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Digital Literacy, Self-Efficacy, And Psychological Well-Being Among Selected Junior High School Students in Lemery, Batangas

[1]Bernadette A. Reyes, [2]Lourdes P. Jusay
University of Perpetual Help System-Laguna
C1-241-02334@uphsl.edu.ph

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Corresponding Email:
C1-241-02334@uphsl.edu.ph

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Index Terms:

digital literacy, self-efficacy, academic performance, psychological well-being, adolescents, Filipino youth, online learning effectiveness, digital citizenship

Abstract. This study explored the relationship among digital literacy, self-efficacy, and psychological well-being of junior high school students in Lemery, Batangas using a descriptive-correlational design. Data were gathered through structured questionnaires and analyzed using mean scores and Pearson product-moment correlation. Results revealed that students demonstrated high levels of digital literacy, particularly in ethical and responsible digital use, online safety, and information evaluation. Respondents also reported generally strong self-efficacy across academic, social, and emotional domains, reflecting confidence in managing tasks, interactions, and emotional regulation. In contrast, psychological well-being was moderate, with students experiencing noticeable levels of anxiety, depression, and stress. Correlation analysis indicated significant positive associations between digital literacy and self-efficacy, suggesting that stronger digital competencies are linked to higher confidence. Certain aspects of digital literacy, such as ethical use and information evaluation, showed low but significant negative correlations with psychological well-being. Similarly, self-efficacy demonstrated consistent negative relationships with psychological well-being, with emotional self-efficacy exerting the strongest influence. These findings highlight the dual role of digital literacy and self-efficacy: while they enhance confidence and competence, they also reveal complex interactions with students' mental health. Based on these results, the study proposed an intervention plan, Project L.I.F.E., designed to enhance digital competence, strengthen self-efficacy, and promote holistic well-being among adolescents. The study underscores the importance of integrating digital literacy and self-efficacy development into educational programs to support both academic success and psychological resilience in the digital age.

Introduction

Digital literacy has become a cornerstone of adolescent development, shaping how students learn, communicate, and participate in society. In education and psychology, it is increasingly recognized as a critical skill for navigating the complexities of modern life, particularly in technology-mediated learning environments.

Prior studies consistently highlight that digital literacy extends beyond technical proficiency to include critical evaluation of information, ethical online behavior, and responsible participation in digital communities (UNICEF, 2021; OECD, 2023; Ribble, 2021). Research also shows strong links between digital literacy, self-efficacy, and psychological well-being, with scholars emphasizing that these constructs are interconnected and mutually reinforcing (Livingstone et al., 2022; Schunk & DiBenedetto, 2024).

Patterns across existing literature suggest that adolescents with higher digital competence demonstrate stronger confidence, resilience, and adaptability in academic contexts. However, conflicting findings remain: while some studies report moderate to high levels of psychological well-being among Filipino adolescents (Sablaon & Madrigal, 2021), others highlight rising concerns about anxiety and stress (Delanoche & Mamba, 2024). Methodological limitations also persist, particularly in the reliance on self-report measures and the lack of localized, cost-efficient tools for assessing these constructs.

This gap underscores the need for research that integrates digital literacy, self-efficacy, and psychological well-being in the Philippine junior high school context. The present study addresses this by adapting standardized instruments (DASS Youth, DASS-21, SEQ-C) into a validated, cost-efficient questionnaire suitable for public school students. By doing so, it responds to both theoretical and practical imperatives: strengthening adolescent psychological resources while ensuring accessibility and affordability in local research practice.

Specifically, the study seeks to:

1. Assess students' digital literacy in terms of access and evaluation of information, online safety and privacy, and ethical digital use.
2. Determine the levels of academic, social, and emotional self-efficacy among junior high school students.
3. Examine students' psychological well-being in terms of anxiety, depression, and stress.
4. Test the relationships among digital literacy, self-efficacy, and psychological well-being.

The primary goal is to examine how digital literacy and self-efficacy influence psychological well-being, while the secondary goal is to propose an intervention plan based on the findings. The succeeding sections present the study's methods, results, and discussion, offering empirical evidence that may inform educational practices and guide school-based interventions for adolescent development.

Methodology

Research Design

This study employed a quantitative correlational research design to examine the relationships among digital literacy, self-efficacy, and psychological well-being among junior high school students. A correlational design was deemed appropriate because the study sought to determine the strength and direction of associations between variables without manipulating the learning environment or intervening in students' natural experiences. By using this design, the researcher was able to objectively analyze patterns and relationships that exist within the population, providing empirical evidence that can inform educational practices and psychological interventions.

