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MEDIATING GENDER DIVERSITY IN DIGITAL-AGE TEACHER READINESS

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Abstract: This research endeavors to empirically examine the mediating role of the gender diversity issue in influencing the effect of communication skills and technology utilization on readiness for becoming a teacher. The study targeted final-year education students at the Faculty of Economics and Business (FEB), Universitas Negeri Surabaya (UNESA). A quantitative explanatory approach was employed, utilizing the Structural Equation Modeling based on Partial Least Square (PLS-SEM). Data were systematically collected via questionnaires administered to a sample of 132 respondents, determined using a proportional purposive sampling technique based on the criteria of having completed the teaching practice program and having an interest in becoming a teacher. It was established that both communication skills and technology utilization directly and positively impact readiness for becoming a teacher. The key finding centers on the mediating variable, the gender diversity issue, which proved to partially and significantly mediate the effect of communication skills and technology utilization on teacher readiness. This suggests that the technical and communicative competencies of prospective teachers become more effective in enhancing readiness when fortified by sociocultural awareness and sensitivity toward gender diversity issues. The conclusion derived from this study is that developing professional teacher readiness necessitates not only the mastery of pedagogical and technological competencies but also strong integration with inclusive awareness. This research offers a theoretical contribution by positioning the gender diversity issue as a crucial prerequisite that strengthens the dimension of professional readiness in the era of Education 4.0.

Keywords: Communication Skills, Technology Utilization, Gender Diversity Issue, Teacher Readiness.

INTRODUCTION

In the current epoch of globalization, the educational sphere is being deeply revolutionized through the acceleration of modern technology. The advent of Education 4.0 has precipitated a radical shift in the pedagogical landscape, positioning the learner at the epicenter of the instructional process and pivoting the focus from traditional teaching to active learning. This transition aims to provide students with the necessary expertise and capabilities to enable sustainable, long-term self-improvement (Bisri et al., 2023). Within this framework, the teaching readiness of prospective educators no longer rests solely upon the mastery of pedagogical content; rather, it is increasingly contingent upon the cultivation of adaptive and contextual competencies.

Furthermore, communicative proficiency emerges as an indispensable element within this evolving paradigm. As articulated by Bukit et al., (2023) effective communication is a mandatory requisite for educators, serving as a core component of their pedagogical competence. Parallel to linguistic articulation, the strategic utilization of technology has become an inevitable necessity in the contemporary digital age. The holistic assimilation of technology not only heightens interest in the field but also elevates the quality of outcomes within the instructional process (Akram et al., 2022; Schlebusch et al., 2024). Consequently, prospective teachers must possess robust digital literacy to navigate the shift toward flexible and innovative learning models. This imperative is reinforced by Putri & Surjanti, (2024) who assert that the delivery of high-quality, efficacious education is profoundly dictated by the level of teacher professionalism.

The preeminent challenge in the contemporary era resides in ensuring that these technical and communicative competencies are executed within an inclusive framework. Educators are increasingly mandated to cultivate a profound sensitivity toward social issues and diversity, with a particular emphasis on gender inclusivity. A

comprehensive state of teacher readiness necessitates a nuanced sociocultural understanding to ensure impartial and safeguarded learning conditions for all students. Consequently, the present study is undertaken to evaluate whether the communicative proficiencies and technological utilizations of prospective teachers have been effectively integrated with social consciousness prior to their induction into the professional sphere.

Prior scholarly inquiries have predominantly focused on examining the direct influence of communicative proficiency and technological utilization on teaching readiness. The novelty of this research resides in the positioning of gender diversity issues as a mediating variable that interlinks communication skills and technological engagement with the preparedness of prospective educators. Through this conceptual framework, the study offers a pioneering perspective: that technical and communicative competencies exert not only a direct impact on readiness but also an indirect influence mediated by students' inclusive sensitivity. In light of the aforementioned conceptualizations, the research is guided by the following hypotheses.

H1: Communicative proficiency exerts a positive and significant influence on teaching readiness. Effective communication skills enable prospective educators to convey instructional content efficiently, manage classroom dynamics, and cultivate positive interpersonal relationships with students. These elements collectively constitute the essential foundation of professional teaching readiness. This hypothesis aligns with the empirical findings of Astutik & Wulandari, (2021) who posit that a teacher's communicative aptitude is crucial for motivating students, providing clear directives, and fostering active participation. Such competence subsequently reinforces the educator's readiness to manage professional classroom environments. Furthermore, Romanyuk et al., (2022) demonstrate that the enhancement of communicative competence yields a significant impact on a teacher's preparedness to execute both pedagogical duties and leadership responsibilities within the school ecosystem.

