

The Impact of Profitability, Financial Decision-Making, Cost Efficiency, and Corporate Financial Health on Employee Financial Literacy Levels in Smes

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ARTICLE INFO	ABSTRACT
Received: 22 Dec 2024	<p>This study evaluates the influence of employee financial literacy (EFL) on the financial performance of small and medium-sized enterprises (SMEs), focusing on four key indicators: profitability(P), financial decision-making (FDM), cost efficiency (CE), and corporate financial health (CFH) on employee financial literacy levels in SMEs. Through stratified random sampling, 100 employees of SMEs from various sectors were selected to ensure representability. A structured questionnaire was administered quantitatively and analyzed using SPSS for correlation and regression analysis. Results indicate a clear positive relationship between employee financial literacy and SME profitability. Analysis of correlations revealed a robust positive correlation between financial literacy and cost efficiency and that higher financial literacy levels decrease operational inefficiencies. With solid financial knowledge, the employees could optimize budgets, make rational decisions, and allocate better resources, improving organizational and competitive stability. Additionally, corporate financial health improved as financial literacy increased. Greater financial literacy corresponded to better debt management and liquidity ratios. These findings emphasize the need for targeted financial literacy training for SME employees and make a case for subsidized financial literacy programs to improve SME resilience. The results from this study allow for the formulation of actionable insights into the linkage between employee financial literacy and SME performance and develop strategies to promote sustainable economic growth.</p> <p>Keywords: Employee Financial Literacy, Small and Medium Enterprises (SMEs), Profitability, Financial Decision-Making, Cost Efficiency, Corporate Financial Health, Human Capital.</p>
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INTRODUCTION

Background of the Study

Financial literacy - knowledge, skills, confidence, and motivation to manage money effectively have become essential topics in personal and corporate finance (Lusardi & Messy, 2023). Since SMEs employ a significant portion of the global workforce, their financial health directly impacts broader economic stability. However, financial literacy research primarily focuses on personal finance, leaving a gap in understanding its effects within organizational contexts, particularly in SMEs (Oppong et al., 2023). Research indicates that financially literate employees contribute positively to firm performance by enhancing decision-making and reducing financial risks. While large corporations have been the focus of previous studies, SMEs operate with distinct challenges, including limited financial resources and less structured management practices (Setrojoyo et al., 2023).

The implications of EFL on SMEs' profitability, decision-making, cost efficiency, and overall corporate financial health are still underexplored. This study seeks to bridge this gap by examining how EFL levels impact SME financial performance and whether targeted financial literacy initiatives could enhance organizational sustainability.

Problem Statement

Despite SMEs' crucial role in economic growth, their high failure rate remains a concern (OECD, 2023). Scholars argue that part of the solution is optimizing human capital—specifically, improving EFL among employees to enhance business decision-making and financial management. While research has shown positive correlations between financial literacy and individual financial well-being, its direct impact on firm performance, particularly in SMEs, remains underexamined (Kumari, 2020; Lusardi & Messy, 2023).

Preliminary studies indicate that workforce financial literacy is linked to improved decision-making and productivity, yet most of these findings stem from large corporate environments (Lestari et al., 2024). Given the structural and resource differences between SMEs and large firms, these findings may not directly apply to SMEs (Oppong et al., 2023). Consequently, this study addresses this knowledge gap by examining how EFL influences SMEs' financial outcomes and whether SMEs can benefit from investing in financial literacy programs for their workforce.

Research Objectives

This study aims to:

1. To explore the profitability of SMEs in terms of employee financial literacy levels.
2. To ascertain the relationship between financial decision-making in SMEs and employee financial literacy levels.
3. To assess the impact of cost efficiency in SMEs on employee financial literacy levels.
4. To examine how overall corporate financial health in SMEs is linked to employee financial literacy levels.

Significance of the Study

SMEs account for approximately 90% of businesses worldwide and employ a substantial percentage of the workforce (OECD, 2023). However, their vulnerability to financial distress and high failure rates raise concerns about long-term sustainability. This study is significant because:

- It contributes to theoretical understanding by exploring EFL within SME settings.
- It provides empirical evidence to support the integration of financial literacy training in SME operations.
- It informs policymakers and business leaders about the potential benefits of investing in financial literacy initiatives.
- It highlights the macroeconomic implications of financially literate workforces in reducing SME failure rates and enhancing economic resilience.

