Does Financial Literacy Influence Students' Level Of Consumptive Behavior?: The Moderating Role Of Self-Control

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Abstract. This research was conducted with the aim of analyzing the influence of financial literacy on students' consumptive behavior with self-control as a moderating variable. The population in this study consisted of students who were studying economics for the 2020-2021 class at state universities in the province of East Java, Indonesia. Sampling used a purposive sampling method which resulted in 185 students. The analysis used in this research is the Structural Equation Model (SEM) which is supported by the Partial Least Method (PLS). The results of this research show that financial literacy has a negative and significant effect on consumptive behavior, and self-control is unable to moderate the influence of financial literacy on consumptive behavior. Therefore, it is important to only pay attention to financial literacy, but in its application it requires strong self-control in students so as not to direct their purchasing patterns towards consumptive behavior.

Keywords. Consumptive Behavior, Financial Literacy, Self-Control

1. Introduction

Digital transformation has provided change and created new opportunities in various sectors, one of which is the economy [1], [2]. This shows that digital transformation has driven breakthroughs in financial services through fintech with increasingly widespread digital payment systems [3], [4]. This phenomenon causes changes in students' consumption patterns, if this convenience is not controlled, it can lead them to consumerist behavior patterns.

Consumptive behavior refers to a person's tendency to make repeat purchases with more grounded motivation on desires rather than needs [5], [6], [7]. This is characterized by the urge to obtain goods and services as a way to satisfy instant gratification [8]. Consumptive behavior can be measured through several indicators, including: 1) impulsive purchases, 2) wasteful or excessive purchases, 3) irrational purchases [9].

The results of initial observations carried out by researchers on undergraduate students in Economic Education, Faculty of Economics and Business, Universitas Negeri Surabaya, many of them are active marketplace users. The convenience of technology makes them tend to be tempted to buy products or services that are presented as symbols of social status or the
present, which creates a competitive attitude in personal appearance, clothing style, following current trends on social media, one of which is by eating and drinking in cafes. This can be seen from the appearance of students who follow fashion trends and use cell phones which are quite expensive, buy food and drinks in modern cafes.

Students, as individuals who have just entered the stage of independence in managing their finances, tend to be easily influenced by things that lead to consumer behavior from the campus environment, social media, and industrial trends in the era of digitalization, as well as various conveniences in technological services. This phenomenon is a result of the lifestyle demands of the digitalization era which have a significant impact on students' purchasing behavior patterns which lead to consumptive behavior.

Consumptive behavior can be avoided, one of which is through financial literacy, which is a term that refers to an individual's understanding of personal financial concepts and the skills needed to manage finances effectively [10], [11], [12], [13]; Financial literacy focuses on practical aspects of finance [14], such as budget management, investing [15], saving, and planning. A person can increase financial literacy through several sources such as books, the internet [16], socialization [17], and formal education or school [18].

According to Caplinska & Ohotina, financial literacy can be measured through several indicators, including selected planning, awareness, financial services and credit [19]. Low ability in financial literacy results in short-term and long-term financial instability [20], [21]. Based on OJK research data in 2022, the financial literacy index of Indonesian society was 49.68%, an increase compared to 2019 of 38.03% [22]. Thus, it is necessary to increase financial literacy to form more rational consumption behavior in this era of digitalization so that it has a good impact on students' financial well-being.

Research conducted by Maris and Listiadi, states that there is a negative and significant influence of financial literacy on consumer behavior [23]. However, research conducted by Kusumaningtyas and Sakti, states that financial literacy does not have a significant effect on students' consumptive behavior [24].

According to Hurlock self-control is a person's ability to guide, regulate and direct forms of behavior through cognitive considerations so that they can lead to positive consequences. A person's ability to control impulses [25] and delay gratification in making consumption decisions can form more rational and responsible shopping patterns [26]. Empirical evidence shows that a lack of self-control leads to consumer behavior [27].

By having strong self-control, students can avoid excessive consumption behavior, manage personal finances wisely, and prioritize primary needs over temporary desires. Through good self-control, students have the ability not to be influenced by consumption trends, and still prioritize rational decisions. Self control indicators according to Averill (in M. Nur Ghuffron &. Rini Risnawati, 2012) are divided into three parts including 1) behavioral control, 2) cognitive control, 3) decision making control.

