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The Influence of Digital Literacy on the Work Readiness of Final-Year Students at Padang State University

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Abstract

Although digital literacy has received increasing attention in graduate employability research, evidence regarding its contribution to work readiness among final-year students across multiple study programs within a single Indonesian public university remains limited. This study aimed to examine the influence of digital literacy on the work readiness of final-year students at Padang State University. A quantitative approach with a simple regression design was employed, involving 335 final-year students from nine faculties selected through purposive sampling. Data were collected using a Digital Literacy Scale adapted from Nafiah (2023) and a Work Readiness Scale adapted from Afaf (2022) and analyzed through simple linear regression using IBM SPSS Statistics 27. The results revealed that digital literacy had a positive and statistically significant influence on work readiness, as represented by the regression equation $Y = 106.614 + 0.279X$. The coefficient of determination ($R^2 = 0.645$) indicated that digital literacy accounted for 64.5% of the variance in students' work readiness. These findings demonstrate that digital literacy is an important factor in strengthening final-year students' readiness to enter the workforce and contribute to the literature on digital competence and career preparation within

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educational and organizational psychology. The study underscores the importance of integrating digital competencies into university curricula and career-preparation programs to facilitate students' transition from higher education to the labor market.

Keywords: Career Preparation; Digital Competence; Digital Literacy; Final-Year Students; Work Readiness

INTRODUCTION

The transition from higher education to the labor market has become an increasingly demanding process, as employers no longer evaluate graduates solely on the basis of academic qualifications but also on their capacity to adapt to rapidly changing work environments (Winterton & Turner, 2019). Final-year students, who are in the final phase of completing their undergraduate studies, are directly confronted with this transition and are expected to demonstrate readiness to compete and contribute effectively once they enter the workplace (Pratama & Magistarina, 2022). Work readiness has therefore become a central concern in the discussion of graduate employability, as it reflects the extent to which a graduate possesses the attitudes, competencies, and attributes required to succeed in a professional setting (Caballero et al., 2011).

This issue is particularly relevant in the Indonesian higher education context. Wibowo and Suroso (2016) noted that the continuous rise in the number of university graduates has not been matched by a corresponding improvement in their readiness to face the demands of work. Iramadhani and Amalia (2023), in a study involving 376 final-year students at Malikussaleh University, found that 46.8% of the participants were categorized as having low work readiness, particularly in the dimensions of work competence and social intelligence. Similarly, Angraini et al. (2021) reported that the work readiness of university graduates in West Sumatra remained predominantly at a moderate level, with communication skill identified as the most influential factor. These conditions are reflected at the national level, where data from the Central Bureau of Statistics indicate a continuing increase in the number of unemployed university graduates in Indonesia (Badan Pusat Statistik, 2026), suggesting that higher education alone does not guarantee readiness to enter the labor market.

The problem of insufficient work readiness has also been identified specifically among students at Padang State University. Pratama and Magistarina (2022) found that work readiness among final-year students at this university was significantly and negatively associated with anxiety related to entering the workforce, indicating that a considerable proportion of students did not yet feel adequately prepared. A preliminary survey conducted by the researcher on 30 final-year students further supported this pattern, showing that students' work readiness remained at a moderate level, characterized by limited confidence, underdeveloped competencies, low participation in organizational activities, and limited interpersonal and collaborative skills.

At the same time, the demands of the labor market continue to evolve alongside the rapid advancement of digital technology in the era of Industry 4.0 (Schwab, 2018; Ullah et al., 2020). Within this context, digital literacy has emerged as one of the most essential competencies for prospective employees. Hague and Payton (2010) explained that digital literacy encompasses the skills, insight, and understanding that support critical, creative, and safe engagement with digital technology across various aspects of life. Karacay (2017) further argued that employees with strong digital literacy are better able to support effective communication and collaboration in technology-based work environments, while Vrana (2016) added that digitally literate individuals tend to have greater opportunities for promotion and adaptability across different work settings. However, empirical evidence suggests that the level of digital literacy among Indonesian students, including those at Padang State University, remains inadequate. Ashari and Idris (2019) found that the digital literacy of digital-native students, particularly in the aspects of information evaluation and use, was still relatively low, while Erlianti and Ardoni (2019) emphasized that the digital literacy of Generation Z remains far from ideal despite their constant exposure to digital technology.

