Proceeding – ICAMEB
International Conference on Accounting, Management, Entrepreneurship and Business (ICAMEB)

The Role of Financial Behavior Biases and Materialism in Shaping Teachers' Debt Propensity

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Abstract

This study explores the influence of financial behavior biases and materialism on teachers' propensity toward indebtedness in West Java Province, Indonesia. Debt is increasingly regarded not only as a financial instrument but also as a behavioral outcome shaped by psychological and value driven factors. Drawing on behavioral finance and consumer behavior theories, the research focuses on how cognitive biases and materialistic orientations affect financial decision making among educators. The study employed a quantitative survey method with purposive sampling, involving 150 teachers as respondents. Data were collected through a structured questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), which allowed for testing the measurement and structural models simultaneously. The empirical results confirm that both financial behavior biases and materialism have a positive and significant impact on teachers' propensity toward indebtedness. Financial behavior biases demonstrate a stronger influence compared to materialism, suggesting that cognitive distortions play a more dominant role than value orientation in shaping borrowing tendencies. These findings validate behavioral finance perspectives, which highlight the role of psychological biases in undermining rational financial decision-making, and complement consumer behavior literature that associates materialism with debt reliance. By situating the analysis in the context of teachers, the study contributes to expanding empirical evidence on indebtedness propensity in professional groups with stable but limited income, offering further insights into the behavioral determinants of debt.

Keywords— ***financial behavior biases; materialism; indebtedness propensity; teachers; behavioral finance***

I. INTRODUCTION

The phenomenon of indebtedness has become a significant issue worldwide, including in Indonesia. Debt is no longer viewed merely as an alternative to fulfill urgent needs but has often turned into a lifestyle, especially with the ease of access to credit and technology-based loans (fintech) (Satrida & Lutfi, 2024). This condition is consistent with findings in behavioral finance, which explain that individual financial decisions often deviate from rational assumptions in traditional finance due to psychological, social, and behavioral bias factors (Santoso et al., 2022). In the perspective of behavioral finance, several financial behavior biases such as overconfidence, myopic bias, and loss aversion can drive individuals to make unsound financial decisions, including excessive borrowing. A systematic review has revealed that behavioral biases, low financial literacy, and materialistic orientation are among the main determinants of indebtedness propensity (Nisa et al., 2025). This indicates that indebtedness is not merely an economic problem but also a complex interaction of cognitive, affective, and dispositional factors.

Materialism, as a value orientation emphasizing possessions and material wealth as measures of success, has been found to have a positive correlation with indebtedness propensity (Pamungkas et al., 2024; Satrida & Lutfi, 2024). Individuals with high levels of materialism tend to exhibit more consumptive behavior and spending that exceeds income, which pushes them to rely on debt as a quick solution to fulfill their desires. Consequently, materialism not only fosters consumptive habits but also weakens long-term financial control.

Moreover, demographic and psychosocial aspects have been shown to influence attitudes and perceptions toward debt. For instance, research on young consumers in Indonesia demonstrates that differences in gender, income, and lifestyle significantly affect perceptions of debt (Astuti & Faturohman, 2024). These findings highlight the need to further explore behavioral and social determinants of indebtedness.

In the context of teachers in West Java, this issue becomes particularly relevant. Teachers, as educators who are expected to model financial responsibility, are also exposed to economic pressures, lifestyle demands, and behavioral biases that may increase their propensity to be indebted. Therefore, investigating the influence of financial behavior bias and materialism on teachers' indebtedness propensity is crucial, not only to enrich the academic discourse but also to provide insights for policy interventions aimed at supporting the financial well-being of educators.

Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), developed by Ajzen (1991), explains that individual behavior is the result of behavioral intention, which is formed through three main factors: attitude toward the behavior, subjective norms, and perceived behavioral control. In the context of financial behavior, TPB posits that a person's decision to borrow is not solely based on rational economic considerations but is also influenced by a positive attitude toward debt, social pressure to meet consumption expectations, and the individual's belief in their ability to manage financial obligations (East, 1993). This theory is relevant to explaining the influence of financial behavior bias and materialism on borrowing tendencies, as cognitive biases may affect perceived control and risk assessment, while materialism shapes positive attitudes toward consumption and the use of credit as a means of achieving material satisfaction. Therefore, TPB provides a comprehensive conceptual framework for understanding how psychological and social factors interact in shaping individual financial behavior, particularly in the context of debt-related decision-making (Xiao et al., 2009).

