



## **CONSUMER EMPOWERMENT INDEX OF ELECTRONIC PRODUCT BUYING**

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### **ABSTRACT**

The purpose of this research was to analyze the influence of demographic, social and economic characteristics towards the consumer empowerment of electronic products. The research used cross-sectional study with an online survey of 100 respondents. Data were analyzed using descriptive and inferential analysis. Descriptive analysis used to identify the demographic, social and economic characteristics of the sample and the consumer empowerment index. The inferential analysis used in this study include chi-square test and logistic regression. The level of consumer empowerment in electronic products only 41.78 that belongs to a capable category. The largest index was found in goods selection dimension (88.33) and the lowest (6.4) on behavior complaint dimension. The result of this study showed that female, early-aged adult (18-40 year), higher education, employed, income between Rp2 000 000-Rp3 000 000 per capita per month, origin from the urban area, and family size  $\leq 4$  were the most empowered consumers. Only two of six variables significantly affect consumer empowerment, namely age and education.



Age has a negative and significant effect on consumer empowerment, while education has a positive and significant effect on consumer empowerment of electronic products. Based on the results of the research, it is necessary to raise awareness of consumers to be able to choose the brand of local products. Also, consumers need to use their rights as consumers to be able to file complaints if they experience disappointment or loss when buying electronic products.

**Keywords:** Consumer Empowerment, Electronic Products, Socio-Demographic Characteristics

## 1. INTRODUCTION

According to the Central Board of Statistics in 2014, the number of households reached 64,771.60. Also, human needs as a consumer, especially households cannot be separated from the various needs of life. The increasing of socio-economic life of the community makes tertiary needs are essential (ZULKARNAEN, 2008).

Next, consumers are currently in an increasingly complex market with more information as well as an increasingly diverse selection of goods and services (SIMANJUNTAK, 2014). According to the research of Nurhayati and Elisabeth (2011), there were 30 cases of consumer losses in trade and 31 cases of losses in property and services trade, where most cases were property business (36%), vehicle sales (20%), food (16%), and household appliances (8%).

The low awareness of consumers about their rights triggers the lack of ability of consumers to protect themselves from fraudulent business actors (ISHAK; ZABIL, 2012). According to a survey conducted by the National Consumer Protection Agency, consumers in Indonesia prefer to remain silent if they get products or services that do not meet their expectations.

The survey results in Indonesia showed that the average of Consumer Empowerment Index (CEI) in twenty-two provinces was still low, i.e., 31.05 with an average in urban (33.46) higher than rural (28.15) areas (SIMANJUNTAK; YULIATI, 2016).

According to Simanjuntak (2014), consumers are empowered to make optimal decisions, understand their preferences, know their rights, recognize when

their rights are violated and lodge complaints and redress. According to survey results, consumers tended not to know the laws and consumer protection agencies and do not file complaints when they feel aggrieved (SIMANJUNTAK; YULIATI, 2016).

Some ways to lure consumers include by way of sale, sweepstakes, gift giving or get attention to the product or business (ZULKARNAEN, 2008). Cases in electronic commodities are in 8<sup>th</sup> ranked with 4.56 percent by the year of 2015 (INDONESIA CONSUMER PROTECTION FOUNDATION, 2016).

Consumer awareness of complaints, the level of information and consumer education, and consumer assertiveness in using electronic devices was still not good. This is because consumers feel that complaints cannot solve the problem, complaints are not a habit and complaints make someone uncomfortable (APRILLIANTY; WARDANA, 2014).

According to Ngai et al. (2007), demographic factors play a significant role in the behavior of consumer complaints. Demographic is the science of the human population regarding size, density, location, age, gender, race, livelihood, and other statistics (KOTLER; ARMSTRONG, 2001).

Based on the above problems, it is necessary to empower consumers for instance by establishing consumers who can submit their complaints when harmed and can assert their rights (NARDO et al., 2011). Meanwhile, research on consumer empowerment was still limited. Investigations on consumer empowerment conducted by Mubarokah (2015) that focused on the empowerment of consumers in general products and Simanjuntak (2014) focused on consumer empowerment on packaged foods.

