



CONSUMER INVOLVEMENT IN ORAL NUTRITIONAL SUPPLEMENTS PURCHASING BEHAVIOR

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Submission: 15/08/2016
Revision: 08/09/2016
Accept: 19/12/2016

ABSTRACT

The research objective are to investigated the factors (motivation and stimulus factor) influencing consumer involvement and the causality between consumer involvement with the product knowledge as well as purchasing behavior and formulate appropriate marketing strategies for the Oral Nutritional Supplements (ONS). The research is carried out using online survey method. The data is obtained using social media to facilitate and accelerate the distribution of questionnaire with sample size of 100. The research tool used was a 5-points Likert questionnaire in which respondents were asked to show their agreements about 40 items of 5 constructs. A partial least square (PLS) - structural equation modeling (SEM) by Smart-PLS software used to test the model. The main contribution of this paper is based on the argument that consumer involvement is highly important in order to understand purchasing behavior.



The results show that motivation and stimulus factor had significant affects on consumer involvement, consumer involvement had significant influence to product knowledge as well as ONS purchasing behavior, however product knowledge did not have significant affects on purchasing behavior.

Keywords: Consumer Involvement, Motivation, Stimulus Factor, Oral Nutritional Supplements, Purchasing behavior

1. INTRODUCTION

Inadequate calorie intake consumed by a patient is one of the factors of malnutrition. Malnutrition can be overcome by giving nutrients orally to prevent lack of nutrients due to illnesses. Giving the right foods in sick infants and children can reduce morbidity and mortality (SUNATRIO et al., 2011). Oral Nutritional Supplements (ONS) can serve as additional diet for people with insufficient nutrients to boost their nutrient level (LOCHS et al., 2006).

Generally ONS can be found in a form of ready-to-drink liquid or protein powder supplements assumed as milk further consumed by the consumers. Essentially, ONS contains specific amount of calorie and protein since it is categorized a specific diet food, so that considered healthy and not having a malnutrition problem, should not consume ONS in a long period of time. ONS are relatively expensive compared to other kinds of milk for further consumption. So, it is important for the consumers to get more involved in the decision of purchasing ONS since they are categorized high-risk products.

In the process of purchasing or consuming a certain product, consumers will undergo a series of stages such as, identifying needs, seeking for information, and evaluating the alternatives. Seeking for information can be initially done when a consumer realizes that consuming a certain product can fulfill the needs. The next stage is evaluating the alternative. It is when a consumer compares several brands with some choices to solve problems. A consumer who gets deeply involved in choosing a product (high involvement decision making) will experience several phases that are proclaiming faith, shaping attitude, and having desire to take action (SUMARWAN, 2002).

The involvement of consumers is one of important aspects to be learned by a company because it has a significant role in describing the behavior of consumers



(MITTAL, 1989). Other than that, the consumers' involvement is the key to decide a certain brand in the buying process (GHAFELEHBASHI et al., 2011).

Every consumer may have different decision depending on how intense they get involved in the products that they want to purchase. The product that needs high involvement decision making, such as ONS will need a serious consideration so that consumers do not buy the products on spot, but seek for the information prior to buying the products. Expensive products are considered having a high financial risk for the consumers so that they force themselves to get more information about the products (SUMARWAN, 2002).

The consumers that have intense involvement in, for example, a prescription will discuss deeply about medicines prescribed with a doctor comparing to consumers who have moderate involvement (LIMBU; TORRES, 2009).

The involvement of consumers is influenced by several factor, such as individual factors (motivation, level of importance, interest and value), the objective factors or stimulus (alternative differences, communication sources and communication content) and also situational factors (use and chance) (ZAICHKOWSKY, 1986; BLOCH, 1982).

The consumers who have intense involvement in a product will gain clearer perception on the attributes, higher importance, and more serious commitment (MULYANA, 2014; HARARI; HORNIK, 2007).

Bloch (1982) said that an individual, who is interested in a certain product, will certainly be motivated and look for the product they liked. Finally, the consumer will do the best effort intensively look for the information concerning the object through mass media, by visiting stores, or by searching the information from internal sources. All of these efforts will make the consumer becoming an expert and having more knowledge on the product. The involvement of consumer will also influence the product knowledge (CHANG; HUANG, 2002) and the objective knowledge (VIEIRA, 2009).

When consumers have a better understanding about product knowledge, they will have a better ability to process the information and will be able to recall the information better (SUMARWAN, 2002), so that it can influence consumer purchasing behavior.

In recent times, there are not many research studies on consumer involvement in purchasing behavior concerning products, in particular the ONS products. Generally, the research concerning involvement is carried out focusing on clothes, medicines prescribed by doctors, cosmetics, shallots, and advertisement.

A study research on ONS has been carried out by Setyanti (2009) using the approach of mature enteral nutrition product marketing strategy. The result showed that the influenced factors of respondents to consume the enteral clinical nutrition were nutritionist, educational background, monthly expenditure, and product availability factor.