Propensity to indebtedness

Propensity to indebtedness is widely recognized as an individual's tendency or inclination to rely on debt as a means of meeting financial needs, whether for productive or consumptive purposes. Prior studies emphasize that this construct reflects not only economic capacity but also behavioral and psychological drivers. In the Malaysian context, Nurul Azma et al. (2019) highlighted that materialism and emotional factors significantly increase an individual's propensity to indebtedness, while financial literacy and risk perception were found to be less influential. Their findings illustrate that debt behavior is often rooted in value orientation and emotional impulses rather than rational financial knowledge.

Further evidence comes from Ghana, where Owusu et al. (2024) demonstrated that a higher propensity to indebtedness negatively affects students' saving ability. Interestingly, their study found that financial literacy moderates this relationship, indicating that while debt tendencies reduce financial resilience, literacy can act as a safeguard against excessive reliance on credit. This confirms the dual role of propensity to indebtedness as both a behavioral outcome and a determinant of wider financial well-being.

In Indonesia, the phenomenon of indebtedness has also been closely linked to consumerist behaviors. Widjaja & Pertiwi (2021) identified that millennials in Surabaya exhibit high propensity to indebtedness driven by materialism, emotions, and risk-taking tendencies. Likewise, Iswariyadi et al. (2023) examined Gen Z Shopee Paylater users and found that materialism and compulsive buying positively influenced their indebtedness, while financial literacy showed no significant impact. These findings highlight that in the digital financial ecosystem, psychological and lifestyle-related factors dominate rational considerations in driving debt behavior. At a broader level, a systematic review by B. P. U. K. Biyanwila & P. A. N. S. Anuradha (2023) consolidates evidence across multiple economies, concluding that propensity to indebtedness is consistently shaped by behavioral determinants, especially materialism and emotions, alongside macroeconomic and demographic contexts. They argue that understanding indebtedness solely from an economic perspective is insufficient, as behavioral aspects often determine why individuals voluntarily assume debt even when financially constrained. Overall, the literature shows that propensity to indebtedness represents a multidimensional construct shaped predominantly by behavioral finance elements. Materialism, emotions, and compulsive consumption act as strong drivers, while financial literacy plays an inconsistent but potentially moderating role. These insights underline the importance of analyzing indebtedness not only through traditional financial variables but also through the lens of behavioral and psychological dynamics.

Financial Behavior Biases

Behavioral finance literature challenges the neoclassical assumption that individuals act rationally in making financial decisions. Instead, decision making is often influenced by psychological biases that can lead to suboptimal financial outcomes (Walasek et al., 2024). One prominent bias in this context is mental accounting, where individuals categorize money based on subjective criteria, leading to inconsistent financial behaviors such as borrowing despite having savings (Thaler, 1999). Empirical studies demonstrate that mental accounting increases individuals' tendency to rely on credit, since they treat debt and savings as separate mental categories (Silva et al., 2023). This bias can distort rational budgeting and consequently increase debt exposure among households.

Another behavioral bias relevant to debt behavior is herding. Herding occurs when individuals imitate the financial behavior of others, neglecting their own information and judgment (Bikhchandani & Sharma, 2000). Recent studies highlight that in financial markets, herding leads to irrational borrowing and investment decisions, particularly during periods of uncertainty (Le et al., 2024). In the context of consumer finance, herding behavior may manifest in individuals' decisions to engage in borrowing simply because peers or colleagues do so, thereby normalizing indebtedness even when personal financial capacity is limited.

Additionally, loss aversion, as described in Prospect Theory, significantly influences financial decision-making. Loss aversion reflects individuals' stronger sensitivity to losses than to equivalent gains (Kahneman & Tversky, 1979). Empirical findings suggest that individuals with higher levels of loss aversion are prone to making risk-averse choices in investment, yet paradoxically may resort to borrowing as a mechanism to avoid immediate consumption loss (Jayawardena & Nanayakkara, 2025). In this way, loss aversion may intensify debt tendency by prioritizing short-term utility over long-term financial stability.