This research will investigate consumer empowerment on electronics product. This study aimed to identify the profiles of consumer empowerment on electronics product and analyze the influence of demographic, social and economic characteristics on consumer empowerment on electronics product.

## 2. LITERATURE REVIEW AND FRAMEWORK

### 2.1. Consumer empowerment concept

Consumers can be empowered through various sources, either through government regulation or consumer education (HUNTER; GARNEFELD, 2008). According to Shibly (2009), empowerment is the process of giving individuals more control by placing boundaries around areas of behavior that are potentially acceptable and allowing individuals to make various choices.

The Commission Staff Working Paper of Brussels (2011) stated that consumer empowerment is a function of knowledge, skill, and firmness of the consumer, and the protection, rules, and institutions designed to support when the consumer plays a role. Consumers are empowered, among others, knowing their obligations as consumers, knowing and affirming their rights, being able to identify the best price and quality, understand their preferences and available choices, recognize when their rights are violated or recognize the unfair practices of business actors (SIMANJUNTAK, 2014).

Nardo et al. (2011) identify an important element in defining empowerment, i.e., consumers should be aware of their decisions when making a purchase, consumers should be able to obtain information about their rights, and consumers should have access to advocacy and settlement mechanisms. According to Shibly (2009), four factors shape the process of consumer empowerment such as adjustment and personalization, flexible pricing, pre and post-purchase service, trust and regulation, as well as communication and information flow.

Consumer empowerment is one of the efforts undertaken to provide guidance on buying behavior of goods and services to be effective (SHIBLY, 2009). Decision making focuses on five stages, including problem recognition, choice search, alternative evaluation, purchasing and result of satisfaction or dissatisfaction toward purchased product/service (PRASAD; JHA, 2014).

According to Article 1 Sub-Article 2 of Regulation of the Minister of Trade of the Republic of Indonesia No. 19 / M-DAG / PER / 5/2009 concerning Registration of Manual and After-Sales Guarantee Manuals and Warranty Cards in Indonesian language for Telematics and Electronics Products states that "consumer electronics products used in domestic life."



The electronic device is one of the most tertiary needs of human beings. In addition to the warranty card, there are other things that need to be paid attention to the consumer, it is the fulfillment of standards that can also benefit consumers in terms of quality, competitive goods prices and the safety of the usage of goods that already meet the Indonesian National Standard (SNI) or international standards set by related regulators regulated in Government Regulation No. 102 of 2000 on National Standardization.

Indonesian National Standard aims to facilitate trade transactions and protect the interests of consumers and enhance the competitiveness of Indonesian products in global markets, as the worldwide market emphasizes the importance of applying product quality standards (NATIONAL STANDARDIZATION BOARD, 2009).

## **2.2. Relationship of demographic characteristics and consumer empowerment**

Demographic characteristics are closely related to consumer complaints behavior (YOGA; WARMIKA, 2013). Gender affects the behavior of consumer complaints (HEUNG; LAM, 2003). Age has been shown to have a significant relationship with consumer complaints behavior.

Research by Ngai et al. (2007) showed a significant correlation between age and consumer complaints behavior. Simanjuntak research (2014) showed a significant difference in the basic skills of consumers in choosing a lower price between different respondents of urban and rural areas. One indicator of cultural factors is the tradition of consuming the public influence on consumer purchasing decisions (GIANTARA; SANTOSO, 2014). Based on the analysis of previous researchers, hypotheses are followed:

**H1a:** Gender has a significant effect on consumer empowerment

**H1b:** Age has a significant effect on consumer empowerment

**H1c:** Location has a significant effect on consumer empowerment

## **2.3. Relationship of social characteristics and consumer empowerment**

The level of education related to the behavior of consumer complaints. Education level affected significantly on the empowerment (RAHMAN; NAOROZE,

2007). Based on the research of Yulianti and Anzola (2009), the level of consumer education complaints was in the middle to the upper level.