H2: The utilization of technology exerts a positive and significant influence on teaching readiness. Mastery of technology empowers prospective educators to innovate within their instructional methodologies, create digitally relevant materials, and adapt to modern learning environments. These capabilities directly enhance both teaching confidence and pedagogical proficiency. The proposed hypothesis resonates with the research conducted by Antonietti et al., (2022) which suggests that teachers who possess digital competence are more inclined to embrace and utilize technology. Such an inclination ultimately bolsters their readiness to manage digital-based instructional processes. Furthermore, as established in the research of Putranti et al., (2024) reinforces the notion that systematically designed teacher professional education focusing on educational technology is highly effective in elevating the technological skills of educators.

H3: The awareness of gender diversity issues exerts a positive and significant influence on teaching readiness. Sensitivity toward gender diversity issues represents a fundamental aspect of psychosocial preparedness. Educators who prioritize inclusivity are capable of establishing learning environments characterized by equality, justice, and minimal discrimination, all of which are hallmarks of professional teaching readiness. This hypothesis aligns with the research of Rguibi et al., (2025) which emphasizes the necessity of targeted professional training to strengthen the competencies of teachers in constructing inclusive and equitable learning atmospheres. Such development effectively bolsters both the psychosocial and professional readiness of educators. Furthermore, Miralles-Cardona et al., (2023) discovered that training and curriculum reflections integrated with gender issues significantly enhance the readiness of teachers to adopt instructional practices that are more inclusive and just.

H4: Communicative proficiency exerts a positive and significant influence on the awareness of gender diversity issues. Effective communication skills facilitate open and critical dialogue, which assists prospective educators in understanding divergent perspectives. These proficiencies enable them to articulate the values of inclusivity, ultimately heightening their sensitivity toward gender diversity issues. This hypothesis is consistent with the assertion that activities requiring cognitive and emotional engagement, such as role-play and instructional planning, strengthen the capacity of teacher candidates to engage in critical dialogue and comprehend diverse gender perspectives (Barrimentos-Saavedra, 2025). Furthermore, research by Tovar-Correal & Pedraja-Rejas, (2025) reinforces that the development of Intercultural Communicative Competence (ICC), which is intrinsically linked to communication skills, empowers teachers to promote interactions that respect gender and cultural diversity. Such competence ultimately supports the realization of an equitable and just educational system.

H5: The utilization of technology exerts a positive and significant influence on the awareness of gender diversity issues. The appropriate application of technology can broaden the access of prospective educators to global resources, case studies, and diverse social perspectives regarding diversity. Such exposure cognitively elevates their awareness toward gender-related issues. This hypothesis aligns with the research of Méndez et al., (2023) which highlights the significance of continuous training in digital competence and inclusive principles to ensure teachers can effectively leverage technology to support diversity. Furthermore, technology facilitates interaction, information dissemination, and more inclusive learning experiences, thereby enhancing the awareness and understanding of teacher candidates regarding gender diversity issues (López-Orozco et al., 2022).

H6: Awareness of gender diversity issues partially mediates the influence of communicative proficiency on teaching readiness. Communication becomes more effective in enhancing readiness when it is utilized to foster inclusive discussions and promote gender equity within the classroom. This hypothesis is consistent with the assertion that the integration of gender perspectives into teacher training elevates the confidence and preparedness of candidates to manage diversity issues in educational settings (Banegas et al., 2020). Moreover, gender-based differences in technological confidence and usage impact the effectiveness of communication and collaboration.

These factors are essential for establishing inclusive learning environments and bolstering overall teaching readiness (Rodríguez-García et al., 2022).

H7: Awareness of gender diversity issues partially mediates the influence of technological utilization on teaching readiness. Technological skills become more meaningful in an instructional context when digital tools are employed to retrieve, analyze, and promote gender-sensitive and inclusive learning materials. This hypothesis aligns with the research of Alieto et al., (2024) which recommends gender-neutral training programs and encourages female participation in technological professional development to create inclusive and gender-fair digital learning environments. Consequently, educational strategies must consider gender backgrounds To facilitate the equitable cultivation of digital expertise and the realization of comprehensive teaching readiness (Moreira-Choez et al., 2024).

