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Fostering Teacher Work-Life Balance in Public Schools: Principal Insights and the Roles of Digital Literacy and Adversity Quotient

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Abstract:

This study examines the relationship between digital li Principal teracy, adversity quotient, and work-life balance among teachers. It explores how technological competence and responsiveness to workplace challenges may relate to teachers' ability to balance professional and personal responsibilities. The study used secondary data from a dissertation dataset collected through a sequential exploratory design. The study obtained qualitative data through interviews with ten school principals, while quantitative data came from 147 civil servant teachers selected through proportional random sampling. Qualitative findings indicated that six school principals mentioned digital literacy and adversity quotient, while seven principals mentioned work-life balance. The original structural model reported positive, statistically significant relationships between digital literacy and work-life balance ($\beta = 0.373$, $p < 0.001$) and between adversity quotient and work-life balance ($\beta = 0.445$, $p < 0.001$). These findings suggest that both capacities are relevant individual resources. However, these coefficients are derived from a broader model. Practically, schools must strengthen digital competencies, manage workloads, set communication boundaries, and provide organizational support. Further research is needed to reevaluate the proposed model.

Keywords: *Digital Literacy, Adversity Quotient, Work-Life Balance, Digital Competence*

Abstrak:

Studi ini meneliti hubungan antara literasi digital dan adversity quotient serta keseimbangan kerja-hidup di kalangan guru. Studi ini mengeksplorasi bagaimana kompetensi teknologi dan respons terhadap tantangan di tempat kerja dapat berhubungan dengan kemampuan guru untuk menyeimbangkan tanggung jawab profesional dan pribadi. Studi ini menggunakan analisis data sekunder berdasarkan dataset disertasi yang diperoleh dari desain eksplorasi sekuensial. Studi ini memperoleh data kualitatif melalui wawancara dengan sepuluh kepala sekolah, sedangkan data kuantitatif berasal dari 147 guru pegawai negeri sipil yang dipilih melalui pengambilan sampel acak proporsional. Temuan kualitatif menunjukkan bahwa enam kepala sekolah menyebutkan literasi digital dan adversity quotient, sementara tujuh kepala sekolah menyebutkan keseimbangan kerja-hidup. Model struktural asli melaporkan hubungan positif dan signifikan secara statistik antara literasi digital dan keseimbangan kerja-hidup ($\beta = 0{,}373$, $p < 0{,}001$) dan antara adversity quotient dan keseimbangan kerja-hidup ($\beta = 0{,}445$, $p < 0{,}001$). Temuan ini menunjukkan bahwa kedua kapasitas tersebut merupakan sumber daya individu yang relevan. Namun, koefisien tersebut berasal dari model yang lebih luas. Secara praktis, sekolah harus memperkuat kompetensi digital, mengelola beban kerja, menetapkan batasan komunikasi, dan memberikan dukungan organisasi. Penelitian lebih lanjut perlu mengevaluasi kembali model yang diusulkan.

Kata Kunci: *Literasi Digital, Adversity Quotient, Keseimbangan Kerja-Hidup, Kompetensi Digital*

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INTRODUCTION

Digitalization has transformed how people work, communicate, and manage responsibilities. In education, teachers now work in classrooms and digital environments, using applications for instructional materials, assessment, administration, and communication with students and parents (Kiryakova & Kozhuharova, 2024; Maryani et al., 2023). These tools can accelerate tasks, yet they may also extend work into personal time. This matters beyond individual teachers because their well-being influences teaching quality and educational sustainability (Arias-Pastor et al., 2024; Durrani & Makhmetova, 2025). Digital competence is important, but its value should not be judged solely by how efficiently teachers use technology (López-Nuñez et al., 2024; Maulia et al., 2026). It should also be considered in relation to their ability to maintain boundaries between professional duties and personal life. Examining this relationship can inform sustainable schoolwork practices in schools today.

A central problem is that technology does not automatically reduce teachers' workloads. Digital applications simplify lesson preparation, grading, document management, and communication, but create notifications, reporting requirements, and expectations of availability (Dasruth & Naicker, 2026; Durnali, 2025). Digital literacy involves more than operating devices; it includes evaluating information, organizing documents, communicating professionally, and protecting data (Mu'amalah, 2024; Saepurohman et al., 2025). These capabilities may help teachers complete tasks efficiently, but benefits depend on how technology is incorporated into school routines. When institutional expectations remain excessive or unclear, digital tools can extend working hours rather than release time (Berg et al., 2023; Imran et al., 2026). Teachers may consequently struggle to separate school responsibilities from personal activities. Understanding this tension is necessary when assessing whether digital literacy relates to work-life balance.

Another problem concerns pressures teachers face. Policy changes, diverse student needs, administrative demands, and tight deadlines can generate difficulties that continue to affect teachers after school hours (Creagh et al., 2025; Gupta & Zhao, 2024). Adversity quotient describes how individuals interpret obstacles, regulate responses, and respond to challenges. Although this capacity may support adaptive coping, it does not mean teachers must tolerate unreasonable workloads without assistance (Dabrowski et al., 2025; Woloshyn et al., 2023). Effective responses can include setting priorities, requesting support, negotiating realistic deadlines, or addressing problems through school management. Research involving other populations cannot explain teachers' experiences in public senior high schools. Investigating adversity quotient in this setting may clarify its relationship with teachers' ability to sustain work-life balance (Saxena & Rathore, 2025; Vydrová, 2026).