A number of studies have examined the association between digital literacy and work readiness, yet important gaps remain. Yulianti et al. (2021) found that digital literacy positively influenced the work readiness of prospective accountants, although the study was limited to a single study program. Muliati and Indriani (2024) and Pakpahan and Nikmah (2024) reported similar positive effects, but in both studies digital literacy was examined together with other variables, so its isolated contribution could not be clearly determined. Muliasari and Octoria (2024) and Karimah et al. (2025) likewise found positive relationships between digital literacy and work readiness, but these studies were conducted in different institutional

contexts and did not focus specifically on final-year students across multiple study programs within a single public university. This indicates a genuine research gap, particularly regarding the isolated and cross-program influence of digital literacy on work readiness among final-year students at Padang State University.

Theoretically, digital literacy is assumed to shape work readiness through its contribution to the four dimensions proposed by Caballero et al. (2011), namely personal characteristics, work competence, organisational acumen, and social intelligence. Individuals with strong digital literacy tend to adapt more quickly to new technologies (Falloon, 2020), complete work tasks more effectively (Mercer, 2019), and are better equipped to manage the information, communication, and problem-solving demands of technology-based organizations (Vuorikari et al., 2016). These theoretical propositions provide a strong foundation for examining whether digital literacy meaningfully contributes to final-year students' readiness to enter the workforce. Based on this background, the present study aims to examine the influence of digital literacy on work readiness among final-year students at Padang State University.

METHODS

This study employed a quantitative approach with a simple regression design to examine the influence of digital literacy, as the independent variable, on work readiness, as the dependent variable, among final-year students at Padang State University. The quantitative approach was selected because the research data were numerical in nature and required statistical analysis to determine the direction and magnitude of the relationship between the two variables (Sugiyono, 2019). This design was considered appropriate because the study did not involve any treatment or intervention but rather sought to determine the extent to which digital literacy predicts work readiness among the target population.

The population of this study consisted of all active final-year undergraduate students at Padang State University from the 2019 to 2022 cohorts, totaling 9,966 students based on the university's student records for the January-June 2026 period. The sample was determined using the Isaac and Michael formula with a 5% margin of error and selected through purposive sampling, based on the criteria that respondents were active students, had not yet graduated, were currently completing their undergraduate thesis, and intended to

enter the workforce after graduation. A total of 335 valid responses were obtained from students across nine faculties and were used in the final analysis.

Data were collected through an online questionnaire distributed via Google Forms. Digital literacy was measured using a scale adapted from Nafiah (2023), based on the eight dimensions of digital literacy proposed by Hague and Payton (2010), consisting of 25 valid items with a Cronbach's alpha of 0.855. Work readiness was measured using a scale adapted from Afaf (2022), based on the Work Readiness Scale developed by (Caballero et al., 2011), consisting of 41 valid items with a Cronbach's alpha of 0.965. Both instruments had previously been tested for validity and reliability through a try-out involving 50 final-year students prior to the main data collection. The collected data were analyzed using IBM SPSS Statistics 27. Prior to hypothesis testing, normality and linearity tests were conducted to ensure that the data met the assumptions of parametric statistics. The influence of digital literacy on work readiness was then examined using simple linear regression analysis, with a relationship considered significant if the p-value was less than 0.05.

RESULTS

1. Descriptive Data

The results showed that final-year students' digital literacy was predominantly in the high category, comprising 68.1% (n = 228) of respondents, while the remaining 31.9% (n = 107) were in the moderate category, with no respondents falling into the low category. In contrast, work readiness among the entire sample (100%, n = 335) fell into the moderate category, indicating that although students possessed a foundation of work readiness, it had not yet reached an optimal level.

2. Clasical Assumption Test

a. Normality Test

Table 1. Normality Test

Variable	N	K-SZ	Sig.	Description
Unstandardized Residual	335	0.045	0.092	Normal

Based on Table 1. Normality Test, the results of the normality test on the unstandardized residual of the regression model, the sample size (N) was 335, with a Kolmogorov-Smirnov statistic of 0.045 and a significance value (p) of 0.092. The Shapiro-

Wilk test further supported this finding, with a significance value of 0.318. Since both significance values are greater than 0.05, it can be concluded that the residual data are normally distributed, indicating that the normality assumption for regression analysis has been fulfilled.

b. Linearity Test

Table 2. Linearity Test

Component	Sig.	Description
Linearity	0.000	Linear
Deviation from Linearity	0.570	No significant deviation

Based on Table 2. Linearity Test, the results of the linearity test showed a significance value of 0.000 for the linearity component, indicating a significant linear relationship between digital literacy and work readiness. The deviation from linearity component showed a significance value of 0.570 (≥ 0.05), indicating no significant deviation from linearity. Therefore, the relationship between digital literacy and work readiness can be considered linear, and the linearity assumption has been fulfilled.