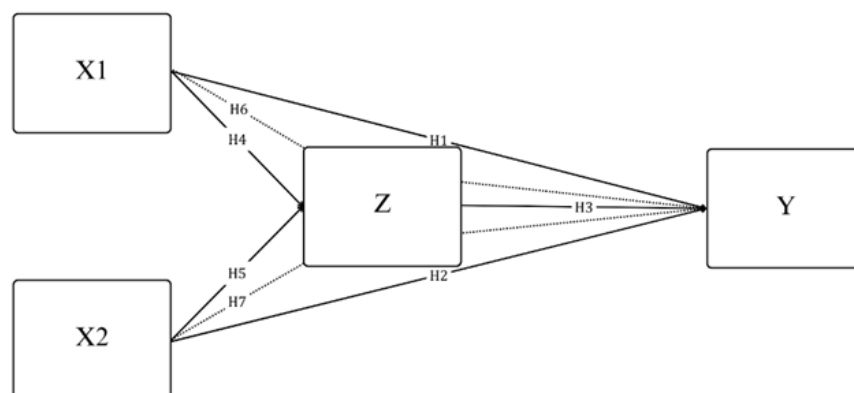
The overarching objective of this research is to empirically examine and analyze the causal relationships between the identified variables. While teacher preparation is well-documented, there remains a significant gap concerning the integration of gender awareness into digital pedagogy. Prior research has examined technical skills as standalone factors, neglecting the role of gender diversity as a vital mediator connecting communicative and technological skills with overall professional preparedness. The primary aim focuses on evaluating the direct influences between the constructs as postulated in hypotheses H1 through H5. Subsequently, the research investigates the mediating role of gender diversity awareness, specifically to assess the partial mediation effects of gender diversity issues in influencing the relationship between communicative proficiency and teaching readiness. Furthermore, this study seeks to verify the partial mediation role of gender diversity awareness in the relationship between technological utilization and teaching readiness, as articulated in hypotheses H6 and H7.

By doing so, this research aims to provide a more holistic understanding of teacher readiness in the Education 4.0 era. Theoretically, this study contributes to Social Cognitive Theory by demonstrating how social factors, such as gender awareness, shape professional outcomes. From a practical standpoint, the findings offer innovations for educational institutions to design training programs that balance technical proficiency with inclusive social sensitivity.

RESEARCH METHODOLOGY

A quantitative methodology featuring an explanatory design is adopted for this study. This methodology was specifically selected to analyze causal relationships and to evaluate the role of mediating variables through Structural Equation Modeling based on Partial Least Squares (PLS-SEM). PLS-SEM was preferred over alternative SEM approaches due to its superior robustness in handling exploratory research and complex models with non-normal data distributions (Hair Jr. et al., 2017). Each construct in this study is operationalized through specific indicators: communication skills focus on interpersonal clarity and message delivery; technology utilization emphasizes the frequency and effectiveness of digital tool integration; gender diversity awareness measures sensitivity toward inclusive classroom practices; and teacher readiness evaluates the candidates' overall self-efficacy and pedagogical preparedness. This analytical framework facilitates a robust assessment of complex inter-variable dynamics and path coefficients within the model. The specific research design implemented for this inquiry is delineated in the following section.

Figure 1. Research Design



Source: Researcher (2025)

The research population encompasses all final-year education students from the Faculty of Economics and Business at Universitas Negeri Surabaya, encompassing the programs of Office Administration Education, Accounting Education, Business Education, and Economic Education. The sampling technique employed is proportional purposive sampling, utilizing specific criteria that include students who have completed teaching practicums and possess a genuine interest in entering the teaching profession. Through this approach, a total of 132 respondents were obtained. By integrating the principles of purposive selection with representative proportions, this method ensures that the sample accurately reflects the inherent diversity of the population (Campbell et al., 2020). Furthermore, the application of proportional purposive sampling enhances methodological precision and data relevance (Memon et al., 2025). The primary data were gathered through the distribution of a questionnaire featuring a five-point Likert scale and consisting of 39 distinct items.

This study relies on Partial Least Squares Structural Equation Modeling (PLS-SEM) to process the data and test the proposed hypotheses, executed through the SmartPLS version 4.0 software. The PLS-SEM analysis encompasses the evaluation of the Measurement Model (Outer Model) to ensure construct validity and reliability, followed by the Assessment of the Structural Model (Inner Model) for hypothesis testing. This structural evaluation includes the analysis of t-statistics and p-values to determine significance, as well as the examination of R² and Q² values to assess the predictive power and relevance of the model. These dual stages of analysis provide a comprehensive validation of the proposed theoretical framework and the empirical strength of the hypothesized paths.

RESULTS AND DISCUSSION

The demographic characteristics of the respondents in this study are categorized by gender, as delineated in the following table.

