

Does Business Culture Shape, Graduate Entrepreneurial and thinking psychology Abilities in the Vocational School Perspectives?

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Abstract

In this study, we examine whether graduates' entrepreneurial abilities are associated with quality industrial practices, workshop quality, business incubators, and business culture. We also explore how much business culture acts as a moderator. A structural equation model (SEM) was used to analyze the data collected in the field. A quantitative survey design was conducted to investigate responses from school principals, staff, teachers, and students at private vocational schools in Samarinda, East Kalimantan. The study's results show that industrial practices, workshop quality, and business culture have a positive and crucial impact on graduates' entrepreneurial abilities. Business culture does not strengthen the relationship between quality industrial practice and workshop quality on graduates' entrepreneurial abilities. Still, it can enhance the relationship between business incubators and graduates' entrepreneurial abilities. These findings indicate that the entrepreneurial abilities of graduates in East Kalimantan can achieve optimal results if the school environment implements a business culture by involving other elements with the support of partnerships with the private sector; the aim is to form a technopreneur character making businesses profitable, having professional business management, and maintaining the business in the long term, running the business independently in the future. These findings can help policymakers in Indonesia improve graduates' entrepreneurial skills at a broader level, including all public and private schools at provincial and even national levels.

Keywords: Quality industrial practice, workshop quality, business incubator, business culture, graduate entrepreneurial abilities

Introduction Excellent and high-quality human resources are the most crucial factor in surviving increasingly harsh competition; hence, individuals must enhance their skills, knowledge, values, attitudes, and competencies to respond appropriately to environmental changes (Firdaus et al., 2015). One method is improving the quality of Vocational High Schools (SMK) and secondary schools training students for work in specific sectors. It is consistent with the goals of vocational education, producing a competent workforce and enabling self-potential development in accepting and adapting to advances in science, technology, and the arts (Pratiwi & Marlina, 2020). Schools must adopt or modify the notion of marketing communications, as have many modern businesses so that the public receives accurate and exhaustive information about school quality. School image comprises five factors: (1) principal leadership and quality of education, (2) graduate competency and alumni achievement, (3) school facilities and infrastructure, (4) parental and community involvement, and (5) student character /graduate of high school (Dardiri, 2015).

In addition, a need still exists for entrepreneurship and IT technology development, particularly for vocational students, so they focus on seeking employment and creating jobs through entrepreneurship. It is influenced by several elements, one of which is coaching and entrepreneurship training designed to develop the business ideas of novices (Coyanda, 2021). The Indonesian education system has undergone periodic modifications to enter the era of globalization, characterized by more harsh labor competitiveness. Competition for the quality of human resources encompasses all aspects of life, including the education sector and the industrial sector, with the same function, namely generating a product/service that can compete in the market by requiring a qualified and skilled workforce of graduates (Daeod et al., 2020).

Unfortunately, the vocational school administration has yet to be able to prepare graduates ready to work. Apart from being impacted by industry and businesses' low priority for education expenditure, it is also caused

by a need for more programs, skills content, and available supporting infrastructure (Cahyadi, 2019). Therefore, cross-sector cooperation is required, such as forming a business incubation, a driver for converting the establishment of human resources. Entrepreneurs, universities, financial institutions, business consultants, business legal counsel, the private sector, BUMN/BUMD, the government through connected technical agencies, and non-governmental organizations all participate in business incubation operations and activities (Haryoko & Jaya, 2021). It is not or is less creative and productive for human resources with entrepreneurial motivation in a creative, innovative, effective, and cooperative manner as the initial step in creating entrepreneurs with advantages.

The description above sufficiently illustrates how several components can build graduate entrepreneurial abilities, including quality industrial practice, workshop quality, business incubators, and business culture. Thus, in this study, we explore how graduate entrepreneurial abilities can be created with encouragement from quality industrial practice, workshop quality, and business incubators and how the role of business culture as a moderator can increase or weaken it. We have also used multilevel regression analysis to obtain more elaborated results.

Research Question

1. Is the quality of industrial practice related to the entrepreneurial ability of vocational school graduates?
2. Is the quality of the workshop related to the entrepreneurial abilities of vocational school graduates?
3. Is the business incubator related to the entrepreneurship skills of the graduates of the focus schools?
4. Is the business culture related to the entrepreneurial skills of graduates from vocational schools?
5. Is the business culture able to mediate the relationship between the quality of industrial practices and the entrepreneurial abilities of vocational school graduates?
6. Is the business culture able to mediate the relationship between the quality of workshops and the entrepreneurial abilities of vocational school graduates?
7. Is the business culture capable of mediating the relationship between business incubators and the entrepreneurial skills of graduates from vocational schools?

Literature Review and Hypothesis Development Quality Industrial Practice and Graduate Entrepreneurial Abilities

Industrial practice is a term of on-the-job training to build the capabilities necessary to execute tasks (Areli et al., 2020; Noviasari et al., 2018; Sudianto & Sastrawan, 2014). The industrial practice integrates occupational skills training and education in a methodical and synchronized manner among learning school-based and skill-acquisition programs (Bowo & Widodo, 2016). Pratiwi and Marlina (2020) underlined that industrial job practice activities could educate students to be accountable and promote student confidence in studying other topics. Implementing industrial practice is indeed a technique to foster an entrepreneurial mindset within a vocational high school program (Diwanggoro, 2020). During industrial practice, students participate in work practices (apprenticeships) in companies or industries as part of their education and training at SMK (Nurjanah et al., 2019). After completing industrial work practices, students can develop industry knowledge and proficiency (Widodo et al., 2017). After graduating from school, they can use the acquired knowledge and abilities to start a firm or engage in entrepreneurship (Chen et al., 2015; Purwanto et al., 2022; Sunggoro et al., 2022; Widodo et al., 2017; Mahmudah & Santosa, 2021). For that, based on the description that has been explained previously, the hypothesis that we propose is as follows:

H₁: Quality industrial practice relates to graduate entrepreneurial abilities.

