

The Mediating Role of Financial Well-Being in the Relationship between Financial Behavior and Stress Among Irregular Income Workers

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Abstract. Psychological well-being is characterized by low stress levels and influenced by financial factors. Therefore, this research aims to determine the effect of financial behavior on stress mediated by financial well-being. An instrument validation test was conducted with 200 participants, followed by a hypothesis model including 266 individuals aged 20–40 years with irregular income patterns. Monte Carlo simulations suggested that a sample of 200 was estimated to produce statistical power approaching .8 using a purposive non-probability method. Stress instrument from Depression, Anxiety, Stress Scale-21 (DASS-21) (Lovibond & Lovibond, 1995), Financial Management Behavior Scale (Dew & Xiao, 2011), and Financial Well-being Scale (Prawitz et al., 2006) were adopted, respectively. According to the hypothesis, financial well-being mediated the relationship between behavior and stress. Data analysis was performed using an efficient macro process in the statistical analysis process. The results showed that financial well-being had a full mediating role in the influence of financial behavior on stress. The primary contribution of this research lies in offering insights into stress reduction through the enhancement of financial well-being.

Keywords: financial well-being, financial behavior, irregular income, stress

Perilaku Keuangan dan Stres pada Pekerja Berpendapatan Tidak Tetap: Kesejahteraan Keuangan sebagai Mediasi

Abstrak. Kesejahteraan psikologis ditandai dengan rendahnya tingkat stres. Salah satu faktor yang memengaruhi tingkat stres adalah faktor keuangan. Tujuan penelitian ini adalah mengetahui pengaruh perilaku pengelolaan keuangan terhadap stres yang dimediasi oleh kesejahteraan keuangan individu. Penelitian ini dilakukan dengan dua tahap, tahap pertama adalah uji validasi instrumen (n = 200) dan tahap kedua adalah uji model hipotesis (n = 266) yang melibatkan partisipan dengan kriteria merupakan pekerja berpendapatan tidak tetap dan berusia 20-40 tahun. Berdasarkan hasil perhitungan dengan simulasi Monte Carlo, sampel sebesar 200 diperkirakan dapat menghasilkan daya statistik mendekati .8. Pengambilan sampel dilakukan dengan teknik purposive - non probability sampling. Instrumen yang digunakan adalah instrumen stres dari Depression, Anxiety, Stress Scale-21 (DASS-21) milik Lovibond dan Lovibond (1995), skala Financial Management Behaviors dari Dew dan Xiao (2011), dan skala Financial Well Being dari Prawitz et al. (2006). Hipotesis yang diuji adalah kesejahteraan keuangan memediasi pengaruh antara perilaku keuangan terhadap stres. Analisis data dilakukan dengan process macro yang dapat lebih efisien dalam melakukan proses analisis statistik. Hasil penelitian menunjukkan kesejahteraan keuangan memiliki peran mediasi penuh dalam pengaruh perilaku keuangan terhadap stres. Kontribusi utama dalam penelitian ini adalah memberikan informasi tentang bagaimana cara menurunkan stres, yaitu dengan upaya meningkatkan kesejahteraan keuangan.

Kata Kunci: kesejahteraan keuangan, pendapatan tidak tetap, perilaku keuangan, stres

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Research related to financial problems are relevant for identifying and preventing high levels of stress. In this context, a literature review explains that financial problems can trigger increased symptoms of depression or anxiety and decreased life satisfaction (Bialowolski et al., 2021). Financial problems are a significant factor influencing the mental health of an individual. An important aspect of mental health is stress, which is described as the inability of an individual to deal with dangerous and threatening situations.

A survey conducted by Gallup (2024) in 160 countries reported an increase in worker stress from 31% to 41% between 2009 and 2023. Workers with irregular incomes have higher stress levels due to limited activities, financial instability, uncertainty, and marginalization, which have a more negative effect on mental health (Bhattacharya & Ray, 2021; Irvine & Rose, 2024; Lewchuk et al., 2003). Irvine & Rose (2024) reported that the association of irregular workers with financial instability, uncertainty, and marginalization negatively affected mental health. Therefore, this research is carried out to examine the mental health of irregular income workers.

Good financial management behavior is essential for irregular income workers to navigate uncertainty and preserve stability. This variable refers to an individual's ability to manage finances effectively, including planning, budgeting, controlling, monitoring, searching, and saving (Dew & Xiao, 2011; Gutter & Copur,

2011), particularly during periods of high consumerism and economic instability (Purnama et al., 2022). Good financial behavior has a positive effect on well-being than self-control (Younas et al., 2019). Financial well-being can be improved by creating long-term plans to anticipate future concerns (Utami & Safitri, 2024).

