

## THEORY OF PLANNED BEHAVIOR (TPB) APPROACH: READING INTENTION OF FOOD LABEL COMPOSITION

Megawati Simanjuntak  
Bogor Agricultural University, Indonesia  
E-mail: mega\_juntak@apps.ipb.ac.id

Submission: 9/3/2021  
Accept: 12/1/2021

### ABSTRACT

*Food product labels have a crucial role as they provide the main source of information about the products. The purpose of this study is to analyze the difference and the influence of knowledge, perception, attitude, subjective norms, and behavioral control toward the intention of reading the composition labels using the Theory of Planned Behavior. This study used a survey method with a total of 400 respondents selected using multistage random sampling. The statistical analyses used were independent t-test and logistic regression. The findings showed that most respondents did not have the intention to read the composition labels. Knowledge, perception, and the subjective norms of the female respondents regarding the composition labels were better than that of the male respondents and were statistically different at  $p < 0.05$ . However, attitudes toward behavior, behavioral control, and intention in reading the composition label tended to be similar for both genders. Intention was influenced by perception ( $p < 0.05$ ), behavioral control ( $p < 0.01$ ) and subjective norms ( $p < 0.01$ ). The better the perception, behavioral control, and subjective norms, the greater the intention of reading the composition label. The results revealed that the three components could be used to predict a person's intention toward an object and also composition labels reading behavior.*

**Keywords:** *composition label, intention, knowledge, perception, the theory of planned behavior*

### 1. INTRODUCTION

Food product labels play a significant role as the primary source of information about the products. Since 2012, the pre-packaged food industry has grown more than 10% (Simanjuntak, Utami & Johan, 2014). Thus, in order to avoid adverse health effects, the public needs to be more aware of the need to pay attention to the labels of packaged food products (Sumarwan, Simanjuntak & Yulianti, 2017).

One component that must be included in the labels of food products, according to the NATIONAL AGENCY OF DRUG AND FOOD CONTROL (NADFC) INDONESIA (2006), is composition. This provides a complete list of ingredients used, including food additives in the order ranging from the ingredient most used in the product, except for vitamins and minerals (NADFC INDONESIA, 2006). This nutritional information that is usually displayed in table form at the back of the product packaging has now begun to be replaced by a simpler-looking label on the front of the product packaging (Grunert et al., 2010).

One of the goals of the placement of the nutritional information on the front of the label is to provide the opportunity to educate consumers to pay more attention to the composition of the food product and the food preparation process (Grunert, Wills & Fernandez-Celemin, 2010). Graham and Laska (2012) found that students who often read labels would tend to eat healthier food compared to those who rarely read the labels.

Research by Chen et al. (2012) showed that the use of food labels varies based on several factors, including knowledge, perceptions, and beliefs. GRUNERT et al. (2010) also found that interest in consuming healthy foods and knowledge of nutrition affect the understanding and the use of nutritional information on food labels. The knowledge possessed by a person tends to make the person more aware of the information obtained, including in terms of the products they use. Consumer knowledge will influence the ability to use and interpret food labels (Prinsloo et al., 2012).

Research on food labels has been carried out before, but research on labeling composition in food products is still scarce. One study on the same topic as this research was conducted by Zahara and Triyanti (2009), who concluded that only a small percentage of students (38.9%) read the composition label. The study also concluded that the low attention given to reading composition labels before purchasing food products is due to the lack of interest in the information listed on the composition label. In addition, Osei, Lawer, and Aidoo (2012) state that only 37.2% of consumers use the information on food labels as a consideration in choosing food products. This shows that the composition label on packaged food products is still neglected by consumers, even though the knowledge of the food composition is essential.

The difference between the research related to food composition labels, as mentioned above, concerns the variables studied and the approach used. This study will use the Theory of Planned Behavior (TPB) approach by examining the knowledge, perceptions, and intentions of reading the composition label. While the research of Osei, Lawer, and Aidoo (2012) focused

more on socio-demographic factors, the usage of food labels, understanding reading information, and the type of information sought, Zahara and Triyanti (2009) only focused on the level of public compliance in reading the nutrition information on the labels, the composition of packaged food products and factors related to those behaviors.

Following the TPB model, intention is an indicator used to predict a person's behavior (Ajzen, 2011). However, the reading behavior of food composition labels is not the focus of this study. Based on the Theory of Planned Behavior (TPB), a person's intentions are measured through three components, namely attitudes toward behavior, subjective norms that are related to one's perception of whether other people are considered necessary will influence their behavior, and behavioral control of how a person perceives behavioral control (Ajzen, 1991).

