

**THE EFFECT OF SOCIAL INFLUENCE AND PRODUCT ATTRIBUTES ON CUSTOMER PURCHASE INTENTION: A STUDY OF SECOND-HAND CLOTHES IN MANADO**

*EFEK DARI PENGARUH SOSIAL DAN ATRIBUT PRODUK TERHADAP MINAT BELI PELANGGAN: STUDI PAKAIAN BEKAS DI MANADO*

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**Abstract:** The purpose of this research is to analyze the effect of social influence and product attributes on customer purchase intention of second-hand clothes in Manado. The method used in this research is the quantitative method. This research used is purposive sampling method, and 105 samples were collected by using a questionnaire with a 5 Likert scale that was distributed via social media. The data collected are processed and analyzed using the multiple linear regression method. The result of this research shows that social influence ( $X_1$ ) and product attributes ( $X_2$ ) have a positive and significant effect towards purchase intention ( $Y$ ) both partially and simultaneously.

**Keywords:** social influence, product attributes, purchase intention

**Abstrak:** Tujuan dari penelitian ini adalah untuk menganalisis pengaruh pengaruh sosial dan atribut produk terhadap niat beli konsumen baju bekas di Manado. Metode yang digunakan dalam penelitian ini adalah metode kuantitatif. Penelitian ini menggunakan metode purposive sampling, dan pengambilan sampel sebanyak 105 orang dengan menggunakan kuesioner dengan skala 5 Likert yang disebarakan melalui media sosial. Data yang terkumpul diolah dan dianalisis menggunakan metode regresi linier berganda. Hasil penelitian menunjukkan bahwa pengaruh sosial ( $X_1$ ) dan atribut produk ( $X_2$ ) berpengaruh positif dan signifikan terhadap niat beli ( $Y$ ) baik secara parsial maupun simultan.

**Kata Kunci:** pengaruh sosial, atribut produk, niat beli

## INTRODUCTION

### Research Background

Everyone has their own taste in fashion. The purpose of clothing, which was initially only to cover, protect, and warm the body, over time how to dress or fashion has become something important. Clothing is not only a complement to the body when dressing; clothes can show a person's personality and lifestyle. The production of clothing by the company makes a large number of goods, at the same time the customer's taste for fashion is constantly changing and increasing consumption, resulting in a large number of second-hand clothes. This second-hand clothing eventually has its own market. Second-hand clothing is one of the targets for people to get branded or imported clothing, it is a target for consumers because it has a model that is not mainstream, the quality of the goods sold is still good, and it has a price that is not too expensive and even tends to be cheap for a branded item.

Many factors influence customers' purchase intention of used clothing besides price and quality, for example, social influence and product attributes. Social influence is an essential part of determining where to buy second-hand clothes and what clothes to buy. For example, if a second-hand clothing store has a good collection

of second-hand clothes, customers will prefer to go to the store and even influence others to shop there. Product attributes are what determine which clothes to buy. Customers can choose clothes with the color, style, quality, size, design, and brand according to their wishes. Also, clothes with unique models and can be said to be one of a kind can be obtained; this is because the source of used clothing does not come directly from the factory but from various previous owners.

### **Research Objective**

Based on the research background above, this research aims to analyze the effect of social influence and product attributes towards the customers purchase intention of second-hand clothes in Manado.

## **THEORETICAL FRAMEWORK**

### **Consumer Behavior**

Consumer buying behavior is a decision-making process related to what, when, why, and how someone buys a product or service, how they use it, their reaction to advertisements, prices, and another promotional tools. According to Kotler and Keller (2011), consumer buying behavior is the study of the ways of buying and disposing of goods, services, ideas, or experiences by individuals, groups, and organizations to satisfy their needs and wants. Solomon et al. (2006) describe consumer buying behavior as a process of choosing, purchasing, using, and disposing of products or services by individuals and groups to satisfy their needs and desires. Furthermore, according to Schiffman and Kanuk (2007), the behavior that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs". In common, all definitions focus on the act of someone in order to fulfil their needs and wants.

