Consumer Behavior Of E-Commerce Users Of Udayana University Students

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Abstract.*Consumptive behavior is the behavior of buying goods that are less necessary to fulfill personal satisfaction so that someone no longer distinguishes between needs and wants. The offers presented by e-commerce can be a risk for Udayana University students because they see it as an opportunity to tend to buy goods that may not be essential. When viewed physically, women tend to have more needs than men. So consumptive behavior must be accompanied by an understanding of the knowledge of managing money well. Financial literacy is very useful for students to avoid consumptive behavior. This study aims to see the effect of the use of e-commerce and financial literacy on the consumptive behavior of Udayana University students. The number of samples used in this study was 400 samples. The analysis techniques used were descriptive analysis techniques and Partial Least Squares (PLS) analysis. The results of this study indicate that the use of e-commerce has a positive and significant effect on the consumptive behavior of Udayana University students. This means that there is a unidirectional relationship between the variable of e-commerce use and the variable of consumptive behavior. Meanwhile, financial literacy has a negative effect on the consumptive behavior of Udayana University students. This means that there is a non-unidirectional relationship between the literacy variable and the consumer behavior variable.*

Keywords: E-commerce Usage, Financial Literacy, Consumptive Behavior

1. INTRODUCTION

The current industrial revolution has entered the 5.0 era or known as the digital era. In this era, society experiences behavioral changes and tends to follow technological developments that focus on fulfilling human needs. This is what underlies the innovation known as Society 5.0. In the digital era, the needs of all levels of society are focused on human-centered needs and supported by technology (technology-based) (Mumtaha and Khoiri, 2019). The digital era is a space where people are increasingly accustomed to artificial intelligence. This artificial intelligence is applied to millions of data on the Internet (Internet of Things)(Mumtaha & Khoiri, 2019). The information then becomes a new source of information that increases the ability of society to create opportunities for humanity, including economic flows. Changes in global economic flows can affect people's behavior in everyday life.(Dheku and Goa, 2023).

The development in the industrial revolution, has seen rapid growth in online retail through communication technology. The rapid development in communication technology has had a significant impact on the lives of people who use it, including in buying and selling

activities on online sites. The ease of service and facilities offered by the online market makes someone consume products based on their desires and beyond their needs.(Septiansari and Handayani, 2021).

Consumption activities are activities of spending income on various goods and services to meet human needs. Human needs that are very important in consumption activities are basic needs or basic needs. When a person's income increases, that person tends to spend to meet non-food needs. If humans prioritize desires over needs in consuming, it will encourage consumptive behavior.(Mubarokah and Pratiwi, 2022).

Consumptive is the behavior of buying goods that are not needed to fulfill personal satisfaction so that a person no longer distinguishes between needs and desires. According to Sumartono in(Dikria and Wintarti, 2016), buying a product that is not considered rationally can be said to be consumer behavior. This consumer behavior can be seen from the increasing tendency of people to shop. The decision to consume or shop is also inseparable from the amount of income a person has.(Rozaini and Sihotang, 2020). A consumer is even willing to spend a large amount of money to be able to have the goods he wants.(Dewi et al., 2017)

One of the factors that is thought to influence consumer behavior is the existence of e-commerce services. The COVID-19 pandemic has indirectly changed consumers to use the internet to make purchases (Bhatti et al., 2020). According toThe Last Supper (2020), e-commerce is the activity of selling or buying products through electronic systems such as computers or mobile phones with an internet network as a connection. E-commerce is an application that supports all buying and selling activities online or through electronic media.(Mittal, 2013). E-commerce can be in the form of online shopping applications, online services, mobile banking, and online tickets.(Niranjanamurthy et al., 2013).

Table 1. Ten Countries with the Percentage of Internet Users Highest Frequent Online Shoppers (January 2024)

No.	Country Name	Mark (%)
1.	Thailand	66.9
2.	South Korea	65.8
3.	Türkiye	64.7
4.	United Arab Emirates	64.3
5.	Mexico	62.1
6.	Malaysia	61.9
7.	China	61.1
8.	English	60.9
9.	India	59.3
10.	Indonesia	59.3

Source: Databoks, 2024

According to the latest Databoks report, in January 2024 there were around 56.1% of global internet users who regularly shopped online every week. The proportion of internet users who frequently shop online, when broken down by country, was highest in Thailand, at 66.9 percent. In second place was South Korea, with 65.8 percent of its internet users shopping online at least once a week. Next were Turkey, the United Arab Emirates, Mexico, Malaysia, China, and the United Kingdom, with proportions as shown in the Table. Indonesia was ranked 10th in the table, with a proportion of internet users who shop online every week of 59.3 percent, equivalent to India (Databoks, 2024). Databoks also noted that globally, women who frequently shop online are more than men. The majority of women who regularly shop online every week are from the 35-44 year age group (62.3 percent) and 25-34 year age group (61.5 percent) (Databoks, 2024).