Mulyana (2014) did a research on the involvement and behavior of clothes purchasing in Bandung with latent variables that were innovation, materialism, usefulness, stimulus factor, and situational factor; the moderate variable in clothes purchasing was involvement.

Besides Mulyana (2014), Kinard and Capella (2006) also stated that involvement was the moderated variable in making a decision. Since there are not many researches concerning the involvement in food products particularly the ONS, it is interesting to research this product.

Based on previous researches, several variables are used to build the involvement construction. In this research, the variables used to build the construction of involvement and behavior of purchasing are motivation, stimulus factor against consumer involvement, the connection between involvement and product knowledge, and the relation between product knowledge and purchasing behavior.

Motivation and stimulus factor are important variables to be analyzed since by having motivation, an individual will be encouraged to take actions to fulfill the needs. It is important for a company to understand the consumer's motivation in purchasing certain products, so the company can provide products suitable for the consumer demand. Stimulus factor is an important variable in the involvement process because it can influence the consumer's attention.

The stimulus factor can be controlled by a company in order to get the consumer's attention. A company has to increase its budget to market the products so that the consumers can understand better about the stimulus given by the



company, and have the involvement with the products, so they will decide to buy certain products.

Consumers' behavior should be taken into consideration since it affect very much on a purchasing decision making. Concerning this issue, it is important to study the factors that influence the consumer's purchasing behavior on the products of Oral Nutritional Supplement (ONS). So, the company can provide suitable marketing strategies that influence the purchasing behavior and priciesly go the intended targeted consumers.

2. THEORETICAL FRAMEWORK

2.1. Consumer involvement

Involvement is the personal interest level perceived or the interest aroused by the stimulus in specific situations. To the extent of the existence, the consumers act deliberately to minimize risks and maximize the benefits gained from the purchase and consumption (ENGEL et al., 1994).

Krugman (1967) described involvement as a combination of needs, values, interests, and situational variables. Guthrie and Kim (2008) in Rothschild (1984) defines involvement as a state of interest, motivation, or arousal. Bloch (1986) as an unobservable state reflecting the amount of interest, arousal or emotional attachment a consumer has with a product.

Zaichkowsky (1986) in the journal entitled "Conceptualizing Involvement", explains the antecedents of involvement, i.e personal characteristics, objects and situations. The personal characteristics that influence involvement are the needs, interests, values and interest. Thus it can be stated that involvement is the perception of the object based on the needs, values and interests. According to Zaichkowsky, involvement is the function of people, situations and objects, $\text{Involvement} = f(\text{person, situation, object})$.

2.2. Oral nutritional supplements

According to Holdsworth, Madden, and Gandy (2006), enteral is giving nutrition through the gastrointestinal tract, for example using a feeding tube that directly passes through a specific part of the gastrointestinal tract. Enteral nutrition in

the United States is known as the Medical Food (MF) while in Europe it is known as the Food For Special Medical Purpose (FSMP).

Giving the right foods in sick infants and children can reduce morbidity and mortality. The purpose of giving enteral nutrition is to mitigate, cure or prevent disease, as well as to maintain the health of sick infants and children (SUANDI, 1999).

2.3. Relationship between motivation and involvement

Wills et al. (2012) explains that high motivation in health and nutrition claims on product greatly influences the buying behavior of products with nutrition benefits. Mulyana (2014) states that one of the factors that influences involvement is materialism factor and products usability that represent consumer motivation.

Mittal (1989) states that involvement is a motivational state of mind of a person regard to an object or activity, it reveals itself as the level of interest in that object or activity. Research of Iwasaki and Havitz (1990) studies the relationship of involvement that define of involvement as an unobservable state of motivation, arousal, or interest toward recreational activity or associated product. Antecedent of involvement consist of two general factors: individual characteristics and social-situational influences.

Based on various studies that relate individual factor, particularly motivation, and involvement, for example by Engel et al. (1994), Zaichkowsky (1986), Mittal (1989), Iwasaki and Havitz (1990), Wills (2012), and Mulyana (2014), then hypothesis that will be answered in this study is formulated, namely:

H1: Motivation affects involvement significantly.

2.4. Relationship between stimulus factor and involvement

Research by Schmidt and Spreng (1996) shows that at the stage of information search, consumers will gather a variety of information that can support them to be better in making decisions. According to Olshavsky and Wyner (1995), quoted by Schmidt and Spreng (1996), the information sources used by consumers can be classified into several types, namely:

1. Controlled marketer (personal selling, advertising, product information on the packaging, product brochures)

2. Reseller information (catalogue)
3. Third-party independent organization (magazine, newspaper articles)
4. Interpersonal sources (friends, acquaintances)
5. Inspection (observation)

Mittal (1989) states that the amount of information search increases as the involvement of a product upsurges. Based on various studies relating stimulus factors of information and involvement for example by Zaichkowsky (1986), Schmidt and Spreng (1996), Setyanti (2009), Gunawan (2002) and Mittal (1989), then the hypothesis that will be answered in this study is formulated, namely:

H2: stimulus factors affects involvement significantly.