Financial well-being is characterized by a healthy financial situation, freedom from anxiety, the ability to meet current obligations, and a sense of future security. This variable serves as a crucial connection between financial management and the impact on mental health (Hassan et al., 2021). Financial behavior is a key factor in well-being (Mokhtar et al., 2021). According to Ozyuksel (2022), high financial well-being can reduce stress and improve performance. The manifestation of reduced stress concerning financial management and elevated expectations for future security correlates with enhanced overall well-being (Netemeyer et al., 2018). Financial well-being is a significant predictor of mental health problems, including stress (Hassan et al., 2021). Conservation of Resources (COR) theory explained that individuals strived to protect and maintain resources. However, stress is experienced when these resources are threatened or lost. In this theory, stress is defined as a consequence of threats, loss, and failure in obtaining or maintaining existing resources (Hobfoll, 1989).

Good financial behavior is an effort to maintain or invest resources. Irregular-income

workers face greater challenges in maintaining financial stability due to fluctuating income. Financial well-being can be defined as the collection of resources that an individual possesses. Resources are valuable assets that support individuals during stressful situations, including financial stability, assets, and adequate income (Hobfoll, 2001). Individuals possessing a high degree of financial well-being are characterized by psychological resources. In line with COR theory, an increase in resource reservoir is directly correlated with a reduction in the susceptibility to stress. Therefore, elevated financial well-being signifies the capacity to access resources and effectively navigate income volatility and unpredictability. Good financial management behavior is strongly associated with enhanced security and stability (Kakde et al., 2024). Sound practices are viewed as an investment in resources with the capacity to increase financial well-being and protect reserve. This mitigates the threat of resource depletion, preventing the onset of stress. Financial well-being also serves as a crucial mediator in the relationship between management behavior and stress among workers with irregular incomes.

Previous research have discussed the effect of financial behavior on overall life satisfaction and well-being (Baryła-Matejczuk et al., 2020; Subaida, 2024; Younas et al., 2019). The results showed that aspects of financial behavior had a significant effect on well-being. In this research, subjective financial well-being

serves as a key predictor of overall well-being. Several aspects of financial behavior, including saving, investing, and budgeting, also affect subjective quality of life, as evidenced by Baryła-Matejczuk et al. (2020) on spouses living in Poland. Individuals with a high subjective quality of life tend to have financial stability, which reduces stress and anxiety. Financial freedom or well-being can increase the fundamental aspect of subjective quality of life. This shows that individuals with a high subjective quality of life possess good financial well-being.

Research has shown that financial behavior significantly impacts well-being, as evidenced by Subaida (2024) and Younas et al. (2019), who examined stock investors on Indonesia Stock Exchange and workers across the education, corporate, and restaurant sectors in Pakistan. There is no research focused on irregular income workers, despite the vulnerability to financial problems, such as excessive debt resulting from economic instability. Irregular income workers face unpredictable fluctuations in income, posing a higher risk of stress. An investigation is conducted to determine when effective financial behavior strategies enhance financial well-being and mitigate stress among irregular income workers.

Further investigation into the interrelationship between financial behavior, well-being, and stress among workers with irregular incomes is needed considering the

complexities of financial well-being and stress, particularly in vulnerable populations. Therefore, this research aims to examine the effect of financial management behavior on stress, with individual well-being hypothesized to act as a crucial mediator. The result is distinguished from previous investigations by focusing on a population of irregular income workers uniquely susceptible to income uncertainty and instability. Valuable insights are also offered into the impact of financial behavior on stress levels. Moreover, this research contributes to the literature in economic psychology by analyzing groups vulnerable to economic instability and stating the specific behaviors and aspects of financial well-being that influence stress. The insights inform evidence-based gained can interventions aimed at mitigating stress and enhancing mental health in the broader community.

Method

Research design

This research used a quantitative design with primary data sources through the distribution of psychological scales. An online survey was carried out using three psychological instruments to obtain information on each participant's scale for related variables. Before collecting model test data, instrument preparation was performed through adaptation and validation. Meanwhile,

instrument adaptation was conducted under the guidelines provided by Beaton et al. (2000). The validation was carried out through expert assessment and construct validation using Confirmatory Factor Analysis (CFA). The model test used a simple mediation analysis through a process macro in IBM SPSS Statistics 23 software.

Subject

Purposive sampling method was used with inclusion criteria for workers with irregular incomes who were aged 20-40 years. The exclusion criteria included workers with fixed or irregular income, as well as those with other income guarantees. The selection of participants was performed by screening potential candidates against predetermined inclusion and exclusion criteria, which were verified through responses captured in the data collection form. The sampling procedure comprised the first stage of validation and reliability testing of the research instrument, as well as a second stage focused on hypothesis testing. The first and second stages of sampling obtained 200 and 277 participants. However, only 266 were included in the final data analysis because 11 participants did not meet the specified criteria. A Monte Carlo simulation was used to obtain accurate parameter estimates to determine the number of participants. Some criteria set for conducting the simulations were (1) parameter and standard error bias did not exceed 10%, (2) standard error bias for parameters whose power was being assessed did not exceed 5%, and (3) coverage remained between .91 and .98. The sample size was selected only when all three criteria were satisfied, resulting in the statistical power of .80 (Muthén & Muthén, 2002). Based on the results of the simulation, the number of participants met the criteria. The first and second stages of sampling were carried out in November and December 2024, respectively.