Research conducted Palupi et al, states that there is a negative and significant influence of self-control on consumer behavior [28]. However, in different research it was found that self-control was unable to moderate the independent variables in consumer behavior research [29].

Based on the research gap above, the author wants to conduct research entitled "Does financial literacy influence students' level of consumptive behavior?: The moderating role of self-control".
2. Literature Review

2.1. Behavioral Theory

The Theory of Planned Behavior (TPB) is a psychological theory developed by Ajzen in 1985 as an extension of the Theory of Reasoned Action (TRA) [30]. TPB aims to predict individual behavior more specifically by expanding TRA. In TRA, a person's behavior is influenced by their intentions, which are in turn influenced by attitudes and subjective norms. TPB adds a new element in the form of perceived behavioral control, namely an individual's perception of the extent to which they can control or influence their actions. By taking into account perceived behavioral control, the TPB provides a more comprehensive understanding of what drives a person to take certain actions, including their ability to overcome obstacles or challenges in achieving goals.

Perceived behavioral control is an individual's belief about how much control they have over a particular behavior [31]. It is determined by the individual's beliefs regarding the availability of resources such as equipment, compatibility, competence, and opportunities that can support or hinder the predicted behavior. This belief is referred to as control belief strength. Apart from that, the perception of behavioral control is also influenced by the magnitude of the role of these resources (power of control factor) in realizing the desired behavior. Overall, perceived behavioral control is a combination of an individual's beliefs about their control over a particular behavior and the role of resources in realizing that behavior.

2.2. Consumptive Behaviour

The word consumptive means wasteful, which means a person's behavior in consuming goods and services excessively or irrationally [20], [32], [33]. Consumptive behavior is defined as the study of how individuals, groups and organizations select, buy, use and place goods, services, ideas or experiences to satisfy their wants and needs [34], [35]. Purchasing goods based on desires without paying attention to usefulness and benefits tends to make someone a consumer [36], [37].

Consumer behavior patterns are based on a tendency towards personal pleasure and material desires, where product purchases prioritize desire factors compared to needs [38]. Consumptive behavior arises from consumer decisions that appear irrational based on imitating behavior adapted to developing trends [39].

It was further explained that students prioritize appearance and prestige in keeping up with up-to-date fashion developments in order to gain recognition from the surrounding environment rather than fulfilling priority needs such as buying handbooks for lectures. Student behavior like this will trap them into consumer behavior so they cannot manage their finances well. Increasingly diverse consumption activities require appropriate consideration in making choices [40].

2.3. Financial Literacy

Financial literacy is defined as an individual's ability in skills and knowledge to understand financial conditions and concepts, so that individuals are able to make effective decisions related to financial management. Sustiyo states that financial literacy greatly influences a person's consumptive behavior because if a person's literacy skills are high, they can manage their finances to achieve prosperity and thus avoid consumptive behavior [41]. The large number of people who do not understand financial literacy will cause these people to tend to be wasteful because they are increasingly consumptive [42], [43], [44], [45].
Financial Literacy is knowledge, skills and beliefs that influence attitudes and behavior to improve the quality of decision making and financial management to achieve community financial prosperity. Financial literacy refers to the financial knowledge, attitudes and behavior skills that every individual needs to avoid financial problems [46], [47]. Financial literacy, such as financial knowledge, cannot be clearly understood by the majority of people, so that people suffer losses due to inflation and economic conditions as well as wasteful nature which leads to consumptive behavior. According to Caplinska & Ohotina, financial literacy can be measured through several indicators, including selected planning, awareness, financial services and credit [19].

2.4. Self Control

Self-control is an individual's ability to control one's behavior and postpone pleasure in order to achieve better future goals [48]. Self control is also an individual's skill in determining his behavior based on the values prevailing in society in order to lead to positive behavior. Furthermore, self-control is related to emotions [49]. Where they must be able to control their emotions and other impulses within them.

Individuals who have good self-control are able to refrain from negative things by considering long-term responsibilities [50]. Meanwhile, individuals with low self-control tend to have difficulty restraining themselves and wanting to perform certain behaviors. In relation to consumer behavior, self-control plays a role in directing and regulating individuals to spend something. Individuals with good self-control are also expected to be able to manage their finances and spend them according to their needs and be more confident in their appearance.