2.5. Relationship between involvement and product knowledge

The research results conducted by Chang and Huang (2002) states that consumers who have high involvement and high product knowledge shows that internal information plays more important role than external information when the consumers will make purchase decisions on products. Although consumers have high involvement and high product knowledge, the external information is used by consumers as a reference.

Vieira (2009) explains the mutually supportive relationship between involvement and subjective knowledge; it shows that involvement affects the time to think or to perceive a product. Assuring the relationship described by Vieira, the research conducted by Pillai (2005) states that the higher the level of consumer involvement the higher the accuracy level of product knowledge of the consumers. The more information on products the consumers gather, the more involved they are, and the higher knowledge they get. Thus, it can be concluded that consumer involvement has strong influence to the consumer's subjective knowledge.

Research conducted by Ti and Widdows (1999) employs Frontier approach aiming to determine the effect of information on their purchase decisions by using the combined effect of product knowledge and product involvement of stimulus factors given to consumers. The result is that the involvement of consumers a product is closely related to the products knowledge obtained by consumers.

Based on various studies that relate involvement and knowledge of the product, for example by Engel et al. (1994), Chang and Huang (2002), Vieira (2009), Pillai (2005), as well as Ti and Widdows (1999) then the hypothesis that will be answered in this research is formulated, namely :

H3: Involvement affects product knowledge significantly.

2.6. Relationship between involvement and purchasing behavior

Based on research conducted by Mulyana (2014), advertisement involvement and involvement of decision making has significant influence on apparels product purchases. Product involvement also influences the purchasing behavior but not significant. Kinard and Capella (2006) stated that involvement is a moderate variable in the purchase process.

Affirming the statement by Kinard and Capella, the research of Ghafelehbashi et al. (2011) states that involvement is a determinant of decision-making on purchasing behavior. The research conducted by Gore et al. (1994) showed positive correlation between consumer involvement in non prescription medicine and purchases decision.

Based on various studies that relate involvement and the purchasing behavior, for example by Engel et al. (1994), Solomon et al. (2006), Mulyana (2014), Kinard and Capella (2006), as well as Ghafelehbashi et al. (2011), the hypothesis that will be answered in the study is formulated, namely:

H4: Engagement affects purchasing behavior significantly

2.7. Relationship between product knowledge and purchasing behavior

According to Ward (2009) the influence of knowledge, habits, and the referent group to the consumption of energy drinks is that the presence of precaution or warning on the label of energy drinks significantly reduces the consumption of energy drinks ($p < 0.1$). The referent group does not show a significant effect on the consumption of energy drinks, because teenagers tend to consume energy drinks individually ($p < 0.1$).

Hong (2015) examined the consumer behavior in Hanoi in the purchase of infant formula milk. The result is very important to communicate the quality of infant formula products to consumers; consumers who have knowledge about breast milk

and nutrition state that breast milk is very important to give to the baby, but women who work in the office choose to give infant formula milk, and before purchasing the product, consumer study the characteristics and quality of the products to be purchased. This study focuses on the knowledge about nutrition and products purchased by respondents that influence the purchasing behavior of consumers of infant formulas.

Based on various studies that relate knowledge of the product and the buying behavior e.g Ward (2009) and Hong (2015), then the hypothesis that will be answered in this study is formulated, namely:

H5: Knowledge of products affects purchasing behavior significantly.

2.8. Relationship between motivation and purchasing behavior

According Khaniwale (2015), there are several reasons underlying a person's behavior in performing the purchase process. The reasons can be considered as motivation. Motivation can be regarded as a driver in meeting the needs or as a driver for achieving certain goals. This is in accordance with Rani (2014) who states that motivation will encourage consumers in doing buying behavior.

The motivation level of the consumers will affect the buying behavior of consumers so the company should be able to capture the needs of consumers and to conduct stimulus so that the consumers can be aware of the needs and have motivation in making a purchase. Based on various studies that relate motivation and purchasing behavior e.g Khaniwale (2015) and Rani (2014), then the hypothesis that will be answered in this study is formulated, namely:

H6: Motivation indirectly affects purchasing behavior significantly.

2.9. Relationship between stimulus factors and purchasing behavior

Stimulus conducted by the company to increase consumer purchasing behavior through advertising for example print and electronic media, referent group of key opinion leader, or through the information label on the product's package. Some companies conduct advertising with the aim to achieve company's goals and to boost market share and sales volume.

Research results by Akanbi and Adeyeye (2011) explains that advertising significantly influences on the increase of sales volume of the products. This result is

in line with the results of Abah and Olohiliye (2015) which state that advertising significantly influences purchasing behavior (Rai, 2013) and sales volume increase of beer products in Nigeria.

Based on studies that relate stimulus factors and purchasing behavior e.g studies Akanbi and Adeyeye (2011), Abah and Olohiliye (2015), and Rai (2013), then the hypothesis that will be answered in this study is formulated, namely:

H7: Stimulus factors indirectly affect purchasing behavior significantly.