Workshop Quality and Graduate Entrepreneurial Skills

The comprehensiveness of quality training workshops in schools would be optimal if all equipment and infrastructure required to facilitate student learning and teaching were in place (Apriadi, 2017). The fullness of practice facilities in schools influences pupils' intelligence and skills (Revantoro & Suwarno, 2018). In addition, the appropriateness of a school's workshops affects comfort and satisfaction throughout practice (Rofadho et al., 2018). This condition can drive pupils to practice with great excitement for learning, increasing their learning outcomes (Hasanuddin, 2020). If the workshop is administered professionally, it can increase earnings for the

school environment (Indiwooro et al., 2019). Additionally, students may directly engage in entrepreneurial practices, preparing them to access the business industry or commerce in the future (Fahma, 2020). The hypothesis based on the narrative described earlier is as follows:

H₂: Workshop quality relatestothe graduate’s entrepreneurial abilities.

Business Incubator and the Graduate’sEntrepreneurial Abilities

A business incubator is a tool for community economic development, assisting in forming new firms. Business incubators aid startups by providing several support programs, such as advice on formulating business and marketing plans, assembling a management team, obtaining finance, and gaining access to more sophisticated professionals (Crefioza & Kusumawardhani, 2021). Saptono (2017) reports that vocational schools facilitate the incubation of businesses by involving students in developing school-based business units. Students are expected to participate in direct learning to get real-world business management experience (Sudana et al., 2019; Xiao & North, 2017)to build entrepreneurial intents serving as the foundation for entrepreneurial conduct. The objective of incubation in product creation or healthy business development for novices is to create a profitable and sustainable company with a positive social impact. In addition, business incubators contribute to the formation of new entrepreneurs (Mayasari et al., 2019), minimize failure in entrepreneurship (Agustina, 2011; Bismala et al., 2019; Bismala & Siregar, 2021; Gunadi, 2021), and entrepreneurial creation among students (Hamdan, 2013; Mayasari et al., 2019; Purwaningsih et al., 2017; Sufyati & Awaludin, 2018). Therefore, the hypothesis is as follows:

H₃: Business incubator relatesto the graduate’s entrepreneurial abilities.

Business Culture, the Graduate’sEntrepreneurial Abilities, and its Moderator

Entrepreneurial or business culture is a mix of individual value systems, managerial abilities, insights, and attitudes categorizing business owners in contexts of effort, willingness to take risks, innovativeness, and managing corporate connections with the economic climate (ECF, 2012). Meanwhile, Thurik and Dejardin (2012) define business culture as a system of shared values in a community appreciating and encouraging entrepreneurship. A thriving corporate culture is characterized by expectations and aids the company’s strategic resource management initiatives. A strong business culture entails a climate in which innovative concepts and creativity are anticipated, risk-taking is supported, and disappointment is permitted (Munyoro et al., 2016). Consequently, Munyoro and Phiri (2020) argue that corporate culture is where learning is encouraged, product, process, and administrative innovations are supported, and experiencing an increase is viewed as an opportunity carrier, probably lacking in learning programs. Thus, the corporate culture encourages and supports the pursuit of potential entrepreneurs that can be utilized with ongoing competitiveness. According to Almeida (2014), business culture is often casual and focuses primarily on creativity and the pursuit of new chances. Meanwhile, Minguzzi and Passaro (2001) define business culture as a combination of personal values, managerial abilities, experiences, and behaviors characterizing entrepreneurs in their spirit of initiative, willingness to take risks, and ability to innovate new goods. According to Ngorora and Mago (2013), business culture is an environment in which individuals are encouraged to innovate, create, and take risks.

Moreover, business culture as a system of shared values fosters and supports entrepreneurship. This definition appears circular because it describes company culture as an entrepreneur’s values, abilities, experiences, and behaviors (Munyoro et al., 2016). However, it is rare for research to raise business culture as a moderator of graduate entrepreneurial abilities, at least in the Indonesian context. According to the European Commission (2013), the failure of vocational schools to create graduates who are imaginative, creative, and capable of starting their enterprises and creating jobs is due to, in part, a lack of business culture. Consequently, in this study, we aim to evaluate the vitality of business culture in vocational schools as a potential means of producing new entrepreneurs among vocational school graduates. Thus, the hypothesis that we propose is as follows:

H₄: Business culture relatestothe graduate’s entrepreneurial abilities.

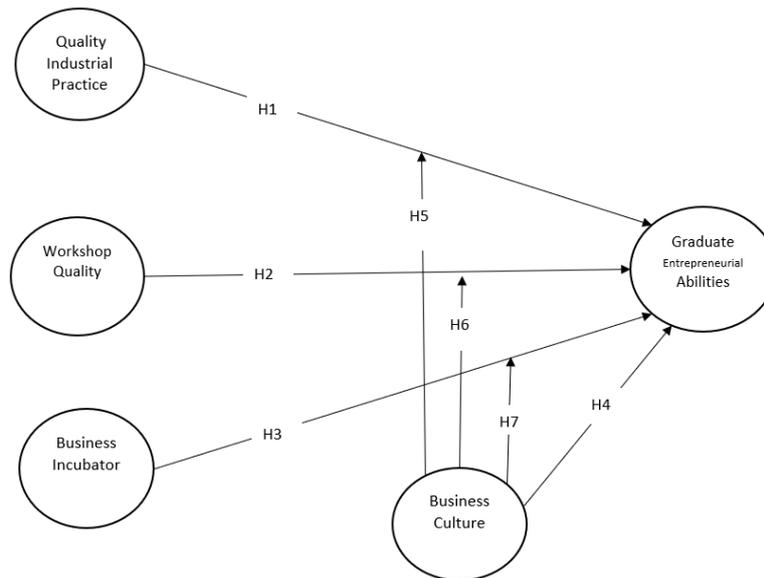
H₅: Business culture moderates quality industrial practice on the graduate’s entrepreneurial abilities.

