

Financial Literacy, Lifestyle, and Education in Prudent Online Borrowing Decisions: The Mediating Role of Self-Control

Fricy O. Rumintjap*, Supramono, and Ardiani Ika Sulistyawati

Master of Management Program, Postgraduate Program, Universitas Semarang, Semarang, 50196, Indonesia

ABSTRACT

Purpose – The rapid growth of digital lending raises concerns about borrowing decision quality. This study examines how financial literacy, consumption-oriented lifestyle, and perceived financial value of education relate to prudent online borrowing decisions through self-control, focusing on platform legality, borrowing costs, and repayment capacity.

Design/methodology/approach – Data from 133 employees across eight branches of an education services company were analyzed using PLS-SEM (SmartPLS 3.0). Analyses included discriminant validity, criterion contamination, common method bias, and PLSpredict assessments, alongside 5,000-resample bootstrapping with percentile confidence intervals for direct, indirect, and total effects.

Finding/Results – Financial literacy and consumption-oriented lifestyle show significant positive direct and indirect relationships with prudent borrowing decisions through self-control (complementary partial mediation). The perceived financial value of education shows a small significant indirect effect (indirect-only mediation). The model explains 61.3% of the variance with satisfactory predictive performance, while self-control's moderating effect on the lifestyle relationship is unsupported.

Originality/Value – This study advances digital consumer finance research by distinguishing borrowing propensity from borrowing decision quality and identifying self-control as a psychological mechanism linking financial knowledge, lifestyle orientations, and educational value perceptions to prudent borrowing. The findings provide insights for workplace financial education, consumer protection initiatives, and responsible digital lending practices.

ARTICLE INFO

Keywords:

Financial Literacy,
Lifestyle,
Perceived Financial
Value of Education,
Self-Control,
Prudent Online
Borrowing

Article Information:

Received: 12/06/2026

Revise: 01/07/2026

Accepted: 20/08/2026

ISSN:

2985-3168 (Online)

2985-3222 (Print)

*Corresponding Author at:

Master of Management Program, Postgraduate Program, Universitas Semarang, Jalan Soekarno Hatta, Tlogosari Kulon, Pedurungan, Semarang 50196, Indonesia.

E-mail address: fricyrumintjap@gmail.com (Fricy O. Rumintjap), supramono@uksw.edu (Supramono), ardiani@usm.ac.id (Ardiani Ika Sulistyawati)

The work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International \(CC BY-SA 4.0\)](https://creativecommons.org/licenses/by-sa/4.0/)



1. Introduction

The digital transformation of financial services has fundamentally changed the way Indonesian households manage money and access credit. Internet penetration in Indonesia reached 79.5% in 2024, equivalent to approximately 221.56 million users (APJII, 2024). Riding on this connectivity, financial technology (fintech) platforms—particularly information-technology-based co-funding services (peer-to-peer/P2P lending, popularly known as pinjaman online or “pinjol”)—offer credit that can be disbursed within minutes using only a national identity card and a smartphone (Safitri, Permadi, & Fathussyaadah, 2022; Gayatri & Muzdalifa, 2022).

The industry’s growth has been accompanied by mounting concerns about borrower welfare. The Financial Services Authority (Otoritas Jasa Keuangan/OJK) recorded that outstanding P2P lending grew 27.32% year-on-year to IDR 75.60 trillion by November 2024, with borrowers aged 19–34 accounting for 51.52% of individual outstanding loans while registering the highest 90-day non-performing rates (OJK, 2024). In North Sulawesi, active borrower accounts rose from 231,880 in October to 239,829 in December 2024, with outstanding loans of IDR 878.95 billion (OJK, 2024). Because legal platforms coexist with unlicensed (illegal) lenders, and because interest costs are considerably higher than bank credit, how borrowers decide—whether they verify licensing, compute costs, and assess repayment capacity—matters as much as whether they borrow at all (Gayatri & Muzdalifa, 2022).

This study therefore focuses on the quality, rather than the frequency, of borrowing decisions. We define the dependent variable as prudent online borrowing decision-making: the extent to which an individual’s process of deciding whether, where, and how to use online loans is deliberate, informed, and risk-aware. It is reflected in choosing only legal, officially registered and OJK-licensed platforms, understanding the consequences of late payment, computing total interest and fees before borrowing, borrowing for need-based or productive purposes with a clear plan for fund use, and checking platform reputation and security. All measurement items are positively worded toward this meaning, so higher scores uniformly indicate a more prudent decision process—not a greater likelihood of borrowing. This construct definition governs the interpretation of every direct and indirect effect reported below.

The empirical setting is PT Insan Cerdas Indonesia, an education-services company operating eight branches in Manado and surrounding regions. Most employees hold tertiary degrees and earn salaries sufficient for daily needs, yet many routinely use online loans—preliminary interviews indicated borrowing for daily needs, hedonic consumption, and debt repayment. This makes the workforce an informative case for asking what distinguishes careful from careless use of online credit among educated, employed adults.

The empirical literature on the determinants of online borrowing behavior is inconclusive. Financial literacy is reported as significant in some studies (Pratita & Martono, 2024; Assyifa & Subagyo, 2023; Yuniawati, Syarif, & Sajekti, 2024; Suyanto, Putri, & Dewi, 2024; Gayatri & Muzdalifa, 2022; Saputra, Oktavia, Samasta, & Kusuma, 2025; Al Hadi, Oktaria, Sari, & Yulistina, 2024) but not in others (Faradila & Rafik, 2023; Devi, Mulyati, & Umiyati, 2020; Setiyaningsih et al., 2024; Ferdiansyah & Khairudin, 2025; Ariyanti & Syah, 2025). Lifestyle is a significant driver in some studies (Kusuma & Habib, 2024; Syafritya & Lahindah, 2024; Putri, Nasution, & Atika, 2025) but not in others (Mukhlisiah, 2023; Maulana, Hatimatunnisani, Oktapiyani, Zaharah, & Keizer, 2024; Mubarok & Wiyadi, 2024). Findings on education are equally mixed (significant: Zalukhu et al., 2024; Paramita, Wahyudi, & Fadila, 2020; Sihombing

& Abidin, 2024; non-significant: Saputra et al., 2025; Sarda, 2024). We argue that part of this inconsistency arises because outcome constructs conflate two different things: the propensity to borrow and the quality of the borrowing decision. Antecedents such as literacy may plausibly reduce the former while improving the latter, so studies mixing the two can produce contradictory signs.

A second source of inconsistency is the omission of the psychological mechanism through which knowledge and dispositions become behavior. This study proposes self-control—the capacity to override impulses, delay gratification, and regulate behavior toward long-term goals (Averill, 1973; Tangney, Baumeister, & Boone, 2004; Baumeister, 2002)—as the mediating mechanism. Recent Indonesian studies have inserted intervening variables such as credit risk (Mulyawan, Asana, & Oktabiani, 2025) or locus of control (Putri et al., 2025), but evidence on self-control as a mediator among employed adults, rather than student or Generation Z samples, remains scarce, particularly outside Java.

This study contributes in three ways. It explicitly separates borrowing propensity from borrowing decision quality and models the latter, clarifying the direction and interpretation of all hypothesized effects. It subjects the mediation model to a more rigorous assessment than is common in this literature—discriminant validity via HTMT, common method bias diagnostics, 5,000-resample bootstrap percentile confidence intervals for direct, indirect, and total effects, and an explicit test of a rival moderation specification. It provides a single-organization case from Eastern Indonesia, a segment and region underrepresented in fintech-borrowing research, and derives deliberately context-specific implications for employers, regulators, and lending platforms.

