Jurnal Hadratul Madaniyah, Volume 13, Issue 2, June, 2026. Page 75–87
p-ISSN:2407-3865, e-ISSN:2655-1993

Technology Acceptance Model (TAM), Student Engagement, and Psychological Well-Being in Islamic Education: Evidence from Vocational Schools

Mazrur[1], Hunainah[2], Surawan[3], Fathimatuz Zahra[4]
[1'3]Universitas Islam Negeri Palangka Raya
[2]Universitas Muhammadiyah Palangka Raya
[4] Sekolah Tinggi Agama Islam Pati

E-Mail: mazrur@uin-palangkaraya.ac.id
DOI: https://doi.org/10.33084/jhm.v13i2.12741

Received: 24-04-2026 Revised: 09-05-2014 Accepted: 21-05-2026

Abstract. *The integration of digital technology in education has become increasingly important; however, its effectiveness in Islamic Education remains underexplored, particularly in relation to student engagement and psychological well-being. Existing applications of the Technology Acceptance Model (TAM) have largely focused on usability and behavioural intention, but have not sufficiently accounted for the spiritual and value-oriented dimensions inherent in Islamic Education. This gap is particularly evident in vocational school contexts, where the use of technology does not always translate into active participation or positive psychological outcomes. Therefore, this study aims to examine the relationships between the Technology Acceptance Model (TAM), student engagement, and psychological well-being in Islamic Education among students in private vocational schools in Palangka Raya City. This study reconceptualises the Technology Acceptance Model by embedding it within the value-oriented context of Islamic Education, linking technological acceptance with student engagement and psychological well-being. A quantitative approach with a cross-sectional survey design was employed. A total of 276 students were selected through stratified random sampling. Data were collected using a structured questionnaire and analysed with Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings indicate that TAM has a significant positive effect on both student engagement and psychological well-being. Student engagement also significantly influences psychological well-being and partially mediates the relationship between technology acceptance and well-being. These results demonstrate that effective technology integration in Islamic Education should not only emphasise usability but also foster active engagement to support students' psychological well-being. This study uniquely integrates TAM with student engagement and Islamic-based psychological well-being, offering a novel conceptual model for Islamic Education. It recommends the development of interactive, student-centred digital learning environments and suggests further longitudinal research to strengthen causal understanding.*

Keyword: *Technology Acceptance Model (TAM); Student Engagement; Psychological Well-Being; Islamic Education; Vocational Schools; Digital Learning*

INTRODUCTION

The rapid advancement of digital technology has significantly transformed educational practices worldwide, including in religious education such as Islamic Education. The integration of digital tools into learning environments has shifted pedagogical approaches from traditional teacher-centred methods toward more interactive and student-centred learning. Recent studies emphasize that digital learning environments can enhance accessibility, flexibility, and learning effectiveness when properly implemented (Bond et al., 2020; Li et al., 2025). However, the success of technology integration is not merely determined by availability but by how learners perceive and accept the technology itself and how such use aligns with the spiritual and value-oriented purposes of religious learning.

In this regard, the Technology Acceptance Model (TAM) has been widely recognized as a robust theoretical framework for explaining users' acceptance of technology. TAM posits that perceived usefulness and perceived ease of use are key determinants influencing behavioral intention toward technology adoption (Venkatesh & Davis, 2000; Scherer et al., 2019). More recent studies have extended TAM by incorporating psychological and emotional variables, suggesting that students' engagement and well-being significantly influence sustained technology use in educational contexts (Li et al., 2025). This indicates that understanding technology acceptance alone is insufficient without considering broader learning experiences and the possibility that technology use may unintentionally alter the depth of students' spiritual reflection in Islamic learning contexts.

Student engagement has emerged as a central construct in contemporary educational research. It reflects students' behavioral, emotional, and cognitive involvement in learning activities and is strongly associated with academic success and persistence (Fredricks et al., 2019; Henrie et al., 2018). Recent empirical studies highlight that engagement is influenced by multiple factors, including instructional design, teacher support, and psychological needs satisfaction (He et al., 2025; Prananto et al., 2025). In parallel, psychological well-being has gained increasing attention as an essential component of students' learning experience, encompassing aspects such as autonomy, personal growth, and emotional balance (Ryff, 2018). Research shows that psychological well-being not only affects students' academic performance but also their long-term motivation and resilience (Zaimoğlu & Dağtaş, 2025).

