The Theory of Planned Behavior as Applied to Chocolate Drink Consumption Intention

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Abstract: The objective of the study was to analyze the factors that influence the intention of chocolate drink consumption. The theory of planned behavior was used as a basis of theoretical framework of study. The data were 212 samples collected through online survey via social media. Data were analyzed by using correlation analysis and analysis of PLS-SEM and all indicators have value loading factor > 0.5. Structural models of consumption intentions generate R square value of 50.5%, meaning that consumption intentions able to be explained by the attitude toward the behavior and perception of behavioral control consumption by 50.5%, while the rest is explained by other factors outside the model. Indicators which play a dominant role in the consumption intentions are the benefits of antioxidants and antidepressants in chocolate drinks, consumers have limited time, and the availability of chocolate drinks were abundant in the market. So that the chocolate drink manufacturers and distributors are expected to be more active in convincing benefits of chocolate to consumers, creating ease-hopefully drinking chocolate practically, and increase the availability of drinking chocolate on the market.

Keywords: Theory of planned behavior, Intention to consume, Chocolate drink

1. Introduction

Indonesia is the third largest cocoa producer in the world after Ivory Coast and Ghana (Dapperin 2012). However, the high cocoa production in Indonesia does not necessarily make Indonesia into a country with a high level of chocolate consumption. Nearly half of all chocolate lovers in the world is the European Community, including Germany, Switzerland and the United Kingdom with an average consumption of 12.78 kg every country of chocolate per capita per year. While the Indonesian people only consume 0.1 kg of chocolate per capita per year, the figure is far below world consumption is about 1 kg per capita per year (FAO 2011).

Since the last five years, the consumer goods sector has been enlivened by a variety of chocolate drink produced from a variety of brands. Currently chocolate drinks are widely available in the form of an instant, such as Ovaltine, Cadbury, MaxCoa, Hot Cocoa, Chocolate Alania Intant, Diamond Swiss Choco Malt Powder, Kokoo, ChocoHut, and Chocolatos. The concentration of antioxidants in hot cocoa is almost two times more powerful than red wine, three to four times more powerful than green tea and four to five times stronger than black tea (Lee 2003). Besides being able to enjoy instant, chocolate drinks are also available in liquor stores in Indonesia. Not much different with coffee, chocolate drinks have also made a new consumption patterns that are part of the life style in the various layers of generations (Hewlett and Wadsworth 2012). Concurrently, the number of outlets drink tea, coffee, or chocolate in Indonesia continues to increase until today. Torsina (2000) mentions that the growth of outlets that are characterized by both traditional and modern increased in recent years.

Consumption of chocolate necessarily be caused by various factors, one of the underlying factors that influence consumption behavior chocolate drink is the intention or interest to the consumption of chocolate drink. Ajzen (1986) propose the best predictions for the behavior is the intention. Thus, the intention of the consumption of chocolate in this study can be seen through analysis model approach Theory of Planned Behavior (TPB).

Through TPB, researchers will use indicators that are relevant to the intention consumption chocolate drink. Therefore, researchers interested in conducting research with the title "Analysis of Model Theory of Planned Behavior Intention Against Consumption of chocolate drink. This study will analyze the factors that influence the intention chocolate drink consumption through three supporting aspects including consumption intentions; attitudes towards consumption behavior, subjective norms, and perceived behavioral control consumption.

2. Literature Review

The writing is focused on the discussion of intention to consume a chocolate drink with a basis of analysis using the theory of planned behavior. The theory of planned behavior is a theory that can explain the factors intention to behave. This research need to be done to prove that the model of theory of planned behavior can be an model to analyze the...
intention of drinking chocolate through attitudes toward the behavior, subjective norms, and perceived behavioral control. There are several studies that serve as benchmarks in this study. Research by Vermeer and Verbeke (2006) describes the gap between attitude and behavior intention to analyze consumer attitudes and intentions of purchase of dairy products continued, with some of the attributes consumers to consider, including: price, brand, comfort, packages, materials, flavors, and also the confidence. Park and Ureda (1999) describes the personal attitude towards the consumption of milk is determined by the specific belief on the results of milk consumption (good taste and nutrients provided) and evaluation of the consequences (good and bad).

