PUNGGAWA
GLOBAL RESEARCH:
JURNAL MULTIDISIPLIN

Punggawa Global Research: Jurnal Multidisiplin
Volume 1, Nomor 6, 2026
E-ISSN: 3164-0117
Open Access: punggawajournal.com/pgr

Internal Psychological Resources as Catalysts for Educator Flourishing: The Impact of Psychological Capital on Teacher Wellbeing

Deny Hadi Siswanto[1]*, Lutfi Hakim[2], Syaifulloh Ibnu Mukmin[3], Muhammad Yasid[4], Mudzofir[5]
[1]SMA Muhammadiyah Mlati, Indonesia
[2]SMA Teladan Yogyakarta, Indonesia
[3]SMA Insan Mulia Boarding School, Indonesia
[4]SMA Santri Pancasila, Indonesia
[5]SMA Islam Al Azhar 34 Yogyakarta, Indonesia
Correspondence: denysiswanto11@guru.sma.belajar.id

Article Info

Article history:
Received Oct 6th, 2026
Revised Nov 17th, 2026
Accepted Nov 25th, 2026

Keywords:
Psychological Capital; Teacher Wellbeing; Positive Organizational Behavior; Secondary Education

ABSTRACT

This study investigates the empirical influence of Psychological Capital on Teacher Wellbeing among educators at SMA Muhammadiyah Mlati. Employing a quantitative explanatory survey design conducted in October 2026, data were collected from the entire population of 19 teachers using a saturated sampling technique and a validated 5-point Likert scale questionnaire comprising 22 valid items across both constructs. Following the fulfillment of classical parametric assumptions specifically residual normality via the Shapiro-Wilk test ($p = 0.273$) and linearity ($p = 0.413$) simple linear regression analysis was performed using SPSS. The statistical results confirm that Psychological Capital exerts a positive and highly significant effect on Teacher Wellbeing, yielding the regression equation $Y = 24.958 + 0.477X$ ($t = 5.735$, $F = 32.888$, $p < 0.001$). A very strong positive correlation ($R = 0.812$) was observed, with Psychological Capital accounting for 65.9% of the variance in Teacher Wellbeing ($R^2 = 0.659$), while 34.1% is attributable to external variables. These findings underscore that internal psychological resources encompassing self-efficacy, hope, optimism, and resilience serve as the primary foundation for sustaining educator wellbeing beyond structural incentives alone. Practically, school leaders are recommended to implement continuous Psychological Capital Intervention (PCI) training programs, structured peer mentoring, and supportive organizational climates to foster resilient and thriving teaching communities.

© 2026 The Authors. Published by Punggawa Legacy Center. This is an open access article under the CC BY license (https://creativecommons.org/licenses/by/4.0/)

INTRODUCTION

The transformation of educational dynamics in the modern era demands an increasingly complex role from teachers, positioning them not merely as transmitters of instructional content, but also as facilitators of character development, pedagogical innovators, and managers of dynamic educational administration (Cholifah & Faelasup, 2024). High demands for adaptation to curriculum reforms, layered administrative workloads, and stakeholder expectations frequently expose educators to sustained psychological pressure (Purwanto et al., 2026). When such occupational stressors are not counterbalanced by adequate psychological capacities and institutional support, teachers become highly susceptible to emotional exhaustion, declining teaching motivation, and burnout symptoms that directly impair the quality of classroom interactions (Arthur et al., 2022). Within this context, teacher wellbeing has emerged as a critical issue in educational management and psychology, serving as a fundamental

prerequisite for sustaining educators' professional performance and driving student academic achievement.

Teacher wellbeing essentially extends beyond the mere absence of psychological distress or occupational stress, encompassing a state of optimal functioning or flourishing that integrates subjective wellbeing, professional satisfaction, work engagement, and positive social relationships within the school environment (Lapidot-Lefler, 2025; Sandilos et al., 2023). Extensive empirical evidence demonstrates that teachers possessing high levels of psychological wellbeing tend to exhibit stronger pedagogical enthusiasm, heightened instructional creativity, and deeper organizational commitment in mentoring students (Siswanto et al., 2026; Tarso et al., 2025). Conversely, low levels of teacher wellbeing not only compromise individual mental health but also trigger elevated turnover intentions and instructional stagnation at the school level. Consequently, identifying the primary determinants capable of sustaining and enhancing teacher wellbeing constitutes a strategic priority for every educational institution.