### **Customer Purchase Intention**

Purchase intention is the process of consumer behavior when they want, will, plan, or have a tendency to make a purchase. The surrounding environment can affect consumer purchase intention, and also, marketing stimuli can attract consumer purchase intention. According to Kotler and Keller (2011), a purchase intention is a form of consumer behavior who wants to buy or choose a product based on experience, use, and desire for a product. According to Ferdinand (2006), there are four indicator that can be used to measure the purchase intention variable in this research: transactional interest, referential interest, preferential interest, and explorative interest. The preferential intention means that the person has a primary preference for the product. Transactional interest, which is a person's tendency to purchase products. Explorative intention describes the behavior of a person who is looking for information about the desired product.

### **Social Influence**

Social influence is a process when a person's attitude, habits, and beliefs are influenced or changed by others' actions or presence. According to Rashotte (2007), social influence is about shifting feelings, attitudes, beliefs, and behavior, intentionally or unintentionally influenced by others. Stibe (2015) stated that the indicator used to measure the social influence variable in this research are: social learning, social comparison, social norms, and social recognition. Social learning is when people learn a new information from another without learning it themselves, the new information transferred from one person to another through teaching, spoken, imitation or by observing their behavior. Social comparison is when a person compares themselves with others, in this case his or her style with other people style. Social comparison influence motivations, as people search for self-improvement when comparing with the others. Social norms means that a person is following other people behaviors in order to be liked or accepted. Social recognition is the value that individuals gain from acceptance and approval from others.

### **Product Attributes**

Product attributes are elements of a product that describe the product's characteristic and make the product unique in a way. Product attributes are both tangible and intangible things. It includes size, color, material, flavor, packaging, design, quantity, quality, brand, safety and so on. Kotler and Armstrong (2012) defined product attributes as product components that ensure that the product can fit consumer needs. When making a purchase, customers will evaluate the product based on tangible product attributes such as color, size, material, package,

price, quantity, smell, weight, and feel. Customers will also evaluate intangible product attributes such as brand, quality, reliability, safety, insurance, and strength.

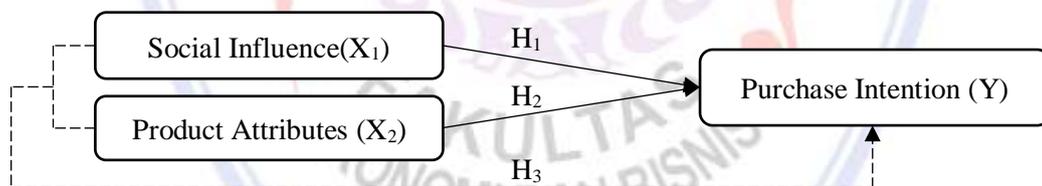
### Previous Research

Chen (2019) aimed to explore the relationship between social influence, product attributes, perceived price, brand trust and intention of Chinese people to purchase Thai rice. The survey questionnaire was used as an instrument for collecting the primary data. The sample size was 152 Chinese in Kunming City, China. The statistics of data analysis were reliability analysis, descriptive statistical analysis, and multiple regression analysis. The results were found that the majority of respondents were females with 20-30 years of age. They were private employees and earned an average monthly income CNY 3,001-5000. Most of them completed bachelor's degrees. Based on the findings, the social influence, product attributes and brand trust had influence while the perceived price had no influence on intention of Chinese people to purchase Thai rice.

Goenawan (2014) examined the effect of product attributes, brand name, product price, and social influence on purchase intention of Android smartphones in Surabaya. This study uses a quantitative approach using the Structural Equation Modeling (SEM) method with LISREL 8.7 software. The sample from this study was selected using non-probability sampling and convenience sampling techniques, the characteristics of the target population are men and women who live in Surabaya with a minimum education of high school, who purchased and used an Android smartphone in at least the last 3 months. The number of samples used in this study were 125 samples. The results of this study indicate that (1) product attributes have a significant positive effect on purchase intention of Android smartphones in Surabaya. (2) Brand name has a significant positive effect on purchase intention of Android smartphones in Surabaya. (3) Product price has no effect on purchase intention of Android smartphones in Surabaya. (4) Social influence has a significant positive effect on purchase intention of Android smartphones in Surabaya

Proboyo and Kusuma (2019) purposed to do a gap analysis between the perception and the expectation of intrinsic and extrinsic product attributes, sales promotion, and place. Prior to the gap analysis, 109 data is collected through online questionnaires and then analyzed using a multiple regression analysis to know the impact of intrinsic and extrinsic product attributes, price, place, advertising, and sales promotion on purchase intention. The result shows that intrinsic and extrinsic product attributes, sales promotion, and place influence purchase intention significantly, while price and advertising are not significant. From the gap analysis, the perceived performance of Product X on four significant elements is lower than the expectation.