Overall, these behavioral biases mental accounting, herding, and loss aversion highlight how psychological factors shape individuals' predisposition toward indebtedness. In the context of teachers in West Java, such biases may be particularly relevant given their stable but limited income structure, social influence in professional environments, and financial responsibilities. Based on the theoretical review and prior empirical evidence, the following hypothesis is proposed:

H1: Financial behavior bias has a significant effect on teachers' debt tendency.

Materialism

Materialism is generally defined as the importance of material possessions in a person's life (Lim et al., 2020). At the highest level, these possessions become the center of one's life and are considered the greatest source of satisfaction or dissatisfaction. Belk (1985) identified materialism as a significant but often overlooked issue in macro-consumer behavior. The concept includes three basic traits: envy, nongenerosity, and possessiveness. Materialistic people tend to be more selfish and less willing to share. Envy, as one of the traits of materialism, can motivate a person to strive to acquire desired objects. However, traditionally, envy is also seen as a destructive trait.

Based on a literature review, there is a clear relationship between materialism and the propensity to incur debt. A study by Doosti & Karampour (2017) found that materialism has a positive impact on the tendency to be in debt. This means that the higher a person's level of materialism, the greater their likelihood of getting into debt. This finding is supported by other research that also identifies materialism as one of the variables that most influences the level of debt, although its effect may be smaller compared to other factors such as financial literacy.

Several studies, such as the one conducted by Khan et al. (2024), have sought to build a model to test the holistic impact of financial literacy on behaviors, including materialism, compulsive buying, and the tendency to be in debt. The results of that study showed that financial literacy has the most significant impact on compulsive buying behavior compared to materialism and the propensity to be in debt. Nevertheless, materialism is still recognized as a factor that can help minimize debt if its consequences are understood. This indicates that an understanding of the impact of materialism can be part of education to reduce individual debt. Based on the literature review, there is a consistent positive relationship between materialism and the propensity to be in debt. Individuals who highly value material possessions tend to use debt as a tool to satisfy their consumptive desires.
H2: Materialism has a significant effect on teachers' debt tendency.

II. METHOD

This study employs a quantitative research approach with a survey design to investigate the effect of psycho behavioral factors, which combine financial behavior bias and materialism, on teachers' indebtedness propensity in West Java Province, Indonesia. The quantitative approach was chosen because it allows the researcher to test hypotheses and examine causal relationships between latent variables. The population in this study consists of teachers in West Java Province. Through purposive sampling, 150 respondents were selected as the research sample, considering their active employment status and direct involvement in personal financial decision-making. The number of respondents is considered adequate because it exceeds the minimum sample size requirements for multivariate analysis as suggested by (Hair et al., 2022).

Data were collected through a structured questionnaire distributed both online and offline. The questionnaire consisted of three sections, namely demographic information, items measuring psycho behavioral factors, and items measuring indebtedness propensity. All constructs were measured using a five point Likert scale ranging from "strongly disagree" to "strongly agree." The independent variable in this study is psycho behavioral factors, which integrate indicators of financial behavior bias such as mental accounting, herding, and loss aversion with materialism dimensions including possessiveness, envy, and nongenerosity. These indicators were adapted from prior studies by (Belk, 1985), (Silva et al., 2023), and (Doosti & Karampour, 2017). The dependent variable is indebtedness propensity, measured through items reflecting attitudes and tendencies toward the use of debt, adapted from previous studies by Jayawardena & Nanayakkara (2025) as well as (Pamungkas et al., 2024).

Data analysis was carried out using Partial Least Squares Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS software. This method was chosen because it is suitable for analyzing complex models with latent constructs and for predictive purposes. The analysis was conducted in two stages, beginning with the assessment of the measurement model to evaluate validity and reliability, followed by the evaluation of the structural model to assess path coefficients, the coefficient of determination (R^2), and hypothesis testing through the bootstrapping procedure.

