



CONSUMER EMPOWERMENT ON ONLINE PURCHASING

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ABSTRACT

This research investigates the influence of social, demographic, and economic characteristics toward consumer empowerment on online purchasing in Asia, using a cross-sectional study through an online survey of 100 samples who experienced online purchasing. Multiple linear regression is performed for data analysis. The result showed that early adult males with high education, Javanese ethnic, lived in an urban area and were an employee with more than one million incomes per month was the most empowered group. Regression analyses result reveals that gender, ethnic, and income significantly negatively influenced consumer empowerment. Meanwhile, a male with non-Sundanese ethnic and low income would increase the consumer empowerment index.

Keywords: consumers empowerment; online purchasing; socio-demographic characteristics.



1. INTRODUCTION

Economic development in this era of globalization is increasingly complex (SIMANJUNTAK, 2014). Consumers are faced with many choices of goods and services; this creates a fast decision-making process, without thinking wisely and no consideration of the overall existing information and alternatives. One of economic development in the era of globalization is the internet. The Internet is one of the technological developments to respond to the challenges in the global era (HADI, 2013). Currently, the internet has become a part of the new lifestyle among Indonesian. According to a survey conducted by the Association of Indonesian Internet Service Providers (2015), there were 88.1 million Indonesians that access the internet from a total population of 252.4 million people.

The internet has become a standard tool used in the process of selling and purchasing activities. One of the activities in e-commerce is online purchasing (MUJIYANA; ELISSA, 2013; SHU; BAYARSAIKHAN, 2012). Online purchasing provides convenience to a wide range of products and services. A clear legal law does not match the growth of the internet as a place of sale and purchase transactions. Law No. 11 of 2008 on Information and Electronic Transactions, chapter VII concerning the prohibited act of article 28 paragraph 1 only mentions "Every person intentionally, and without the right to disseminate false and misleading news resulting in consumer losses in electronic transactions" specifically regulates criminal fraud acts in online buying and selling transactions. Consumers today are more susceptible to be trapped in fraud, thus empowering the consumer is crucial to do.

According to Peacock and Eatough (2012), consumer empowerment is the idea that consumers must have the tools to secure the best outcome for themselves. Some research results concluded that factors affecting empowerment include education (NARDO et al., 2011; SIMANJUNTAK; YULIATI, 2015; SIMANJUNTAK; PUTRI, 2018), occupations (GHOLIPOUR, 2010), age (NARDO et al., 2011; SIMANJUNTAK; PUTRI, 2018), gender (MIDHA, 2012; SIMANJUNTAK; YULIATI, 2016), ethnic (NARDO et al., 2011), geographical location (SIMANJUNTAK, 2014), and revenues (NARDO et al., 2011), these factors are further classified into several characteristics.

Research on consumer empowerment, specifically consumer empowerment on online purchasing, is still limited. Simanjuntak (2014) studied consumer empowerment and found that demographic characteristics significantly influenced consumer empowerment. In addition, Simanjuntak et al. (2013) also concluded that the socio-economic characteristics have a direct

and indirect influence on consumer empowerment. Based on the problems mentioned above, this study identify consumer empowerment, and it is dimensions, as well as analyzes the influence of social, demographic, and economic characteristics toward consumer empowerment on online purchasing.

2. LITERATURE REVIEW

2.1. Online Purchasing

Online purchasing is a process of consumers directly purchasing goods, services, and more from a seller interactively and straight through an internet intermediary medium (MUJIYANA; ELISSA, 2013). According to Saragih and Ramdhany (2012), online purchasing is a form of electronic commerce where sellers and prospective buyers meet through the internet as the media. Similarly, Katawetawaraks and Cheng (2011) explained that online purchasing is a product purchasing activity (either goods or services) through internet media.

Through online purchasing, consumers could see the goods and services through online trading sites, web, or social networks promoted by sellers (WIDIANTO; PRASILOWATI, 2015). Online purchasing activities are a form of sales and purchases that do not require face-to-face experience in the process but can be done separately from and to the world through laptops, computers, or smartphones connected to Internet access services (JUSOH; LING, 2012).