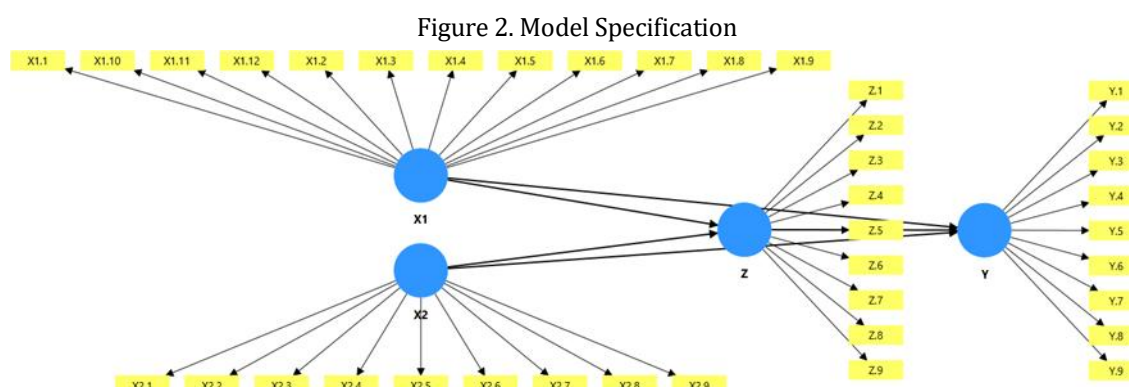
Table 1. Demographic Characteristics of Respondents

Gender	Amount	Percentage
Male	24	18%
Female	108	82%
Total	132	100%

Source: Primary data processed by the researcher (2025)

The data collection process concluded with 132 respondents, a figure that satisfies our required sample size for the analysis. Within this distribution, 24 respondents identified as male (18%), while 108 respondents identified as female (82%). This demographic composition provides the empirical basis for the subsequent stages of statistical analysis.

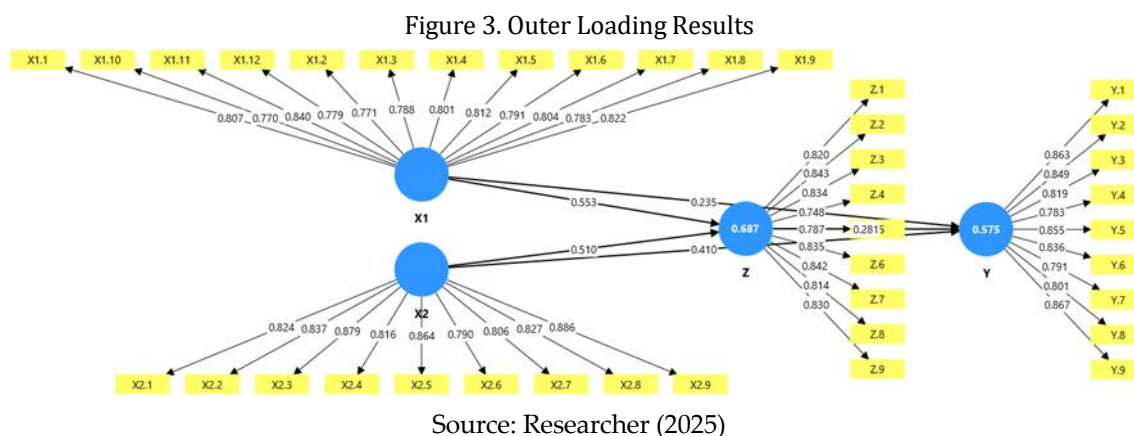
Model specification serves as the fundamental initial step To elucidate the interactions between constructs or latent variables within both the structural and measurement models. This phase involves establishing causal, mediating, or moderating relationships derived from theoretical frameworks. Furthermore, it includes determining the appropriate measurement model type, whether reflective or formative (Hair Jr. et al., 2017). Accordingly, the model specification implemented in the present study is delineated as follows.



Source: Researcher (2025)

The analysis proceeds to the subsequent stage, which involves evaluating the outer loading through validity and reliability tests on the established model to identify the items that are valid and reliable. The validity assessment is

conducted in two stages, comprising convergent validity and discriminant validity. To verify the convergent validity of the constructs, the outer loading value of an indicator on its associated construct should exceed 0.70 and the Average Variance Extracted (AVE) must be greater than 0.50 (Hair Jr. et al., 2017).



Based on Figure 3, it can be observed that the outer loading values for each item satisfy the requirements for convergent validity because all values exceed the threshold of 0.70. Consequently, it is established that the 12 items for the communication skills variable, alongside the 9 items for the technology utilization, teaching readiness, and gender diversity issue variables, have met the necessary criteria. The findings from the Average Variance Extracted (AVE) analysis are summarized in the table below.

