

Moderating Factors in the Relationship between Institutional Environment and Teacher Digital Entrepreneurship Competency in Vocational Schools

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ABSTRAK

Pendidikan kewirausahaan digital merupakan proses penting bagi wirausaha digital di era transformasi digital yang semakin masif. Guru merupakan salah satu elemen kunci yang harus memiliki kompetensi yang memadai dalam mengajar kewirausahaan digital. Tujuan penelitian adalah untuk menganalisis faktor-faktor yang mempengaruhi kompetensi kewirausahaan digital guru yang berasal dari peran lingkungan institusi sekolah serta latar belakang kepemilikan usaha dan gender. Penelitian ini merupakan penelitian kuantitatif dengan metode survei dan teknik pengumpulan data menggunakan kuesioner. Survei dilakukan pada 11 SMK yang terdiri dari 81 guru kewirausahaan. Hasil penelitian menunjukkan bahwa dukungan lingkungan institusi berupa aspek kognitif, normatif, dan regulatif sangat berpengaruh pada kompetensi kewirausahaan digital yang dimiliki oleh guru kewirausahaan. Pengaruh lainnya dapat dilihat dari faktor internal (latar belakang kepemilikan usaha dan gender), namun pengaruh tersebut memiliki signifikansi yang rendah dalam mempengaruhi kompetensi kewirausahaan digital guru. Peneliti selanjutnya dapat melakukan eksplorasi yang lebih luas terkait faktor-faktor lainnya yang dapat mempengaruhi kompetensi kewirausahaan digital guru.

ABSTRACT

Entrepreneurship education is a crucial process for digital entrepreneurs in the era of escalating digital transformation. Teachers represent one of the key elements who must possess adequate competencies in teaching digital entrepreneurship. The research aims to analyze the factors influencing the digital entrepreneurship competence of teachers derived from the institutional school environment and the background of business ownership and gender. This research is a quantitative study employing survey methodology, and data collection techniques involving the use of questionnaires. The survey was conducted in 11 Vocational High Schools, comprising 81 teachers. The research findings indicate that institutional environmental support in the form of cognitive, normative, and regulative aspects significantly influences the digital entrepreneurship competence possessed by entrepreneurship teachers. Other influences can be observed from teachers' internal factors (entrepreneurial background and gender), however, these influences have low significance in affecting teachers' digital entrepreneurship competence. Researchers may conduct broader explorations regarding other factors that may influence teachers' digital entrepreneurship competence

1. INTRODUCTION

In the era of Industry 4.0, digital entrepreneurship has gradually been recognized as a crucial instrument for bringing innovative values to a nation's integration and development (Oztemel & Gursev, 2020; Pham, Nguyen, Tran, Mai, & Nguyen, 2023). Engaging in entrepreneurship at a young age can serve as a solution to encourage the creation of sustainable entrepreneurs and job opportunities (Bakry, Khalifa, & Dabab, 2019; Chigunta, 2017). Digital entrepreneurship education is a vital process for digital entrepreneurs (Trongtorsak, Saraubon, & Nilsook, 2021). A background of strong experience and education enhances the likelihood of achieving entrepreneurial milestones and success in digital business

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(Ratzinger, Amess, Greenman, & Mosey, 2018; Zaheer, Breyer, Dumay, & Enjeti, 2019). Entrepreneurship education implemented in secondary schools has proven effective in enhancing competencies, entrepreneurial intentions (Kim, Kim, Lee, & Joung, 2020), and entrepreneurial mindset (Handayati, Wulandari, Soetjipto, Wibowo, & Narmaditya, 2020). One indicator of successful entrepreneurship education is the focus on teachers' abilities to encourage students to be independent, creative, innovative, and proactive in creating job opportunities through entrepreneurship (Handayati et al., 2020; Yohana, 2020). However, research on digital entrepreneurship education has not extensively analyzed the subject of teachers as educators. Researchers recommend that future research on entrepreneurship competence be examined from the perspective of teachers in their teaching roles (Ferrerias-Garcia, Sales-Zaguirre, & Serradell-López, 2021; Stenholm, Ramström, Franzén, & Nieminen, 2021). Teachers play a pivotal role in the education system, holding significant responsibility for guiding and educating the younger generation (Keyhani & Kim, 2021). The Ministry of Education and Culture of Indonesia's 2022 data, reveals that only about 38% of teachers in Indonesia have ICT competency certification. This data is supported by the results of teacher competency tests in Indonesia in 2022, indicating that teachers only scored 54.05 out of the threshold of 70, with vocational school teachers having lower competency scores compared to high school teachers (Kemendikbud, 2022). Student involvement in entrepreneurship learning in vocational schools is much higher than in general schools (Hoang, Le, Tran, & Du, 2020; Ni & Ye, 2018). Factors influencing teacher competence include professional training, new teaching methods, support for entrepreneurial practices and culture, and policy support (Yangjie-Huang, An, Liu, Zhuo, & Wang, 2020). Research on entrepreneurship education increasingly emphasizes the importance of the institutional environment within educational institutions, and researchers unanimously agree on its significance (Elert & Henrekson, 2021; Ferreras-Garcia et al., 2021). Educational institutions exhibit varying qualities in integrating digital aspects (Chaurasia, Kodwani, Lachhwani, & Ketkar, 2018). The institutional theory supports the environmental factors of institutional settings in influencing the digital entrepreneurship competence of teachers. This theory emphasizes the role of institutions in the form of regulations, norms, and cognitive aspects in guiding individuals, explaining how practices and organizational structures are accepted by members (Aldrich & Fiol, 1994; Scott, 2013).