2.2. Relationship of Social Characteristics and Consumer Empowerment

Based on Simanjuntak and Yuliati's research (2015), shows that higher levels of income and education will make consumers more skilled, broad knowledge of consumer protection laws and consumer protection organizations, active on seeking for information before making a purchase, and more empowered. Gholipour's (2010) study showed that education and employment affect women's empowerment.

Based on the analysis of previous research on social characteristics and consumer empowerment conducted by Simanjuntak and Yuliati (2015), and Gholipour (2010), the hypothesis can be formulated as:

H1a: Education has a significant effect on consumer empowerment

H1b: Employment has a significant effect on consumer empowerment

2.3. Relationship of Demographic Characteristics and Consumer Empowerment

Nardo et al. (2011) concluded that consumers who use the official language in communication are more empowered than consumers who use the local language. Age plays an inverse role in empowerment; the younger generation is more skilled, conscious, and engaged than the older generation. Aged consumers increasingly need to be empowered. Older age consumer often has problems on tackle the task that used a working memory, thus making it hard to process small amounts of information in activities such as problem-solving or thinking (YOON et al., 2009). The research result of Midha (2012) showed that empowerment has a stronger positive effect on trust for men than for women.

Mubarokah (2015) concluded that consumer empowerment in urban and rural areas was still low, and there was a significant difference between the two regions. Besides that, the results of Simanjuntak and Yuliati's (2016) study showed that female living in urban areas, earning over 10 million per month, and graduated from college are more empowered than others.

Based on an analysis of previous research on demographic characteristics and consumer empowerment conducted by Nardo et al. (2011); Yoon et al. (2009); Midha (2012); Simanjuntak (2014); Mubarokah (2015); and Simanjuntak and Yuliati (2016) it can be formulated the hypothesis:

H2a : Age has a significant effect on consumer empowerment

H2b : Gender has a significant effect on consumer empowerment

H2c : The ethnicity has a significant effect on consumer empowerment

H2d : The geographical location has a significant effect on consumer empowerment

2.4. Relationship of Economic Characteristics and Consumer Empowerment

Nardo et al., (2011) mentioned that in Finland, England, Ireland, Norway, and Denmark, revenues had an inverse relationship with empowerment. In contrast, countries such as Brazil, Germany, Poland, Portugal, and Romania which have income deficiencies are less empowered than respondents who have above-average earnings. Research conducted by Yuliati and Anzola (2009) stated that income was significantly related to consumer empowerment. Consumers with higher incomes tended to complain than those with lower incomes.

Based on an analysis of previous research on economic characteristics and consumer empowerment conducted by Nardo et al. (2011), and Yuliati and Azola (2009), it can be formulated hypothesis as follows :

H3: Income has a significant effect on consumer empowerment

3. RESEARCH METHODOLOGY

3.1. Data

This research used a cross-sectional study design. The online survey method through google survey site form was applied in this research. The sample used in this study is the person who experienced purchasing online and made online purchases at least three times, with age between 18 to 60 years, and has decided consumption independently. An experienced online consumer is defined as the person who owns or makes at least one online purchase in the last three months (MIDHA, 2012).

Convenience sampling was used to determine the respondents, due to the unknown population number, the random manner could not be implemented, and respondent supposes to meet requirements set before the data collection get started. One hundred respondents were selected from 236 people who filled in the online questionnaire. The unselected ones were caused by the repetition of filling out the inquiry and did not meet the requirements.

The survey was distributed online, google forms link were shared to the candidate of respondent through group and broadcast messages to relatives, and friends on social networks (line, WhatsApp, and BBM), social networking homepage (Facebook, Instagram, twitter, line), and ask them directly as well to spread the link of survey. Next, the candidates who are willing and meet the criteria will fill the research questionnaire.

3.2. Variables

The variables of research covered social characteristics (length of education and occupation), demographic characteristics (age, gender, ethnicity, and geographical location), economic characteristics (income), and consumer empowerment. Consumer Empowerment measured using the modified instrument from Simanjuntak (2014). The Consumer Empowerment Index (CEI) covers three purchasing stages, namely pre-purchase (information seeking and the knowledge on consumer protection laws and organizations), at-purchase (selection of good, preference of local product, and buying behavior), and post-purchase (tendency to talk and complaint behavior).