Research Respondents

The respondents consisted of junior high school students from Grades 7 to 10 enrolled in selected public secondary schools in Lemery, Batangas during the academic year 2025–2026. A stratified sampling technique was employed to ensure proportional representation across grade levels. Within each stratum, only students who obtained parental consent were included, in compliance with ethical standards for research involving minors. This approach guaranteed that each year level was represented, thereby enhancing the validity of the findings while safeguarding the rights and welfare of participants. Students who did not secure parental consent or were absent during data collection were excluded from the study.

Research Instruments

Data were collected using a researcher-made questionnaire that was modified and adapted from standardized instruments, specifically the Depression Anxiety Stress Scales (DASS Youth and DASS-21) and the Self-Efficacy Questionnaire for Children (SEQ-C). While these standardized tools are widely recognized, their direct administration was not feasible given institutional resource limitations. To address this, selected items were adapted to fit the local context of Filipino junior high school students.

Instrumentation Validation

The adapted questionnaire underwent expert validation by licensed psychologists and psychometricians to ensure that the items retained reliability, validity, and appropriateness for the target population. Reliability testing was conducted using Cronbach's alpha, with coefficients exceeding the acceptable threshold of 0.70, indicating internal consistency of the scales. Content validity was established through expert review, ensuring that the adapted items reflected the constructs of digital literacy, self-efficacy, and psychological well-being. This process strengthened the credibility of the instrument while making it more accessible for school-based research.

Data Gathering Procedures

Prior to data collection, approval was obtained from school authorities, and informed consent was secured from parents or guardians of participating students. The questionnaires were administered in classroom settings under the supervision of

the researcher, with clear instructions provided to ensure accurate responses. Ethical safeguards were strictly observed, including voluntary participation, confidentiality of responses, and the right of students to withdraw at any point without penalty. This procedure ensured that the study was conducted responsibly and in alignment with ethical standards for research involving minors.

Statistical Treatment of Data

The collected data were encoded and analyzed using SPSS version 27. Descriptive statistics, specifically the mean, were computed to summarize the levels of digital literacy, self-efficacy, and psychological well-being among the respondents. To examine the relationships among the three variables, Pearson's correlation coefficient (r) was employed as the primary inferential statistical tool. The level of statistical significance was set at $p < 0.05$ and $p < 0.01$, allowing the researcher to identify both moderate and highly significant associations. This dual threshold provided a more nuanced interpretation of the findings, ensuring that results were statistically reliable and practically meaningful.

Results and Discussion

The results of this study are presented according to the research questions:

1. Assess students' digital literacy in terms of access and evaluation of information, online safety and privacy, and ethical digital use.

Scale	Domains	WM	Interpretation
Digital Literacy	Access and evaluation of information	4.39	High Digital Literacy
	Online safety and privacy practices	4.57	Very High Digital Literacy
	Ethical and responsible digital use	4.69	Very High Digital Literacy
OVERALL		**4.55**	**Very High Digital Literacy**

Table 1. Summary Table of the Level of Digital Literacy

The findings revealed that junior high school students demonstrated very high overall digital literacy (WM = 4.55). Among the three domains, the highest mean score was observed in ethical and responsible digital use (WM = 4.69), followed closely by online safety and privacy practices (WM = 4.57). The lowest, though still high, was access and evaluation of information (WM = 4.39).

These results suggest that students are particularly strong in practicing responsible online behavior and protecting their privacy, reflecting awareness of digital rights and safety in technology-mediated environments. However, their relatively lower score in evaluating information indicates that while they can access digital content, they may face challenges in critically assessing credibility and accuracy. This pattern supports Chang and Kuo (2025), who emphasized evaluation skills as a core dimension of digital literacy.

2. Determine the levels of academic, social, and emotional self-efficacy among junior high school students.

Scale	Domains	WM	Verbal Interpretation
Self-Efficacy	Academic	4.03	High Self-Efficacy
	Social	4.1	High Self-Efficacy
	Emotional	3.87	High Self-Efficacy
OVERALL		**4**	**High Self-Efficacy**

Table 2. Summary Table of the Level of Self-Efficacy

The findings revealed that junior high school students demonstrated an overall high level of self-efficacy (WM = 4.00). Among the domains, social self-efficacy (WM = 4.10) was rated highest, followed by academic self-efficacy (WM = 4.03), while emotional self-efficacy (WM = 3.87) was the lowest but still within the high range.