The remainder of this paper is organized as follows. Section 2 reviews the literature and develops the hypotheses. Section 3 describes the data and method. Section 4 presents the results and discussion, and Sections 5 and 6 conclude with implications, limitations, and directions for future research.

2. Literature Review & Hypothesis Development

2.1. Prudent online borrowing decision-making

A consumer decision is a choice among two or more alternatives (Schiffman & Kanuk, 2004), and Kotler and Keller (2012) describe its dimensions as product, brand, channel, amount, and timing choices. For credit products, however, the welfare-relevant question is not only which loan is chosen but how well the choice is made. Drawing on the responsible-borrowing perspective embedded in Indonesia's consumer-protection framework (OJK, 2016), we conceptualize prudent online borrowing decision-making as a decision process that (i) restricts consideration to legal, registered, and OJK-licensed platforms with sound reputations and security; (ii) evaluates the total cost of credit, including interest, fees, and late-payment consequences; (iii) matches borrowing to repayment capacity and need-based or productive purposes; and (iv) plans the use of borrowed funds. Within the Theory of Planned Behavior (Ajzen, 1991), such a process reflects favorable attitudes toward careful financial conduct and a high level of behavioral control over borrowing impulses; self-control is the volitional capacity that underpins perceived behavioral control. Conceptually, this construct is distinct from borrowing propensity: a prudent decision-maker may borrow or refrain from borrowing, but does either deliberately.

2.2. Financial literacy

Financial literacy is the combination of knowledge, skill, and confidence that improves the quality of financial decision-making and money management (OJK, 2016). It encompasses understanding financial concepts and risks, budgeting, saving, borrowing, insurance, and investment (Chen & Volpe, 1998; Lusardi & Mitchell, 2014), and the capacity to apply that understanding in daily decisions (Laily, 2016; Yushita, 2017). Mukharomah and Kurniawan (2023) emphasize that literacy enables individuals to evaluate collected information so that decisions—including credit decisions—are made deliberately. In this study, financial literacy is measured through knowledge and application dimensions (Indrawan & Veronica, 2024). Because digital financial literacy remains uneven in Indonesia (Rahayu, 2022), literacy is a natural candidate antecedent of the quality of online borrowing decisions.

2.3. Lifestyle

Lifestyle is a person's pattern of living expressed through activities, interests, and opinions, particularly in how money is spent and time is allocated (Dilasari, Mulyati, & Kurniawan, 2021). To avoid ambiguity about what our scale captures, we characterize the construct precisely as consumption-oriented lifestyle engagement: the activity items measure routine participation in shopping, recreation, and social gatherings; the interest items measure attentiveness to product trends and brands; and the opinion items measure beliefs about appearance and social status. The construct thus measures active consumer engagement with elements of status consumption; it does not measure financial discipline, nor does it directly measure over-indebtedness or hedonic excess. The literature assigns such engagement two distinct roles in borrowing behavior that are often conflated. On the one hand, consumption-oriented lifestyles can increase the need or desire to borrow: trend-following and status-oriented consumption create recurring financing pressure that instant credit can satisfy (Setiyaningsih et al., 2024; Kusuma & Habib, 2024).

On the other hand, consumption-active individuals are more frequently exposed to digital financial products, promotions, and peer information exchange, which builds marketplace familiarity and evaluation routines—platform comparison, reputation checking, recommendation seeking—that can improve the quality of the decision process itself (Syafriya & Lahindah, 2024). Notably, recommendation seeking from family and friends is itself one facet of the prudence construct, so the informational pathway is directly represented in the data. Because our dependent variable captures decision quality rather than borrowing volume, the engagement mechanism is the relevant one for the direct hypothesis; the borrowing-pressure mechanism concerns an outcome this study does not model, and the tension between the two is revisited in the discussion.

2.4. Perceived financial value of education

Prior studies of education and financial behavior typically operationalize education as attained level (e.g., high school, diploma, bachelor's, postgraduate), with mixed results (Zalukhu et al., 2024; Paramita et al., 2020; Sihombing & Abidin, 2024; Saputra et al., 2025; Sarda, 2024). This study takes a perception-based approach: the six items, adapted from a consumer-education framework covering personal financial management, consumer choice and decision-making, and consumer awareness, ask respondents to assess the extent to which their formal education provides a foundation for money management, enables them to analyze the risks and long-term implications of financial decisions, and supports informed consumer

choices. We label the construct the perceived financial value of education (PFVE) to reflect precisely what is measured. Its position relative to adjacent constructs should be stated explicitly: unlike financial literacy, which captures actual financial knowledge and its application, PFVE captures an attribution—the belief that one’s formal education is the source of financial competence; unlike financial self-efficacy, it refers to the perceived adequacy of one’s educational preparation rather than task-specific confidence. Because such attributions and actual literacy plausibly co-develop, the two constructs are expected to correlate substantially, and we therefore examine their empirical distinctiveness (Section 4.2) and PFVE’s incremental contribution beyond literacy (Section 4.3) rather than assuming them. PFVE is expected to matter for borrowing decisions because individuals who believe their education equips them to analyze financial information are more likely to engage in the information search and risk evaluation that characterize a prudent decision process (Harjayanti, Rovita, & Yuwono, 2020). At the same time, general education is not domain-specific, and its behavioral consequences may depend on self-regulatory capacity rather than operating directly (Devi et al., 2020). Objective attainment, field of study, and exposure to formal financial training were not collected in this survey; establishing whether they add explanatory power beyond literacy remains a task for future research.

2.5. Self-control

Self-control is the ability to plan, direct, and regulate one’s behavior toward positive outcomes, including the capacity to delay gratification (Averill, 1973; Tangney et al., 2004). Averill (1973) distinguishes behavioral control (regulating actions and responses), cognitive control (managing thought processes and attention), and decisional control (choosing deliberately among available courses of action). In consumer finance, self-control failure is a proximate cause of impulsive purchasing and over-indebtedness, whereas strong self-control supports restrained, deliberate use of credit (Baumeister, 2002). We therefore position self-control as the psychological channel through which knowledge (financial literacy), dispositions (lifestyle), and perceived educational competence are converted into a prudent borrowing decision process.

2.6. Hypothesis development

Financial literacy equips individuals to identify licensed platforms, compute the total cost of credit, and assess repayment capacity before borrowing—precisely the behaviors that define a prudent decision process (Lusardi & Mitchell, 2014; Mukharomah & Kurniawan, 2023). Empirically, literacy has been associated with better-quality financial decisions in credit and purchase contexts (Pratita & Martono, 2024; Assyifa & Subagyo, 2023; Gayatri & Muzdalifa, 2022; Al Hadi et al., 2024). Thus:

H1: Financial literacy is positively related to prudent online borrowing decision-making.

Consumption-active lifestyles expose individuals to digital financial products and to social information exchange—recommendations from family, friends, and peers—that feed platform comparison, reputation checking, and cost awareness (Syafriya & Lahindah, 2024; Putri et al., 2025). Through this engagement mechanism, lifestyle is expected to be positively associated with the deliberateness of the borrowing decision process. Thus:

H2: Lifestyle is positively related to prudent online borrowing decision-making.

Individuals who perceive that their education equips them to understand financial products and analyze decision risks should be more inclined to search for information, evaluate legality and costs, and consider long-term implications before borrowing (Harjayanti et al., 2020; Sihombing & Abidin, 2024). Thus:

H3: The perceived financial value of education is positively related to prudent online borrowing decision-making.