Employment status affected significantly on consumer empowerment (GHOLIPOUR et al., 2010). According to Nardo et al. (2011), inactive consumers were less empowered than those who employed. The status of employment differs markedly between the two employment status groups on consumer empowerment in the consumer skill dimension (SIMANJUNTAK, 2014).

The level of education and employment status determined the level of empowerment (GHOLIPOUR et al., 2010). Based on the previous research, hypotheses are :

**H2a:** Education has a significant effect on consumer empowerment

**H2b:** Employment status has a significant effect on consumer empowerment

#### **2.4. Relationship of economic characteristics and consumer empowerment**

The economic factor plays an essential role in increasing empowerment (THAPA; GURUNG, 2010). Consumer empowerment was affected by income (SIMANJUNTAK, 2014). Simanjuntak study (2014) found that the higher consumer income in the urban area would increase the consumer empowerment index.

Based on the research of Yulianti and Anzola (2009), there was a significant relationship between income and consumer complaints behavior as one of the dimensions of consumer empowerment. The income also related to consumer purchasing power. Consumers who spend a more expensive cost tend to make an in-depth observation of the product to be purchased. Based on the analysis of previous research, here are the hypotheses:

**H3:** Income has a significant effect on consumer empowerment

#### **2.5. Research framework**

Based on the empirical research, a conceptual framework suggested that characteristics of demographic, social and economic effect on consumer empowerment in Figure 1.

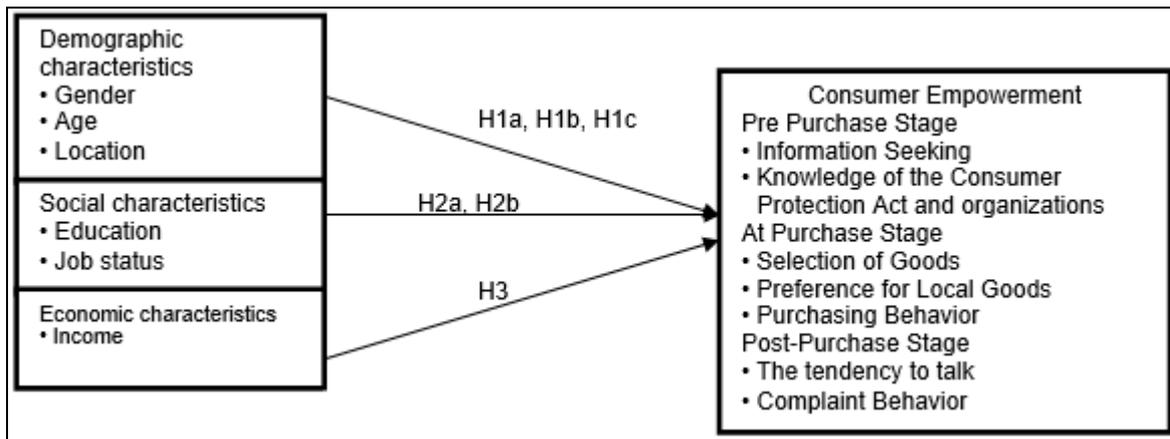


Figure 1: Research framework

### 3. RESEARCH METHODOLOGY

Respondents in this study were family members of either women or men aged 18-60 years with a history of purchasing electronic products at least three times in the last five years. A total of 165 consumers responded through online survey within two weeks. After screening the questionnaires, 65 incomplete and repeat inquiries. As a result, a total of 100 usable responses had collected that under the required criteria and data completeness.

The sampling technique used convenience sampling. The online survey has several advantages such as ease of data collection, input, and handling of data automatically, increased response rates, low cost, and take a short time (SINCERO, 2012). Nardo et al. (2011) also used online survey method in their consumer empowerment research.

The questionnaires were distributed online to some areas in Indonesia, including Bogor, Bandung, Palembang, Jakarta, Pekanbaru, and Padang. Researcher spread links containing questionnaires to the public through groups in social media applications (Line, Whatsapp, Instagram, Facebook, Twitter, and Path).

