchases	0.855
HC1	Thinking about your own health	0.828
HC2	Deep attention to the health	0.881
HC4	Regular health check-ups	0.832
HC5	Being alert to health conditions	0.835
HV1	Consuming the product prevents premature aging	0.760
HV2	Consuming the product increases vitality	0.810
HV3	Consuming the product increases immunity	0.836
HV4	Consuming the product treats chronic diseases	0.782
HV5	Consuming the product removes toxins in the body	0.802
HV6	Consuming the product makes the body fitter	0.868
HV7	Consuming the product makes my life healthier	0.920
HV8	Consuming the product can have health effects	0.884
HV9	Consuming products is in accordance with a healthy lifestyle	0.792
HV10	Consuming the product can improve my health	0.907
HV11	Consuming the product can treat acute illnesses	0.754
SN1	Other people influence my purchasing decisions	0.839
SN 2	Other people approve of my purchasing decisions	0.899
SN 3	Family influences my purchasing decisions	0.897
SN 4	Expert opinions influence my purchasing decisions	0.798
Ittpdm1	I regularly use the product	0.797
Ittpdm2	If the product is available, I will purchase it	0.789
Ittpdm3	I buy products during the COVID-19 pandemic	0.884
Ittpdm4	I try the product during the COVID-19 pandemic	0.870
Ittpdm5	I pay more for the product	0.825
Ittpdm6	I buy products with packaging that can be recycled	0.711

Table 3 The Results of Construct Reliability

Variable	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Att	0.902	0.913	0.926	0.678
BC	0.936	0.939	0.951	0.797
HV	0.955	0.960	0.961	0.693
HC	0.851	0.866	0.895	0.635
Ittpdm	0.898	0.905	0.922	0.665
SN	0.880	0.894	0.918	0.736

Note: Att= Attitude, BC= Behavioral Control, HV= Health Value, HC= Health Consciousness, Ittpdm= Intention to Purchase During Pandemic, and SN= Subjective Norm.

The third part of the research result explains structural model analysis. This structural model analysis contains information about the value of the regression coefficient and statistical t-test. With this value, the researchers can test the hypothesis. The results of the structural model analysis can be seen in Table 5.

Based on the results of this structural model analysis (Table 5 and Figure 1), the results of the research hypothesis can be explained as follows. In Figure 1, the coefficient of determination of the attitude is 0.373. It means that 37.3% of the variation in customers' attitudes is influenced by health consciousness and health value. In addition, the results find that the coefficient of determination of the purchase intention is 0.521 (see Figure 1). It means that health consciousness, health value, attitudes, subjective norm, and behavioral control influence 52.1% of the variation in customers' purchase intentions. Furthermore, Table 5 also shows that the path value between health consciousness and attitude is  $\beta$  of 0.152 with a t-value of 2.077. Meanwhile, the path value between health value and attitude is  $\beta$  of 0.518 with a t-value of 5.273. From the path value, it

can be concluded that H1 (health consciousness has a significant influence on customers' attitudes) and H2 (health value has a significant effect on customers' attitudes) are supported.

From Table 5, the path value between health consciousness and purchase intention is  $\beta$  of 0.233 with a t-value of 3.019. Meanwhile, the path value between health value and purchase intention is  $\beta$  of 0.336 with a t-value of 2.724. From the path value, H3 (health consciousness has a significant effect on customers' purchase intentions) and H4 (health value has a significant effect on customers' purchase intentions) are supported.