Table 2. Five E-Commerce with the Most Visitors in Indonesia (January-December 2023)

No.	E-Commerce Name	Value (Visits)
1.	Shopee	2,349,900,000
2.	Tokopedia	1,254,700,000
3.	Lazada	762,400,000
4.	Blibli	337,400,000
5.	Open	168,200,000

Source:Databox, 2024

Based on the table, Shopee is an e-commerce marketplace category that has received the most site visits in Indonesia throughout 2023. During January-December 2023, the Shopee site cumulatively received around 2.3 billion visits, far surpassing its competitors. In the same period, the Tokopedia site received around 1.2 billion visits, and the Lazada site 762.4 million visits. Meanwhile, the BliBli site received 337.4 million visits, and the Bukalapak site 168.2 million visits. In addition to winning in terms of quantity, the Shopee site also achieved the highest visit growth rate in the 2023 period (Databoks, 2024). Throughout January-December 2023, the number of visits to the Shopee site was recorded to have increased by 41.39 percent (year-to-date/ytd). On the other hand, visits to the Tokopedia site fell 21.08 percent (ytd), Lazada fell 46.72 percent (ytd), and Bukalapak fell 56.5 percent (ytd). Shopee's competitor whose visits grew positively was only Blibli, which increased by 25.18 percent (ytd). (Databoks, 2024)

For students, a demand to follow technological developments, the ease of getting information from various social media about the latest things around the world is a factor that causes students to be easily influenced by the development of technological flows. It is undeniable that students are one of the promising target markets.(Hanipah, 2020).

Consumer behavior refers to the tendency of students to make excessive purchases and use of goods or services, regardless of actual needs. Students who show consumer behavior tend to buy goods that may not be essential, but are done more because of desires or emotional drives.(Hanipah, 2020). The offers presented by e-commerce can be a risk for students because they see it as an opportunity to gain profit and convenience. As a result, they tend to compete to fulfill their material desires without considering the consequences of such consumer behavior.(Dheku and Goa, 2023). In addition, they often use their income to buy things that are only intended to gain popularity and social recognition in their surroundings. The impact of this mindset creates changes in their lifestyle, including the way they dress, their diet, and their preference for certain brands, which can ultimately lead to a very consumerist lifestyle.(Azizah and Aswad, 2022).

The consumer behavior that usually occurs in the student environment is to maintain appearance by buying excessive items, such as clothes, bags, accessories and the like. This phenomenon is also seen in Udayana University students. Based on the results of the researcher's interview, this is the initial step in a study of 30 students from 13 faculties at Udayana University, a phenomenon was obtained that showed that students were in the age range of 18-24 years and were at the diploma and undergraduate levels. These students shop online more driven by the desire factor alone without considering the use of the goods purchased. In addition, there are attractive advertisements, various products offered, the services provided satisfy students, and relatively small risks, as well as discounts make students more motivated to buy goods. Until finally the goods purchased will pile up, and not all goods can be used, only become collectibles. This fact can be seen in the items they buy, including clothes, pants, shoes, watches, bags, wallets, and skincare. When there is an advertisement with a big discount, some of the majority of students are tempted to make a purchase even though the items are not included in the list of needs that must be met by consumers and also because they follow the recommendations of friends and feel interested in buying when friends use the same product. To deepen this phenomenon, it is very important for this study to be carried out.

Other research conducted by Kurnia (2020) shows that there is a positive and significant influence between the variables of the impact of exposure to e-commerce shopee which include movement, intensity of stimuli, novelty and repetition on consumer behavior. Other research also conducted by Ainul, (2021) shows that there is an influence of e-commerce on student consumer behavior. Research conducted byEnglish: Anggaraeni & Widayati, (2022)shows that there is an influence of e-commerce convenience on student consumer behavior. However, in the studySustainable, (2021)shows that e-commerce has no effect on consumer behavior. The

occurrence of a non-unidirectional relationship between e-commerce and consumer behavior means that people who use online shop applications still consume reasonably and not excessively even though there is easy access in using e-commerce for shopping.

Consumptive behavior must be accompanied by an understanding of knowledge to manage money well. Financial literacy is very useful for students to avoid consumptive behavior.(Yahya, 2021). Financial literacy is considered to be a factor that directly influences the consumer behavior of students who use e-commerce (Mu'amala and Eko Wahyudi, 2021) . Financial literacy is the level of knowledge, skills, beliefs that influence attitudes and behavior to improve the quality of decision making and financial management in order to achieve prosperity (Financial Services Authority, 2016).Mu'amala and Eko Wahyudi, (2021)revealed that financial literacy is very useful for consumers who use e-commerce. Consumers who have financial knowledge will be able to manage their consumption behavior (Putri et al. 2016). Imawati et al. (2013) explained that financial literacy skills will help consumers choose and complain about the goods and services they consume intelligently, in addition, understanding financial literacy will help consumers manage their finances more easily and make plans for the future. Financial literacy is needed to minimize consumptive actions towards purchasing goods or services for e-commerce users.