Previous research has examined digital literacy, digital learning, critical evaluation, teachers' perceived digital competence, and measurement instruments

(Nguyen & Habók, 2024; Tzafilkou et al., 2023). Other studies have considered digital transformation, online education, and barriers to technology use in varied educational settings (Sahni et al., 2025; Singun, 2025). This literature establishes the importance of digital capability, but does not necessarily explain teachers' work-life balance. Research on adversity quotient and psychological resilience has separately explored professional quality of life, stress management, and well-being among different populations (Lu et al., 2024; Nguyen & Edreck, 2025). These studies provide conceptual foundations, but differences in occupation, context, and outcomes limit generalization to public senior high school teachers. The present study connects these research strands by examining digital literacy and adversity quotient in relation to work-life balance.

Limited contextual evidence explains how digital literacy and adversity quotient relate to work-life balance among public senior high school teachers in Sukabumi Regency. The dissertation from which this article's data originate primarily examined teachers' organizational commitment. Interviews with ten school principals indicated that six informants mentioned digital literacy and adversity quotient, while seven mentioned work-life balance. These observations suggest that the constructs are relevant, but do not establish statistical relationships or effects. The study contributes by examining both capabilities within one analytical framework while distinguishing interview evidence from quantitative findings. This focus offers a context-specific perspective without claiming that the concepts themselves are new.

This study asks whether digital literacy and adversity quotient are positively associated with work-life balance among public senior high school teachers. The argument is that digital literacy may help teachers organize technology-mediated tasks, while adversity quotient may support adaptive responses to workplace difficulties. Both capabilities are therefore expected to be positively related to work-life balance. H1 proposes that digital literacy is positively associated with teachers' work-life balance. H2 proposes that adversity quotient is positively associated with teachers' work-life balance. These hypotheses must be evaluated using instruments and a statistical model. Results from the dissertation's full model cannot automatically establish findings for a separate three-variable model that has not been re-estimated.

RESEARCH METHODS

This study used a secondary data analysis design based on data from a dissertation on teachers' organizational commitment in Sukabumi Regency. The original study adopted a sequential exploratory design within the POP-SDM approach, combining qualitative interviews with quantitative survey analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM) (Anawati et al., 2025; Ardiansyah et al., 2025). This design was selected because the qualitative phase identified relevant factors in the research context, while the quantitative phase examined relationships among constructs. The present article focuses specifically on digital literacy, adversity quotient, and work-life balance. No new survey data collection is claimed. Because organizational commitment differs conceptually from work-life balance, the analysis and reporting treat the constructs separately.

The research was conducted in public senior high schools in northern Sukabumi Regency, West Java, Indonesia. This setting was selected because the original dissertation examined teachers working within public secondary education institutions, where digital administrative responsibilities, instructional demands, and professional challenges may intersect with personal life. The qualitative phase involved ten public senior high school principals interviewed between April and December 2025. The quantitative target population comprised 230 civil-service teachers with at least three years of work experience across ten schools. The dissertation reported a sample of 147 respondents selected through proportional random sampling. However, the final number of cases available for the present analysis must be verified against the original dataset, including missing-data screening and eligibility checks.

Data collection in the original study involved face-to-face interviews and a quantitative survey. Researchers interviewed ten principals to identify factors relevant to teachers' organizational experiences and working conditions. The information collected addressed the participants' professional perspectives, the circumstances surrounding teachers' work, and the relevance of digital literacy, adversity quotient, and work-life balance. Interview findings were organized through reduction and coding, with six principals mentioning digital literacy, six mentioning adversity quotient, and seven mentioning work-life balance. These frequencies indicate the relevance of the constructs but do not establish statistical effects. Quantitative data were obtained through the dissertation's teacher survey. The questionnaire items, administration procedures, and final dataset must be checked against the original research records before reporting further details.

Qualitative data analysis followed the processes of data condensation, data display, and conclusion drawing and verification. Data condensation involved selecting, organizing, and coding interview information relevant to the research focus (Bingham, 2023; Safitri et al., 2026). Data display was used to arrange the coded information into meaningful categories, particularly the three constructs examined in this article. Verification involved revisiting the evidence to ensure that interpretations remained consistent with the interview records. Assess data trustworthiness through triangulation across available evidence, consistency between interpretations and source records, and an audit trail documenting analytical decisions. However, specific procedures such as member checking, independent coding, or formal triangulation should only be reported if they were actually conducted and documented in the original study. For the quantitative analysis, the three constructs require a separately estimated PLS-SEM model before statistical relationships can be reported.

RESULTS AND DISCUSSION

Results

Digital Literacy and the Management of Teachers' Work-Life Balance

Digital literacy is defined as teachers' capacity to use digital technologies to manage work-related information, organize instructional documents, access teaching materials, operate assessment applications, and communicate professionally. In public senior high schools in Sukabumi Regency, this construct

is relevant to understanding how teachers manage professional and personal responsibilities. The qualitative exploration found that six of the ten principals mentioned digital literacy, indicating its relevance in their accounts without establishing its magnitude or statistical influence. Because verbatim interview excerpts and individual informant identifiers were unavailable, these findings cannot be attributed to specific principals.