LITERATURE REVIEW

Introduction

EFL is defined as the aggregate knowledge, skills, and motivations required for employees to manage financial resources effectively within the workplace (Davoli & Rodriguez-Planas, 2022). Financial literacy is a vital subset of human capital that contributes to economic growth and firm-level financial success. Despite global variations in financial literacy rates (Van Nguyen et al., 2022), there is a growing emphasis on workplace-centered financial literacy research (Custódio et al., 2019), making this study highly relevant.

Review of Previous Research

Employee Financial Literacy Levels

EFL encompasses financial knowledge, skills, access, attitudes, and behaviors enabling effective financial management (Pham & Toan, 2023). OECD (2023) defines financial literacy as a behavioral construct that integrates financial awareness, skills, attitudes, and behavior, which are crucial for personal and business financial decision-making. Studies suggest that financial literacy is an essential human capital component influencing firms' operational and strategic decisions (Callis et al., 2023; Skica et al., 2022).

Financial literacy manifests in competencies such as budgeting, taxation, asset management, credit evaluation, and cost-benefit analysis (Anshika & Singla, 2022). Empirical evidence links financial literacy to better financial behaviors, including saving, investment, and cash flow optimization (IFC, 2021). Multi-item scales effectively quantify financial literacy, allowing for an empirical assessment of its impact on firm performance (OECD, 2023; Özyeşil & Tembelo, 2024). However, gaps remain in understanding how literacy levels translate into enterprise-level financial performance.

Profitability

Profitability measures a firm's ability to generate income relative to costs, assets, and shareholder equity (Fadhillah et al., 2024). For SMEs, profitability ensures business sustainability and growth (Serrasqueiro et al., 2023). Metrics such as net profit margins, return on assets (ROA), and return on equity (ROE) provide insights into financial efficiency and performance.

Human capital and intellectual capital theories suggest that knowledge embedded in employees enhances profitability by improving strategic decision-making and resource allocation (Huang & Huang, 2020). Financially literate employees can contribute to better pricing, cost control, and investment decisions, ultimately improving firm profitability. However, empirical research linking workforce financial literacy directly to SME profitability remains scarce, necessitating further investigation (Oberrauch & Kaiser, 2024).

Financial Decision-Making

FDM is crucial for optimizing resource allocation, investment strategies, and cost-benefit trade-offs (Arbelo et al., 2020). Effective FDM aligns strategic objectives with financial choices, enhancing business sustainability. SMEs, operating on limited budgets, must prioritize evidence-based decision-making to mitigate financial risks (Hanif et al., 2023).

Theoretical frameworks such as strategic alignment and optimization models suggest that financially literate employees improve decision quality (Akerlele, 2023; Ghonim et al., 2020). Financial literacy enhances analytical skills, risk assessment, and capital allocation, leading to more informed investment and expenditure decisions (Setrojoyo et al., 2023). Although empirical studies link financial literacy to improved decision-making in large firms, research on SMEs remains limited (Skica et al., 2022).

Cost Efficiency

CE refers to a firm's ability to control expenses while maximizing productivity (Kibirige et al., 2022). SMEs, often operating with thin profit margins, rely on cost control measures to maintain competitiveness (OECD, 2023). Indicators such as expense-to-revenue ratios, overhead costs per unit, and budget variance analyses help assess cost efficiency (Fadhillah et al., 2024).

Human capital theory posits that financially literate employees can improve cost efficiency through better resource allocation and financial discipline (Kiran et al., 2022). Empirical evidence suggests that financially skilled teams optimize inventory management, reduce carrying costs, and enhance operational efficiency (De Soto et al., 2021). However, research focusing on financial literacy's direct impact on SME cost structures remains insufficient.

Corporate Financial Health

CFH encompasses profitability, liquidity, capital structure, and investment efficiency, determining a firm's long-term viability (Serrasqueiro et al., 2023). Financially literate employees enhance CFH by improving cash flow management, debt reduction, and working capital efficiency (Pham & Toan, 2023).