The fourth National Survey of Financial Literacy and Inclusion (SNLIK) conducted by the Financial Services Authority (OJK) in 2022 showed "a financial literacy index of 49.68 percent and a financial inclusion index of 85.10 percent. This figure has increased compared to the results of the SNLIK in 2019, namely a financial literacy index of 38.03 percent and a financial inclusion index of 76.19 percent. The financial literacy index in 2016 was 29.7 percent and the financial inclusion index was 67.8 percent". Thus, there has been an increase in financial understanding (OJK, 2022). The survey shows that the Indonesian people do not yet have a sufficient level of knowledge in maximizing the use of money for more valuable activities. Students' ignorance of financial literacy and their consumptive and wasteful attitudes are also problems faced by them(Rantelobo and Sir, 2018).

High consumerism causes financial management to be difficult. Usually the younger generation, such as students, are lazy in recording their financial expenses. Students are a part of society that is quite large in number and provide proper financial management and are supported by good financial literacy, so it is hoped that the standard of living can improve. This applies to every income. No matter how high a person's income is, without proper management, financial security will be difficult to achieve (Nababan and Sadalia, 2012). Financial conditions

and standard of living will be better if someone is able to improve their financial literacy.(Rantelobo and Sir, 2018).

Based on Sustiyo's research (2020), financial literacy has a negative and significant effect on Generation Z's Consumptive Behavior. This also shows that the higher the level of financial literacy, the lower the student's consumptive behavior will be. In addition, Ridhayani and Johan's research (2020) stated that financial literacy has a negative and significant effect on consumptive behavior. This statement occurs because the more someone understands the pattern of financial literacy, the wiser that person tends to be in consuming. However, this is different from researchFaithful and Sincere, (2022)that financial literacy has no influence on consumer behavior. According to Romadloniyah & Setiaji (2020), when someone has a high or low level of literacy, it is not a benchmark for consumer behavior.

Based on the review of the background of the problem above, this study focuses on the population of Udayana University students who have not been widely studied in the context of consumer behavior related to e-commerce, gender and financial literacy, so researchers are interested in re-examining it.

2. RESEARCH METHODS

The main objective of this study is to explain the influence and causal relationship between one variable and another so that a model can be formulated that describes the relationship between the variables studied. The variables in question are the use of e-commerce, financial literacy and consumer behavior. Based on this explanation, this study with an associative problem formulation to ask about the relationship between two or more variables (Sugiyono, 2017). In addition, this study is also classified as a type of survey research conducted to obtain individual respondent opinion data using a questionnaire that is analyzed through hypothesis testing.

The research design in this study is quantitative research. The research was conducted by interviewing Udayana University students. Where the instrument used for data collection was a questionnaire (google form) containing statements based on the indicators of each variable. Scoring for questionnaire items according to a Likert scale of 1-4. After being obtained, the data was then analyzed using the inductive statistical method, namely descriptively and inferentially. The data analysis tool used is based on the Variance Based Structural Equation Modeling (SEM) approach which is commonly known as the Partial Least Square Program Smart PLS Version 4.0. PLS can be relied on as an analysis method because

it does not have to be supported by a large sample size, can be used on various scales, and does not require many assumptions, and the sample size does not have to be large (Solimun, 2008).

The population in this study were students at the diploma and undergraduate levels of Udayana University who were in the age range of 18-22 years (late adolescence) and used e-commerce. Based on PDDIKTIodd year reporting data 2023undergraduate, diploma and professional students as many as30.838Jiwa consists of 13 faculties and 49 study programs.The researcher used the formula for determining the number of samples formulated by Slovin. The questionnaire was distributed through Google Form so that a number of questionnaires that were received and met the requirements would be analyzed further. The number of samples used in this study was 400 samples. The analysis techniques used were descriptive analysis techniques and Partial Least Squares (PLS) analysis.

3. RESULTS AND DISCUSSION

SEM-PLS Model Results

a. Evaluation of Measurement Model (Outer Model)

The PLS model has two parts, namely the measurement model (outer model) and the structural model (inner model) and is processed based on the indicator scores. Testing the measurement model in this study aims to evaluate indicators that are reflective of their constructs. Analysis of the indicators used is tested to provide meaning to the contribution made by the latent variables.(Nurtjahjani, 2020).
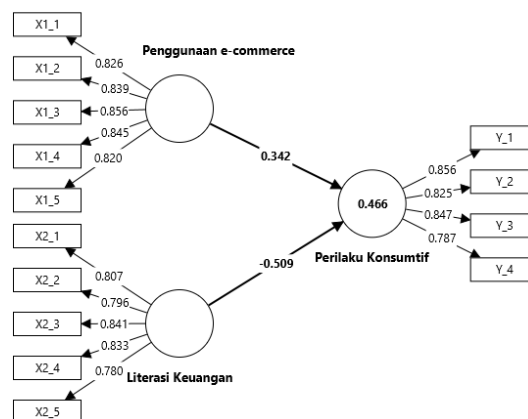
Figure 1: Outer Model