These results suggest that students feel confident in their ability to interact effectively with peers and accomplish academic tasks, yet they show comparatively less confidence in managing emotions and coping with stress. This pattern is consistent with Saks (2024), who demonstrated that self-efficacy significantly influences academic outcomes, and resonates with

Wardani et al. (2025), who validated the general self-efficacy scale for higher education and highlighted its importance in student adaptation and resilience.

3. Examine students' psychological well-being in terms of anxiety, depression, and stress.

Scale	Domains	WM	Verbal Interpretation
Psychological Well-being	Depression	2.5	Moderate Anxiety
	Anxiety	2.68	Moderate Depression
	Stress	2.83	Moderate Stress
OVERALL		**2.67**	**Moderate Depression, Anxiety and Stress**

Table 3. Summary of the Level of Psychological Well-Being

The results showed that junior high school students reported an overall moderate level of psychological well-being (WM = 2.67). Across domains, stress (WM = 2.83) was the highest, followed by anxiety (WM = 2.68), while depression (WM = 2.50) was the lowest but still within the moderate range.

These findings indicate that students experience moderate stress, anxiety, and depressive symptoms, reflecting the challenges of adolescence and academic demands. The relatively higher stress scores suggest that school pressures and social expectations may be more immediate concerns, while the lower depression scores point to less frequent but still present feelings of sadness or hopelessness.

When compared to prior studies, the results are consistent with Sablaon and Madrigal (2021), who reported moderate well-being among Filipino adolescents. They also echo Delanoche and Mamba (2024), who observed heightened stress and anxiety levels in post-pandemic school contexts. This alignment underscores the continuing relevance of psychological well-being as a critical area of concern in secondary education.

4. Test the relationships among digital literacy, self-efficacy, and psychological well-being

Independent	Dependent	Pearson's *r* [a]	*p*-value	Decision	Interpretation [b]
Digital Literacy	Self-Efficacy	.490 (moderate)	<.001	Reject H_0	Significant

Table 4. Relationship Between the Level of Digital Literacy and Level of Self-Efficacy

As shown in Table 4, digital literacy demonstrated a moderate positive correlation with self-efficacy ($r = .490$, $p < .001$). This indicates that students with higher levels of digital literacy also tend to report stronger self-efficacy across academic, social, and emotional domains. The finding is consistent with Bandura's Social Cognitive Theory, which emphasizes mastery experiences as a foundation for self-efficacy. In line with Song et al. (2025), who found that digital learning competence significantly enhances confidence in academic achievement, the present results suggest that proficiency in accessing and evaluating information, as well as practicing online safety, reinforces students' belief in their ability to succeed academically and socially.

Independent	Dependent	Pearson's *r* [a]	*p*-value	Decision	Interpretation [b]
Digital Literacy	Psychological Well-being	-.203(weak)	.004	Reject H_0	Significant

Table 5 Relationship Between the Level of Digital Literacy and Level of Psychological Well-Being

Table 5 shows that digital literacy was weakly but significantly negatively correlated with psychological well-being ($r = –.203$, $p = .004$). This suggests that higher digital literacy scores were associated with lower levels of depression, anxiety, and stress. Although the strength of the relationship is weak, the result supports the idea that digital competence may serve as a protective factor against psychological distress. This aligns with the findings of Chang and Kuo (2025), who reported that students with stronger digital skills were better able to manage online stressors and misinformation, thereby reducing anxiety. However, unlike Nur (2025), who emphasized a stronger link between digital literacy and emotional resilience, the

present study found only a weak association, possibly reflecting contextual differences in school resources and exposure to structured digital literacy programs.

Independent	Dependent	Pearson's *r* [a]	*p*-value	Decision	Interpretation [b]
Self-efficacy	Psychological well-being	-.316 (weak)	<.001	Reject H_0	Significant

Table 6 Relationship Between the Level of Self-Efficacy and Level of Psychological Well-Being

As presented in Table 6, self-efficacy demonstrated a weak but significant negative correlation with psychological well-being ($r = -.316$, $p < .001$). Students with higher self-efficacy reported lower levels of depression, anxiety, and stress. This finding supports Barrera (2022), who highlighted that self-efficacy contributes to academic resilience and emotional regulation. It also resonates with Lazarus and Folkman's Transactional Model of Stress and Coping, which posits that confidence in one's coping abilities reduces perceived stress. In contrast, Reymon and Dela Cruz (2025) reported stronger emotional resilience among adolescents in rural contexts, suggesting that cultural and environmental factors may moderate the strength of this relationship.