Furthermore, research of Siahaan SBF, Sumawan U, and Nurrochmat DR (2015) explain the factors that influence the traders intention of using local soy sauce in food commodities, through the theory of planned behavior. The study was conducted in Bogor with food traders respondents who have or currently using a local soy sauce. Data were collected by face to face interview using a questionnaire to 102 respondents. Data processing was performed by descriptive method and multiple linear regression tests. The results showed that attitudes toward the behavior and control of behavior is a significant component affect the intention to use local soy sauce, whereas subjective norm component not significant. Based on the research results, the factors that influence the intention to use local soy sauce is profitable, made into savory dishes, bring prosperity to local communities, at affordable prices, good quality, and ease obtained. Sumarwan U, Johan IR, and Anindita D (2011) describes the behavior intention, where the relationship between attitudes, preferences and purchase intentions were analyzed using Spearman correlation. Results of the analysis showed a significant relationship between attitude and purchase intention. The child’s attitude toward increasingly positive product can increase purchase intentions of children to these products. Meanwhile, correlation analysis also shows that there is no significant relationship between preferences with attitudes and purchase intention.

Ajzen 2006; Gracia de Magistris 2007; Riefer and Hamm 2008 mentioned that perceived behavioral control significantly influence food consumption. One potential determinant in consumer decision-making is the availability of the product, it is associated with the perception of behavioral control, where the perception of behavioral control refers to the ease or difficulty getting or consuming a particular product (Vermeer and Verbeke 2006). The study by Robinson and Smith (2002) showed that 52% of consumers are interested in buying food, but do not buy the food because of the lack of availability of products, followed by discomfort and price.

Other than that, Mowen and Minor (1998) explains that behaves interest is the tendency or interest someone to behave in a certain way which aims to obtain, use or dispose of the product or service. According to Peter and Olson (2000), the desire to behave is a proposition that link themselves to the impending action, such as: "I want to go shopping day of the week tomorrow". Measurement intention to behave can be the best way to predict the behavior of future purchases. Zeithaml, Berry, and Parasuraman (1996) asserts that the consequences arising from the perception of service quality in the intentions of individual consumer behavior can be viewed as a signal the success or failure of the company to retain its customers. Behavioral intentions can be seen as an indicator that signals whether customers will stay with or leave the products or services of a business entity. According to Zeithaml, Berry, and Parasuraman (1996) behavioral intentions are divided into three dimensions, including: 1) Recommendation, namely an intention to behave that encourage friends or relatives in order to use the goods or services or to recommend the company to others, so indirectly they have been doing marketing for the company and bring consumers to the company. 2) Repurchase intention, namely an intention to behave using the product twice or more. They are doing the use of the products twice as much, or buy two different kinds of products in two occasions. 3) Pay more, namely an intention to behave arising from customer satisfaction with business entities despite a change in prices higher but consumers still want to pay a high price.

Meanwhile, research results Kassem and Lee (2004) showed the attitude toward the behavior, subjective norms, and perceived behavioral control are each significant predictors of the intention to drink soda. The strongest predictor was the attitude toward the behavior, followed by perceived behavioral control and subjective norm. Selection of food or beverages for consumption is a complex process and is influenced by many interrelated factors. Cultural background, social factors (aging population, changing family structures), concerns about the health and environment interact with individual perceptions associated organoleptic characteristics of food in influencing food choices (Messina et. Al.). There has been increased attention on some aspects of food and beverage consumption among consumers, such as diet and health, and food safety and the environment.

The conclusion, several previous studies shows the influence of attitudes toward behavior to behavioural intention, among others; Kassem and Lee (2004) showed the attitude toward the behavior is the strongest predictor of the intention to drink soda, followed by perceived behavioral control and subjective norm. Furthermore, research of Siahaan SBF, Sumawan U, and Nurrochmat DR (2015) showed that attitudes toward the behavior is a significantly affect the intention to use local soy sauce, followed by perceived behavioral control.