Strong environmental support for entrepreneurship has a significant positive effect on the cognitive dimension and performance of teachers in influencing their competencies (Prihatini, Arafat, & Mulyadi, 2020; Urban, 2016). Institutions need to provide broad and adequate internet connectivity in education so that teachers can learn appropriate teaching techniques and strategies (Paliwal & Singh, 2021). Research results state that teacher acceptance of digital aspects will be strengthened by supportive institutional actions, as there will be an improvement in their technology and pedagogy literacy (Millidonis, Lois, Georgiou, & Tsoukatos, 2023). Furthermore, institutions that provide specialized training related to digital skills can appreciate both teacher competence and its impact on the education design to be used (Kirkova-Bogdanova, 2021). Effective institutional policy support is one of the factors associated with improving teacher competence in entrepreneurship education (Rasmussen, Mosey, & Wright, 2014; Yangjie-Huang et al., 2020). In addition to institutional environmental support, the background of teachers can shape their perceptions of entrepreneurship education and how they apply it in teaching (Galán-Muros, van der Sijde, Groenewegen, & Baaken, 2017). Internal factors in the form of teacher backgrounds can influence teachers' perceptions of the interest and importance of entrepreneurship education (Hämäläinen, Joensuu-Salo, Peltonen, & Raappana, 2022) and the choice of teaching methods that teachers will use (Joensuu-Salo, Peltonen, Hämäläinen, Oikkonen, & Raappana, 2021). Entrepreneurial experience is closely related to digital business capabilities (Zaheer et al., 2019). These factors are related to the influence of gender on direct business experience, where research results state that women play a larger role in enhancing entrepreneurial competence (Goel, Göktepe-Hultén, & Ram, 2015). Individual digital competence can be differentiated by gender (Lane & Lyle, 2011; Lissitsa, Chachashvili-Bolotin, & Bokek-Cohen, 2017). Conversely, other research results state that women are at risk of falling behind in the digital society (Lister, 2020). The magnitude of the gender impact on competence in specific fields has a small but positive effect (Şen & Yildiz Durak, 2022). There is a need for future research that goes further in measuring digital competence professionally for both men and women (Sánchez-Canut, Usart-Rodríguez, Grimalt-Álvaro, Martínez-Requejo, & Lores-Gómez, 2023).

However, other research suggests different results regarding the influence of institutional environmental factors on the teaching of digital entrepreneurship by teachers. The findings of a study showed less support the view that the institutional environment can stimulate the entrepreneurial behavior of educators (Alves, et al., 2019). The cognitive system conditions in educational institutions have a low impact on entrepreneurial interest (Yangjie-Huang & Bu, 2023). Insignificant relationships also appear between facility support and the use of technology by teachers in learning (Habibi et al., 2023). Categorizes external factors (institutional school environment) and internal factors (teacher background)

influencing teachers' perceptions of the importance of entrepreneurship education (Hämäläinen et al., 2022). An empirical analysis also states that entrepreneurship is not a gender-neutral phenomenon, so gender differences will affect entrepreneurial tendencies (Goel et al., 2015). This research is conducted to help bridge the gap in previous research findings and realize the transformation of digital entrepreneurship in education that is more suitable to meet the needs of the current era. Although educational institutions understand the importance of teacher competence success factors, it has not fully aligned with the expectations and business world implementation (Gupta, Seetharaman, & Maddulety, 2020). There is still limited research analyzing these factors in the focus of teaching, especially in vocational schools. Hence, this research brings novelty to the field. Thus, the specific focus and objective of this research are to analyze the role of the school institution environment in influencing the digital entrepreneurship competencies of teachers, considering other supporting factors such as business ownership background and gender. Identifying the digital entrepreneurship competencies possessed by vocational school teachers is expected to serve as a guideline for enhancing their capacity in the long-term education system.