3. Methods

This research uses quantitative methods and analyze with SEM-PLS. The use of quantitative methods is because the data in this research are numbers which are processed and analyzed using statistical tools to find the meaning of the number data. In component based SEM, the strength of the analysis is based on the portion of the model that has the largest number of predictors with a recommended minimum sample ranging from 30 to 100 samples. It can be concluded that the advantages obtained by using the PLS or component based SEM analysis model are that the data does not have to have a certain distribution, the model does not have to be based on theory and the existence of indeterminancy, and the sample size is small.

The sampling technique in this research used purposive sampling. Purposive sampling is a sample determination technique using certain considerations or criteria [51]. The time for carrying out the research was carried out during February - April 2024, especially in the data collection process, which includes implementing and preparing research instruments, validating questionnaires, distributing questionnaires and collecting data.

The sample criteria guidelines used by the author as a guide in this research are as follows: 1) Bachelor of Economics Education students class 2020 – 2021 with an age range of 19-22 years, because they tend to be active in managing personal finances and are susceptible to the influence of advertising, 2) Bachelor of Economics Education students class of 2020 – 2021 who have received basic to intermediate economics and financial literacy courses (Macroeconomics, Microeconomics, Non-Bank Financial Institutions, Introduction to Accounting, and the like). The sample obtained was 185 respondents who filled out the questionnaire.
This research uses information on the value of questionnaires answered by respondents. The type of questionnaire used in this research is a closed questionnaire, where alternative answers have been provided that have been determined by the researcher. The instruments developed into questionnaire statements in this research are as follows:

### Table 3
**Indicator of Latent Variable**

<table>
<thead>
<tr>
<th>No</th>
<th>Variabel &amp; References</th>
<th>Indicator</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Consumptive behaviour (Lina &amp; Rosyid, 1997)</td>
<td>1) impulse buying, 2) wasteful or excessive purchases, 3) irrational purchases.</td>
<td>5 2 3</td>
</tr>
<tr>
<td></td>
<td>Total Item</td>
<td></td>
<td><strong>10</strong></td>
</tr>
<tr>
<td>2.</td>
<td>Financial Literacy (Caplinska &amp; Ohotina, 2019)</td>
<td>1) selected planning, 2) awareness, 3) financial services, and 4) credit.</td>
<td>4 3 4 3</td>
</tr>
<tr>
<td></td>
<td>Total Item</td>
<td></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>3.</td>
<td>Self Control (Averill (in M. Nur Ghufron &amp;. Rini Risnawati, 2012))</td>
<td>1) behavior control, 2) cognitive control, 3) control decision making.</td>
<td>2 3 2</td>
</tr>
<tr>
<td></td>
<td>Total Item</td>
<td></td>
<td><strong>7</strong></td>
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</tbody>
</table>

### 4. Result and Discussion
In table 4, it can be seen that the estimated cross loading value shows that each indicator of each latent variable is greater than the value of other latent variables which have a value of more than 0.7. This means that each latent variable already has good discriminant validity, where several
latent variables have measures that are highly correlated with other constructs. For several indicators, the discriminant validity is still less than 0.70.

<table>
<thead>
<tr>
<th>Table 4: Loading Factor</th>
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<tbody>
<tr>
<td><strong>Consumptive Behaviour</strong></td>
</tr>
<tr>
<td>CB1</td>
</tr>
<tr>
<td>CB10</td>
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<tr>
<td>CB2</td>
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<tr>
<td>CB3</td>
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<tr>
<td>CB4</td>
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<td>CB5</td>
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<td>CB6</td>
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<td>CB7</td>
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<td>CB8</td>
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<td>CB9</td>
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<td>FL1</td>
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<td>SC6</td>
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<td>SC7</td>
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</table>

The next stage is to measure the validity value of the construct by looking at the Average Variant Extracted (AVE) value. At this stage, the conditions set to declare a model good are if the respective AVE value is more than 0.5. In table 5, it can be seen that all Average variance extracted (AVE) values have a value of more than 0.5. Thus, it can be said that the AVE values
for financial literacy (0.746), self-control (0.835), and consumptive behavior (0.809) can be said to be valid and meet the validity test criteria.

