

The Effectiveness of Competency Tests and School Environmental Factors on The Confidence of SMK Students in Bekasi City

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ABSTRACT

Vocational High School (SMK) is a secondary school that aims to produce skilled and professional personal in their fields in accordance with Expertise Competency Test (UKK) is an assessment held specifically for vocational students to measure the achievement of student competencies. The purpose of this study was to analyze the perceived effectiveness of the competency test and school environmental factors and their effect on the confidence of vocational students in the city of Bekasi in facing graduation. The method in this research and development approach. The analytical tool used in the development of this research is SEM (Structural Equation Model) Amos. The objects in this study were study graduation from vocational high school (SMK) in Bekasi City for the 2018 – 2021 class. The research respondents consisted of 237 respondents graduated from SMK. The results showed that the effectiveness of the competency test and school environmental factors had a dominant influence on the self-confidence of SMK students in Bekasi City.

Keywords: effectiveness, competency test, school environment, confidence, vocational high school

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INTRODUCTION

Vocational High School (SMK) has become a trend since the emergence of several companies, especially in Bekasi City. Vocational High Schools offer several advantages, including that graduate will be experts in certain fields. Vocational High School (SMK) is a high school that aims to produce skilled and professional personnel in their fields in accordance with the future-looking expertise study program and according to the needs of the market.

The graduation requirement for SMK students is the Expertise Competency Test (UKK). SME does not have to run smoothly as expected, in reality problems are found to be many problems. The ineffective implementation of the Expertise Competency Test can be a source of problems that arise. Many factors that cause the ineffectiveness of the implementation of the competency test include: because of the support of the school environment so that it can cause a lack of self-confidence of SMK students alone. In order for the level of self-confidence of children to increase after being given a competency test, it is necessary to support the school environment in order to produce reliable and professional graduates.

In general, the formulation of the problem of this study is self-confidence that is less impacted by ineffective training and unfavorable school environmental factors. The structure of the relationship between variables that affect directly or indirectly the self-confidence of vocational high school students in Bekasi City, which consists of effectiveness competency test and school environment support. The purpose of this study is to analyze the effectiveness of the perceived Competency Test and school environmental factors and their influence on the confidence of SMK students in Bekasi City in facing his graduation. In the previous research (Hariyani & Roesminingsih, 2019) entitled The Effectiveness of SMK Model on Graduate Competencies in Bangkalan Regency showed the results of a study on indicators of the effectiveness of schools that have high value is teaching that has the purpose of influence from the existence of the teacher.

Effectiveness is one measurement of success in the achievement of planned goals. According to Slamet PH (2000: 12) effectiveness is a measure that states to what extent the goal of both quality, quantity or time has been achieved, this is also commensurate with the opinion of Husein Umar (1999: 56) that effectiveness is related to the achievement of targets related to quality, quantity and time. According to Slamet, P. H. (2003: 13), effectiveness in the form of an equation is equal to the comparison between real results and expected results

Gomes (2000:209) in, (Candra & Sulandari, 2017) states that measuring the effectiveness of a training program can be evaluated based on information obtained at five levels, including: (a) *Reactions*, that is, to find out the opinions of the participants regarding the training program, after attending the training the participants were asked about how far they were satisfied with the training overall, to the materials presented, their content, the materials provided, and the training environment (room, rest time, food, air temperature), (b) *Learning*, which is to find out how far the participants master the concepts, knowledge and skills provided during the training usually by conducting written tests, performance tests and 1 Simulation exercises, (c) *Behaviors*, judging from the participants before and after the training, can be compared to determine the degree of influence of the training on their performance, (d) *Organizational results*, which is to test the impact of the training on the working group or organization as a whole. Data can be collected before and after training on the basis of productivity criteria, turnover, absences, accidents, complaints, quality

improvements, client satisfaction and the like, (e) *Cost effectivity*, intended to determine the amount of costs spent on training programs, and whether the amount of costs for such services is small or large compared to the costs arising from problems experienced by the organization.

Muhammad Surya stated in relation to the school environment that "The school environment must be able to grow and develop motives to work well and productively conductively, both its physical, social and psychological environment. For this reason, the best possible physical environment can be created, for example, cleanliness, layout, facilities and so on.