Knowledge alone does not guarantee restraint; literate individuals may still decide impulsively when self-regulation fails (Baumeister, 2002). Literacy should strengthen self-control by making the future costs of impulsive borrowing cognitively salient, and self-control in turn disciplines the decision process—resisting promotional inducements such as low teaser rates or high limits and enforcing planning before borrowing (Mukharomah & Kurniawan, 2023). Thus:

H4: Self-control mediates the positive relationship between financial literacy and prudent online borrowing decision-making.

For lifestyle, the engagement mechanism operates partly through self-regulation: consumption-active individuals who develop the habit of delaying gratification and evaluating long-term consequences convert market familiarity into deliberate borrowing choices, whereas those without such control are vulnerable to impulsive use of instant credit (Dilasari et al., 2021; Maulana et al., 2024). A rival specification is that self-control moderates (weakens) the lifestyle effect rather than transmitting it; we test this alternative explicitly as a robustness check. Thus:

H5: Self-control mediates the positive relationship between lifestyle and prudent online borrowing decision-making.

Finally, general educational competence becomes financially consequential when coupled with the discipline to act on analysis. Since education does not translate directly into sound money management in several studies (Saputra et al., 2025; Sarda, 2024), self-control may be the channel through which perceived educational competence affects the borrowing decision process. Thus:

H6: Self-control mediates the positive relationship between the perceived financial value of education and prudent online borrowing decision-making.

3. Methodology

3.1. Research design, population, and sample

This study uses a quantitative, explanatory survey design applied to a single-organization case. The population comprises all 200 active employees of PT Insan Cerdas Indonesia, an education-services company operating through eight branch offices in North Sulawesi and Gorontalo, Indonesia. All active employees were eligible; the recruitment target of 133 respondents was set with the Slovin formula at a 5% margin of error (Sugiyono, 2012) and allocated across branches in proportion to branch size (Table 1 reports the realized allocation). Invitations were distributed directly by the researcher—not by supervisors—through employee WhatsApp groups, with an information page explaining the study's purpose, the voluntary nature of participation, and data confidentiality; proceeding to the questionnaire constituted consent. The Google Form collected no names, employee identifiers, or device

information, and supervisors had no access to responses or participation records. All 133 questionnaires were returned and usable. Because distribution nevertheless occurred through internal channels and the survey concerns potentially sensitive borrowing behavior, we acknowledge in Section 6 that perceived organizational encouragement and social desirability cannot be fully excluded.

Because the Slovin formula does not account for model complexity, effect size, or statistical power, sample adequacy was additionally verified with a power analysis for the most complex structural equation, which has four predictors (the decision construct). For $\alpha = 0.05$ and power = 0.80, detecting a medium effect ($f^2 = 0.15$; Cohen, 1988) requires $n = 85$, which the sample exceeds. A sensitivity analysis shows that $n = 133$ provides 80% power for effects of $f^2 \geq 0.093$, equivalent under the inverse-square-root heuristic to standardized paths of $|\beta| \geq 0.216$ (Kock & Hadaya, 2018). The financial-literacy and self-control paths exceed this bound, whereas the two lifestyle paths ($\beta = 0.165\text{--}0.167$) fall below it; although both are significant by bootstrap confidence intervals, we flag them as requiring cautious interpretation and replication in larger samples.

3.2. Data collection and measures

Primary data were collected through a structured questionnaire administered via Google Forms. All construct items used a five-point Likert scale (1 = strongly disagree; 5 = strongly agree) and were positively worded toward the focal construct, ensuring a uniform conceptual direction within each block. Financial literacy (X1, eight items) covers general financial knowledge, saving and borrowing (including understanding the risks and additional costs of online loans and considering repayment capacity before applying), insurance, and investment (Chen & Volpe, 1998; Indrawan & Veronica, 2024). Lifestyle (X2, six items) captures activities, interests, and opinions related to consumption (Dilasari et al., 2021). Perceived financial value of education (X3, six items) captures the perceived contribution of formal education to personal money management, risk analysis of purchase decisions, information search, and evaluation of long-term financial implications.

Prudent online borrowing decision-making (Y, ten items) captures using only legal, officially registered platforms; preferring OJK-licensed platforms; understanding late-payment consequences; computing total interest and costs before borrowing; borrowing for productive needs with a clear plan for fund use; and checking platform reputation, recommendations, and security systems (Kotler & Keller, 2012; OJK, 2016). Self-control (Z, six items) covers behavioral, cognitive, and decisional control (Averill, 1973). The full wording of all 36 items is disclosed. Two financial-literacy items (X1.3, understanding the risks and costs of online loans; X1.4, considering repayment capacity before applying) are worded closely to facets of the dependent variable and therefore raise a potential criterion-contamination concern; Section 4.2 reports a robustness analysis that re-estimates the model with these two items removed. Procedural remedies against common method bias included voluntary participation, assurance of anonymity, separation of construct blocks in the questionnaire, and neutral item wording (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

3.3. Data analysis

Hypotheses were tested using variance-based structural equation modeling (PLS-SEM) with SmartPLS 3.0, chosen because the model is prediction-oriented, involves a mediating construct, and does not impose multivariate normality assumptions (Hair, Risher, Sarstedt, & Ringle, 2019). The measurement model was evaluated through indicator loadings, average variance extracted ($AVE \geq 0.50$; Fornell & Larcker, 1981), internal consistency reliability (Cronbach's alpha and composite reliability ≥ 0.70), and discriminant validity using the Fornell–Larcker criterion, cross-loadings, and the heterotrait–monotrait ratio of correlations with bootstrap confidence intervals (HTMT inference; Henseler, Ringle, & Sarstedt, 2015), supplemented by a confirmatory comparison against an alternative model in which financial literacy and the decision construct are merged.

Common method bias was assessed through Harman's single-factor test (Podsakoff et al., 2003) and the full collinearity VIF procedure ($VIF < 3.3$; Kock, 2015). The structural model was evaluated using inner VIFs, R^2 with bootstrap confidence intervals, effect sizes f^2 (Cohen, 1988), standardized root mean square residual (SRMR), and out-of-sample predictive power via PLSpredict with ten-fold cross-validation repeated ten times against a linear-model benchmark (Shmueli et al., 2019). All hypothesis tests use a single, consistent inferential rule: an effect is judged significant when its 95% percentile bootstrap confidence interval (5,000 resamples) excludes zero. Percentile intervals are preferred over normal-theory t-thresholds because the sampling distribution of indirect effects is typically skewed (Preacher & Hayes, 2008); bootstrap standard errors and t-values are reported descriptively. Mediation was classified following Zhao, Lynch, and Chen (2010). As a robustness check on the rival moderation specification, we estimated a two-stage latent interaction (self-control $\times$ lifestyle) on the decision construct.

4. Result and Discussion

4.1. Respondent profile

Table 1 summarizes respondent characteristics. The sample is nearly gender-balanced (53.4% male); most respondents are 31–40 years old (39.1%), have 6–12 months of tenure (36.8%), hold staff positions (66.2%), and earn IDR 4,000,001–6,000,000 monthly (44.4%). This middle-income, productive-age profile corresponds to the segment OJK (2024) identifies as the heaviest user of online lending. Descriptive statistics show high mean scores for financial literacy (4.4), lifestyle (4.4), PFVE (4.3), self-control (4.4), and prudent borrowing decisions (4.5), with standard deviations of 0.50–0.52, indicating relatively homogeneous responses.