Table 2. Average Variance Extracted (AVE) Results

Variable	AVE
Communication Skills (X1)	0.636
Technology Utilization (X2)	0.701
Gender Diversity Issue (Z)	0.668
Teaching Readiness (Y)	0.689

Source: Primary data processed by the researcher (2025)

Based on the Average Variance Extracted (AVE) results in Table 2, it can be observed that the AVE value for each variable exceeds 0.50, which signifies that all variables satisfy the requirements for convergent validity. The analysis then proceeds to the discriminant validity test. The Heterotrait-monotrait ratio of correlations (HTMT) is a modern criterion for assessing discriminant validity within the PLS-SEM framework. Discriminant validity is established when HTMT values remain under 0.90 for similar constructs and do not exceed 0.85 for those that are conceptually distinct (Hair Jr. et al., 2017). The HTMT results for this study are presented in the following table.

Table 3. Heterotrait-monotrait Ratio of Correlations (HTMT) Results

Variable	HTMT
X2 – X1	0.218
Y – X1	0.535
Y – X2	0.667
Z – X1	0.702
Z – X2	0.657
Z – Y	0.733

Source: Primary data processed by the researcher (2025)

Based on the HTMT results in Table 3, it can be observed that all HTMT values for every latent construct relationship within this model are below 0.85. Given these results, the discriminant validity of the model has been established. This signifies that each variable utilized in this study empirically measures a distinct concept that is unique from the other latent constructs in the model.

After the requirements for convergent and discriminant validity have been satisfied, the analysis proceeds to the reliability test. The most commonly utilized measure is composite reliability, which may also be denoted as rho_c. A composite reliability value exceeding 0.70 is considered acceptable (Hair Jr. et al., 2017). The results of the composite reliability assessment for this study are presented in the following table.

Table 4. Composite Reliability (rho_c) Results

Variable	rho_c
Communication Skills (X1)	0.954
Technology Utilization (X2)	0.955
Gender Diversity Issue (Z)	0.948
Teaching Readiness (Y)	0.952

Source: Primary data processed by the researcher (2025)

Based on the composite reliability results in Table 4, it can be observed that each variable demonstrates good reliability because every composite reliability value exceeds 0.70. With both convergent and discriminant validity established, the research framework is validated and prepared for the next stage of data analysis. The subsequent stage involves conducting the assessment of the structural model or the inner model.

According to Hair Jr. et al., (2017) the coefficient of determination R² is the most frequently utilized measure for evaluating the structural model. In the context of structural model evaluation, R² coefficients are interpreted as substantial at 0.75, moderate at 0.50, and weak at 0.25. The outcomes of the R² analysis for this study are summarized in the table below.

Table 5. Coefficient of Determination (R²) Results

Variable	R ²
Gender Diversity Issue (Z)	0.687
Teaching Readiness (Y)	0.575

Source: Primary data processed by the researcher (2025)

Based on the R² results in Table 5, it can be observed that 69% of the variance in the gender diversity issue variable can be explained by the communication skills and technology utilization variables. The remaining 31% of the variance is explained by additional constructs excluded from this research model. Consequently, the R² value for the gender diversity issue variable falls into the moderate category as the value exceeds 0.50.

Regarding the teaching readiness variable, it is found that 58% of this variable can be explained by communication skills and technology utilization. The remaining 42% of the variance is accounted for by variables not captured within this specific model. Therefore, the R² value for the teaching readiness variable is also classified as moderate because it exceeds 0.50.

The next stage of analysis involves evaluating the f² effect size to determine the contribution of a specific exogenous construct to the R² of an endogenous construct. Evaluating these values determines the substantive impact of each predictor, measuring whether its omission leads to a small, medium, or large shift in the outcome variable. According to Hair Jr. et al., (2017) the interpretation of a large effect is a value exceeding 0.35, a medium effect exceeds 0.15, a small effect exceeds 0.02, and no effect is represented by a value below 0.02. In this study, the f² effect size results are found as follows.

Table 6. Effect Size (f²) Results

Variable	f ²
X1 – Y	0.064
X1 – Z	0.932
X2 – Y	0.211
X2 – Z	0.791
Z – Y	0.058

Source: Primary data processed by the researcher (2025)

Based on Table 6, it can be observed that communication skills have a small effect on teaching readiness, as indicated by an f² value of 0.064. However, communication skills demonstrate a large effect on the gender diversity issue with an f² value of 0.932. The influence of technology utilization on teaching readiness shows a medium effect with an f² value of 0.211. Meanwhile, technology utilization has a large effect on the gender diversity issue with an f² value of 0.791. Furthermore, the gender diversity issue is found to have a small effect on teaching readiness with an f² value of 0.058.