3. Research Methods

This research was conducted for two months (February-April 2016), including the preparation phase of the research proposal, data collection, data processing and data analysis. Methods of data collection was done by an independent survey online through social networking. Link questionnaires distributed to co-workers, colleagues studies, and general connected directly with researchers on social network Path. Researchers assume that active user of social media contributed to patterns of consumption and life style of today.
This study focused on 212 people individual consumers are connected directly with researchers on social network Path. The analysis of this study is limited to the level of consumer intentions with the analysis model of the Theory of Planned Behavior through four latent variables such behavior tehadap attitude, subjective norm, perceived behavioral control, and intention consumption. Approach to consumer attitudes will lead to more consumer interest in the consumption of chocolate drinks and is not focused on a particular brand. Exploration of factors and dimensions of consumption intentions conducted to know how dominant influence attitudes toward behavior, subjective norms and perceived behavioral control to the intention consumption chocolate drink.

This research is descriptive quantitative research to analyze the impact of planned behavior to the intention consumption chocolate drink. Selection of chocolate as research objects deliberately determined based on existing problems. This study used a cross-sectional study design. Kinnear and James in Sumarwan et al. (2011) mentions that the cross-sectional study is a study that uses data collection techniques or gathering information from every element of the population sample and is done only once at a certain time, so that the object of the study was not observed on an ongoing basis in the long term.

Data used in this study are primary data and secondary data. The primary data obtained through self-report with the tools in the form of a questionnaire containing indicators reflective of the variables studied. These variables include characteristics of the sample (age, gender, occupation, marital status, spending on food and beverage consumption, knowledge of chocolate and experience the consumption of chocolate), attitudes toward the behavior, subjective norm, perceived behavioral control, and intention consumption chocolate drink. The questionnaire used is a modification of the articles made by Ajzein (2002) on how to create a questionnaire with TPB approach. In addition to primary data, secondary data was also used in this study. Secondary data is data that is collected by the other party to the intent and purpose (Sumarwan et al., 2011). Secondary data in this study include chocolate beverage consumption data, as well as other data such as books, journals, websites and literature to support this research.

Sampling technique using purposive sampling method. Unit sample in this study is an element (people) in accordance with the sampling procedure. According to Kwong and Wong (2013) cites Marcoulides guide and Saunders (2006), the sheer number of minimum samples for marketing research using the structural model of 70 samples. Some researchers suggest the number of samples used for modeling path which ranged from 100-200 samples (Hoyle and Wong Kwong 1995 in 2013). Referring to the theory, the number of samples used in this study amounted to 212 people.

The results of this paper is expected to provide information on the effect of planned behavior to the intention to consume a chocolate drink that is useful to marketers for the preparation of the analytical framework and business strategies are more effective in marketing their chocolate drink, and evaluation of managerial for industrial chocolate in Indonesia related to the marketing strategy that has been done today and formulate marketing strategy forward.

3.1. Variable Description and Measurement

The study consists of four latent variables. The fourth latent variables among which tehadap behavioral attitudes, subjective norms, perceived behavioral control, and intention consumption. Tehadap behavioral attitudes, subjective norms, and perceived behavioral control, each of which has two dimensions (Table 1). Each dimension is reflected by four indicators. While the intention of immediate consumption is measured by three indicators. Each indicator is measured using the instrument in the form of a question questionnaire. The scale of measurement used in this study is an interval scale. Interval scale used to measure attitudes tehadap consumption behavior, subjective norms of consumption, and perceived behavioral control the consumption of chocolate drink. Attitude measurement interval assessment conducted through five, where one states strongly disagree, the two disagree, neutral three states, four states agree and five states strongly disagree.