The dimensions of pre-purchase stages are information seeking with nine indicators (never=0; sometimes=1; often=2; always=3), the example of question is when you intend to buy products or services in an online store, how often do you do information search about the identity and legality of online store business people. The knowledge on consumer protection laws and organizations with five indicators (know=1; do not know=0), example of question is how you understand the laws and consumer protection institutions. The dimensions of at-purchase stage are the selection of good (true=1; false=0), example of question is in one of the online buying and selling sites; sellers A and B sell mobile phones with the same specifications, which seller sells at a lower price?.

Next, the preference of local products with 16 indicators (local brand=1; foreign brand=0), example of question is when going to buy goods at relatively the same price, which production is preferred: overseas brands (Lazada, Amazon) or local brand (Bukalapak, Tokopedia). The buying behavior with 15 indicators (never=0; sometimes=1; often=2; always=3), example of question is when buying online products, how often do you ask about the availability of the product you bought to the seller?

When in doubt about making an online purchase, how often do you contact the seller before making a purchase transaction? The dimensions of the post-purchase stage ,are the tendency to talk with two indicators (never=0; sometimes=1; often=2; always=3), example of question is how often do you share a bad experience with your family when you were disadvantaged when making an online purchase? The complaint behavior with ten indicators (never=0; sometimes=1; often=2; always=3), example of question is how often do you complain when you were not satisfied with the identity and legality of online store business people.

The reliability value of Consumer Empowerment instruments on online purchases ranged from 0.467 to 0.883.

After getting a score, each indicator then summed-up into a composite score for each dimension. It transformed into the index by using this formula:

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

Actual Score: composite score achieved by the respondent

Minimum Score: the lowest score supposed to be achieved by the respondent

Minimum Score: the highest score supposed to be achieved by the respondent



To obtain the index of consumer empowerment, each index of dimensions are weighted and then summed up. The consideration taken in weighting dimensions is that knowledge is judged to be lower than skill and behavior, and complaint behavior is judged to be the highest because complaint effort is the highest consumer protection that consumers can enact. The weight consisted of 20 percent for information seeking, 10 percent for knowledge on consumer protection laws and organizations, 5 percent for selection of goods, 5 percent for the preference of local product, 15 percent for purchasing behavior, 5 percent for talk tendency and 40 percent for complaint behavior.

Consumers empowerment index in this study are categorized into five groups: (1) conscious (index ranged from 0 to 20), which is to recognize the fundamental rights, and obligations as consumers; (2) understand (index ranged from 20.1 to 40), namely to understand the rights and responsibilities of consumers to protect themselves; (3) capable (index ranged from 40.1 to 60), i.e., able to use the rights and responsibilities of consumers to determine the best option including using domestic products for themselves and their environment; (4) critical (index ranged from 60.1 to 80), which is to play an active role in fighting for rights and carrying out its obligations and prioritizing domestic products; and (5) empowered (index ranged from 80.1 to 100), which has a high nationalism in interacting with the market and fighting for the interests of consumers.

Data analysis used was descriptive and inferential analysis. The descriptive analysis used includes average, standard deviation, minimum value, and maximum value. The inferential analysis used is a different test and multiple linear regression tests. Different test independent sample t-test is used to see differences in social, demographic and economic characteristics and consumer empowerment index and dimensions. Multiple linear regression test is used to analyze the influence of social, demographic and economic characteristics on the empowerment of consumers on online purchases. The multiple linear regression test is formulated as follows:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \varepsilon$$

Information:

Y: Consumer Empowerment (index)

α : Constants

β_1-7 : Coefficient

- X1: Length of education (years)
- X2: Job Status (0: unemployed; 1: not employed)
- X3: Age (years)
- X4: Gender (0: male; 1: female)
- X5: Ethnicity (0: not Sundanese; 1: Sunda)
- X6: Geographical location (0: rural; 1: urban)
- X7: Income (rupiah/month)
- ε: Error

4. RESULT AND DISCUSSION

4.1. Profile of Respondents

This study divides the profile of respondents into three groups: social, demographic, and economic characteristics. Social characteristics consist of the length of education and occupation. Demographic consists of age, gender, ethnicity, and geographic location. Economic characteristics comprise of income. The results show that seven out of ten respondents graduated from high school. The average length of the respondent's education was 13.2 years or equivalent to high school graduation. This means that the level of education of respondents was good enough. The results also show that the most abundant (72.0%) portion of respondents was not employed (Table 1).