According to NADFC INDONESIA (2008), consumer concern regarding the composition labels of food products was only 7.9% out of the total of 88.9% of consumers' attention to food labels. Therefore, this study was conducted to (1) identify the knowledge, perceptions, attitudes toward behavior, subjective norms, behavioral control, and intention to read food product composition labels using the Theory of Planned Behavior approach; (2) analyze differences of knowledge, perceptions, attitudes toward behavior, subjective norms, behavioral control, and intention to read the composition of food product labels by gender; and (3) analyze the influence of knowledge, perceptions, attitudes, subjective norms, and behavioral control on the intention to read food product composition labels using the Theory of Planned Behavior approach.

This research focuses on real stimuli, food composition labels, of one product category, namely food packaged with various brands. The information on the food composition label consists of a complete list of ingredients used, including food additives in the order ranging from the ingredient most used in the product, except for vitamins and minerals. This information is usually available on the food packaged in the market with a low involvement of purchase items.

## **2. LITERATURE REVIEW**

### **2.1. Consumer Knowledge**

Consumer knowledge is all information that consumers have about goods and services, other knowledge related to these goods and services, as well as other information related to their function as consumers (Sumarwan, 2011). Peter and Olson (2010) mentioned that

consumers have different levels of product knowledge. Prinsloo et al. (2012) explained that consumer knowledge about a product would affect consumer's ability to interpret information and use the product.

Someone who has a good understanding of an issue will have a personality and behavior that is in accordance with what is expected by the social environment (Ajzen et al., 2011). Chen et al. (2012) stated that the understanding of information on food labels is influenced by several things, such as gender, income, education, ethnic group, skin color, regional origin, and the diet program being undertaken. According to Ajzen et al. (2011), a person's knowledge can also be used to predict a person's intention to perform a behavior. Therefore, the better the level of knowledge that a person has of goods or services, the better the quality of goods or services the person obtains.

## 2.2. Consumer Perception

Perception is the process by which a person selects, organizes, and interprets information to create a meaningful picture of the world (Kotler & Keller, 2009). According to Setiadi (2008), everyone's perception of an object will be different. Setiadi further said that a person's perception is influenced by several things, including age, past experiences, and surrounding stimuli. The formation of different perceptions on the same stimulus is caused by three things related to sensory stimuli, namely: selective attention, selective distortion, and selective retention (Kotler & Armstrong, 2008).

Consumers' perceptions of various stimuli they receive are influenced by the characteristics they have. Some characteristics of consumers that affect perception are how consumers distinguish the difference between two or more stimuli, the ability of consumers to detect differences between stimuli (threshold level), the ability of consumers to respond to stimuli that are below their consciousness (subliminal perception), the level of adaptation of stimuli, and generalization of stimuli (Setiadi, 2008). Perception is also influenced by previous knowledge, which then, from this perception, new knowledge will be created (Jayanti, Djamaludin & Latifah, 2011). Further, Jayanti, Djamaludin and Latifah (2011) stated that the better a person's level of knowledge of an object, the better the person's perception of the object.

## 2.3. Theory of Planned Behavior

Theory of Planned Behavior (TPB) is one of the attitude models developed from the Theory of Reasoned Action (TRA) (Sumarwan, 2011). This model was also developed based on Fishbein's multi-attribute model. TPB explains that the main factor that influences a person's behavior is the intention or intention to behave (Achmat, 2011). An individual's intention to display behavior is a combination of attitudes towards behavior, subjective norms, and behavioral control (Ajzen et al., 2011). In addition to predicting intentions and behavior, Ajzen and Klobas (2013) stated that TPB is also related to personal characteristics and contextual factors that influence a person. Figure 1 shows that a person's intention towards a behavior is influenced by three variables: attitudes towards behavior, subjective norms, and behavioral control.