H₆: Business culture moderates workshop quality on the graduate’s entrepreneurial abilities.

H₇: Business culture moderates business incubators on the graduate’s entrepreneurial abilities.

As an illustration for further analysis and based on the previous literature, we created a research framework in Figure 1 below.

Figure 1
Research Concept



Methods

Research Design

This study is a quantitative approach with a correlational design seeking to link exogenous and endogenous variables mediated by moderating variables in determining direct and indirect effects. Moreover, we aim to explore whether the moderating variable is effective in the developed model. The research was conducted at a private vocational school in Samarinda, East Kalimantan, Indonesia, from January to November 2022. Students were in active learning conditions except for the holidays in mid-June and mid-July. Therefore, we did not conduct research when students were on vacation.

Population and Sample

The population comprised 32 schools under the Education and Culture Office of Samarinda City. We used a sample using the purposive sampling method with the selection according to our criteria. We decided that respondents encompassed teachers, employees, and students, with ten representatives taken from each school, so that the number of samples used was ten people multiplied by 32. Hence, we had 320 people in the study.

Research Instrument

The survey instrument contains closed-ended questions measuring respondents' views on graduate entrepreneurial abilities as the dependent variable, quality industrial practice, workshop quality, incubator business as independent variables, and business culture as moderating variables. Our study adopts five graduate entrepreneurial abilities items from Rusmana (2020), four for quality industrial practice adopted from Pratiwi and Marlina (2020), seven for workshop quality adopted from Yoto et al. (2018), five for business incubators adopted from Lutfiani et al. (2020), and six for business culture assumed from Yang et al. (2021). We measured respondents' views on a five-point Likert scale from strongly disagree (1) to agree (5) strongly. We examined the questionnaire from September 2022 to November 2022.

Validity and Reliability Test

Using the convergent technique, we could determine the indicator's validity, expressed as the value of the external loading factor. It specifies that the value range of .50 to .70 for the loading factor is still enough for

exploratory investigations, the preliminary phases of constructing a measurement scale. In this particular investigation, the outer loading value of each indicator was more than .70, allowing it to pass muster in terms of convergent validity.

In the following step, we evaluated a variable's discriminant validity by contrasting the extracted square root coefficient of variance (AVE) from each latent factor to the correlation coefficient between the other factors in the model. This evaluation was done to determine whether the variable could distinguish between groups. The AVE value suggests it has a significance greater than .5. According to Table 3, the constructs investigated in this research had a discriminant validity greater than .50 (Fornell & Larcker, 1981). The value of the variable indicators is determined through composite reliability in the last phase. Results were judged reliable whenever the composite reliability and Cronbach's alpha were significantly higher than .70 (Chin, 2010), and can be seen in Table 1.

Table 1
Explanatory Result

Variable	Items	Cross loading	Cronbach's Alpha	rho_A	CR	AVE
Quality industrial practice	QIP1	.969	.964	1.014	.973	.900
	QIP2	.964				
	QIP3	.891				
	QIP4	.969				
Workshop quality	WQ1	.817	.973	0.973	.978	.864
	WQ2	.970				
	WQ3	.968				
	WQ4	.971				
	WQ5	.821				
	WQ6	.972				
	WQ7	.971				
Business incubator	IB1	.990	.984	0.984	.987	.940
	IB2	.988				
	IB3	.889				
	IB4	.987				
	IB5	.990				
Business culture	BC1	.887	.950	0.955	.960	.801
	BC2	.883				
	BC3	.899				
	BC4	.929				
	BC6	.901				
	GEA1	.872				
Graduate entrepreneurial abilities	GEA2	.902	.945	0.947	.958	.820
	GEA3	.896				
	GEA4	.927				
	GEA5	.928				

*) QIP=Quality Industrial Practice; WQ= Workshop Quality; Business Incubator; BC= Business Culture; GEA= Graduate Entrepreneurial Abilities

Data processing using SmartPLS indicates that all construct manifestations in this investigation have loading values larger than .70. It demonstrates that the manifest variable with a loading value of more than .70 satisfies convergent validity due to its high level of validity.

The calculation of the composite reliability yielded values ranging from .958 to .987 (more than .70), demonstrating that the variable's indicators were dependable. Cronbach's alpha scores varied from .912 to .945, indicating that the indications were reliable and could be considered free of errors (Chin, 2010).

Data Collection and Analysis

Researchers distributed 350 questionnaires face-to-face and through the Google form, but 312 were returned, and valid data that could be analyzed were 258 questionnaires. As for testing the hypothesis of the research framework used, a structural equation model (SEM) using SmartPLS for data analysis was developed, and SPSS was used for testing assumptions. We tried to test if the SEM could undergo the assumption test first, even though SEM with SmartPLS can be analyzed without going through the assumption test first (Ghozali, 2015).

Results

Assumption test

Normality

The normality test is performed by looking at the dots on the Normal Probability Plot to see if they spread along the diagonal line. The histogram figure demonstrates the collected data with a distribution that is close to being normal and may be validated using the Kolmogorov-Smirnov test.