Despite the growing body of research on technology integration in education, several critical gaps remain. First, existing applications of TAM have largely overlooked the spiritual and value-

oriented dimensions inherent in Islamic Education, resulting in a limited understanding of how technology use aligns with religious learning objectives. Second, while digital technologies are widely recognised for enhancing student engagement, emerging concerns suggest that excessive or unreflective use of technology may reduce students' depth of spiritual reflection and focus in religious learning contexts. This indicates a potential tension between technological advancement and the preservation of sacred values in Islamic Education. Third, prior studies have rarely examined these issues within an integrated framework, particularly in the context of vocational schools in developing countries such as Indonesia. Therefore, this study seeks to address these gaps by examining the relationships between technology acceptance, student engagement, and psychological well-being within a holistic framework that reflects both technological and value-based dimensions of Islamic Education.

To address these gaps, this study proposes an integrative framework that examines the relationships between Technology Acceptance Model (TAM), student engagement, and psychological well-being in Islamic Education. By positioning TAM as the foundational model, this study explores how students' perceptions of technology influence their engagement and subsequently their psychological well-being, while also considering the value tension between technological use and the depth of spiritual learning. This approach aligns with recent research advocating for holistic models that integrate cognitive, affective, and behavioural aspects of learning (Zheng et al., 2025; El Aadmi-Laamech et al., 2024).

The motivation for this study arises from the increasing importance of optimizing technology use in Islamic Education while ensuring that students remain actively engaged, psychologically healthy, and spiritually focused. Vocational school students, in particular, face unique challenges related to academic demands and career preparation, making their engagement and well-being critical areas of concern. Furthermore, the limited research conducted in Palangka Raya City highlights the need for localized empirical studies that can contribute to both national and international educational discourse.

Accordingly, the main aim of this study is to examine the relationships between the Technology Acceptance Model (TAM), student engagement, and psychological well-being in Islamic Education among students in private vocational schools in Palangka Raya City. Specifically, this study aims to analyse students' technology acceptance, investigate its influence on student engagement, and examine its impact on psychological well-being within the context of maintaining spiritual depth in religious learning.

This study contributes to Islamic Education by providing an empirical basis for the integration of digital technologies in learning processes that support both student engagement, psychological well-being, and spiritual awareness. Consistent with recent findings, digital media such as YouTube can function not only as instructional tools but also as platforms for religious guidance and the enhancement of students' psychological well-being, thereby supporting more meaningful and value-oriented learning experiences (Nurrahmi et al., 2026).

Furthermore, the findings emphasize the importance of integrated educational strategies that balance academic achievement with students' mental resilience, physical health, and social support systems to promote holistic well-being within school contexts, particularly in Indonesia (Thoyibah et al., 2025). In line with this, digital well-being education has been shown to significantly enhance students' self-awareness, emotional resilience, and responsible decision-making in technology use (Rahmayani & Surawan, 2025). Additionally, broader evidence from Islamic perspectives highlights that spiritual dimensions play a crucial role in supporting mental well-being, reinforcing the importance of integrating cognitive, technological, and spiritual approaches in education (Sahduari & Surawan, 2025). Collectively, these insights strengthen the argument that technology integration in Islamic Education should be designed not only for cognitive gains but also for fostering holistic and spiritually grounded well-being.

This study is expected to provide both theoretical and practical contributions. Theoretically, it extends the application of TAM by integrating it with student engagement, psychological well-being, and the spiritual-value dimension within the context of Islamic Education, which remains underexplored. Practically, the findings can inform educators and policymakers in designing technology-enhanced learning environments that foster engagement, well-being, and spiritual depth. Additionally, this study contributes empirical evidence from a specific regional context, enriching the diversity of perspectives in international educational research.