Empirical analysis aims to validate the model and reliability of constructs that reflect the parameters of latent variables or constructs built based on theory and empirical studies. The measurement model with reflective indicators is analyzed by looking at the results of the convergent validity of each indicator. Convergent validity testing in PLS can be seen from the magnitude of the outer loading of each indicator on its latent variable. For this, a loading factor

of 0.5 to 0.6 is considered sufficient, with a small number of indicators per construct, ranging from 3 to 7 indicators (Solimun, 2010).

The measurement model is an assessment of the validity and reliability of research variables. The results of the analysis of the measurement model of all loading factors show more than 0.50 so that no items are discarded. The measurement model explains that the construct validity of each indicator has met the requirements.(Nurtjahjani, 2020).

There are three criteria for assessing measurement models, namely discriminant validity, composite reliability, and convergent validity.(Hair et al., 2021). Based on the three criteria for assessing the measurement model, testing the measurement model of each indicator that reflects the construct or latent variable can be explained as follows.(Hair et al., 2021). Evaluation of the measurement model is based on the results of the hypothesis model calculations.

b. Discriminant Validity

Discriminant validity testing in this study was conducted using cross loading and square root of average (AVE) values with the aim of checking (testing) whether the indicators are valid in explaining or reflecting latent variables. If the cross loading value of each indicator from the relevant variable is greater than the cross loading value of other variables, the indicator is said to be valid.(Latan & Noonan, 2016). The results of the discriminant validity calculations are presented in Table 3 below.

Table 3. Loading Factor and Crossloading

Indicator	Use of e-commerce	Financial Literacy	Consumer behaviour
X1_1	**0.826**	-0.211	0.379
X1_2	**0.839**	-0.231	0.402
X1_3	**0.856**	-0.203	0.374
X1_4	**0.845**	-0.220	0.385
X1_5	**0.820**	-0.204	0.431
X2_1	-0.177	**0.807**	-0.466
X2_2	-0.172	**0.796**	-0.467
X2_3	-0.288	**0.841**	-0.537
X2_4	-0.184	**0.833**	-0.469
X2_5	-0.204	**0.780**	-0.478
Y_1	0.471	-0.530	**0.856**
Y_2	0.351	-0.529	**0.825**
Y_3	0.414	-0.504	**0.847**
Y_4	0.311	-0.401	**0.787**

Source: Processed primary data, 2024

Validation based on loading factors on all indicators is good because it has a value of more than 0.5. In addition, all indicators, apart from having a loading factor of more than 0.50, also have the highest value on their constructs when compared to cross loading on other

constructs. Evaluation of the measurement model based on loading factors and cross loading is included in the good category.(Hair et al., 2022).

Discriminant validity test uses square root of average extracted ($\sqrt{AVE}$). If the AVE root value of each latent variable is greater than the correlation with other variables, the instrument is said to have good discriminant validity as shown in Table 4.

Table 4. Discriminant Validity Results

	Use of e-commerce	Financial literacy	Consumer behavior
Use of e-commerce	0.837		
Financial literacy	-0.256	0.812	
Consumer behavior	0.473	-0.597	0.829

Source: Primary processed data, 2024

Description: The coefficients on the diagonal are the roots of AVE; The coefficients outside the diagonal are the correlation coefficients between constructs; AVE = Average Variance Extracted

In addition to meeting convergent validity, a reflective measurement model must have discriminant validity. A measurement model meets discriminant validity if the AVE root of a construct is greater than the correlation coefficient with other constructs.(Latan & Noonan, 2016). For example, the construct of e-commerce usage has an AVE value of 0.701 so that the root of AVE is 0.837. The magnitude of the correlation coefficient of the transformational leadership construct with other constructs ranges from -0.256 and 0.473 so that this analysis provides a conclusion that there is quite good discriminant validity. The results of the analysis show that the discriminant validity value of a variable is higher when compared to the correlation value between variables. Thus, it can be concluded that the measurement model of this study has met discriminant validity.

Table 5. Heterotrait-Monotrait Ratio (HTMT) Results

	Use of e-commerce	Financial literacy	Consumer behavior
Use of e-commerce			
Financial literacy	0.286		
Consumer behavior	0.533	0.687	

Source: Processed primary data, 2024

Construct validity can also be seen from the results of the Heterotrait-Monotrait Ratio (HTMT), where it is expected that in a suitable model the HTMT ratio must be below 1.0 (Garson, 2016). So, the HTMT ratio is a supporting or reinforcing value of the discriminant validity value. Inter-construct will show strong reliability if the HTMT ratio value is less than

1.0(Hair et al., 2022). The results of the analysis shown in Table 4 indicate that the HTMT ratio value between constructs has shown less than 1.0.

c. Composite reliability

*Composite reliability*and average variance extracted (AVE) tests the reliability value between indicators of the constructs that form it. The composite reliability result is said to be good if the value is above 0.70 and for AVE it is good if the value is more than 0.50(Hair J et al., 2014). The results of the composite reliability and AVE measurement model tests are presented in Table 6 below.

