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Consumer Satisfaction When Shopping Online On Students

Laura Nethania Sidabutar, Mutia Rasyida, Widi Sri Astuti S Pakpahan

202110515225@mhs.ubharajaya.ac.id

Fakultas Psikologi Universitas Bhayangkara Jakarta Raya

Abstract

This research aims to evaluate the level of student consumer satisfaction when shopping online using the discrimination power method *and confirmatory factor analysis* (CFA). A total of 10 items were prepared to measure consumer satisfaction in the context of e-commerce. The results of the discrimination power analysis show that two of the ten items tested have discrimination power that is appropriate to the phenomenon studied, so that they can be used to measure consumer satisfaction effectively. Next, CFA is used to test the validity and reliability of the constructs of these items. It is hoped that the findings of this research will provide deeper insight into the factors that influence student consumer satisfaction in online shopping and can be the basis for developing more effective marketing strategies in e-commerce.

Keywords: *Consumer Satisfaction, Online Shopping, Students.*

Introduction

Online shopping is a shopping activity carried out via the internet. This activity involves purchasing products or services from online stores or e-commerce platforms (Harahap, 2018). In online buying and selling activities, sellers and buyers do not meet directly, as is the case with the normal sales process that occurs in markets, for example. However, the buying and selling process is carried out by ordering the desired goods and services through vendors, manufacturers or resellers using the internet. Next, make payments by transferring via bank, e-bank, or COD (Cash on Delivery). The behavior of each consumer in deciding to buy a product is a special study for each online seller

before selling their product to achieve consumer satisfaction. Measuring consumer satisfaction can be diukur dengan skala *Customer Satisfaction Index* (CSI). The Customer Satisfaction Index (CSI) method is an indicator for determining the overall level of user satisfaction with an approach that takes into account the importance of the attributes being measured (Syukri, 2014). This method has several advantages, including efficiency (not only a satisfaction index but also obtaining information related to dimensions or attributes that need to be improved), easy to use and simple and uses a scale that has quite high sensitivity and reliability.

In this era of increasingly fierce competition, one way to get loyal consumers is to satisfy consumer needs consistently from time to time (Erna Ferrinadewi, 2005). There are many ways that companies can use to satisfy consumer needs. Often companies compete to provide products at low prices with the assumption that consumers only consider price in purchasing decisions. This assumption is not entirely correct. Consumers who are satisfied with what they buy in e-commerce tend to repurchase the product. so that achieving consumer satisfaction is also a measure of a company's success which has an impact on sales levels.

Problematizing consumer satisfaction scales is a critical process for understanding and evaluating the extent to which the scales truly accurately reflect customer satisfaction levels. In the end, UX and UI have a very important role in managing customer satisfaction, especially with an application. The two cannot be separated (Wiwesa, 2021).

The purpose of studying the satisfaction scale instrument is to gain a better understanding of a person's level of satisfaction with evaluating the performance of a particular product, service or experience, thereby helping companies

understand the needs and preferences of their consumers better, as well as improving business performance. and relationships with customers (Syukri, 2014).

Literature Review

Consumer Satisfaction

Satisfaction is an assessment of the characteristics or features of a product or service, or the product itself, which provides a level of consumer pleasure related to fulfilling consumer consumption needs. Service Quality, Product Quality and Price have a significant influence on Consumer Satisfaction, meaning that there is a simultaneous influence of Service Quality, Product Quality and Price on Consumer Satisfaction (Asti & Ayuningtyas, 2020).

Consumer satisfaction is a person's feeling when they get something they want (Hafsyah, 2020). Satisfaction in this case is the level of satisfaction that internet facility users have in carrying out online transactions. Consumer satisfaction with e-commerce is the most important factor for the survival of an online shop. If someone who shops on an online site feels satisfied then it can be said that the online shop is successful and can get customers who are loyal to the online site.

According to (Zulkarnaen & Nurbaeti, 2018), consumer satisfaction is the level of feeling happy or disappointed after comparing the service or product received and what was expected. Therefore, companies must provide satisfaction to consumers in accordance with consumer expectations and desires, both in terms of service, product benefits and price.

Based on the definition above, it can be concluded that consumer satisfaction is the level of feeling or disappointment after comparing the service or product received and what was expected.

Aspects of Consumer Satisfaction

According to Oliver (in Embi & Widyasari, 2013) there are five aspects of consumer satisfaction that need to be considered, namely:

a. Reliability: this aspect includes the service provider's ability to provide consistent and accurate services.
b. Responsiveness, this aspect includes the service provider's ability to respond to consumer needs quickly and effectively.
c. Guarantee: this aspect includes the service provider's ability to provide guarantees that the services provided meet the standards expected by consumers.
d. Empathy: this aspect includes the service provider's ability to understand consumer needs and perspectives.
e. Physical appearance: this aspect includes the physical appearance and condition of the service environment, including location, visual appearance, and cleanliness.