<table>
<thead>
<tr>
<th>Table 1: Variables and indicators in the model</th>
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<tbody>
<tr>
<td>Latent variables</td>
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<tr>
<td>Attitude toward behavior</td>
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<td></td>
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<tr>
<td>Subjective norm</td>
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<td></td>
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<td>Perception of behavior management</td>
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<td></td>
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<tr>
<td>Intention consumption</td>
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</table>

3.2. Data Analysis

Descriptive analysis in this study include the respondent demographics including age, gender, education, employment, and expenditure per month as well as the behavior of drinking chocolate. The data was analyzed using SPSS and presented in cross tabulations so as to facilitate the interpretation and subsequent analysis. The conceptual framework can be seen in Figure 1.
study refers to the theory of planned behavior ranging from attitudes to consumption behavior, subjective norms, and perceived behavioral control consumption. The hypothesis to be tested in this study are:

H1: Attitudes towards consumption behavior have a significant effect to the intention consumption chocolate drink.

H2: Subjective norms significantly influence the consumption of chocolate drink consumption intentions.

H3: Perception of control significantly influence consumption behavior intention chocolate beverage consumption.

Methods of data analysis in this study using SEM-PLS (Structural Equation Modelling - Partial Least Square). SEM-PLS give researchers an opportunity to evaluate the structural parameters statistically from various indicators, and the entirety of the latent constructs a model, Sumarwan et al. (2013). SEM-PLS is a powerful analytical method because it can be applied to all scales of the data, does not require a lot of assumptions and the sample size should not be large. SEM-PLS than can be used as a confirmation of the theory can also be used for testing proportions. SEM-PLS may also be used for structural modeling with reflective or formative indicators (Jaya and Sumertajaya 2008). SEM testing can be done using SmartPLS software for Windows.

Decision-making based on the validity of the attribute value compared with the count \( r \) value table or a probability value (p-value). Attributes declared invalid if the correlation coefficient \( (r-count)> r\)-table or a p-value of \(<0.05\). The \( r\)-table for \( n = 30 \) (df = 2) is 0.361. The table shows the validity test whole-count \( r \) (correlation coefficient) obtained from the processing of research data is more than \( r\)-table means attributes have been valid and can be used for further discussion. Reliability testing data was analyzed using SPSS to see Cronbach Alpha coefficients. Reliability test results of the individual indicators for each dimension has a Cronbach Alpha coefficients for 0.932, meaning that the research indicators are reflected by questionnaire reliable and consistent.

4. Results and Discussion

4.1. Demographic Characteristics

Some 76 percent of respondents are in early adult age category, only 21 percent of respondents who are in the middle age category, as well as 3 percent of the respondents included in the category of older adults. Based on gender, there is a distribution of men and women as much as 53 percent as much as 47 percent. This shows that consumers drink chocolate is dominated by men.

4.2. Evaluation Measurement Model

According to Widodo (2008), there are three criteria for the use of analytical techniques with which to assess the outer SmartPLS models which are convergent validity, discriminant validity, and composite reliability. Test validity can be seen from the loading factor for each indicator constructs. Rule of thumb is commonly used to assess convergent validity value 0.6-0.7 loading factor to research that is exploratory, however, to study the early stages of development scale of measurement, the value of the loading factor of 0.5-0.6 is considered sufficient (Chin, 1998). At this stage of the research will be used limit loading factor of 0.5. The results of data processing using SmartPLS, can be seen in Figure 2.

Convergent validity relates to the principle that the gauges of the constructs should have a high correlation. Based Hair et al. (2006), the rule of thumb is usually used to make a preliminary examination of the matrix factor is \( \pm 0.3 \) to be considered in compliance with the minimum level, for loading \( \pm 0.4 \) is considered better, and for loading of 0.5 is considered significant practical. Thus, the higher the loading factor, it is increasingly important role in interpreting the loading matrix factors. Beradaskan results of the analysis (Figure 2), of all the indicators have had a value of loading factor of more than 0.5. This indicates that all the indicators could reflect the latent variables.
The second test for convergent validity by looking at the value of Average Variance Extracted (AVE) on a reflective indicator model. Terms of the model has good validity when their respective latent variables with reflective indicators have above 0.5 AVE. The results of the analysis are shown in Table 2, the value AVE of each latent variable has a value> 0.5, so that the PLS model qualifies good convergent validity.