Table 6. Composite reliability results

	Cronbach's alpha	*Composite reliability*(rho_a)	*Composite reliability*(rho_c)	*Average variance extracted*(AVE)
Use of e-commerce	0.893	0.894	0.921	0.701
Financial literacy	0.870	0.873	0.906	0.659
Consumer behavior	0.849	0.859	0.898	0.687

Source: Processed primary data, 2024

The results of the reliability test show that all constructs have composite reliability coefficients ranging from 0.859 to 0.894 (more than 0.70) and AVE ranging from 0.659 to 0.701 (more than 0.50). Thus, the results of all measurement models used in this study already have high reliability. Thus, further analysis can be carried out by examining the goodness of fit model by evaluating the inner model.

d. ConvergentValidity

*Convergent validity*measuring the validity of the indicator as a construct measure that can be seen from the outer loading. The indicator is considered valid if it has an outer loading value of 0.5 to 0.6 which is considered sufficient, the number of indicators per construct is not large, and ranges from 3 to 7 indicators.(Solimun, 2010). Outer loading has the highest value, which means that the indicator is the strongest/most important measure in reflecting the relevant latent variable. The loading factor value shows the weight of each indicator as a measure of each variable.(Abdi et al., 2014). Indicators with large loading factors indicate that the indicator is the strongest (dominant) variable measurer. In the PLS model, the loading factor for reflective indicators is outer loading.

Table 7. Loading Factor Indicators

Variables	Indicator	Label	*Loading Factor*
Use of e-commerce	X1_1	No time limit	0.826
	X1_2	Saving time	0.839
	X1_3	Cheaper goods and services	0.856
	X1_4	Compare products and prices accurately	0.845
	X1_5	Cross-regional buyers	0.820
Financial Literacy	X2_1	Budget	0.807
	X2_2	Savings	0.796
	X2_3	Investment	0.841
	X2_4	Loan	0.833
	X2_5	Insurance	0.780
Consumer Behavior	Y_1	Excessive consumption of goods and/or services	0.856
	Y_2	Does not show the useful aspects of the product	0.825
	Y_3	Prioritize wants over needs	0.847
	Y_4	Does not have a priority scale	0.787

Source: Processed primary data, 2024

Table 6 shows the loading factor of the indicators presented, we can describe that the highest outer loading shows the strongest indicators in forming each latent variable. Outer loading measures how much the indicators contribute to the latent variable, where the outer loading value that is closer to 1 indicates the greater contribution of the indicator. The following is a description of the highest outer loading for each latent variable:

1. E-commerce usage: The indicator with the highest outer loading is X1_3 (Cheaper goods and services) with a value of 0.856. This means that the perception that goods and services are cheaper is the strongest factor in influencing e-commerce usage compared to other indicators such as saving time, comparing products, or cross-regional buyers.

2. Financial Literacy: Indicator X2_3 (Investment) has the highest outer loading with a value of 0.841. This shows that an individual's ability to understand and manage investment is the most important aspect in forming financial literacy, more than other aspects such as savings, loans, or insurance.

3. Consumptive Behavior: Indicator Y_1 (Consuming goods and/or services excessively) has the highest outer loading value, which is 0.856. This means that consumptive behavior is more influenced by the habit of consuming excessively compared to other indicators such as prioritizing desires or not paying attention to the usefulness aspect of the product.

Thus, the indicators that have the highest outer loading values are the most dominant in forming the related latent variables, namely the use of e-commerce, financial literacy, and consumer behavior.

Structural Model Evaluation (Inner Model)

Model fit can be measured by three model fit indices, namely SRMR, model determination (), and Goodness of Fit (GoF) coefficient. In the SEM model with the Partial Least Square or SEM-PLS approach, to measure the level of model fit, the Standardized Root Mean Square Residual (SRMR) value will be used.Rm^2(Hair et al., 2021). SRMR is a fit model developed by Hu and Bentler (1999) for CB-SEM. SEM-PLS adopts SRMR to determine the difference between sample covariance and covariance generated by SEM-PLS. SRMR represents the average value of all standardized residuals, and has a range from 0 to 1. A model that has a good fit will have an SRMR value of less than 0.08 and has a poor fit status if it is more than 0.10 (Hair et al., 2021).