Research Methods

This research data was collected using the questionnaire method. A questionnaire is a technique in the form of a structured list of questions or statements that are asked to people or what are called respondents (Ningsih et al., 2021). Questionnaires given online to students who shop online are presented as samples in this study with the aim of gathering information about students' self-satisfaction when shopping online.

The variable that will be measured in this research is the consumer satisfaction scale among students. The scale method used is the Likert scale. According to Sugiyono (2007) the Likert scale is a scale used to measure the behavior, attitudes, opinions and perceptions of a person or group of people about social phenomena. Each item is provided with 4 categories of answer choices, namely SS (Strongly Agree), S (Agree), Neutral (N), TS (Disagree), STS

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(Strongly Disagree). Respondents are asked to choose one of the available alternative answers. The favorable score is SS (Strongly Agree) with a value of 5, S (Agree) with a value of 4, Neutral (3), TS (Disagree) with a value of 2, and STS (Strongly Disagree) with a value of 1.

Table 1. Blue Print of Consumer Satisfaction Scale

Dimension	*Indicator*	*Aitem*
Reliability	1. Timeliness	1. 1. I am satisfied that the goods I bought arrived faster than expected 2. 2. I am satisfied with Shopee's performance because the items I buy rarely experience delays delivery
Responsiveness	1. Ease of Contact 2. Willingness	3. I am satisfied with the seller's responsive performance when asking questions 4. I am satisfied with Shopee's performance because its

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		Customer Service is ready when I am need
Guarantee	1. Courtesy	5. Customer Service provides service politely and politely when I ask questions 6. The seller provided polite and courteous service to me ask
Empathy	1. Understand 2. Concern	7. Seller always tries to understand my wants and needs 8. Seller cares and is alert provide a solution to my complaint
Physical Evidence	1. Suitability	9. The goods I purchased correspond to the information the seller provided 10. The goods I

		bought the second time were of the same quality as when I bought them
		11. first time
Total		10

Results and Discussion

Based on the calculation results of the validity test of the consumer satisfaction variable with 10 statement items which were filled in by 117 respondents, they are as follows :

Figure 1. Validity

Pearson's Correlations ▼

Variable		X10	X9	X8	X7	X6	X5	X4	X3	X2	X1	Total
1. X10	Pearson's r	—										
	p-value	—										
2. X9	Pearson's r	0.449***	—									
	p-value	< .001	—									
3. X8	Pearson's r	0.233*	0.251**	—								
	p-value	0.012	0.006	—								
4. X7	Pearson's r	0.163	0.256**	0.584***	—							
	p-value	0.080	0.005	< .001	—							
5. X6	Pearson's r	0.415***	0.305***	0.509***	0.457***	—						
	p-value	< .001	< .001	< .001	< .001	—						
6. X5	Pearson's r	0.183*	0.341***	0.340***	0.363***	0.481***	—					
	p-value	0.048	< .001	< .001	< .001	< .001	—					
7. X4	Pearson's r	0.102	0.106	0.380***	0.255**	0.354***	0.472***	—				
	p-value	0.273	0.256	< .001	0.005	< .001	< .001	—				
8. X3	Pearson's r	0.144	0.191*	0.258**	0.239**	0.340***	0.233*	0.460***	—			
	p-value	0.120	0.039	0.005	0.009	< .001	0.011	< .001	—			
9. X2	Pearson's r	0.300**	0.449***	0.215*	0.206*	0.383***	0.331***	0.299**	0.456***	—		
	p-value	0.001	< .001	0.020	0.026	< .001	< .001	0.001	< .001	—		
10. X1	Pearson's r	0.468***	0.361***	0.208*	0.316***	0.275**	0.256**	0.115	0.289**	0.437***	—	
	p-value	< .001	< .001	0.024	< .001	0.003	0.005	0.217	0.002	< .001	—	
11. Total	Pearson's r	0.562***	0.604***	0.645***	0.613***	0.714***	0.625***	0.569***	0.592***	0.668***	0.606***	—
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	—

* p < .05, ** p < .01, *** p < .001

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Based on the table above, it can be seen that all statements for the consumer satisfaction variable have valid status, because the p-value shows <.001 where an item can be said to be valid if the significance value is < 0.05.

Table 2. Reliability

Frequentist Individual Item

Reliability Statistics

Item	If item dropped Cronbach's α
X1	0.804
X2	0.796
X3	0.806
X4	0.808
X5	0.800
X6	0.791
X7	0.802
X8	0.800
X9	0.804
X10	0.810

Points estimated

Cronbach's α = 0.818

Based on the results of testing consumer satisfaction measuring instruments, the point estimate for Cronbach's alpha was 0.818. If the Cronbach's alpha value is > 0.6, it can be said that the measuring instrument is reliable. Therefore, it can be concluded that this consumer satisfaction measuring instrument has a good reliability index.