Studies indicate that financial literacy influences capital structuring, investment feasibility, and risk mitigation (Braunerhjelm & Lappi, 2023). Financially knowledgeable managers can negotiate favorable financing terms, optimize debt-equity ratios, and make strategic investment decisions (Oppong et al., 2023). Despite these theoretical links, empirical studies correlating workforce financial literacy with CFH are scarce, particularly in SME contexts (Lusardi & Messy, 2023).

Conceptual Framework

The conceptual framework developed for this study (Figure 1) illustrates the relationship between employee financial literacy (EFL) and four independent variables: profitability, financial decision-making, cost efficiency, and corporate financial health.

This framework is grounded in Human Capital Theory and Research View, demonstrating how financially literate employees contribute to better financial outcomes.

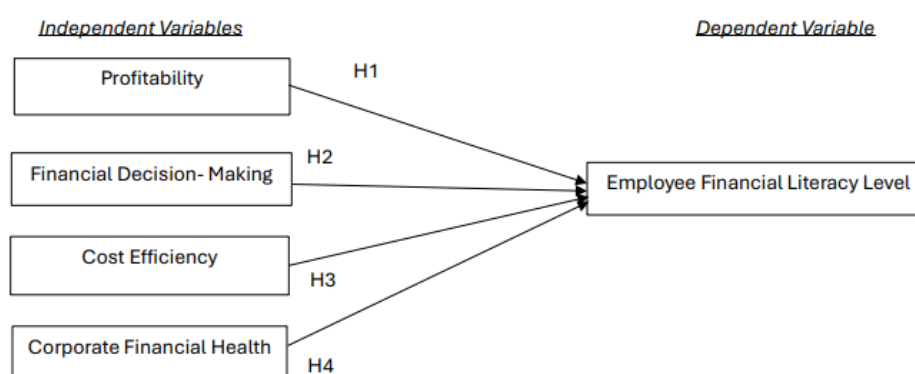


Figure 1. Conceptual Framework Model

Source: Develop for This study

Hypotheses

The study tests the following hypotheses:

- **H1:** Profitability in SMEs is positively and significantly related to employee financial literacy levels.
- **H2:** Financial decision-making in SMEs is significantly influenced by employee financial literacy levels.
- **H3:** Cost efficiency in SMEs is positively influenced by employee financial literacy levels.
- **H4:** Corporate financial health in SMEs is positively and significantly impacted by employee financial literacy levels.

METHODOLOGY

Research Design

The study adopts a quantitative **research design**, facilitating hypothesis testing and statistical generalization (Miswanto et al., 2024). A **stratified random sampling method** selects **100 SME employees**, ensuring **representation across industry type, firm size, and geographic location**. This approach aligns with prior SME research (Teoh & Chong, 2021) and maintains **external validity** despite resource constraints. The study integrates **Human Capital Theory**, linking theoretical perspectives to empirical data.

Population and Sample Size

Targeting **SMEs in Malaysia**, which account for **1,069,831 businesses (DOSM, 2024)**, the study employs **stratified random sampling** for diversity across sectors. The **100-employee sample** provides insights into financial literacy trends, with **proportional selection across industries and regions**. While a larger sample could enhance generalizability, rigorous **statistical analysis using SPSS** ensures methodological robustness.

Questionnaire Scoring & Data Analysis

A **five-point Likert scale** (1 = Strongly Disagree, 5 = Strongly Agree) was used for response measurement. **SPSS Version 29** facilitated **descriptive and inferential analyses**, including **correlation and multiple regression models**, to assess financial literacy's impact on SME financial performance. **Diagnostic tests for multicollinearity and normality** ensured statistical robustness (Heryanto & Leng, 2022).

FINDINGS

Introduction

This chapter presents the research findings based on statistical analyses, including descriptive statistics, correlation, and regression analysis. These methodologies provide insights into the relationships between Employee Financial Literacy (EFL) and key business performance indicators: Profitability (P), Financial Decision-Making (FDM), Cost Efficiency (CE), and Corporate Financial Health (CFH). The findings are structured to demonstrate the impact of financial literacy on SME performance and vice versa, supporting the study's hypotheses.