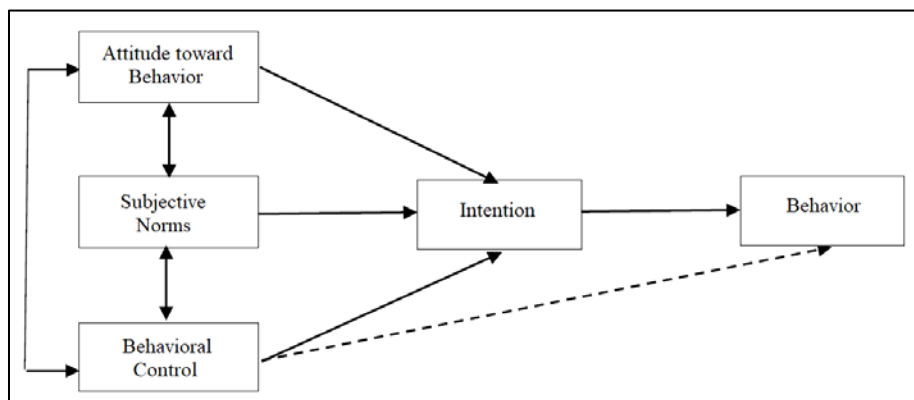


Figure 1: Theory of Planned Behavior

Attitude is an expression of feelings in a person that reflects a positive or negative tendency towards an object (Schiffman & Kanuk, 2008). Attitudes in the TPB model consist of two components, namely behavioral beliefs and evaluation of consequences (outcome evaluation). Behavioral beliefs are individual beliefs about positive or negative consequences that will be received after performing a behavior (Ajzen & Klobas, 2013). Meanwhile, individual judgments or evaluations of the positive or negative of behavior are referred to as evaluations of consequences. Adha and Virianita (2010) stated that attitude is the main factor that influences a person's intentions and behavior.

Another component that influences intention is the subjective norm. Subjective norms are individual perceptions of the desires and expectations of those around them to display or not display certain behaviors (Achmat, 2011). The formation of subjective norms is influenced by two things, namely normative belief (normative behavioral) and motivation to comply (motivation to comply). Perceptions of other parties that are considered important by individuals as people who suggest themselves to display or not to display a behavior are

referred to as normative beliefs (Ajzen & Klobas, 2013). Meanwhile, motivation to comply is an individual's willingness to display and not display the views or perceptions of other parties that are considered important by the individual (Achmat, 2011).

The aspect that distinguishes the TRA attitude model from the TPB is the addition of the third component of intention, namely Perceived Behavioral Control (PBC). Behavioral control shows a person's level of belief about the opportunities, resources, or skills the person has to perform a behavior (Achmat, 2011). Behavioral control consists of two components: the individual's belief about the ability to control or display a behavior (control beliefs) and the individual's belief that there are obstacles or support in carrying out a behavior (power of control factor). People with strong behavioral control will have a strong intention to display behavior. Conversely, people with low behavioral control will have a low intention to display a behavior (Awwaliyah, 2013).

#### **2.4. Intention to Read Composition Labels**

According to Achmat (2011), intention is a function of beliefs and important information about a person's tendency to display a behavior that will lead to a specific outcome. Intention is a dimension of the probability of a person's subjective location relating to behavior. The formation of intentions is influenced by several components, namely attitudes towards behavior, subjective norms, and behavioral control. These three components can be used to predict a person's intentions towards an object and behavior (Ajzen & Klobas, 2013).

In addition to the TPB component, there are several factors that influence the intention, one of which is knowledge. The results of Ajzen et al. (2011) show that knowledge has a positive correlation with intention. Someone who has a good understanding of an issue will have a personality and behavior that is in accordance with what is expected by the social environment.

Another factor that influences the formation of intentions is the level of completeness of the information received by a person. The amount of information obtained by a person has a different influence on the formation, development, and change of intentions towards an object (Siwi & Meiyanto, 2002).

The intention to read composition labels shows how much effort a person makes to actualize the plan of reading composition labels of certain food products. The amount of effort

to actualize the reading behavior plan is influenced by the level of sources and opportunities that facilitate or hinder the behavior of reading composition labels (Siwi & Meiyanto, 2002).

## **2.5. Food Product Labels**

A food label is any information regarding food in the form of pictures, writings, a combination of both, or other forms attached to food, inserted into, affixed to, or is part of food packaging. The purpose of food labeling is so that people get correct and not misleading information about the food they will consume. In addition, another goal of food labeling is to create an honest and responsible food trade (NADFC INDONESIA, 2006).

According to Government Regulation (PP) of the Republic of Indonesia 69 of 1999 concerning Food Labels and Advertisements, information and statements about food listed on food labels must be true and not misleading, whether in writing, images, or in any other form. The inclusion of a statement about the benefits of food for health can only be done if it is supported by scientific facts that can be accounted for (NADFC INDONESIA, 2006).

Kotler and Keller (2009) stated that labels have several functions, namely identifying the product or brand, rating the product, describing the product (what the product is, who made it, where the product was made, when the product was made, what it contains, how to use it, and how to use it safely), and promote products through attractive graphics. Labels on food products provide an opportunity for consumers to obtain information about the process of preparation and manufacture of food products (Murphy, 2013).

In addition, food labels can help consumers to know the safety, cleanliness, and quality of a product (Osei, Lawer & Aidoo, 2012). Furthermore, Osei, Lawer and Aidoo (2012) explained that the level of use and consumer understanding of a product has a significant influence and a positive relationship with consumer purchasing decisions. Consumers must be aware of their responsibility and need to know that they are one of the main actors in the “farm-to-fork” chain. Therefore, consumers must always be careful in choosing food products (Aygen, 2012).