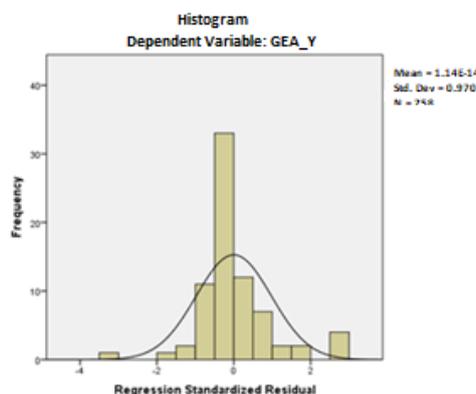
Table 2

Kolmogorov-Smirnov Test Result

		Unstandardized residual	Information
N		258	
Normal parameters ^{a,b}	Mean	.0011743	Data is normally distributed.
	Std. Deviation	.969484	
Most extreme differences	Absolute	.086	
	Positive	.086	
	Negative	-.088	
Test Statistic		.086	
Asymp. Sig. (2-tailed)		.200 ^{c,d}	

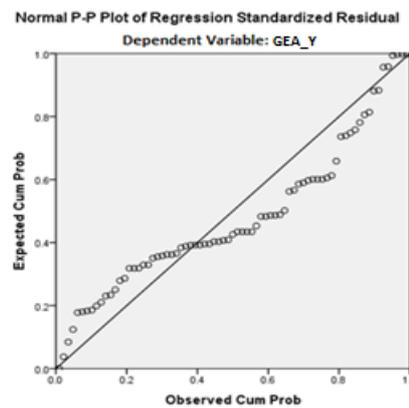
Based on the one-sample Kolmogorov-Smirnov Test, the Asymp value, *p*-value, for two-sided test is .2, which is greater than .05. Thus, we can state that the data are normally distributed and acceptable for research (Table 2).

Figure 2 Histogram of Regression Standard Residual



On the Histogram Display Normal Curve, the slope on the left and right sides of the almost perfect bell-shaped curve tends to be balanced (Figure 2). Thus, the Normality Test with the P-Plot of the Regression Standardized Residual reveals a normal distribution, and the regression model has satisfied the normality assumption (Figure 3).

Figure 3
Normal P-Plot of Regression Standard Residual



Multicollinearity

The existence or absence of multicollinearity symptoms is determined by evaluating the value of the correlation matrix obtained while processing data and the value of VIF and its tolerance.

Table 3
Multicollinearity, Autocorrelation, and Heteroscedasticity Test Results

Model	Model 1		Model 2	Model 3		Information
	Tolerance	VIF	DW	t	Sig.	
1						There is no multicollinearity event.
QIP_X1	.126	4.112				
WQ_X2	.123	5.275				
BI_X3	.131	4.322				
BC_Z	.122	5.129				
2	Durbin-Watson		2.0288			There is no autocorrelation.
3	Glejser Test					There is no heteroscedasticity.
QIP_X1				.482	.376	
WQ_X2				.377	.423	
BI_X3				.494	.365	
BC_Z				1.389	.064	

No variable has a tolerance value of 0.01, indicating no correlation of more than .95 between independent variables. The results of VIF indicate the same point: no independent variable has a VIF value larger than 10. This regression model contains no multicollinearity event between independent variables (Table 3). A vital characteristic of a reliable regression model is the absence of autocorrelation. The autocorrelation test determines if the misleading error in time t and the misleading error in time t-1 are correlated in the linear regression model. If it occurs, it is known as an autocorrelation issue. The magnitude of the Durbin-Watson for $dL = 1.563$ and the magnitude of Durbin-Watson for dU (inner limit) of 1.9787 . The magnitude of the $4-dU$ value is $(4-1.9787= 2.0213)$, and the value of $4-dL$ is $(4-1.563=2.437)$. Then, it becomes $2.0213 < 2.0288 < 2.437$. Therefore, no symptom of autocorrelation exists between variables.

Heteroscedasticity tests if the regression model's residuals are unequally distributed. Homoscedasticity is when the residual variance remains the same between observations, while heteroscedasticity is when it changes. Homoscedasticity or no heteroscedasticity implies effective regression models. This test uses a scatter plot. It checks the regression scatter plot dots for heteroscedasticity. No heteroscedasticity is evident if points spread randomly above and below zero on the Y-axis. Regressing the independent variables to the absolute residual value strengthens the Glejser test. The significant value of all research variables is more than .05. The quality industrial practice variable has a significance value of .376, workshop quality .423, business incubator .365, and business culture .064. Therefore, heteroscedasticity does not exist.

Figure 4
Heteroscedasticity

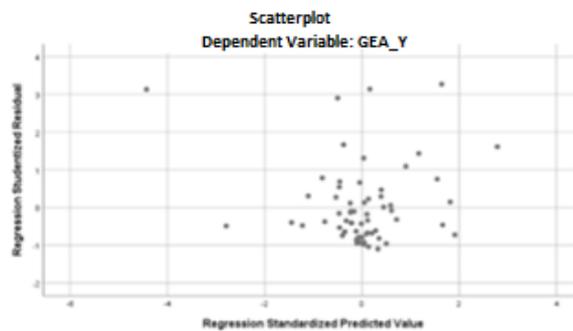


Figure 4 illustrates that the heteroscedasticity test in the scatterplot shows that the dots are not random, form a clear or regular pattern, and are dispersed above and below Y-axis 0. Thus, this regression model lacks heteroscedasticity.

Hypothesis Testing

The path analysis results are shown in the following diagram.