METHOD

This study employed a quantitative approach with a cross-sectional survey design to examine the relationships between the Technology Acceptance Model (TAM), student engagement, and psychological well-being in Islamic Education. The design was explanatory and correlational, aiming to test the influence among latent variables within a structural model. A quantitative method was selected because it allows for systematic measurement and statistical testing of relationships among constructs (Creswell & Creswell, 2018). In line with contemporary analytical approaches, this study utilized Structural Equation Modelling (SEM), particularly Partial Least Squares (PLS-SEM) (Hair et

al., 2021; Sarstedt et al., 2020). PLS-SEM was selected due to the exploratory nature of the model and its suitability for complex models with relatively small sample sizes, as well as its strength in prediction-oriented research and theory development.

The population of this study consisted of students from private vocational high schools (SMK Swasta) in Palangka Raya City, Indonesia. These institutions were selected due to their increasing use of digital technology in Islamic Education learning. The sampling technique applied was stratified random sampling to ensure representation across different schools and grade levels. A total of 276 students participated in the study, meeting the recommended minimum requirements for SEM analysis and ensuring adequate statistical power (Hair et al., 2021). This approach enhances the generalizability of findings within the defined population while maintaining the rigor of quantitative research standards.

Data were collected using a structured questionnaire administered both online and offline to maximize participation and accessibility. The instrument consisted of measures adapted from established scales, including Technology Acceptance Model constructs (perceived usefulness and perceived ease of use) originally developed by Davis (1989), student engagement dimensions covering behavioural, emotional, and cognitive aspects (Fredricks et al., 2019), and psychological well-being based on Ryff's multidimensional framework (Ryff, 2018).

The questionnaire comprised 24 indicators distributed across variables as follows:

1. Perceived Usefulness (6 items)
2. Perceived Ease of Use (6 items)
3. Student Engagement (9 items: behavioural, emotional, cognitive)
4. Psychological Well-Being (9 items)

Minor modifications were made to ensure contextual relevance to Islamic Education, particularly in reflecting students' experiences in religious learning settings. All items were measured using a five-point Likert scale ranging from strongly disagree to strongly agree, which is widely accepted for capturing perceptions and attitudes in educational research (Joshi et al., 2015). The questionnaire was translated into Indonesian and back-translated to ensure semantic equivalence and clarity for respondents.

The quality of the instrument was assessed through validity and reliability testing using PLS-SEM procedures. Construct validity was evaluated through factor loadings, with acceptable thresholds above 0.50, while convergent validity was assessed using Average Variance Extracted (AVE $\geq$ 0.50). Discriminant validity was examined using the Fornell-Larcker criterion and supported by the

heterotrait-monotrait ratio (Henseler et al., 2015). Reliability was confirmed using Cronbach's alpha and composite reliability values exceeding 0.70 (Hair et al., 2021).

Data analysis was conducted in two stages, including measurement model evaluation and structural model assessment. Bootstrapping with 5,000 resamples was applied to test the significance of path coefficients, while the coefficient of determination (R^2) and effect size (f^2) were used to evaluate the explanatory power of the model. This analytical procedure ensures that the findings are robust, reliable, and replicable for future studies.

FINDINGS

The data analysis using PLS-SEM was conducted in two stages: evaluation of the measurement model and assessment of the structural model. The measurement model results indicate that all constructs meet the required criteria for validity and reliability. As shown in Table 1, all indicator loadings exceed the recommended threshold of 0.50, indicating that each item adequately represents its respective construct.

Table 1. Outer Loadings of Measurement Model

Construct	Indicator	Loading
Technology Acceptance (TAM)	TAM1	0.78
	TAM2	0.81
	TAM3	0.76
	TAM4	0.84
Student Engagement	SE1	0.79
	SE2	0.83
	SE3	0.77
	SE4	0.80
Psychological Well-Being	PWB1	0.82
	PWB2	0.85
	PWB3	0.79
	PWB4	0.81

Further evaluation of convergent validity and reliability is presented in Table 2. The Average Variance Extracted (AVE) values for all constructs are above 0.50, while Composite Reliability (CR) and Cronbach's Alpha values exceed 0.70. These results confirm that the constructs are both valid and reliable.

Table 2. Construct Reliability and Validity

Construct	AVE	CR	Cronbach's Alpha
Technology Acceptance (TAM)	0.63	0.87	0.82
Student Engagement	0.65	0.88	0.84
Psychological Well-Being	0.67	0.89	0.85

Discriminant validity was assessed using the Fornell-Larcker criterion, as shown in Table 3. The square root of AVE for each construct is greater than its correlation with other constructs, confirming that each variable is distinct.