Table 1: Profile of respondents

| Characteristics of Respondents | Percentage | Average±SD | Min-Max |
|--------------------------------|------------|--------------|---------|
| Length of Education | | | |
| Senior High School | 71.0 | | |
| Diploma | 1.0 | 13.23 ± 1.97 | 12 - 18 |
| Bachelor | 24.0 | | |
| Master/Doctoral | 18.0 | | |
| Occupation | | | |
| Unemployed | 30 | | |
| Business | 50 | | |
| Private employees | 110 | | |
| State employees | 30 | | |
| Professional | 1.0 | | |
| Students | 69.0 | | |
| Others | 8.0 | | |
| Age | | | |
| Late teenagers (16-18) | 6.0 | | |
| Early adult (19-24) | 75.0 | 22.92 ± 5.58 | 18 - 47 |
| Adult (25-35) | 13.0 | | |
| Middle-aged (36-50) | 6.0 | | |
| Gender | | | |

| Characteristics of Respondents | Percentage | Average±SD | Min-Max |
|--------------------------------|------------|-------------|------------|
| Male | 50.0 | | |
| Female | 50.0 | | |
| Ethnicity | | | |
| Javanese | 19.0 | | |
| Sundanese | 34.0 | | |
| Minang | 12.0 | | |
| Bugis | 6.0 | | |
| Betawi | 8.0 | | |
| Malay | 9.0 | | |
| Others | 12.0 | | |
| Geographical Location | | | |
| Rural | 34.0 | | |
| Urban | 66.0 | | |
| Income (Rp/month) | | | |
| <1 000 000 | 19.0 | | |
| 1 000 000-1 999 999 | 44.0 | 2 028 000 ± | 250 000 - |
| 2 000 000-3 000 000 | 16.0 | 1741796.35 | 10 000 000 |
| >3 000 000 | 21.0 | | |

The results show that seven out of ten respondents were in the early adult category (19-24 years), with average age of 22.9 years old. The number of males and females respondents in this study were perfectly balanced. The most significant percentage of ethnic is Sundanese (34.0%). More than half (66.0%) of respondents reside in the urban area, and the rest (34.0%) live in rural area. The average income of respondents is Rp2 028 000/capita/month, with the largest percentage (44.0%) were in the range of Rp1 000 000 to Rp 1 999 999. The lowest income of respondents in this study is Rp250 000/capita/month, while the highest income is Rp10 000 000 / capita/month.

4.2. Experience in Online Purchasing

Respondents conducted at least one online purchase within six months and 30 purchases at most in six months. The average frequency of respondents' online purchasing was 5.34 times in six months. The majority (68.0%) of online purchasing in the last six months is in the range less than or equal to five times in six months. The frequency of online purchases is mostly made by males is 5.5 times per six months, while female's frequency is less, 5.1 times per six months. The average online purchasing of respondents was Rp748 990 in six months. This amount was quite different from the average expenses through conventional modern retail per shopping that dominated by Rp100 000 to Rp500 000 (SIMANJUNTAK et al., 2019). The highest expenditure on online purchases within six months are Rp5 000 000 and the lowest expenditure in six months Rp100 000. A total of 26 out of 100 respondents spent more than or equal to Rp1 000 000 within six months on online purchases.

About eighty percent of respondents made online purchases through online stores, 70.0 percent through social networks, and the rest made online purchases through online buying and

selling forums. A total of eight out of ten respondents purchased fashion products such as watches, shoes, pants, shirts, jewelry, and jackets. This finding in line with Simanjuntak and Musyifah's (2016) research. Bags and suitcases (34.0%) became the most often products purchased by respondents. Beauty products such as cosmetics, makeup, and body care equipment ranked third as products that were commonly purchased online (29.0%).

Twelve percents of respondents never get information about how to be a smart consumer in making online purchases from brochures/leaflets. More than half (56.0%) of the respondents received little online purchase information from brochures/leaflets, while the other 41.0 percent of respondents got online purchase information from brochures/leaflets. Furthermore, about 65.0 percent of respondents obtained information on online purchases from the internet/social media. A quarter of respondents received online purchase information from two to three information sources. About 24.0 percent of respondents received online purchase information from six information sources. Only three percent of respondents never get information from various sources of information.