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Discriminant Validity - Cross Loadings</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Cronbach's alpha</td>
</tr>
<tr>
<td>Consumptive Behaviour</td>
<td>0.974</td>
</tr>
<tr>
<td>Financial Literacy</td>
<td>0.974</td>
</tr>
<tr>
<td>Self Control</td>
<td>0.967</td>
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</tbody>
</table>

Inner model in SEM-PLS (Partial Least Squares Structural Equation Modeling) data analysis refers to the part of the model that handles the relationship between latent constructs (variables that are not directly measured). Inner models assess causal relationships or influence between latent constructs, helping to explain how one construct influences another. This model is expressed in the form of paths and coefficients, which measure the strength and direction of the relationship between these constructs. The validity and significance of this relationship is evaluated using statistical tests and measures of model fit or goodness of fit. The results of the SEM PLS hypothesis test can be explained through the following image:
Figure 1. Full Model

The goodness of fit test is used to assess how well the structural model and measurement model fit the observed data. The feasibility test for this model looks at the R-square value which ranges from 0 to 1, with the category 0.75 being considered good, 0.50 being moderate, and also 0.25 being considered poor. The following is the R-square value based on the results in SEM shown in the table and figure, namely:

<table>
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<th>Table 6</th>
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<tbody>
<tr>
<td>R-Square</td>
</tr>
<tr>
<td>Consumptive Behaviour</td>
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</table>

Based on table 6, the suitability of the model can be seen from the r-square results of consumptive behavior (Y) which is 0.875 (87.5%) meaning that consumptive behavior can be explained by the variables of financial literacy and self-control of 87.5%. The remaining 12.5% is explained by other variables that are not in this study.
Table 7
Hypothesis Test

| Construct                  | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T statistics (|O/STDEV|) | P values |
|----------------------------|---------------------|-----------------|-----------------------------|-----------------------------|----------|
| Financial Literacy -> Consumptive Behaviour | -0.340              | -0.357          | 0.166                       | 2.053                       | 0.040    |
| Self Control x Financial Literacy -> Consumptive Behaviour | -0.085              | -0.083          | 0.089                       | 0.958                       | 0.338    |

The results of hypothesis testing in table 7 provide information about how strong and significant the relationship between constructs in the model proposed in this research is. These results can be explained, among other things, as follows:

A. **Financial literacy has a negative and significant effect on consumer behavior**

Based on the original sample results of -0.340 with a p-value of 0.040 < 0.05. So it can be concluded that the hypothesis "financial literacy has a negative and significant effect of -34% on the consumer behavior of Bachelor of Economics Education students" which means that hypothesis 1 is accepted. The results of this research are strengthened by several previous studies which state that financial literacy has a negative and significant effect on consumer behavior [23], [28], [52]. Students who have good financial literacy tend to be wiser in managing their money, including understanding the importance of making a budget and controlling expenses.

According to Caplinska & Ohotina, financial literacy can be measured through several indicators, one of which is the chosen plan [19]. Students who always make a shopping list or plan before making purchases tend to show a high level of financial literacy, because this practice reflects their ability to plan expenses well. By compiling a shopping list, students can identify real needs and prioritize purchases, thereby avoiding impulse shopping or unnecessary purchases [53]. This practice helps students stay within set budget limits and manage their finances more efficiently. As a result, the consumption behavior of students who always make shopping lists is usually more focused, controlled and responsible, contributing to long-term financial stability.

Students realize that the ability to manage finances can be obtained from anywhere, such as books, courses, YouTube, lectures, which can have a positive impact on students' consumption behavior. Wide access to various financial literacy sources such as books and the internet [16], gives students the opportunity to build a comprehensive understanding of managing finances. By utilizing these various resources, students can learn effective financial strategies, such as budgeting, saving, investing, and managing financial risk. So students who do not understand financial literacy well can cause these people to tend to be wasteful because they are increasingly consumptive.

