The Impact Of Financial Literacy, Financial Planning, Financial Self-Efficiency, And Demographic Variables On Financial Behavior

Wida Purwidianti[1] , Anggit Prasetyo Budi Santoso[2], Akhmad Darmawan[3],
Ika Yustina Rahmawati[4] , Lutfia Setyani[5]
widapurwidianti@ump.ac.id[1], anggitpbs30@gmail.com[2],akhmaddarmawan@ump.ac.id[3]

Faculty of Economics and Business, Universitas Muhammadiyah Purwokerto[1, 2, 3, 4,5]

Abstract. This study examines the impact on financial behavior of financial literacy, financial planning, financial self-efficacy, and demographic variables. The study sample consisted of 89 owners of MSMEs in the West Purwokerto District. This analysis employs multiple linear regression. This study demonstrates that financial literacy, financial planning, and financial self-efficacy have a substantial impact on financial behavior. The demographic variables of level of education, gender, and age have no impact on financial behavior. These findings make a theoretical contribution to the advancement of knowledge in the field of Financial Management. In addition, the findings of this study will be of practical use to the proprietors of MSMEs.

Keywords: financial literacy, financial planning, financial self-efficacy, education level, gender, age, financial behavior

1 Introduction

Micro, Small, and Medium-Sized Enterprises (MSMEs) play a crucial role in Indonesia's economic growth. MSMEs can absorb up to 97 percent of the labor force and contribute 60.34 percent of the gross domestic product. Financial behavior is essential in MSMEs. This is evidenced by the development of behavioral finance study in SMEs [1]–[7]. Financial literacy, financial planning, financial self-efficacy, and demographic factors have all been shown to influence financial behavior.

Financial literacy can be interpreted as an individual's expertise in managing financial conditions at present and in the future [8]. There is currently inconsistency in the relationship between financial literacy and financial behavior [3], [9]–[15]. The results of other studies show different results. Financial literacy does not impact financial behavior [2], [16], [17].

Financial planning is a process in which a person will fulfill the necessities of life as a financial goal through a comprehensive financial implementation so that he can show one's finances [18]. The results of study on financial planning on financial behavior show different study results. Based on study conducted by [18], [19], it is stated that Good financial planning can improve financial behavior. Study by [20] states that financial planning and a series of psychological metrics impact a person's financial behavior in saving.

Financial self-efficacy reflects an individual's belief in managing finances and successfully achieving financial goals [21]. According to [15], high financial self-efficacy will lead to an increase in financial behavior. The results of this study are in line with study [21]. In the interim, [22] studies indicate that financial self-efficacy does not show a substantial role in changes in financial behavior.

Demographic variables also impact financial behavior. Demographic variables in this study consisted of education level, gender, and age. According to study conducted by [12] and [18], education does have a positive and substantial impact on financial behavior. Meanwhile, study conducted by [2], [21] stated that the level of education did not substantially influence financial behavior. Previous study on the impact of gender on financial behavior has revealed a pattern of consistency. The study's findings [22] demonstrate that gender has a substantial impact on financial behavior. While the results of the study [3] prove different results, gender does not have a substantial influence on financial behavior. Study on the impact of age on financial behavior has provided two opposing pieces of evidence. The study's results [12], [23] prove that age substantially influences financial behavior. Study [3], [10] found that age did not impact financial behavior.

The explanation above shows a study gap in financial literacy, financial planning, financial self-impaction, and demographic variables on financial behavior. Therefore, this study will re-examine the relationship between these variables at different locations. This study will contribute theory to the development of science in the field of Financial Management. In addition, the results of this study will provide practical contributions to MSME owners.

