

# Purchase Intention of Customers towards Health Products in Melaka

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**Abstract**—Currently, the number of companies offering health products is increasing over the years. This variety range of options available for customers has driven the researchers to dig out what the factors are that influence the intentions of purchasing by customers. The importance of this research was to realize what are the factors that could impact the behavior of customers in deciding which product to be purchased or to be bought. The objectives of this research are to investigate the impact or relationship of customer knowledge, product performance, and health concern towards the purchase intention of consumers toward health products. In addition, the research is classified as descriptive study to collect data by using quantitative method. The researcher had distributed survey questionnaires to 201 respondents through online distribution after manual questionnaires have been answered by 20 respondents during pilot test. Data gathered and analyzed by using SPSS software. The results obtained showed significant influences between customer experience, customer attitude, perceived values, perceived usefulness, and health background on purchase intention of consumers toward health products. However, perceived ease of use and health awareness did not achieve a significant correlation with the intention of purchase by consumers. Based on the discussions made on findings, this research may be able to be explored deeper view through further research in the future and eventually contributing to the industry.

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## I. INTRODUCTION

CURRENTLY, the number of companies offering health beverages is increasing over the years – Almas Beauty and Health, Dherbs, Bio-Pharmaceuticals Sdn Bhd, Stevia Industry (M) Sdn Bhd and else. This variety range of options available for customers has driven the researchers to dig out what the factors are that influence the intentions of purchasing by customers. The willingness of consumers to decide purchasing one product [1].

First and foremost, the level of customers' knowledge and experience toward one product could play a role in making decision whether to or to not purchase the goods. Referring to Theory of Planned Behavior, a person would act out the attitudes or behavior upon something based on the evaluation of amount of information they have as instance of household income. According to [2] stated that every Malaysian realize the importance of taking a balanced dietary however the action taken will be influenced by the number of household income. As for this issue suggested, the knowledge gained and owned by the customers about health products (beverages) will influence their behavior in purchasing the latter. This includes the benefits or the price of the products. Not only that, if the consumers happened to try the health beverages before this, the experience they have also play role in making decision to buy the goods.

Next, consumers' attitude and behavior toward health beverages purchase also affected by the values perceived by them. Customers' behavior towards purchasing is influenced by the benefits perceived and what value they are about to receive [3]. According to Theory

of Reasoned Behavior (TRA), it stated that in execute an attitude there are also a factor that limit or stopping the behavior from being executed. Price and quality are the examples of stopping elements that limit the attitudes of purchasing.

Furthermore, the performance of products also plays a vital role in deceiving the consumers to purchase the goods. Commonly, comparisons between brands and quality will be conducted in order to measure which product will deliver better performance. The demand in the market could be reflected through purchasing intentions of customers. The performance in terms of flexibility, ease of use, perceived usefulness, complexity, and the enjoyment of products on experience of users should be taken care of as it could help to improve the innovation development.

Consumption of sugar is high among Malaysians and this issue leads to the increment rate of diabetics in the country. Referring to [4], type of diabetes that contributed prominently to the significant numbers of health issues – obesity and overweight is Type 2 Diabetes, between 55.6% and 57.4% of overall abdominal obesity (using circumstance of waist measurement) in Malaysia has been reported. This finding shows that Malaysian tends to over consumed sugar, fat and carbohydrates. Having issues on health such as diabetes will direct a person to choose and purchase health products which they perceive could help to lessen the rate of sugar level in blood or which they may perceived could lengthen and slow down the effects of the ailments they suffer.