Figure 5
Path Analysis

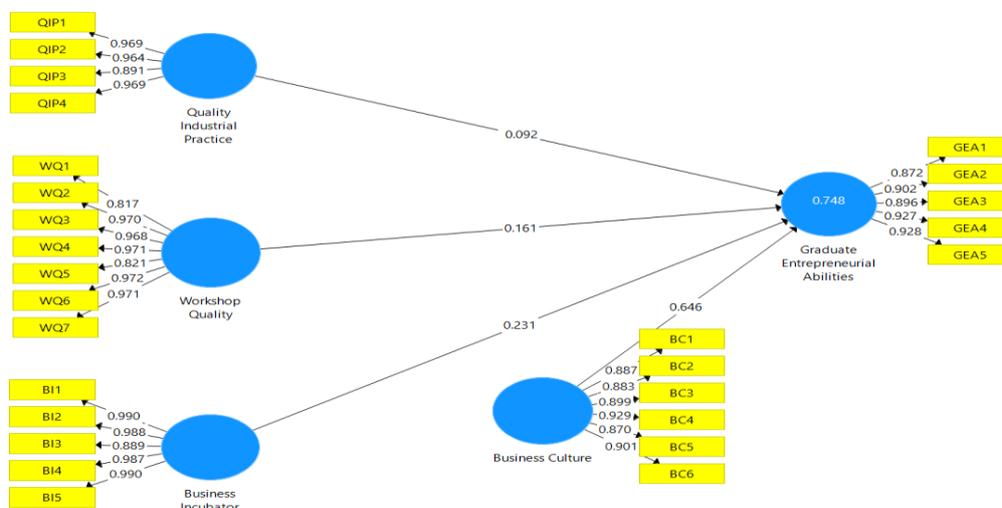
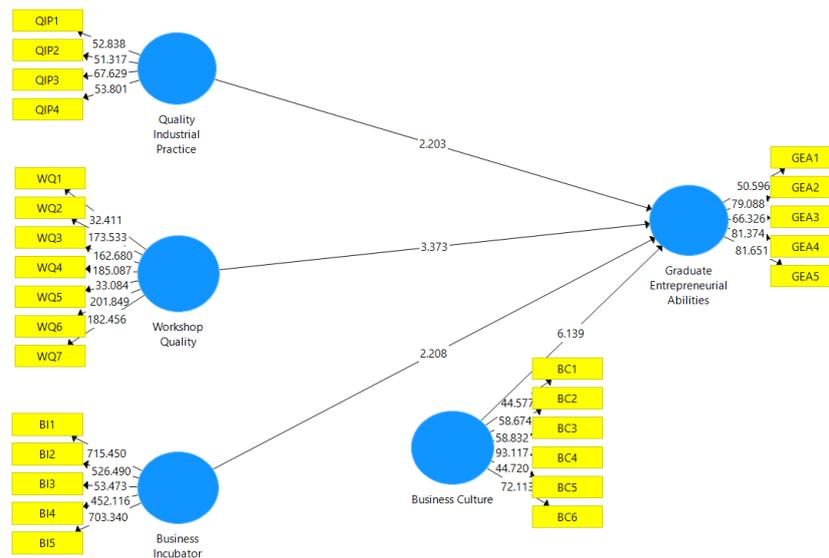


Figure 5 illustrates the findings of data processing using SmartPLS, showing the magnitude of the path coefficient for each relationship. Next, each relationship is examined using a simulation based on the bootstrap approach. This test is conducted to reduce the incidence of research data anomalies. The test results use the bootstrap approach (Figure 6).

Figure 6
Bootstrapping Inner Model



Path coefficient evaluation is used to demonstrate the strength of the effect or influence of the independent variable on the dependent variable. Figure 6 shows that the relationship between business culture and the graduate’s entrepreneurial abilities has the highest path coefficient value of 6.139, followed by 3.373 for the impact of workshop quality on the graduate’s entrepreneurial abilities. Then, the coefficient is 2.208 for the impacts of business incubators on graduate entrepreneurial abilities and 2.203 for the impacts of quality industrial practice on the graduate’s entrepreneurial abilities. According to the description of the above results, all variables in this model have positive path coefficients. It indicates that the influence of an independent variable on a dependent variable is proportional to its path coefficient value.

Examining the *p*-values allows us to determine the significance level of accepting a hypothesis. The hypothesis can be validated if the *p*-values are less than .05. In SmartPLS, a bootstrapping procedure is performed on a valid and trustworthy model, and it satisfies the feasibility requirements to get the *p*-value of the model. Table 4 depicts the results of bootstrapping.

Table 4
Path Coefficient Result

Hypothesis	Path	Original sample	Standard deviation	T Statistics	P-values	Results
H ₁	QIP -> GEA	.092	.044	2.203	.037	Accepted
H ₂	WQ -> GEA	.161	.048	3.373	.001	Accepted
H ₃	BI -> GEA	.231	.107	2.208	.031	Accepted
H ₄	BC -> GEA	.646	.108	6.139	.000	Accepted

*) QIP=Quality Industrial Practice; WQ= Workshop Quality; BI=Business Incubator; BC= Business Culture; GEA= Graduate Entrepreneurial Abilities

Based on the path coefficient obtained between quality industrial practice and graduate entrepreneurial abilities of .092 with a p -value of .037 $<.05$, one can state that quality industrial practice significantly affects graduate entrepreneurial abilities. Parameter coefficients with positive values indicate that the greater the quality of industrial practice, the greater the effectiveness of the school. Then, H_1 is accepted. The correlation between workshop quality and graduate entrepreneurial abilities is .161, with a p -value of .001, revealing a significant relationship between the two variables. Therefore, H_2 is supported. In addition, business incubators can improve graduate entrepreneurial skills, as evidenced by the original sample value of .231 with a statistical T value of 2.208 ($p < .05$), meaning that H_3 is accepted. Finally, given that the correlation between business culture and graduate entrepreneurial abilities is .646 with a p -value of .000 $<.05$, demonstrating a significant relationship between the two variables. If the parameter coefficient is positive, then the hypothesis of H_4 that business culture increases graduate entrepreneurial abilities is accepted.