Table 5 shows that the path value between attitudes and purchase intention is  $\beta$  of -0.016 with a t-value of 0.078. From the path value, H5 (attitude significantly affects customers' purchase intentions) is not supported. Then, the path value between the subjective norm on purchase intention is  $\beta$  of 0.150 with a t-value of 1.509. H6 (subjective norm significantly affects customers' purchase intentions) is also not supported. Last, the path value between perceived behavioral control and purchase intention is  $\beta$  of 0.203 with a t-value of 2.001. H7 (perceived

Table 4 The Correlation Between Variables

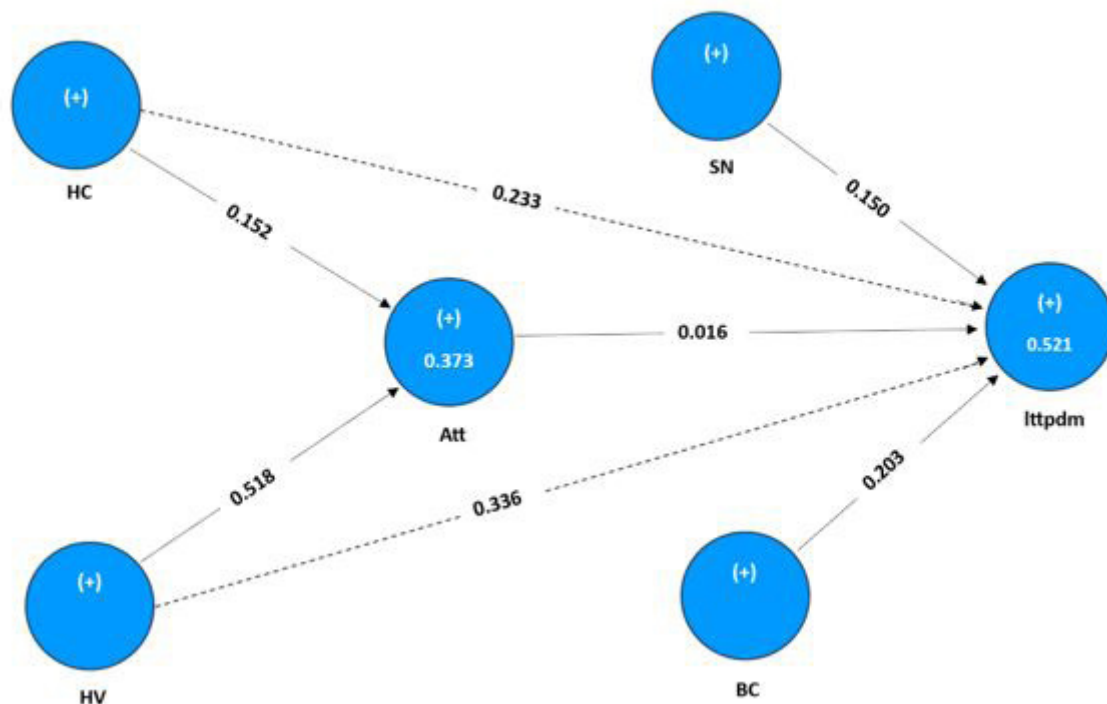
Variable	Att	BC	HV	HC	Ittpdm	SN
Att	<b>0.823</b>					
BC	0.692	<b>0.893</b>				
HV	0.580	0.339	<b>0.832</b>			
HC	0.444	0.358	0.523	<b>0.797</b>		
Ittpdm	0.576	0.536	0.600	0.530	<b>0.815</b>	
SN	0.766	0.688	0.438	0.337	0.542	<b>0.858</b>

Note: Att= Attitude, BC= Behavioral Control, HV= Health Value, HC= Health Consciousness, Ittpdm= Intention to Purchase During Pandemic, and SN= Subjective Norm.

Table 5 Structural Model Analysis Results

Path Regression	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics	P-Values
HC → Att	0.193	0.196	0.085	2.077	0.012
HV → Att	0.480	0.484	0.100	5.273	0.000
HC → Ittpdm	0.216	0.228	0.082	3.019	0.005
HV → Ittpdm	0.339	0.347	0.122	2.724	0.003
Att → Ittpdm	-0.001	-0.011	0.132	0.078	0.496
SN → Ittpdm	0.160	0.161	0.109	1.509	0.071
BC → Ittpdm	0.235	0.226	0.113	2.001	0.019

Note: Att= Attitude, BC= Behavioral Control, HV= Health Value, HC= Health Consciousness, Ittpdm= Intention to Purchase During Pandemic, and SN= Subjective Norm.