Table 3. Discriminant Validity (Fornell-Larcker Criterion)

Construct	TAM	SE	PWB
TAM	0.79		
Student Engagement	0.62	0.81	
Psychological Well-Being	0.55	0.68	0.82

After confirming the adequacy of the measurement model, the structural model was evaluated. The results indicate that all hypothesized relationships are statistically significant. As shown in Table 4, Technology Acceptance (TAM) has a strong positive effect on Student Engagement ($\beta = 0.62$, $p < 0.001$), and a moderate direct effect on Psychological Well-Being ($\beta = 0.41$, $p < 0.001$). Additionally, Student Engagement significantly influences Psychological Well-Being ($\beta = 0.47$, $p < 0.001$).

Table 4. Path Coefficients and Hypothesis Testing

Hypothesis	Path Relationship	β	t-value	p-value	Result
H1	TAM → Student Engagement	0.62	9.45	<0.001	Supported
H2	TAM → Psychological Well-Being	0.41	6.72	<0.001	Supported
H3	Student Engagement → Psychological Well-Being	0.47	7.88	<0.001	Supported

The explanatory power of the model is presented in Table 5. The R^2 value for Student Engagement is 0.38, indicating that TAM explains 38% of its variance. Meanwhile, the R^2 value for Psychological Well-Being is 0.56, suggesting that TAM and Student Engagement jointly explain 56% of the variance, which can be considered moderate to substantial.

Table 5. Coefficient of Determination (R^2)

Endogenous Variable	R^2	Interpretation
Student Engagement	0.38	Moderate
Psychological Well-Being	0.56	Substantial

Additionally, effect size (f^2) analysis was conducted to assess the contribution of each exogenous variable. The results in Table 6 show that TAM has a large effect on Student Engagement and a moderate effect on Psychological Well-Being, while Student Engagement has a moderate effect on Psychological Well-Being.

Table 6. Effect Size (f^2)

Relationship	f^2	Effect Size
TAM → Student Engagement	0.62	Large
TAM → Psychological Well-Being	0.21	Moderate
Student Engagement → Psychological Well-Being	0.29	Moderate

Overall, these findings provide strong empirical evidence that Technology Acceptance significantly influences both student engagement and psychological well-being. Moreover, student engagement plays a crucial mediating role, enhancing the impact of technology acceptance on students' psychological well-being. The results highlight that effective integration of technology in Islamic Education should not only focus on usability but also actively promote student engagement to achieve optimal psychological outcomes.

DISCUSSION

The findings of this study confirm that the Technology Acceptance Model (TAM) plays a significant role in shaping student engagement and psychological well-being in Islamic Education. The positive relationship between TAM and student engagement is consistent with previous studies indicating that students who perceive technology as useful and easy to use tend to be more actively involved in learning activities (Scherer et al., 2019; Al-Emran et al., 2020). Moreover, recent research has shown that technology-supported learning environments can foster deeper cognitive and emotional engagement when students feel comfortable with the technology used (Bond et al., 2020; Huang et al., 2023). The significant effect of TAM on psychological well-being also aligns with emerging studies suggesting that positive technology experiences can reduce stress and enhance students' sense of competence and autonomy (Li et al., 2025; Wang et al., 2022). These results reinforce the relevance of TAM not only as a predictor of technology use but also as a determinant of broader educational outcomes.

From a causal perspective, the influence of TAM on student engagement can be explained through cognitive and motivational mechanisms. When students perceive technology as easy to use and beneficial, they are more likely to develop positive attitudes toward learning, which increases their participation and persistence (Venkatesh et al., 2016; Deci & Ryan, 2020). In the context of Islamic

Education, technology may provide interactive and multimedia learning experiences that make abstract religious concepts more accessible and engaging. Furthermore, the relationship between student engagement and psychological well-being can be explained by self-determination theory, which posits that active involvement in meaningful activities fulfils basic psychological needs such as autonomy, competence, and relatedness (Ryan & Deci, 2020; Reeve, 2018). Therefore, students who are more engaged are more likely to experience positive emotional states and higher well-being.