## **2.6. Composition Labels**

Food composition provides information on a complete list of food ingredients, including food additives in descending order starting with the largest part, except vitamins and minerals. In the Government Regulation of the Republic of Indonesia Number 69 of 1999

concerning Food Labels and Advertisements, provisions regarding the labeling of food composition are listed in Article 19 to 22 (NADFC INDONESIA, 2006).

In Article 19, it is stated that information on the ingredients used to produce a food product is included on the label. The material used as intended must use a common or commonly used name. In addition, Article 22 also explains that food containing additional food ingredients must include the class of food additives. If the food additive used has the name of the food additive and an international code, the meaning of the international code must be stated on the food label, except if the additive used is a dye. This is done so that everyone who consumes food can clearly know the types of food additives used.

The use of water added as an ingredient must be stated on the composition label unless the water is part of the ingredients used. Water or foodstuffs that experience complete evaporation during the processing do not need to be listed. Congenital food ingredients contained in product formulations as part of other ingredients such as Monosodium Glutamate (MSG) in spices must also be listed on the composition label. Congenital additives, or natural spices in food, are referred to as flavorings (NADFC INDONESIA, 2006). Food composition labels play an important role in helping consumers to choose foods that suit their circumstances, such as current dietary guidelines (Murphy, 2013).

### **3. RESEARCH METHODOLOGY**

This study used a survey method. The research was conducted at IPB University. The population of this study comprised undergraduate students who were still active in their third, fifth, and seventh semesters. Based on the Slovin formula with an error of 0.05 and a population of 10.540 students, the number of respondents obtained was 385, but it was fulfilled to 400 respondents to minimize sampling errors. The technique of sampling used multistage random sampling with faculty and gender as a layer. Respondents came from nine faculties and 36 departments in IPB University.

The types of data used in this study were primary. Primary data were individual characteristics (gender, attendance at lectures related to consumers), knowledge, perceptions, attitude toward behavior, subjective norms, behavioral control, and intention to read composition labels.

Knowledge is all information that respondents have regarding food product composition labels. Knowledge will help direct attention to important information, good



understanding, and allow more accurate information to be stored in memory and used to make decisions (Miller & Cassady, 2015). The instrument was modified from Ardiansyah, Djamaludin, and Herawati (2012) as well as Simanjuntak and Dewantara (2014) consist of 15 statements using the Guttman scale. A score of one (1) was given for each statement answered correctly, and a score of zero (0) was given for each statement answered incorrectly. The scores of each statement were then added up to a total score. The reliability was classified 0.674 with validity ranged from 0.287 to 0.500.

Perception is the assessment or viewpoint of the respondents regarding food product composition labels based on stimuli obtained previously. Perception was modified from Ardiansyah, Djamaludin, and Herawati (2012) using fifteen statements with 5-point Likert scales from strongly disagree to agree strongly. The reliability was 0.810 and validity ranged from 0.164 to 0.628.

The Theory of Planned Behavior includes attitude toward behavior, behavioral control, and intention to read composition labels. The attitude towards behavior is the response and the assessment of the composition label. Perception were referred to Ardiansyah, Djamaludin, and Herawati (2012), Simanjuntak and Dewantara (2014), as well as Zahara and Triyanti (2009). Attitude toward behavior was measured using six statements consisting of three behavioral beliefs and three consequences evaluation statements using five Likert scales from strongly disagree to strongly agree. Subjective norms are individual perceptions of the wishes and expectations of the people around them to read or not read the composition label.

Subjective norm was measured using six statements consisting of three normative beliefs and three statements of motivation to comply. Behavioral control is the level of individual trust regarding the opportunity and resources available to read the composition label. The statements to measure the behavioral control comprised six statements consisting of three control beliefs and three power of control factors.

The intention to read the composition label is one's intention to realize the plan to read a specific food product composition label. The intention to read the composition label was measured using one statement. Respondents who answered strongly disagree and who answered disagree with the statement were categorized as respondents who did not have the intention of reading the composition label, while respondents who answered agree and who answered strongly agree to the statement were categorized as respondents who had the intention to read the composition label.

Attitude toward behavior, subjective norms, behavioral control, and intention to read composition labels were measured using an instrument that was classified as reliable with alpha coefficients ranged from 0.777 to 0.812. The validity for those variables ranged from around 0.237 to 0.571.