### Conceptual Framework



**Figure 1. Conceptual Framework**

*Source: Literature Review*

### Research Hypothesis

H1: Social influence has a positive and significant effect on customer purchase intention.

H2: Product attributes has a positive and significant effect on customer purchase intention.

H3: Social influence and product attributes simultaneously has a positive and significant effect on customer purchase intention.

## RESEARCH METHOD

### Research Approach

This research uses a quantitative research method to analyze the influence of social influence and product attributes towards customer purchase intention. According to Creswell (2016), quantitative research is a method for testing certain theories by exploring the connection between several variables in research.

### **Population, Sample, and Sample Technique**

The population in this study are Manadonese who have intention to purchase second-hand clothes. According to the calculation on Leedy formula, the sample needed for this research are 96 respondents that means that the minimum sample needed for this research is 96 respondents who are Generation Z who live in Manado. To obtain the information from the selected respondent that has the criteria, purposive sampling technique was used.

### **Data Collection Method**

In quantitative research, a research questionnaire uses close-ended questions. This research uses a questionnaire to collect data and will be given by social media to the respondent that has been selected.

### **Operational Definition of Research Variable**

Social influence in this research defined as the process when a person's attitude, habits, and beliefs are influenced or changed by others' actions or presence. Product attributes in this research defined as are elements of a product that describe the product's characteristic and make the product unique in a way. Purchase intention is the process of consumer behavior when they want, will, plan, or have a tendency to make a purchase.

### **Data Analysis Method**

#### **Validity and Reliability Test**

Validity test in this research used Pearson Correlation. The item in the questionnaire counted as valid if  $r_{\text{count}} > r_{\text{table}}$ , otherwise, if  $r_{\text{count}} < r_{\text{table}}$ , it means the item is not valid. Based on the distribution of  $r_{\text{table}}$  values with a significance level of 10% and the number of respondents (N) 105, the  $r_{\text{table}}$  value can be obtained at 0.161. Cronbach's Alpha was used in this research to test the reliability of each variable, if Alpha is less than 0.6 then it is unreliable.

#### **Multiple Regression Analysis Model**

According to Nawari (2010), regression analysis is a simple method for investigating functional relationships among several variables. The relationship between these variables is manifested in a mathematical model. Multiple linear regression analysis will be used in this research because there are two independent and one dependent, which are social influence ( $X_1$ ), product attributes ( $X_2$ ), and purchase intention (Y).

## **RESULT AND DISCUSSION**

### **Result**

#### **Validity and Reliability Test**

The validity test in this study has been processed using the SPSS statistic 25. The items in this research's questionnaires are valid proven from the data result that shows the value of the Pearson Correlation from each variable are more than the value of the  $r_{\text{table}}$  and the significant level also below 10%. The reliability test also shows that the questionnaire that been used in this research is reliable based on the value of Cronbach's Alpha 0.667 which is more than 0.6.

#### **Classical Assumption Test**

##### **Normality Test**

Normality test is used to determine if the samples are drawn from normal distributed population, a good regression model is the one that has a residual value that is normally distributed. Kolmogorov-Smirnov method is used in this research normality test with significant level  $>0.1$ , which means the residual value is normally distributed.

According to the data on Table 1, it shows that the significant value which is Asymp. Sig. (2-tailed) is 0.200 which is more than 0.1, this means that the data are normally distributed.

**Table 1. Normality Test**

		Unstandardized Residual
N		105
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.22602463
Most Extreme Differences	Absolute	.072
	Positive	.057
	Negative	-.072
Test Statistic		.072
<b>Asymp. Sig. (2-tailed)</b>		<b>.200<sup>c, d</sup></b>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance

Source: SPSS Data Proceed, 2022

### Multicollinearity Test

The purpose of multicollinearity test is to find out if there is an intercorrelation between the independent variables. Tolerance and VIF (Variance Inflation Factors) method will be used in this research. There is no multicollinearity or intercorrelation between the independent variables if the tolerance value more than 0,10 and VIF value less than 10,00.