In addition, to determine if business culture can moderate the link between quality industrial practice, workshop quality, the graduate's entrepreneurial abilities, and the following route coefficients are examined (Table 5).

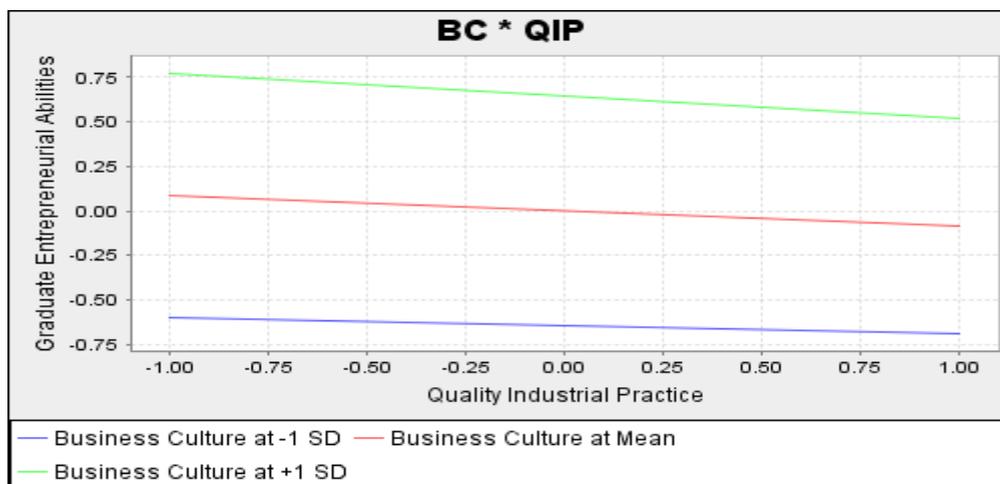
Table 5
 Moderation Test

Hypothesis	Path	Original sample	Standard deviation	T Statistics	P Values	Result
H_5	BC * QIP -> GEA	.042	.048	0.880	.379	Rejected
H_6	BC * WQ -> GEA	.042	.033	1.274	.203	Rejected
H_7	BC * BI -> GEA	.241	.074	3.283	.001	Accepted

*) QIP=Quality Industrial Practice; WQ= Workshop Quality; BI=Business Incubator; BC= Business Culture; GEA= Graduate Entrepreneurial Abilities

To clarify the moderating relationship between variables, one can see the Simple Slope Analysis Data in Figures 7 – 9.

Figure 7
 QIP on GEA and BC as Moderator

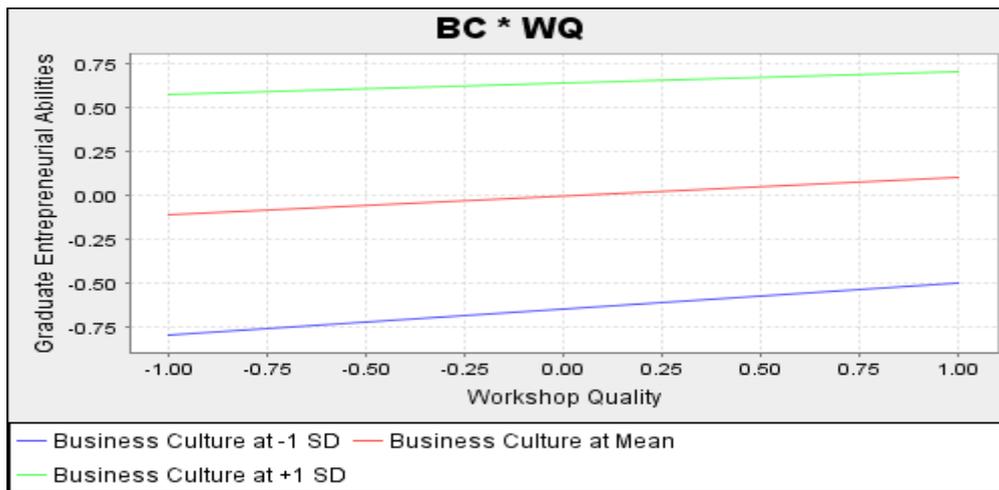


Based on Figure 7 above, respondents with high business cultures have high-quality industrial practices with graduate entrepreneurial abilities and vice versa. If they have a low business culture, it impacts their low-

quality industrial practice with the graduate's entrepreneurial skills. Even though the impact is minimal, as in the figure on the equation line, which tends to be straight or with no change, one can conclude that business culture does not strengthen or weaken the relationship between quality industrial practice and the graduate's entrepreneurial abilities.