3. METHODOLOGY

3.1. Research approach

The research is carried out using survey method that is gaining research samples from respondents as the representatives of population, and using questionnaire to measure the primary data according to individual analysis unit. The research is a cross sectional survey that is an observational research on facts about tendencies and problems obtained in a certain period of time, so that the research object is not observed continuously in a long period of time.

The data is obtained using online social media to facilitate and accelerate the distribution of questionnaire. The online survey method has a weakness that is the difficulty of the researcher to explain the questionnaire compared to a face-to-face survey method. The questionnaire link is spread among social media groups discussing topics about nutrition for children, child development, child rearing and education for children.

Before filling out the questionnaire, the criteria of the eligible respondent are mentioned first, so that the respondent will participate in the survey according to the criteria set by the researcher. The respondent criteria are a mother of children of 1 to 12 years old, a mother who has bought ONS products, at least once for the past 6 months. Children of 1 to 12 years old are the target consumers of ONS products for children. Prior to spreading out the questionnaire, the researcher has contacted the group administrator asking for permission to spread the questionnaire.

The result is that there are 6 social media groups giving permission to carried the research. Prior to conducting the survey, the researcher has also undergone a questionnaire reliability research test given to 30 respondents, and the result shows



that the questionnaire is reliable. Several researchers have obtained data using online method, among others Manalu (2008), Briggs (2010), and Nugraha (2015).

3.2. Research sampling

The sample unit of this research is mothers with children ranging from 1 to 12 years old. They have bought ONS products at least once in past six months. According to Kwong and Wong (2013) quoted the guidelines of Marcoulides and Saunders (2006), the minimum numbers of sample for a marketing research using a structural model that has latent variable errors, are 70. Some researchers suggests that the number of sample used for path modeling are around 100 to 200 samples (HOYLE, 1955 in KWONG; WONG, 2013). Referring to this theory, the number of samples used in this research are 100 people.

The sampling technique is a non-probability-sampling procedure that is population obtained without knowing the information about them, called sampling frame (ABIDLLAH; HARTONO, 2015). A purpose sampling is used to determine the sample. Purposive sampling is a technique to choose sample based on certain criteria according to the purpose of research (ABDILLAH; HARTONO 2015). The criteria set in this research is only for mothers who have children ranging from 1 to 12 years old and have bought the ONS products at least once for the past six months. Children ranging from 1 to 12 years old is according with segmentation of the products (ONS).

3.3. Research variables and measurement method

In this research there are two variables, exogenous latent variables and endogenous latent variables (Table 1). Operationally, latent variables were defined by explaining thoroughly what the concept is and were measured by using indicators (ABDILLAH; HARTONO 2015). In this research there are 7 latent variables, and as to the research hypothesis, four variables are measured using an instrument in a form of a 40 questionnaires consisting indicators of those variables.

Each question represents one indicator. The instrument used in this research a modified version taken from Mulyana (2014), Cass (2000), and Engel et al. (1994). The exogenous variables are the involvement determinants consisting of motivation and stimulus factors. The endogenous variables are consumer's involvement, product knowledge, and purchasing behavior. The measurement scale used is likert

scale indicating 5 points, 1 indicating strongly disagree, and 5 indicating strongly agree.

Table 1: Definition and variable measurements

Latent Variables	Description of Latent Variables	Indicator variables	References
Motivation (M)	A situation activated or moved towards one's behavior based on the purposes, including the drives, wishes and expectations	Food supplement (M1)	Mulyana (2014), Mowen and Minor (1998)
		Weight gain (M2)	
		Recovery process (M3)	
		Overcoming eating difficulty (M4)	
		Friend or family recommendation (M5)	
		Pediatrician recommendation (M6)	
		Interesting gifts (M7)	
		Accepting samples (M8)	
		Flavors loved by children (M9)	
Stimulus Factor (S)	Information given by the company to attract the attention causing the consumer's involvement	Telemarketing (S1)	Mulyana (2014), Schmidt, Spreng(1996), Setyanti (2009), Gunawan (2002)
		Sales promotion girl (S2)	
		Paramedics (doctors or nutritionists) (S3)	
		Social media (S4)	
		Advertisement (S5)	
		Brochures or magazines (S6)	
		Samples (S7)	
Consumer Involvement (K)	Advertisement Involvement (KI) is a personal interest or the levels of personal interest toward advertisement	Searching for an advertisement from one of the media (KI1)	Mulyana (2014), Cass (2000), Zaichkowsky (1986)
		Showing interest in advertisements (KI2)	
		Personal relevance of advertisement (KI3)	
		Looking for information through advertisement (KI4)	
		Being meticulous in advertisement (KI5)	
		Discussing advertisement with family members (KI6)	
	Product Involvement (KP) is interest or the levels of personal importance toward a product	The importance of ONS (KP1)	Mulyana (2014), Cass (2000), Zaichkowsky (1986)
		The interest of ONS (KP2)	
		Personal relevance of advertisement (KP3)	
		Being meticulous in analyzing the package label of ONS(KP4)	
		Having scrupulous product attention (KP5)	
	Involvement in Decision Making (KK) is interest or the levels of personal importance toward a product decision making	Personal interest in decision making (KK1)	Mulyana (2014), Cass (2000), Zaichkowsky (1986)
		Comparing several brands when purchasing (KK2)	
		Calculating prices among brands when purchasing (KK3)	
		Giving a deep thought when deciding to purchase (KK4)	
		Purchasing is carried out individually (KK5)	
Consumption Involvement (KS) is interest or the levels of personal importance toward product	Being satisfied after consuming ONS (KS1)	Cass (2000)	
	Consumption importance toward ONS (KS2)		