ICBAE 2022, August 10-11, Purwokerto, Indonesia

DOI 10.4108/eai.10-8-2022.2320785

2 Literatur Review

2.1 Financial Literacy on Financial Behavior

The financial literacy of SME owners will influence financial behavior. Good financial literacy will lead to optimal financial behavior [24]. [3] stated that increasing financial literacy will further improve the financial behavior of SME owners. The results of other studies also explain this [3], [9], [10], [13]–[15], [25]–[29]. This study's first hypothesis is as follows::

H1: Financial Literacy has a Positive Impact on Financial Behavior

2.2 Financial Planning on Financial Behavior

Financial planning is a process in which a person will fulfill the necessities of life as a financial goal through a comprehensive financial implementation so that he can show one's finances [18]. One's financial planning will determine the process to meet the needs of life for the future as a financial goal through a comprehensive financial implementation to show one's financial behavior. The study results by [18] and [19] show that good financial planning can improve financial behavior. The second hypothesis of this study states:

H2: Financial Planning Has a Positive Impact on Financial Behavior

2.3 Financial Self-Efficacy on Financial Behavior

Albert Bandura's 1977 development of social cognitive theory (social cognitive theory) is based on the belief in the existence of human agency. The development of self-efficacy is a crucial aspect of human autonomy. Self-efficacy involves not only knowing what to do, but also possessing the skills and confidence to execute a performance. A person's behavior is also influenced by their sense of self-efficacy. For instance, deciding what action to take [30]. The findings of [31], [32] indicate that the greater the financial self-impaction, the greater the financial behavior. This study's third hypothesis states

H3: Financial Self-Impact Positively Impacts Financial Behavior

2.4 Education on Financial Behavior

Social learning theory states that the learning history of a person or individual can lead to an expectation of reinforcement, and a person can view a reward, both positive and negative, as a result of his behavior or depending on forces beyond his control (Rotter, 1966). According to study conducted by [18] and [28], education level has a positive and substantial impact on financial behavior. The fourth hypothesis tested in this study is

H4: Education Level Has a Positive Impact on Financial Behavior

2.5 Gender on Financial Behavior

There are differences between the financial behaviors of men and women, according to [22]. Men are more knowledgeable about investments and personal finances than women. Additionally, men favor riskier investments. At the same time, women will tend to avoid risk. Study results [22], [23], [33] explain the positive influence between gender and financial behavior. The fifth hypothesis of this study is

H5: Gender has a Positive Impact on Financial Behavior

2.6 Age on Financial Behavior

Age will impact financial behavior. Younger individuals prefer risky investments to older individuals [34]. The study's results [23], [28] prove that age substantially influences financial behavior. The sixth hypothesis of this study states

H6: Age has a negative impact on financial behavior

3 Method

The population in this study is MSMEs located in the West Purwokerto District. The sampling technique is the convenience sampling method. The sample used was 89 SMEs. The definition of each variable is in table 1 below.

Table 1. Variable Operational Definition

Variable	Operational definition	Indicator
Financial Behavior	How an individual behaves when faced with financial decisions	1. Don't delay payment 2. Preparation of future financial plans 3. Set aside money for savings 4. Distribution of money for personal and business purposes

Variable	Operational definition	Indicator
Financial Literacy	The knowledge that a person has in order to be able to manage his finances	1. Basic financial knowledge 2. Savings 3. Loans 4. Insurance 5. Investment
Financial Planning	The process by which a person will fulfill the necessities of life as a financial goal	1. Business actors pursue short-term objective 2. Business actors engage in medium-term enterprises. 3. Business actors have long-lasting enterprises. 4. Business actors have a financial plan that can be derived from revenue. 5. Business actors have a well-defined spending plan. 6. Business actors have made investments and savings
Financial Self-Efficacy	The feeling of confidence that individuals have about their capabilities to manage finances effectively so that they are able to achieve financial goals	1. Ability in financial expenditure planning 2. Decision-making ability when unexpected events occur 3. Ability to avoid financial challenges 4. Confidence in financial management 5. Confidence in financial conditions in the future
Level of Education	The respondent took final education.	Scored 1 for junior school; 2 for high school, 3 for diploma, and 4 for undergraduate.
Gender	Gender of respondents	Scored 1 for Male; 2 points for Women
Age	Age of respondent	Scored 1 for under 40 years old, 2 for 40-50 years old, and 3 for over 50 years old.

The studyer applied multiple regression analysis. The tests include descriptive statistical tests, tests of validity and reliability, tests of classical assumptions, tests of model fit, and hypothesis testing. If the value of the regression coefficient is positive and the significance is less than 0.05, hypotheses one through five will be accepted. If the value of the regression coefficient is negative and the significance is less than 0.05, then the sixth hypothesis will be accepted.