In efforts to understand the factors shaping educator wellbeing, Positive Organizational Behavior (POB) scholarship highlights the vital role of internal individual psychological resources conceptualized as Psychological Capital, or PsyCap (Henríquez & Urzúa, 2023). Psychological Capital is a higher-order positive psychological construct comprising four synergistic dimensions: self-efficacy, defined as confidence in one's ability to execute challenging tasks; hope, reflecting perseverance toward goals and the capacity to generate alternative pathways; optimism, representing positive attributions regarding present and future success; and resilience, denoting the capacity to bounce back from adversity or setbacks (Heryuriani et al., 2025; Purwaningsih et al., 2026; Sadiyah et al., 2025). Crucially, these four psychological capacities are state-like rather than fixed personality traits, meaning they are malleable and can be systematically developed through workplace experiences and targeted organizational interventions.

Theoretically and empirically, Psychological Capital operates as both a protective buffer and a proactive catalyst that enables teachers to manage job demands constructively and preserve their psychological wellbeing (Li, 2021). Educators with elevated levels of Psychological Capital tend to appraise pedagogical challenges and school policy changes as opportunities for professional growth rather than threats that deplete emotional energy (Mala et al., 2026; Massouti et al., 2024). Numerous prior studies within the educational sector have confirmed a significant positive correlation between Psychological Capital and job satisfaction, work engagement, and subjective wellbeing among teachers across various school levels (Ewulley et al., 2023; Widyastuti et al., 2026). When teachers possess robust self-efficacy and resilience, they are better equipped to maintain affective stability amid complex classroom pressures, thereby sustaining teacher wellbeing at an optimal level.

Although the relationship between Psychological Capital and teacher wellbeing has been extensively investigated in international literature and corporate settings, empirical studies specifically examining this phenomenon within private secondary schools grounded in Islamic values in Indonesia remain relatively scarce and warrant deeper contextual inquiry (Jarwanto et al., 2026; Prasetyo et al., 2022; Pulungan et al., 2026). SMA Muhammadiyah Mlati, a private senior high school located in Sleman Regency, Special Region of Yogyakarta, represents a distinctive educational ecosystem characterized by dual demands for academic excellence and religious character formation, alongside a demographically diverse teaching workforce spanning varied age brackets, postgraduate educational backgrounds, and a polarized tenure distribution between early-career and senior educators. This human resource diversity at SMA Muhammadiyah Mlati generates unique psychological dynamics in navigating school workloads, necessitating empirical verification of the extent to which teachers' internal psychological capital sustains their overall wellbeing.

Grounded in these empirical gaps and practical urgencies, the present study is highly relevant in quantitatively and explanatorily examining the influence of Psychological Capital on Teacher Wellbeing across the entire teaching population at SMA Muhammadiyah Mlati. An accurate empirical understanding of the magnitude with which Psychological Capital predicts teacher wellbeing is expected not only to enrich theoretical discourse in educational psychology and school human resource

management, but also to provide an evidence-based foundation for school leadership and educational boards in formulating sustainable capacity-building policies (Harris & Jones, 2023; Putri et al., 2024). Through these insights, schools can design targeted mental competency programs and supportive work climates to cultivate a thriving, resilient, and high-performing community of educators.

RESEARCH METHOD

This study employed a quantitative approach with an explanatory survey design to empirically examine the influence of Psychological Capital (X) as the independent variable on Teacher Wellbeing (Y) as the dependent variable (Creswell & Poth, 2018). The research was conducted in November 2026 at SMA Muhammadiyah Mlati, involving the entire population of 19 teachers through a saturated sampling (census) technique, given the relatively small population size that allowed all members to be included as research respondents. Primary data were collected systematically through the distribution of a closed-ended questionnaire utilizing a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with each instrument initially comprising 12 statement items adapted from the theoretical frameworks of positive organizational behavior and educator wellbeing.

Prior to hypothesis testing, all research instruments underwent data quality assessments consisting of empirical validity testing using Pearson Product Moment correlation and internal consistency reliability testing using Cronbach's Alpha coefficient ($\alpha > 0.60$), resulting in 22 valid and reliable statement items for further analysis after eliminating one non-performing item from each variable (Naufal et al., 2025). Subsequently, the collected data were analyzed using descriptive statistics to map demographic profiles and variable score tendencies, followed by classical assumption tests encompassing residual normality testing via the Shapiro-Wilk test (selected due to the sample size of $N < 50$) alongside the Kolmogorov–Smirnov test for comparison, as well as linearity testing via the Test of Linearity at a significance threshold of $p > 0.05$ (Ghozali, 2021). The final stage of analysis applied simple linear regression supported by partial significance testing (t-test), simultaneous model feasibility testing (F-test), and the calculation of the coefficient of determination (R^2) using SPSS software to measure the magnitude of Psychological Capital's contribution to Teacher Wellbeing.