After determining the f² results, the subsequent step is to test the predictive relevance Q². A path model possesses predictive relevance for a selected reflective endogenous construct if the Q² value is greater than 0, whereas a Q² value below 0 implies that the structural model does not possess sufficient predictive relevance (Hair Jr. et al., 2017). The Q² results for this study are presented as follows.

Table 7. Predictive Relevance (Q²) Results

Variable	Q ²
Gender Diversity Issue (Z)	0.671
Teaching Readiness (Y)	0.533

Source: Primary data processed by the researcher (2025)

Based on the results in Table 7, it is found that the Q² values for both the gender diversity issue and teaching readiness variables exceed 0, indicating that both variables possess strong predictive relevance. To test the hypotheses, it is necessary to examine the path coefficients, t-statistics, and p-values. With a significance level of 0.05, a hypothesis is accepted if the t statistic is greater than 1.96 and the p value is less than 0.05 (Hair Jr. et al., 2017). The hypothesis testing results for this study are presented in the following table.

Table 8. Path Coefficients Results

Variable	Path Coefficients	t-statistics	p-values
X1 – Y	0.073	3.208	0.001
X2 – Y	0.069	5.952	0.000
Z – Y	0.095	2.959	0.003
X1 – Z	0.056	9.962	0.000
X2 – Z	0.058	8.760	0.000

Source: Primary data processed by the researcher (2025)

According to the results in Table 8, communication skills exert a positive and significant influence on teaching readiness. This is evidenced by a t-statistics of 3.208, which surpasses the required 1.96, and a p-values of 0.001, which remains below the 0.05 significance level. This finding demonstrates that for prospective teachers, the ability to communicate effectively, which is an integral part of pedagogical competence, serves as a direct foundation that enhances their readiness to perform professional teaching duties. This outcome is consistent with the study conducted by Rahmanto et al., (2021) which states that student communication skills are vital for professional readiness, including the teaching profession. Furthermore, research by Kharousi et al., (2025) also indicates that communication skills

significantly influence the teaching readiness of prospective teachers, contributing 39.5 percent to the variance in readiness.

Furthermore, technology utilization also exerts a positive and significant influence on teaching readiness, as evidenced by a t-statistics of 5.952 which exceeds 1.96 and a p-values of 0.000 which is below 0.05. In relation to the background of students in the Faculty of Economics and Business education programs at UNESA which demands digital literacy, this finding confirms that mastery of technology enables respondents to innovate in teaching methods, create relevant materials, and enhance teaching confidence in the digital era. This result is supported by research from Fauziah & Wulandari, (2022) which states that the use of technology based e modules is considered valid and highly feasible, thereby supporting teacher readiness in modern learning. Additionally, Almusawi & Durugbo, (2024) also state that the fit between task technology and teaching innovation is strongly related to teacher readiness to use technology, as demonstrated through empirical results that support a positive and significant influence.

The analysis continues with the gender diversity issue, which also exerts a positive and significant influence on teaching readiness, as indicated by a t-statistics of 2.959 which exceeds 1.96 and a p-values of 0.003 which is below 0.05. This finding indicates that sensitivity toward gender diversity issues is a vital aspect of psychosocial readiness. Inclusive prospective teachers are able to create a fair learning environment with minimal discrimination, which is a characteristic of professional readiness. This result is supported by the research of Sukamto et al., (2024) which states that the application of gender responsive pedagogy strengthens the understanding and skills of prospective teachers in creating a fair and inclusive learning atmosphere, thereby enhancing their readiness to become professional educators. Lassibille & Gómez, (2022) also emphasize the importance of policies that encourage gender diversity in schools, as a more gender diverse work environment can improve teacher satisfaction and readiness in performing their professional duties. Consequently, gender diversity is proven to be an important factor influencing the readiness and well being of teachers across various educational contexts.

Furthermore, communication skills exert a statistically significant positive impact on the gender diversity issue, as evidenced by a t-statistics of 9.962 which exceeds 1.96 and a p-values of 0.000 which is below 0.05. This finding demonstrates that effective communication facilitates open and critical dialogue, which is essential for understanding different perspectives and increasing sensitivity toward gender diversity issues. This result is supported by Toyosi & Adewunmi, (2025) who state that targeted communication, such as campaigns and the use of inclusive language, is capable of shaping social perceptions and behaviors related to gender roles. Consequently, proficient communication skills are vital for overcoming barriers and promoting the creation of a more gender equal work environment. Without effective communication skills, efforts to establish gender diversity will likely struggle to succeed. Open and direct communication helps leaders and management understand the importance of diversity, thereby creating a more inclusive and productive work environment (Velar & Kee, 2024).