3. Hypothesis Test

Table 3. Hypothesis Test

Variable	B	t	p	R^2	Description
Digital Literacy (X) → Work Readiness (Y)	0.279	24.618	0.000	0.645	H1 accepted

Based on Table 3. Hypothesis Test results, the regression coefficient (B) for digital literacy was 0.279, with a t-value of 24.618 and a significance value (p) of 0.000. Since the significance value is less than 0.05, it can be concluded that digital literacy has a significant influence on work readiness, and the resulting regression equation is Y = 106.614 + 0.279X. The coefficient of determination (R^2) of 0.645 indicates that digital literacy accounted for 64.5% of the variance in work readiness, while the remaining 35.5% was explained by other factors outside this study. Therefore, the alternative hypothesis (H1) proposed in this study is accepted.

DISCUSSION

The results of this study indicate that digital literacy among final-year students at Padang State University is generally in the high category, while their work readiness remains

at a moderate level. This finding suggests that although most students are already competent in using digital technology for academic and communicative purposes, this competence has not yet been fully translated into optimal readiness to enter the workforce. This pattern is consistent with the preliminary survey presented in the introduction, which showed that students' confidence, competence development, organizational involvement, and interpersonal skills were still in need of strengthening.

The regression analysis showed a positive and significant influence of digital literacy on work readiness, meaning that the higher the students' digital literacy, the higher their work readiness tends to be. This finding is consistent with the theoretical proposition of Caballero et al. (2011), who explained that work readiness is shaped by personal characteristics, work competence, organisational acumen, and social intelligence. Digital literacy appears to support the development of these dimensions, as students who are more capable of engaging critically, creatively, and safely with digital technology (Hague & Payton, 2010) are also more likely to acquire the technical competence, adaptability, and communication skills that are increasingly valued in technology-based work environments (Karacay, 2017; Vuorikari et al., 2016).

This finding is in line with previous studies showing a positive relationship between digital literacy and work readiness among Indonesian university students. Muliasari and Octoria (2024) found that digital literacy positively influenced the work readiness of economic education students, while Karimah et al. (2025) reported a similar pattern among Generation Z respondents in the context of technological transformation. Pakpahan and Nikmah (2024) also found a positive influence of digital literacy on accounting students' work readiness amid digital disruption. Beyond the Indonesian context, Gao and Gao 2024) found that digital literacy was closely related to the employment ability of vocational undergraduate students, while Simangunsong et al. (2026) reported that digital literacy significantly contributed to final-year students' readiness to enter the workforce. The consistency of these findings across different populations strengthens the argument that digital literacy functions as an important psychological and technical resource that supports graduates' preparedness for professional life.

The influence of digital literacy on work readiness can be further understood through its role in facilitating adaptive learning and effective task performance. Falloon (2020) explained that individuals with strong digital literacy tend to learn and master new

technologies more quickly, as they are already accustomed to adapting to evolving digital systems. Mercer (2019) added that employees equipped with adequate digital skills tend to complete work tasks more effectively and productively. These mechanisms suggest that digital literacy does not merely represent technical proficiency, but also reflects a broader capacity for adaptability, problem-solving, and continuous learning, all of which are central to the concept of work readiness.

Although the contribution of digital literacy to work readiness was substantial (64.5%), the remaining 35.5% of the variance was explained by factors outside this study. According to Yorke and Knight (2004), work readiness is also shaped by understanding, skill, efficacy belief, and metacognition, none of which were directly examined in this study. This suggests that work readiness is a multidimensional construct that cannot be fully explained by digital literacy alone, and that other factors such as internship experience, career motivation, and social support may also play an important role in shaping students' readiness to enter the workforce.

This study has several limitations. First, the sample was selected through purposive sampling, which limits the generalizability of the findings to the broader population of final-year students at Padang State University. Second, the sample was dominated by students from the 2022 cohort, so the findings may not fully represent students who are closer to graduation. Third, this study relied on a cross-sectional design and self-report questionnaires, which may be subject to response bias. Future studies are recommended to include a more balanced cohort distribution, incorporate additional predictors of work readiness, and consider longitudinal or mixed-method designs to obtain a more comprehensive understanding of the phenomenon.