<table>
<thead>
<tr>
<th>Evaluation of the consequences</th>
<th>AVE</th>
<th>Composite Reliability</th>
<th>Cronbachs Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.616344</td>
<td>0.864499</td>
<td>0.789441</td>
</tr>
<tr>
<td>Controlling factor</td>
<td>0.694879</td>
<td>0.900811</td>
<td>0.852377</td>
</tr>
<tr>
<td>Intention consumption</td>
<td>0.735019</td>
<td>0.892637</td>
<td>0.819528</td>
</tr>
<tr>
<td>Normative belief</td>
<td>0.658906</td>
<td>0.882122</td>
<td>0.814697</td>
</tr>
<tr>
<td>Control belief</td>
<td>0.626876</td>
<td>0.869943</td>
<td>0.799746</td>
</tr>
<tr>
<td>Behavioral belief</td>
<td>0.628247</td>
<td>0.871032</td>
<td>0.802473</td>
</tr>
<tr>
<td>Motivation to comply</td>
<td>0.681849</td>
<td>0.892161</td>
<td>0.832435</td>
</tr>
<tr>
<td>Subjective norm</td>
<td>0.595874</td>
<td>0.919570</td>
<td>0.897303</td>
</tr>
<tr>
<td>Perception of behavior</td>
<td>0.586844</td>
<td>0.918682</td>
<td>0.898175</td>
</tr>
<tr>
<td>management</td>
<td>0.541706</td>
<td>0.904008</td>
<td>0.878173</td>
</tr>
</tbody>
</table>

The next measurement is test the reliability of the models used to prove the accuracy, consistency, and accuracy of instruments to measure the construct. Test reliability that measure reliability and Cronbachs alpha compositing on any latent constructs more than 0.6. Discriminant validity testing done on the principle that the gauges (manifest variables) distinct constructs should not have a high correlation (Ghozali, 2012). Correlation values between the constructs have been less than the value √AVE so the model has been qualified discriminant validity.

4.3. Evaluation of Structural Model

Attitudes toward the behavior is one of three main factors intention to behave. Attitudes toward the behavior can be seen through the levels held by individuals in making evaluations that are good or bad for the behavior. Attitudes towards behavior was measured through two variables: behavioral belief and evaluation of the consequences. Both of these will affect the level of the intentions of a person to such behavior. The higher the behavior belief and evaluation of the consequences of certain behaviors, the intention of such behavior will be higher (Fishbein and Ajzen 1975). The largest portion of each indicator behavioral belief instrument has a high frequency with an average frequency of 65.5%. Confidence in the behavior of drinking chocolate in determining attitudes toward behavior, can not be separated from the evaluation of the consequences. The largest portion of each indicator consequence evaluation instruments have a high frequency with an average frequency of 61.5%.

Another factor of behavior intention is subjective norm. Subjective norm express individual beliefs about how they would be seen by a reference group if they perform certain behaviors (Al-Swidi 2014). Subjective norm for the consumption of chocolate in this study extend through the
norms of trust and motivation to comply. The largest portion of each indicator norm trust instrument has a frequency being the average frequency of 47%. Confidence in the norm of drinking chocolate in determining subjective norms of consumption, are inseparable from motivation to stick with it. The largest portion of each indicator instrument has a medium frequency of motivation comply with an average frequency of 47.25%.

In addition to attitudes toward behavior and subjective norm is the perception of behavioral control. Perception of control behavior can be seen through the trust factor control and control. The largest portion of each indicator trust instrument control frequencies are high with an average frequency of above 50% in the amount of 75.25%. Confidence control of drinking chocolate in determining the perception of behavioral control, can not be separated from the control factor. The largest portion of each indicator instrument control factor has a high frequency with an average frequency of 71.5%.

Measurement models inner here in after by way of bootstrapping at the outer end of the model by looking at the value of the T-statistic as a reference to assess to test the hypothesis on every track of endogenous variables to exogenous variables. Bootstrapping results in Table 3 show two lines have a significant effect (T-statistics > T-table 1.96 at 5% significance level). While the lines were not significant (T-statistic < T-table 1.96).