**Table 2. Multicollinearity Test**

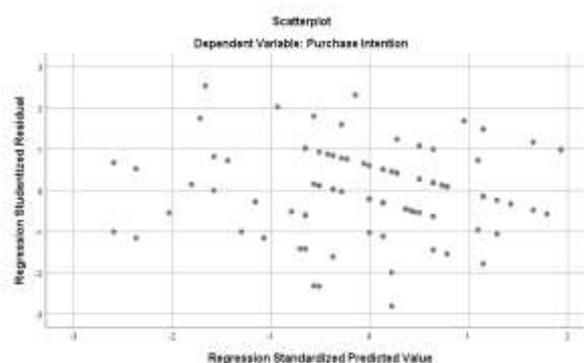
Variable	Collinearity Statistics				Status
	Tolerance		VIF		
	Result	Value	Result	Value	
Social Influence	.813	>0.10	1.230	<10.00	No Multicollinearity
Product Attributes	.813	>0.10	1.230	<10.00	No Multicollinearity

Source: SPSS Data Proceed, 2022

Based on the data shown above, the tolerance value of Social Influence ( $X_1$ ) and Product Attributes ( $X_2$ ) variable is 0.813 which is more than 0.10, and the VIF value of Social Influence and Product Attributes is 1.230 which is less than 10.00. It means that there is no multicollinearity or intercorrelation between both of the independent variables.

### Heteroscedasticity Test

Heteroscedasticity symptoms or problems occurrence will lead to doubts or inaccuracies in a regression analysis result. A good regression model is the one with no symptoms of heteroscedasticity. The absence of heteroscedasticity symptoms can be observed using scatterplot pattern.

**Figure 2. Heteroscedasticity Test**

Source: SPSS Data Proceed, 2022

**Multiple Linear Regression Analysis**

The purpose of doing multiple linear regression analysis is to measure the influence of the independent variables Social Influence ( $X_1$ ), Product Attributes ( $X_2$ ), on the dependent variable Purchase Intention ( $Y$ ).

**Table 3. Multiple Linear Regression Analysis**

Model		Coefficients <sup>a</sup>			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	6.472	1.666		.507	.613
	Social Influence	.112	.061	.169	4.642	.000
	Product Attributes	.404	.083	.451	11.851	.000

a. Dependent Variable: Purchase Intention

Source: SPSS Data Proceed, 2022

The result in the Table 3 can be shown through the regression equation as follows:

$$Y = 6.472 + 0.112X_1 + 0.404X_2 + e$$

The data above shows the result of Multiple Linear Regression Analysis, the effect of Social Influence ( $X_1$ ), Product Attributes ( $X_2$ ) on Purchase Intention ( $Y$ ). The unstandardized beta coefficient value will be explained below.

- The constant value is 6.472 that means all the independent variables are equal to zero.
- Regression coefficient of Social Influence ( $X_1$ ) is 0.112 means that if there is one unit increase in Social Influence ( $X_1$ ), then the Purchase Intention ( $Y$ ) is increasing by 0.112 assuming the other variables are constant (*ceteris paribus*).
- Regression coefficient of Product Attributes ( $X_2$ ) is 0.404 means that if there is one unit increase in Product Attributes ( $X_2$ ), then the Purchase Intention ( $Y$ ) is increasing by 0.404 assuming the other variables are constant (*ceteris paribus*).

**Table 4. Multiple Correlation Coefficient and Coefficient of Determination Test**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.545 <sup>a</sup>	.298	.284	1.238

a. Predictors: (Constant), Product Attributes, Social Influence

Source: SPSS Data Proceed, 2022

Based on Table 4 above, the coefficient of correlation (R) value is .545. It means the correlation relationship between the dependent variable, Purchase Intention ( $Y$ ), with the independent variables, Social Influence ( $X_1$ ) and Product Attributes ( $X_2$ ) is .545. If the correlation coefficient value tends to be close to 1, it means there is a tight relationship between the dependent variable and independent variables.

To measure the ability of a model in explaining the variation of the dependent variable will be used the coefficient of determination ( $R^2$ ). The value of  $R^2$  is .298, means the 29.8% variation of Purchase Intention ( $Y$ ) as dependent variable is explained by the independent variables, Social Influence ( $X_1$ ) and Product Attributes ( $x_2$ ). The rest 70.2% is influenced by other variable that is not explained in this research.