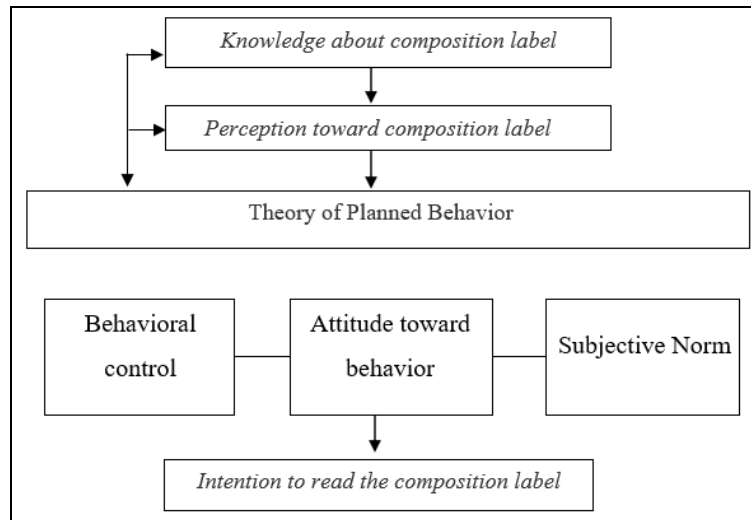


Figure 2: Research framework

Data were collected by self-report. Before this, the researcher obtained each respondent's contact information and asked for their agreement to become respondents for this research.

The composite scores obtained for each variable were indexed with a scale of 0 to 100. The statistical analysis included independent sample t-test and logistic regression. Independent sample t-test analyzed differences of knowledge, perceptions, attitude towards behavior, subjective norms, behavioral control, and intention to read composition labels by gender. In addition, logistic regression analyzed the factors that influenced knowledge, perceptions, attitudes toward behavior, subjective norms, and behavioral control.

## 4. RESULT

### 4.1. Individual Characteristics

The respondents comprised 60.8% females, and the males comprised 39.2%. The average age of the males was 20.34 years, while for females, it was 20.20 years. The proportion of respondents based on whether or not they attended courses related to consumers was 27.4% for males and 32.1% for females.

### 4.2. Knowledge of Food Label Composition

Knowledge of composition labels refers to information that respondents have about labels showing the composition of food products. There was a significant difference between males and females ( $p < 0.05$ ) regarding knowledge of food composition labels. The significant difference in males and females knowledge of food composition labels concerning knowledge of the purpose of food composition labels, the regulations regarding the writing on food composition labels, the regulations for using food names on composition labels, and knowledge of types of food additives prohibited by the government.

The differences in knowledge level between males and females were also seen from several statements that were answered correctly. All of the males had very high knowledge about the components that must be listed on food labels. Meanwhile, females had a very high level of knowledge regarding the provisions of writing food composition labels.

The knowledge of respondents was categorized as deficient, low, good, and very good. The majority of the respondents (91.5%) had very good knowledge about the composition label. There were significant differences ( $p < 0.05$ ) in the level of knowledge of males and females. Males had a lower average of knowledge score compared to females.

#### **4.3. Perception Toward Composition Label**

Respondents had a very good perception of the benefits of the information listed on the composition label, the obligation of the marketer to list the composition, and paid attention to the composition label when purchasing food products. This can be seen from the high average score of male and female respondents who agreed with the statements.

However, respondents had a very bad perception of the composition label as they felt lazy to read the label because the terms used were difficult to understand. Nearly half of the respondents (47.2%) had a good perception of the composition label. There were significant differences ( $p < 0.05$ ) between males and females regarding their perceptions of the composition label. The average perception index of the females was better than that of the males.

#### **4.4. Attitude Toward Behavior**

The attitude towards behavior is the response to and judgment of respondents regarding composition labels. The attitude toward the composition label in this study consisted of two aspects: the belief in reading the composition and the evaluation label. More than half of the respondents (57.7%) had the right attitude toward reading the composition label. In addition,

the results of the study also showed no significant differences between males and females ( $p > 0.05$ ) in attitudes towards the composition label.

#### 4.5. Subjective Norms

Subjective norms for label composition are the individual perceptions of the wishes and expectations of the people around them to read or not read the composition label. Subjective norms in this study are divided into two aspects, namely normative beliefs and motivation to comply. The results show that the lecturer was the most influential individual in the respondents' decision to read the composition label because more than half of the respondents obeyed their lecturers in reading the composition label. Meanwhile, people around the respondents, such as parents and friends, were not classified as influential individuals (significant other) in this study.

More than three-quarters of the respondents (77.8%) had subjective norms in the good category, with the highest average index of 50 to 75. There were 11% of respondents with very good categories, while the rest had low subjective norm level score categories. Based on the results of different tests conducted, there was a significant difference ( $p < 0.01$ ) between males and females concerning subjective norms. The average index of the subjective norms of males was smaller than that of females.