Note: Att= Attitude, BC= Behavioral Control, HV= Health Value, HC= Health Consciousness, Ittpdm= Intention to Purchase During Pandemic, and SN= Subjective Norm.

Figure 1 The relationship of the Theoretical Model for the Analysis of the Structural Equation

behavioral control significantly affects customers' purchase intentions) is supported. Among these seven hypotheses, two research hypotheses are not supported. Based on the explanation, the result of hypothesis testing can be summarized in Table 6.

The last part of the research results discusses the findings in more detail. The research shows that health consciousness has a significant influence on customers' attitudes. It means that health consciousness is important in building customers' attitudes toward herbal products and supplements. Along with the increase in the quality of people's lives, their awareness and concern for health also increases. The quality of life of these people is reflected in their education, work, and income. For example, in the research, more than 50% of the respondents earn more than five million Rupiah, and most have bachelor's and master's degrees. For the respondents whose quality of life is classified as high, they have a high enough awareness and concern for health.

This health awareness will determine their attitude towards what products/foods they buy or consume. They tend to like (have a more positive attitude) toward products, events, or behaviors that support the formation of healthy lifestyle patterns/styles and behaviors. For example, people with high health consciousness will have a positive attitude toward organic food, herbs, supplements, fitness, bicycles, car-free days, and others. The findings align with several previous research results that health

consciousness significantly affects customers' attitudes (Geovanca et al., 2023; Parashar et al., 2023; Xu et al., 2020). Therefore, effective marketing communication for certain products, events, or behaviors related to forming a healthy lifestyle is needed to build a more positive public attitude.

The results indicate that health value has a significant effect on customers' attitudes toward herbal products and supplements. It means that health benefits are important in shaping people's attitudes toward herbal products and supplements. People tend to have a positive attitude toward a product if customers judge the product to contain certain benefits they need. For example, a female student who is overweight will have a very positive (like) attitude towards green tea because she thinks that green tea is very beneficial for weight loss.

Herbal products and supplements are widely known to provide various benefits that are needed by the community. For example, certain herbal products and supplements are widely known to be very good for increasing endurance and immunity. The community desperately needs products that can increase endurance and immunity in connection with the current pandemic. Therefore, the community is very positive towards certain herbal products and supplements, such as vitamin C, ginger, turmeric, vitamin E, honey, and others. These products are seen as very useful for increasing immunity and endurance. This result is in line with previous research that health



Table 6 Summary of Hypothesis Testing

Hypothesis	Statement of Hypothesis	Result
H1 (HC → Att)	Health consciousness has a significant effect on customers' attitudes toward purchasing herbal products and supplements.	Supported
H2 (HV → Att)	Perceived health value has a significant effect on customers' attitudes toward purchasing herbal products and supplements.	Supported
H3 (HC → Ittpdm)	Health consciousness has a significant effect on customers' purchase intentions of herbal products and supplements.	Supported
H4 (HV → Ittpdm)	Perceived health value has a significant effect on customers' purchase intentions of herbal products and supplements.	Supported
H5 (Att → Ittpdm)	Customers' attitudes have a significant effect on their purchase intentions of herbal products and supplements.	Not Supported
H6 (SN → Ittpdm)	Subjective norm has a positive significant effect on customers' purchase intentions.	Not Supported
H7 (BC → Ittpdm)	Perceived behavioral control has a positive significant effect on customers' purchase intentions.	Supported

Note: Att= Attitude, BC= Behavioral Control, HV= Health Value, HC= Health Consciousness, Ittpdm= Intention to Purchase During Pandemic, and SN= Subjective Norm.

value has a significant influence on customers' attitudes (Liao et al., 2020; Ghazali et al., 2017; Chinomona, 2016). Therefore, communicating the health benefits of a product effectively is needed to shape a more positive public attitude towards herbal products and supplements.