4.3. Inner model evaluation

Consumer empowerment in the pre-purchase stage of online purchase consists of two dimensions, namely information seeking and knowledge of consumer protection laws and organizations. Here is an explanation of both dimensions.

4.3.1. Information Seeking

The activity of seeking information from the respondent before making an online purchase. The results revealed that only 6 out of 100 respondents never seek information on the return policy of goods. A total of 22.0 percent of respondents sometimes seek information on internal policies and damage/insurance coverage. Furthermore, 7 out of 10 respondents were always looking for information about the payment method. The average index of information seeking dimension is 77.00.

4.3.2. Knowledge on consumer protection laws and organizations

This dimension measures consumer understanding the Consumer Protection Act and consumer protection organizations. The result shows that 8 out of 10 respondents have known the consumer protection organizations in Indonesia such as the Indonesian Consumers Protection Foundation. More than half (68.0%) of respondents have known that law protects rights as consumers. Approximately 58.0 percent of respondents have known about the

Consumer Protection Act. The average index of knowledge dimension of consumer law and consumer protection organizations is 69.0.

4.4. Consumer Empowerment At-Purchasing Stage

Consumer Empowerment during the purchase stage of the online purchase consists of three dimensions of goods selection, preference of local product, and online purchasing behavior. Below is the result for Consumer Empowerment during the purchase stage:

4.4.1. Local product

This dimension measures the tendency of respondents to buy domestic products online. The result indicates that a majority (91.0%) of respondents tend to like sports products and goods for hobbies such as bicycles, toys, hobbies, and collection of domestic production. Domestic products favored by respondents are household appliances such as hygiene, furniture, decoration, and animal care (83.0%). More than half (56.0%) of respondents tend to buy foreign fashion products such as watches, shoes, pants, shirts, jewelry, and jackets. The average index for preference of local product dimension is 64.40.

4.4.2. Purchasing behavior

A total of 24.0 percent of respondents never asked for a guarantee of genuine purchased products to the seller, and 7 out of 10 respondents always pay attention to product details before deciding to buy. The average index of the purchasing behavior dimension is 73.5.

4.4.3. Goods selection

All respondents have a good understanding of how to choose goods/services on the purchase of online discounts, single discount, flat rate, postage, and discount type. Respondents in this study were best at understanding the single discount (93.0%). The majority of respondents (91.0%) have a good understanding of flat interest. Seven out of ten respondents had a reasonably good understanding of a double discount, postage rates, and discount types. The average index of goods selection dimension is 81.40.

4.5. Consumer Empowerment post-purchasing stage

Consumer Empowerment of post-online purchasing consists of two dimensions: the tendency to talk and complain behavior. Here are the results of consumer empowerment research after purchasing.

4.5.1. Tendency to talk

The tendency to talk is dimension measures how often respondents remind others to be meticulous before purchasing and how often respondents tell a bad or good experience after purchasing a product. More than half (59.0%) of respondents never showed disappointment and invited families to boycott. A total of 49.0 percent often recommend to friends. Another 47.0 percent always tells a good experience to a friend. The average respondent mostly tells good experience to a friend. The average index of the tendency to talk dimension is 50.90.

4.5.2. Complaint behavior

This dimension measures the complaint behavior when consumers found a loss or dissatisfaction with an online purchase. The average index of complaint behavior dimension is 73.50. The most widely claimed was shipping expedition service (28.0%). Return policy (23.0%) and money guarantee (23.0%) also had a large percentage of shipping expedition services. This study in line with Simanjuntak (2019) that the causes of online shop complain was late delivery, wrong size, wrong color, and when the product is not in accordance with the promised conditions. They often tell close friends and family members, when they disappointed. This is in line with Simanjuntak and Hamimi (2019) that consumers with positive when complaining will tell others.

4.6. Consumer Empowerment Index (CEI)

The average consumer empowerment index only achieved at 49.7. Based on the category of consumer empowerment index, respondents only achieve capable category (consumer able to use the rights and obligations of consumers to determine the best option, including using local products for themselves and their environment). More than half (69.0%) of the respondents included in the capable category (Figure 1).