Characteristics of the School Environment According to Tulus (2004) are divided into several parts as follows: (a) Teachers, educators who provide knowledge that will be accepted by students. Armed with the knowledge and skills possessed, teachers can educate the nation's children, (b) Students, a child who is entrusted by parents to go to school to dig His potential through learning provided by the teacher, (c) Facilities and Infrastructure, is a factor that affects student behavior. The condition of the building and other complete learning support facilities can be used to support learning so that teachers are more effective in providing learning to students.

Self-confidence is an important requirement that students must have in order to produce creative work where self-confidence in students can be grown through an attitude of acceptance and respect for behavior students, this begins with their courage in activities (Rahmawati and Kurniati, 2015:95). Lie (in Rahayu, 2013: 68-69) posits about behavioral traits that reflect high self-confidence, namely: (a) Being confident in oneself, (b) Not dependent on others, (c) Not being dependent hesitating, (d) Feeling yourself valuable, (e) Not bragging, (f) Having a sense of courage to act.

METHOD

The object of this study is students who graduated from SMK in Bekasi City, Class of 2018 – 2021. This research was conducted on graduate students or alumni, because alumni have recently or have not been carrying out a competency test for a long time. So that the effectiveness of competency tests and school environment support to determine the level of self-confidence of students is more measurable. The population used in this study was alumni of SMK students, both state vocational schools and private vocational schools in Bekasi City. a total of 237 Alumni students. The determination of the number of respondents (samples) is carried out through *a simple random sampling* method. It is said to be simple because sampling from a population is done randomly regardless of the strata present in that population, but potential respondents must have certain characteristics, namely the respondents are alumni of SMK students in Bekasi City.

In this study, the data to be revealed are data on the effectiveness of competency tests, school environment support and self-confidence of alumni students of SMK Kota Bekasi, using probability techniques. In data collection using questionnaire or questionnaire techniques and documentation. Furthermore, from 237 respondents the data was analyzed with the help of the computer statistics program SPSS 26 and the AMOS 26 Program. The systematics in the discussion of this chapter consists of descriptive analysis and causality analysis which includes normality testing, outlier testing, *goodness of fit* testing, hypothesis testing and discussion of research.

RESULTS AND DISCUSSION

In testing the validity and reliability of the competency test effectiveness factor is influenced by 11 (eleven) statements. Where from all these statements form 1 variable, namely the Competency Test Effectiveness variable.

Table 1. Validity Conclusion Variable Effectiveness of Competency Test

Latent Variable : Competency Test Effectiveness Factor	SME	MSA	Bartlett's test of Sphericity sig.	Loading factors	Comunalities-Extraction Scoer	Validity Conclusion
X1.1	0,927	.943 ^a	.000	0,789	0,622	Valid
X1.2		.848 ^a		0,666	0,443	Valid
X1.3		.952 ^a		0,738	0,544	Valid
X1.4		.867 ^a		0,723	0,523	Valid
X1.5		.953 ^a		0,788	0,620	Valid
X1.6		.942 ^a		0,822	0,675	Valid
X1.7		.949 ^a		0,748	0,560	Valid
X1.8		.943 ^a		0,756	0,572	Valid
X1.9		.899 ^a		0,720	0,519	Valid
X1.10		.941 ^a		0,779	0,607	Valid
X1.11		.940 ^a		0,726	0,527	Valid

Based on the value in the *Corrected Item-Total Correlation* column, all indicators are valid because it is greater ($>$) than 0.284 (r-table value). And the reliability statistics table, which looks like *Cronbach's Alpha* is $0.921 > 0.60$, the reliability of a variable is said to be good if the value of *Cronbach's Alpha* > 0.60 and it can be concluded that the statement that there is reliable and the data is said to be valid if the data is more than 0.50, as can be seen in table 1.

In testing the validity and reliability of factors of the school environment is influenced by 8 (eight) statements. Where from all these statements form 1 variable, namely the school environment factor variable.

Table 2. Validity Conclusion of School Environment Variables

Latent variable : School Environmental Factors	SME	MSA	Bartlett's test of Sphericity sig.	Loading factors	Comunalities-Extraction Scoer	Validity Conclusion
X2.1	0,922	.935 ^a	.000	0,758	0,574	Valid
X2.2		.920 ^a		0,770	0,593	Valid
X2.3		.924 ^a		0,815	0,665	Valid
X2.4		.904 ^a		0,878	0,770	Valid
X2.5		.919 ^a		0,787	0,619	Valid
X2.6		.945 ^a		0,825	0,680	Valid
X2.7		.907 ^a		0,819	0,670	Valid
X2.8		.931 ^a		0,824	0,679	Valid

Based on the value in the *Corrected Item-Total Correlation* column the entire indicator is valid because it is greater ($>$) than 0.284 (r-table value). And *the reliability statistics* table, which looks like Cronbach's Alpha is $0.922 > 0.60$, the reliability of a variable is said to be good if the value of *Cronbach's Alpha* > 0.60 and it can be concluded that the statement that is reliable and the data is said to be valid if the data is more than 0.50, as can be seen in table 2.