## II. METHODOLOGY

Descriptive method was applied by the researcher to construct the research studies. To conduct this research, a quantitative way of doing is selected as the latter is supremely related to the strategy of survey research and experimental. In doing research study, it is crucial to have data collection and information gathering. Primary and secondary data are the sources for information dig out, used to examine the objective of the research. Those two

are the requirements needed to be fulfilled as to strengthening the relevance of the research conducted. For this paper, the strategy used was via survey conducted through questionnaires distribution as the effectiveness of that mean is believed and assured. The self- administrative type of questionnaire is suitable for data collection and it can be done online or directly on face to face encounter. The researcher has selected Melaka as the location to run the research. The respondents are ranged from 18 years old and above whom could be the users and consumers of health products including Stevia in Melaka, Malaysia. The classification of respondents is being divide into three that are: Baby Boomers generation (above 50 years old), Generation X (range within 36 years old until 49 years old), and Generation Y (19 years old until 35 years old). In order to engage with all of this three generations, a suitable time and correct way of delivering questionnaire should be chosen wisely as to ease the process for both parties (researcher-respondents). Table I shows the description of section in questionnaire.

TABLE I. DESCRIPTION OF CLASSIFICATION SECTIONS OF QUESTIONNAIRES

Section	Descriptions
1	Demographic Information
2	Customer Knowledge : Experiences and Attitudes
3	Product Performance: Perceived Values, Perceived Ease of Use and Perceived Usefulness
4	Social Influence: Health Awareness and Health Background
5	Perceived Intentions on Health-Related Products (Sugar Alternative Beverages)

## III. RESULT AND DISCUSSION

The data was collected through online survey and responded by 201 consumers of health beverages in Melaka. The data collected were elaborated in term of pilot test, reliability testing analysis, descriptive analysis, and multiple regression analysis in the effort of testing and analyzing the results.

### A. Descriptive Analysis

Table II illustrates the demographic profile of 201 respondents of the study. The results are dominated by females with frequency of 144 while male jotted the number of 57 people:

The respondents for this research is collected from Melaka. The total of 201 respondents can be divided by gender where this group is dominated by females with 144 respondents whereas male note only 57 people out of 201 total. This survey was also taken and answered by different type of age and generations. The differences can be classified onto 4 groups - young as 18 years old and up to more than 50 years old. From data analyzation conducted, the most participant enjoined this survey is from Y Generation who are 18 – 29 years old with the highest percentage of 87.6% and equivalent to 176 out of 201 respondents. This could be happened due to IT and language literacies possessed by this group which is relatively higher compared to the other age groups. The least percentage is held by the Baby Boomers (above 50 years old) with percentage of only 2.5% equivalent to only 5 participants, this group contributed less than quarter of total respondents. The huge differences between these two generations is quite surprising as researchers ought the highest purchaser of health products would come from the baby boomers; however, it seems that the young generation nowadays started to pay more attention on their well-being.

Not only researcher explore the gender and the age of the respondents, their current household income is included in research information as well. This is due to the belief of hypothesis where the higher the income, the higher the possibilities of purchasing variety of health products. It is also because the current household income would insignificantly affect the purchase intention of health products. It can be said that, most of respondents are coming from B40 group as the percentage calculated shows high digit on “below RM 2000” income with 69.2% percent of them.

Another reason to support the statement above – regarding of the high number of Gen Y compared to the others, due to IT literacy owned by the millennials which makes them stand out better than Baby Boomers. This is supported by

the article on [5], more than 9 out of 10 millennials, equivalent to 92% of them owned smartphones and they are the largest group of people who downloaded apps more on Internet compared to the others - Gen X (85%), Baby Boomers (67%) and Silent Generation with the percentage of Internet users of 30% only. Since, the survey is conducted through online (Google Form), it eases and tend to attract the youngsters to answers the questionnaire which clearly explained the reasons of high number of “below RM 2000” incomers as we do acknowledge that most of Gen Y are teenagers who still studying or even some who are working have the average wage salary of RM 5 per hour. Based on article published by [6], salary of fresh grads is facing declining where diploma holder could earn a real payment of mere RM 1 376 in 2018 compared to 2010 where the salary would be RM 1458.