Figure 8

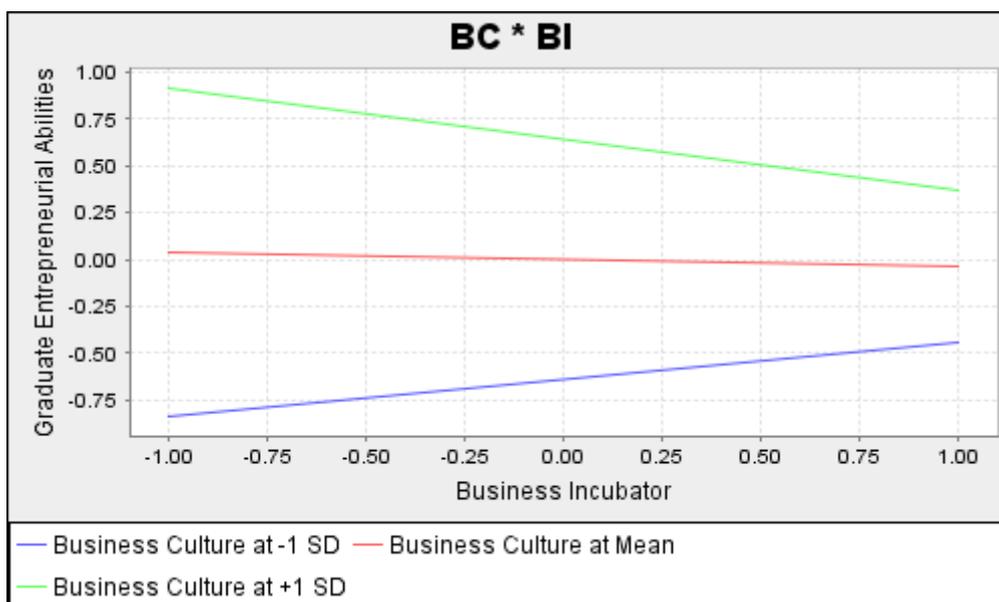
WQ on GEA and BC as Moderator



High business culture has a high workshop quality with the graduate's entrepreneurial abilities and vice versa. If they have a low business culture, it impacts their low workshop quality with the graduate's entrepreneurial skills. Even though the impact is minimal, as in the figure on the equation line (Figure 8), which tends to be straight or with no change, one can conclude that business culture does not strengthen or weaken the relationship between workshop quality and the graduate's entrepreneurial abilities.

Figure 9

BI on GEA and BC as Moderator



The tendency to change in the lines of the equation indicates that business culture strengthens or weakens the relationship between business incubators and the graduates' entrepreneurial skills. Respondents with a high business culture have a high business incubator, with the graduates having entrepreneurial ability and vice versa (Figure 9). Based on the moderation test, with a T value of $0.880 < 1.96$ and a significance level of more than 5%. Therefore, neither quality business culture nor industrial practices significantly affect graduates' entrepreneurial abilities. Business culture remains the same (strengthen or weaken); the relationship between quality industrial practices and graduates' entrepreneurial abilities is insignificant. Therefore, hypothesis 5 is rejected. In addition, business culture and workshop quality have a low association with graduates' entrepreneurial skills, with a T value of $1.274 < 1.96$ and a significance level of more than 5%. Hence, the implications of business culture cannot reduce the relationship between the quality of workshops and graduates' entrepreneurial abilities. Hence, H_6 can be rejected. However, business culture can moderate the relationship between business incubators and graduate entrepreneurial skills, as evidenced by the T value of $3.283 > 1.96$, so a decision can be made that H_7 is accepted.

In addition, it is necessary to use multilevel linear regression for the model to achieve a high level of accuracy in prediction. The more variables to include in calculating a regression, the more accurate the model's predictions are, as shown in Table 6.

Table 6
Multilevel Regression Analysis

Path	Model 1		Model 2		Model 3		Remark
	Original sample	P-values	Original sample	P-values	Original Sample	P-Values	
QIP -> GEA	.092	.037	.083	.321	.107	.262	Insignificant
WQ -> GEA	.161	.001	.104	.003	.110	.003	Significant
BI -> GEA	.231	.031	.048	.681	.039	.776	Insignificant
BC -> GEA	.646	.000	.645	.000	.639	.000	Significant
BC * QIP -> GEA			.042	.379	.052	.366	Insignificant
BC * WQ -> GEA			.042	.203	.043	.222	Insignificant
BC * BI -> GEA			.241	.001	.238	.003	Significant
BC -> QIP					.437	.000	Significant
BC -> WQ					.410	.000	Significant
BC -> BI					.735	.000	Significant

*) QIP=Quality Industrial Practice; WQ= Workshop Quality; BI= Business Incubator; BC= Business Culture; GEA= Graduate Entrepreneurial Abilities

When the moderator variable of business culture is analyzed using tiered regression, shown in the Table above, the correlation of quality industrial practices and business incubators to the entrepreneurial abilities of graduates is not significant ($p > .05$), as shown in model 3. However, business culture can affect industrial practices that are quality, quality workshops, and business incubators. Business culture is still worthy of being a moderator variable even though it only strengthens the relationship between business incubators and the entrepreneurial abilities of graduates. Still, business culture cannot moderate the link between the quality of industrial practices and the quality of workshops on graduates' entrepreneurial skills.

Discussion and Conclusion

Acceptance of hypothesis 1 implies that with quality entrepreneurial practice, students have more knowledge to foster their interest in entrepreneurship because more experience and insight gained during the course is possible, leading to a growing interest in entrepreneurship. However, if the experience gained is

limited, it prevents students from feeling insecure about entrepreneurship due to the lack of insight gained. Achievements, attitudes, knowledge, and skills acquired during industrial work practices will make it easier for students to start entrepreneurship. Our findings are based on the influence of quality industrial practices on SMK graduates' interest in becoming entrepreneurs (Pratiwi&Marlena, 2020). They reinforce the research of Fajriah & Sudarma (2017), who concluded that SMK graduates are declared to have high work readiness if they have mastered everything needed following the job requirements they must have. Some things that need to be prepared to have high work readiness are broad insight, expertise according to the field, understanding of thinking, and a good personality allowing a person to choose and feel comfortable with their work to achieve success. Our findings, once again, confirm the findings of previous studies (Firdaus et al., 2018; Katili et al., 2021; Listyaningrum & Wahyudin, 2017), showing that quality industrial practice beneficially affects the competitiveness of graduates in entrepreneurship and readiness work.