#### 4.6. Behavioral Control in Reading Composition Labels

Behavioral control of label composition is the level of individual trust regarding the opportunity and resources to read the composition label. Behavioral control in this study is divided into two aspects: control beliefs and the power of control factors. The results show that more than half of the respondents had reasonable control beliefs in knowing the risk of consuming food that did not include a composition label.

This is indicated by the high average index of respondents who answered that statement compared with other statements. Also, respondents had the power of proper control factor that the risks arising from not reading the composition label encouraged them to read the composition label. This is indicated by the high average index of respondents who answered agreed to the statement.

More than half of the respondents (57.3%) had reasonable behavioral control in reading composition labels. Only 3% of respondents had excellent behavioral control in reading the

composition label. There were no significant differences ( $p > 0.05$ ) between males and females regarding behavioral control.

#### 4.7. Intention to Read the Composition Label

The intention to read the composition label is how much one's intention is to realize a plan to read specific food product composition labels. The intention to read composition labels is categorized into two groups, namely respondents who have the intention of reading the composition label and respondents who do not have the intention of reading the composition label. Most of the respondents (85%) did not have the intention to read the composition label, namely 84.4% of males and 86% of females. Based on the results of the chi-square test, there is no significant relationship ( $p = 0.478$ ) between the intention to read the composition label and gender.

#### 4.8. The Different of Index for All Variables

The average perception scores, attitudes towards composition labels, subjective norms, and behavioral controls for both males and females who had the intention of reading the composition label were higher than for respondents who did not have the intention of reading the composition label. The average knowledge score of females who did not have the intention to read the composition label was higher than for the female respondents who had the intention to read the composition label. Meanwhile, the average knowledge score of male respondents who had the intention to read the composition label was higher than for males who did not have the intention of reading the composition label (Table 1).

Table 1: The average index and t-test for all variables

Variables	Intend to read			Not intend to read		
	Male (n=131)	Female (n=209)	p-value	Male (n=26)	Female (n=34)	p-value
1. Knowledge	81.54	91.18	0.206	87.56	88.95	<b>0.010*</b>
2. Perception	60.00	62.56	<b>0.029*</b>	67.55	69.93	0.264
3. Attitude toward behavior	71.72	69.35	<b>0.025*</b>	73.06	76.02	0.457
4. Subjective norm	55.27	58.82	<b>0.014*</b>	63.76	66.72	0.173
5. Behavioral control	47.46	45.68	0.230	55.23	56.47	0.454

\*Significant on  $p < 0.05$

#### 4.9. Factors Influence Intention to Read Label

The results show that the independent variables in this study had a significant effect ( $p < 0.01$ ) on the intention to read the composition label. Besides, the value of the coefficient of

determination was adjusted (Nagelkerke R<sup>2</sup>) of 0.287. The intention to read the composition label was only explained by the independent variables of 28.7, while the remaining 71.3% was explained by other variables not examined in this study (Table 2).

Table 2: Logistic regression of intention to read the label

Independent Variables	Coefficient B	Sig	EXP (B)
Knowledge	-1.069	0.352	0.343
Perception	3.230	<b>0.033*</b>	25.284
Attitude toward behavior	-0.265	0.822	0.767
Subjective norm	4.309	<b>0.000**</b>	74.357
Behavioral control	2.884	<b>0.009**</b>	17.895
Nagelkerke R <sup>2</sup>		0.287	
X <sup>2</sup> model (p)		14.206 ( <b>0.000**</b> )	

\*Significant on p<0.05; \*\* Significant on p<0.01

The intention to read the composition label was influenced by several variables, namely perception, behavioral control, and subjective norms. Perception affected significantly (p<0.05) and positively the intention to read the composition label (B=25.284). In other words, respondents who had a good perception of the composition label had 25.284 times greater opportunity to read the composition label than students who had a lack of perception of the food composition label. Besides, the intention to read the composition label was also influenced significantly (p<0.01) and positively by subjective norms (B=74.357).

This is to say, respondents with good subjective norms had 74.357 times greater opportunities to read composition labels compared to respondents with a lack of subjective norms. Behavioral control also had a significant (p<0.01) and positive effect on the intention to read the composition label (B=17.895). This means that respondents with reasonable behavioral control had 17.895 times more opportunity to read composition labels than respondents with less behavioral control of the composition label.

## 5. DISCUSSION

### 5.1. Consumer Empowerment

The composition label provides information on the complete list of ingredients that comprise a food product, including food additives. The information printed on the composition label is a tool to help consumers improve their health (Borra, 2006). Nearly a quarter of respondents (24.5%) placed the composition label as sixth in the sequence of labeled food products that were considered before purchasing food products. This is in line with the research of Osei, Lawer, and Aidoo (2012), which shows that the majority of consumers read

information labels only occasionally at the time of purchase. More than half of the respondents agreed that the information contained in the composition label was not interesting to read.