In addition, this research shows that students show a very good level of caution and awareness regarding the use of digital credit. In financial literacy, students with a good understanding of the risks and benefits of using digital credit tend to do research and seek information before...
making decisions. They are aware of the potential pitfalls or financial difficulties that can arise if they are not careful with digital credit services. Caution regarding the use of digital credit is an indicator of strong financial literacy, where students try to protect themselves from potential excessive consumer behavior [54].

Students tend to see how important it is to understand the risks and responsibilities in using digital credit, considering that easy access to services such as online loans which are widespread can influence their consumer behavior. Having a good understanding of digital credit services will help students make wiser financial decisions, avoid debt traps, and manage their budgets more effectively [55]. Based on the analysis above, it can be concluded that the higher the student's financial literacy level, the lower their consumptive behavior.

B. The Role of Self Control in Moderating the Effect of Financial Literacy on Consumptive Behavior

Based on the original sample results of -0.085 with a p-value of 0.338 > 0.05. So it can be concluded that the hypothesis "financial literacy has no effect on the consumer behavior of Bachelor of Economics Education students with self-control as moderation", which means hypothesis 2 is rejected. This research is supported by Suwardhana's statement in his research which found that self-control was unable to moderate the independent variable in consumer behavior research [29]. Supported by research by Rahmawati and Surjanti, which states that there is no significant influence of self-control on students' consumptive behavior [56].

In this research, the self-control variable weakens the influence of financial literacy on student consumption behavior. This shows the challenges faced by students in dealing with technological disruption when making consumption decisions. This condition can be caused by the large number of advertisements, promotions and personalized recommendations on social media and e-commerce which continually attract students' attention and influence their purchasing decisions. In addition, even though their level of financial literacy is good, students still lack effective strategies for separating relevant and irrelevant information, so they are easily distracted by external stimuli.

Individuals with good self-control are expected to be able to manage their finances and spend them according to their needs. In this research, it was found that although good financial literacy can help students understand the importance of making rational consumption decisions, a lack of self-control can be a factor that weakens the effect of financial literacy on consumption behavior. Students who have high financial literacy need to increase awareness of the importance of self-control in dealing with online distractions as well as practical abilities to manage temptations from social media or online platforms. Therefore, although financial literacy is important, developing strong self-control is also necessary to help students make wiser consumption decisions.

Financial literacy gives students the knowledge about how to manage money wisely, including how to budget, save, and understand the financial consequences of spending decisions. However, without adequate self-control, students find it difficult to apply this knowledge consistently, especially amidst the temptation of impulsive shopping. Self-control can help students overcome social or environmental pressures that encourage excessive consumption. This research is in line with the results of previous research which states that although knowledge is a necessary foundation, high financial literacy does not always result in good financial behavior in practice [57].
5. **Conclusions and Implications**

As for several findings obtained in the research, it can be concluded that financial literacy has a negative and significant effect on the consumer behavior of Bachelor of Economics Education students. It can be interpreted that the higher the student's financial literacy level, the lower their consumptive behavior. With good financial literacy, students can understand financial risks and how to avoid unnecessary debt and direct students to consume consumption behavior that does not lead to consumptive behavior. The new finding in this research is that the self-control variable should strengthen but weaken the influence of financial literacy on students' consumptive behavior. It can be interpreted that even though students have a very good level of financial literacy, they are not accompanied by good self-control through consistent self-discipline in managing their finances, so this will weaken their rational consumption actions. Suggestions given by researchers regarding the results of this research include: 1) Students are expected to be able to improve their ability to practically apply knowledge of financial literacy to consumption behavior, especially in utilizing digital financial services wisely, 2) Future researchers are advised to explore other moderating variables such as norms social or emotional intelligence which influences the relationship between financial literacy and student consumptive behavior. Researchers can also consider the influence of social media and digital technology in shaping student consumer behavior and measure more specific variables with valid measurement instruments. So that it makes a significant contribution to increasing financial literacy and reducing student consumptive behavior.

**References**


[8] M. Sari, N. Adilla Bahri Lubis, and Jufrizen, “The Effect Of Financial Literature And Self Control On Consumption Behavior (Study On Students Of The Faculty Of...


[23] W. Yubilia Maris and A. Listiadi, “Pengaruh lingkungan teman sebay, status sosial ekonomi orang tua, dan literasi keuangan terhadap perilaku konsumtif dengan locus of