	consumption	Experiencing when a child consumes ONS(KS3)	
Product Knowledge (P)	A collection of various information on products	Other names for ONS (P1) The calorie contained in ONS (P2) The fat contained in ONS (P3) The benefits of consuming ONS (P4) The serving method of ONS (P5)	Vieria (2009), Engel et al. (1994), Chang and Huang (2002)
Purchasing Behavior (PP)	Consumer behavior in relation to stores, product and information search for the attribute of a certain product	Purchasing Volume (PP1) Expenditure for ONS (PP2)	Setyanti (2009)

3.4. Data analysis

The model used in this study is predictive relationship modeling and PLS-SEM (Partial Least Modeling) technique is used to test the hypothesis in this study, using SmartPLS software.

4. RESULTS AND DISCUSSION

4.1. Assessing outer model of the measurement model

According to Ghozali (2012), there are three criteria in the use of analytical techniques using SmartPLS, which is to assess the outer model namely convergent validity, discriminant validity, and composite reliability.

1) Convergent validity

Test validity can be seen from the loading factor for each construct indicator. Rule of thumb used to assess convergent validity is the loading factor value of 0.6-0.7 for exploratory research, however, for the the early stage of the development of the measurement scale, the loading factor of 0.5-0.6 is still considered as sufficient (CHIN, 1998).

The convergent validity deals with the principles that the gauges of the constructs should have high correlation. Based on Hair et al. (2011) rule of thumb commonly used to do initial investigation of the factor matrix is ± 0.3 , considering that it has met the minimum level; for loading of ± 0.4 it is considered as better, and loading 0.5 is considered as practically significant. Thus, the higher the loading factor is, the more important the role of loading in interpreting the factor matrix.

Based on the analysis result (Table 2) of 40 construct variables indicators, 31 indicators have a value of loading factor of more than 0.5 and 9 indicators that have a value of less than 0.5. This indicates that the indicator value <0.5 is unable to describe the latent variables in the purchase of ONS so that both indicators are omitted.

Table: 2 Variable and loading factor

Variable	Dimension	Indicator	After Elimination	After Bootstrap
Motivation (M)		Food supplement (M1)	0.794	19.060
		Weight gain (M2)	0.720	7.487
		Recovery process (M3)	0.649	6.328
		Overcoming eating difficulty (M4)	0.778	14.198
		Friend or family recommendation (M5)	0.540	4.604
		Interesting gifts (M7)	0.668	10.140
		Children love the flavors (M9)	0.615	8.699
Stimulus Factor (S)		Telemarketing (S1)	0.751	11.300
		Sales promotion girl (S2)	0.752	11.893
		Social media (S4)	0.764	10.339
		Advertisement (S5)	0.852	36.096
		Brochures or magazines (S6)	0.768	13.627
		Samples (S7)	0.634	8.032
Involvement	Advertisement Involvement (KI)	Searching for an advertisement from one of the media (KI1)	0.772	14.161
		Showing interest in advertisements (KI2)	0.861	30.865
		Personal relevance of advertisement (KP3)	0.882	27.926
		Being meticulous in advertisement (KI5)	0.875	30.796
	Product Involvement (KP)	The importance of ONS (KP1)	0.884	23.765
		The interest of ONS (KP2)	0.838	24.942
		ONS product is very suitable for children's need (KP3)	0.890	42.842
		Having scrupulous product attention (KP5)	0.754	14.126
	Involvement in Decision Making (KK)	Personal interest in decision making (KK1)	0.874	21.883
		Purchasing is carried out individually (KK5)	0.770	10.697
	Consumption Involvement (KS)	Being satisfied after consuming ONS (KS1)	0.920	42.06
		Consumption importance toward ONS (KS2)	0.889	30.692
		Experiencing when a child consumes ONS(KS3)	0.892	30.925
Product Knowledge (P)		Other names for ONS (P1)	0.909	13.607
		The calorie contained in ONS (P2)	0.872	8.851
		The fat contained in ONS (P3)	0.810	9.797
Purchasing behavior (PP)		Purchasing Volume (PP1)	0.875	13.63
		Expenditure for ONS (PP2)	0.816	7.837

2) Discriminant validity

Discriminant validity is related to the principles that the different construct gauges should not have high correlation. Discriminant validity test is assessed based



on the cross loading of the measurement with the constructs or by comparing the AVE root for each construct with the correlation among the constructs in the model. The model has sufficient discriminant validity if the AVE root for each construct is bigger than the correlation among the constructs in the model (ABDILLAH; HARTONO, 2015).