Table 1. Profile of respondents (n = 133)

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	71	53.4
	Female	62	46.6
Age	20–30 years	33	24.8
	31–40 years	52	39.1
	41–50 years	37	27.8
	> 50 years	9	6.8
Tenure	< 6 months	21	15.8
	6–12 months	49	36.8

Characteristic	Category	Frequency	Percentage (%)
Position	13–24 months	31	23.3
	> 24 months	32	24.1
	Staff	88	66.2
	Contract (honorary)	45	33.8
Branch	Sarapung	34	25.6
	Ranotana	24	18.0
	Kotamobagu	15	11.3
	Gorontalo	14	10.5
	Paniki	13	9.8
	Bitung	13	9.8
	Tomohon	13	9.8
	Malalayang	8	6.0
	≤ IDR 2,000,000	16	12.0
	IDR 2,000,001–4,000,000	45	33.8
Monthly income	IDR 4,000,001–6,000,000	59	44.4
	> IDR 6,000,000	13	9.8

Source: Primary data, processed (2026)

4.2. Measurement model evaluation

Table 2 reports the measurement model. All indicator loadings exceed 0.50 and the majority exceed 0.70. Three decision items (0.595–0.669) and one self-control item ($Z.6 = 0.537$) fall below 0.70; following Hair et al. (2019), indicators loading between 0.40 and 0.70 were retained because their removal did not raise AVE or composite reliability above the thresholds already met, and because they preserve the content validity of the decision construct (they capture the security-checking and platform-selection facets of prudence). All constructs achieve AVE above 0.50 (Fornell & Larcker, 1981), composite reliability of 0.879–0.910, and Cronbach's alpha of 0.835–0.890.

Table 2. Measurement model results

Construct	Items	Loading range	AVE	CR	Cronbach's Alpha
Financial literacy (X1)	8	0.651–0.795	0.548	0.906	0.881
Lifestyle (X2)	6	0.663–0.894	0.560	0.883	0.843
Perceived financial value of education (X3)	6	0.704–0.786	0.548	0.879	0.835
Self-control (Z)	6	0.537–0.833	0.563	0.884	0.839
Prudent borrowing decision (Y)	10	0.595–0.811	0.507	0.910	0.890

Source: SmartPLS 3.0 output, processed (2026)

Table 3 presents discriminant validity. Under the Fornell–Larcker criterion, the square root of each construct's AVE exceeds its correlations with other constructs for all pairs except financial literacy–decision, where the construct correlation (0.722) marginally exceeds the decision

construct's $\sqrt{\text{AVE}}$ (0.712). All HTMT point estimates are below 0.85, and HTMT inference based on 5,000 bootstrap resamples shows that no 95% confidence interval includes 1—FL–PBD 0.805 [0.709; 0.888], FL–SC 0.835 [0.735; 0.923], FL–PFVE 0.818 [0.718; 0.907], SC–PBD 0.797 [0.694; 0.887]—satisfying the HTMT inference criterion (Henseler et al., 2015). We note transparently that the upper bounds of the financial-literacy pairs exceed 0.85, so distinctiveness cannot be claimed to be comfortable; three further pieces of evidence are therefore provided.

The cross-loadings show that every indicator loads highest on its own construct, with a single marginal exception (X1.8 loads 0.660 on PFVE versus 0.651 on financial literacy). Second, a confirmatory comparison against an alternative model in which the financial-literacy and decision indicators form one merged construct shows clearly inferior measurement quality: the merged block fails convergent validity ($\text{AVE} = 0.450 < 0.50$) and worsens overall fit (SRMR 0.096 vs. 0.093 for the five-construct model), supporting the separation of the two constructs. Third, Section 4.2.1 shows that removing the two potentially contaminating literacy items restores the Fornell–Larcker criterion without changing any conclusion. Taken together, the constructs are empirically separable but conceptually proximate, and we interpret the financial literacy–decision relationship with corresponding care.

Table 3. Discriminant validity: Fornell–Larcker criterion and HTMT

Construct	FL	LS	PFVE	SC	PBD
1. Financial literacy (FL)	(0.740)	0.479	0.818	0.835	0.805
2. Lifestyle (LS)	0.427	(0.748)	0.429	0.520	0.551
3. Perceived financial value of education (PFVE)	0.711	0.374	(0.740)	0.743	0.671
4. Self-control (SC)	0.720	0.459	0.637	(0.750)	0.797
5. Prudent borrowing decision (PBD)	0.722	0.496	0.597	0.700	(0.712)

Notes: Diagonal (in parentheses) = square root of AVE; below diagonal = construct correlations; above diagonal = HTMT ratios. Source: SmartPLS 3.0 output, processed (2026)

Because two financial-literacy items (X1.3 and X1.4) are worded closely to facets of the dependent variable, the full model was re-estimated with these items removed, leaving a six-item literacy construct restricted to knowledge content (loadings 0.681–0.770; $\text{AVE} = 0.540$). All conclusions are unchanged: financial literacy still significantly predicts self-control ($\beta = 0.474$ vs. 0.486) and prudent decisions ($\beta = 0.358$ vs. 0.382), R^2 for the decision construct is 0.608 (vs. 0.613), and, importantly, the Fornell–Larcker criterion is now satisfied for the literacy–decision pair (construct correlation $0.709 < \sqrt{\text{AVE}} 0.712$). The marginal Fornell–Larcker violation in the full model is therefore attributable to the two overlapping items rather than to a genuine lack of construct separation, and the substantive results are robust to their exclusion.

Because all constructs were measured from the same respondents at one time, common method bias was assessed statistically. Harman's single-factor test shows that the first unrotated factor accounts for 36.8% of total variance, below the 50% threshold (Podsakoff et al., 2003). Full collinearity VIFs among the latent variables range from 1.375 to 3.083, all below the 3.3 cut-off (Kock, 2015). We acknowledge that these diagnostics provide limited assurance: no marker variable or measured latent method factor was included at the design stage, so the

absence of common method bias cannot be established, only rendered less likely; this is registered as a limitation in Section 6.

4.3. Structural model evaluation and hypothesis testing

Figure 1 presents the estimated model. Inner VIFs for all structural equations range from 1.239 to 2.704, well below 3.3, indicating no structural collinearity concern. The SRMR of the five-construct model is 0.093—below the lenient 0.10 benchmark though above the strict 0.08 threshold, which we disclose accordingly. R^2 is 0.613 (95% CI [0.532; 0.725]) for prudent borrowing decisions and 0.572 (95% CI [0.469; 0.702]) for self-control, both moderate. Effect sizes (f^2) show that financial literacy is the dominant predictor of self-control ($f^2 = 0.256$, medium-to-large), with smaller contributions from PFVE (0.060) and lifestyle (0.052); on the decision construct, financial literacy (0.139) and self-control (0.102) contribute small-to-medium effects, lifestyle a small effect (0.056), and PFVE a negligible one (0.006), foreshadowing the non-significance of its direct path. Removing PFVE from the model reduces R^2 for self-control from 0.572 to 0.547 but leaves R^2 for the decision construct essentially unchanged (0.613 to 0.611), quantifying PFVE's incremental contribution as operating on self-control rather than directly on decisions.