4 Result and Discussion

4.1 Result

This study was conducted on MSMEs in West Purwokerto District. Study respondents are more dominated by men, as much as 57 percent. The age of the majority of respondents is between 40-50 years. Education level is dominated by high school education level.

In the validity test, from all statement items of financial behavior variables, financial literacy, financial planning, and financial self-efficacy, it is obtained r count above r table. So that all statements in the questionnaire can be said to be valid.

Reliability testing on indicators of financial behavior variable questions shows the number 0.708, financial literacy variable is 0.817, financial planning is 0.804 and financial self-efficacy is 0.707. The value of the reliability test produces a number that is more than 0.70. The results can be concluded that the four variables already have reliable question indicators.

The classical assumption of normality test proves that the Kolmogorov Smirnov value shows a number of 0.142. Heteroscedasticity testing using the glejser test showed that all variables had a significance above 0.05. The multicollinearity test proves that all variables have a variance inflation factor value below the value of 10. Therefore, this research data is declared to have passed the classical assumption test.

The model fit test resulted in an F test value of 36,486 with a significance level of 0.000, so it was stated that there was a fit model. Adjusted R square test shows a value of 70.80 percent. This can prove that the independent variables in this study can explain the increase or decrease in the financial behavior variable by 70.80 percent. The remaining 29.20 percent is explained by other variables not examined.

Multiple regression analysis testing is shown in table 2 below.

Table 2. Multiple regression test results

Variable	Unstandardized Coefficients		t-test	Significance
	B	Standard Error		
Constant	-1,293	0,421	-3,071	0,003
Financial Literacy	0,486	0,027	5,595	0,000
Financial Planning	0,526	0,087	5,921	0,000
Financial Self Efficacy	0,306	0,107	2,854	0,005
Education	0,031	0,027	1,161	0,249
Gender	0,032	0,042	0,759	0,450
Age	-0,015	0,029	-0,526	0,600

Dependent Variable: Financial Behavior

The results of data analysis have shown that there is a unidirectional influence between financial literacy, financial planning and financial self-efficacy. This unidirectional relationship can be interpreted as when the three variables change for the better, the financial behavior of the MSME owners is getting better. Conversely, if the three variables change in a lower direction, the financial behavior of MSME owners will change for the worse.

Financial literacy has a regression coefficient value of 0.486 and a probability value of 0.000. Therefore, hypothesis 1 in this study is stated to be supported. The regression coefficient value of the financial planning variable is 0.526 and the probability is 0.000. These results prove that hypothesis 2 can be accepted. The coefficient of financial self-efficacy shows a positive number of 0.306 with a probability of 0.005, the results of this study prove that the statement of hypothesis 3 is acceptable.

The three demographic variables (education, gender and age) show probability values greater than 10 percent. Thus, the study cannot prove the statements in hypotheses 4, 5 and 6. This study proves that the financial behavior of MSME owners will not be influenced by differences in education level, gender or age.

4.2 Discussion

Financial literacy owned by MSME owners can cause changes in their financial behavior. Good knowledge about investment, savings, debt, and insurance will improve the financial behavior of MSME owners. This is to the theory that planned behavior about individual behavior will be motivated by its knowledge. The results of this study support the findings [13]–[15], [18], and [29] that financial literacy can improve individual financial behavior. The results of this study do not support the findings [17] and [35] that financial literacy cannot change individuals' financial behavior.

Good financial planning will cause individuals to have better financial behavior. Financial planning will produce individuals who can better manage their financial behavior. This study follows the results of previous studies conducted by [18], [19] on the importance of financial planning in shaping financial behavior, and [20], which confirmed that financial planning and a series of psychological metrics influence saving behavior.

Financial self-efficacy can change the financial behavior of MSME owners. When financial self-efficacy increases, it will cause financial behavior to improve. These results support the social cognitive theory are the findings of this study. This finding is in line with the results of studies [15], [21], and [32], which prove the effect of self-efficacy in improving financial behavior. The results of this study contradict the study [36] regarding the existence of financial self-efficacy that cannot change individual financial behavior.