Research procedure

This research commenced with the registration of ethics and was assigned registration number 2.380/IX/HREC/2024. The process continued with the adaptation of instruments, validity and reliability analyses, and the mediator model test Furthermore, data collection was conducted online using Google Forms. Participants were provided with comprehensive research information before completing an informed consent form. This form confirmed their willingness to participate, collected essential demographic data, and required the completion of three psychological instruments.

Research instrument

The instruments used were Financial Behavior (PK), Financial Well-being (KK), and Stress. Financial Behavior was measured using Financial Behavior Scale by Dew and Xiao (2011), which assessed financial management behavior, including cash management, savings and investment, credit use, and insurance. The

instrument consisted of four factors and 15 items, with a Cronbach's alpha reliability of .81 for the original, and item loadings ranging from .64 to .85. An example of an item in Financial Behavior instrument adapted into Indonesian was "Comparing prices when purchasing products or services." Each item in the instrument was assessed on a 5-point Likert scale, ranging from 1 (never) to 5 (always).

Financial Well-Being instrument used was Incharge Financial Distress/Financial Well-Being Scale (IFDW) (Prawitz et al., 2006) which measured an individual's situation, money management, family life, health, and billpaying behavior. The instrument comprised eight unidimensional items, with a Cronbach's alpha reliability value of .956 and factor loadings ranging from .833 to .926. An example of an item adapted into Indonesian was "How satisfied were you with your current financial condition?" Each item was scored on a 10-point Likert scale, ranging from 1 to 10, with different descriptions. The scoring method computed the average and classified the scores into a range of 1.0 to 4.0, 4.1 to 6.9, and 7.0 to 10.0 for low, medium, and high levels, respectively.

Stress variable was measured using Depression, Anxiety, and Stress Scales (DASS-21) instrument, developed by Lovibond and Lovibond (1995). This instrument was adapted into an Indonesian version and tested for validity and reliability by Hakim and Aristawati (2023). DASS-21 measured three dimensions, namely depression, stress, and anxiety. This

research used only stress dimension to assess difficulty relaxing, nervous arousal, irritability or restlessness, overreactivity, and impatience. Stress instrument in DASS-21 consisted of seven items with a Cronbach's alpha reliability coefficient of .77 and item factor loadings ranging from .312 to .833. An example of a stress dimension item in the adapted Indonesian version of DASS-21 was "I found it difficult to feel calm." Each item was rated on a 4-point Likert scale, ranging from 0 (did not apply to me at all, or never) to 3 (applied to me very much, or very often). The scoring method summed the individual item scores and multiplied the total by 2. The resulting scores were interpreted and categorized into a range of 0 to 14, 15 to 18, 19 to 25, 26 to 33, and above 34 as normal, mild, moderate, severe, and very severe, respectively.

Financial management behavior and well-being instruments were originally written in English. Therefore, instrument adaptation was necessary to ensure that the translated version retained the same meaning, validity, and reliability as the original version. This research obtained permission from the scale owner and conducted the adaptation. The steps for adapting the measuring instrument were carried out according to the guidelines provided by Beaton et al. (2000), which included translation, synthesis, back-translation, expert committee review, and pretesting. The translation was performed by two translators who were fluent in the source and target

languages. Synthesis was conducted by the research team on the two translations to resolve discrepancies in the results from the translators. The expert committee review comprised a lecturer in economic psychology and a lecturer in psychometrics. The pretesting or trial stage was conducted by administering the measuring instrument to 10 participants who met the criteria, to ensure the instructions and measuring instrument were understood.

Data analysis method

This research was conducted to test the hypothesis that examined the effect of financial behavior on stress, mediated by financial well-being. The independent (X), mediating (M), and dependent (Y) variables were financial behavior, financial well-being, and stress, respectively.

The Hayes process macro model was used to automatically estimate direct and indirect effects in line with the hypothesis. Factor scores were considered more efficient than total scores in measuring participant abilities due to fewer participants (Kiliç, 2019).

Results

This research aims to examine the effect of financial management behavior on stress, with individual well-being hypothesized to act as a crucial mediator. The result is distinguished from previous investigations by focusing on a population of irregular income workers uniquely susceptible to income uncertainty and instability.

Validity test results

Each instrument was assessed for content and construct validity. Content validity assessments were conducted on financial behavior and well-being instruments using expert assessment through quantitative and qualitative methods. The quantitative research used a 5-point Likert scale ranging from very irrelevant to relevant. The results of quantitative assessments were analyzed using Aiken's V calculation.