Table 8. Results of Model Fit Test with SRMR and NFI

Index	Statistics	Good Fit Limit	Poor Fit Limit
SRMR	0.058	Less than 0.08	More than 0.10
NFI	0.892	More than 0.50	Less than 0.50

Source: Processed primary data, 2024

The model proposed in this study has an SRMR value of 0.058 which means less than 0.08 and less than 0.1. Thus it can be concluded that the model is in the good fit category. The NFI value of 0.892 (more than 0.50) also explains that the level of model fit is good.

Table 9. R-Square Measurement Results

No.	Variables	R^2
1.	Use of e-commerce	0.342
2.	Financial literacy	0.509
3.	Consumer behaviour	0.466

Source: Processed primary data, 2024

Hair, et al. (2022) stated that in general the coefficient of determination is classified as low if it is less than 0.20. However, in the results of this model, both coefficients are more than 0.20 so that based on these results, the model fit is classified as good. The fit of other models can be assessed from several calculations such as the model determination coefficient (Rm^2). Calculating model fit can be done with the following formula.

$$Rm^2 = 1 - (1 - R_1^2)(1 - R_2^2)(1 - R_3^2)$$

$$Rm^2 = 1 - (1 - 0{,}342)(1 - 0{,}509)(1 - 0{,}466)$$

$$Rm^2 = 1 - 0{,}172$$

$$Rm^2 = 0{,}827$$

The calculation results show Rm^2 a value of 0.827, which means that this research model has a high model fit. The model accuracy of 82.7 percent explains that the model's

contribution to explaining the structural relationships of the five variables studied is 82.7 percent and the rest is explained by other variables not involved in the model.

The structural model fit in the inner model uses the GoF (goodness of fit) value to measure how good the resulting model is. The GoF value has a value range of 0-1, the closer it is to 1, the better the model. A GoF value of more than 0.33 indicates a good model fit.(Hair et al., 2022).

Table 10. Goodness of Fit (GoF) Index

Variables	Communal	R^2
Use of e-commerce	0.701	0.342
Financial literacy	0.659	0.509
Consumer behavior	0.687	0.466
Amount	2,047	1,317
Average	0.682	0.439
Index (GoF)	0.547	

Source: Primary data processed, 2024

Information : The communality value is taken from the AVE value

Model fit can also be calculated using the goodness of fit index. The goodness of fit (GoF) index is defined as the geometric mean or root of the product of the mean communality and).R^2 the mean for all endogenous constructs (Tenenhaus et al. 2005). The GoF index indicates the predictive power of the overall model. The GoF value has an interval between 0 and 1. A GoF value approaching 1, at least 0.33, indicates a good path model estimate (Akter, D'Ambra, and Ray, 2011). The GoF index for this research model is 0.547. Thus, the structural model that explains the relationship between the five variables has good predictive power (fit

Relationship between Loading Factor and Average Score of Indicators

The contribution of indicators in measuring constructs is explained through the loading factor value.(Hair et al., 2022). The highest loading factor means that the strongest reflection of the construct is in that indicator.(Solimun, 2010). The average item in one indicator explains the assessment of real conditions based on respondents' observations. The highest loading factor will not always have the highest average. The combination of loading factors and averages will be presented in a special interpretation as a finding of the modeling results.(Hair et al., 2021). For example, high factor loading and high average provide an interpretation that the indicator is very important (sensitive) in measuring the construct and the current condition is the best compared to other indicators.

Table 11. Loading Factor and Average Indicator

Variables	Indicator	Label	*Loading Factor*	Average
Use of e-commerce	X1_1	No time limit	0.826	3.50
	X1_2	Saving time	0.839	3.53*)
	X1_3	Cheaper goods and services	0.856*)	3.48
	X1_4	Compare products and prices accurately	0.845	3.48
	X1_5	Cross-regional buyers	0.820	3.53*)
Financial Literacy	X2_1	Budget	0.807	3.36
	X2_2	Savings	0.796	3.44
	X2_3	Investment	0.841*)	3.47*)
	X2_4	Loan	0.833	3.47*)
	X2_5	Insurance	0.780	3.40
Consumer Behavior	Y_1	Excessive consumption of goods and/or services	0.856*)	3.13
	Y_2	Does not show the useful aspects of the product	0.825	3.18*)
	Y_3	Prioritize wants over needs	0.847	3.15
	Y_4	Does not have a priority scale	0.787	3.14

*Note: *) = highest value*

Source: Processed primary data, 2024

Based on Table 11 which contains the loading factor values and average indicators, the following is an explanation of the highest outer loading which forms the latent variable, as well as the indicators that most influence the formation of the variables of e-commerce use, financial literacy, and consumer behavior:

1. Use of e-commerce:

Indicator with the highest loading factor: X1_3 (Cheaper goods and services) with a loading factor value of 0.856. This means that this indicator has the strongest influence in the formation of the latent variable of e-commerce usage. Consumers tend to use e-commerce because of the cheaper price of goods and services compared to conventional shopping methods. Other influential indicators: X1_2 (Saving time) and X1_5 (Cross-regional buyers) also have high values (0.839 and 0.820), which shows that consumers are also influenced by time efficiency and the ability to shop across regions through e-commerce.