Presentation of Findings

Reliability Analysis

Reliability analysis, measured using Cronbach's Alpha, confirms the scale's internal consistency. Overall, Cronbach's Alpha score of 0.983 signifies excellent reliability. Table 1 reveals that all constructs—P, FDM, CE, CFH, and EFL—strongly contribute to the study's conceptual framework, validating their inclusion in the research.

Table 1: Overall Reliability Statistics for the Scale

Cronbach's Alpha	N of Items
.983	5

Descriptive Analysis

Respondent Demographics

The demographic profile provides contextual insights into the study sample. 60% of respondents are male, and 40% are female (Figure 2), with 39% falling within the 26-35 age range, representing middle-career professionals (Figure 3). 42% hold bachelor's degrees, indicating that an educated workforce is critical for financial literacy development (Figure 4). Job roles are balanced among managers (27%), finance-related roles (36%), and general employees (37%), ensuring diverse perspectives on financial decision-making (Figure 5). 43% of respondents have 1-3 years of work experience, while only 8% have over six years, suggesting a relatively young workforce (Figure 6).

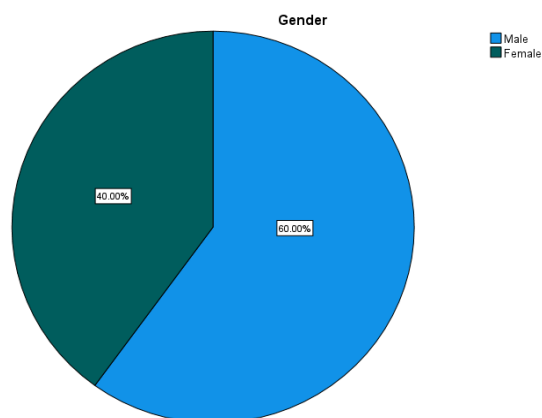


Figure 2. Gender Distribution Pie Chart

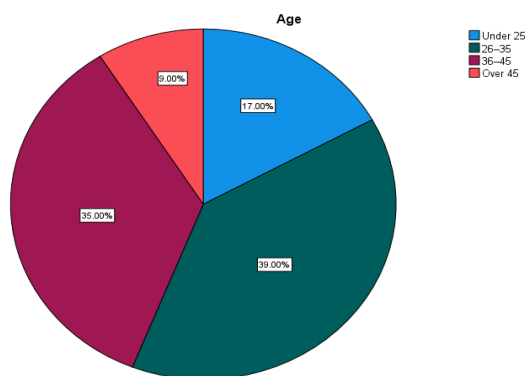


Figure 3. Age Distribution Pie Chart

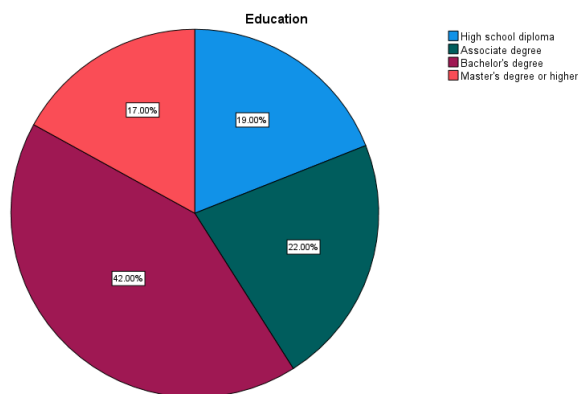
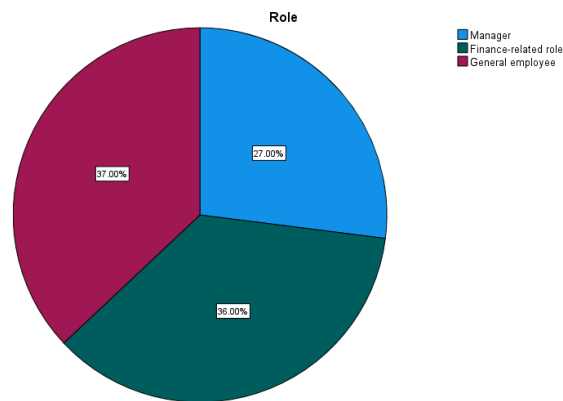
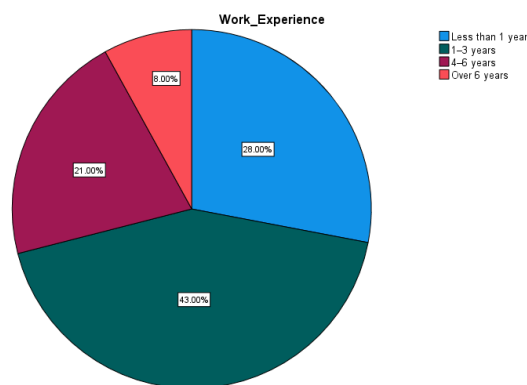