III. RESULTS AND DISCUSSION

The evaluation of the measurement model demonstrates that all constructs in this study meet the standards for convergent validity and internal consistency. The factor loading values for each indicator fall within the range of 0.736 to 0.909, surpassing the minimum benchmark of 0.70. This confirms that every indicator strongly reflects its respective latent construct. The Average Variance Extracted (AVE) values for all constructs are higher than 0.50, with financial behavior bias at 0.736, materialism at 0.707, and propensity to indebtedness at 0.725. These results indicate that each construct accounts for more than half of the variance of its observed indicators. In addition, the Composite Reliability (CR) values of 0.893, 0.906, and 0.929 all exceed the recommended cut-off of 0.70, signifying excellent internal consistency. Likewise, Cronbach's Alpha (CA) scores, which range from 0.819 to 0.904, further verify the stability and reliability of the measurement instruments. Collectively, these findings affirm that the measurement model employed in this study is both valid and reliable, thereby providing a robust basis for further structural model testing, consistent with methodological recommendations by Hair et al. (2022).

Table 1. Measurement Model Analysis and Evidence of Convergent Validity

Characteristics	Factor Loadings	AVE	CR	CA
Financial behavior biases		0,736	0,893	0,819
FBB 1	0,823			
FBB 2	0,909			
FBB 3	0,838			
Materialism		0,707	0,906	0,861

Characteristics	Factor Loadings	AVE	CR	CA
M1	0,782			
M3	0,866			
M4	0,840			
M5	0,872			
Propensity to indebtedness		0,725	0,929	0,904
PI1	0,886			
PI2	0,889			
PI3	0,878			
PI4	0,857			
PI5	0,736			

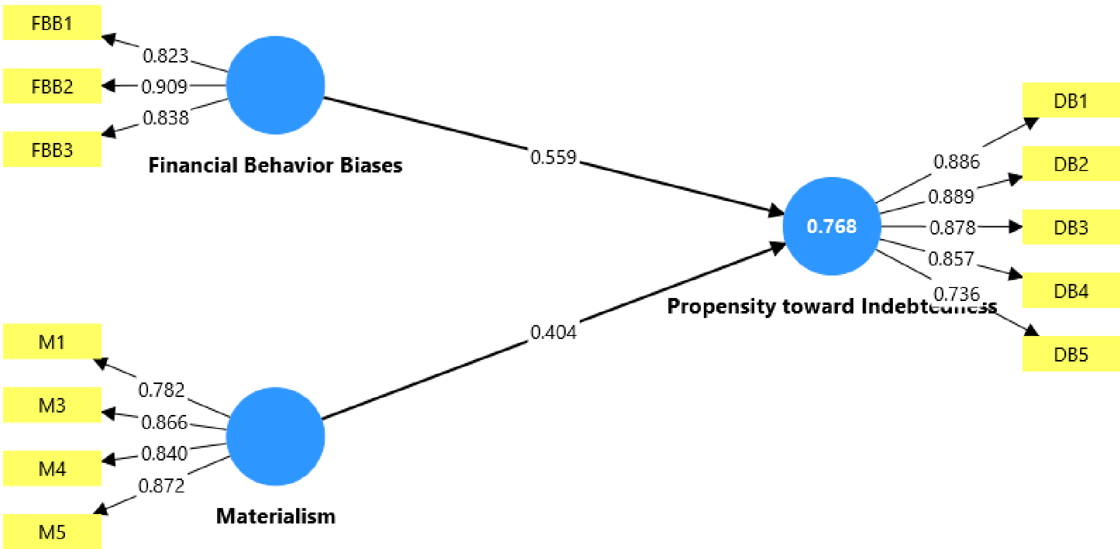

Figure 1. Structural Model

The Effect of Financial Behavior Biases on Propensity toward Indebtedness

The path analysis results indicate that Financial Behavior Biases have a coefficient of 0.559 on Propensity toward Indebtedness. The t-statistics value of 7.649, which is far above the 1.96 threshold at a 5% significance level, and the p-value of 0.000 confirm that the relationship is statistically significant. The positive coefficient suggests that the higher the financial behavior biases teachers possess, the greater their tendency to incur debt.

This finding is consistent with the study by Flores & Vieira (2014) and Hamid (2025), which revealed that financial behavior biases such as herding, overconfidence, and mental accounting encourage individuals to make less rational financial decisions, thereby increasing their propensity to indebtedness. Academically, this can be explained through behavioral finance theory, which asserts that psychological biases distort rational judgment in financial decision-making (Thaler, 1999). Thus, in the context of teachers in West Java, financial behavior biases are proven to be a significant factor contributing to the heightened tendency toward indebtedness.