Data collected through the online questionnaire include demographic characteristics (gender, age, and location), social characteristics (level of education and employment status), as well as the economic characteristic (income). Consumer empowerment was measured using instruments adapted from Simanjuntak (2014). The Consumer Empowerment Index (CEI) consists of three buying stages, namely pre-purchase, at purchase, and post-purchase.

The instrument of consumer empowerment (Cronbach alpha 0.879) adopted from Simanjuntak (2014). The tool then modified according to the focus of electronic products. After instrument testing, the reliability of consumer empowerment instrument yielded 0.877. It means that the tool used in previous research and this research were good and can be trusted as data gathering tool (Table 1).

Table 1: Reliability and validity of research instrument

Dimensions of consumer empowerment	Number of questions	Cronbach alpha	Validity
Information Seeking	6	0.855	0.684**-0.800**
Knowledge of consumer protection law and organizations	5	0.660	0.414**-0.765**
Selection of goods	8	0.190	0.554**-0.833**
Purchase Behavior	6	0.051	0.339**-0.685**
Preferences of local products	12	0.362	0.412**-0.651**
Tendency to talk	11	0.809	0.766**-0.881**
Complaint behavior	12	0.945	0.460**-0.673**

Scoring is given according to the scale used in each of the variables studied. Consumer empowerment used various scale such as correct (score one) and not correct (score zero); know (score one) and do not know (score zero); yes (score one) and no (score zero), as well as local products (score one) and non-local products (score zero).

The three-point Likert scale was used to measure the questions that describe the intensity or frequency of the assessment namely never (score one), sometimes (score two), often (score three) and always (score four). Next, after scoring process for each item, sum up for each dimension was performed, so that composite score was produced. After that, a transformation of a composite score for each dimension performed to generate an index by using below formula :

$$\text{Index} = \frac{\text{Actual score} - \text{Minimum score}}{\text{Maximum score} - \text{Minimum score}} \times 100$$

Note :

Index: scale between 0 to 100

Actual score: score gain by respondent

Minimum score: the lowest score that supposes to be gained by respondent

Maximum score: the highest score that supposes to be gained by respondent



The above process produce the index for each dimension. To obtain the index of consumer empowerment, each index of dimension was weighted. Some considerations were taken in weighting each dimension of consumer empowerment. Knowledge was judged to be lower in weight than skill and behavior. Next, complaint behavior was judged to be the highest due to complain effort was the highest consumer protection that can be done by consumers.

The weighting comprises of 20 percent for information seeking, 10 percent for knowledge of consumer protection law and organizations, 5 percent for preferences of local products, 15 percent for purchasing behavior, 5 percent for the tendency to talk and 40 percent for complaining behavior. After obtaining the index of consumer empowerment, the researcher categorized the index into five groups, namely: conscious (CEI score 0.0-20.0), understanding (CEI score 20.1-40.0), capable (CEI score 40.1-60.0), critical (CEI score 60.1-80.0) and empowered (CEI score 80.1-100.0). Next, this study performed logistic regression to analyze the influence of characteristics of demographic, social and economic toward consumer empowerment index.

## **4. RESULTS AND DISCUSSION**

### **4.1. Profit of respondents**

The results showed that most of the respondents (89%) were in the early adult category (18-40 years) with the average age of the respondents as a whole was 26.9 years (Table 2). The highest percentage of female sex was female (68%) than male (32%). More than half of respondents (69%) had 4-6 family members. Six out of ten respondents (61%) were from urban areas. Based on the results of research, the majority (44%) of respondents come from the Javanese. Based on the data obtained, the largest percentage of highest education (58%) is 12 years.

The average length of education of respondents is 13.7 years (high school graduation). Based on the results of the study, more than half of respondents in this study were not employed (59%). The results showed that the average income of the respondent family was Rp2 672 000 per capita per month with the largest percentage being in the range of more than Rp3 000 000 (32%). Thus, it can be said that the respondents in this study have a high level of income.