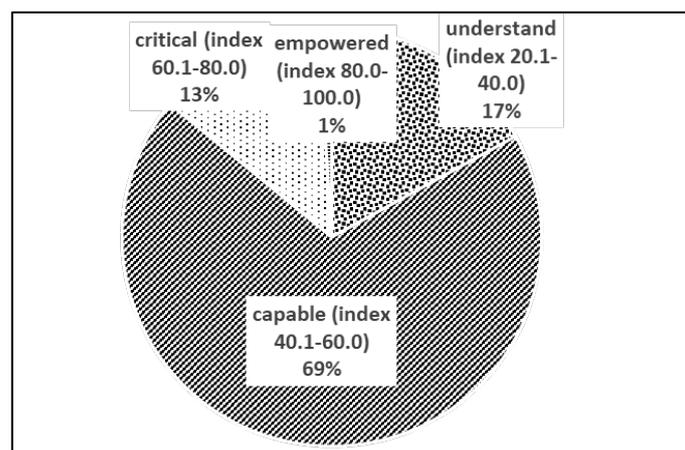


Figure 1: Category of Consumer Empowerment index on online shopping

The result also shows that the Consumer Empowerment Index (CEI) on online purchasing is 49.7. This index is lower than Simanjuntak (2015), who study the consumer empowerment index without specific products; the result showed that the consumer empowerment index still reached 53.84, means that consumers still relatively less empowered.

Based on the dimensions, the selection of goods has the highest index compared to other dimensions. This means that respondents in doing online purchasing had a reasonable selection of goods. Meanwhile, the dimension with the lowest index was complaint behavior. This was because respondents were rarely complaining when they felt unsatisfied towards the business.

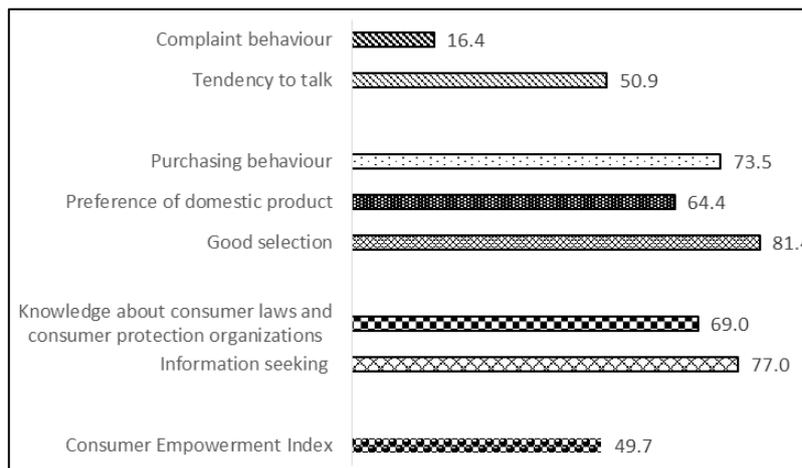


Figure 2: The average of Consumer Empowerment index based on the dimensions

Consumer empowerment is a positive subjective state generated by a comparison of a consumer's ability relative to an existing or previous ability. 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).

The index of consumer empowerment on online purchases in this study is in the category of able (49.7). When compared with previous consumer empowerment study conducted by Simanjuntak and Yuliati (2014), the index of consumer empowerment in the field of food is in the category of understanding (26.57). This means that the consumer empowerment in the field of food is lower than the index of consumer empowerment on online purchases.

The general model of consumer empowerment developed by Shibly (2009), based on three different views interrelated of power and empowerment suggests that four key factors are explaining the complex concept of consumer empowerment. Factors that explain complex concepts of consumer empowerment include: (1) ability to customize and personalize products

/ services; (2) ability to adjust pre and post-purchase price of product / service; (3) extensive information and ease of communication relevant to the purchase decision; and (4) the level of law and trust in the purchasing environment.

Product customization and personalization is a bid for consumers of the various components of products and services that can be selected to satisfy a particular need and desire as Samudro et al., (2019) research that perceived quality influence significantly on satisfaction. The results showed that the purchasing behavior dimension has an average index of 73.50, and on average, respondents often pay attention to product details before buying through online purchases. Research shows that preference of local product has an index of 64.40, and index of consumer's empowerment on online purchase is in the category capable (49.7), which can use rights and obligations of the consumer to determine the best choice, including using the local product for self and its environment. This shows that consumers have made adjustments and personalized products on online purchases.