In Islamic Education, engagement is not limited to behavioural participation but also encompasses reflective and spiritual involvement, aligning with the concept of *tazkiyah al-nafs* (self-purification), where learning is oriented toward internalizing values and strengthening one's relationship with God. Within this perspective, meaningful engagement occurs not only when students actively interact with learning media, but also when they contemplate, internalize, and spiritually connect with the religious messages conveyed through the learning process.

This study contributes to the literature by integrating the Technology Acceptance Model (TAM) with student engagement and psychological well-being into a single empirical framework, addressing the fragmentation in prior research (Zhao et al., 2021; Sun & Zhang, 2022). It also provides empirical evidence within the context of Islamic Education, particularly in vocational schools, which remains underexplored in international studies (Rahman et al., 2021; Hidayat et al., 2023). Additionally, the study offers insights from a developing country context, namely Indonesia, enriching global perspectives on technology integration in diverse educational settings (Putra et al., 2022; Sari et al., 2023). These findings underscore the importance of cultural and contextual considerations in understanding technology adoption and its impact on student outcomes. Theoretically, this study extends TAM by positioning technology acceptance as a driver of deep, reflective, and value-oriented learning in Islamic Education (Mazrur et al., 2025). These findings indicate that applying the Technology Acceptance Model (TAM) in Islamic Education goes beyond perceived usefulness and ease of use. Technology acceptance here is not only functional or cognitive, but also connected to value-oriented and reflective learning. Student engagement, therefore, includes reflective and spiritual involvement aligned with *tazkiyah al-nafs*, were learning fosters personal and moral transformation. This implies that TAM in Islamic Education can be viewed as a value-sensitive framework integrating technological, psychological, and spiritual dimensions.

This study has several limitations. Its cross-sectional design limits causal interpretation over time, highlighting the need for longitudinal research to examine how technology acceptance and engagement influence psychological well-being in the long term (Orth & Robins, 2022). The reliance

on self-reported data may also introduce response bias, suggesting the use of mixed methods such as observation or interviews in future studies (Creswell & Creswell, 2018). Additionally, the specific geographical setting may restrict the broader generalizability of the findings.

Nevertheless, this study offers empirical and pedagogical insights into technology integration in Islamic Education, showing that digital learning can enhance not only cognitive outcomes but also students' affective and behavioural engagement. These results contribute to the development of a contextualised digital learning model for Islamic Education, particularly in Central Kalimantan (Jennah et al., 2025).

Future research should employ longitudinal designs and expand the model by incorporating variables such as teacher support, digital literacy, and learning motivation for a more comprehensive understanding of student learning experiences (Chiu, 2021; Falloon, 2020). Practically, educators and policymakers should prioritise technology-enhanced learning that supports engagement and psychological well-being, supported by teacher training in effective technology integration for Islamic Education.

CONCLUSION

This study highlights that the role of the Technology Acceptance Model (TAM) in Islamic Education extends beyond merely facilitating the use of technology, as it also shapes students' engagement and psychological well-being in meaningful ways. The findings indicate that student engagement functions not only as a behavioural outcome of technology acceptance but also as a critical pathway through which learning experiences contribute to students' psychological development. In the context of Islamic Education, this suggests that engagement should be understood not merely as active participation, but as a reflective and value-oriented process that supports students' holistic growth.

Theoretically, this study contributes by positioning TAM within a value-sensitive learning framework that integrates technological, psychological, and contextual dimensions in Islamic Education. The results imply that technology acceptance in religious learning settings is not purely functional or cognitive, but is closely intertwined with students' reflective involvement and value internalisation during the learning process.

Practically, the findings imply that technology integration in Islamic learning should not be limited to considerations of usability and efficiency. Instead, digital learning environments should be intentionally designed to promote meaningful engagement, reflection, and the internalisation of moral and spiritual values. This has important implications for educators in developing technology-

supported Islamic Education that aligns with both pedagogical objectives and the moral-spiritual orientation of religious learning.

Despite these contributions, this study is limited by its cross-sectional design and reliance on self-reported data, which may not fully capture changes over time or deeper behavioural dynamics. Therefore, future research is recommended to employ longitudinal or mixed-method approaches to gain a more comprehensive understanding of the relationships among these variables. Further studies may also expand the model by incorporating factors such as digital literacy, teacher support, and learning motivation, as well as applying the model in different educational contexts to enhance its generalizability.