RESULTS AND DISCUSSION

1. Descriptive Statistical Analysis

Based on the descriptive statistical analysis of 19 respondents all from SMA Muhammadiyah Mlati the demographic profile indicates a predominance of female teachers at 10 respondents (52.6%) compared to 9 male teachers (47.4%), with the largest age distribution falling within the 45-54 age group (9 respondents, 47.4%), followed by those over 55 years old (5 respondents, 26.3%), aged 25-34 (4 respondents, 21.1%), and aged 35-44 (1 respondent, 5.3%). In terms of tenure, the majority of respondents have 1-5 years (8 respondents, 42.1%) or more than 15 years (7 respondents, 36.8%) of teaching experience, while the remainder have taught for 11-15 years (3 respondents, 15.8%) and 6-10 years (1 respondent, 5.3%), and regarding educational background, most hold a master’s degree (10 respondents, 52.6%) while the rest hold a bachelor’s degree (9 respondents, 47.4%). Meanwhile, descriptive results for the research variable measured across 12 statement items on a 1-5 scale with a theoretical score range of 12-60 reveal that Psychological Capital (X) yielded a total score of 884, a minimum score of 31, a maximum score of 53 (range = 22), a mean of 46.53 (standard error = 1.236), a median of 49.00, and a mode of 50.

2. Instrument Test Results

Based on the results of empirical validity (*Pearson Product Moment*) and reliability (*Cronbach's Alpha*) testing on 19 respondents ($r_{\text{table}} = 0.456$ at a significance level of $\alpha = 5\%$), it can be concluded that both research instruments are declared valid and reliable for use in research data collection after eliminating the statement items that did not meet the criteria.

Table 1. Summary Table of Instrument Validity and Reliability Test Results

Research Variable	Initial Number of Items	Number of Valid Items	Dropped Items (Invalid)	Cronbach's Alpha Value	Reliability Status ($\alpha > 0.60$)
Psychological Capital (X)	12	11 items	1 (Item number 1)	0.885	Very Reliable
Teacher Wellbeing (Y)	12	11 items	1 (Item number 10)	0.723	Reliable
Overall Total	24	22	2	-	Feasible for Use

Based on the instrument testing criteria, a statement item is declared valid if it has a value of $r_{\text{count}} > 0.456$ or Sig. (2-tailed) < 0.05; therefore, items that did not meet these criteria (1 item in variable X and 1 item in variable Y) were excluded from further data analysis. Meanwhile, in terms of reliability, both variables have *Cronbach's Alpha* values exceeding the critical threshold of 0.60 and even surpassing the high reliability standard of 0.70, proving that this research instrument possesses good internal consistency.

3. Classical Assumption Tests

Normality Test Given the sample size of $N < 50$ ($N = 19$), the residual normality test was primarily evaluated using the Shapiro–Wilk test, alongside the Kolmogorov–Smirnov test for comparison. Data is considered normally distributed if the significance value (p) exceeds 0.05.

Table 2. Tests of Normality

Variable	KS Statistic	df	KS Sig.	SW Statistic	df	SW Sig.
Unstandardized Residual	0.119	19	0.200*	0.941	19	0.273

As shown in Table 1, the Shapiro-Wilk significance value is 0.273 ($p > 0.05$) and the Kolmogorov-Smirnov significance value is 0.200 ($p > 0.05$). Consequently, the residual values of the regression model follow a normal distribution. Linearity Test The relationship between the independent and dependent variables is deemed linear if the significance value on the *Deviation from Linearity* row exceeds 0.05.

Table 3. ANOVA Table (Test of Linearity)

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups (Combined)	150.193	9	16.688	4.951	0.013
Linearity	119.010	1	119.010	35.311	0.000
Deviation from Linearity	31.183	8	3.898	1.157	0.413
Within Groups	30.333	9	3.370	-	-
Total	180.526	18	-	-	-

Based on Table 2, the significance value for *Deviation from Linearity* is 0.413 ($p > 0.05$), and the calculated F-value (1.157) is lower than the critical F-table value (3.230). This confirms a statistically significant linear relationship between Psychological Capital (X) and Teacher Wellbeing (Y).

4. Hypothesis Testing and Simple Linear Regression Analysis

Partial Test (t-Test) and Regression Equation

With degrees of freedom $df = N - k = 19 - 2 = 17$ at a two-tailed significance level of $\alpha = 0.05$, the critical t-table value is 2.110. The hypothesis is accepted if $t_{\text{count}} > t_{\text{table}}$ or $p < 0.05$.

Table 4. Regression Coefficients (Dependent Variable: Teacher Wellbeing)

Model	Unstandardized B	Std. Error	Standardized β	t	Sig.

