

THE INFLUENCE OF DEMOGRAPHIC FACTORS (AGE, GENDER, EDUCATION AND INCOME) ON CONSUMER BUYING BEHAVIOR OF ONLINE SHOP

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ABSTRACT

This study aims to analyze the influence of age, gender, education and income on consumer buying behavior of online shop. This study's data is primary data obtained through the questionnaire distributed to online store consumers in Manado City. Multiple linear regression analysis Regression analysis was used and showed that the age education and income the same positive influence on consumer buying behavior, while gender has the opposite impact. Testing hypotheses partially shows that the value of the variable t for age and education greater than t_{table} and gender and income has the opposite comparison. Simultaneous hypothesis testing, where the value of the variable F value for these variable is greater than F_{table} . which means that the four variables simultaneously affect the consumer buying behavior. The relationship model indicates that consumer buying behavior is influenced by age, gender, education and income while the rest percentage influenced by other excluded causes in this study. The result of analysis indicates that these variables to consumer buying behavior have a positive relationship.

Keywords: *consumer, buying behavior, demographic factors*

INTRODUCTION

Research Background

Nowadays online shops have spread so widely in over the world, even in Indonesia there are millions of online shops selling clothes, beauty care, car equipment, motorbikes equipment, books and many other things. Today Internet is not only a networking media, but also as transaction medium for consumers at global market in the world, and becomes dominant retailers in the future. The most necessary element of e-retail offers a direct interactive channel as well as no time definition, people and place. To shop on Internet becomes an alternative for consumers since it is more comfortable than conventional shopping which usually attributed with anxious, crowded, traffic jam, limited time, parking space and etc. Technological progress in the sphere of information and communication is encouraging the use and development of new shopping methods, leading to a rapid growth in non-store shopping as the individual can buy products/services without having to travel to retail outlets (Bigne et, al 2005)

The role of demographic segmentation is necessary to answer the demands and needs of the target market of the company's persuasive efforts to stimulate and influence the purchase decision process. Demographic segmentation consists of several parts of the market into groups on the basis of demographic variables such as: age, gender, family size, type of family, family life cycle, income, occupation, education, religion, race and nationality. In the business to consumer (B2C) e-commerce cycle activity, consumers use Internet for many reasons and purposes such as: Searching for product features, prices or reviews, selecting products and services through Internet, placing the order, making payments, or any other means which is then

followed by delivery of therequired products through Internet, or other means and last is sales service through Internet or other mean (Javadi et, al 2012).

The rapid advance of technology in Indonesia, online sales sector is highly developed and well-known. Even now, people sometimes prefer to buy online rather than to the store for reasons of convenience and attractive price comparisons. Strategies used at online stores are doing sales by promoting by providing product brochures, provide good service to the customer is served by a polite, listen to the customer and the customer is trying to fulfill desires in order to retain customers. Another way is by offering special discounts for members only, if they make a purchase that lot. Therefore, this research focuses on analyzing the influence of age, gender and education on consumer buying behavior of online shop and consumers in this study is that consumers living in Manado.

Research Objectives

There are five research objectives in this study, which are.

1. To analyze the influence of age on consumer buying behavior of online shop.
2. To analyze the influence of gender on consumer buying behavior of online shop.
3. To analyze the influence of education on consumer buying behavior of online shop.
4. To analyze the influence of income on consumer buying behavior of online shop.
5. To analyze the influence of age, gender, education and income simultaneously influential on consumer buying behavior of online shop.

THEORETICAL FRAMEWORK

Consumer Behavior

Consumer behavior is the study of the processes involved when an individual selects, purchases, uses or disposes of products, services, ideas, or experiences to satisfy needs and desires (Richa 2012 cited Solomon, 1998). In order for the Internet to expand as a retail channel, it is important to understand the consumer's attitude, intent and behavior in light of the online buying experience: i.e., why they use or hesitate to use it for purchasing? Consumer attitudes seem to have a significant influence on this decision (Schiffman et. al. 2003)

Consumer Buying Behavior

It is argued that in general consumer purchase decisions are going to buy the most preferred brand, but the actual act of purchase is not always the same as planned for sure. There is a barrier between the two factors of interest and purchase decisions (Tjiptono, 2001:54). The factors that influence consumers to make purchases can be divided into 2, which are: Rational and Emotional motives. Rational motive is motif based on the facts as shown by the private, facility supply, sales, and prices are motives into consideration in assessing consumer, factors besides the quality of service and availability of the goods, the limited time available to buyers consumers are also taken into consideration And Emotional motives is Motive judgment relating to people's feelings, this motif is based more on subjective considerations; this motif produces a feeling of luxury to the consumer such as status or something that makes the customer feel satisfied.