Based on the table of cross loading (Table 3), it can be concluded that each indicator in latent variable has differences with the indicators in other variables shown with the higher loading score in its construct except in motivation construct.

Table: 3 AVE and discriminant validity based on cross loading value

Constructs	AVE	Motivation	Stimulus factor	Involvement	Product knowledge	Purchasing behavior
Motivation	0.470	0.686				
Stimulus factor	0.572	0.592	0.756			
Involvement	0.376	0.701	0.663	0.613		
Product knowledge	0.708	0.254	0.330	0.346	0.865	
Purchasing behavior	0.748	0.397	0.133	0.339	0.100	0.846

3) Composite reliability

Reliability test is performed to prove the accuracy, consistency, and accuracy of the instrument in measuring the construct. Test reliability by using PLS SEM can be conducted in two ways, which are based on the value of Cronbach's alpha and composite reliability. Rule of thumb used to assess the reliability construct is that the composite reliability value must be greater than 0.7 for confirmatory research and a value of 0.6-0.7 is still acceptable for exploratory research.

Based on Table 4, the value of Cronbach's alpha and composite reliability generated by the majority of all constructs was excellent which is above 0.6 so that it can be concluded that all indicators of the construct are reliable or that they meet the reliability test.

Table: 4 Reliability test through Cronbach's alpha and composite reliability

Variable	Cronbach's Alpha	Composite Reliability
Motivation	0.811	0.859
Stimulus factor	0.850	0.888
Involvement	0.898	0.912
Product knowledge	0.830	0.899
Purchasing behavior	0.594	0.829

4.2. Evaluation of structural models

Structural model testing is carried out by looking at the value of R-square of any endogenous latent variables as the predictive power of the structural model.

According to Hair et al. (2011), the R-square value of 0.75; 0.50 and 0.25 can be concluded as the model of a strong, moderate and weak respectively while according Chin (1998), the R-square value of 0.67; 0.33 and 0.19 belongs to the model of powerful, moderate, and weak respectively. R-square value of the analysis research results can be seen in Figure 1.

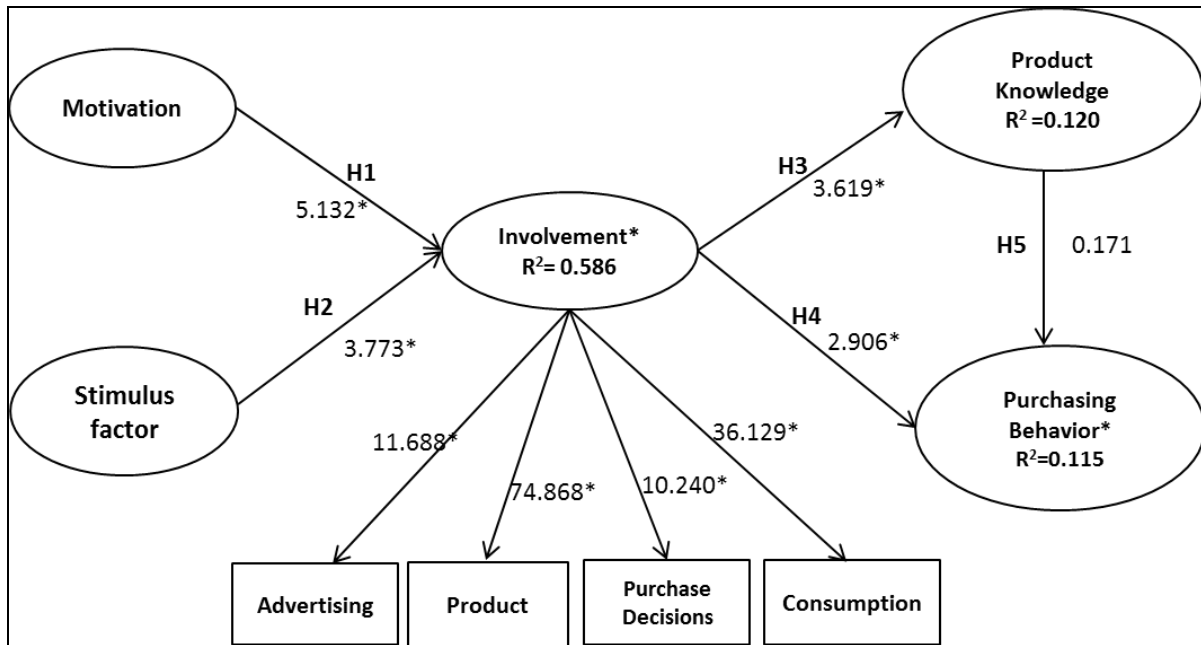


Figure 1: Research model (measurements and R2)

Based on Figure 1, the ability of the motivation variable and stimulus factor variable in explaining the involvement is of 58.6% which belongs to moderate model, the ability of the involvement variable in explaining the knowledge is of 12% which belongs to the weak category, and the last the ability of the variable of involvement and knowledge in explaining the purchasing behavior is of 11.5% which belongs to the weak category.