Table 2: Profile of respondents

Characteristics of Respondents	Percentage (%)	Mean±SD	Min-Max
Gender			
Male	32.0	0.68±0.46	
Female	68.0		
Age Category (year)			
Early Adult (18-40)	89.0	26.99±10.38	18-60
Mature Adults (41-60)	11.0		
Geographical location			
Rural	39.0		
Urban	61.0		
Level of education			
Senior High School	58.0	13.73±2.13	12-18
Diploma / Academy	9.0		
Bachelor	26.0		
Master	7.0		
Employment status			
Student	59.0		
Business	6.0		
Private employees	17.0		
State Employee	16.0		
Professional Workers	2.0		
Income/Pocket Money (Rp/month)			
<1 000 000	14.0	2 762 000 ± 21142.6	200 000 – 9 000 000
1 00 000 – 1 999 999	31.0		
2 000 000 – 3 000 000	23.0		
> 3 000 000	32.0		

#### 4.2. Consumer Empowerment Index (CEI)

Figure 2 display the average index of consumer empowerment and its dimensions. The index for each dimension provided by transforming the composite score into an index (scale from 0 to 100) as explained in the method. The results of the research in Figure 2 shows that the Consumer Empowerment Index (CEI) on electronic products is 41.8 out of 100.

The dimension of complaint behavior is the dimension with the lowest average index compared with other dimensions. This is caused by 96.0 percents of respondents included in the category of very less in complaints. The dimension of goods selection is the dimension with the highest average index (88.33). This is because consumers of electronic products can already choose good electronic products by the needs and attributes of electronic products.

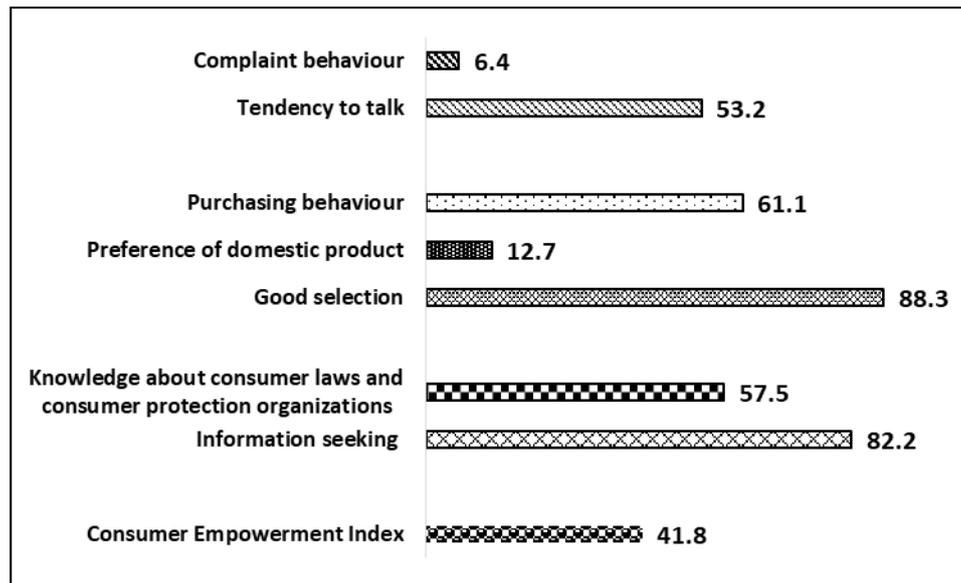


Figure 2: Average of consumer empowerment index and its dimensions

Consumer empowerment is a multifaceted concept that includes skills, competencies, and rights, as well as the ability of consumers to collect and use information and market capabilities to provide legal and practical protection (NARDO et al., 2011). Consumer empowerment is one of the efforts to inform about the buying behavior of goods and services to consumers (SHIBLY, 2009).

The index of consumer empowerment in electronic products was 41.78 and belong to a capable category. Compared with the results of the study Nardo et al. (2011) which states that consumer empowerment in 29 countries in Europe achieved to 51.31, the findings are still low. The results of this study are higher than Simanjuntak and Yuliati (2014) with a difference of 3.15 points.