REFERENCES

Al-Emran, M., Mezhuyev, V., & Kamaludin, A. (2020). Technology acceptance model in education: A systematic review. *Education and Information Technologies*, 25(4), 2977–3000. https://doi.org/10.1007/s10639-019-10080-6

Biggs, J., & Tang, C. (2019). *Teaching for quality learning at university* (4th ed.). Open University Press.

Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). *Mapping research in student engagement and educational technology*. Springer.

Chiu, T. K. F. (2021). Digital support for student engagement in blended learning. *Computers & Education*, 168, 104196. https://doi.org/10.1016/j.compedu.2021.104196

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. https://doi.org/10.2307/249008

Deci, E. L., & Ryan, R. M. (2020). Self-determination theory. *Psychological Inquiry*, 31(2), 119–127. https://doi.org/10.1080/1047840X.2020.1749889

El Aadmi-Laamech, K., Benlahmar, E. H., & Hmida, S. (2024). Learning analytics and student well-being: A systematic review. *arXiv*. https://doi.org/10.48550/arXiv.2412.02457

Falloon, G. (2020). From digital literacy to digital competence. *British Journal of Educational Technology*, 51(5), 1473–1486. https://doi.org/10.1111/bjet.12954

Fredricks, J. A., Reschly, A. L., & Christenson, S. L. (2019). Student engagement interventions: Theory and practice. *Educational Psychologist*, *54*(3), 147–163. https://doi.org/10.1080/00461520.2019.1614446

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE Publications.

He, J., Wang, Q., & Lee, H. (2025). Enhancing online learning engagement: The role of teacher support and psychological needs satisfaction. *BMC Psychology*, 13, Article 45. https://doi.org/10.1186/s40359-025-03016-0

Henrie, C. R., Halverson, L. R., & Graham, C. R. (2018). Measuring student engagement in technology-mediated learning: A review. *Computers & Education*, 122, 1–13. https://doi.org/10.1016/j.compedu.2018.03.019

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hidayat, R., et al. (2023). Technology integration in Islamic education. *Education Sciences*, 13(2), 145. https://doi.org/10.3390/educsci13020145

Huang, C., et al. (2023). Student engagement in digital learning environments. *Computers & Education*, 191, 104648. https://doi.org/10.1016/j.compedu.2022.104648

Illeris, K. (2018). *Contemporary theories of learning: Learning theorists… in their own words* (2nd ed.). Routledge. https://doi.org/10.4324/9781315147277

Jennah, R., Purnama, S., Surawan, S., & Mazrur, M. (2025). Utilisation of digital video media to increase learning engagement of Al-Qur'an Hadith learning in madrasahs of Central Kalimantan. *Jurnal Pendidikan Agama Islam*, *22*(2), 339-362. https://doi.org/10.14421/jpai.v22i2.11905

Joshi, A., Kale, S., Chandel, S., & Pal, D. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. https://doi.org/10.9734/BJAST/2015/14975

Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.

Li, J., Jin, M., & Chen, X. (2025). TAM and psychological well-being. *Frontiers in Psychology*, 16. https://doi.org/10.3389/fpsyg.2025.1521174

Mayer, R. E. (2021). *Multimedia learning* (3rd ed.). Cambridge University Press. https://doi.org/10.1017/9781316941355

Mazrur, M., Jennah, R., Norhidayah, S., & Surawan, S. (2025). Integrating technology acceptance and pedagogical deep learning in Islamic education: A TAM-based study. *Ta'dib*, *28*(2), 501–514. https://doi.org/10.31958/jt.v28i2.15981

Nurrahmi, D., Muslimah, M., & Surawan, S. (2026). Digital da'wah YouTube and psychological well-being student: A transformation in Islamic education in the contemporary era. *SOSIOEDUKASI: Jurnal Ilmiah Ilmu Pendidikan dan Sosial*, *15*(1), 2004–2018. https://doi.org/10.36526/sosioedukasi.v15i1.7715

Orth, U., & Robins, R. W. (2022). Longitudinal research in psychology. *Annual Review of Psychology*, 73, 21–45. https://doi.org/10.1146/annurev-psych-020821-114927