Figure 4. Educational Qualifications Pie Chart

**Figure 5.** Roles in Organization Pie Chart**Figure 6.** Work Experience Pie Chart

Summary of Variables

Descriptive statistics (Table 2) outline the dependent variable (EFL) and independent variables (P, FDM, CE, and CFH). Employee Financial Literacy scores range between 2.79 and 2.95, indicating moderate literacy levels. Profitability, financial decision-making, and cost efficiency score moderately, reflecting room for improvement in SME financial management practices.

Table 2: Descriptive Statistics for Variables

Items	N	Minimum	Maximum	Mean	Std. Deviation
P1	100	1	5	2.50	1.202
P2	100	1	5	2.64	1.375
P3	100	1	5	2.71	1.358
P4	100	1	5	2.72	1.349
FDM1	100	1	5	2.78	1.219
FDM2	100	1	5	2.62	1.384
FDM3	100	1	5	2.62	1.285
FDM4	100	1	5	2.62	1.384
CE1	100	1	5	2.51	1.267
CE2	100	1	5	2.56	1.282

CE3	100	1	5	2.53	1.381
CE4	100	1	5	2.61	1.363
CFH1	100	1	5	2.48	1.283
CFH2	100	1	5	2.60	1.435
CFH3	100	1	5	2.56	1.313
CFH4	100	1	5	2.60	1.378
EFL1	100	1	5	2.79	1.343
EFL2	100	1	5	2.92	1.338
EFL3	100	1	5	2.95	1.410
EFL4	100	1	5	2.94	1.413

Correlation Analysis

Correlation analysis examines the relationships between EFL, P, FDM, CE, and CFH. All variables exhibit strong positive correlations, suggesting interdependencies in SME financial performance. The most significant correlations include:

Table 3: Pearson Correlations Between Key Variables

Variables	P	FDM	CE	CFH	EFL
P	1	.900**	.916**	.910**	.924**
FDM	.900**	1	.908**	.926**	.921**
CE	.916**	.908**	1	.929**	.920**
CFH	.910**	.926**	.929**	1	.945**
EFL	.924**	.921**	.920**	.945**	1

Note: $p < 0.01$ (2-tailed). Pearson correlation coefficients indicate strong positive relationships between all key variables, with the highest correlation observed between **CFH and EFL ($r = 0.945$)**, signifying the impact of corporate financial health on employee financial literacy.

Regression Analysis

Multiple regression analysis explores how P, FDM, CE, and CFH predict EFL. The R-squared value (0.922) suggests that these independent variables explain 92.2% of the variance in EFL, reinforcing their significance.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.960 ^a	.922	.919	.35015
a. Predictors: (Constant), CFH, P, FDM, CE				

This table presents the regression model summary, highlighting the relationship between Employee Financial Literacy (EFL) and independent variables (P, FDM, CE, and CFH). The **R-squared value (0.922)** indicates that **these predictors explain 92.2% of the variation in EFL**, confirming the model's strength and significance.

Table 5: ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	138.478	4	34.619	282.368	.000 ^b

Residual	11.647	95	.123
Total	150.125	99	

a. Dependent Variable: EFL

b. Predictors: (Constant), CFH, P, FDM, CE

The ANOVA results evaluate the overall significance of the regression model. The **F-value (282.368, $p < 0.001$)** confirms that the model is statistically significant, meaning that at least one of the predictors (P, FDM, CE, CFH) has a meaningful impact on Employee Financial Literacy.