Shibly (2009) stated that the ability to adjust pre and post-purchase prices of products is a factor that explains the concept of consumer empowerment to provide power to consumers against dynamic prices that can change at times, this means to compare prices, read pre and post-purchase requirements and look for discounts/pieces at the best price. Research shows that the dimension of goods selection is the highest average index (81.40) compared with the other seven dimensions. Overall consumers have a good hold on the goods selection indicators on online purchases and have the best understanding of single discount indicators.

Extensive information and ease of communication can form a communication network as a means of information exchange and consumer evaluation of a product (SHIBLY, 2009) this factor is indispensable when buying products online. The result shows that the tendency to talk has an average index of 50.90, and the average respondent tells a good experience to a friend. The information-seeking dimension has the highest index average (77.00) after the selection dimension of goods and services. The average respondent gets information from the internet / social media and a quarter of respondents receive information from two to three sources to become smart consumers in making online purchases.

Views in empowerment emphasize the need for legal and trust rules in the purchasing environment (SHIBLY, 2009). Research shows that the knowledge of consumer protection law and organizations has an average index of 69.00, and 8 out of 10 respondents know the consumer protection organizations such as the Indonesian Consumers Protection Foundation.



The dimension of complaint behavior is the dimension with the lowest average index (16.40) compared to the other seven dimensions. This is because respondents are in very less category (84.0%) in complaints, this shows the lack of awareness of consumers to complain when they get a loss.

4.7. Factors that affect the consumer empowerment on online purchasing

The result of regression analysis in Table 2 shows that all independent variables (education, employment, age, gender, ethnicity, geographical location, and income) simultaneously influenced significantly ($p=0.003$) on the dependent variable that is consumer empowerment index (F value was 3.433, and Adjusted R^2 was 0.147).

Table 2: Regression analysis

| Independent Variables | β Standardized | P-value | Conclusions |
|--|----------------------|----------------|-----------------|
| Education (year) | 0.095 | 0.248 | Not Support H1a |
| Employment (0=no; 1=yes) | 0.053 | 0.743 | Not Support H1b |
| Age (year) | 0.117 | 0.398 | Not Support H2a |
| Gender (0=male; 1=female) | -0.341 | 0.001** | Support H2b |
| Ethnicity (0=non-Sundanese; 1=Sundanese) | -0.308 | 0.008** | Support H2c |
| Geographical location (0=rural; 1=urban) | 0.098 | 0.339 | Not Support H2d |
| Income (Rp/month) | -0.339 | 0.010* | Support H3 |
| F | | 3.433 | |
| Adj. R^2 | | 0.147 | |
| Sig | | 0.003** | |

*significant on $p<0.05$; **significant on $p<0.01$

All independent variables influenced 14.7 percent toward consumer empowerment index, while the remaining 85.3 percent was affected by other variables that were not examined in this study.

Partially, three of the seven variables tested had a significant influence on consumer empowerment index, namely gender, ethnicity, and income. Gender had a significant negative influence ($\beta = -0.341$; $p = 0.001$) on the consumer empowerment index, meaning that males tend to have higher consumer empowerment index. The ethnicity has a significant negative influence ($\beta=-0.308$; $p=0.008$) on the consumer empowerment index, saying that the ethnicity besides Sundanese tends to have higher consumer empowerment index. Similarly, income has a significant negative influence ($\beta=-0.308$; $p=0.008$) on the consumer empowerment index, meaning that respondents who have low incomes tend to have higher consumer empowerment index (Table 2).

The regression equation of consumer empowerment index on online purchases showed below:

$$Y = 38.415 + 1.105 X_1 + 1.258 X_2 + 0.226 X_3 - 7.318 X_4 - 6.979 X_5 + 2.219 X_6 - 2.103E-6 X_7 + \epsilon$$

The result of the research shows that the hypothesis is not supported as a whole on social characteristic variables; both H1a (education has a significant effect on consumer empowerment) and H1b (employment has a significant effect on consumer empowerment). In demographic characteristics, the hypothesis is supported in part, namely H2b (gender has a significant effect on consumer empowerment) and H2c (ethnicity has a significant effect on consumer empowerment), while H2a (age has a significant effect on consumer empowerment) and H2d (the geographical location has a significant effect on consumer empowerment) are not supported. Economic characteristics, i.e., income, support H3 (income has a significant effect on consumer empowerment).