There is no substantial relationship between education and financial behavior. The findings of this study are different from social learning theory. This study also contradicts the results of [18], which concluded that a good level of education could change financial behavior in a better direction. However, this study has the same conclusion as study [21], [35] that the level of education cannot change financial behavior. According to [37], knowledge about behavior in managing finances can be obtained from formal and non-formal education and culture in the family and the surrounding environment. Meanwhile, this study does not measure non-formal education but only formal education. So in this study, it can be said that the effect of education level on financial behavior does not have a substantial impact.

There was no substantial effect on gender. In explaining their financial behavior, there were no differences between men and women, according to the findings. The findings of this study corroborate previous study from [3], showing that gender does not substantially impact financial behavior.

Age differences have no impact on changes in financial behavior. The coefficient value shows a negative value but is not substantial. These results support study [3], [10] finding that age does not affect financial behavior.

5 Conclusion

The results of this study prove that financial literacy, financial planning, and financial self-efficacy substantially influence financial behavior. Demographic variables of education level, gender, and age do not influence financial behavior. This study contributes to the science of Financial Management with the factors that influence financial behavior. This study provides a practical contribution to MSMEs about the importance of paying attention to financial literacy, financial planning, and financial self-efficacy in managing their business finances. Practical contribution for the government in fostering MSMEs by paying more attention to financial literacy and financial planning capabilities of MSME owners

This study has a number of limitations. First, the sample size is modest and convenience sampling is employed. First, the sample is relatively small and uses the convenience sampling method. Further study can multiply the sample and use different sampling methods. Second, this study uses six independent variables. Further study is suggested to add other variables such as financial attitude and financial experience.

References

[1] C. Naomi, S. Kiprop, and J. Tanui, "Influence of Herding Behavior on Investment Decision of SMEs in Bomet County , Kenya," *East African Sch. J. Econ. Bus. Manag.*, vol. 4464, no. 2, pp. 34–39, 2018.

[2] W. Purwidianti and N. Tubastuvi, "The Impact of Financial Literacy and Financial Experience on SME Financial Behavior in Indonesia," *J. Din. Manaj.*, vol. 10, no. 36, pp. 40–45, 2019.

[3] W. Purwidianti, N. Tubastuvi, A. Darmawan, and I. Y. Rahmawati, "Does Financial Behavior Mediate The Relationship Between Financial Literacy and Financial Experience Towards Financial Performance of Small Businesses?," *Proc. Int. Conf. Sustain. Innov. Track Account. Manag. Sci. (ICOSIAMS 2021)*, vol. 201, no. Icosiams 2021, pp. 235–241, 2022, doi: 10.2991/aebmr.k.211225.033.

[4] W. Purwidianti, B. A. Pramuka, and R. D. Laksana, "The Moderation Role of Religiosity on the Relationship Between Risk Tolerance and Financial Behavior of Small Businesses' Owners," *Qual. - Access to Success*, vol. 22, no. 185, pp. 88–94, 2021, doi: 10.47750/qas/22.185.13.

[5] I. Sadalia, Syahyunan, and N. A. Butar-Butar, "Financial Behavior and Performance on Small and Medium Enterprises in Coastal Area of Medan City," in *IOP Conf. Series: Materials Science and Engineering*, 2017, vol. 180, doi: 10.1088/1742-6596/755/1/011001.

[6] M. A. B. M. T. Thaker, M. O. Mohammed, J. Duasa, and M. A. Abdullah, "The Behavioral Intention of Micro Enterprises to Use The Integrated Cash Waqf Micro Enterprise Investment (ICWME-I) Model as a Source of Financing," *Gadjah Mada Int. J. Bus.*, vol. 18, no. 2, pp. 111–130, 2016, doi: https://doi.org/10.22146/gamaijb.12565.

[7] A. Wong, S. Holmes, and M. T. Schaper, "How do small business owners actually make their financial decisions? Understanding SME financial behaviour using a case-based approach," *Small Enterp. Res.*, vol. 25, no. 1, pp. 36–51, 2018, doi: 10.1080/13215906.2018.1428909.