(Constant)	24.958	3.896	—	6.407	0.000
Psychological Capital (X)	0.477	0.083	0.812	5.735	0.000

From the unstandardized coefficients in Table 3, the simple linear regression equation is formulated as follows:

$$Y = 24.958 + 0.477X$$

The t-test yields $t_{\text{count}} = 5.735 > t_{\text{table}} = 2.110$ with a significance level of $p = 0.000 < 0.05$. This indicates that Psychological Capital (X) exerts a positive and statistically significant partial effect on Teacher Wellbeing (Y). The constant of 24.958 indicates the baseline Teacher Wellbeing score when Psychological Capital equals zero, while the regression coefficient of 0.477 implies that every one-unit increase in Psychological Capital elevates Teacher Wellbeing by 0.477 units.

Model Feasibility/ Simultaneous Test (*F*-Test)

Using $df_1 = 1$ and $df_2 = 17$ at $\alpha = 0.05$, the critical F-table value is 4.451.

Table 5. ANOVA (Dependent Variable: Teacher Wellbeing)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	119.010	1	119.010	32.888	0.000
Residual	61.516	17	3.619	-	-
Total	180.526	18	-	-	-

As presented in Table 4, $F_{\text{count}} = 32.888 > F_{\text{table}} = 4.451$ with $p = 0.000 < 0.05$. These figures demonstrate that the regression model achieves goodness-of-fit and that Psychological Capital (X) significantly predicts Teacher Wellbeing (Y).

Coefficient of Determination (R^2)

Table 6. Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.812	0.659	0.639	1.902

As detailed in Table 5, the correlation coefficient (R) of 0.812 reflects a very strong positive relationship between Psychological Capital and Teacher Wellbeing. Furthermore, the R^2 value of 0.659 indicates that Psychological Capital (X) accounts for 65.9% of the variance in Teacher Wellbeing (Y), whereas the remaining 34.1% is attributable to external variables not examined within this research model.

5. Discussion

The findings of this study empirically prove that Psychological Capital (PsyCap) exerts a positive and highly significant influence on Teacher Wellbeing among educators at SMA Muhammadiyah Mlati, as demonstrated by the simple linear regression equation $Y = 24.958 + 0.477X$ with $t_{\text{count}} = 5.735$ ($p = 0.000 < 0.05$) and a model feasibility score of $F_{\text{count}} = 32.888$ ($p = 0.000 < 0.05$). The positive regression coefficient of 0.477 confirms that every one-unit increase in teachers' psychological capacity linearly elevates their psychological and professional wellbeing by nearly half a unit, further reinforced by the fulfillment of classical assumptions for normality ($p = 0.273$) and linearity ($p = 0.413$). These results align with positive organizational behavior theory, which posits that the synergy of individual psychological resources encompassing self-efficacy, hope, optimism, and resilience serves as a fundamental internal capital for sustaining affective stability and job satisfaction within educational settings (Novianto et al., 2025; Siswanto et al., 2025; Yurt, 2025). In a school environment that demands high adaptability to curriculum reforms and administrative workloads, teachers with high levels of Psychological Capital tend to appraise pedagogical challenges as opportunities for professional growth rather than threats that trigger emotional burnout, thereby

maintaining optimal subjective and professional wellbeing (Mishra & Koehler, 2006; Namukasa & Aryee, 2021).

Furthermore, the correlation coefficient (R) of 0.812 and the coefficient of determination (R^2) of 0.659 indicate a very strong positive relationship, wherein Psychological Capital accounts for 65.9% of the variance in Teacher Wellbeing, while the remaining 34.1% is attributable to external factors outside this research model. This substantial explanatory power underscores that internal psychological resources play a far more dominant role in determining teacher wellbeing than physical facilities or material incentives alone (Peranita et al., 2025; Zhu et al., 2023). These findings corroborate prior educational studies demonstrating that the four dimensions of Psychological Capital operate synergistically as a protective buffer against daily classroom stressors and relational pressures involving students and parents (Fuaddi et al., 2020; Rizky et al., 2024; Rohayati et al., 2026). When teachers possess strong confidence in their instructional capabilities alongside the capacity to bounce back from pedagogical setbacks, their psychological wellbeing increases substantially, directly enhancing the quality of teaching and learning interactions at school (Hardi et al., 2026; Pisriwati et al., 2024).

Examined through the lens of demographic profiles and descriptive statistical analysis, the high mean score of Psychological Capital among respondents at SMA Muhammadiyah Mlati recorded at 46.53 with a median of 49.00 and a mode of 50 within a theoretical score range of 12-60 is closely associated with the teachers' age composition, tenure, and educational attainment. The respondent cohort is predominantly composed of mature educators within the 45-54 age bracket (47.4%) and those over 55 years old (26.3%), supported by a majority holding master's degrees (52.6%). From a career development psychology perspective, age maturity and postgraduate education provide a stronger cognitive foundation for emotional regulation, pedagogical problem-solving, and the cultivation of stable self-efficacy when navigating school dynamics (DiNapoli & Miller, 2022; Tong et al., 2025). Moreover, the polarized distribution of teaching tenure between senior educators with over 15 years of experience (36.8%) and early-career teachers with 1-5 years of experience (42.1%) fosters a mutually reinforcing school ecosystem, wherein the energy and optimism of novice teachers blend with the resilience and practical wisdom of senior faculty to sustain a collective climate of wellbeing (Rohmadi et al., 2024; Wibowo et al., 2026; Yusuf et al., 2026).