Lastly, technology utilization exerts a positive and significant influence on the gender diversity issue, as evidenced by a t-statistics of 8.760 which exceeds 1.96 and a p-values of 0.000 which is below 0.05. This finding proves that technology can expand the access of prospective teachers to global resources and social perspectives related to diversity, thereby cognitively increasing their awareness of gender issues. This result is supported by Wu & Liu, (2025) who emphasize that gender diversity enhances digital innovation and reduces financial barriers, thus strengthening the role of technology in creating a more inclusive and diverse work environment. Research by Živković et al., (2024) also indicates that gender diversity in leadership contributes significantly to technology adoption and the creation of an inclusive work culture, which further reinforces the positive relationship between technology utilization and the gender diversity issue.

After determining the path coefficients, Hair Jr. et al., (2017) explain that mediation occurs when a third mediator variable acts as an intermediary between two other related constructs, and the direct relationship between the exogenous and endogenous constructs is affected. The results for the indirect hypothesis testing are presented in Table 9.

Table 9. Mediation Test Results

Variable	Path Coefficients	t-statistics	p-values
X1 – Z – Y	0.054	2.851	0.004
X2 – Z – Y	0.053	2.707	0.007

Source: Primary data processed by the researcher (2025)

and teaching readiness is strengthened through the role of the gender diversity issue, as evidenced by a *t* statistic of 2.851 which exceeds 1.96. Effective communication does not only have a direct impact but becomes more effective in enhancing readiness when utilized to create inclusive discussions and promote gender equity in the classroom. This finding indicates that the communication of prospective teachers becomes more effective in improving readiness when used to facilitate inclusive dialogue and advocate for gender equality in educational settings. Teaching readiness is not solely influenced by how well they communicate but also by the understanding and application of gender equity principles in education. This result is supported by Septiyanti & Fajriah, (2021) who state that when effective communication is used to create inclusive discussions, it enhances not only communication skills but also the readiness of students to become teachers capable of promoting gender equity. Tovar-Correal & Pedraja-Rejas, (2025) also emphasize that gender and ethnic diversity can strengthen their ability to create inclusive and effective interactions in the classroom. Consequently, teaching readiness is influenced not only by communication skills but also by the understanding and implementation of gender equity principles within educational practices.

Similarly, the positive relationship between technology utilization and teaching readiness is strengthened through the role of the gender diversity issue, with a *t*-statistics of 2.707 confirming that the value is above 1.96. Technological skills become more meaningful in the teaching context when digital tools are used to search for, analyze, and promote gender sensitive and inclusive learning materials. This finding demonstrates that technological skills gain greater significance in teaching when digital instruments are utilized to facilitate inclusive learning resources. The utilization of digital technology must be adaptive and responsive to diverse student needs, including gender contexts. This result is supported by Hamidah & Wulandari, (2021) whose research shows that utilizing digital technology in assessment not only improves the higher order thinking skills of students but also receives highly positive responses. This indicates that technology use can strengthen teacher readiness in managing adaptive and responsive learning for diverse student needs. Other research by Handayani & Wulandari, (2023) found that the use of digital e modules allows teachers to organize learning materials that are more inclusive and sensitive to diversity, thereby reinforcing teacher readiness in facing twenty first century learning challenges that demand gender equity and inclusivity.

The findings of this research as a whole are strengthened and can be explained through the Social Cognitive Theory (SCT) developed by (Bandura & Jourden, 1991) specifically the concept of Triadic Reciprocal Determinism. SCT emphasizes that outcomes such as teaching readiness (which is a manifestation of high professional self efficacy) are not influenced by a single factor alone but result from a reciprocal interaction between personal or cognitive factors, behaviors, and environmental or social factors. Communication skills and technology utilization represent the personal and behavioral factors that prospective teachers must master as a fundamental asset. However, in accordance with the key findings of this study, the direct influence of these skills on teaching readiness becomes more effective and robust when mediated by the gender diversity issue which serves as a crucial environmental or social factor. In the context of modern education, environmental factors demand that prospective teachers are not only technically competent but also adaptive and sensitive toward diversity and equality issues. Consequently, the gender diversity issue becomes an environmental norm that determines the successful transformation of skills into professional teaching readiness. This confirms that to achieve high levels of readiness, prospective teachers need to integrate their technical competencies with relevant sociocultural awareness in alignment with the SCT framework.