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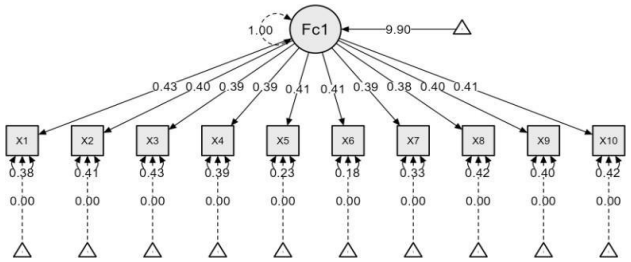
Figure 3. Confirmatory Factor Analysis



The image above shows a measurement model that uses the Confirmatory Factor Analysis (CFA) technique. In this model, there is one latent factor (Fc1) which is measured by ten items (X1 to X10). All items (X1 to X10) have a positive factor coefficient with the latent factor Fc1, as the value of the factor coefficient ranges from 0.38 to 0.43.

Table 3. RMSEA

Other fit measures

Metric	Value
Root mean square error of approximation (RMSEA)	0.128
RMSEA 90% CI lower bound	0.103
RMSEA 90% CI upper bound	0.154
RMSEA p-value	1.676×10^{-6}
Standardized root mean square residual (SRMR)	0.099
Hoelter's critical N (α = .05)	56.057
Hoelter's critical N (α = .01)	63.547
Goodness of fit index (GFI)	0.988
McDonald fit index (MFI)	0.697

Expected cross validation index (ECVI)	1.457

0.05<RMSEA<0,08 (Acceptable), 0,05<SRMR (Fit), 0,95<GFI<1,00 (Fit)

The table above shows that the RMSEA is at a value of 0.103, which indicates that there is rejection of the measurement model parameters created by the researchers, because the RMSEA value cannot exceed 0.08.

The table above shows that the SRMR value is 0.099, which indicates that this value is higher than the standard SRMR value, namely 0.05.

The table above shows that the GFI value is 0.988, which indicates that there is rejection of the minimum and maximum values.

In this research, we explore the results of evaluating the level of student consumer satisfaction in the context of online shopping, with a focus on using discriminative power methods and confirmatory factor analysis (CFA). The results of the analysis show that the consumer satisfaction measuring instrument used has quite good validity and reliability, but still requires some significant improvements. All statement items were declared valid with a P value <0.001, and a Cronbach's alpha value of 0.818 indicating strong internal consistency (Hair, J. F., Black, W. C,. Babin, B. J., & Anderson, 2010). However, there are no items that meet the uniqueness requirements with a value > 0.6, which indicates the lack of ability of these items to specifically measure different aspects of consumer satisfaction (Tabachnick, B. G., & Fidell, 2007). This could be caused by redundancy or overlap between items, so it is necessary to revise several statements to increase variability and specificity of measurements. In addition, the Confirmatory Factor Analysis (CFA) analysis showed several problems in the suitability of the measurement model. Although the latent factor coefficients are in the positive range of 0.38 to 0.43, fit indices such as

RMSEA are 0.103 and SRMR are 0.099 exceed accepted limits (Kline, 2011). The GFI value of 0.988 also indicates an assessment of the maximum value expected in the measurement model, indicating that the current model does not fully match the empirical data. Therefore, it is necessary to review and modify the model structure as well as develop new items that are more specific and varied to measure various aspects of consumer satisfaction more accurately (Byrne, 2012). This effort is expected to increase the validity and reliability of measuring instruments so that they are better able to describe consumer satisfaction comprehensively.

Conclusion

Based on the analysis, this consumer satisfaction measuring tool shows strong validity with all valid variable statements because the p-value is <0.001, and has good reliability with a Cronbach's alpha value of 0.818, higher than the minimum threshold of 0.6. However, of the 10 statement items, none met the uniqueness requirements, because all had a value <0.6. Principal Component Analysis (PCA) shows that item 2 and item 8 are correlated with the online shopping phenomenon, indicating relevance in the research context. In Confirmatory Factor Analysis (CFA), the measurement model shows one latent factor (Fc1) which is measured by ten items with positive factor coefficients ranging from 0.38 to 0.43. However, the analysis results also show that the RMSEA value of 0.103 and SRMR of 0.099 indicates that the measurement model does not comply with the established standards, because the RMSEA value exceeds the maximum limit of 0.08 and the SRMR value is higher than the standard of 0.05. Apart from that, the GFI value of 0.988 indicates a rejection of the minimum and maximum values expected in the measurement model.

Overall, although this measuring tool has good reliability and several items are relevant to the phenomenon under study, several statement items do not meet the uniqueness requirements, and several model fit indices indicate

that the measurement model needs to be improved to achieve a better fit. This shows the need for further revision and development to ensure that this consumer satisfaction measuring tool is more valid and reliable in measuring consumer satisfaction in the future.

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