[8] M. Cohen and C. Nelson, "Financial Literacy: A Step for Clients towards Financial Inclusion," in *Global Microcredit Summit. Commissioned Workshop Paper*, 2011, pp. 14–17.

[9] N. Tang and A. Baker, "Self-esteem, financial knowledge and financial behavior," *J. Econ. Psychol.*, vol. 54, no. April, pp. 164–176, 2016, doi: 10.1016/j.joep.2016.04.005.

[10] A. Sayinzoga, E. H. Bulte, and R. Lensink, "Financial Literacy and Financial Behaviour: Experimental Evidence from Rural Rwanda," *Econ. J.*, vol. 126, no. 594, pp. 1571–1599, 2016, doi: 10.1111/ecoj.12217.

[11] N. Kumari and A. K. Sar, "Recent Developments in Behavioral Finance," *Int. J. Appl. Bus. Econ. Res.*, vol. 15, no. 19, 2017, doi: 10.3905/jwm.2000.320376.

[12] C. Strömbäck, T. Lind, K. Skagerlund, D. Västfjäll, and G. Tinghög, "Does self-control predict financial behavior and financial well-being?," *J. Behav. Exp. Financ.*, vol. 14, pp. 30–38, 2017, doi: 10.1016/j.jbef.2017.04.002.

[13] D. R. Pulungan, "Literasi Keuangan Dan Dampaknya Terhadap Perilaku Keuangan Masyarakat Kota Medan," *Ekon. J. Ilmu Ekon. dan Stud. Pembang.*, vol. 17, no. 1, pp. 56–61, 2017.

[14] N. Erawati and Susanti, "Pengaruh Literasi Keuangan, Pembelajaran Di Perguruan Tinggi, Dan Pengalaman Bekerja Terhadap Perilaku Keuangan Mahasiswa Fakultas Ekonomi Universitas Negeri Surabaya," *J. Pendidik. Akuntansi, Fak. Ekon. Univ. Negeri Surabaya*, pp. 1–7, 2017.

[15] N. T. Herawati, I. M. Candiasa, I. K. Yadnyana, and N. Suharsono, "Factors That Influence Financial Behavior Among Accounting Students in Bali," *Int. J. Bus. Adm.*, vol. 9, no. 3, p. 30, 2018, doi: 10.5430/ijba.v9n3p30.

[16] A. D. Reswari, Sudarto, and E. Widiastuti, "The Influence Of Financial Literacy Towards Financial Behavior," *Int. J. Bus. Soc.*, vol. 18, no. 3, pp. 469–484, 2017, doi: 10.33736/ijbs.3139.2017.

[17] D. K. Deasy Lestary Kusnandar, "Literasi Keuangan Dan Gaya Hidup Ibu Rumah Tangga Dalam Membentuk

Perilaku Keuangan Keluarga Di Kota Tasikmalaya," 2018, no. September, pp. 1–13.

[18] E. A. Ari Susanti , Ismunawan, Pardi, "Tingkat Pendidikan, Literasi Keuangan, Dan Perencanaan Keuangan Terhadap Perilaku Keuangan UMKM di Surakarta," vol. 18, no. 1, pp. 45–56, 2017.

[19] H. Wiyanto, Y. I. Putri, and H. Budiono, "Keterkaitan Pengetahuan dan Perencanaan Keuangan Terhadap Perilaku Karyawan Pria," vol. XXIV, no. 02, pp. 176–192, 2019.

[20] D. Brounen, K. G. Koedijk, and R. A. J. Pownall, "Household financial planning and savings behavior," *J. Int. Money Financ.*, vol. 69, pp. 95–107, 2016, doi: 10.1016/j.jimonfin.2016.06.011.

[21] V. Andrew and N. Linawati, "Hubungan Faktor Demografi dan Pengetahuan Keuangan Dengan Perilaku Keuangan Karyawan Swasta di Surabaya," *Finesta*, vol. 02, no. 02, pp. 35–39, 2014.

[22] D. Walczak and S. Pienkowska-Kamieniecka, "Gender Differences in Financial Behaviours," *Eng. Econ.*, vol. 29, no. 1, pp. 123–132, 2018, doi: 10.5755/j01.ee.29.1.16400.