Digital literacy may help teachers complete routine tasks by managing digital files, locating instructional resources, operating assessment platforms, and communicating efficiently. However, technological competence does not necessarily reduce overall workload. Disconnected applications, repetitive reporting requirements, and expectations of responding to messages beyond working hours may create additional demands. Therefore, digital literacy should be understood as a potential individual resource whose contribution to work-life balance depends partly on organizational arrangements and working conditions.

Regarding observation, the available methodological description identifies face-to-face interviews and a quantitative survey. However, it does not document specific classroom observations, observations of teachers' digital practices, or field-note excerpts. Therefore, no direct observational finding can be reported as established evidence. The interpretation remains that digital literacy may facilitate task organization when digital systems are accessible, integrated, and aligned with teachers' responsibilities. Conversely, poorly coordinated digital procedures may increase administrative demands. These possibilities highlight the importance of distinguishing observed behavior from analytical interpretation. If the original research included observational records, they should be examined before claims about teachers' actual technology use, communication patterns, or workload-management practices are incorporated into the final manuscript.

Taken together, the findings indicate that digital literacy is a relevant construct for examining teachers' work-life balance in public senior high schools in Sukabumi Regency. The qualitative exploration establishes its relevance through mentions by six principals, while the dissertation's full quantitative model reports a positive and significant relationship. These two forms of evidence serve different purposes: the qualitative findings identify contextual relevance, whereas the quantitative results describe a statistical association within the original model. The overall pattern suggests that technological competence may help manage professional responsibilities, but its contribution should not be separated from institutional expectations and working conditions. This interpretation does not establish causality or demonstrate that digital literacy independently improves work-life balance.

Table 1. Findings on Digital Literacy and Work-Life Balance

Analytical aspect	Research findings	Evidence base
Qualitative exploration	Digital literacy was identified as a relevant aspect of teachers' work experiences.	Mentioned by 6 of 10 school principals.
Data condensation	Digital literacy is conceptually associated with managing documents, locating instructional materials,	Analytical interpretation of the construct; not a direct interview quotation.

	operating assessment applications, and communicating professionally.	
Data display	Digital competence may facilitate task completion, whereas disconnected applications and repetitive reporting may increase workload.	Analytical synthesis; specific practices require confirmation from interview transcripts or observational records.
Quantitative findings from the dissertation	($\beta = 0.373$; $t = 5.122$; $p < 0.001$)	Reported coefficient from the original full dissertation model.
Verification	A positive and statistically significant relationship was reported in the original model. Its coefficient for the article's three-construct model remains unverified.	Requires re-estimation using the original quantitative dataset.

Source: *Qualitative exploratory findings and quantitative results from the dissertation, as provided by the researcher*

Table 1 illustrates that digital literacy is relevant for managing teachers' work-life balance, but the available evidence still needs to be interpreted with caution. In the qualitative phase, six out of ten principals mentioned digital literacy, indicating that this aspect is quite prominent in the informants' reports. The structural model results in the initial dissertation also showed a positive and significant relationship between digital literacy and work-life balance ($\beta = 0.373$; $t = 5.122$; $p < 0.001$). However, these results come from the initial research model. They therefore cannot be directly interpreted as estimates for a new model that only includes digital literacy, adversity quotient, and work-life balance. This table also highlights that the available data do not yet identify the most beneficial digital practices or the organizational conditions that may influence this relationship. Thus, digital literacy can be understood as a potential resource to help teachers manage their work and personal lives. However, its benefits depend on how technology is implemented in the school work setting.

Adversity Quotient and Teachers' Responses to Workplace Challenges

Adversity quotient refers to teachers' capacity to understand workplace difficulties, identify controllable aspects of problems, establish priorities, and choose appropriate responses to professional pressure. In the context of work-life balance, this capacity concerns how teachers manage competing responsibilities without letting workplace challenges continually undermine their personal lives. The qualitative exploration indicated that six of the ten principals mentioned adversity quotient when discussing teachers' work experiences, highlighting its relevance in the original research context. This finding suggests that workplace challenges may be understood not only through the demands teachers encounter but also through how they interpret and respond to those demands. However, the available evidence contains no verbatim interview excerpts or informant-specific accounts; therefore, this finding summarizes the reported qualitative data rather than attributing statements to particular principals.

Analytically, adversity quotient may relate to work-life balance through responses such as reorganizing priorities, identifying manageable aspects of problems, seeking assistance from colleagues or school leaders, and discussing

deadlines when responsibilities conflict. These responses illustrate adversity quotient as a capacity for proportionate problem-solving rather than simply enduring pressure. This distinction is important because individual resilience should not justify excessive workloads or unrealistic expectations. Nevertheless, these examples represent conceptual interpretations of the construct, not verified accounts of principals' statements or teachers' actual practices. The available evidence also does not establish teachers' adversity quotient levels or demonstrate its independent influence on work-life balance.

Quantitative findings from the original dissertation provide additional evidence of the relationship between adversity quotient and work-life balance. In the dissertation's full structural model, adversity quotient had a positive path coefficient of $\beta = 0{,}445$; $t = 5{,}913$; $p < 0{,}001$. This result indicates a positive and statistically significant relationship within the original model. Numerically, the coefficient was larger than that for digital literacy $\beta = 0{,}373$ however, this difference does not establish that adversity quotient has a statistically stronger relationship with work-life balance because no formal test comparing the coefficients has been reported. Furthermore, the coefficient should not be presented as the result of a newly estimated three-construct model unless that model has been re-estimated using the relevant data.