**Table 3: Value loading factor and T-Stats structural model**

<table>
<thead>
<tr>
<th>Perception</th>
<th>Loading Factor</th>
<th>T Statistics</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective norm consumption -&gt; Consumption intention</td>
<td>0.057</td>
<td>0.998</td>
<td>0.505</td>
</tr>
<tr>
<td>Perception behavioral control consumption -&gt; Consumption intention</td>
<td>0.306</td>
<td>3.942</td>
<td>0.505</td>
</tr>
<tr>
<td>Attitudes toward behavior consumption -&gt; Consumption intention</td>
<td>0.441</td>
<td>5.457</td>
<td>0.505</td>
</tr>
</tbody>
</table>

Attitudes towards consumption and perceived behavioral control significantly influence consumption behavior of consumption intentions, respectively 5.457 and 3.942. While the subjective norm of consumption are not significantly influence consumption intentions can be seen from the value of T statistics <1.96 is equal to 0.998. Structural models intention chocolate drink consumption resulted in the value of R Square of 50.5% means that the diversity of the intentions of the consumption of chocolate that can be explained by the model of 50.5%, while the remaining 49.5% is explained by other factors outside the model.

Attitudes towards consumption behavior reflected by the trust behavior and evaluation konsekuens, more dominant than the consumption intentions perception of control behavior that is reflected by the confidence factor control and control. It can be seen from the value of the loading factor attitudes towards the consumption behavior of 0441 while the perception of behavioral control consumption by 0306. Meanwhile, subjective norm consumption behavior reflected by norms of trust and motivation only positive but not significant effect to the intention of 0.57 chocolate drink consumption.

### 4. Managerial implications

Changes and formulation of marketing strategies in a variety of consumer goods industry is necessary for the industry to remain competitive in the market. Change management is a systematic process of applying knowledge, tools and resources necessary to affect change in people affected by the process (Nasution 2010). Management of change is intended to provide the necessary business solutions successfully in an organized way and method, by managing the impact of changes on the people involved. In order to achieve the expansion of the consumer market chocolate in Indonesia, it is necessary as well as change management and the formulation of marketing strategies of manufacturers and distributors of chocolate drinks including beverage outlets. Manufacturers and distributors need to understand how the intentions of chocolate drink consumption from consumers for increased marketing management can increase the consumption of consumer intentions. Intention consumer consumption is significantly influenced by attitudes toward consumption behavior and perception of behavioral control.

Attitudes towards consumption behavior chocolate drink are reflected by the trust behavior and evaluation of the consequences. Thus, both producers and distributors of chocolate drinks need to increase consumer confidence in on benefits of chocolate, for example by writing four of the indicators in the packaging and visual advertising to consumers. Moreover, both producers and distributors also need to reassure consumers on the importance of positive benefits for the body chocolate drink. Consumers would have the perception of its own to consume a chocolate drink. So that both the producers and distributors will be able to foster the perception of control in consuming chocolate beverages to consumers. Perception of control behavior is a reflection of the confidence factor of behavior management and behavior control. So that both the chocolate beverage manufacturers need to boost consumer confidence, by pursuing efficient pricing for chocolate drinks, chocolate drinks provide convenience to consume an instant and practical, as well as increasing the availability of chocolate on the market.

### 5. Conclusions

Based on the analysis of the model theory of planned behavior to the intention consumption of chocolate, it can be concluded that factors affecting intention chocolate drink consumption is the attitude toward the behavior and perception of behavioral control. Attitude toward behavior more dominant intention of consumption compared with the perception of controlling consumption behavior. Meanwhile, subjective norm had no effect on the consumption of chocolate drink intentions.

Chocolate beverage manufacturers should be more active to increase sales in the chocolate drinks market through marketing strategies that attract so as to increase consumer intention to consume a chocolate drink, especially with the growing positive attitude and perception of the chocolate
drink. However, further research needs to be done is the analysis of the influence of the intentions of the consumption of chocolate drink consumption behavior.

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References


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