The analysis results showed that the content validity of financial behavior and well-being instruments met the criteria for high validity. The qualitative assessment of the expert included suggestions for the instrument's items. Some suggestions comprised changing the wording of the item "How confident are you of having enough money to cover a financial emergency requiring approximately IDR 15.000.000?" to "How confident were you about having sufficient money to cover a

 Table 1

 Aiken's V Values Instrument

Instrument	V	Information	
Financial Behavior	.794	High	
Financial Well-Being	.688	High	
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Note. V: Aiken's V values

financial emergency requiring approximately IDR 15.000.000?" Additionally, the item "Setting aside money for a retirement account" was suggested to be changed to "Setting aside money for a retirement fund." The qualitative assessment results showed that the instrument's items were relevant.

The construct validity of each instrument was assessed through CFA with Mplus software using 200 research data points. The fit indices used to evaluate the model consisted of Chi-Square, root mean square error of approximation (RMSEA), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and standardized root mean square residual (SRMR). Meanwhile, the criteria for determining model fit included an insignificant

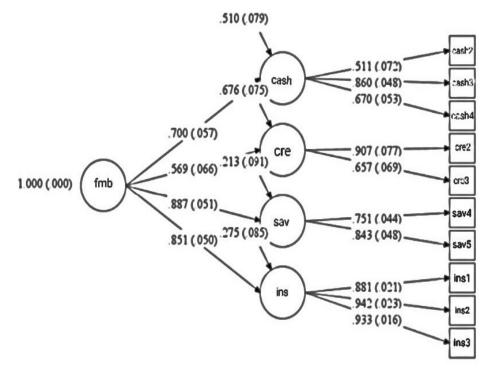
Chi-square (p > .05), RMSEA < .08, CFI > .90, TLI > .90, and SRMR < .08 (Schumacker & Lomax, 2010). CFA results of each instrument are reported as follows: a. Financial Behavior Instrument Adaptation of the FMBs Scale Financial Behavior instrument consisted of four factors, namely 1) Cash Flow Management (cash), 2) Credit Management (cre), 3) Savings and Investment (sav), and 4) Insurance Behavior (ins). CFA for the instrument used a second-order model. The adopted estimator was WLSMV since the data distribution was nonnormal. This was indicated by a skewness value outside the range of -1 to 1, and the data were ordinal. Initial CFA results showed that only CFI and TLI indices met the criteria. Therefore, the empirical data were not consistent with the theoretical model of financial management behavior (χ 2(86) = 302.125, p < .001, RMSEA = .112 [.099; .126], SRMR = .085, CFI = .940, TLI = .927).

Based on the initial analysis, this research selected items using two criteria. The first criterion was that the factor load of each item was set above .40. Therefore, this research dropped item cash1, with a factor load of .295. In the second criterion, sav1, sav2, sav3, and KRE1 items with large MIs and higher standard errors would be dropped. The selection process dropped 5 items, leaving 10 that were analyzed using CFA for the same model. Based on the established fit index criteria, only the chi-square value was not met $(\chi 2(31) = 59.220, p < .002)$. The $\chi 2$ value was susceptible to the number of

degrees of freedom and increased with the sample size (Kline, 2016). Therefore, this research examined 4 additional fit indices to evaluate the model (RMSEA = .067, [.041; .093], SRMR = .043, CFI = .988, TLI = .983). The empirical data were consistent with the theoretical model of financial behavior. The results reported a multidimensional model that was consistent with the original scale.

Each item in financial behavior indicator had a factor loading greater than .50. The item factor loading for cash flow management, credit management, savings and investment, and insurance behavior ranged from .511 to .860, .657 to .907, .751 to .843, and .881 to .942, respectively. Figure 1 shows the instrument model with standardized numerical coefficients.

Figure 1CFA Financial Behavior Second Order Factor Loading



b. Financial Well-Being Instrument (Adapta tion of Prawitz et al.'s FWB Scale)

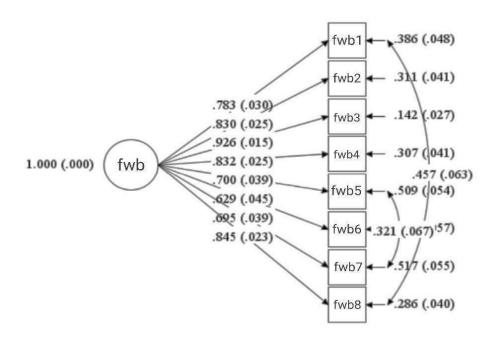
CFA of financial well-being was conducted using the maximum likelihood (ML) estimator with a first-order model. This estimator was selected because the data had a skewness value between -1 and 1, which met the requirements for normal data. Initial CFA results showed that SRMR, CFI, and TLI fit indices met the criteria. Therefore, the empirical data did not fit the theoretical financial well-being model (χ 2 (20) = 79.229, p < .001, RMSEA = .122 [.094; .150], SRMR = .036, CFI = .949, TLI = .929).