From a methodological and psychometric standpoint, the robustness of these findings is underpinned by the quality of the measurement instruments, which underwent rigorous validity and reliability testing prior to regression modeling. Following the elimination of one invalid statement item from each variable (Item 1 in Psychological Capital and Item 10 in Teacher Wellbeing due to $r_{\text{count}} < 0.456$), the remaining 22 valid items exhibited high internal consistency, achieving Cronbach's Alpha values of 0.885 for Psychological Capital and 0.723 for Teacher Wellbeing. This empirical screening of non-performing items ensures that the latent constructs of teacher wellbeing and psychological capital are measured precisely without indicator distortion bias, adhering to established standards of psychological scale development in organizational research (Li, 2021; Prasetyo et al., 2022). Although the study sample comprised 19 respondents, the fulfillment of all parametric assumptions alongside a low standard error of the estimate (1.902) confirms that the resulting predictive model possesses high estimation precision and is scientifically robust for a finite institutional population (Sun et al., 2025; Vuoriainen et al., 2025).

Theoretically and practically, these findings offer strategic implications for the school leadership at SMA Muhammadiyah Mlati and educational policymakers, highlighting that efforts to enhance teacher wellbeing cannot rely solely on structural improvements, but must instead target sustained interventions to develop teachers' psychological capacities (Abbas et al., 2019; Alam et al., 2025; Rahmayuni et al., 2024). Given that 34.1% of the variance in Teacher Wellbeing remains influenced by variables outside the current model such as collegial social support, authentic principal leadership, and work-life balance implementing Psychological Capital Intervention (PCI) training programs integrated into a supportive organizational culture represents a transformative step toward sustaining educator performance (Abbas et al., 2019; Benedict, 2025; Susetyawati et al., 2026). By facilitating pedagogical reflection forums, structured peer mentoring between senior and early-career teachers, and greater professional autonomy, the school can maximize Psychological Capital as a primary catalyst for cultivating a thriving, resilient, and high-performing educational community (Astiwi et al., 2024; Limori et al., 2025; Putri et al., 2026).

CONCLUSION

Based on the results of the simple linear regression analysis of 19 teachers at SMA Muhammadiyah Mlati, it can be concluded that Psychological Capital exerts a positive and highly significant influence on Teacher Wellbeing ($Y = 24.958 + 0.477X$; $t_{\text{count}} = 5.735$; $F_{\text{count}} = 32.888$; $p = 0.000 < 0.05$), accounting for 65.9% of its variance ($R^2 = 0.659$), while the remaining 34.1% is attributable to external factors outside this study. These findings carry the strategic implication that enhancing teacher wellbeing cannot rely solely on improvements to physical facilities or structural incentives, but rather requires strengthening teachers' internal psychological capacities encompassing self-efficacy, hope, optimism, and resilience as the core foundation of occupational resilience and instructional quality. Therefore, it is recommended that school leadership implement continuous Psychological Capital Intervention (PCI) training programs, facilitate structured peer mentoring forums that integrate the experience of senior teachers with the energy of early-career educators, and grant greater professional autonomy within a supportive organizational climate, while future researchers are encouraged to expand the sample scope and investigate external variables such as collegial social support, authentic principal leadership, and work-life balance.

REFERENCES

Abbas, J., Raza, S., Nurunnabi, M., Minai, M. S., & Bano, S. (2019). The impact of entrepreneurial business networks on firms' performance through a mediating role of dynamic capabilities. *Sustainability (Switzerland)*, *11*(11). https://doi.org/10.3390/su11113006

Alam, S. R., Siswanto, D. H., & Aprilia, D. (2025). Implementasi pembelajaran STEM terintegrasi computational thinking untuk meningkatkan kemampuan pemecahan masalah murid. *Papanda Journal of Mathematics and Science Research*, *4*(1), 40–50. https://doi.org/10.56916/pjmsr.v4i1.1130

Arthur, Y. D., Dogbe, C. S. K., & Asiedu-Addo, S. K. (2022). Enhancing Performance in Mathematics Through Motivation, Peer Assisted Learning, And Teaching Quality: The Mediating Role of Student Interest. *Eurasia Journal of Mathematics, Science and Technology Education*, *18*(2), 1–13. https://doi.org/10.29333/EJMSTE/11509