The available research materials do not provide independent observational records of teachers responding to workplace challenges in their daily activities. Consequently, specific behaviors such as teachers reorganizing their schedules, requesting assistance, or negotiating deadlines cannot be reported as verified observation findings. As an analytical interpretation, these behaviors represent plausible ways adversity quotient may be expressed in school settings. Their actual occurrence, frequency, and implications for teachers' work-life balance would need to be established through field notes or other direct observational evidence. This distinction preserves the difference between the quantitative association identified in the original dissertation and the practical mechanisms that remain to be empirically verified.

Taken together, the findings suggest that adversity quotient is a relevant individual resource for understanding how teachers may respond to workplace challenges in relation to work-life balance. The qualitative exploration shows that the construct appeared in the accounts of six principals. At the same time, the original structural model identifies a positive and statistically significant relationship between adversity quotient and work-life balance. These two forms of evidence support the relevance of further examining adversity quotient, but they do not establish that resilience alone produces better work-life balance. The practical significance of this capacity must also be considered in relation to workload distribution, leadership support, and the organizational conditions under which teachers perform their responsibilities.

Table 2. Findings on Adversity Quotient and Work-Life Balance

Analytical aspect	Research findings	Evidence base
Qualitative exploration	Adversity quotient was relevant to understanding teachers' work experiences and responses to challenges.	Mentioned by 6 of 10 principals.

Data condensation	Adversity quotient concerns understanding obstacles, identifying controllable aspects, setting priorities, and selecting responses to pressure.	Conceptual interpretation; not a direct informant quotation.
Data display	Potential adaptive responses include reprioritizing tasks, seeking assistance, and discussing deadlines with school leaders.	Analytical elaboration of the research construct; not independently verified interview or observation evidence.
Quantitative findings from the original dissertation	$\beta = 0{,}445$; $t = 5{,}913$; $p < 0{,}001$	Coefficient from the original full structural model.
Verification	A positive and statistically significant relationship was identified in the original model. The coefficient was numerically larger than the digital literacy coefficient, but the statistical difference between the two coefficients has not been tested.	Re-estimation and a formal coefficient-comparison test are required for further inferential claims.

Source: *Qualitative exploratory data and results from the original dissertation model provided by the researcher, reorganized and interpreted for this article*

Table 2 explains that adversity quotient is a relevant factor for understanding how teachers respond to workplace challenges in relation to work-life balance. The qualitative findings indicate that six out of ten principals mentioned this aspect, while the original dissertation's structural model revealed a positive and statistically significant relationship with work-life balance $\beta = 0{,}445$; $t = 5{,}913$; $p < 0{,}001$. The table also illustrates that, conceptually, adversity quotient relates to the ability to establish priorities, seek assistance, and respond proportionately to workplace pressure. However, the available evidence does not establish whether teachers consistently demonstrate these responses in practice. Although the adversity quotient coefficient is numerically higher than the digital literacy coefficient, no statistical test has been conducted to establish whether the difference between the two relationships is significant. Thus, the table highlights adversity quotient as a potentially relevant individual resource, whose contribution to work-life balance should be understood alongside organizational conditions, workload demands, and support from school leaders.

The Complementary Roles of Digital Literacy and Adversity Quotient

Digital literacy and adversity quotient are understood as two distinct but potentially complementary individual capacities relevant to teachers' work-life balance. Digital literacy involves managing technology-based tasks, evaluating information, and using digital tools to support professional responsibilities, while adversity quotient concerns understanding workplace difficulties, prioritizing tasks, seeking assistance, and responding appropriately to pressure. In the qualitative exploration, both constructs were mentioned by six of the ten principals, while work-life balance was mentioned by seven, indicating their relevance in the original research context. Digital literacy may help teachers organize documents, access instructional materials, manage assessments, and communicate professionally. Meanwhile, adversity quotient may support their

responses to competing responsibilities and workplace challenges. Together, these capacities provide an analytical perspective for understanding how teachers manage professional and personal demands. However, the available qualitative data contain no verbatim interview excerpts or informant-specific statements. Therefore, these interpretations summarize the reported findings rather than direct quotations. The potential complementarity between the two capacities remains an analytical interpretation, not an empirically verified interaction.

The quantitative findings from the original dissertation offer further evidence on how these individual capacities relate to work-life balance. In the full structural model, digital literacy showed a positive path coefficient ($\beta = 0.373$), as did adversity quotient ($\beta = 0.445$), and both relationships were statistically significant ($p < 0.001$). These results indicate that each construct was positively associated with work-life balance within the original model. Although the adversity quotient coefficient was numerically larger, the available evidence does not establish that its relationship was statistically stronger than that of digital literacy. In addition, these coefficients should not be read as results of a separate three-construct model, because the original estimates came from a broader dissertation model.