Table 6: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.230	.089		2.574	.012	.053	.408
P	.286	.084	.271	3.380	.001	.118	.453
FDM	.186	.088	.177	2.122	.036	.012	.361
CE	.110	.093	.105	1.176	.242	-.075	.295
CFH	.445	.096	.437	4.647	.000	.255	.635

a. Dependent Variable: EFL

This table provides insights into the contribution of each independent variable to Employee Financial Literacy (EFL). **Corporate Financial Health (CFH) has the most substantial positive impact ($B = 0.445$, $p < 0.001$)**, followed by **Profitability (P) ($B = 0.286$, $p = 0.001$)**, and **Financial Decision-Making (FDM) ($B = 0.186$, $p = 0.036$)**. Cost Efficiency (CE) shows a weaker relationship ($B = 0.110$, $p = 0.242$), suggesting that other financial factors may indirectly influence its impact on EFL.

Discussion of Findings

The findings validate the hypothesis that employee financial literacy is both an outcome and a determinant of SME performance.

Key insights include:

- CFH is the strongest predictor of EFL, suggesting that financially stable firms prioritize financial literacy initiatives.
- Profitability significantly influences EFL, reinforcing profitable SMEs invest in employee financial development.
- Financial Decision-Making positively impacts EFL, demonstrating that better financial knowledge leads to improved decision-making frameworks.

Conclusion

This research underscores the interdependent nature of financial literacy and SME success. By integrating financial literacy into corporate strategy, SMEs can improve decision-making, optimize cost management, and enhance

profitability, ultimately ensuring long-term sustainability. These insights contribute to the broader discourse on financial literacy as a critical organizational competency.

CONCLUSIONS

Introduction

This chapter integrates the study's findings with Human Capital Theory to establish financial literacy as a measurable component of human capital. The results confirm that financial literacy improves SMEs' profitability, cost efficiency, and financial decision-making. Beyond validating existing theories, the study also identifies significant barriers, including resource constraints, industry-specific limitations, and contextual challenges hindering financial literacy interventions' broader implementation. The chapter provides evidence-based recommendations for SME leaders and policymakers, advocating for financial literacy initiatives that enhance organizational resilience. It also highlights areas for future research, including long-term observational studies and multi-sector analyses to expand the practical application of financial literacy programs in real-world SME environments.

Theoretical and Practical Implications

The study confirms that Human Capital Theory applies to SME performance, emphasizing financial literacy as a key human capital element. The results demonstrate that financial literacy positively affects SME profitability, cost efficiency, and decision-making, reinforcing the role of employee knowledge and skills as critical organizational resources. The study also highlights financial literacy as a mechanism for overcoming resource constraints and navigating market volatility.

From a practical perspective, SME leaders should recognize financial literacy as a strategic enabler of success. Employees with financial knowledge can better manage budgets, control costs, and make strategic investment decisions, ultimately increasing profitability. Tailored financial literacy training programs should focus on financial statement analysis, cash flow management, and risk assessment to enhance workforce capabilities.

Recommendations

To improve SME performance, this study recommends targeted financial literacy workshops addressing budgeting, cost management, and investment decision-making. Industry-specific training can maximize operational efficiency and profitability. Empirical evidence supports the positive impact of financial literacy on SMEs' ability to manage financial challenges (Aswar et al., 2022; Addo et al., 2022).

National-level initiatives should promote financial literacy, with governments collaborating with financial institutions to provide subsidized training programs and tax incentives for SMEs. Integrating digital financial tools, such as mobile finance apps, can enhance accessibility and adoption (Loza et al., 2024; Togun et al., 2023).

Summary and Conclusion

This study establishes financial literacy as a crucial enabler of SME performance, supporting Human Capital Theory by demonstrating its impact on profitability, efficiency, and strategic decision-making. Financial literacy enhances SMEs' ability to manage resources, control costs, and navigate economic uncertainties. The findings confirm that financially literate employees improve organizational stability and long-term growth. Future research should explore external factors influencing financial literacy's role in sustaining SME performance, reinforcing its transformative potential for inclusive economic growth.

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