Some reasons for consumers not reading food labels are the labels are not attractive, they lack time to read the label, and the very limited ability of consumers to understand the information contained in food labels, as well as the absence of a sense of consumer responsibility for food consumed (Signal et al., 2008).

In addition, consumers' lack of understanding about the composition label also caused respondents' low attention to reading composition labels (Osei, Lawer & Aidoo, 2012). This lack of understanding was caused by the difficulty of the terms used on the labels and the tiny size of the font. Even so, attractive composition labels with additional information can motivate consumers to read composition labels (Ranilović & Barić, 2011).

The females had a better knowledge of composition labels compared to males. This is in line with the results of the study by Simanjuntak (2014), which shows that gender has a significant positive effect on knowledge, and by Chen et al. (2012), which stated that one of the factors that influence information gathering on food labels is gender. This is because when buying food products, females are more concerned about the list of ingredients used as compared with males (Zorba & Kaptan, 2011), and females are more concerned with the environment than males (Furrow & Knott, 2009).

This finding is also in line with the research of Simanjuntak and Dewantara (2014), which concluded that there are differences between males and females in knowledge related to halal labels, as seen in females having higher scores. Also, Chen et al. (2012) found that American females with higher levels of education and a better understanding of nutrition could easily understand the information contained in the composition label.

Respondents' perceptions about the label of food composition fell into the good category. More than half of the respondents (62.2%) agreed that the information contained in the composition label is very beneficial for consumers. In addition, the results of the study also show that there were significant differences between males and females in perceptions regarding the label composition.

Consumer knowledge can influence their ability to interpret information (Prinsloo et al., 2012). The results show that knowledge has a positive relationship with perception. This is indicated by the regression results, which show respondents' perceptions of the composition

label as influenced by knowledge. The better the knowledge of the respondents about the composition label, the better the perception of the composition label.

This is also in line with research by Prasiwi et al. (2018), who found that label knowledge significantly affects reading label perception. Previous research by Jayanti, Djamaludin, and Latifah (2011) also stated that the better the level of one's knowledge of an object, the better the perception of the object. In addition to knowledge, the results of the study show that the employment status of the mother also influences the perception of the composition label. Respondents with unemployed mothers had a better perception of the composition label. This is because unemployed mothers have more time to communicate with children so that the planting of positive values in the family is more effectively given compared to employed mothers (Isik & Guven, 2007).

The respondents' attitude in reading the composition label was in a good category. Respondents responded positively to questions related to attitudes, both related to behavioral beliefs (evaluations) and evaluation of consequences (outcome evaluation). This shows that the respondents had a reasonably high degree of control that reading the composition label will provide essential benefits and deliver the expected goals after reading the composition label.

The objectives are, among other things, so that consumers avoid food products that could cause allergies and food products that contain hazardous chemicals, and in so doing, they will get food that is safe for health (Murphy, 2013). This is in accordance with the results of the study of Osei, Lawer, and Aidoo (2012), which states that food composition labels can help consumers to know the safety, cleanliness, and quality of a product.

Based on subjective norms, of the four figures suspected of influencing respondents in reading the composition label, the lecturer was the figure that most influenced the respondents' decision to read the composition label. Other party perceptions that are considered necessary by individuals as people who suggest themselves display or not display a behavior will influence the displaying of behavior (Ajzen & Klobbas, 2013). In this study, the behavior that the respondents wanted to display was reading the composition label.

An individual's significant other is the social figure that influences a person's decision whether to display or not a particular behavior (Ajzen, 2011). Out of the four figures suspected of influencing respondents in reading the composition label, the lecturer figure was the one that most influenced the respondent's decision to read the composition label. Lecturers were



influential individuals (significant other) for the respondents, which led to their decision to read composition labels because lecturers are considered to have good knowledge and understanding of many things, including food composition labels. Also, lecturers were the individuals who influenced the respondents because they were trusted as competent figures to confirm the good or not of a food product.

Behavioral control of more than half of the respondents in this study fell into the good category. Respondents believed that the time they had when purchasing food products, the type of information contained in the composition label, and knowledge about the risk if they did not read the composition label became the driving factor for them to read the composition label. However, information on the composition label that is less attractive was a significant obstacle for respondents to read the composition label. Information on the composition label is becoming increasingly complex, and the sometimes confusing and unfamiliar terms to consumers are one of the inhibiting factors in the search for information about the composition label (Zahara & Triyanti, 2009).