Regarding hypothesis2, the findings complement those of Yoto et al. (2018), accentuating that SMK, a means to create a new workforce, must prepare graduates who can compete in the current and ongoing era of globalization, particularly in preparing a skilled middle-level workforce. In preparing these graduates, schools must provide facilities and infrastructure as workshops/laboratories for activities molding their attitudes, knowledge, and abilities under their chosen field of expertise/significance.

In education, the necessity to combine theory and practice is recognized. Students must integrate theory and practice to be competent in engineering, let alone in mastering theory. Moreover, the presence of laboratories/workshops in schools is crucial for bolstering the competency of teachers and students, possibly affecting the quality of graduates. The results indicate that the workshop quality has a beneficial and vital impact on graduates' entrepreneurial talents.

. Based on empirical findings regarding business incubators and graduate entrepreneurial abilities (H_3), these findings support Puspitaningtyas (2018), demonstrating that technology-based business incubators are a vessel with facilities for entrepreneurial growth. They provide the ability to manage businesses from multiple perspectives, including production, marketing, capital, finance, and business partnerships. Again, this conclusion is consistent with the research of Lutfiani et al. (2020), demonstrating that business incubators can provide training and mentoring programs for tertiary vocational schools. They implement methods such as classical, case studies, discussions, and simulations. This implementation makes it easier and more active for students to participate in the training to gain experience and skills in the entrepreneurial spirit.

Furthermore, the business incubator provides the following five programs:

1. coaching to solve problems by providing consultations,
 2. conducting market research to identify opportunities in product sales and development,
 3. collaboration between institutions, the process of mutual need producing added value and the economy,
 4. the formation of business units and programs assisting in directing the process of these results
- demonstrates conclusively that business incubators can enhance vocational students' capacity to navigate entrepreneurship after graduation.

Accepting H_4 proves that business culture can substantially influence the entrepreneurial abilities of SMK graduates. This finding aligns with what Yang et al. (2021) have asserted. They report that incorporating business culture into the exercise of skill at vocational institute schools perpetuates the interpretation and meaning of business culture and practices the spirit of commitment and trustworthiness of science's fundamental values. On top of that, it has far-reaching significance for the hereditary business culture and regulates how society conducts business and trade. From the industry perspective, graduates of vocational high schools are skills and abilities in business management. These talents play a directing role in the growth of businesses in the long term, and the performance of their exercise is linked to the path in which the entire commercial and industrial corporation sector is moving.

Regarding the development of abilities, incorporating a culture of doing business will consider factors such as knowledge, capability, quality, and quality. Students with a solid education in business culture throughout the

school are better equipped to continue the exemplary practices associated with business culture when they graduate. These practices include hard effort, love and dedication, and honest service.

Rejection of hypotheses 5 and 6 shows that the business culture at Private Vocational Schools in Samarinda has yet to strengthen graduates' entrepreneurial abilities to apply quality industrial practices and quality workshops, creating entrepreneurial-oriented SMK graduates. The core connotation of business culture has yet to permeate the entire inculcation and curriculum system in vocational schools, intended to cultivate superior technical and skilled talents combined with professional education and innovation and entrepreneurship education. It is reconstructed to form the characteristics of integration of specialization, innovation, and progressive infiltration culture as growth and development in the formation of graduates, capturing business opportunities. The nature and characteristics of business culture that continually experience and produce renewal are related to culture as a process and culture as a product. It shows that business culture is one of the human culture's derivatives, constantly experiencing high-intensity changes. Therefore, cultural competence is only natural to be relevant to business success to welcome the era of global business. Business incubators prioritizing technology as the main factor in their development need a new culture as an outlook in globally-oriented entrepreneurship. Naturally, in our study, we found that business culture can strengthen the business incubator relationship and the entrepreneurial abilities of SMK graduates, so the conclusion H_7 is accepted as a fact that follows the literature and empirical.

Implication, Limitation, and Further Research

Our study contributes to the existing literature by demonstrating that school entities that implement quality industrial practices maintain the quality of workshops, business incubators, and a good business culture. These practices can enhance graduates' entrepreneurial abilities. To strengthen the entrepreneurial abilities of graduates, we recommend that schools grow, develop, and strive to instill and strengthen students' mental readiness. Thus, they have the motivation to create or conduct activities that may even be novel or unique through creative thought and innovative action. Efforts to cultivate an entrepreneurial mindset can begin with a proper and more systematic educational plan. In order for schools to effectively produce graduates who are capable of entrepreneurship, four (four) key components must be in place and well-prepared: (1) Entrepreneurship Policy Strategy in Schools, (2) Principal Leadership, (3) Resources, and (4) School Networking Committee. Concerning our study, the limitations listed below should serve as a guide for future research.

In the initial phase of this process, we used a representative sample of private SMKs in the province of East Kalimantan's Samarinda. Therefore, future research must replicate the participation of representatives from other districts/cities to generalize the results to public schools. Future research can also investigate mixed methods using a larger sample size and data triangulation involving expert informants.

Second, societal perceptions of graduates' entrepreneurial abilities still require investigation due to their importance in practice-based policymaking. Additional research should examine how the quality of industry practices, workshops, business incubators, and business culture influence societal perceptions of graduates' entrepreneurial abilities.

Thirdly, our study does not consider the teaching factory environment, pedagogical skills, teaching competence, and other cultural factors influencing the entrepreneurial abilities of graduates. Future research should include these indicators as control, mediating, and moderating variables, respectively, to examine these variables' effect on graduates' entrepreneurial abilities. Finally, additional research must be conducted to determine whether graduates' entrepreneurial skills are related to quality industrial practices, workshop quality, business incubators, and business culture in the district/city, provincial, and national school environment.

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