Demographic Segmentation

Segmentary demography is the study of individuals, groups, or organizations of the processes they use to select, secure use and dispose of products, sevice, ekperiens or ideas to satisfy need and the impacts tht these prosses have on the consumer and society. The segmentary demography behaviour is defined as the behaviour that consumer display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy thain needs (Lee and Johnson, 2004). It is stated that segmentation based on demographic segmentation that is essentially based on the map of population age , sex or gender, family size, stage in the life cycle through which the family (family life cycle), highest level of education achieved, occupation consumers , income level, religion, ethnicity (Kasali, 2000).

Relationships Among Variables

Age and Consumers Buying Behavior

Age, especially period the between 25years – 36years was found to have overpowering influence as revealed by consistent high percentage influences equivalence across the buying decision stages. This may probably be due to our tendencies to learn and adapt to ways of the society as we pass through our lifecycle stages, and particularly because of physical development, which affect the kind clothes we buy (Alooma and Lawan, 2013). Paterson (2007) states the age is a strong factor in determining consumer behavior, and research conducted by Ganesan et al., (2008) which mentions age affects consumer perception of every consumer.

Gender and Consumers Buying Behavior

The finding of be attributed to the reason that females are more impulsive buyers than males and are more likely to be attracted towards the promotional schemes offered by the online retailers and therefore buy more frequently through on-line shopping than do males (Richa, 2012). Wolin (2003) and Junaidi (2008) states there are differences in the influence of gender on perceptions of consumers and will further impact on the shopping behavior.

Education and Consumers Buying Behavior

Education had overbearing influence on consumer post purchase behaviour as well as information search. This may be attributed to the fact that highly educated people are generally seen as problem solvers and are likely to seek for information. This corroborate with series of empirical studies which revealed that persons with high education have greater contact with mass media (Alooma and Lawan 2013 cited Katz and Lazarsfeld 1955).

Income and Consumers Buying Behavior

It is stated that income may indirectly affect the intention to use a product and states a person's income is positively and significantly affect the intention to adopt a new product. Purchases will be very closely related to one's own money. Budget to shop showing the spending limit someone who is closely related to its income (Hyun et al., 2010 cited Wang et al., 2008).

Previous Research

Richa (2012) found that **Impact Of Demographic Factors Of Consumers On OnlineShopping Behaviour: A Study Of Consumers In India** On-line shopping is a recent phenomenon in the field of E-Business and is definitely going to be the future of shopping in the world. The results of study reveal that on-line shopping in India is significantly affected by various Demographic factors like age, gender, marital status, family size and income. The results of the study could be further used by the researchers and practitioners for conducting future studies in the similar area. Aloma and Lawan (2012) in their article: **Effects of Consumer Demographic Variables on Clothes Buying Behaviourin Borno State, Nigeria** investigated the study assessed consumer demographic variables influencing clothes buying behaviour in Borno state, Nigeria. The study recommended for marketing managers to adopt market segmentation strategy and segment their clothes markets on the bases of demographic variables since they were all found to have great degree of influences on clothes buying decisions.