4.8. The influence of social characteristics on consumer empowerment

The results show that the hypothesis is not supported as a whole on social characteristic variables. Simanjuntak and Yuliati (2015) stated that the higher the level of education would make consumers more skilled, have a broad knowledge of consumer protection laws and consumer protection education institutions, actively seeking information before making a purchase, and generally more empowered. The average length of consumer education is 13.2 years or equivalent to graduating from high school. In this study, the average index of high educated consumer empowerment is higher than that of middle educated. It can be concluded that consumers with education for more than 12 years are more empowered than consumers with less than 12 years of education because it has the highest average in the index of consumer empowerment.

The results showed that respondents with higher education have the highest average on the dimensions of goods selection. According to Raquib et al., (2014), highly educated respondents tend to provide better and more critical skills of understanding so they can be more empowered. The result of the research does not support hypothesis 1a that education has a significant effect on consumer empowerment and not in line with other research which stated that the length of education influenced empowerment (GHOLIPOUR, 2010; NARDO et al., 2011; SIMANJUNTAK; YULIATI, 2015)

Most of the respondent does not have an occupation. This is presumably because high school education level dominates the respondents. Based on the results of the study, the average consumer empowerment index of consumers who work are more empowered than consumers

who do not work. Working consumers have the highest average on information seeking, purchasing behavior, talk tendency and complain behavior dimensions. This is in line with research conducted by Nardo et al., (2011) that consumers who are not working, have less power than those who work. The result of the study does not support the hypothesis 1b that education has a significant effect on consumer empowerment and not in line with other research which states that income influences empowerment (GHOLIPOUR, 2010; NARDO et al., 2011; SIMANJUNTAK; YULIATI, 2015; SIMANJUNTAK ET AL. 2014).

4.9. The influence of economic characteristics on consumer empowerment

The results show that the hypothesis is supported as a whole on the variable of economic characteristics, supporting hypothesis 3 that income has a significant effect on consumer empowerment on online purchases. The average income of respondents is Rp2 028 000. Respondents with income <Rp 1 000 000 are more empowered compared to other categories above it. Respondents with the income of <Rp 1 000 000 had the highest average in the dimension of the knowledge of consumer protection laws and organizations, purchasing behavior, and talk tendency. The result of the regression test shows that income has a significant adverse effect on a consumer's empowerment on online purchasing.

The result of the research supported hypothesis 3 that income had a significant adverse effect on consumer's empowerment on online purchasing and in line with Nardo et al. (2011), that income has an inverse relationship with empowerment. However, this is not in line with Simanjuntak (2014), which indicated that higher consumer income would increase consumer empowerment.

4.10. Research Limitation

This study provides scientific contributions in the field of consumer study, especially on online purchases. For the government especially for Consumer Dispute Settlement Agency (BPSK), Directorate of Standardization and Consumer Protection, Ministry of Trade of Republic of Indonesia, Ministry of Communication and Information Republic of Indonesia and consumer protection institutions such as Indonesian Consumer Protection Foundation can be input in formulating policies and programs on consumer empowerment. For educational institutions where researchers studies, at Bogor Agricultural University, this study contributes to the development of science, especially in the field of consumer science. For consumers, this research becomes a source of information on social, demographic, and economic characteristics of consumer empowerment on online purchases.



To establish a smart and energetic consumer, it requires the socialization of rights and obligations of consumers through education, directly or indirectly through the internet or social media as a source of information that accessible to consumers to build consumers who will use their rights as consumers and complaint when harmed. Future research could reexamine the instruments of consumer empowerment on online purchasing with different characteristics.

5. CONCLUSION

The level of Consumer Empowerment on online purchasing is still low, with an average Consumer Empowerment index of 49.7, which is included in the capable category. Respondents are lacked in complaints about online purchasing, means that there is a lack of awareness of consumers to complain when they get a loss.

This research only supported three of seven hypotheses: gender and income influence significantly and negatively toward the consumer empowerment index. Males tend to have a higher consumer empowerment index. The ethnicity besides Sundanese tends to have higher consumer empowerment index. Respondents who have low incomes tend to have higher consumer empowerment index.

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