Furthermore, the findings of this study align with (Schunk & DiBenedetto, 2020), who posit that individual behavior is influenced by the dynamic interaction between personal factors and the social environment. By demonstrating that gender diversity awareness mediates the development of teacher readiness, this research advances the theory by integrating social inclusivity as a cognitive filter for technical skills. This carries significant theoretical implications for digital education, suggesting that readiness is not merely a technical achievement but a socio-technical construct, wherein inclusive values amplify the impact of both digital and communicative competencies.

CONCLUSION

Based on the results of the analysis and discussion in this study, all seven hypotheses are accepted. Regarding direct effects: (1) Communication skills exert a positive and significant influence on teaching readiness. Effective communication ability serves as a direct foundation that enhances the professional readiness of prospective teachers. (2) Technology utilization has a positive and significant impact on teaching readiness. Technological mastery enables innovation in teaching methods and increases teaching confidence in the digital era. (3) The gender diversity issue significantly and positively influences teaching readiness. Sensitivity toward gender diversity issues as a psychosocial readiness aspect is essential for creating fair and inclusive learning environments. (4) Communication skills exert a positive and significant influence on the gender diversity issue. Effective communication facilitates open and critical

dialogue necessary for increasing sensitivity toward gender diversity. (5) Technology utilization has a positive and significant impact on the gender diversity issue. Technology expands the access of prospective teachers to resources and social perspectives, thereby cognitively enhancing their awareness of gender issues. Furthermore, regarding the indirect effects: (6) The positive relationship between communication skills and teaching readiness is strengthened through the role of the gender diversity issue. Communication becomes more effective in improving readiness when utilized to create inclusive discussions and promote gender equity. (7) The positive relationship between technology utilization and teaching readiness is strengthened through the role of the gender diversity issue. Technological skills become more meaningful when digital tools are used to search for, analyze, and promote gender sensitive and inclusive learning materials.

A key implication arising from the results of this study is that the Faculty of Economics and Business (specifically Office Administration Education, Accounting Education, Business Education, and Economics Education) must integrate the gender diversity issue into learning practices, as this awareness is proven to be an indirect path that strengthens teaching readiness influenced by communication skills and technology utilization. The education programs at FEB UNESA need to ensure that technology courses do not only teach basic software but also focus on technology applications for inclusive pedagogy (for instance, creating gender responsive teaching materials). Therefore, the assessment of prospective teachers is not sufficient if it only measures subject matter mastery and technological operational skills, it must also include an evaluation of their ability to implement gender responsive pedagogy and manage inclusive classroom dynamics. By ensuring that communication courses teach critical dialogue and technology courses teach the creation of gender sensitive materials, the FEB UNESA Education Programs can strategically use the gender diversity issue as an environmental norm that determines the successful conversion of basic competencies into high professional readiness. This is in alignment with Social Cognitive Theory principles which emphasize that learning and professional competence development occur through reciprocal interaction between individuals, behavior, and their social environment, including norms and gender diversity as part of that environment (Schunk & DiBenedetto, 2020). Consequently, implementing gender diversity issues as a strategic environmental norm in the FEB UNESA Education Programs can enhance learning effectiveness and professional development through mutually influencing social cognitive mechanisms. This step ultimately aims to address the greatest challenges of modern education, which is to produce graduates who not only master pedagogical and technological competencies but also possess strong inclusive awareness. The primary implication is to produce teachers and graduates who are not only technically and digitally competent but also socioculturally mature.

Based on the findings of this study, future researchers are suggested to conduct several further explorations. This includes testing the relationships between these variables in different populations outside the student environment of the education programs at FEB UNESA. Future researchers could also explore the roles of other mediating or moderating variables that may be relevant to provide a more comprehensive understanding of the factors influencing teaching readiness. Furthermore, future studies may benefit from a mixed-methods design, integrating qualitative interviews to gain a deeper understanding of how future educators translate gender diversity awareness into their communicative and technological activities. Although this study provides novel insights, it is subject to certain limitations. The sample was restricted to students from a single faculty at UNESA, specifically the Faculty of Economics and Business, which may limit the generalizability of the findings to other disciplines or geographic regions. Additionally, the cross-sectional nature of the data captures only a single point in time. Consequently, future research should employ longitudinal designs to track the evolution of teacher readiness and gender sensitivity as candidates transition into their professional teaching careers.

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