2. METHOD

The research approach used was quantitative, employing a survey research method. The survey method in this research pertained to the collection of data on all variables among vocational high school entrepreneurship teachers. The statistical analysis methods utilized in this study were linear regression and Moderated Regression Analysis (MRA), aided by the implementation of IBM SPSS Statistics 27 for Windows. The data for this research were primary data collected from 11 Vocational High Schools in Brebes Regency, Central Java, Indonesia, during the academic year 2023/2024. Although the regency has the highest number of vocational high schools (91), it has limited numbers of teachers and the lowest teacher competence (58,53) from the government-set threshold of 70. Based on this, further research was conducted to analyze the factors influencing the digital entrepreneurship competence of vocational high school teachers. Sampling was conducted using a purposive sampling technique, based on specific criteria to align with the research objectives. These criteria included: (1) targeted vocational high schools having a concentration in digital business expertise, hence sharing similar institutional environmental components, and (2) teachers teaching entrepreneurship subjects within the digital business expertise concentration. Researchers officially distributed online questionnaires to schools as a data collection tool, with the process assisted by the regional education authorities and school management. Consequently, data were obtained from 81 teachers from several schools in the relevant area. Table 1 shows the demographic data of the research sample. The data were obtained through a questionnaire, which the researchers developed based on several previous studies.

The questionnaire development initially involved translation from English to Indonesian by language experts to ensure language consistency. Subsequently, validity and reliability tests were conducted outside the research sample, whereby invalid items were eliminated. Using a significance level of 0,05 and a data count of 81, a critical value of r -table of 0,228 was obtained, leading to the conclusion that all items were valid as they exhibited Pearson correlation values (r -calculated) $> 0,228$. The final version of the questionnaire was administered to respondents in the form of a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). *Institutional Environment*. The 15 measurement items were adopted from (Dai, 2023; Zhuang & Sun, 2023). Institutional environment (IE) constitutes a set of cognitive, normative, and regulative aspects that form a system within an organization, exerting pressures or constraints that can influence individual competence (Sambharya & Musteen, 2014). An example questionnaire item used was "My school provides adequate digital entrepreneurship teaching equipment," with a Cronbach's alpha of 0,935. *Teacher Digital Entrepreneurship Competency*. The 19 measurement items were adopted from (González & Wagenaar, 2006; Joensuu-Salo, Peltonen, & Hämäläinen, 2023). Digital Entrepreneurship Competence (DEC) encompasses a holistic coverage of cognitive, affective, and conative components possessed by teachers related to digital entrepreneurship aspects such as identifying business opportunities, action planning, initiative, and collaboration, as well as digital management and security (Chen-Li & Ifenthaler, 2023). An example questionnaire item used was "I have innovative ideas that can be turned into digital entrepreneurship projects in the future," with a Cronbach's alpha of 0,924. *Gender dan Business ownership*. Both were defined as dummy variables, with data obtained directly from the questionnaire. Respondents were assigned a value of 1 if they were female or 0 if they were male. Furthermore, respondents were assigned a value of 1 if they owned their own business or 0 if they did not own their own business.

Table 1. Demographic of Sample

Category	Frequency	Percentage (%)
Gender		
Male	32	39,5
Female	49	60,5
Age		
< 25 years old	4	5,0
25 - 35 years old	27	33,3
36 - 45 years old	23	28,4
> 45 years old	27	33,3
Last Educational Background		
Diploma (D3)	1	1,2
Bachelor's Degree (D4/S1)	75	92,6
Master's Degree (S2)	5	6,2
Doctoral Degree (S3)	0	0,0
Length of Work Experience (as a Teacher)		
< 1 year	2	2,5
1 - 5 year	18	22,2
6 - 10 year	20	24,7
> 10 year	41	50,6
Training Experience (Digital Entrepreneurship)		
Yes	64	79,0
No	17	21,0
Business Ownership (Entrepreneurship)		
Yes	59	72,8
No	22	27,2