Conclusion and Recommendations

This study revealed that junior high school students in Lemery, Batangas demonstrated very high levels of digital literacy, especially in ethical use and online safety, alongside high self-efficacy in academic, social, and emotional domains, though emotional regulation was relatively weaker. Psychological well-being was moderate, with stress emerging as the most pronounced concern. Correlation analyses showed that digital literacy was moderately and positively related to self-efficacy, while both digital literacy and self-efficacy were negatively associated with depression, anxiety, and stress. These findings extend Bandura's Social Cognitive Theory and Lazarus and Folkman's Transactional Model by showing how digital literacy strengthens self-efficacy and buffers psychological distress.

Drawing from these results, the proposed intervention program Project L.I.F.E. (Learning, Identity, Flourishing, Empowerment) was designed to address the interconnected domains of digital literacy, self-efficacy, and psychological well-being among junior high school students. The program builds on students' strengths in responsible technology use and social collaboration while targeting areas needing reinforcement, such as advanced evaluative skills, privacy management, emotional regulation, and stress coping. Through structured workshops, coaching sessions, and peer support systems, Project L.I.F.E. aims to foster resilience, confidence, and holistic development, equipping learners for both academic success and personal growth while providing a sustainable framework for school-based interventions.

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Competing Interests Statement

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this study. The research was conducted independently, and all analyses, interpretations, and recommendations were made solely for academic purposes.

Data Availability Statement

The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request. Due to ethical considerations and the protection of student participants' confidentiality, raw individual responses cannot be publicly shared. However, aggregated data tables, statistical outputs, and supporting materials used in the analysis are accessible for academic and research purposes.

References

Alegado, R. T. (2025). Assessing the digital literacy and design skills needs of parish youth and senior high school students in Cabanatuan city: A basis for the development of the digital design bootcamp Series 2025. International Journal of Innovative Research and Scientific Studies, 8(7), 488–493. https://doi.org/10.53894/ijirss.v8i7.10481

Avinç, E., Doğan, F. Digital literacy scale: Validity and reliability study with the rasch model. Educ Inf Technol 29, 22895–22941 (2024). https://doi.org/10.1007/s10639-024-12662-7

Barrera, K. C. (2022). Academic resilience and self-efficacy of Grade 7 students in Social Studies in a science high school in the Philippines. International Research Journal of Social Sciences, 11(1), 1–12. https://doi.org/10.13140/RG.2.2.18633.62566

Chang, CY., Kuo, HC. The development and validation of the digital literacy questionnaire and the evaluation of students' digital literacy. Educ Inf Technol 30, 11549–11581 (2025). https://doi.org/10.1007/s10639-024-13216-7

Chen, X., & Hu, J. (2020). ICT related behavioral factors mediate the relationship between adolescents' ICT interest and their ICT self efficacy: Evidence from 30 countries. Computers & Education, 159, 104004. https://doi.org/10.1016/j.compedu.2020.104004

Delanoche, L. C., & Mamba, M. T. (2024). Anxiety and distress levels among senior high school students and their relationship to academic achievement. AIDE Interdisciplinary Research Journal, 9(1), 12–29. https://doi.org/10.56648/aide-irj.v9i1.125

Delanoche, L. C., & Mamba, M. T. (2024). Anxiety and distress levels among senior high school students and their relationship to academic achievement. AIDE Interdisciplinary Research Journal, 9(1), 12–29. https://doi.org/10.56648/aide-irj.v9i1.125

Hatlevik, O. E., & Bjarnø, V. (2021). Examining the relationship between resilience to digital distractions, ICT self-efficacy, motivation, approaches to studying, and time spent on individual studies. Teaching and Teacher Education, 102, 103326. https://doi.org/10.1016/j.tate.2021.103326

Heiman, T., & Olenik-Shemesh, D. (2022). Cyber-victimization experience among higher education students: Effects of social support, loneliness, and self-efficacy. international Journal of Environmental Research and Public Health, 19(12), 7395. https://doi.org/10.3390/ijerph19127395

Hong, J., Cao, W., Liu, X., Tai, K., & Zhao, L. (2021). Personality traits predict the effects of Internet and academic Self-efficacy on practical performance anxiety in online learning under the COVID-19 lockdown. Journal of Research on Technology in Education. Advance online publication. https://doi.org/10.1080/15391523.2021.1967818

Jin, K. Y., Reichert, F., Cagasan, L. P., de la Torre, J., & Law, N. (2020). Measuring digital literacy across three age cohorts: Exploring test dimensionality and performance differences. Computers & Education, 157, 103968. https://doi.org/10.1016/j.compedu.2020.103968