The results show that health consciousness positively and significantly influences the intention to buy herbal products and supplements. Health consciousness is important in determining customers' purchase intentions of herbal products and supplements. Health consciousness is related to increasing public awareness and attention to a healthy lifestyle, which in turn can lead to the formation of a healthy lifestyle. The increase in healthy lifestyles in the midst of society today is closely related to the high threat to public health due to the pandemic and the increasing number of foods and drinks with chemicals that can endanger health (Jayasinghe, 2020; Jonathan & Tjokrosaputro, 2022; Echhad, 2023).

This healthy lifestyle, in turn, is seen in people's decisions to buy/consume goods, services, and events that are compatible with this healthy lifestyle. In other words, health consciousness drives customers' purchase intentions of goods, services, or events that can protect their health from the threat of a pandemic or the content of hazardous chemicals in food and beverages. Thus, increasing public awareness of health will increase their intention to buy products that align with a healthy lifestyle, such as herbal and organic

products and supplements. The results are in line with several previous studies that health consciousness has a significant effect on people's intention to buy herbal products, supplements, and green and organic products (Xu et al., 2020; Parashar et al., 2023; Geovanca et al., 2023). Therefore, building public awareness about products or events that can protect their health and increase their immune system is very important.

Next, the results indicate that health value has a significant effect on customers' purchase intentions of herbal products and supplements. The perception of health benefits possessed by herbal products and supplements is an important factor in determining people's intention to buy these herbal products and supplements. The increasing threat to public health today, both due to the pandemic and the content of hazardous chemicals in food and beverages, increases public perception of the importance of consuming useful products in overcoming various health threats society faces today. The increasingly diverse forms of health threats experienced by people today encourage their intention to consume products that are useful to protect themselves from various forms of health threats that may occur. For example, people flock to buy useful herbal products and supplements to increase immunity and endurance to avoid the COVID-19 outbreak. The results are in line with several previous studies that perceived health value benefits have a significant effect on customers' intentions to buy herbal products and supplements

(Ahsan & Ferdinando, 2022; Widyaningrum et al., 2021; Liao et al., 2020; Chinomona, 2016). Thus, effective marketing communication about the various health benefits possessed by various herbal products and supplements is an important factor in increasing customers' purchase intention of herbal products and supplements.

The results indicate that the customers' attitudes do not have a significant effect on customers' purchase intentions of herbal products and supplements. The results contradict several previous research results that attitudes have a significant influence on customers' intentions to buy a particular product or brand (Liao et al., 2020; Siaputra & Isaac, 2020; Hafiz & Permana, 2021; Hasan & Suciarto, 2020; Ghazali et al., 2017). Several possibilities can cause the findings, such as the increasing public demand for herbal products and supplements coupled with the low supply of available ones in the market. The high demand during this pandemic has caused customers to make quick purchasing decisions for these herbal products and supplements to meet their needs. Quick purchasing decisions cause customers to take advantage of the limited availability of internal information sources. As a result, evaluating alternatives before the purchase decision does not go well. In other words, purchasing decisions for herbal products and supplements during this pandemic are not based on an adequate evaluation of alternatives. Consequently, the public has no solid basis for determining whether they prefer brands A or B. It means that attitudes towards herbal and supplement brands are no longer a determining factor in customers' decisions to purchase herbal products and supplements during the pandemic. As a result, attitudes have become insignificant in influencing customers' purchase intentions of herbal products and supplements during the pandemic.

Similarly, subjective norm does not have a significant effect on customers' purchase intentions of herbal products and supplements. The factor of close people around the respondents does not affect their intention to consume herbal products and supplements. This result is not in line with several previous studies that subjective norm has a significant effect on customers' purchase intentions (Ahsan & Ferdinando, 2022; Shimul et al., 2022; Jung et al., 2020; Siaputra & Isaac, 2020; Ghazali et al., 2017).