According to Nardo et al. (2011), essential elements of empowerment that consumers should be aware of their decision when buying should be able to obtain information about their rights and should have advocacy and compensation access. Based on these results, the average respondent is only in a category capable and considered less empower. These findings are because the percentage of respondents' complaints behavior is very high in the category of less (93%) to make the index of consumer empowerment to be low.

More than half respondents have reached the capable category (58.0%). That is, the majority of respondents can use the rights and obligations of consumers but has not played an active role in fighting for consumer rights. Only two percent of respondents have reached the critical category (Figure 3).

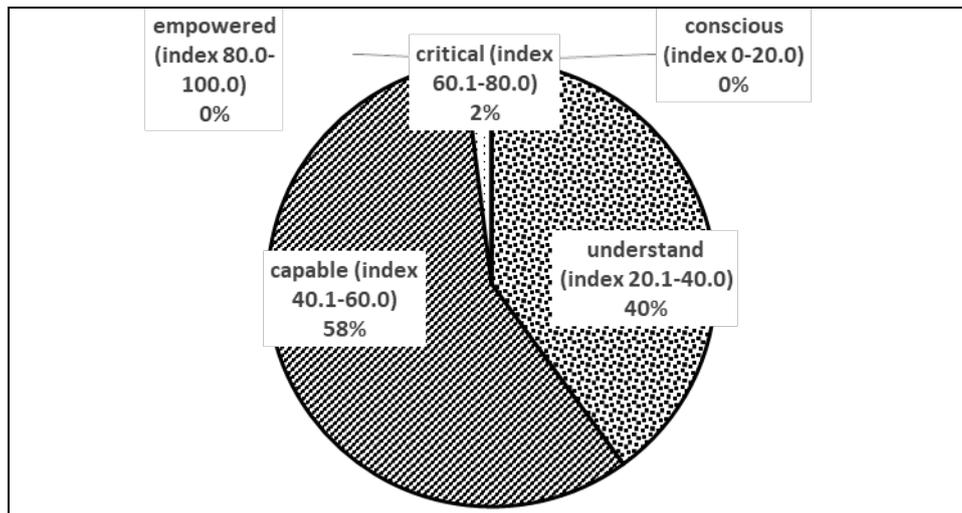


Figure 3 : Category of electronic consumer empowerment index

There are four factors that shape the process of consumer empowerment such as adjustment and personalization, flexible pricing and service pre and post-purchase, trust and information flow communications (SHIBLY, 2009). Consumer electronics empowerment categories that have reached the category capable of showing that consumers have been able to make adjustments and personalization at the time of purchasing electronic products.

The flow of communication and information also forms a process of consumer empowerment. Based on the results of research, the dimension of complaint behavior (6.4) has the lowest index; it shows that the consumer communication flow related to electronic products has not been intensive so that the consumer empowerment process has not been maximized. However, in the information seeking dimension (82.22) has the highest index, it indicates that consumer electronic products are good in finding information related to electronic products.

This research does not further discuss the reason why respondents did not complain. But due to Zulkarnaen (2008), the Indonesian people are more trying to get goods that are useful for life and activities cheaply without considering how the quality of electronic goods and how it will be done after the sale of electronic goods.

#### 4.3. Correlation between Consumer Empowerment Index (CEI) Category and demographic, social and economic characteristics

Based on the correlation test between Consumer Empowerment Index (CEI) category and demographic, social and economic characteristics, chi-square analysis shows that overall variables did not correlate significantly ( $p > 0.1$ ) with the category of

consumer empowerment index (Table 3). Only education correlates significantly ( $p < 0.1$ ) with Consumer Empowerment Index (CEI) category, it means that the level of education somehow will contribute to the CEI index. Even though the direction of the contribution could not identify based on the p-value.