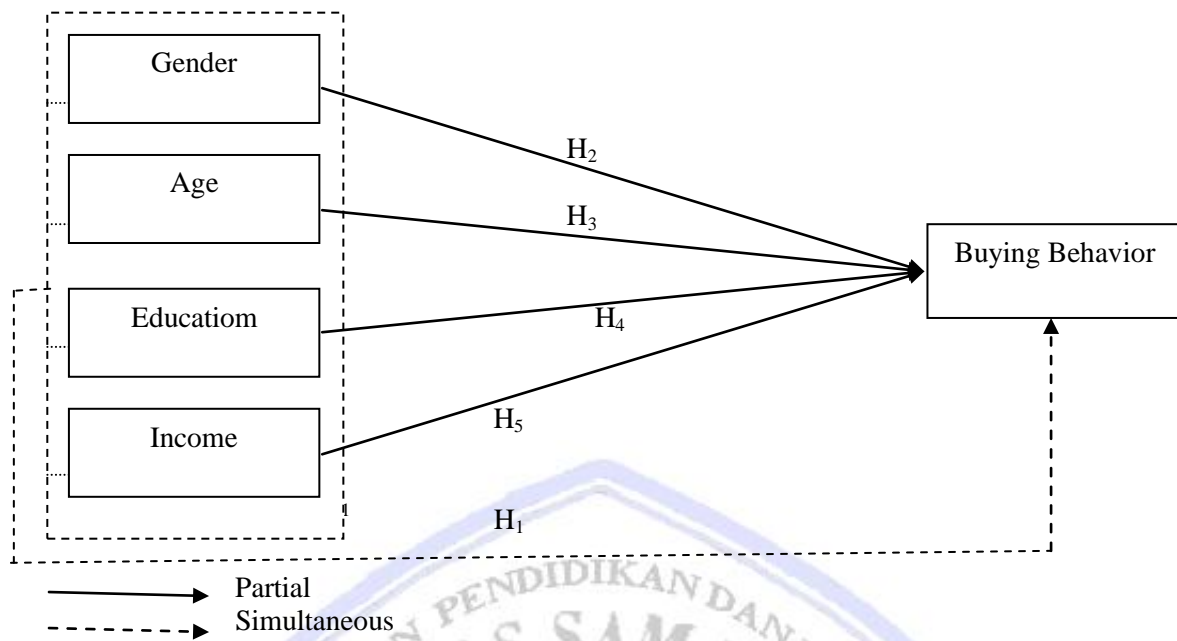


Figure 1. Conceptual Framework

Research Hypotheses

- H₁ : Age, Gender, Education and Income simultaneous influence on consumer buying behavior of online shop
 H₂ : Gender influence on consumer buying behavior of online shop
 H₃ : Age influence on consumer buying behavior of online shop
 H₄ : Education influence on consumer buying behavior of online shop
 H₅ : Income influence on consumer buying behavior of online shop

RESEARCH METHOD

Type of Research

This study is associative research. Sugiyono (2010:100) stated that an associative research study aimed to determine the effect of two or more variable.

Place and Time of Research

This study will be conducted in Manado especially in the environment of online shop consumers. The study was conducted in Manado between July to October 2013.

Population and Sample

Population is the entire group of people, events or things of interest that the researcher wishes to investigate. (Sekaran and Bougie 2009:263). The population in this research is the consumers of online who live in the city of Manado ± 7,956 people each year.

Data Collection Method

There are two types of data in this research, which are Primary Data and Secondary Data. Primary data refer to information obtained first-hand by the researcher on the variables of interest for the specific purpose of the study. Individual provide information when interviewed, administered questionnaires, or observed. Group depth interviews, or focus groups, are the other rich source of primary data (Sekaran and Bougie 2009;180). On the other hand, secondary data refer to the data gathered for some other purpose than the immediate study. Sometimes it is called desk research while the primary data are called field research (Hair et, al. 2010;50).

Operational Definition of Research Variables

Age is related to the age of the respondent level measurement scale used is data based on respondents' answers; Gender is related to the sex of the respondent; Education is related to the educational level successfully completed by the consumer; Income is all income is taken as the basis of considerations of consumers in planning, buying and using the product as needs; and Consumers buying behavior is related to the interests / needs and potential of the consumer's desire to buy products online. Measurement scale that is used for these variables is the Likert scale, which is based on the answers of responde,

Data Analysis Method

Validity and Reliability Test

Validity indicates the extent to which a measuring device (instrument) that shows what you want to measure. A concept is composed of several components or variabel. Oleh Therefore, if the validity of the test instrument invented a component that is not valid to say that the device is not inconsistent with other components to support a concept. Test reliability is an index that indicates whether a reliable measuring instrument/dependable, if a measuring instrument used to measure two times the same symptoms and the results of measurements obtained relatively consistent the measure is reliable. In other words, the results show consistency reliability measurement tools in measuring the same symptoms over and over again.