Indicators with the highest average: X1_2 (Saving time) and X1_5 (Cross-regional buyers) with an average value of 3.53. This shows that the main reason consumers use e-commerce is because they feel more efficient in terms of time and can make purchases without geographical limitations. Another influential indicator: X1_3 (Cheaper goods and services) has an average of 3.48, showing that cheaper prices are also an important reason for using e-commerce, although not as high as the time efficiency factor and the ability to shop across regions.

2. Financial Literacy:

Indicators with the highest loading factors: X2_3 (Investment) and X2_4 (Loans) with loading factor values of 0.841 and 0.833. Investment and understanding of loans are the strongest aspects of financial literacy in forming this latent variable, indicating that someone with good financial literacy pays more attention to investment decisions and uses loans wisely. Other influential indicators: X2_1 (Budget) and X2_2 (Savings) also make important contributions with loading factor values above 0.7, indicating that budget management and savings are significant factors in forming financial literacy.

Indicators with the highest average: X2_3 (Investment) and X2_4 (Loan) with an average value of 3.47. This shows that individuals with good financial literacy are more focused on decisions related to investment and loans. This indicates that these two things are important elements in financial understanding. Another influential indicator: X2_2 (Savings) with an average value of 3.44 is also quite high, indicating that awareness of savings is also an important element of financial literacy.

3. Consumer Behavior:

Indicators with the highest loading factor: Y_1 (Consuming goods/services excessively) with a loading factor value of 0.856. This shows that consumer behavior is most influenced by the tendency to consume goods or services excessively. Other influential indicators: Y_3 (Prioritizing desires over needs) with a loading factor of 0.847 is also a strong factor, indicating that consumer behavior is also influenced by an individual's desire to prioritize desires over needs.

Indicators with the highest average: Y_2 (Not paying attention to the product's usefulness aspect) with an average value of 3.18. This shows that consumer behavior is most influenced by the tendency not to prioritize the usefulness of the product when making a purchase. Consumers tend to buy without considering the product's usefulness aspect. Other influential indicators: Y_3 (Prioritizing desires over needs) with an average of 3.15 shows that consumer behavior is also influenced by individual preferences to prioritize desires over needs.

Hypothesis Testing

Table 12. Hypothesis Testing Results

Exogenous	Endogen	Original Sample (o)	t-statistic	*p-value*
Use of e-commerce	Consumer behavior	0.342	8,162	0,000
Financial literacy	Consumer behavior	-0.509	12,659	0,000

Source: Processed primary data, 2024

From Table 11 it can be seen that all exogenous variables have a significant influence on endogenous variables. This is evidenced by the t-statistic> 1.96 and p-value <level of significance 0.05 of the relationship of each exogenous variable to each endogenous variable.The following equation system can be written:

$$Y = 0.342 - 0.509X_1X_2 \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots..(4.1)$$

1. The use of e-commerce on consumer behavior has a coefficient with a positive direction. The calculation results show that the path coefficient of 0.342 with a t-statistic of 8.162 (p = 0.000) provides a decision that the use of e-commerce has a significant effect on consumer behavior.

2. Financial literacy on consumer behavior has a coefficient with a negative direction. The calculation results show that the path coefficient of -0.509 with a t-statistic of 12.659 (p = 0.000) provides a decision that financial literacy has a significant effect on consumer behavior.

The display of the path coefficient test results as part of the inner model carried out by the bootstrapping procedure. Each path displays the magnitude of the path coefficient and its level of significance. A p-value of equal to or less than 0.05 provides a decision that there is a significant influence on the path and the direction of the coefficient can be used as a direction describing the influence of the two variables. However, if the p-value is more than 0.05, it provides a decision that there is no significant influence on the path and the direction of the coefficient cannot be used as a direction describing the influence of the two variables.

The results of this analysis provide a description that the use of e-commerce and literacy have high involvement in consumer behavior. In addition, it can also be explained that the use of e-commerce has a positive effect on consumer behavior while financial literacy has a negative effect on consumer behavior. Overall, this hypothesis model provides the conclusion that the use of e-commerce can spur impulsive buying while having good financial literacy can avoid impulsive buying so as to suppress the occurrence of consumer behavior.

4. DISCUSSION OF RESEARCH RESULTS

The Influence of E-commerce Usage on Udayana University Students' Consumptive Behavior

This study shows that the use of e-commerce has a positive and significant influence on the consumer behavior of Udayana University students. This means that the more often students use e-commerce platforms, the higher their tendency to make purchases of non-essential goods.