Table 3 : Chi-square analysis of respondents characteristics and consumer empowerment index category

Variables	Chi-Square (p value)
Sex (0=male;1=female)	0.598
Age (0= $\leq$ 25 years; 1= > 25 years)	0.747
Geographical location (0=rural; 1 urban)	0.557
Education (0=Moderate education; 1=higher education)	0.085
Employment (0=not employed; 1=employed)	0.130
Income (0= $<$ 2 million rupiah; 1= $\geq$ 2 million rupiah)	0.496

#### 4.4. Regression result

The logistic regression analysis performed due to non-fulfillment of normal data distribution requirement for multiple regression analysis. As an independent variable, consumer empowerment transformed into binary namely capable and above (dummy 1) for index  $>$  40 and unable for index  $\leq$  40 (dummy 0). Simultaneously, six variables significantly affect consumer empowerment with the nagelkerke  $R^2$  value of 14.3 percent. That is, for 14.3 percent consumer empowerment is influenced by the variables in the study, while 85.7 percent influenced by other variables that were not examined (Table 4).

Tabel 4: Logistic regression result

Independent variables	B	Wald	Sig.	Exp(B)	Result
Sex (0=male;1=female)	-0.318	0.489	0.484	0.728	Not support H1a
Age (0= $\leq$ 25 years; 1= > 25 years)	-1.520	4.188	.041**	0.219	Support H1b
Geographical location (0=rural; 1 urban)	0.327	0.505	0.477	1.386	Not support H1c
Education (0=Moderate education; 1=higher education)	1.046	2.796	0.094*	2.847	Support H2a
Employment (0=not employed; 1=employed)	1.143	2.299	0.129	3.136	Not support H2b
Income (0= $<$ 2 million rupiah; 1= $\geq$ 2 million rupiah)	-0.339	0.275	0.600	0.713	Not support H3
Constant	-0.130	0.024	0.878	0.878	

Ket : Consumer empowerment (0=below capable; 1=capable and above); \*significant at  $p < 0.1$ ; \*\*

significant at  $p < 0.05$ ; Nagelkerke  $R^2=14.3$

Partially, only two of six variables namely education and age that significantly affected consumer empowerment namely age and education. Respondents with higher education levels were 2.847 times more likely to be capable and more than

respondents with low education levels. This is in line with research Yuliati and Anzola (2009) which concluded that the higher level of consumer education would be more active to complain if not satisfied with the purchase of goods/services. Furthermore, age has a significant effect on consumer empowerment. Respondents with age  $\leq 25$  years are more likely to be 4.567 times more capable or more than older respondents ( $> 25$  years).

#### **4.5. Hypothesis testing**

##### **4.5.1. Relationship of demographic characteristics and consumer empowerment**

The result shows that the hypothesis is not supported overall on the influence of demographic characteristics on consumer empowerment. The gender has no significant effect on consumer empowerment. The results do not support hypothesis 1a and are inconsistent with other studies suggesting that sex has a significant effect on empowerment (KOBBERG et al., 1999).

According to Handoyo and Setiawan (2015), gender affects the empowerment of consumers; women tend to complain than men. Meanwhile, the age of has a negative and significant effect on consumer empowerment. Means that the younger respondents would have the higher consumer empowerment index.

The result supports hypothesis 1b and in line with Simanjuntak and Yuliati (2017) which found that age affects consumer empowerment. Sofyan (2017) also explained that age had a significant effect on consumer empowerment. According to Handoyo and Setiawan (2015), age influenced consumer complaining behavior, which belongs to one dimension of consumer empowerment.

Other explanation that shows the older age of respondents will lead to the decreasing of consumer empowerment index is due to the older tend to more difficult to access information and more accept the dissatisfaction by not complaining. Conversely, the younger consumers tend to be enjoy to seek information and more responsive to dissatisfaction by filing complaints toward the actors. This makes the younger respondents will be more empowered.

Geographical location has no significant effect on consumer empowerment. The results do not support hypothesis 1c and are not in line with Chandrasekar's (2012) study that geographical location affected empowerment. Ekanem et al. (2006)

explained that geographical location is important in the search for information about the product, in this case, is part of consumer empowerment.