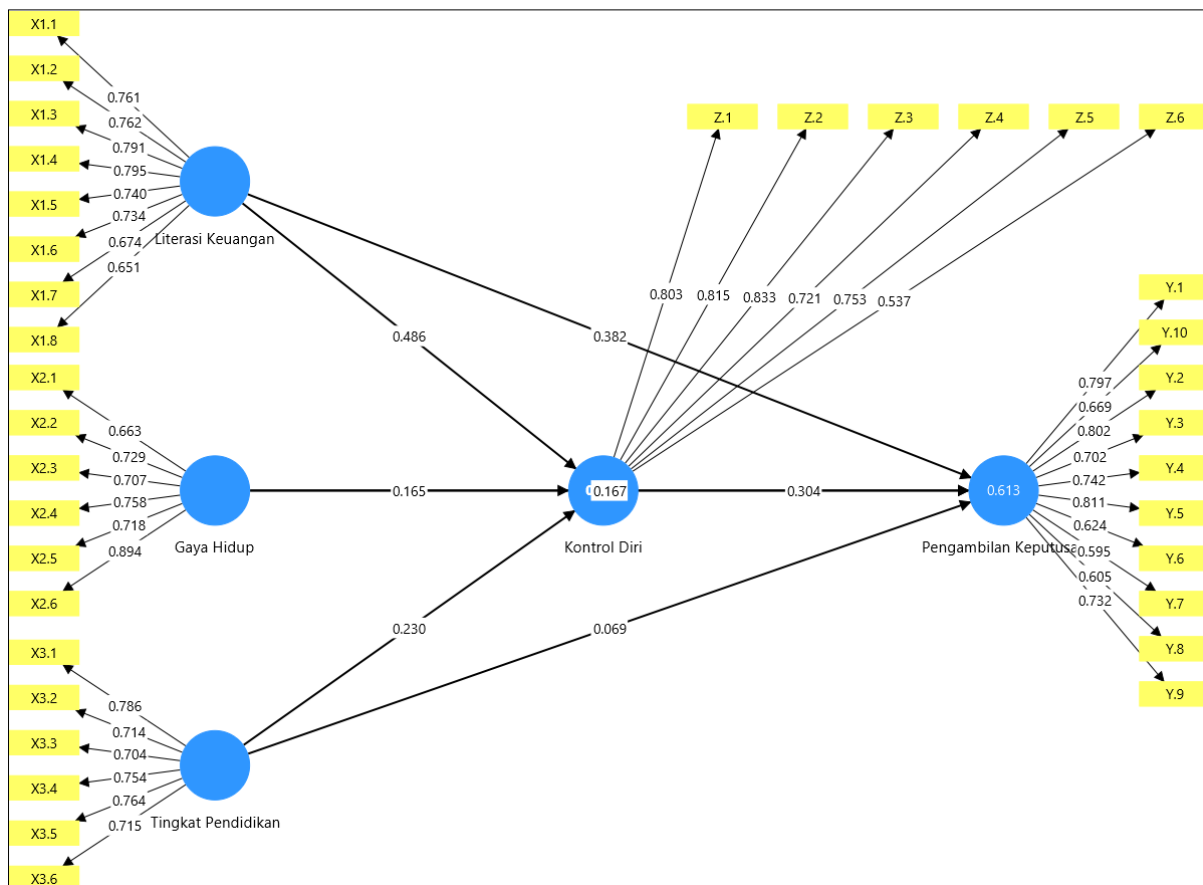


Figure 1. Structural model estimation results

Source: SmartPLS 3.0 output (2026)

Table 4 reports direct, specific indirect, and total effects from 5,000 bootstrap resamples with 95% percentile confidence intervals; following the inferential rule stated in Section 3.3, significance is judged solely by whether the interval excludes zero. All three antecedents

significantly build self-control, with financial literacy the strongest ($\beta = 0.486$; CI 0.297–0.654), and self-control significantly promotes prudent decisions ($\beta = 0.304$; CI 0.124–0.495). Directly, financial literacy ($\beta = 0.382$; CI 0.193–0.564) and lifestyle ($\beta = 0.167$; CI 0.028–0.305) are significantly related to prudent borrowing decisions, supporting H1 and H2. The direct effect of PFVE is non-significant ($\beta = 0.069$; CI –0.099–0.244), so H3 is rejected.

For the mediation hypotheses, the specific indirect effects of financial literacy ($\beta = 0.148$; CI 0.054–0.262) and lifestyle ($\beta = 0.050$; CI 0.011–0.103) through self-control are significant, and since the corresponding direct effects are also significant with the same sign, both constitute complementary partial mediation (Zhao et al., 2010); H4 and H5 are supported. The specific indirect effect of PFVE ($\beta = 0.070$; CI 0.016–0.160) also excludes zero and is therefore significant under the stated rule, so H6 is supported; with a non-significant direct effect, the pattern is indirect-only mediation (Zhao et al., 2010). Its substantive weight is nevertheless limited: the effect is small, the bootstrap t-value is only 1.886, and the total effect of PFVE (0.139; CI –0.021–0.312) is not significant, so we interpret H6 as statistically supported but substantively weak and in need of replication. Total effects for financial literacy (0.529) and lifestyle (0.218) are significant.

Table 4. Direct, indirect, and total effects (5,000 bootstrap resamples)

Path	β	SE	t	95% CI	Conclusion
<i>Direct effects</i>					
FL → Self-control	0.486	0.091	5.324	[0.297; 0.654]	Significant
LS → Self-control	0.165	0.063	2.625	[0.046; 0.287]	Significant
PFVE → Self-control	0.230	0.087	2.639	[0.075; 0.419]	Significant
Self-control → PBD	0.304	0.093	3.283	[0.124; 0.495]	Significant
FL → PBD (H1)	0.382	0.095	4.018	[0.193; 0.564]	Supported
LS → PBD (H2)	0.167	0.070	2.398	[0.028; 0.305]	Supported
PFVE → PBD (H3)	0.069	0.087	0.795	[–0.099; 0.244]	Not supported
<i>Specific indirect effects</i>					
FL → SC → PBD (H4)	0.148	0.053	2.780	[0.054; 0.262]	Supported
LS → SC → PBD (H5)	0.050	0.024	2.140	[0.011; 0.103]	Supported
PFVE → SC → PBD (H6)	0.070	0.037	1.886	[0.016; 0.160]	Supported (weak)
<i>Total effects</i>					
FL → PBD	0.529	0.083	6.412	[0.366; 0.687]	Significant
LS → PBD	0.218	0.067	3.240	[0.084; 0.347]	Significant
PFVE → PBD	0.139	0.085	1.632	[–0.021; 0.312]	Not significant

Notes: FL = financial literacy; LS = lifestyle; PFVE = perceived financial value of education; SC = self-control; PBD = prudent online borrowing decision-making. CI = 95% percentile bootstrap confidence interval. Inference rule: an effect is significant when the 95% percentile CI excludes zero; t-values are descriptive. Source: SmartPLS 3.0 bootstrapping output, processed (2026)

As a robustness check on the rival specification suggested by the moderation perspective, we estimated a two-stage latent interaction model adding a self-control $\times$ lifestyle term to the decision equation. The interaction was essentially zero ($\beta = 0.000$; $t = 0.005$), while all other paths were unchanged. Self-control thus transmits, rather than conditions, the lifestyle effect in these data, supporting the mediation specification.

Because the choice of PLS-SEM was motivated by prediction, out-of-sample predictive power was assessed with PLSpredict using ten-fold cross-validation repeated ten times, benchmarked against a linear regression of each endogenous indicator on all exogenous indicators (Shmueli et al., 2019). Table 5 reports the results for the decision indicators. All Q^2_{predict} values are positive (0.164–0.413 across the sixteen endogenous indicators), and the PLS model yields lower prediction error (RMSE) than the linear benchmark for 15 of 16 indicators (all six self-control indicators, Q^2_{predict} 0.180–0.385, and nine of ten decision indicators), indicating medium-to-high out-of-sample predictive power rather than merely in-sample fit.