One of the main factors forming the latent variable of e-commerce usage is the indicator of cheaper goods and services. With more competitive prices on e-commerce platforms, students tend to be encouraged to make impulsive purchases without considering their actual needs. E-commerce provides an environment where lower prices, discounts, and attractive promotions create an incentive for students to buy items that are not actually needed. This phenomenon is reinforced by the ease of access to a variety of product and service choices, which often tempt users to buy only because of the opportunity, not based on need.

This is in line with consumer behavior characterized by excessive purchases and wrong priorities in determining wants compared to needs. Thus, this study confirms that low prices and availability of goods in e-commerce play an important role in increasing consumer behavior, especially among students, who tend to be more susceptible to impulsive purchases due to the attractiveness of prices and ease of transactions.

This finding is in line with previous research conducted by several previous researchers, namely:Hafiza et al., (2024)said that the presence of e-commerce platforms offers convenience and various attractive offers to consumers. Through e-commerce, the buying and selling transaction process becomes more practical, especially in online shopping. This convenience is also felt by students of the University of Mataram, many of whom prefer to shop online rather than having to shop at offline stores. However, often this online shopping activity makes them more consumptive. They tend to be tempted to buy goods without considering the needs or uses of the goods, but only to fulfill their impulsive desires.Prasetyo et al., (2023)said that the large number of online businesses influences the consumer lifestyle of students who still have excessive desires or wishes. They buy goods online not for their needs, but they buy goods in online shops only because of the discounts listed on the available goods given by the seller.

Mubarokah and Pratiwi (2022) said that an attractive e-commerce design and appearance determines the first impression of users to visit the site. E-commerce must also provide clear information and optimal security. Ease of service, various promotions and the availability of various products needed make consumers buy goods or services more often on

e-commerce, including students in fulfilling their desire to buy trendy products or simply to support their appearance. These results are consistent with this study, which shows that students are driven by cheaper prices in making purchases. Oktaviani, et al. (2023) stated that easy access to e-commerce platforms and various promotions contribute to increased consumer behavior, especially among young users such as students. Students often do not consider their needs carefully before making a purchase, in line with the finding that impulsive buying is driven by price factors.

Overall, this previous study supports the finding that e-commerce usage has a positive effect on student consumer behavior. Factors such as competitive prices, ease of shopping, and attractive promotions are the main reasons for the increase in impulsive purchases, especially for non-essential items.

Based on the results of the description test of the e-commerce usage variable, it can be seen that the average value of the respondents' answers is very much agree. This can be identified through the respondents' answers which show that the majority gave high answers to each statement item.

The Influence of the Use of Financial Literacy on the Consumptive Behavior of Udayana University Students

This study shows that financial literacy has a negative influence on the consumer behavior of Udayana University students. This means that the higher the level of financial literacy of students, the wiser they are in managing their expenses, thus reducing the tendency to buy non-essential goods.

One of the main factors forming the latent variable of financial literacy is the investment indicator. Students who have a better understanding of investment tend to be wiser in allocating their funds, choosing to invest rather than buy unnecessary items. They have a long-term orientation in financial management and are more aware of the importance of saving and investing for the future, rather than spending money on current consumption.

This finding is in line with previous research conducted by several researchers:Nur Ismail et al., (2021)said that to reduce consumer behavior, especially the millennial generation, investment can be used. This is based on the results of identifying factors that influence consumer behavior and investment interest, namely financial knowledge and LoC. These results are in line with the findings that investment is one of the key factors in financial literacy that helps reduce consumer behavior.(Mubarokah & Pratiwi, 2022)emphasizes that financial literacy plays an important role in reducing consumer behavior among students. The financial

literacy variable negatively influences consumer behavior. This means that students who are consumerist can be reduced if their level of financial literacy is high. Abdullah et al., (2022) said that financial literacy has a significant effect and is negatively correlated with consumer behavior. This means that the better the financial literacy, the lower the consumer behavior in students.

Based on the statistical results of financial literacy, Udayana University students have an average of 84.12 percent, which means that students have a high level of financial literacy. This is in accordance with the research of Chen and Volpe (1998) categorizing financial literacy and stating that if it is greater than 80 percent, it indicates that the individual has high financial knowledge. Although most respondents are able to understand the basics of financial literacy very well, its implementation in everyday life needs to be improved. When detailed from the questionnaire results, there were 234 (59.5 percent) respondents who perceived themselves as having consumptive behavior. These respondents agreed, even strongly agreed with the statements in the consumptive behavior variable.

5. CONCLUSION

Based on the research results presented in the previous section, a number of conclusions can be drawn as follows:

1) Referring to the results of the hypothesis test, it is concluded that the use of e-commerce has a positive and significant effect on the consumer behavior of Udayana University students. This means that when students shop through e-commerce excessively without considering the actual needs, it will lead to excessive consumer behavior.

2) Referring to the results of the hypothesis test, it is concluded that financial literacy has a negative and significant effect on the consumer behavior of Udayana University students. This means that when students have good financial management, they will avoid excessive consumer behavior.

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