Astiwi, W., Siswanto, D. H., & Suryatama, H. (2024). Description regarding the influence of teacher qualifications and competence on early childhood learning achievement. *Asian Journal of Applied Education (AJAE)*, *3*(3), 347–358. https://doi.org/10.55927/ajae.v3i3.10360

Benedict, E. (2025). Community-based participatory research as a driver of social enterprise development. *African Journal of Higher Education Community Engagement*, *2*(1), 49–68. https://doi.org/10.21504/ajhece.v2i1.2551

Cholifah, S., & Faelasup. (2024). Educational Environment in the Implementation of Character Education. *Journal of Scientific Research, Education, and Technology (JSRET)*, *3*(2), 816–825. https://doi.org/10.58526/jsret.v3i2.418

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches (4th ed.)*. SAGE Publications.

DiNapoli, J., & Miller, E. K. (2022). Recognizing, supporting, and improving student perseverance in mathematical problem-solving: The role of conceptual thinking scaffolds. *The Journal of Mathematical Behavior*, *66*(100965). https://doi.org/10.1016/j.jmathb.2022.100965

Ewulley, F., Anlimachie, M. A., Abreh, M. K., & Mills, E. E. (2023). Understanding the nexus of school types, school cultures and educational outcomes and its implication for policy and practice. *International Journal of Educational Research*, *121*(July), 102237. https://doi.org/https://doi.org/10.1016/j.ijer.2023.102237

Fuaddi, F., Tomoliyus, T., Sukoco, P., & Nopembri, S. (2020). The Enjoyable Physical Education Learning to Improve Students' Motivation and Learning Achievement. *Physical Education, Sport and Health Culture in Modern Society*, *1*(1 (49)), 50–59. https://doi.org/10.29038/2220-7481-2020-01-50-59

Ghozali, I. (2021). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 26 (Edisi 10)*. Badan Penerbit Universitas Diponegoro.

Hardi, Y., Atwano Pisriwati, S., & Hadi Siswanto, D. (2026). Teacher Self-Awareness and Digitalization Strategies for Accreditation Quality Improvement in Educational Institutions. *Jurnal Pendidikan Dan Inovasi Pembelajaran*, *1*(3), 286–291.

Harris, A., & Jones, M. (2023). The importance of school leadership? What we know. *School Leadership and Management*, *43*(5), 449–453. https://doi.org/10.1080/13632434.2023.2287806

Henríquez, D., & Urzúa, A. (2023). Positive Social Interaction and Psychological Kinship Mediate the Effect of Identity Fusion on Psychological Well-Being in South-South Migrants. *Trends in Psychology*, (0123456789). https://doi.org/10.1007/s43076-023-00269-9

Heryuriani, B., Efendi, R., Rambe, M. Y., & Siswanto, D. H. (2025). Fostering Academic Self-Efficacy in Adolescents: A Case Study of Counseling Strategies in Secondary Schools. *JUPERAN: Jurnal Penedidikan Dan Pembelajaran*, *04*(02), 667–675.

Jarwanto, R., Siswanto, D. H., Heryuriani, B., & Tarso. (2026). An integrated ecosystem model for academic potential test readiness in islamic secondary education. *JIMI: Jurnal Ilmiah Multidisiplin Ilmu*, *3*(5), 214–222. https://doi.org/10.69714/nrrr4f69

Lapidot-Lefler, N. (2025). Teacher Responsiveness in Inclusive Education: A Participatory Study of Pedagogical Practice, Well-Being, and Sustainability. *Sustainability (Switzerland)*, *17*(7). https://doi.org/10.3390/su17072919

Li, S. (2021). *Psychological Wellbeing, Mindfulness, and Immunity of Teachers in Second or Foreign Language Education: A Theoretical Review* (A. Derakshan, R. Pishghadam, & A. Mystkowska, Eds.). Frontiers in Psychologi and Frontiers in Educatoin. https://doi.org/10.3389/fpsyg.2021.7203

Limori, M., Siswanto, D. H., Shigematsu, T., & Astiwi, W. (2025). Integrating STEAM in Teaching Integrals: An Interactive Media Needs Analysis to Enhance Creative Thinking. *RUKASI: Jurnal Ilmiah Perkembangan Penedidikan Dan Pembelajaran*, *02*(05). https://doi.org/10.70294/59c2b980

Mala, R., Pisriwati, A., & Siswanto, D. H. (2026). Administrative Modernization and Literacy Policy Implementation in School Library Governance. *Jurnal Ilmu Administrasi Dan Kebijakan Publik*, *1*(3), 161–168.