The available research materials do not provide independent observational records documenting how teachers use digital tools while responding to workplace challenges. Consequently, I cannot report specific observed practices as verified field observations. As an analytical interpretation, the complementary roles of digital literacy and adversity quotient could be reflected in situations where teachers use digital tools to organize tasks while adjusting priorities or seeking support when workloads become difficult to manage. However, these examples illustrate possible mechanisms rather than documented observations from this study. Direct observational records or detailed field notes would be needed to establish whether such practices occur and how they relate to teachers' work-life balance in everyday school settings.

Taken together, the findings indicate that digital literacy and adversity quotient represent two distinct individual resources that may be relevant to teachers' work-life balance. Digital literacy concerns managing technology-mediated work, whereas adversity quotient concerns responses to difficulties and pressure. The qualitative exploration establishes that both constructs appeared in the accounts of six principals. At the same time, the original quantitative model reports positive and statistically significant relationships between each construct and work-life balance. However, the findings do not demonstrate a simultaneous effect, an interaction between the constructs, or a causal relationship. The main interpretation is that teachers' work-life balance should be examined in relation to both their individual capacities and the organizational conditions that shape their professional responsibilities.

Table 3. Integrated Findings on Digital Literacy, Adversity Quotient, and Work-Life Balance

Analytical aspect	Research findings	Evidence base
Construct relevance	Digital literacy and adversity quotient both appeared in the original qualitative exploration.	Each construct was mentioned by 6 of 10 principals.

Outcome construct	Work-life balance also emerged as a relevant issue in the research context.	Mentioned by 7 of 10 principals.
Data condensation	Digital literacy relates to managing technology-based tasks, whereas adversity quotient relates to responding to difficulties and pressure.	Conceptual synthesis of the two constructs.
Quantitative data display	Digital literacy: $\beta = 0.373$; adversity intelligence: $\beta = 0.445$; both with $p < 0.001$	Path coefficients from the original full dissertation model.
Integrated verification	Both paths were positive and statistically significant in the original model. The available evidence does not establish simultaneous effects in a separately estimated three-construct model.	Re-estimation of the article's model is required.
Contextual implications	Developing digital competence should be accompanied by appropriate workload management and organizational support.	Interpretation of the findings, not the result of an intervention test.

Source: *Qualitative exploratory data and results from the original dissertation model provided by the researcher, reorganized and interpreted for this article*

Table 3 shows that digital literacy and adversity quotient both have positive and statistically significant relationships with teachers' work-life balance in the original dissertation's full structural model. Digital literacy had a path coefficient of $\beta = 0.373$, while adversity quotient had $\beta = 0.445$, and both were significant at $p < 0.001$. These findings indicate that both individual capacities are relevant to understanding work-life balance within the original model. Although the adversity quotient coefficient is numerically higher, the available evidence does not establish that its relationship is statistically stronger than that of digital literacy. The table also points to an important methodological limitation: the reported coefficients come from a broader structural model and cannot automatically be read as results of a separate three-construct model. The findings therefore support examining both capacities in relation to work-life balance, but further model estimation is needed to determine how they relate within this article's specific analytical framework.

Discussion

The findings indicate that digital literacy is positively associated with teachers' work-life balance, consistent with research showing that digital technologies can facilitate professional tasks but may also blur boundaries between work and personal life (Duan et al., 2023; Lacárcel, 2025). Cheng et al. (2026) for example, found that teachers' use of digital learning environments after working hours could adversely affect work-life balance, particularly when influenced by workplace social expectations. Similarly, research on digitalization in schools highlights both efficiency gains and additional demands arising from multiple administrative systems and after-hours communication. These findings suggest that digital literacy alone is insufficient; its benefits depend on how schools organize and regulate technology-mediated work.

The positive association between adversity quotient and work-life balance extends research that positions adversity quotient as a resource for responding to professional challenges (Kumari & Arora, 2024a; Saidah & Mukaffi, 2026). A systematic review by Arafani et al. (2023) found that adversity quotient in

educational settings was associated with outcomes such as problem-solving, self-regulation, motivation, and achievement. Research involving Indonesian teachers has likewise linked adversity quotient with professional competence and organizational citizenship behavior (Ariyanto et al., 2023; Utaminingsih et al., 2025). These findings align with the broader literature, though they address a different outcome: work-life balance. The results should not be interpreted as evidence that teachers must individually endure excessive pressure, adaptive coping also requires reasonable workloads and institutional support.

Taken together, the findings support an integrated perspective in which digital literacy and adversity quotient represent distinct individual resources relevant to work-life balance. Digital literacy concerns managing technology-mediated responsibilities, whereas adversity quotient concerns responding to difficulties and pressure (Affan & Baharun, 2026; Morrison & Hoben, 2026). This interpretation complements boundary theory, which explains how digital communication can extend work into personal time, and research on adversity quotient, which emphasizes adaptive responses to challenges (Kumari & Arora, 2024b; Syahril et al., 2026). The theoretical contribution lies in bringing these constructs into a shared analytical framework for examining teachers' work-life balance. However, because the reported coefficients originate from the original broader model, their combined or interactive effects remain unconfirmed.