TABLE II. DEMOGRAPHIC PROFILE ANALYSIS

Characteristics	N = 201	Percentage
<b>Gender</b>		
Male	57	28.4
Female	144	71.6
<b>Age</b>		
18 – 29 years old	176	87.6
30 – 39 years old	14	7.0
40 – 49 years old	6	3.0
Above 50 years old	5	2.5
<b>Race</b>		
Malay	162	80.6
Chinese	15	7.5
Indian	11	5.5
Others	13	6.5
<b>Household Income</b>		
Less than RM 2000	139	69.2
RM 2001 = RM 3000	34	16.9
RM 3001 = RM 4000	11	5.5
Above RM 4000	17	8.5

### B. Reliability Test

The research conducted reliability analysis before continuing an advanced test analysis. A value of Cronbach’s Alpha which is more than 0.60 is considered acceptable for exploratory and descriptive research to execute stability of the measurement, however value of more than 0.70 is highly recommended.

Referring to the results obtained (Table III.), reliability analysis is conducted on 201 responses gained and it could be interpreted that, the result is acceptable and can be relied on as the Cronbach's Alpha executed the value of 0.932 which is higher than acceptable value of 0.60.

TABLE III. RELIABILITY TEST

Construct	Items	Cronbach's Alpha (n = 201)
<b>Customer Knowledge</b>		
Customer experience	3	0.697
Customer attitude	3	0.773
<b>Product Performance</b>		
Perceived value	3	0.803
Perceived usefulness	3	0.870
Perceived ease of use	3	0.710
<b>Health Concern</b>		
Health awareness	3	0.677
Health background	3	0.760
<b>Purchase Intention</b>	3	0.630

C. Regression Analysis

Multiple regression analysis is used to examine the effects of independent variables (Customer Knowledge, Product Performance, and Health Concern) toward Purchase Intention of Consumer.

Table IV illustrates the results of regression obtained from the data-collecting. The R-square (R<sup>2</sup>) for customer knowledge is shown as 0.326, this can be defined as 32.6% of the variance in the purchase intention can be forecasted from the association of all independent variables in knowledge of consumers. Analysis of regression shows customer attitude and customer experiences played vital part in influencing purchase intention of consumer in buying health-related products in Melaka. The significant variables which elaborated purchase intention are customer experience ( $\beta=0.548$ ,  $p=0.000$ ) and customer attitude ( $\beta=$

0.459,  $p=0.000$ ). The other 68.1% variances shall be explained by other factors apart from customer knowledge factors – which is not included in this research.

Moreover, R<sup>2</sup> for product performance executed value of 0.431 which can be analyzed as 43.1% of the variance in purchase intention can be predicted from association of all independent variables in factor of product performance. The outcome analyzed can be explained in which all of the items – perceived value, perceived ease of use, and perceived usefulness has significant influences on purchase intention as it can be viewed on the significant values of the model which is less than 5%: perceived values ( $\beta=0.637$ ,  $p=0.000$ ), perceived ease of use ( $\beta=0.496$ ,  $p=0.000$ ) and perceived usefulness ( $\beta=0.593$ ,  $p=0.000$ ).

Lastly, R<sup>2</sup> for health concern among consumers executed value of 0.414 which is equivalent to 41.4% of variance in purchase intention can be predicted from associations of all independent variables in these factors. Variables of health awareness and health background execute significant impact on purchase intention as both gives significant values of ( $\beta=0.389$ ,  $p=0.000$ ) and ( $\beta=0.641$ ,  $p=0.000$ ) respectively.