4.3. Hypothesis testing

4.3.1. Relationship between motivation and involvement (H1)

The t-test (5.132) value of motivation variable (Table-5), which is above 1.96, it can be concluded that motivation has direct and significant impact on involvement, meaning that the higher the motivation of respondents to ONS is, the higher the involvement would be.

This is in line with researches by Zaichkowsky (1986), Mittal (1989), Iwasaki and Havitz (1990), and Mulyana (2014) which state that one of the factors that

influence the involvement is motivation. So the higher respondents motivation is, the higher their involvement in ONS products will be. High motivation for a product will increase consumers willingness to process information about desired brand (MACLNNIS et al., 1991) and to compare one brand to another brand (PETTY; CACIOPPO, 1981 in GHALAFEHBASHI et al., 2011) and that will increase consumer involvement.

Table: 5 Result of hypothesis testing

Construct	Path model	t-value	Results
(H1) Motivation → Involvement	Direct effect	5.132	Accepted
(H2) Stimulus factor → Involvement	Direct effect	3.773	Accepted
(H3) Involvement → Product knowledge	Direct effect	3.619	Accepted
(H4) Involvement → Purchasing behavior	Direct effect	3.382	Accepted
(H5) Product knowledge → Purchasing behavior	Direct effect	0.171	Rejected
(H6) Motivation -> Purchasing behavior	Indirect effect	2.410	Accepted
(H7) Stimulus factor -> Purchasing behavior	Indirect effect	2.736	Accepted

Notes: * t-values for two-tailed test: 1.96 (significance level = 5%)

Source: (Hair et al., 2011)

4.3.2. Relationship between stimulus factor and involvement (H2)

The value of the t-test (3.773) of stimulus factor variable, which is above 1.96, it can be concluded that stimulus factor has direct and significant impact on involvement, meaning that the higher the stimulus factor given to the respondent, the higher the involvement will be. This is in line with researches by Mowen and Minor (1998), Zaichkowsky (1986), Schmidt and Spreng (1996), Gil et al. (2007), Setyanti (2009), and Gunawan (2002) which state that the stimulus factor influences involvement. Involvement is a collection of communication between stimulus giver i.e. stimulus provided by the company, and the response from consumers (MACLANNIS et al., 1991).

A person with intention to buy a new product, for example ONS for their children, and later sees the product on television, will make inquiries about the product promoted by the manufacturer so that the consumer will be more involved in seeking information about benefits and usability and other information about ONS.

4.3.3. Relationship between involvement and product knowledge (H3)

The value of t-test (3.619) variable of product knowledge factor, which is above 1.96, so it can be concluded that involvement directly and significantly affects

product knowledge, meaning that the higher the involvement of respondents in ONS, the higher their product knowledge will be.

This is in line with research by Ti and Widdows (1999), which states that consumers involvement in a product is closely related to their product knowledge. Park and Moon (2003) explain that the more engaged consumers in a product, the higher their knowledge about product attributes will be. So better understanding of the two factors that play a role in purchasing behavior, involvement and consumer product knowledge can help create the right message and effective communication and help customers in remembering the message or information on the product during the purchase process.

These messages can guide consumers to select the desired brand when purchasing process takes place (AGHDAIE; HONARI, 2014). The result is also in line with research by Limbu and Torres (2009) on prescription of drug products, which states that the more involved the consumers are, the higher consumer awareness of the product, the brand name, and a tendency to discuss drugs shown by health professionals.

4.3.4. Relationship between Involvement and purchasing behavior (H4)

It can be seen that the value of t-test engagement variable is 3.382, which is above 1.96, so it can be concluded that involvement has a direct and significant impact on purchasing behavior. The higher the involvement of respondents in ONS product is, the higher its influence on purchasing behavior will be since respondents are increasingly involved in the process of information inquiry, exposure to the stimulus of producers, friends, family, social media, or the internet so that respondents know the information and the product benefits and this facilitates respondents to purchase ONS.

This is in line with research by Kinard and Capella (2006), which states that engagement is a determinant of decision-making on purchasing behavior because consumer purchasing decisions differ depending on the level of consumer involvement in a product (GHAFELEHBASHI et al., 2011).

4.3.5. Relationship between product knowledge and purchasing behavior (H5)

With the value of the t-test variable between product knowledge and purchasing behavior of 0.171, which is below 1.96, it can be concluded that product



knowledge does not indirectly affect purchasing behavior in significant way. Higher product knowledge does not significantly affect the purchase volume of ONS for children.

This is not in line with the researches by Ward (2009) and Hong (2015) which state that respondents' knowledge on nutrition and products has significant impact on their purchasing behavior of baby formulas. This might have caused by the positioning of ONS product as a nutritional supplement consumed only when children do not want to eat or when they are sick. ONS product is not a regular product that is consumed regularly, but it is usually consumed in a certain condition when there is a decline in child nutritional status.