Table 5. PLSpredict assessment of the decision indicators (10 $\times$ 10-fold cross-validation)

Indicator	Q^2_{predict}	RMSE (PLS)	RMSE (LM)	PLS < LM
Y.1	0.248	0.448	0.516	Yes
Y.2	0.248	0.460	0.503	Yes
Y.3	0.281	0.439	0.504	Yes
Y.4	0.207	0.472	0.537	Yes
Y.5	0.262	0.452	0.500	Yes
Y.6	0.287	0.450	0.503	Yes
Y.7	0.220	0.464	0.451	No
Y.8	0.164	0.483	0.507	Yes
Y.9	0.413	0.394	0.449	Yes
Y.10	0.318	0.421	0.454	Yes

Notes: $Q^2_{\text{predict}} = 1 - \text{SSE}/\text{SSE of the naive (training-mean) benchmark}$; LM = linear regression of each indicator on all exogenous indicators. Source: Authors' computation (2026)

4.4. Discussion

The results support a capability interpretation of financial literacy. Given that the decision construct measures the deliberateness of the borrowing process, the positive direct effect of literacy (H1) means that employees with stronger financial knowledge decide more carefully: they restrict attention to legal, OJK-licensed platforms, compute total interest and fees, and weigh repayment capacity before applying. This is consistent with evidence that literacy improves the quality of financial decisions (Lusardi & Mitchell, 2014; Pratita & Martono, 2024; Al Hadi et al., 2024) and clarifies the ambiguity in studies where literacy predicts borrowing outcomes of unclear direction (Faradila & Rafik, 2023; Setiyaningsih et al., 2024): literacy need not reduce borrowing, but it disciplines how borrowing is done.

Consumption-oriented lifestyle engagement is also positively related to decision prudence (H2), consistent with the engagement mechanism: consumption-active employees encounter digital financial products and peer recommendations more frequently, which feeds platform comparison, reputation checking, and cost awareness (Syafriya & Lahindah, 2024)—and recommendation seeking is itself a facet of the prudence construct, giving the informational

pathway direct representation in the data. Three caveats prevent overreading this result. First, as Section 2.3 makes explicit, the items measure active consumer engagement including status-consumption elements—not financial discipline, over-indebtedness, or hedonic excess—so the finding does not imply that consumptive lifestyles are financially benign. Second, because the outcome is decision quality rather than borrowing volume, the result is silent on whether lifestyle also increases how much or how often employees borrow; the borrowing-pressure mechanism emphasized by Setiyaningsih et al. (2024) and Kusuma and Habib (2024) may well operate on that separate outcome, and modeling both outcomes jointly is a priority for future research. Third, the lifestyle paths ($\beta = 0.165\text{--}0.167$) fall below the sample's 80% power sensitivity bound (Section 3.1); although significant by bootstrap confidence interval, they warrant replication before firm conclusions are drawn.

The perceived financial value of education shows no significant direct effect on decision prudence (H3), while its indirect path through self-control is significant but small (H6: indirect-only mediation). Three explanations are plausible. First, the sample is educationally homogeneous—most employees hold tertiary degrees—which restricts variance in education-related perceptions. Second, general educational competence is not domain-specific: its analytical benefits appear to be absorbed by financial literacy, which captures the applied money-management skills that matter proximately for credit decisions (f^2 for PFVE is only 0.006 once literacy and self-control are controlled, and removing PFVE leaves decision R^2 essentially unchanged while lowering self-control R^2 by 0.025). Third, our measure is perceptual and conceptually proximate to literacy (HTMT 0.818); objective attainment, field of study, or exposure to financial education may behave differently, which we flag for future research. The consistent pattern—no direct or total effect, a small indirect effect through self-control—suggests that if perceived educational competence matters for prudent borrowing in this setting, it does so by building self-discipline rather than by directly supplying decision-relevant knowledge.

The mediation results are the study's central contribution. Self-control significantly transmits the effects of financial literacy (H4) and lifestyle (H5) to decision prudence, with complementary partial mediation in both cases (Zhao et al., 2010): knowledge and market engagement improve decisions partly by strengthening the capacity to resist promotional temptations—low teaser rates, high limits, discounts—and to enforce planning before borrowing (Baumeister, 2002; Mukharomah & Kurniawan, 2023). The explicit rejection of the moderation alternative strengthens this interpretation: in these data, self-control is a conduit, not a contingency. Because both direct and indirect paths remain significant, however, self-control is an important but not exclusive channel; interventions that target only self-regulation, or only knowledge, would each leave part of the mechanism unaddressed.

Finally, the single-company setting bounds these findings. Employees share a payroll system, organizational culture, and communication networks, which may correlate responses and restrict external validity; the results characterize this organizational case rather than productive-age workers or Eastern Indonesian borrowers in general. It is also worth emphasizing what the decision construct does and does not capture: it reflects prudence in choosing and using legal online lending channels, and does not measure exposure to illegal lenders, the distinction between emergency and lifestyle borrowing, or downstream outcomes such as debt cycling and default.

5. Conclusion and Suggestion

This study examined whether financial literacy, consumption-oriented lifestyle engagement, and the perceived financial value of education promote prudent online borrowing decision-making, with self-control as a mediating mechanism, among 133 employees of one education-services company in Eastern Indonesia. Financial literacy and lifestyle engagement are positively related to decision prudence both directly and through self-control (complementary partial mediation); the perceived financial value of education has no direct or total effect and operates only through self-control, with a small indirect-only effect. The model explains 61.3% of the variance in decision prudence with satisfactory out-of-sample predictive power, and a rival moderation specification was tested and rejected. By distinguishing borrowing propensity from borrowing decision quality, the study offers one explanation for the inconsistent signs reported in prior research on literacy, lifestyle, and education in online borrowing.

Theoretically, the findings extend the Theory of Planned Behavior and self-regulation theory to fintech borrowing by locating self-control as the volitional channel between knowledge and dispositions on the one hand and the quality of credit decisions on the other, and by showing that perceived educational competence is not a substitute for domain-specific financial capability. Practically—and strictly as context-specific, evidence-informed suggestions rather than universal prescriptions—three implications follow. For employers in comparable organizational settings, workplace financial education that pairs literacy content (licensing checks, total-cost calculation, repayment-capacity assessment) with self-regulation practices (budgeting rules, planned fund use, cooling-off habits) is a reasonable design principle, though our cross-sectional evidence cannot establish that such programs will reduce harmful borrowing or default. For regulators, the finding that prudent borrowers actively check OJK licensing and platform legality suggests continued value in making licensing status salient and easily verifiable, particularly given the coexistence of legal and illegal lenders. For platforms, reputation, security, and transparent cost information are the attributes that deliberate borrowers examine, aligning commercial incentives with responsible-lending practice.