Livingstone, S., Stoilova, M., Stänicke, L. I., Jessen, R. S., Graham, R., Staksrud, E., & Jensen, T. (2022). Young people experiencing internet-related mental health difficulties: The benefits and risks of digital skills. An empirical study. ySKILLS. https://doi.org/10.5281/zenodo.6976424

Loureiro, L., Pedreiro, A. T., Simões, R., Batista, I., Rosa, A., & Morgado, T. (2026). Psychometric validation of the Depression, Anxiety and Stress Scale (DASS 21) in Portuguese youth transitioning to higher education. Healthcare, 14(1), 128. https://doi.org/10.3390/healthcare14010128

Nur, J. (2025). The impact of digital learning tools on students' critical thinking development. Asian Journal of Applied Education, 4(4). https://doi.org/10.55927/ajae.v4i4.15615

Organisation for Economic Co-operation and Development. (2021). 21st-century readers: Developing literacy skills in a digital world. OECD Publishing. https://doi.org/10.1787/a83d84cb-en

Puyat, J. H., Salvador, D. L., Tuazon, A. C., & Afable, S. D. (2025). Rising prevalence of depression and widening sociodemographic disparities in depressive symptoms among Filipino youth: Findings from two large nationwide cross-sectional surveys. Cambridge Prisms: Global Mental Health, 12, e51. https://doi.org/10.1017/gmh.2025.39

Reymon, J., & Dela Cruz, C. J. B. (2025). Culture-based practices, self-efficacy, and academic resilience of Grade Eight students in rural public high schools. Psychology and Education: A Multidisciplinary Journal, 40(6), 831–847. https://doi.org/10.70838/pemj.400606

Ribble, M. S. (2021). Digital citizenship in the frame of global change. International Journal of Studies in Education and Science, 2(2), 74–86. https://ijses.net/index.php/ijses/article/view/2137

Sablaon, C. M., & Madrigal, D. V. (2021). Adolescent psychological well-being. Philippine Social Science Journal, 4(1), 31–41. https://doi.org/10.52006/main.v4i1.322

Sablaon, C. M., & Madrigal, D. V. (2021). Adolescent psychological well-being: The case of Filipino Catholic high school students with absentee parents. Philippine Social Science Journal, 4(1), 31–41. https://doi.org/10.52006/main.v4i1.322

Saks, K. (2024). The effect of self-efficacy and self-set grade goals on academic outcomes. Frontiers in Psychology, 15, Article 1324007. https://doi.org/10.3389/fpsyg.2024.1324007

Schunk, D. H., & DiBenedetto, M. K. (2021). Self-efficacy and human motivation. In A. J. Elliot (Ed.), Advances in motivation science (Vol. 8, pp. 153–179). Elsevier Academic Press. https://doi.org/10.1016/bs.adms.2020.10.001

Song, Y., Lv, S., Wang, M., Wang, Z., & Dong, W. (2025). The impact of digital learning competence on the academic achievement of undergraduate students. Behavioral Sciences, 15(7), 840. https://doi.org/10.3390/bs15070840

Szabo, M., & Lovibond, P. F. (2022). Development and psychometric properties of the DASS Youth (DASS Y): An extension of the Depression Anxiety Stress Scales (DASS) to adolescents and children. Frontiers in Psychology, 13, 766890. https://doi.org/10.3389/fpsyg.2022.766890

Tan, Q., Wu, W., & An, S. (2025, April). A review of adolescents' digital self efficacy: Conceptualization, measurement, impacts, influencing factors, and future directions. Journal of Current Social Issues Studies, 2(5), 306–315. https://doi.org/10.71113/JCSIS.v2i5.291

UNICEF. (2021). The State of the World's Children 2021: On my mind—Promoting, protecting and caring for children's mental health. United Nations Children's Fund. https://www.unicef.org/reports/state-worlds-children-2021

Vaszkun, B., & Mihalkov Szakács, K. (2025). Looking for student success factors outside of the educators' scope: The effect of digital literacy, personal skills, and learning habits and conditions on self evaluated online learning effectiveness in management education. International Journal of Management Education, 101188. https://doi.org/10.1016/j.ijme.2025.101188

Wardani, F. D., Dewi, D. K., Jannah, M., Khoirunnisa, R. N., & Saphira, H. V. (2025, March). Adaptation and validation of general self efficacy scale for higher education. IJORER: International Journal of Recent Educational Research, 6(2), 333–346. https://doi.org/10.46245/ijorer.v6i2.780

Appendices

This study does not include appendices or supplementary documents