Practically, schools should develop teachers' digital competence while improving the organizational conditions surrounding digital work. Professional development can strengthen teachers' ability to manage documents, assess information, and use educational applications efficiently (Ajani, 2024; Amemasor et al., 2025). At the same time, school leaders can simplify reporting procedures, reduce duplicated data entry, clarify communication expectations outside working hours, and distribute administrative responsibilities fairly. Research indicates that school leadership support and clear boundaries can reduce teachers' after-hours information and communication technology demands (Hesse et al., 2025; Jian & Zhou, 2025). These measures complement individual coping capacities rather than placing responsibility for work-life balance entirely on teachers. Digital transformation should therefore be evaluated not only through technological adoption but also through its consequences for teachers' working conditions (Islamiyah, 2025; Nazila et al., 2026).

The study contributes contextual evidence from public senior high schools in Sukabumi Regency by examining digital literacy and adversity quotient together in relation to teachers' work-life balance. Its contribution is exploratory rather than causal: qualitative reports establish the constructs' relevance, while the original structural model indicates positive statistical associations. Important limitations remain because this analysis did not include interview quotations or independent observational records, and the reported coefficients have not been re-estimated in a separate three-construct model. Future research should test that model using the original dataset, investigate organizational support and workload as contextual factors, and collect direct accounts of teachers' digital practices. Such work could clarify when individual capacities support balance and when organizational demands constrain their benefits.

CONCLUSION

This study concludes that digital literacy and adversity quotient are relevant individual resources associated with teachers' work-life balance. The key insight is that technological competence may facilitate work management, while adversity quotient may support adaptive responses to workplace challenges; however, neither should be considered in isolation from organizational demands and institutional support. The study's scholarly contribution lies in bringing these two constructs into a shared analytical framework for understanding teachers' work-life balance in public senior high schools. Practically, school leaders should strengthen teachers' digital competence, simplify administrative procedures, clarify communication boundaries, distribute workloads fairly, and provide support when professional pressures arise. Nevertheless, the findings require cautious interpretation because the qualitative evidence lacks verbatim interview excerpts and independent observational records. At the same time, the reported path coefficients originate from the original broader structural model rather than a separately estimated three-construct model. Future research should re-estimate the proposed model, examine organizational support and workload as contextual factors, and investigate teachers' actual experiences to clarify how individual capacities and workplace conditions jointly relate to work-life balance.

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REFERENCES

Affan, M., & Baharun, H. (2026). Digital Literacy and Religious Moderation: The Strategic Role of Teachers and the Pedagogical Synthesis. *TADIB: Jurnal Pendidikan Agama Islam*, *4*(1), 161–178. https://doi.org/10.69768/jt.v4i1.112

Ajani, O. A. (2024). The Role of Educational Technology in Enhancing Professional Development and Teaching Competence among Secondary School Teachers. *International Journal of Development and Sustainability*, *13*(7), 588–606.

Amemasor, S. K., Oppong, S. O., Ghansah, B., Benuwa, B.-B., & Essel, D. D. (2025). A Systematic Review on the Impact of Teacher Professional Development on Digital Instructional Integration and Teaching Practices. *Frontiers in Education*, *10*, 1541031. https://doi.org/10.3389/feduc.2025.1541031

Anawati, S., Setyaningsih, S., & Wulandari, D. (2025). Enhancing Teacher Productivity through Integrated Management Resources: A Mixed-Methods Study in Indonesian Islamic Elementary Schools. *SUJANA: Education and Learning Review*, 1–22. https://doi.org/10.56943/sujana.v4i4.883

Arafani, W., Yusuf, Y., & Agustiningsih, N. (2023). Adversity Quotient (AQ) in Education: A Systematic Literature Review for the Period 2018–2022. *Indonesian Journal of Applied Science and Technology*, *4*(1), 1–11.

Ardiansyah, M., Hardhienata, H., Soewarto, H., & Suhendra, S. (2025). Modeling and Optimization of Teacher Innovativeness Enhancement Based on Technological Literacy and Organizational Support (A Study Using the POP-SDM Method on Permanent Teachers at Private Vocational School Foundations in West Jakarta). *JMSP (Jurnal Manajemen dan Supervisi Pendidikan)*, *9*(3), 339–355. https://doi.org/10.17977/um025v9i32025p324

Arias-Pastor, M., & González-Santos, J. (2024). Analysis of Teacher Self-Efficacy and Its Impact on Sustainable Well-Being at Work. *Behavioral Sciences*, *14*(7), 563. https://doi.org/10.3390/bs14070563

Ariyanto, A., Fuad, N., & Muhab, S. (2023). The Influence of Transformational Leadership and Adversity Quotient on Teachers' Organizational Citizenship Behavior. *Scaffolding: Jurnal Pendidikan Islam dan Multikulturalisme*, *5*(1), 142–161. https://doi.org/10.37680/scaffolding.v4i3.2339

Berg, J., Green, F., Nurski, L., & Spencer, D. A. (2023). Risks to Job Quality from Digital Technologies: Are Industrial Relations in Europe Ready for the Challenge? *European Journal of Industrial Relations*, *29*(4), 347–365. https://doi.org/10.1177/09596801231178904

Bingham, A. J. (2023). From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis. *International Journal of Qualitative Methods*, *22,* 16094069231183620.