Multiple Regression Analysis Method

Multiple regression analysis is the appropriate technique to use when there are several independent variables that need to be examined for their influence on a dependent variable (Malhotra 2007), and the formula is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

Whereas:

- Y : Buying Behavior
- X₁ : Gender
- X₂ : Age
- X₃ : Education
- X₄ : Income

RESULT AND DISCUSSION

Result

Multiple Regression Analysis

To measure the effect of the relationship between the independent variable (X) on the dependent variable (Y), in this case measuring the strength of the relationship age, gender, education and income in consumer buying behavior at Manado can be seen by the following table.

Table 1.
Results of Multiple Linear Regression Analysis

Variable	Partially		
	B	t value	Sig.
(Constant)	0.091		
Age (X ₁)	0,383	4.230	0,000
Gender (X ₂)	-0,013	-0.264	0,792
Education (X ₃)	0,519	6.503	0,000
Income (X ₄)	0.054	1.203	0.232

Source: Data processed SPSS, 2013

Multiple regression equation in this study can be written as follows:

$$Y = 0.091 + 0.383X_1 - 0.013X_2 + 0.519X_3 + 0.054X_4 + e$$

Interpretation of the above equation is as follows :

- $\alpha = 0.091$, the value of this constant is shown if there is no X variables (age, gender, education and income), then the consumer buying behavior amounted to 0.091
- $\beta = +0.383$, the regression coefficients indicate that each variable age rose 1% then the variable will increase 38.3% of consumer buying behavior, assuming other variables remain or equal to zero.
- $\beta = -0.013$, the regression coefficients indicate that each variable gender, up 1% it will decrease consumer buying behavior variables worth 1.3% assuming other variables remain or equal to zero.
- $\beta = +0.519$, the regression coefficient incates that each variable education rose 1% then the variable will increase 51,9% of consumer buying behavior, assuming other variables remain or equal to zero.
- $\beta = +0.054$, the regression coefficients indicate that each variable income rose 1%, it will increase consumer buying behavior variables worth of 5.4% assuming other variables remain or equal to zero.

Hypothesis Testing

Partial test (t-test)

- Age (X1) has Significant value 0.000; which is lower than 0.05; and the calculation of t_{count} 2.434 and t_{table} is 1.98; which is $t_{\text{count}} > t_{\text{table}}$, and Education (X3) has Significant value 0.000; which is lower than 0.05; and the calculation of t_{count} 6.503 and t_{table} is 1.98; which is $t_{\text{count}} > t_{\text{table}}$. Based on the concluded result, it is found that Age (X1) and Education (X3) have partially influence for the influence of the Customer Purchase Behavior for Online Shopping in the Manado City.
- Gender (X2) has Significant value 0.792; which is greater than 0.05; and the calculation of t_{count} -0.264 and t_{table} is 1.98; which is $t_{\text{count}} < t_{\text{table}}$. Based on the concluded result, it is found that Gender (X2) has not partially influence for the influence of the Customer Purchase Behavior for Online Shopping in the Manado City.
- Income (X4) has Significant value 0.232; which is greater than 0.05; and the calculation of t_{count} 1.232 and t_{table} is 1.98; which is $t_{\text{count}} < t_{\text{table}}$. Based on the concluded result, it is found that Income (X4) has not partially influence for the influence of the Customer Purchase Behavior for Online Shopping in the Manado City.

Simultaneous Significant test (test - f)

Based on the results obtained by analysis of F count of 130.993 with a significance level of 0.000, much smaller than 0.05, therefore the regression model can be used to predict consumer buying behavior variables or in other words, the variables age, gender, education and income affect simultaneously to consumer buying behavior.