A modification index check was conducted to address issues in the initial model (Teo et al., 2013). The process was performed by correlating the errors of item pairs with high modification indices. The first item pair with correlated errors was FWB1 ('How stressed

were you today about your financial situation?') and FWB8 ('How stressed were you about your finances in general?'), which had a modification index of 38.684. Meanwhile, the second item pair was FWB5 ('How confident were you about having enough money to cover a financial emergency that required approximately IDR 15.000.000?') and FWB7 ('How often did you feel like you only had enough money to live on, and were living paycheck to paycheck?'), possessing modification index of 21.026. After modification, the model met the fit index criteria $(\chi 2(18) = 23.056, p = .1885 > .05, RMSEA = .037$ [.000; .077], SRMR = .020, CFI = .996, TLI = .993). The factor loading per item ranged from .629 to .926. The results indicated that a unidimensional model fit the original scale. Figure 2 shows the factor loading of each item in financial well-being model, containing standardized numbers.

Figure 2

CFA Financial Well-Being First Order Factor Loading



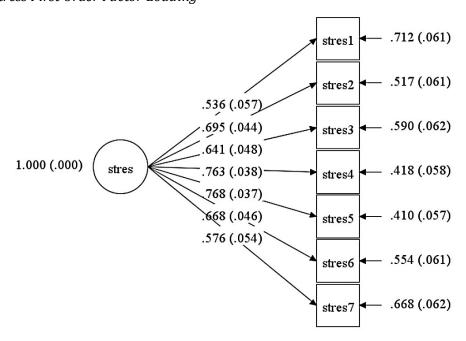
c. Stress Instrument

Stress instrument used the ML estimator and a first-order model in CFA. This estimator was selected because the data were normally distributed (skewness was between -1 and 1). Additionally, the validity and reliability tests of stress adaptation scale, previously conducted by Hakim and Aristawati (2023), also used the ML estimator. CFA results provided good support from the available data, and all fit indices used to evaluate the model

met the criteria. This showed that the empirical data were consistent with the theoretical model of stress ($\chi^2(14) = 23.318$, p=.055 > .05, RMSEA = .058 [.000; .098], SRMR = .036, CFI = .980, TLI = .970). Each item showed good factor loading values, ranging from .536 to .768. The model fit index analysis in CFA reported a unidimensional model in line with the original scale. Figure 3 shows the distribution of stress model factor loads with the standardized numbers.

Figure 3

CFA Stress First Order Factor Loading



The results of CFA model fit index analysis showed the model's suitability to the original scale. Financial behavior scale was reported to fit the multidimensional model. Meanwhile, financial well-being scale and stress scale suggested a fit with the unidimensional model.

Normality test results

Normality test was conducted in two stages to examine financial behavior and well-being as the independent and dependent variables, respectively. The test used the non-parametric Kolmogorov-Smirnov (K-S) statistical test presented in Tables 2 and 3.

Table 2Path 1 Normality Test

	Unstandardized Residual
N	266
Test Statistic	.054
Asymp. Sig. (2-tailed)	.056

Table 3Path 2 Normality Test

	Unstandardized Residual			
N	266			
Test Statistic	.050			
Asymp. Sig. (2-tailed)	.098			

Normality test results reported a significance value greater than .05 (p > .05)

since the data followed a normal distribution.

Multicollinearity test results

Table 4 *Multicollinearity Test Results*

Variable	Collinearity S	Collinearity Statistics		
variable	Tolerance	VIF		
Financial Behavior	.569	1.758		
Financial Well-Being	.569	1.758		

The model met the requirements for being free from multicollinearity (tolerance value > .10 and VIF value < 10).

Heteroscedasticity test was conducted in two stages, namely paths 1 and 2. The Glejser test was used to assess heteroscedasticity, as presented in Tables 5 and 6.

Heteroscedasticity test results

Table 5Path 1 Heteroscedasticity Test Results

Variable	t	р
Financial Behavior	-1.836	.067

Table 6Path 2 Heteroscedasticity Test Results

Variable	t	р	
Financial Behavior	-1.266	.207	
Financial Well-being	-1.756	.080	

The test results showed that all variables had a significance value greater than .05 (p >

.05). Therefore, there was no heteroscedasticity in the research model.

Hypothesis test results

The hypothesis test was a simple mediation analysis aimed at determining the effect of the independent variable (X) on the dependent variable (Y) through a

mediator (M). This analysis examined the direct relationship between X and Y through M. Hypothesis testing was conducted using Hayes's Process macro, as reported in Table 7.