Cheng, C., Panyanuwat, A., Li, X., & Yang, J. (2026). Beyond the Digital Panopticon: A Mixed-Methods Examination of Teacher Burnout, Psychological Capital, and Well-Being through the Lens of Work-Life Balance. *Frontiers in Psychology*, *17,* 1878063. https://doi.org/10.3389/fpsyg.2026.1878063

Creagh, S., Thompson, G., Mockler, N., Stacey, M., & Hogan, A. (2025). Workload, Work Intensification and Time Poverty for Teachers and School Leaders: A Systematic Research Synthesis. *Educational Review*, *77*(2), 661–680. https://doi.org/10.1080/00131911.2023.2196607

Dabrowski, A., Hsien, M., Van Der Zant, T., & Ahmed, S. K. (2025). "We Are Left to Fend for Ourselves": Understanding Why Teachers Struggle to Support Students' Mental Health. *Frontiers in Education*, *9,* 1505077. https://doi.org/10.3389/feduc.2024.1505077

Dasruth, J., & Naicker, S. R. (2026). Conceptualising a School Leaders' Digital Leadership Framework to Lead Education 4.0 in a South African School District. *Sage Open*, *16*(2), 21582440251415080. https://doi.org/10.1177/21582440251415081

Duan, S. X., Deng, H., & Wibowo, S. (2023). Exploring the Impact of Digital Work on Work-Life Balance and Job Performance: A Technology Affordance Perspective. *Information Technology & People*, *36*(5), 2009–2029. https://doi.org/10.1108/ITP-01-2021-0013

Durnali, M. (2025). Tiny but Functional? Unpacking the Role of Smartphones in Driving Digital Transformation in School Administration and Teaching Practices. *Education and Information Technologies*, *30*(16), 23111–23140. https://doi.org/10.1007/s10639-025-13676-5

Durrani, N., & Makhmetova, Z. (2025). A Multi-Layered Socio-Ecological Framework for Investigating Teacher Well-Being: Key Predictors and Protective Factors. *Sustainability*, *17*(3), 900. https://doi.org/10.3390/su17030900

Gupta, A., & Zhao, X. (2024). Teachers' Work under Responsibilising Policies: An Analysis of Educators' Views on China's 2021 Educational Reforms. *Journal of Education Policy*, *39*(4), 622–639. https://doi.org/10.1080/02680939.2023.2236067

Hesse, F., Huettermann, H., & Bruch, H. (2025). Always On-Line? An Organizational Model of Leaders' After-Hours Smartphone Use and Climate of Constant Connectivity. *Journal of Occupational and Organizational Psychology*, *98*(4), e70067. https://doi.org/10.1111/joop.70067

Imran, K., Devaputra, G., Kaisar, M., & KB, V. (2026). Managing the Digital Revolution in Higher Education: Recognizing Obstacles, Possibilities, and Techniques to Improve Faculty Work/Life Balance and Institutional Sturdiness. *Journal of Workplace Behavioral Health*, *41*(3), 1079–1091. https://doi.org/10.1080/15555240.2025.2541863

Islamiyah, M. (2025). A Digital Transformation Framework for Pesantren: Integrating Technology and Sharia Principles in Startup Development. *Al-Fiqh: Journal of Contemporary Islamic Law*, *1*(2), 77–87. https://doi.org/10.61987/fiqh.v1i2.1354

Jian, J., & Zhou, M. (2025). Exploring the Relationship between After-Hours Work-Related Social Media Use and Teacher Job Burnout. *Scientific Reports*, *15*(1), 36188. https://doi.org/10.1038/s41598-025-20067-w

Kiryakova, G., & Kozhuharova, D. (2024). The Digital Competences Necessary for the Successful Pedagogical Practice of Teachers in the Digital Age. *Education Sciences*, *14*(5), 507. https://doi.org/10.3390/educsci14050507

Kumari, K., & Arora, R. (2024a). Mediating Role of Work-Life Balance in Relationship of Adversity Quotient and General Role Stress among Police Personnel. *Journal of Police and Criminal Psychology*, 1–8. https://doi.org/10.1007/s11896-024-09725-3

Kumari, K., & Arora, R. (2024b). Role of Technology, Adversity Quotient, Socio-Demographic and Health Factors in Work-Life Balance: A Bibliometric Analysis. *International Conference on Smart Computing and Communication*, 293–303. https://doi.org/10.1007/978-981-97-1320-2_24

Lacárcel, F. J. S. (2025). Digital Technologies, Sustainable Lifestyle, and Tourism: How Digital Nomads Navigate Global Mobility? *Sustainable Technology and Entrepreneurship*, *4*(2), 100096. https://doi.org/10.1016/j.stae.2025.100096

López-Nuñez, J.-A., Alonso-García, S., Berral-Ortiz, B., & Victoria-Maldonado, J.-J. (2024). A Systematic Review of Digital Competence Evaluation in Higher Education. *Education Sciences*, *14*(11), 1181. https://doi.org/10.3390/educsci14111181

Lu, L., Ye, C., Xu, R., Feng, H., & Liu, B. (2024). Psychological Resilience and Perceived Stress among Chinese Medical Students: Mediation between Optimistic Intelligence Quotient and Adversity Quotient. *BMC Medical Education*, *24*(1), 1358. https://doi.org/10.1186/s12909-024-06287-0

Maryani, L., Nur, J., Utami, S., & Nurnaifah, I. I. (2023). Strengthening School Management with Digital Education Technology to Improve the Quality of Educational Output. *Indonesian Journal of Educational Research and Review*, *6*(2), 446–465. https://doi.org/10.23887/ijerr.v6i2.66039