The value of adjusted R square is .284 means 28.4% variation of dependent variable can be explained by two independents variable that are used in this research, the rest 71.6% is explained by another factors that is not explained in this research.

**Hypothesis Testing****Table 5. T-test**

Variable	Tcount	Ttable	Sig.	Status
Social Influence ( $X_1$ )	1.836	1.659	.069	Accepted
Product Attributes ( $X_2$ )	4.897	1.659	.000	Accepted

Source: SPSS Data Proceed, 2022

Based on the table, the Social Influence ( $X_1$ )  $t_{count}$  value is 1.983 which is more than 1.659 and the significant level is 0.069 which is less than 0.1. This indicates that Social Influence ( $X_1$ ) have a positive and significant effect on Purchase Intention (Y) partially. It means the first hypothesis (H1) is accepted.

The Product Attributes ( $X_2$ )  $t_{count}$  value is 4.897 which is more than 1.986 and the significant level is 0.000 which is less than 0.1. This indicates that Product Attributes ( $X_2$ ) have a positive and significant effect on Purchase Intention (Y) partially. So, the second hypothesis (H2) is accepted.

**Table 6. F-test**

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.207	2	33.104	21.599	.000 <sup>b</sup>
	Residual	156.326	102	1.533		
	Total	222.533	104			

a. Dependent Variable: Purchase Intention

b. Predictors: (Constant), Product Attributes, Social Influence

Source: SPSS Data Proceed, 2022

Based on the table, the value of  $f_{count}$  is 21.599 and the significance level is 0.000. The value of  $f_{table}$  is 3.08 it means  $f_{count}$  is more than  $f_{table}$ , and the significance level is 0.000 which is less than 0.1. The result shows that Purchase Intention (Y) as dependent variable are affected by Social Influence ( $X_1$ ) and Product Attributes ( $X_2$ ) as independent variables. This indicates that the third hypothesis (H3) is Accepted.

## Discussion

### Social Influence on Purchase Intention

Based on the data result, it shows that social influence variable has an effect to purchase intention. The t-test result shows that the first hypothesis is accepted. Social influence is the effect on individual based on others behaviour. Family, friends, co-workers or social media and individuals or groups can alter a person thought, behaviours and action. The social influence factor that customers consider when purchasing second-hand clothing, it includes social learning, social comparison, social norms, social recognition. The first hypothesis is accepted, it indicates that people in Manado learn about the second-hand clothing trend from others they have an intention to purchase the clothing according to the on-going trend. The post-purchase behaviour of people in Manado are they like to be recognize and like to compare themselves with others, this resulting in them purchasing more clothes to be better than the other. This study is supported by the previous research that social influence had influence on intention of Chinese people to purchase Thai rice (Chen, 2019; Goenawan, 2014).

### Product Attributes on Purchase Intention

Based on the data result, it shows that product attributes variable has an effect towards customer's purchase intention on second-hand clothing partially. The t-test result shows that the first hypothesis is accepted. Product attributes is an element of a product that could act as the base of customers purchase intention. The level of customer satisfaction of a product lies in the attributes of the product. If customers are satisfied, they will show an interest in the product and tend to make repeat purchases. Product attributes can place a brand's position in the market which can be weak or strong based on the product. Product attributes in this research discuss about the factors that customers consider when purchasing second-hand clothing, it includes product quality, product features, product design, price, and value of the product. With the acceptance of the second hypothesis, it indicates that the better the quality, the more diverse the features, designs, prices, and values of a product, the greater the customers purchase intention towards second-hand clothing. This result is supported by the previous study of Goenawan (2014) that product attributes have a significant positive effect on purchase intention of Android smartphones.

### Social Influence and Product Attributes on Purchase Intention

Based on the f-test result shown in the Table 6, the value of  $f_{count}$  is 21.599 which is greater than the value of  $f_{table}$  3.08. The significant level is 0.000 which is less than  $\alpha$  used (0.1). This shows that social influence and product attributes as the independent variables, has significant and positive effect on purchase intention as the dependent variable simultaneously, meaning the third hypothesis is accepted. According to the researcher, the reason social influence and product attributes simultaneously gives significant impact on customers purchase

intention toward second-hand clothing might be because when the customers are learning or finding out about the second-hand clothing trend, they are gaining the information about the value, quality, and the feature they can acquire when purchasing the product. This also applies when customers see other people's clothing styles, they tend to pay attention to the design of that person's clothing, which can lead to the customers desire to purchase clothes with the same style. This result is supported by the previous result of Chen (2019) that social influence and product attributes influence on intention of Chinese people to purchase Thai rice.