Massouti, A., Al-Rashaida, M., & Alhosani, M. (2024). A Qualitative Study on Dubai's Inclusive Education Policy from School Leaders' Perspectives. *Sustainability (Switzerland)*, *16*(3), 1–20. https://doi.org/10.3390/su16031252

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, *108*(6), 1017–1054. https://doi.org/10.1111/j.1467-9620.2006.00684.x

Namukasa, I. K., & Aryee, K. L. (2021). Pedagogical Knowledge for Teaching Mathematics in Montessori Schools. *International Electronic Journal of Mathematics Education*, *16*(3), em0646. https://doi.org/10.29333/iejme/11005

Naufal, N., Apriani, F., Fajriana, Nurdin, Nurdin, K., & Siswanto, D. H. (2025). *Analisis Multivariat*. Padang: Literasi Langsung Terbit.

Novianto, V., Ari, N., Setiawati, E., Nor, M., & Azman, A. (2025). Implementation of Human Security Values for Building Student Resilience: A Case Study of SMPIT Baitussalam Prambanan Indonesia. *Journal of Culture and Values in Education*, *8*(3), 1–19. https://doi.org/10.46303/jcve.2025.24

Peranita, N., Lesmana, K. Y. P., & Satyawan, I. M. (2025). The Effectiveness of Cooperative and Conventional Physical education Models and the Availability of Facilities for Physical education Management. *Journal of Physical Education, Healt and Sport*, *12*(2), 629–639. https://doi.org/10.15294/jpehs.v12i2.38505

Pisriwati, S. A., Hardi, Y., & Siswanto, D. H. (2024). Enhancing organizational development through principal leadership to improve teacher and staff work discipline. *Journal of Organizational and Human Resource Development Strategies*, *1*(1), 52–62. https://doi.org/10.56741/ohds.v1i01.670

Prasetyo, A. R., Kadiyono, A. L., Sulastiana, M., & Abidin, Z. (2022). Happiness at Work among Teachers across Cultural Settings: A Guide of Teacher Effectiveness to Apply Technology-Assisted Teaching in Indonesia. *Journal of Positive Psychology and Wellbeing*, *6*(1), 539–560. https://doi.org/10.17509/ijost.v7i1.43072

Pulungan, T. N., Siswanto, D. H., & Pisriwati, S. A. (2026). Integrated human resource management for strengthening organizational capacity in resource-constrained islamic senior high schools. *Jurnal Ilmiah Manajemen Dan Akuntansi*, *3*(5), 280–288. https://doi.org/10.69714/agh96j58

Purwaningsih, N. T., Setiawan, A., & Siswanto, D. H. (2026). CORE Learning Model for Enhancing Mathematical HOTS, Motivation, and Students' Self-Efficacy Development. *Jurnal Pendidikan Dan Inovasi Pembelajaran*, *1*(4), 513–519.

Purwanto, E., Kasanah, U., Dimara, E. A., & Siswanto, D. H. (2026). Reconceptualizing School Discipline Policy: Restorative-Educational Religious Sanctions within an Islamic Character Ecosystem. *Jurnal Ilmu Administrasi Dan Kebijakan Publik*, *1*(3), 124–130.

Putri, H. A., Astiwi, W., & Siswanto, D. H. (2026). Culturally Responsive Teaching in Phase E Mathematics: Deconstructing Stigmas through Ethnomathematics and Performance-Based Assessment. *Jurnal Pendidikan Profesi Guru*, *1*(2), 44–51.

Putri, H. A., Pisriwati, S. A., & Siswanto, D. H. (2024). Leadership strategies in decision-making for senior high school principals. *Journal of Organizational and Human Resource Development Strategies*, *1*(02), 104–111. https://doi.org/10.56741/ohds.v1i02.707

Rahmayuni, L. D. M., Sriyati, S., & Kusumawaty, D. (2024). Development of assessment instrument business proposal for students' systems thinking skills on business model canvas in bioentrepreneurship course. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, *10*(3), 773–778. https://doi.org/10.22219/jpbi.v10i3.34840

Rizky, M. Al, Hartati, H., & Syafaruddin, S. (2024). Developing A Digital-Based Library to Enhance Educational Knowledge Among Students. *Journal of Physical Education, Sport, Health and Recreations*, *13*(1), 38–49.