Maulia, I. R., Machdar, N. M., Hendayana, Y., Rony, Z. T., & Renwarin, J. M. J. (2026). Integrating Digital Competence and Islamic Work Ethics to Enhance Change Readiness: The Mediating Role of Employee Engagement. *Business and Applied Management Journal*, *4*(2), 234–247. https://doi.org/10.61987/bamj.v4i2.2278

Morrison, C., & Hoben, J. (2026). Rethinking Education in the Algorithmic Age: A Model for AI Digital Literacy and Identity. *Pedagogy, Culture and Society*. https://doi.org/10.1080/14681366.2026.2668652

Mu'amalah, H. (2024). Transforming Student Satisfaction in the Digital Era: A Study of the Effects of Hybrid Learning and Digital Literacy in Islamic Religious Education. *Al-Ishlah: Jurnal Pendidikan*, *16*(4), 4728–4736. https://doi.org/10.35445/alishlah.v16i4.6143

Nazila, I. A., Ramadhania, S. N., & Lateh, M. (2026). Digital Anxiety and the Search for Meaning: Integrating Fiqh Principles as a Coping Mechanism for Gen Z's FoMO. *Al-Fiqh: Journal of Contemporary Islamic Law*, *2*(1), 28–43. https://doi.org/10.61987/fiqh.v2i1.999

Nguyen, L. A. T., & Habók, A. (2024). Tools for Assessing Teacher Digital Literacy: A Review. *Journal of Computers in Education*, *11*(1), 305–346. https://doi.org/10.1007/s40692-022-00257-5

Nguyen, V. P., & Edreck, D. E. (2025). Adversity Quotient and Professional Quality of Life among Nurses in Two Public Hospitals in Southern Vietnam: A Cross-Sectional Study. *Tạp Chí Khoa Học Điều Dưỡng*, *8*(1), 107–118. https://doi.org/10.54436/jns.2025.01.958

Saepurohman, A., Badrudin, Erihadiana, M., Lestari, A. S., & Alai, A. (2025). Strategic Management of Digital Literacy Initiatives in Islamic Boarding Schools of Tasikmalaya. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*. https://doi.org/10.31538/munaddhomah.v6i2.1711

Safitri, D., Devi, E. K., Sunarti, Z., & Munip, A. (2026). Sharia Economic Law Analysis of Plant Utilization on Donated Land. *Amorti: Jurnal Studi Islam Interdisipliner*, 1798–1806. https://doi.org/10.59944/amorti.v5i4.1574

Sahni, S., Verma, S., & Kaurav, R. P. S. (2025). Understanding Digital Transformation Challenges for Online Learning and Teaching in Higher Education Institutions: A Review and Research Framework. *Benchmarking*, *32*(5), 1487–1521. https://doi.org/10.1108/BIJ-04-2022-0245

Saidah, B., & Mukaffi, Z. (2026). Workload and Work-Life Balance on Employee Job Satisfaction: The Mediating Role of Adversity Quotient, a Study at BMT UGT Sidogiri Center. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, *9*(2), 11349–11362.

Saxena, S., & Rathore, B. (2025). Adversity Quotient as Determining Factor of Mental Health and Professional Quality of Life among Healthcare Professionals: A Systematic Review. *Annals of Neurosciences*, *32*(1), 58–65. https://doi.org/10.1177/09727531241231055

Singun, A. J. (2025). Unveiling the Barriers to Digital Transformation in Higher Education Institutions: A Systematic Literature Review. *Discover Education*, *4*(1), 37. https://doi.org/10.1007/s44217-025-00430-9

Syahril, F., Andrianie, S., Krismona, E. B., & Abdullah, N. Z. M. (2026). Adolescent Resilience and Adversity Quotient in the Digital Age: A Literature Review of Psychological Stress and Adaptive Responses. *Jurnal Bikotetik (Bimbingan dan Konseling: Teori dan Praktik)*, *10*(1), 35–48. https://doi.org/10.26740/bikotetik.v10n1.p35-48

Tzafilkou, K., Perifanou, M., & Economides, A. A. (2023). Assessing Teachers' Digital Competence in Primary and Secondary Education: Applying a New Instrument to Integrate Pedagogical and Professional Elements for Digital Education. *Education and Information Technologies*, *28*(12), 16017–16040. https://doi.org/10.1007/s10639-023-11848-9

Utaminingsih, S., Anwar, S., Rachmawaty, S., & Quinones Jr, R. P. (2025). Adversity Quotient as a Predictor of Early Childhood Education Teachers' Performance amid the Challenges of Educational Digitalization. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, *11*(02), 203–212. https://doi.org/10.32678/tarbawi.v11i02.11339

Vydrová, J. (2026). The Paradigm Shift from Work-Life Balance to Work-Life Fit. *International Journal of Organization Theory & Behavior*, 1–68. https://doi.org/10.1108/IJOTB-06-2025-0177

Woloshyn, V., Savage, M., Maich, K., & Penney, S. (2023). Stress, Coping, and Well-Being in Teachers and School Administrators. *Alberta Journal of Educational Research*, *69*(4), 492–513. https://doi.org/10.55016/ojs/ajer.v69i4.75886