6. Limitations and Future Research

The limitations of this study should be read alongside its findings. First, the evidence comes from a single company in one region; shared payroll systems, organizational culture, and communication networks may correlate responses, so generalization to other occupational or regional contexts is not warranted. Second, the design is cross-sectional and self-reported: causal claims are precluded, and because no marker variable or measured latent method factor was included at the design stage, the available diagnostics (Harman's test, 36.8%; full collinearity VIFs ≤ 3.083) render common method bias less likely but cannot establish its absence; social-desirability bias likewise cannot be excluded. Third, the 100% response rate obtained through internal company channels may reflect perceived organizational encouragement or limited anonymity, despite researcher-administered, voluntary, and anonymous data collection. Fourth, education was measured perceptually (PFVE) rather than as objective attainment, PFVE is conceptually proximate to financial literacy (HTMT 0.818), and the sample is educationally homogeneous; the education findings should not be read as evidence about attainment effects. Fifth, financial literacy and the decision construct, while empirically separable (Section 4.2), share conceptual territory, and two literacy items required

a contamination robustness check; scale refinement that separates knowledge content from decision-process content more sharply is desirable. Sixth, the sample provides 80% power only for effects of $f^2 \geq 0.093$ ($|\beta| \geq 0.216$), so the smaller lifestyle effects require replication. Seventh, the dependent variable captures the prudence of the decision process, not realized outcomes—loan volumes, illegal-lender exposure, emergency versus lifestyle borrowing, debt cycling, or default.

Future research should therefore (i) replicate the model across multiple organizations, sectors, and regions, ideally with multi-group comparisons; (ii) employ longitudinal or experimental designs capable of establishing whether literacy or self-regulation interventions change borrowing behavior; (iii) measure objective educational attainment, field of study, and exposure to financial education alongside PFVE; (iv) model borrowing propensity and borrowing decision quality as distinct outcomes, including objective records where accessible; and (v) incorporate the legal-illegal lender distinction and downstream outcomes such as delinquency, testing additional mediators and moderators—financial stress, income adequacy, or locus of control—to establish when knowledge and lifestyle translate into responsible rather than risky borrowing.

Acknowledgement

The authors thank the management and employees of PT Insan Cerdas Indonesia for facilitating data collection, the anonymous reviewer for constructive comments that substantially improved the manuscript, and the Master of Management Program, Universitas Semarang, for academic support.

Reference

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Al Hadi, S., Oktaria, E. T., Sari, P. N., & Yulistina. (2024). Pengaruh literasi keuangan dan efikasi keuangan dalam pengambilan keputusan investasi cryptocurrency pada Gen-Z di Bandar Lampung [The influence of financial literacy and financial efficacy on cryptocurrency investment decisions among Gen-Z in Bandar Lampung]. *Jurnal TECHNOBIZ*, 7(2), 55–63.
- APJII. (2024). *Survei penetrasi internet Indonesia 2024* [Indonesian internet penetration survey 2024]. Jakarta, Indonesia: Asosiasi Penyelenggara Jasa Internet Indonesia.
- Ariyanti, F. I., & Syah, M. F. J. (2025). The influence of financial literacy and brand image on online shopping consumptive behavior on TikTok platform with purchase decision as a mediator. *Dinasti International Journal of Economics, Finance & Accounting*, 6(2).
- Assyifa, C. N., & Subagyo, H. (2023). Pengaruh literasi keuangan dan gaya hidup terhadap perencanaan keuangan pegawai kantoran di Tangerang Raya [The influence of financial literacy and lifestyle on the financial planning of office workers in Greater Tangerang]. *Journal of Economics and Business UBS*, 12(2).
- Averill, J. R. (1973). Personal control over aversive stimuli and its relationship to stress. *Psychological Bulletin*, 80(4), 286–303.
- Baumeister, R. F. (2002). Yielding to temptation: Self-control failure, impulsive purchasing, and consumer behavior. *Journal of Consumer Research*, 28(4), 670–676.
- Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107–128.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Devi, L., Mulyati, S., & Umiyati, I. (2020). *Pengaruh pengetahuan keuangan, pengalaman keuangan, tingkat pendapatan, dan tingkat pendidikan terhadap perilaku keuangan* [The effect of financial knowledge, financial experience, income level, and education level on financial behavior]. *Journal of Accounting for Sustainable Society*, 2(2), 78–109. doi:10.35310/jass.v2i02.671
- Dilasari, D., Mulyati, S., & Kurniawan, A. (2021). *Pengaruh financial literacy, life style, locus of control dan demografi terhadap perilaku konsumtif generasi milenial di Kota Subang* [The effect of financial literacy, lifestyle, locus of control and demographics on the consumptive behavior of millennials in Subang City]. *JASS (Journal of Accounting for Sustainable Society)*, 2(2).
- Faradila, D., & Rafik, A. (2023). *Pengaruh literasi keuangan terhadap perilaku keuangan dan intensi meminjam dari pinjaman online/P2P lending pada mahasiswa Universitas Islam Indonesia* [The effect of financial literacy on financial behavior and intention to borrow from online loans/P2P lending among students of Universitas Islam Indonesia]. *Selekta Manajemen: Jurnal Mahasiswa Bisnis & Manajemen*, 2(3), 63–76.
- Ferdiansyah, M. R., & Khairudin. (2025). *Pengaruh literasi keuangan dan inklusi keuangan terhadap pengambilan keputusan kredit petani jagung* [The effect of financial literacy and financial inclusion on the credit decisions of corn farmers]. *EKOMA: Jurnal Ekonomi, Manajemen, Akuntansi*, 4(3).
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Gayatri, A. M., & Muzdalifa. (2022). *Memahami literasi keuangan sebagai upaya pencegahan perilaku konsumtif dari pinjaman online* [Understanding financial literacy as an effort to prevent consumptive behavior arising from online loans]. *Judicious: Journal of Management*, 3(2).
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.
- Harjayanti, D. R., Rovita, A., & Yuwono, T. (2020). *Pengaruh tingkat pendidikan, tingkat literasi keuangan, dan instrumen literasi keuangan terhadap keputusan pembelian pada media online (studi kasus masyarakat Kota Tangerang Selatan)* [The influence of education level, financial literacy level, and financial literacy instruments on purchase decisions in online media (a case study of South Tangerang City)]. *Jurnal Mandiri: Ilmu Pengetahuan, Seni, dan Teknologi*, 4(2), 199–209.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Indrawan, & Veronica. (2024). *Studi faktor penentu risky credit behavior dalam penggunaan pay later generasi Z* [A study of the determinants of risky credit behavior in Generation Z's use of pay-later services]. *Jurnal Muara Ilmu Ekonomi dan Bisnis*, 8.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1–10.
- Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Information Systems Journal*, 28(1), 227–261.