## CONCLUSION AND RECOMMENDATION

### Conclusion

After doing research and processing the data that has been collected with the aim to know about the effect of social influence and product attributes towards customer purchase intention on second-hand clothes in Manado, researcher can draw conclusion as follows:

1. Social influence does not have a positive and significant effect on Purchase Intention towards customer purchase intention on second-hand clothes in Manado.
2. Product attributes have a positive and significant effect on Purchase Intention towards customer purchase intention on second-hand clothes in Manado.
3. Both social influence and product attributes simultaneously have a positive and significant effect on customer purchase intention on second-hand clothes in Manado.

### Recommendation

Based on the results, the followings are some suggestions for marketers and academic purposes that can be given by the researcher:

1. Marketers need to provide more information so that people know more about second-hand clothing trends, which can lead to customer purchase intentions.
2. Product quality must be maintained in order to gain customer trust in second-hand clothing.
3. Future researcher may use other variables to explore more factors that can influence customer purchase intention towards second-hand clothing.
4. This research could be used as references for future study or for developing new idea that can be implemented in customer's behavior study.

## REFERENCES

- Chen, L. (2019). The Relationship between Social Influences, Product Attributes, Perceived Price, Brand Trust and Intention of Chinese People to Purchase Thai Rice. *Master Thesis*. Bangkok University. Available at: <http://dspace.bu.ac.th/handle/123456789/3782>. Retrieved on: February 20, 2022
- Creswell, J. W. (2016). *Research Design, Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*. 4th Edition. Yogyakarta: Pustaka Belajar
- Goenawan, K. (2014). Pengaruh Product Attributes, Brand Name, Product Price, dan Social Influence Terhadap Purchase Intention Android Smartphone di Surabaya. *CALYPTRA: Jurnal Ilmiah Mahasiswa Universitas Surabaya/ Bidang Manajemen (M)*, Vol. 3, No. 1. <https://journal.ubaya.ac.id/index.php/jimus/article/view/1521>. Retrieved on: March 12, 2022
- Ferdinand, A. (2006). *Metode Penelitian Manajemen: Pedoman Penelitian untuk Skripsi, Tesis dan Disertai Ilmu Manajemen*. Semarang: Universitas Diponegoro
- Kotler, P., & Armstrong, G. (2012). *Principles of Marketing*. Edisi 14. USA: Prentice-Hall Pearson
- Nawari. (2010). *Analisis Regresi dengan MS Excel 2007 dan SPSS 17*. Jakarta: PT. Alex Media Komputindo

Proboyo, A., & Kusuma, B. I. (2019). *The Impact of Product Attributes, Price, Place, Advertising, and Sales Promotion: A Case of Kids Shampoo in Indonesia*. *Petra International Journal of Business Studies (IJBS)*, VoL. 2, No. 2, 59-70. Available at: <https://ijbs.petra.ac.id/index.php/ijbs/article/view/58>. Retrieved on: May 23, 2022

Rashotte, L. (2007). *Social Influence*. In *The Blackwell Encyclopedia of Sociology*. Wiley Online Library

Schiffman, L., & Kanuk, L. L. (2007). *Consumer Behaviour. 9th Edition*. Upper Saddle River: Prentice-Hall

Solomon, M., Bamossy, G., Askegaard, S., & Hogg, M. K. (2006). *Consumer Behavior: A European Perspective. Third Edition*. Pearson Education Limited

Stibe, A. (2015). Towards a Framework for Socially Influencing Systems: Meta-Analysis of Four PLS-SEM Based Studies.” *Lecture Notes in Computer Science*, 172–183. Massachusetts Institute of Technology Open Access Articles. Available at: [https://dspace.mit.edu/bitstream/handle/1721.1/108333/Stibe\\_2015a\\_SIS.pdf?sequence=2&isAllowed=y](https://dspace.mit.edu/bitstream/handle/1721.1/108333/Stibe_2015a_SIS.pdf?sequence=2&isAllowed=y). Retrieved on: January 11, 2022