3. RESULT AND DISCUSSION

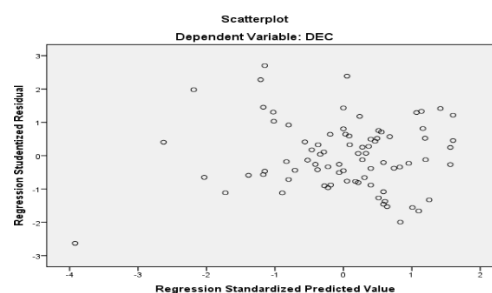
Result

Before testing the moderation model, preliminary statistical analysis was conducted to test for assumptions of normality, heteroskedasticity, and linearity. One method used to test the normality of the data was the Kolmogorov-Smirnov test on the research sample, yielding a significance value of 0,200 ($>0,05$). This indicates that the data are normally distributed and meet the normality assumption for further regression analysis. The results of the normality test are shown in Table 2.

Table 2. Normality Test Results

Variabel	One Sample Kolmogorov-Smirnov		
	Df	Statistik	Sig.
IE dan DEC	80	0.066	0.200

Heteroskedasticity refers to systematic changes in the spread of errors (residuals) within a regression model and can affect the reliability of regression results (Sheng, 2008). The results of the heteroskedasticity test are displayed in Figure 2. In the graph, the points are scattered both above and below and spread randomly without a specific pattern. This indicates that there are no symptoms of heteroskedasticity in the data, or the data used are homogenous.

**Figure 2.** Heteroscedasticity Test Results

Furthermore, the researcher conducted a linear diagnostic test to examine whether there are serious linearity problems in the relationship between the independent variable and the dependent variable. In this study, IE is the independent variable and DEC is the dependent variable. Based on the results of the Linearity test, a significance score of 0,000 ($<0,05$) and a Deviation from the Linearity score of 0,249 ($>0,05$) were obtained. This indicates a linear relationship between the variables tested in this study. The results of the linearity test can be seen in Table 3.

Table 3. Linearity Test Results

Independent Variable	Dependent Variable	Sig. Linearity	Sig.Deviation from Linearity
IE	DEC	0.000	0.249

Hierarchical regression analysis was employed to determine the contribution of each variable by introducing the variables at each testing level (model). Table 4 displays the results of the hierarchical regression analysis, consisting of 4 sequential models. Based on this table, the researcher conducted regression on the main variable, namely IE against DEC, resulting in model 1 which has a positive coefficient value of 0.793, a t-count value of 9.616 with a significance of 0.000 ($<0,05$). In model 1, an R-squared value of 0,533 was obtained, indicating that IE's influence on DEC is 53,3%, with 46,7% influenced by other variables. To identify other variables affecting DEC, the researcher added control variables in model 2. Regression in model 2 was applied to the main variable by adding control variables (education, years of experience, training, and age). In model 2, the R square value was obtained, namely 0.535, which only shows an increase of 0.025, meaning that the presence of the control variable only increases the effect by 2.5%. This indicates that the control variables added did not provide a significant increase in IE's influence on DEC. In model 3, after adding Gender and interaction variables between IE and Gender, an R-squared score of 0,527 was obtained with an increase of 0.005. Meanwhile, in model 4 adding BO and interaction variables between IE and BO, an R-squared score of 0,537 was obtained with an increase of 0.020. These results also indicate that moderation variables (Gender and BO) are not able to provide a significant increase in the influence of EI on DEC, respectively the influence given is only 0.5% and 2%.

Table 4. Results of Hierarchical Regression Analysis

	Model 1	Model 2	Model 3	Model 4
Main Variable				
Institutional Environment (X)	0.793*** (9.616)	0.787*** (9.107)	0.717*** (6.076)	0.486** (2.729)
Control Variables				
Age	-	-1.703 (-1.100)	-1.771 (-1.122)	-1.862 (-1.190)
Last Educational Background	-	6.143 (1.724)	6.569 (1.802)	6.750 (1.869)
Length of Work Experience	-	1.726 (1.080)	1.860 (1.132)	1.909 (1.160)
Training Experience	-	-0.724 (-0.308)	-0.722 (-0.304)	-0.082 (-0.034)
Moderating Variables				
Gender	-	-	-8.138 (-0.817)	-15.813 (-1.463)
Business Ownership	-	-	-	-18.307 (-1.681)
X_Gender	-	-	0.148 (0.874)	0.276 (1.510)
X_Business Ownership	-	-	-	0.332 (1.795)
Constant	25.991*** (4.709)	13.678 (1.710)	16.362 (1.818)	29.045 (2.392)
N	81	81	81	81
R	0.734	0.751	0.754	0.767
R square (R ²)	0.533	0.535	0.527	0.537
R square Change	0.539	0.025	0.005	0.020