Figure 4 *Hypothesis Model*

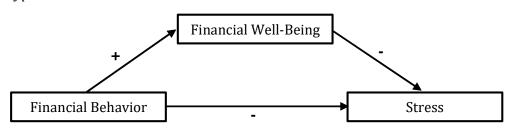


Table 7 *Model Summary Results*

Model	R	R-Square	MSE	F
FMB→FWB	.6566	.4312	.5420	200.1084
FMB, FWB→STRESS	.7484	.5601	.3915	167.4598
FMB→STRESS	.5478	.3001	.6206	113.2149

Note. FMB: Financial Behavior, FWB: Financial Well Being

The R² value was .4312 for financial behavior model, with well-being as the dependent variable. This showed that 43.12% of the variation in financial well-being could be explained by stress, while others were affected by external variables. In financial behavior and well-being model, the R² value was .5601. This value showed that 56.01% of

stress could be explained by financial behavior and well-being, while the remaining 43.99% was affected by other variables. In the third model, the R² value was .3001 with financial behavior and stress as independent and dependent variables. This value reported that 30.01% of the changes in stress could be explained by financial behavior.

Table 8 *Results of the Path Hypothesis Test*

	Coefficients	se	t	р		apping BC % CI
	(β)			_	LL	UL
Path a						
Constant	.0000	.0451	0001	.9999	0889	.0889
FMB * FWB	.6566	.0547	14.1460	.0000	.6659	.8813
Paths c' and b						
Constant	.0000	.0384	0011	.9991	0756	.0755
FMB * Stress	1039	.0616	-1.9162	.0564	2394	.0033
FWB * Stress	6761	.0523	-12.4685	.0000	7552	5492
Path c						
Constant	.0000	.0483	0008	.9994	0951	.0951
FMB * Stress	5478	.0585	-10.6402	.0000	7378	5074

Note. FMB: Financial Behavior, FWB: Financial Well Being

Table 8 shows the results of all direct and mediation path analyses. The effect of financial behavior on well-being obtained a path coefficient value of .6566, with a significance of .00 (p < .001). Path c reflected the direct effect of financial behavior on stress, with a coefficient of -.1039 and a significance of .0564 (p > .05). Furthermore, path b showed the effect of

financial well-being on stress, with a coefficient of -.6761 and a significance of .00 (p < .001). These results indicated the presence of total or perfect mediation. Path c represented the total effect of financial behavior on stress, obtaining a path coefficient of -.5478 (p < .05). Table 9 reports the indirect effect, or the presence of a mediating role of financial well-being.

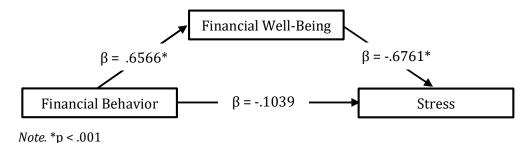
Table 9Results of Hypothesis Testing on the Indirect Effect

	Indirect Effect	Boot SE	Bootstrapping BC 95% CI		
			LL	UL	
Financial Well-Being	5045	.0498	6070	4119	

Table 9 presents financial well-being as a mediator of the relationship between behavior and stress. The results showed that the indirect effect of financial well-being was -.5045. The indirect effect of the

variable did not overlap or cover 0 (lower limit = -.6070, upper limit = -.4119). Therefore, financial well-being served as a mediating factor in the relationship between behavior and stress.

Figure 5
The Role of Financial Well-Being as a Mediator between Behavior and Stress



Discussion

The analysis shows that financial well-being fully mediates the influence of behavior on stress among irregular income workers. The result shows that financial behavior as a mediating variable impacts well-being and stress.

A positive relationship exists between financial behavior and well-being. This research shows that improved financial behavior correlates with higher well-being. According to COR theory, financial behavior represents an effort to acquire or protect existing resources. The variable is positively associated with financial well-being, which is defined as the perceived adequacy and stability of resources. Conversely, a negative relationship was observed between financial behavior and stress. This is because improved financial behavior is connected to reduced stress levels.

The effect of financial well-being and stress reports a negative relationship. The direction of the hypothesis shows that 1) financial behavior is positively related to well-being, 2) well-being is negatively associated

with stress, and 3) financial behavior is negatively related to stress. This result is consistent with predictions from COR theory, where stress increases when an individual loses resources.

Younas et al. (2019) showed that financial behavior had a greater effect on well-being than self-control. Moreover, Chavali et al. (2021) reported that the factors in financial behavior significantly affected well-being of individuals in India.

Good financial behavior is essential for improving well-being. Utami and Safitri (2024) stated that financial behavior had a significant and positive effect on well-being. The instability faced by irregular income workers requires greater effort to achieve financial well-being. Similarly, irregular income workers need to have good financial behavior to achieve improved well-being. Acquiring or investing resources is important in preventing or mitigating losses (Hobfoll et al., 2016). Zhang and Sussman (2024) explained that financial behavior in the form of budgeting mitigated the negative effects associated with income uncertainty.