CONCLUSION

Based on the results of this study, digital literacy among final-year students at Padang State University was found to be predominantly in the high category, while their work readiness remained at a moderate level. The findings further showed a positive and significant influence of digital literacy on work readiness, with digital literacy accounting for 64.5% of the variance in work readiness. These results indicate that digital literacy plays a substantial role in strengthening final-year students' readiness to enter the workforce, although it is not the sole determinant of this readiness. Universities, including Padang State University, are

encouraged to strengthen digital-based curricula, career-preparation programs, and internship opportunities to support students' holistic readiness for the labor market. Future research is recommended to examine additional predictors of work readiness and to involve a more representative sample across cohorts and institutions.

REFERENCES

Afaf, A. (2022). *Pengaruh Self-Efficacy terhadap Work Readiness pada Mahasiswa Semester Akhir Universitas Nahdlatul Ulama Indonesia (UNUSIA)* [Undergraduate thesis, Universitas Nahdlatul Ulama Indonesia]. https://repository.unusia.ac.id/id/eprint/82/

Angraini, D. I., Murisal, & Ardias, S. W. (2021). Pengaruh Keterampilan Komunikasi terhadap Kesiapan Kerja Lulusan Sarjana Sumatera Barat. *Al-Qalb: Jurnal Psikologi Islam, 12*(1), 84–100. https://doi.org/10.15548/alqalb.v12i1.2643

Ashari, M., & Idris, N. S. (2019). Kemampuan Literasi Digital Generasi Digital Native. In *Seminar Internasional Riksa Bahasa XIII* (pp. 1355–1362).

Badan Pusat Statistik. (2026, February 24). *Pengangguran Terbuka menurut Pendidikan Tertinggi yang Ditamatkan*. https://www.bps.go.id/id/statistics-table/2/Njc0IzI%3D/pengangguran-terbuka-menurut-pendidikan-tertinggi-yang-ditamatkan.html

Caballero, C. L., Walker, A., & Fuller-Tyszkiewicz, M. (2011). The Work Readiness Scale (WRS): Developing a measure to assess work readiness in college graduates. *Journal of Teaching and Learning for Graduate Employability, 2*(2), 41–54. https://dro.deakin.edu.au/articles/journal_contribution/The_work_readiness_scale_WRS_developing_a_measure_to_assess_work_readiness_in_college_graduates/21006685

Erlianti, G., & Ardoni. (2019). Urgensi Literasi Digital untuk Generasi Z: Studi Kasus SMPN 4 Palembayan, Kabupaten Agam. *Nusantara Journal of Information and Library Studies (N-JILS), 2*(2), 189–204. https://doi.org/10.30999/n-jils.v2i2.723

Falloon, G. (2020). From digital literacy to digital competence: The teacher digital competency (TDC) framework. *Educational Technology Research and Development, 68*(5), 2449–2472. https://doi.org/10.1007/s11423-020-09767-4

Gao, P., & Gao, Y. (2024). How does digital leadership foster employee innovative behavior: A cognitive–affective processing system perspective. *Behavioral Sciences, 14*(5), Article 362. https://doi.org/10.3390/bs14050362

Hague, C., & Payton, S. (2010). *Digital literacy across the curriculum*. Futurelab. https://www.nfer.ac.uk/media/jnhety2n/digital_literacy_across_the_curriculum.pdf

Julianti, Iramadhani, D., & Amalia, I. (2023). Gambaran Kesiapan Kerja pada Mahasiswa Tingkat Akhir Universitas Malikussaleh yang Terkena Dampak Pandemi COVID-19. *INSIGHT: Jurnal Penelitian Psikologi, 1*(4), 732–743. https://ojs.unimal.ac.id/ijpp/article/view/11448

Karacay, G. (2018). Talent development for Industry 4.0. In A. Ustundag & E. Cevikcan (Eds.), *Industry 4.0: Managing the digital transformation* (pp. 123–136). Springer. https://doi.org/10.1007/978-3-319-57870-5_7

Karimah, I., Nuskan Abdi, M., & Mufid, M. (2025). Peran Literasi Digital, Adaptabilitas, dan Self-Efficacy dalam Memengaruhi Kesiapan Kerja Gen Z di Era Transformasi Teknologi. *JMD: Jurnal Riset Manajemen & Bisnis Dewantara, 8*(1), 41–52. https://ejournal.stiedewantara.ac.id/index.php/JMD/article/view/1355

Mercer. (2019). *Global talent trends 2019: Connectivity in the Human Age*. https://www.corporate.marsh.com/assets/insights/publications/2019/feb/gl-2019-global-talent-trends-study.pdf