Thus, consumers' better product knowledge of ONS does not necessarily increase the volume of ONS purchases for children.

4.3.6. Relation between motivation and purchasing behavior (H6)

The indirect effect of the relationship between motivation and purchasing behavior has a value of t-test 2.410, which is above 1.96. So, it can be concluded that motivation has a significant indirect effect on buying behavior, meaning motivation will increase involvement and higher involvement means higher purchasing behavior.

This is in line with research by Gore et al. (1990) which shows positive results between consumer involvements in the non-prescription drug products with purchase decision. In addition, research by Deiner (2016) on the influence of motivation and buying behavior of bamboo furniture products that shows although the respondents' knowledge on product attributes is high, there is no significant effect on buying behavior.

Khaniwale (2015) and Rani (2014) also state that motivation will encourage consumers in making purchasing behavior, but this study shows that motivation boosts purchasing behavior through engagement. Consumer motivation level will affect consumer involvement because involvement is a moderating variable of purchasing behavior because in certain situations and environments engagement will increase consumers' motivation and preferences for a product.

Based on this phenomenon, it can be seen that the level of motivation will influence purchasing behavior so the company should be able to capture the needs

of consumers, and do the right stimulus so that consumers can be aware of their needs and have motivation in making a purchase.

4.3.7. Relation between stimulus factors and purchasing behavior (H7)

The indirect effect of the relationship between stimulus and buying behavior has a value of t-test 2.736, which is above 1.96, so it can be concluded that the stimulus factor has an indirect significant effect on purchasing behavior. So, the higher the stimulus factor given to respondents by the producer is, the higher the purchasing behavior will be, but it should be through involvement variable.

This is in line with researches by Akanbi and Adeyeye (2011), Abah and Olohiliye (2015) which state that advertising significantly influences purchasing behavior (Rai, 2013) and an increase in the sale volume of beer products in Nigeria. So the use of information will indirectly help consumers to shape attitudes toward certain brands in order to boost consumers' confidence in buying a product (CHANG; HUANG, 2002).

5. CONCLUSION

The results of this study show that motivation and stimulus factors directly influence the involvement. The higher the factor of motivation and stimulus provided by the company is, the higher the involvement in ONS will be. The highest motivation variable and considered the main indicator is that ONS can serve as food supplement for children. The stimulus factor with the highest value and plays important role in increasing respondents' involvement is advertising. Of the four dimensions of involvement, the involvement dimension with the highest value is product involvement, which means that the respondents are very interested in the ONS products.

Involvement has a direct effect on product knowledge, which means respondents' higher involvement in ONS leads to higher product knowledge. Involvement also has a direct significant effect on purchasing behavior. The higher the respondent's involvement in ONS is, the higher its influence is on ONS purchasing behavior because respondents are increasingly involved in the process of information inquiry, exposure to the stimulus by producers, friends, family, social media, or the internet so that the respondents know the information and the product benefits and this helps them make ONS product purchases.

Product knowledge does not directly have significant effect on purchasing behavior. The higher the value of product knowledge does not significantly affect purchases of ONS for children. It might be caused by the positioning of ONS product as a nutritional supplement when children do not want to eat or when they are sick. ONS product is not a regular product that is consumed regularly, but it is usually consumed in a certain condition when there is a decline in the current nutritional status of the children; therefore, although consumers' product knowledge on ONS products is high, this does not necessarily increase purchase volume of ONS for children.

Motivation has a significant indirect effect on purchasing behavior, meaning motivation will increase the involvement and higher involvement will lead to higher buying behavior. Motivation increases the purchasing behavior through engagement. Consumer motivation level will affect consumer involvement because involvement is a moderating variable of purchasing behavior, so in certain situations and environments, involvement will increase consumers' motivation and preferences towards a product. Stimulus factor has also indirect significant effect on purchase behavior. So the higher the stimulus factor from the company to the respondents is, the higher the purchasing behavior will be, but this should be through involvement variable.

6. IMPLICATION AND RESEARCH LIMITATION

Based on the results of the research, the strategies a company to increase ONS purchases by consumers are through education about the benefits and uniqueness of the product, campaign on alternative food for children, viral marketing on the testimony of the use of the product; and in addition to ad on TV, advertising through digital marketing and social media to raise awareness of risk and the importance of ONS consumption for children can also be used.

This study has limitations that need to be developed later in the future. The limitations of this study are that this study cannot be generalized to a higher level and the testing was done only online (self-assessment). The limitation of online survey is the difficulty in explaining the questionnaire compared to a face-to-face survey.



However, further research can focus on the search of variables affecting consumer involvement in addition to motivation and stimulus factor are risk perception, prices, time, and individual situation factors. It can also be developed further to include situational involvement and intensive engagement so that it is clear whether consumers are engaged only in certain circumstances or intensive situation that is long term.

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