The following reasons may explain the findings. Herbal products and supplements suddenly have become the most sought-after by customers during the pandemic. Then, the availability of herbal products and supplements in the market is very limited during the pandemic. Hence, customers must make quick purchasing decisions to get the herbal products and supplements they need to increase their immunity and endurance. Customers only utilize internal information sources that they already have. They no longer have the opportunity to seek additional information from external sources, such as close friends and people around them, to make quick purchasing decisions for the herbal products and supplements they need.

In short, during the pandemic, the recommendation factor from close people around customers is no longer important in determining customers' intentions to buy herbal products and supplements.

The next explanation is probably related to the profile of the respondents. Most of them have undergraduate and graduate education. With a relatively high level of education, they likely have sufficient internal information sources. They do not need to seek additional information from external sources, such as people around them, to make purchasing decisions for herbal products and supplements. Thus, recommendations from people around customers (subjective norm) are no longer important in shaping customers' intentions to buy herbal products and supplements.

Last, perceived behavioral control has a significant effect on customers' purchase intentions of herbal products and supplements. Behavioral control is an important factor in determining customers' intentions in consuming herbal products and supplements. The results are in line with several previous studies that behavioral control has a significant influence on customer purchase intentions of herbal products, supplements, organic products, green products, and others (Ahsan & Ferdinando, 2022; Fitriani & Winda, 2023; Siaputra & Isaac, 2020; Jain, 2020; Ghazali et al., 2017).

Behavioral control in the research is related to the degree of convenience for customers to realize their behavior in purchasing herbal products and supplements. The availability of herbal products and supplements in the market, affordable prices, and quality products are important indicators of the customers' convenience in realizing their purchasing behavior. Then, it influences customers' purchase intentions of herbal products and supplements. It means that the easier it is for customers to manifest their behavior, the higher the customers intend to buy herbal products and supplements. Given that customers need herbal products and supplements during this pandemic, marketers' efforts to make it easier for customers to obtain them are very important to increase their purchase intentions.

## CONCLUSIONS

The research finds that health consciousness and health value have a significant effect on customers' attitudes. It also shows that health consciousness and health value have a significant effect on customers' purchase intentions. These factors have an important role in developing customers' attitudes and purchase intentions toward herbal products and supplements. However, subjective norm and attitude do not significantly affect customers' purchase intentions. Finally, perceived behavioral control has a positive significant effect on customers' purchase intentions. Behavioral control is also important in developing customers' purchase intentions for herbal products

and supplements, especially during the COVID-19 pandemic.

The research contributes to TPB. It has extended TPB by adding health consciousness and health value as new predictors of purchase intention for herbal products and supplements. This extended TPB is more suitable for predicting customers' purchase intentions for herbal products and supplements.

For practical implication, since health consciousness and health value significantly affect consumers' attitudes and purchase intentions, marketers and other stakeholders need to carry out effective marketing communications about products and events that support the development of healthy behavior and lifestyles. Furthermore, marketers also need to communicate effectively about the more specific health benefits of herbal products and supplements to increase consumers' attitudes and purchase intentions. Next, since behavioral control significantly influences purchase intention, marketers need to make it easier for consumers to get the herbal products and supplements they need. For example, they can provide a wide variety of products according to the variety of market segments, affordable prices, good product quality, and the availability of herbal and supplement products in its distribution channels.

The limitation of the research is that the research uses a purposive sampling technique. As a consequence, the generalization of the research is only applicable to the consumers in West Sumatra. Hence, future research is recommended to use a random sampling method involving a wider sample. Future research can also add other variables related to the health belief model, such as perceived severity, susceptibility, and health motivation, as new predictors of purchase intention, especially for herbal products and supplements.

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