Note: *** when $p < 0.001$; ** when $p < 0.010$; * when $p < 0.050$; Source: researcher data processing

From a practical standpoint, the F-test is utilized to determine the simultaneous influence of all independent variables on the dependent variable. Table 5 displays the results of the F-test across the 3 models in this study.

Table 5. F-test Calculation Results

Model	F	Sig.
Model 1	92.466	0.000
Model 2	19.386	0.000
Model 3	13.744	0.000
Model 4	11.294	0.000

Based on the results of the F-test in model 1 with IE as the independent variable, a significance of 0,000 ($<0,05$) was obtained, indicating that IE significantly influences DEC. In model 2, by including IE as well as Education, Years of Experience, Training, and Age as control variables, a significance score of 0,000 ($<0,05$) was obtained, indicating that all variables simultaneously significantly influence DEC. In models 3 and 4, by including IE, Gender, BO, interaction variables, and control variables, a significance score of 0,000 ($<0,05$) was obtained, indicating that all variables simultaneously or together can significantly influence DEC. Based on the t-tests observed in Table 4, within model 4 by including all variables, control variables, and interaction variables in the study, it is found that IE significantly influences DEC with a significance of 0,008 ($<0,05$). Then, the control variable Age has a significance of 0,238 ($>0,05$), Education with a significance of 0,066 ($>0,05$), Years of Experience with a significance of 0,250 ($>0,05$), and Training with a significance of 0,973 ($>0,05$), indicating that all control variables do not have a significant influence on DEC. Furthermore, Gender with a significance of 0,148 ($>0,05$) and BO with a significance of 0,097 ($>0,05$) do not significantly affect DEC. Interaction variables IE and Gender with a significance of 0,135 ($>0,05$) and interaction variables IE and BO with a significance of 0,077 ($>0,05$) also indicate the lack of significant influence of both interaction variables on DEC.

Discussion

Based on the results of the F-test in model 1, with IE inputted as the independent variable, a significance of 0.000 (<0.05) was obtained, indicating that IE significantly influences DEC. Similarly, in the analysis of the t-test, IE was found to significantly affect DEC with a significance of 0.008 (<0.05). This research indicates that the school environment influences the digital entrepreneurship competence possessed by teachers. The effect of the institutional environment's impact is evident from the regression analysis results in the first model, incorporating the IE variable in influencing DEC, yielding an R-square value of 0.533, meaning that the influence of IE on DEC is 53.3%, with the remaining 46.7% influenced by other variables. Institutional support has a significant influence on the level of digital competence of individuals within it stating (Inamorato, et al., 2023). Consistent with institutional theory, the regulatory, normative, and cognitive support aspects will influence the human system context within individuals (Palthe, 2014). Current research supports how institutional factors such as regulations, culture, and social norms prevailing in the organizational environment significantly affect entrepreneurial activities (Baker, 2023; Li-Sun, Shi, Ahlstrom, & Tian, 2020). This study focuses on the cognitive aspect, represented by facility support such as access to pedagogical needs, software, ease of internet use, and other resources (Dai, 2023), the regulatory aspect represented by school regulations and policies (Yangjie-Huang et al., 2020), and the normative aspect represented by schools' efforts to provide the best conditions for teachers (Tołwińska, 2021).