[23] B. Tekçe, N. Yilmaz, and R. Bildik, *What factors impact behavioral biases? Evidence from Turkish individual stock investors*, vol. 37. Elsevier B.V., 2016.

[24] O. A. Stolper and A. Walter, "Financial literacy, financial advice, and financial behavior," *J. Bus. Econ.*, vol. 87, no. 5, pp. 581–643, 2017, doi: 10.1007/s11573-017-0853-9.

[25] A. Lusardi, P. C. Michaud, and O. S. Mitchell, "Optimal financial knowledge and wealth inequality," *J. Polit. Econ.*, vol. 125, no. 2, pp. 431–477, 2017, doi: 10.1086/690950.

[26] A. Z. Arifin, "The Influence of Financial Knowledge, Control and Income on Individual Financial Behavior," *Eur. Res. Stud. J.*, vol. XX, no. 3A, pp. 635–648, 2017.

[27] P. V. Raveendra, J. E. Singh, P. Singh, and S. S. Kumar, "Behavioral finance and its impact on poor financial performance of SMES: A review," *Int. J. Mech. Eng. Technol.*, vol. 9, no. 5, pp. 341–348, 2018.

[28] C. Strömbäck, T. Lind, K. Skagerlund, D. Västfjäll, and G. Tinghög, "Does self-control predict financial behavior and financial well-being?," *J. Behav. Exp. Financ.*, vol. 14, pp. 30–38, 2017, doi: 10.1016/j.jbef.2017.04.002.

[29] N. Fatimah and Susanti, "Pengaruh Pembelajaran Akuntansi Keuangan, Literasi Keuangan, Dan Pendapatan Terhadap Perilaku Keuangan Mahasiswa Fakultas Ekonomi Universitas Muhammadiyah Gresik," *J. Pendidik. Akunt.*, vol. 6, no. 1, 2018.

[30] A. Bandura, "Self-efficacy: Toward a Unifying Theory of Behavioral Change," *Psychol. Rev.*, vol. 84, no. 2, pp. 191–215, 1977, doi: 10.1037/0033-295X.84.2.191.

[31] N. L. Rizkiawati and N. Asandimitra, "Pengaruh demografi, financial knowledge, financial attitude, locus of control dan financial self-efficacy terhadap financial management behavior masyarakat surabaya," vol. 6, no. 2010, 2018.

[32] M. A. J. Qamar, M. A. N. Khemta, and H. Jamil, "How Knowledge and Financial Self-Efficacy Moderate the Relationship between Money Attitudes and Personal Financial Management Behavior," *Eur. Online J. Nat. Soc. Sci.*, vol. 5, no. 2, pp. 296–308, 2016.

[33] M. K. Y. Mak and W. H. Ip, "An Exploratory Study of Investment Behaviour of Investors," *Int. J. Eng. Bus. Manag.*, vol. 9, no. June, pp. 1–12, 2017, doi: 10.1177/1847979017711520.

[34] A. Oehler, S. Wendt, F. Wedlich, and M. Horn, "Investors ' Personality Influences Investment Decisions : Experimental Evidence on Extraversion and Neuroticism Investors ' Personality In fl uences Investment Decisions : Experimental Evidence," *J. Behav. Financ.*, vol. 19, no. 1, pp. 30–48, 2017, doi: 10.1080/15427560.2017.1366495.

[35] W. Purwidianti and N. Tubastuvi, "The Impact of Financial Literacy and Financial Experience on SME Financial Behavior in Indonesia," *J. Din. Manajeme*, vol. 10, no. 36, pp. 40–45, 2019.

[36] L. Farrell, T. R. L. Fry, and L. Risse, "The significance of financial self-efficacy in explaining women's personal finance behaviour," *J. Econ. Psychol.*, vol. 54, pp. 85–99, 2016, doi: 10.1016/j.joep.2015.07.001.

[37] A. P. Rustiaria, "Pengaruh Pengetahuan Keuangan, Sikap Keuangan, Dan Tingkat Pendidikan Terhadap Perilaku Pengelolaan Keuangan Keluarga," *J. Bus. Bank.*, pp. 1–17, 2017.