Rohayati, L. B., Siswanto, D. H., Husna, A. U., & Tarso, T. (2026). ECO Sains and Green Entrepreneurship in Secondary Education: Character Development, Business Competencies, and Sustainable Product Innovation. *Punggawa Global Research: Jurnal Multidisiplin*, *1*(5), 473–480. https://doi.org/10.67707/pgr.v1i5.385

Rohmadi, J., Wahyu, Y., & Oktari, V. (2024). Implementation of creative problem-solving model with RME approach on mathematics problem-solving ability. *Jurnal Elemen*, *10*(1), 43–54. https://doi.org/10.29408/jel.v10i1.19788

Sadiyah, K., Setiawan, A., Siswanto, D. H., & Fitriyani. (2025). Self-efficacy, learning styles, and learning discipline as predictors of mathematics achievement among vocational school students. *Jurnal Ilmiah Multidisiplin Ilmu*, *2*(3), 138–148. https://doi.org/10.69714/40sjf608

Sandilos, L. E., Neugebauer, S. R., DiPerna, J. C., Hart, S. C., & Lei, P. (2023). Social–Emotional Learning for Whom? Implications of a Universal SEL Program and Teacher Well-being for Teachers' Interactions with Students. *School Mental Health*, *15*(1), 190–201. https://doi.org/10.1007/s12310-022-09543-0

Siswanto, D. H., Kintoko, Susetyawati, M. M. E., & Rambe, M. Y. (2025). Psychological determinants of mathematics achievement: Examining the roles of self-confidence, academic resilience, and learning discipline. *Jurnal Ilmiah Multidisiplin Ilmu*, *2*(5), 29–39. https://doi.org/10.69714/grxtz057

Siswanto, D. H., Yogyanto, R. N., & Susetyawati, M. M. E. (2026). Hamemayu Hayuning Bawana philosophy as a pedagogical foundation for contextual environmental statistics learning. *JIMI: Jurnal Ilmiah Multidisiplin Ilmu*, *3*(5), 93–103. https://doi.org/10.69714/mvarwh47

Sun, B., Yu, J., Khattak, S. I., Tariq, S., & Zahid, M. (2025). Digital Innovation, Business Models Transformations, and Agricultural SMEs: A PRISMA-Based Review of Challenges and Prospects. *Systems*, *13*(8). https://doi.org/10.3390/systems13080673

Susetyawati, M. M. E., Siswanto, D. H., Kintoko, K., & Garcia, M. B. L. (2026). Dialogic AI in the mathematics classroom: Exploring generative AI as a thinking partner for secondary education student. *Insight on Educational Mathematics*, *1*(2), 63. https://doi.org/10.30659/iem.v1i2.55618

Tarso, Siswanto, D. H., & Setiawan, A. (2025). Teacher qualifications in the implementation of the Kurikulum Merdeka and ISMUBA. *Curricula: Journal of Curriculum Development*, *4*(1), 13–28. https://doi.org/10.17509/curricula.v5i1.76836

Tong, T., Pi, F., Zheng, S., Zhong, Y., Lin, X., & Wei, Y. (2025). Exploring the Effect of Mathematics Skills on Student Performance in Physics Problem-Solving: A Structural Equation Modeling Analysis. *Research in Science Education*, *55*(3), 489–509. https://doi.org/10.1007/s11165-024-10201-5

Vuoriainen, A., Rikala, P., Heilala, V., Lehesvuori, S., Oz, S., Kettunen, L., & Hämäläinen, R. (2025). The six C's of successful higher education-industry collaboration in engineering education: a systematic literature review. *European Journal of Engineering Education*, *50*(1), 26–50. https://doi.org/10.1080/03043797.2024.2432440

Wibowo, W. A., Tarso, T., & Siswanto, D. H. (2026). The effectiveness of the Problem-Solving learning model assisted by geogebra on mathematical Problem-Solving skills. *PELITA: Jurnal Penelitian Dan Karya Ilmiah*, *26*(01), 32–39. https://doi.org/10.33592/pelita.v26i1.6318

Widyastuti, R., Yogyanto, N., & Siswanto, D. H. (2026). Recontextualizing School Improvement Through Education Report Utilization and Teacher Data Literacy Practices. *Jurnal Pendidikan Dan Inovasi Pembelajaran*, *1*(3), 311–318.

Yurt, E. (2025). The relationships among pre-service teachers' critical thinking disposition, self-efficacy, and creative thinking disposition in Turkey: a latent growth mediation model. *Current Psychology*, *44*, 85–102. https://doi.org/10.1007/s12144-024-07147-2

Yusuf, M., Siswanto, D. H., & Husna, A. U. (2026). Mapping the Educational Impacts of the Pomodoro Technique: A PRISMA-Guided Systematic Review. *Punggawa Global Research: Jurnal Multidisiplin*, *1*(5), 246–258. https://doi.org/10.67707/pgr.v1i5.319

Zhu, C., Klapwijk, R., Silva-Ordaz, M., Spandaw, J., & de Vries, M. J. (2023). Cognitive and embodied mapping of data: an examination of children's spatial thinking in data physicalization. *Frontiers in Education*, *8*(December), 1–18. https://doi.org/10.3389/feduc.2023.1308117