The Effect of Materialism on Propensity toward Indebtedness

The analysis of the path between Materialism and Propensity toward Indebtedness yielded a coefficient of 0.404, with a t-statistics value of 4.936 and a p-value of 0.000. These results demonstrate that materialism exerts a positive and significant influence on indebtedness propensity. In other words, teachers with higher levels of materialism tend to be more inclined to use debt as a means of fulfilling consumptive desires and maintaining social status.

This result aligns with the study by (Azma et al., 2019; Ihsan, 2021), which found that materialism positively affects the propensity to indebtedness. From a theoretical perspective, materialism highlights the importance of possessions as a measure of life success (Belk, 1985), thereby making individuals with a strong materialistic orientation more vulnerable to relying on debt to satisfy their consumptive aspirations.

Table 2. Hypothesis Testing

Hypothesis	Relationship	Original Sample	Standard Deviation	T-Statistics	P-Values	Result
H1	FBB → PI	0,559	0,073	7,649	0,000	Accepted
H2	M → PI	0,404	0,082	4,936	0,000	Accepted

Both hypotheses of this study are accepted. Financial Behavior Biases and Materialism are both proven to have a positive and significant effect on Propensity toward Indebtedness. However, the influence of Financial Behavior Biases is more dominant than that of Materialism, as indicated by the higher path coefficient. These findings reinforce previous studies Azma et al. (2019), Flores & Vieira (2014), and Hamid (2025) while also extending empirical evidence to the context of teachers in West Java, showing that psychological factors and consumptive values play a crucial role in driving indebtedness propensity.

IV. CONCLUSIONS

This study set out to examine the influence of financial behavior biases and materialism on teachers' propensity toward indebtedness in West Java Province. The findings from the measurement and structural model assessments demonstrate that both constructs exert a positive and significant effect on indebtedness propensity. More specifically, financial behavior biases exhibit a stronger impact compared to materialism, as reflected in the higher path coefficient. These results underscore the critical role of psychological distortions in financial decision-making and the influence of value orientation in shaping consumption patterns that lead to debt reliance.

From a theoretical standpoint, the study extends the application of behavioral finance by confirming that cognitive biases such as mental accounting, herding, and loss aversion remain highly relevant in explaining debt related behaviors beyond financial markets, particularly among educators with relatively stable but limited income. Likewise, the significance of materialism reinforces consumer behavior theory, which positions material possession as a driver of status and satisfaction, thereby prompting individuals to use debt as a coping mechanism for unmet desires.

In practical terms, the findings suggest the necessity for targeted financial literacy programs that not only improve technical financial management skills but also address psychological and behavioral aspects of decision-making. Additionally, awareness campaigns aimed at reducing materialistic orientations and promoting financial prudence can be instrumental in mitigating teachers' reliance on debt. Policymakers and educational institutions are therefore encouraged to design interventions that integrate both cognitive behavioral awareness and value-based financial education to strengthen teachers' financial well-being.

Limitations And Suggestions For Future Research

Although the present study provides meaningful insights, several limitations should be acknowledged. First, the sample is limited to 150 teachers in West Java, which restricts the generalizability of the findings to other regions or professional groups. Future research could expand the sample size and incorporate teachers from different provinces or even diverse occupations to capture broader variations. Second, the study relied on self-reported survey data, which may be subject to response bias. Employing mixed methods, such as combining surveys with in-depth interviews or behavioral experiments, could enrich the robustness of future findings. Third, the study focused exclusively on financial behavior biases and materialism as predictors of indebtedness propensity. Other relevant factors such as financial literacy, peer influence, or cultural values were not examined and could be integrated into future models to provide a more comprehensive understanding.

Future research is also encouraged to adopt longitudinal designs to observe how financial behavior biases and materialism influence indebtedness propensity over time, particularly in response to changes in economic conditions and financial regulations. Exploring moderating variables such as digital financial literacy or financial self-control may also offer valuable contributions to both theory and practice.

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