Muliasari, D., Sudarno, & Octoria, D. (2024). Pengaruh Literasi Digital dan Soft Skill terhadap Kesiapan Kerja Mahasiswa Pendidikan Ekonomi Universitas Sebelas Maret Surakarta. *Oikos: Jurnal Kajian Pendidikan Ekonomi dan Ilmu Ekonomi, 9*(1), 100–107. https://journal.unpas.ac.id/index.php/oikos/article/view/11645

Muliati, Y., & Indriani, E. (2024). Analysis of competencies, soft skills, and digital literacy in the era of technological disruption (study on undergraduate accounting study program students FEB University of Mataram). *Asian Journal of Management, Entrepreneurship and Social Science, 4*(2), 1418–1431. https://ajmesc.com/index.php/ajmesc/article/view/863

Nafiah, N. N. (2023). *Hubungan Literasi Digital dengan Kesiapan Kerja pada Mahasiswa Tingkat Akhir di Universitas Setia Budi* [Undergraduate thesis, Universitas Setia Budi Surakarta]. https://eprints.setiabudi.ac.id/id/eprint/398/

Pakpahan, S. R., & Nikmah. (2024). Kesiapan Kerja Mahasiswa Akuntansi di Era Disrupsi Teknologi Digital: Peran Keahlian Akuntansi, Literasi Digital, Literasi Manusia, dan Adaptabilitas Karir. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah, 6*(4), 4797–4812. https://doi.org/10.47467/alkharaj.v6i4.1037

Pratama, P., & Magistarina, E. (2022). Hubungan Work Readiness terhadap Tingkat Kecemasan Menghadapi Dunia Kerja pada Mahasiswa Tingkat Akhir Universitas Negeri Padang di Masa Pandemi COVID-19. *Jurnal Riset Psikologi, 5*(4), 187–197. https://doi.org/10.24036/jrp.v5i4.14171

Schwab, K. (2018). *The global competitiveness report 2018*. World Economic Forum. https://www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitivenessReport2018.pdf

Simangunsong, E., Martin, & Mutiara, Y. (2026). Pengaruh Literasi Digital, Efikasi Diri, Kecerdasan Emosional, dan Keterampilan Digital terhadap Kesiapan Memasuki Dunia Kerja: Studi Kasus Mahasiswa Tingkat Akhir Program Studi Manajemen Fakultas Ekonomi dan Bisnis Unika Santo Thomas Medan. *Jurnal Manajemen dan Bisnis, 26*(1), 81–92. https://ejournal.ust.ac.id/index.php/JIMB_ekonomi/article/view/6301

Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Ullah, Z., Al-Turjman, F., Mostarda, L., & Gagliardi, R. (2020). Applications of artificial intelligence and machine learning in smart cities. *Computer Communications, 154*, 313–323. https://doi.org/10.1016/j.comcom.2020.02.069

Vrana, R. (2016). Digital literacy as a boost factor in employability of students. In *Information literacy: Key to an inclusive society* (pp. 169–178). Springer. https://doi.org/10.1007/978-3-319-52162-6_17

Vuorikari, R., Punie, Y., Carretero Gomez, S., & Van den Brande, G. (2016). *DigComp 2.0: The digital competence framework for citizens: Update phase 1: The conceptual reference model*. Publications Office of the European Union. https://doi.org/10.2791/11517

Wibowo, A., & Suroso. (2016). Adversity Quotient, Self-Efficacy, dan Kesiapan Kerja Siswa Kelas XII Program Keahlian Multimedia SMKN 1 Kabupaten Jombang. *Persona: Jurnal Psikologi Indonesia, 5*(2), 174–180. https://doi.org/10.30996/persona.v5i02.735

Winterton, J., & Turner, J. J. (2019). Preparing graduates for work readiness: An overview and agenda. *Education + Training, 61*(5), 536–551. https://doi.org/10.1108/ET-03-2019-0044

Yorke, M., & Knight, P. T. (2004). *Learning & employability: Embedding employability into the curriculum*. Learning and Teaching Support Network.

Yulianti, M., Asniati, A., & Juita, V. (2021). Pengaruh Keahlian Akuntansi, Literasi Digital, dan Literasi Manusia terhadap Kesiapan Kerja Calon Akuntan di Era Disrupsi Teknologi Digital. *Ekonomis: Journal of Economics and Business, 5*(2), 449–456. https://doi.org/10.33087/ekonomis.v5i2.389