Previous investigation on financial wellbeing and stress supports the results. Ryu and Fan (2023) reported that financial worry was associated with psychological distress. Financial worry is a sign of poor well-being, while psychological distress is an emotional state, discomfort, and suffering experienced by individuals with symptoms of depression and anxiety in response to stressors. These results explain the relationship between financial worry and psychological distress prevalent among unmarried, unemployed, low-income, and homeless individuals. A systematic review conducted by Hassan et al. (2021) also showed that financial well-being affected mental health, such as depression, anxiety, and stress.

Low financial well-being predicts difficulties, depression, stress, and anxiety. Previous research showed that financial well-being was negatively related to stress levels. Individuals with high financial well-being have a lower threat of losing resources and possess coping mechanisms to deal with stressors and life's demands. According to Satria et al. (2025), limited resources and work demands contribute to the cycle of stress in teachers.

This research is subject to several limitations, namely 1) the data collected through an online questionnaire may have introduced sampling bias since participation was restricted to individuals with internet access, and 2) the scope was confined to internal variables, namely financial behavior and well-being, excluding external factors that may also influence the outcomes. Therefore, future research are expected to explore other factors, particularly

correlating the use of internal and external variables, such as social support, environmental conditions, and socioeconomic factors affecting stress.

Conclusions

This research aims to determine the effect of financial behavior on stress mediated by financial well-being. In conclusion, financial well-being mediates the relationship between behavior and stress in irregular income workers. This shows that financial behavior does not directly impact stress without the influence of well-being. The results also report a positive relationship between financial behavior and well-being. This is because improved financial behavior led to greater well-being. A negative relationship exists between financial well-being and stress. Therefore, improved financial behavior contributes to enhanced well-being and reduced stress levels.

Suggestion

Future research is recommended to use a more varied model, considering the collaboration of internal variables such as self-control and coping strategies, as well as external factors, including the environment, burden, and support. The public should be encouraged to pay attention to financial behavior and implement good practices.

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References

- Baryla-Matejczuk, M., Skvarciany, V., Cwynar, A., Poleszak, W., & Cwynar, W. (2020). Link between financial management behaviours and qquality of relationship and overall life satisfaction among married and cohabiting couples: Insights from application of artificial neural networks. *International Journal of Environmental Research and Public Health*, 17(4), 1190. https://doi.org/10.3390/ijerph17041190
- Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, *25*(24), 3186–3191. https://doi.org/10.1097/00007632-200012150-00014
- Bhattacharya, A., & Ray, T. (2021). Precarious work, job stress, and health related quality of life. *American Journal of Industrial Medicine*, 64(4), 310–319. https://doi.org/10.1002/ajim.23223
- Bialowolski, P., Weziak-Bialowolska, D., Lee, M. T., Chen, Y., VanderWeele, T. J., & McNeely, E. (2021). The role of financial conditions for physical and mental health. Evidence from a longitudinal survey and insurance claims data. *Social Science & Medicine*, 281, 114041. https://doi.org/10.1016/j.socscimed.2021.114041

- Chavali, K., Mohan Raj, P., & Ahmed, R. (2021). Does financial behavior influence financial well-being? *The Journal of Asian Finance, Economics and Business*, 8(2), 273-280. https://doi.org/10.13106/jafeb.2021.vol8.no2.0273
- Dew, J., & Xiao, J. J. (2011). The Financial Management Behavior Scale: Development and validation. *Journal of Financial Counseling and Planning*, 22(1), 43-59.
- https://www.afcpe.org/news-and-publi cations/journal-of-financial-counselingand-planning/volume-22-1/thefinancial-management-behavior-scaledevelopment-and-validation/
- Gallup. (2024). State of the global workplace: The voice of the world's employees (Research summary). Gallup. https://www.ahtd.org/files/state-of-the-global-workplace-2024-key-insights.pdf
- Gutter, M., & Copur, Z. (2011). Financial behaviors and financial well-being of college students: Evidence from a national survey. *Journal of Family and Economics Issues*, *32*(4), 699–714. https://doi.org/10.1007/s10834-011-9255-2
- Hakim, Moh. A., & Aristawati, N. V. (2023). Mengukur depresi, kecemasan, dan stres pada kelompok dewasa awal di Indonesia: Uji validitas dan reliabilitas konstruk DASS-21. *Jurnal Psikologi Ulayat*, *10*(2), 232–250. https://doi.org/10.24854/jpu553
- Hassan, M. F., Mohd Hassan, N., Kassim, E. S., & Utoh Said, Y. M. (2021). Financial wellbeing and mental health: A systematic review. *Studies of Applied Economics*, *39*(4). https://doi.org/10.25115/eea.v39i4.4590
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. https://doi.org/10.1037/0003-066X.44.3.513
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested self in the stress process: Advancing conservation of