- Kotler, P., & Keller, K. L. (2012). *Marketing management* (14th ed.). Upper Saddle River, NJ: Pearson.
- Kusuma, D. W., & Habib, M. A. D. (2024). *Pengaruh gaya hidup, promosi, dan harga terhadap keputusan pembelian iPhone pada iPhoneku Bandung Tulungagung* [The effect of lifestyle, promotion, and price on iPhone purchase decisions at iPhoneku Bandung Tulungagung]. *Journal of Management and Creative Business*, 2(2), 303–321.
- Laily, N. (2016). *Pengaruh literasi keuangan terhadap perilaku mahasiswa dalam mengelola keuangan* [The effect of financial literacy on students' money-management behavior]. *Journal of Accounting and Business Education*, 1(4).
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44.
- Maulana, M. C., Hatimatunnisani, H., Oktapiani, S., Zaharah, M. F., & Keizer, H. D. (2024). *Analisis pengaruh gaya hidup Gen Z terhadap tata kelola keuangan pribadinya* [An analysis of the effect of Gen Z lifestyle on personal financial governance]. *Jurnal Ekonomi Manajemen Bisnis dan Akuntansi*, 2(2), 231–239.
- Mubarok, M. N., & Wiyadi. (2024). *Pengaruh motivasi, gaya hidup dan persepsi konsumen terhadap keputusan pembelian produk fashion melalui social media* [The effect of motivation, lifestyle and consumer perception on fashion product purchase decisions through social media]. *Edunomika*, 8(1).
- Mukharomah, & Kurniawan, M. R. N. (2023). *Pengaruh literasi keuangan terhadap perilaku kredit berisiko yang dimediasi oleh efikasi diri pada mahasiswa di Kota Surakarta* [The effect of financial literacy on risky credit behavior mediated by self-efficacy among students in Surakarta City]. *Jurnal Manajemen dan Bisnis*, 8.
- Mukhlisiah, R. (2023). *Pengaruh pendidikan, gaya hidup, literasi keuangan terhadap pengelolaan keuangan dosen muda di Jabodetabek* [The effect of education, lifestyle, and financial literacy on the financial management of young lecturers in Greater Jakarta]. *Indonesian Journal Accounting*, 4(1).
- Mulyawan, I. B. A. P., Asana, G. H. S., & Oktabiani, L. (2025). *Pengaruh literasi keuangan dan tingkat pendidikan terhadap penggunaan pinjaman online dengan risiko kredit sebagai variabel mediasi* [The effect of financial literacy and education level on online loan use with credit risk as a mediating variable]. *Balance: Jurnal Akuntansi dan Manajemen*, 4(1).
- OJK. (2016). *Peraturan Otoritas Jasa Keuangan Nomor 76/POJK.07/2016 tentang peningkatan literasi dan inklusi keuangan* [Financial Services Authority Regulation No. 76/POJK.07/2016 on improving financial literacy and inclusion]. Jakarta, Indonesia: Otoritas Jasa Keuangan.
- OJK. (2024). *Statistik layanan pendanaan bersama berbasis teknologi informasi* [Statistics of information-technology-based co-funding services]. Jakarta, Indonesia: Otoritas Jasa Keuangan.
- Paramita, K., Wahyudi, & Fadila, A. (2020). *Determinan perilaku pengelolaan keuangan pada pelaku industri kecil menengah* [Determinants of financial management behavior among small and medium industry actors]. *Studi Akuntansi dan Keuangan Indonesia*, 3(2).
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.

- Pratita, D. O., & Martono, S. (2024). *Pengaruh literasi keuangan dan sikap keuangan terhadap pengelolaan keuangan pribadi mahasiswa* [The effect of financial literacy and financial attitude on students' personal financial management]. *Jurnal Samudra Ekonomi dan Bisnis*, 15(2).
- Putri, S. R., Nasution, J., & Atika. (2025). *Pengaruh literasi keuangan dan life style terhadap keputusan menggunakan pinjaman online (pinjol) ilegal dengan locus of control sebagai variabel moderating bagi generasi Z di Kota Medan* [The effect of financial literacy and lifestyle on decisions to use illegal online loans with locus of control as a moderating variable among Generation Z in Medan City]. *Jurnal Manajemen Terapan dan Keuangan*, 14(3).
- Rahayu, R. (2022). *Analisis faktor-faktor yang mempengaruhi tingkat literasi keuangan digital: Studi pada generasi Z di Indonesia* [An analysis of factors affecting digital financial literacy: A study of Generation Z in Indonesia]. *Reviu Akuntansi dan Bisnis Indonesia*, 6(1), 74–87.
- Safitri, N., Permadi, I., & Fathussyaadah, E. (2022). *Literasi keuangan digital, keberlanjutan usaha industri kecil dan menengah serta dampaknya terhadap kesejahteraan keuangan* [Digital financial literacy, the sustainability of small and medium industries, and their impact on financial well-being]. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 6(3), 1203–1214.
- Saputra, A. W., Oktavia, V., Samasta, A. S., & Kusuma, P. J. (2025). *Peran literasi keuangan, tingkat pendidikan, dan pendapatan terhadap pengelolaan keuangan generasi sandwich* [The role of financial literacy, education level, and income in the financial management of the sandwich generation]. *PARADOKS Jurnal Ilmu Ekonomi*, 8(1).
- Sarda, Z. (2024). *Pengaruh tingkat pendidikan dan literasi keuangan terhadap pengelolaan keuangan rumah tangga menurut perspektif ekonomi Islam (studi Desa Emperom Kota Banda Aceh)* [The effect of education level and financial literacy on household financial management from an Islamic economics perspective (a study of Emperom Village, Banda Aceh)] (Undergraduate thesis, Universitas Islam Negeri Ar-Raniry, Banda Aceh, Indonesia).
- Schiffman, L. G., & Kanuk, L. L. (2004). *Consumer behavior* (8th ed.). Upper Saddle River, NJ: Prentice Hall.
- Setiyaningsih, H., Rohmawati, M., Amalia, L. N., Hartanto, E. P. T., Watini, & Kustitik. (2024). *Pengaruh literasi keuangan dan gaya hidup terhadap niat melakukan pinjaman online mahasiswa FEB UNY* [The effect of financial literacy and lifestyle on the intention to use online loans among FEB UNY students]. *Jurnal Riset dan Penalaran Mahasiswa*, 1(2).
- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *European Journal of Marketing*, 53(11), 2322–2347.
- Sihombing, P., & Abidin, Z. (2024). *Pengaruh pengetahuan, tingkat pendidikan, dan pendapatan terhadap preferensi nasabah dalam mengambil keputusan menjadi nasabah bank konvensional* [The effect of knowledge, education level, and income on customer preferences in deciding to become conventional bank customers]. *Jurnal Ilmiah Multidisiplin Terpadu (JIMAT)*, 2(2), 514–520.
- Sugiyono. (2012). *Metode penelitian bisnis* [Business research methods]. Bandung, Indonesia: Alfabeta.
- Suyanto, Putri, F. K., & Dewi, W. P. (2024). *Literasi keuangan, gaya hidup, dan pengelolaan keuangan mahasiswa akuntansi: Pembelajaran akuntansi keuangan sebagai variabel mediasi* [Financial literacy, lifestyle, and accounting students' financial management: Financial

- accounting learning as a mediating variable]. *RATIO: Reviu Akuntansi Kontemporer Indonesia*, 5(1).
- Syafriya, I., & Lahindah, L. (2024). The impact of lifestyle on online purchasing decisions and repurchase intentions of Shopee customers. *Devotion: Journal of Research and Community Service*, 5(8).
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72(2), 271–324.
- Yuniawati, W., Syarif, D., & Sajekti, T. (2024). *Pengaruh financial knowledge, financial attitude, locus of control dan lifestyle terhadap financial behaviour pada mahasiswa di Kota Bandung* [The effect of financial knowledge, financial attitude, locus of control and lifestyle on the financial behavior of students in Bandung City]. *JEMSI (Jurnal Ekonomi, Manajemen, dan Akuntansi)*, 10(2), 1098–1108.
- Yushita, A. N. (2017). *Pentingnya literasi keuangan bagi pengelolaan keuangan pribadi* [The importance of financial literacy for personal financial management]. *Jurnal Nominal*, 6(1).
- Zalukhu, R. S., Hutauruk, R. P. S., Collyn, D., Jayanti, S. E., Sinaga, S., & Damanik, S. W. H. (2024). *Pengaruh tingkat pendidikan, faktor usia dan gender terhadap literasi keuangan pelaku UMKM di Kota Medan* [The effect of education level, age and gender on the financial literacy of MSME actors in Medan City]. *Accounting Progress*, 3(1), 36–48.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206.