#### **4.5.2. Relationship of social characteristics and consumer empowerment**

The result shows that the hypothesis is not supported all on the influence of social characteristics on consumer empowerment, but only supports the level of education (H2a). The result shows that the level of education has a significant effect on consumer empowerment.

This is in line with the research of Rahman and Naoroze (2007) which stated that the level of education affected empowerment. Other research of Sofyan (2017) also stated that highly educated respondents are more empowered than secondary education level.

According to Simanjuntak (2014), high formal education could improve consumer empowerment. This is because high education has the opportunity to provide better skills and a more critical understanding so that it can be more productive and empowered (RAQUIB et al., 2010). Respondents who succeed in education to a higher level will be more open to their thoughts and insights on consumer issues (SIMANJUNTAK, 2014).

Highly educated respondents will be easier to access information and be aware of their rights and responsibilities as consumers that make them more empowered than less educated consumers.

Based on the results of research, the employment status does not affect the consumer empowerment. This finding does not support hypothesis 2b and is inconsistent with Gholipour et al. (2010) which stated that employment status affected consumer empowerment. Nardo et al. (2011) also reported that unemployed consumers were less empowered than those who employed.

#### **4.5.3. Relationship of economic characteristic and consumer empowerment**

The result shows that the hypothesis is not supported by the economic characteristics of income. Income does not affect consumer empowerment; this does not support hypothesis 3 and not in line with other research, Simanjuntak (2014) stating that consumer income would increase consumer empowerment. The amount of income will be related to consumer purchasing power.

Consumers who will spend a more expensive cost tend to make in-depth observations of the product to be purchased (SIMANJUNTAK 2014). Based on the research of Yuliati and Anzola (2009), there was a significant relationship between income and consumer complaining behavior. Sofyan (2017) revealed that the higher consumer income would increase the consumer empowerment index. Also, Thapa and Gurung (2010) also explained that the economic factor is a factor that plays an essential role in improving empowerment.

## **5. CONCLUSIONS AND SUGGESTIONS**

The respondents in this study were dominated by the early adult (18-40 years old), living in urban areas, high school of education, and the average income of Rp 2 672 000 per capita per month. The average of consumer empowerment index on electronic products is 41.78 with the highest index was goods selection dimension (index 88.33), and the lowest was complaint behavior dimension (index 6.4).

Only two of six variables significantly affect consumer empowerment, namely age and education. Age has a negative and significant effect on consumer empowerment, while education has a positive and significant effect on consumer empowerment. The younger and the higher education of respondents will contribute to the higher the consumer empowerment index.

## **6. IMPLICATION AND RESEARCH LIMITATION**

This study provides scientific contributions in the field of family science and consumer social characteristics, demography, economics and consumer empowerment, especially on online purchases. For the government, especially for Consumer Dispute Settlement Agency, Directorate of Standardization and Consumer Protection, Ministry of Trade of the Republic of Indonesia and Consumer Protection Agency can become an input in formulating policies and programs about consumer empowerment.

Based on the result of research, consumer empowerment on the electronic product is still low especially on the complaints behavior and local brand preference. So that, the effort is needed to increase consumer awareness to be able to choose a brand of domestic product, and consumers need to use their right as a consumer to be able to complain when faced disappointment or loss when purchasing electronic products.

As consumers must be aware of protecting themselves independently to be able to avoid the unfair practices of the producers. To establish a smart and consumer empowerment has required the socialization of rights and responsibilities of consumers through education directly or indirectly through the internet or social media as a source of information accessible to consumers, so it will build consumers who dare to use their rights as consumers and complain when harmed.

The limitation of this study is the result could not be generalized at the population level due to nonprobability sampling conducted in this study. Methods of data collection used online-based survey that allows respondents to find the correct answer first. The absence of in-depth interviews with consumers makes the researcher unable to identify the reason why respondents do not complain about electronic products. Therefore, this study cannot describe the wider diversity of factors that affect consumer empowerment.

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