There were no significant differences between males and females in attitudes and behavioral controls. This is due to the distribution of respondents who were less heterogeneous in terms of attitude and behavioral control. Furthermore, there were significant differences between males and females with regard to subjective norms. Females had better subjective norms compared to males. Female respondents are significantly more concerned than male respondents about the expiration date and list of ingredients used when buying packaged food (Zobra & Kaptan, 2011). Therefore, females are more open to opinions and the input of social figures around them.

Knowledge does not affect the intention of the person to read the composition label. This is not in line with the research of Ajzen et al. (2011), which shows that one's knowledge can be used to predict one's intention to perform a behavior. This is because knowledge does not directly affect the intention to read the composition label. In this study, knowledge influenced intention through the formation of respondents' perceptions.

This is in line with the research of Grunert and Wills (2007), which shows that the formation of one's perceptions is influenced by prior knowledge. One of the factors suspected of causing this is the characteristics of homogeneous individuals. Also, this is also due to greater influence than other variables not examined in this study. The variables that influence intentions not examined in this study included motivation, lifestyle, trust, risk perception, and

perceived use (Jusoh & Goh, 2012; Ma'ruf, Mohamad & Ramayah, 2005). Grunert et al. (2010) mentioned that the real challenge does not seem to be a person's ability to use information but one's motivation to use information.

Most respondents did not have the intention to read composition labels in every purchase of food products. The results show that several factors influenced respondents' intentions in reading labels, including respondents' perceptions of label composition, behavioral control, and subjective norms.

This is in line with Ajzen and Klobbas (2013) stated that the formation of intention is influenced by several factors, namely attitudes toward behavior, subjective norms, and behavioral control. These three factors can be used to predict a person's intention towards an object and behavior. The attitude towards the composition label does not affect the intention to read the composition label.

This is in line with the findings of Jusoh and Goh (2012), which show that not all factors in TPB affect one's intentions. In the present study, this is seen in the low attitude score in reading composition labels. Other findings in the study show that knowledge does not affect the intention to read the composition label. Further, the respondents' low intention in reading composition labels is suspected to be due to the food products being products that are consumed frequently (daily products) so that respondents already know the consequences of consuming the product even though they do not pay attention to the composition label.

The contribution of this research for students and the general public is to provide information about the importance of reading composition labels and that it is their obligation as consumers to read the composition label and know their rights to obtain correct, clear, and honest information about the food products they consume. According to Cha et al. (2014), young adults with low health literacy tend not to use food labels to choose products and tend to have poor-quality diets, so increasing health literacy is essential for improving diet quality.

Barreiro-Hurlé et al. (2010) stated that nutrition knowledge education programs could be a useful tool for increasing the use of composition labels so that they can contribute to consumers' healthy eating habits. The composition label on packaged foods is also an effective intervention (in terms of costs) at the population level, with a wide range; this label is useful for reducing the health and economic burden of obesity (Campos, Doxey & Hammond, 2011).

This research is expected to increase consumer awareness, especially in students, so that they can be wiser and more careful in reading food composition labels to consume food that is safe for health. For marketers and producers, this research contributes to providing information about their obligations to provide correct, clear, and honest information on food products.

## 6. CONCLUSION AND SUGGESTION

The results of the study indicate that although the respondents' knowledge of the composition label was in the very good category and the perceptions, attitudes toward behavior, subjective norms, and behavioral controls were in a good category, most of the respondents did not have the intention to read the composition label. Knowledge, perceptions, and subjective norms of composition labels in the case of the females were better than those of the males and showed a significant difference statistically, while attitude toward behavior, behavioral control, and intention to read labels between male and female respondents tended to be similar.

Research has shown that most respondents do not have the intention to read the composition label. For this reason, the necessity is for education and other agencies such as the Indonesian Consumers Foundation (YLKI) and other institutions related to education and consumer protection to increase the intention of consumers, especially students, to read composition labels. In addition, the Ministry of Trade and NADFC Indonesia need to increase control of food products that do not meet the provisions of the labeling of composition.

This research was carried out using the self-report method that allows for higher bias due to the lack of supervision from researchers. For this reason, further research is expected to be conducted using the self-report method, which is carried out simultaneously with the respondents and the researcher. Respondents in this study comprised of students who had homogeneous characteristics.

Therefore, further research is expected to involve more diverse respondents so that the results of the study are more representative. Future studies are also expected to limit the food products under study and avoid the selection of food products that are consumed continuously as research objects. In addition, further research is expected to analyze other factors that influence the intention to read labels that have not been studied in this study, such as motivation, lifestyle, trust, perceived risk, and perceived use.

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