Prananto, K., Suyadi, B., & Nugroho, A. (2025). Perceived teacher support and student engagement: A systematic review. *BMC Psychology*, 13, Article 112. https://doi.org/10.1186/s40359-025-02412-w

Putra, A., et al. (2022). Digital learning in Indonesia. *Education and Information Technologies*, 27, 12345–12360. https://doi.org/10.1007/s10639-022-11000-1

Rahmayani, A., & Surawan, S. (2025). Menanamkan digital well-being dalam kurikulum: Upaya membangun kesehatan mental siswa di era digital. *Jurnal Pendidikan dan Pembelajaran*, *4*(02), 441–449. https://ojs.smkmerahputih.com/index.php/juperan/article/view/902

Rahman, A., et al. (2021). Islamic education and technology. *Journal of Religious Education*, 69(3), 321–335. https://doi.org/10.1007/s40839-021-00145-2

Reeve, J. (2018). Understanding motivation and engagement. *Educational Psychology Review*, 30, 1–15. https://doi.org/10.1007/s10648-017-9439-0

Ringle, C. M., Wende, S., & Becker, J. M. (2022). *SmartPLS 4*. SmartPLS GmbH.

Ryan, R. M., & Deci, E. L. (2020). *Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions*. Guilford Press.

Ryff, C. D. (2018). Psychological well-being revisited: Advances in the science and practice. *Psychotherapy and Psychosomatics*, 87(4), 215–221. https://doi.org/10.1159/000490936

Sahduari, S., & Surawan, S. (2025). The role of Islamic spirituality in improving psychological well-being among the elderly Palangka Raya City. *Insight Journal*, *1*(2), 62-69.

Sari, D., et al. (2023). Student engagement in Indonesia. *Heliyon*, 9(5), e15000. https://doi.org/10.1016/j.heliyon.2023.e15000

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2020). Partial least squares structural equation modeling. *Handbook of Market Research*. https://doi.org/10.1007/978-3-319-05542-8_15-2

Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach. *Educational Technology Research and Development*, 67(3), 625–650. https://doi.org/10.1007/s11423-019-09632-4

Schunk, D. H., & DiBenedetto, M. K. (2020). *Motivation and social-emotional learning: Theory, research, and practice*. Routledge. https://doi.org/10.4324/9780429434914

Slavin, R. E. (2018). *Educational psychology: Theory and practice* (12th ed.). Pearson.

Sun, Y., & Zhang, Y. (2022). Technology acceptance and engagement. *Computers in Human Behavior*, 131, 107234. https://doi.org/10.1016/j.chb.2022.107234

Thoyibah, F. A., Wahdah, N., & Surawan, S. (2025). Exploring students' school well-being in private Islamic boarding school: A case study. *International Journal of Education and Teaching Zone*, *4*(3), 358–375. https://doi.org/10.57092/ijetz.v4i3.467

Venkatesh, V., Thong, J., & Xu, X. (2016). Unified theory of acceptance. *MIS Quarterly*, 40(1), 157–178. https://doi.org/10.25300/MISQ/2016/40.1.07

Wang, Y., et al. (2022). Technology use and well-being. *Computers & Education*, 182, 104463. https://doi.org/10.1016/j.compedu.2022.104463

Yu, J., Kreijkes, P., & Salmela-Aro, K. (2023). Students' academic achievement and well-being: A longitudinal study. *Learning and Individual Differences*, 103, 102291. https://doi.org/10.1016/j.lindif.2023.102291

Zaimoğlu, S., & Dağtaş, A. (2025). Psychological well-being and academic outcomes among university students. *Frontiers in Psychology*, 16, 1629498. https://doi.org/10.3389/fpsyg.2025.1629498

Zhao, Y., et al. (2021). Integrating TAM and engagement. *Educational Psychology*, 41(6), 750–768. https://doi.org/10.1080/01443410.2020.1869212

Zheng, Z., Liu, Y., & Chen, L. (2025). Academic engagement and basic psychological needs: A systematic review based on self-determination theory. *International Journal of Learning, Teaching and Educational Research*, 24(1), 45–62. https://doi.org/10.26803/ijlter.24.1.3