School institutions need to pay more attention to providing support for access to digital resources and entrepreneurship to promote the enhancement of entrepreneurship teachers' competencies. Teachers' capabilities can be determined by their access to technology tools, as well as their access to quality internet and technical and pedagogical training received (Canese, Paez, Amarilla, & Rodriguez, 2022). School management needs to make efforts by organizing training sessions to familiarize teachers with using computer equipment in the school learning environment (Thanasi-Boçe, 2021). Schools should expand their services by providing fast internet networks (Paliwal & Singh, 2021). Facility support factors also cannot be separated from appropriate and properly implemented institutional policies. This can be a major challenge for teachers in implementing new competencies. Consistent with previous findings that teacher efforts will be in vain without supportive policies (Babinčáková, Ganajová, & Bernard, 2023). The influence of improving policy mechanisms on teacher competence is significant (Davis, 2022). The results of this study also support the statement that relevant policies enable institutions to maintain and develop their employees' abilities to remain competitive (Muralidharan & Pathak, 2018). Thus, school support can

create an organizational atmosphere conducive to the development of individual entrepreneurial skills and competencies (Fischer, de Moraes, & Schaeffer, 2019). Based on the analysis of variance incorporating IE, Gender, BO, and interaction variables, a significance value of 0.000 (<0.05) was obtained, indicating that all variables simultaneously or together can significantly influence DEC. However, the average analysis results of two different groups on the BO variable with DEC yielded a significance of 0.148 (>0.05), and the gender variable with DEC yielded a significance of 0.097 (>0.05). These results indicate insignificant influence, where the BO and Gender variables are unable to moderate the relationship between IE and DEC. These results support previous research groups stating that entrepreneurial experience may reduce the positive impact of entrepreneurship education implementation (Fayolle & Gailly, 2015). Teachers who have entrepreneurial experience may already possess a broader understanding of business realities and perceive digital entrepreneurship education theories as less relevant. Addressing this gap involves effectively integrating practical knowledge into entrepreneurship classes (Suomi, et al., 2023). The role of teachers in fostering such initiative synchronization requires good facilitation (America & Neethling, 2023).

Another factor, gender, also exhibits a low ability to moderate the relationship between school's institutional environment and teachers' digital entrepreneurship competence. There is no significant difference between young and senior academics, as well as between men and women, in mastering digital competence (Hämäläinen et al., 2022; Inamorato dos Santos et al., 2023). Gender is an important factor in the educational context, but no significant differences were found between genders in influencing competence in digital-based learning (Korlat et al., 2021). Teacher's competence in implementing digital-based learning in the classroom is more influenced by external factors that allow for identifying different profiles of teachers according to the conditions of the educational institutions where they work (Canese et al., 2022). In developing digital entrepreneurship education strategies for teachers, it is important to consider external factors that can influence their competencies, while also being aware that gender may have a limited impact in this context.

Following the 46.7% influence from factors other than the institutional environment, regression analysis results indicate that the inclusion of business ownership (BO) and gender roles in the model only increases the R square value by 0.5% and 2% each. These findings suggest that the entrepreneurial experience background of teachers and gender have an impact on enhancing the role of school institutional environment support for teachers' digital entrepreneurship competencies. However, the influence is not significant. A greater influence arises from the role of school institutions equipped with modern infrastructure facilities that facilitate the teaching process for students (Otahe, 2019). Teachers' entrepreneurship background has a positive relationship with teachers' entrepreneurship education competence, but the relationship is small and greater than the background factors of training and school managerial support (Hämäläinen et al., 2022). The research findings urge school institutions to enhance their support for teachers to realize more effective digital entrepreneurship learning. This is crucial because digital-based learning can be more effective if the teachers are competent, despite other potential barriers (Atim et al., 2021). Schools need to improve the availability of adequate facilities and resources, supported by appropriate policies, to foster a positive school environment and culture. A better school environment in facilitating the use of digital technology will further enhance teachers' digital entrepreneurship competence (Rizal & Nurjaya, 2020; Zhaorui-Wang & Chu, 2023). Consequently, teachers will feel fully supported and inspired to continue honing their digital entrepreneurship skills, which in turn will be beneficial in their teaching to students.

4. CONCLUSION

This study concludes that school environmental support significantly influences the digital entrepreneurship competence of entrepreneurship teachers, especially in vocational schools. Other influences can be seen from internal teacher factors (business ownership background and gender), but these influences have low significance in affecting teachers' digital entrepreneurship competence. Similarly, other factors such as the highest education level, years of experience, training, and age of teachers also have low significance in influencing teachers' digital entrepreneurship competence. The specific research findings indicate that the institutional environment significantly influences teachers' digital entrepreneurship competence. Another finding is business ownership and gender factors cannot significantly moderate the influence of the institutional environment on teachers' digital entrepreneurship competence. Thus, further research can explore broader factors that may affect teachers' digital entrepreneurship competence. Additionally, the results of this study can serve as a basis for decision-making by school institutions in providing support to entrepreneurship teachers to achieve significant competence improvement.

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