Coefficient of Correlation and Determination (r^2)

Rate R of 0.920 indicates that the correlation or relationship with the dependent variable independent variable that is strong enough for 92%, while the value of R Square or coefficient of determination is 0.847, this value indicates that 84.7% of variation or change in the dependent variable can be explained by variations or changes in variable dependent. While the remaining 15.3% is explained by reasons - reasons that are not included in the research model.

Discussion

In this research, the first finding has determined that Age, Gender, Education and Income have general impact for the increasing and the decreasing of the Customer Purchase Behavior for Online Shopping in the Manado City and it is related with the idea that these essential demographic factors can make people have interest to check products in the online stores and purchase the desired ones. The second finding from this research has concluded about the dominance from each important factor for the changing of the Customer Purchase Behavior for Online Shopping in the Manado City. Mainly, it is found that Education has the most dominant impact for the changing of the Customer Purchase Behavior for Online Shopping in the Manado City

and it is caused by the differentiation of the educational level will determine the preference for choosing products and/or services, especially from online store. Meanwhile, it is also stated that Age has the moderate influence for the increasing and/or the decreasing of the Customer Purchase Behavior for Online Shopping in the Manado City and it is based on the circumstance that some people in two or more different age groups can share the similar or the same model of preference. On the other hand, it is later discovered that Income have the least dominant impact for the changing of the Customer Purchase Behavior for Online Shopping in the Manado City and it is connected with the similarity of the average monthly income from the majority of people in the Manado City.

In the contrary, Gender only has the negative impact, regarding with the increasing and the decreasing of the Customer Purchase Behavior for Online Shopping in the Manado City and its reason is related with the idea that male and female customers in every marketplace, especially in this city have shared the same preference for products in the online store, expect for gender-based products in the online store. The third finding in this research has stated that Age and Education give the significant impact for the changing of the Customer Purchase Behavior for Online Shopping in the Manado City and Gender and Income only give the insignificant impact for the Customer Purchase Behavior for Online Shopping in the Manado City. Both statements are based on the notion that Age and Education influence the way of people to socialize and later affect the preference for products and/or services, especially products in the online store; and that Gender and Income perception from people in this can be similar or even same for products and service that are sold in the online store.

Richa (2012) found in his article Impact of Demographic Factors of Consumers on Online Shopping Behaviour: A Study of Consumers in India. On-line shopping is a recent phenomenon in the field of E-Business and is definitely going to be the future of shopping in the world. Most of the companies are running their on-line portals to sell their products/services on-line. Though online shopping is very common outside India, its growth in Indian Market, which is a large and strategic consumer market, is still not in line with the global market. The potential growth of on-line shopping has triggered the idea of conducting a study on on-line shopping in India. The present research paper has used Qualitative and Quantitative research methods to study the impact of Demographic factors of consumers on on-line shopping parameters like satisfaction with on-line shopping, future purchase intention, frequency of on-line shopping, numbers of items purchased, and overall spend on on-line shopping. The data was collected through Questionnaires on a sample of 580 respondents from Delhi, Mumbai, Chennai, Hyderabad and Bangalore. The results of study reveal that on-line shopping in India is significantly affected by various Demographic factors like age, gender, marital status, family size and income. The results of the study could be further used by the researchers and practitioners for conducting future studies in the similar area.

CONCLUSION AND RECOMMENDATION

Conclusion

The conclusion is as follow:

1. Age, Gender, Education and Income generally give the significant influence for the Customer Purchase Behavior for Online Shopping in the Manado City.
2. Age and Education have the significant influence for the changing of the significant influence for the Customer Purchase Behavior for Online Shopping in the Manado City, Income have the least influence for the changing of the significant influence for the Customer Purchase Behavior for Online Shopping in the Manado City and Gender has the negative influence for the changing of the significant influence for the Customer Purchase Behavior for Online Shopping in the Manado City.

Recommendation

The recommendation is as follow:

1. The company's management of online store in the Manado City must consider about the importance of Age, Gender, Education and Income for the changing of the Customer Purchase Behavior for Online Shopping in the Manado City and the same management must also consider about other factors that can impact the Customer Purchase Behavior for Online Shopping in the Manado City.
2. This research can be used for supporting or concluding further studies in the similar concepts, together along with several corrections.

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