TABLE IV. REGRESSION ANALYSIS

Variables	Model	(B)	( $\beta$ )	p	R <sup>2</sup>
<b>Customer Knowledge</b>					
Customer experience	1	0.488	0.473	0.000	0.326
Customer attitude		0.299	0.195	0.002	
<b>Product Performance</b>					0.431
Perceived value	2	0.535	0.637	0.000	
Perceived usefulness		0.496	0.593	0.001	
Perceived ease of use		0.434	0.496	0.858	
<b>Health Concern</b>					0.414
Health awareness	3	0.377	0.389	0.082	
Health background		0.624	0.641	0.000	

\*significant at 0.05 level; dependent variable = purchase intention

#### D. Hypothesis Testing

To check the hypotheses, a statistical measurement is applied in which data computed using regression analysis are used as references, whereby the p value of the independent variables which is less than 5% or 0.05 ( $p < 0.05$ ) is ought to have significant impacts on dependent variable – purchase intention of consumers toward health-related products. Table V. show the result of the hypothesis testing.

Looking at the coefficient results gained from regression analysis conducted, it can be seen the significant value of customer experience is less than 0.005 ( $p = 0.000$ ), hence it is supporting the fact that customer experience has significant impact on consumer purchase intention on health products. Therefore, we do not reject  $H_1$  of Hypothesis 1.

Based on regression analysis, the p value of customer attitude is recorded significant as the significant is 0.002 which is clearly less than 0.05. It brings meaning of significant impact of customer attitude toward consumer purchase intention; hence we do not reject  $H_1$  of Hypothesis 2.

Regression analysis of perceived value executed digit of 0.000 in its significant value, making it brings significant impact on purchase intention of consumers, therefore  $H_1$  did not rejected.

Products perceived usefulness is said to have significantly influences consumer purchase intention as it is supported by the significant value,  $p = 0.000$  ( $p < 0.005$ ), hence the  $H_1$  is not rejected as the statement is supported by the regression analysis.

Based on regression analysis conducted, the significant value of product perceived ease of use is 0.858 which is literally more than 5%, making it not confidently impacting the purchase intention of consumers. Hence, we reject the  $H_1$  and do not reject  $H_0$  of Hypothesis 5.

The coefficient of health awareness executed significant value of 0.082, hence it has no significance toward purchase intention of consumers. As the p value is more than 0.005, we do not reject the  $H_0$ .

Based on regression analysis conducted, the significant value of health medical background

is 0.000 which is literally less than 5%, making it confidently impacting the purchase intention of consumers. Hence, we reject the  $H_0$  and do not reject  $H_1$  of Hypothesis 7.

TABLE V. RESULT OF HYPOTHESES

<i>Hypotheses</i>	<i>Result</i>
H1: Customer experience has significantly influenced consumer purchase intention on health products.	Supported
H2: Customer attitude on products significantly influences consumer purchase intention on health products.	Supported
H3: Product perceived value significantly influences consumer purchase intention on health products.	Supported
H4: Product perceived usefulness significantly influences consumer purchase intention on health products.	Supported
H5: Product perceived ease of use significantly influences consumer purchase intention on health products.	Not supported
H6: Health awareness significantly influences consumer purchase intention on health products.	Not supported
H6: Health medical background significantly influences consumer purchase intention on health products.	Supported

#### IV. CONCLUSION

Based on the outputs, customer knowledge, perceived values, perceived usefulness and health background are the significant factors as they are impacting and influencing the purchase intention. However, the level of health awareness and the understanding on perceived ease of use are under the stake which were insignificantly influencing the intention of consumers' purchase.

Furthermore, in the future, it is suggested to dig out more factors influencing intention of purchasing rather than these three mentioned independent variables – customer knowledge, products performance, and health consciousness. Referring to the output, there are two independent variables did not bring significance on the purchase intention – perceived ease of use and health awareness. This may due to answers given by the 201 respondent which is not satisfy enough, hence these two factors may be reviewed and refined for better research result in the next time. Future study

may could be done in different developing and developed countries as to see the differences factor leading in decision making of purchasing among consumers toward health products.

The main objectives of this research have been testified and verified by regression and relevant analysis conducted. The results of this research potentially reveal the evidence on consumers' purchase intention from certain factors as well as offering information to market and consumers itself.

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