- resources theory. *Applied Psychology*, *50*(3), 337–421. https://doi.org/10.1111/1464-0597.00062
- Hobfoll, S. E., Tirone, V., Holmgreen, L., & Gerhart, J. (2016). Conservation of resources theory applied to major stress. In G. Fink (Ed.), *Stress: Concepts, cognition, emotion, and behavior* (pp. 65–71). Academic Press. https://doi.org/10.1016/B978-0-12-800951-2.00007-8
- Irvine, A., & Rose, N. (2024). How does precarious employment affect mental health? A scoping review and thematic synthesis of qualitative evidence from western economies. *Work, Employment and Society*, *38*(2), 418–441. https://doi.org/10.1177/09500170221128698
- Kakde, H. S., Lad, K., & Kalani, R. (2024). Fostering financial resilience: A pathway through financial wellness. *Educational Administration: Theory and Practice*, 30(5), 5777–5783. https://doi.org/10.53555/kuey.v30i5.3854
- Kiliç, A. F. (2019). Can factor scores be used instead of total score and ability estimation? *International Journal of Assessment Tools in Education, 6*(1), 25-35. https://doi.org/ 10.21449/ijate.442542
- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). The Guilford Press.
- Lewchuk, W., De Wolff, A., King, A., & Polanyi, M. (2003). From job strain to employment strain: Health effects of precarious employment *Just Labour*. https://doi.org/10.25071/1705-1436.165
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. Behaviour Research and Therapy, 33(3), 335–343. https://doi.org/10.1016/0005-7967(94)00075-U
- Mokhtar, D., Ruslan, M. I. I., & Abdullah, N.-A. (2021). The relationship between work

- and family conflict on life satisfaction and quality of life among employees in the health sector. *International Journal of Academic Research in Business and Social Sciences*, 11(7), 89-99. https://doi.org/10.6007/IJARBSS/v11-i7/10185
- Muthén, L. K., & Muthén, B. O. (2002). How to use a monte carlo study to decide on sample size and determine power. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(4), 599–620. https://doi.org/10.1207/S15328007SEM0904-8
- Netemeyer, R. G., Warmath, D., Fernandes, D., & Lynch, J. G. (2018). How am i doing? Perceived financial well-being, its potential antecedents, and Its relation to overall well-being. *Journal of Consumer Research*, 45(1), 68–89. https://doi.org/10.1093/jcr/ucx109
- Ozyuksel, S. (2022). Financial stress relationship with work life and financial well-being. *European Scientific Journal, ESJ, 18*(6), 87. https://doi.org/10.19044/esj.2022.v18n6p87
- Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). *InCharge Financial Distress/Financial Well-Being Scale* [Database record]. APA PsycTests. https://doi.org/10.1037/t60365-000
- Purnama, S., Hikmah, K., & Sukarno, A. (2022). Faktor yang mempengaruhi financial management behavior pada mahasiswa manajemen UPN "Veteran" Yogyakarta. Jurnal EMA, Ekonomi Manajemen, Akuntansi, 7(2), 76-84. https://doi.org/10.47335/ema.v7i2.121
- Ryu, S., & Fan, L. (2023). The relationship between financial worries and psychological distress among U.S. adults. *Journal of Family and Economic Issues*, 44(1), 16–33. https://doi.org/10.1007/s10834-022-09820-9
- Satria, R., Fauzan, F., & Muhammad, A. F. (2025). Analisis faktor-faktor penyebab stres kerja terhadap kinerja guru: Studi literatur komprehensif. *Jurnal Riset Dan Inovasi Pembelajaran*, *5*(1), 249–263. https://doi.org/10.51574/jrip.v5i1.2889

- Schumacker, R. E., & Lomax, R. G. (2010). *A beginner's guide to structural equation modeling* (3rd ed.). Routledge.
- Subaida, I. (2024). The influence of financial behavior on financial well-being through financial satisfaction. *Jurnal Ekonomi Pembangunan*, *22*(01), 30–39. https://doi.org/10.22219/jep.v22i01.29654
- Teo, T., Tsai, L. T., & Yang, C.-C. (2013). Applying Structural Equation Modeling (SEM) in educational research: An introduction. In M. S. Khine (Ed.), *Application of Structural Equation Modeling in Educational Research and Practice* (pp. 3–21). SensePublishers. https://doi.org/10.1007/978-94-6209-332-4_1
- Utami, S., & Safitri, T. A. (2024). Pengaruh sikap keuangan, perilaku keuangan dan penge tahuan keuangan terhadap kesejah teraan

- keuangan. *Jurnal Mirai Management*, *9*(1), 1126–1136. https://journal.stieamkop.ac.id/index.php/mirai/article/view/7351/4916
- Younas, W., Javed, T., Kalimuthu, K. R., Farooq, M., Khalil-ur-Rehman, F., & Raju, V. (2019). Impact of self-control, financial literacy and financial behavior on financial well-being. *The Journal of Social Sciences Research*, *5*(1), 211–218. https://doi.org/10.32861/jssr.51.211.218
- Zhang, C. Y., & Sussman, A. B. (2024). Income predictability and budgeting. *Journal of Consumer Affairs*, *58*(1), 304–341. https://doi.org/10.1111/joca.12568

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