In testing the validity and reliability of the confidence factor is influenced by 6 (six) statements. Where from all these statements form 1 variable, namely the confidence factor variable.

Table 3. Validity Conclusion Confidence Variables

Latent Variable : Confidence Factor	SME	MSA	Bartlett's test of Sphericity sig.	Loading factors	Comunalities-Extraction Scoer	Validity Conclusion
Y.1	0,877	.868 ^a	.000	0,842	0,709	Valid
Y.2		.914 ^a		0,800	0,640	Valid
Y.3		.850 ^a		0,782	0,612	Valid
Y.4		.853 ^a		0,815	0,665	Valid
Y.5		.875 ^a		0,732	0,536	Valid
Y.6		.907 ^a		0,796	0,633	Valid

Based on the value in the *Corrected Item-Total Correlation* column the entire indicator is valid because it is greater ($>$) than 0.284 (r-table value). And *the reliability statistics* table, which looks like *Cronbach's Alpha* is $0.882 > 0.60$, the reliability of a variable is said to be good if the value of *Cronbach's Alpha* > 0.60 and it can be concluded that the statement that there is reliable and the data is said to be valid if the data is more than 0.50, as can be seen in table 3.

Analysis SEM in this study aims to find out more clearly about the effect of the effectiveness of competency tests and school environmental factors on the self-confidence of SMK students in Bekasi City.

The relationship between the effectiveness of competency tests and school environmental factors on self confidence

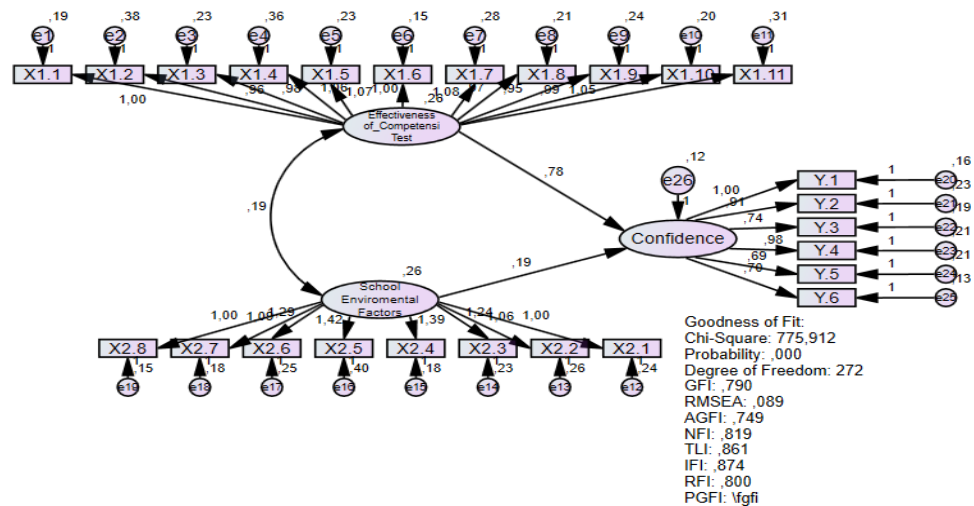


Figure 1. Structural Model before modification

Table 4. Early model Goodness Of Fit (GOF) Test Results

Goodness- of – fit index	Cut-of value	Analysis Results	Model Evaluation
Chi square	Minimum	775,912	Not yet
Sig.Probability	$\geq 0,05$	0,000	Not yet
GFI	$\geq 0,90$	0,790	Not yet
AGFI	$\geq 0,90$	0,749	Not yet
CMIN/DF	$\leq 2,0$	2,853	Not yet
TLI	$\geq 0,90$	0,861	Not yet
CFI	$\geq 0,90$	0,874	Not yet
RMSEA	$\leq 0,08$	0,089	Not yet

The relationship between the effectiveness of competency tests and school environmental factors on self confidence

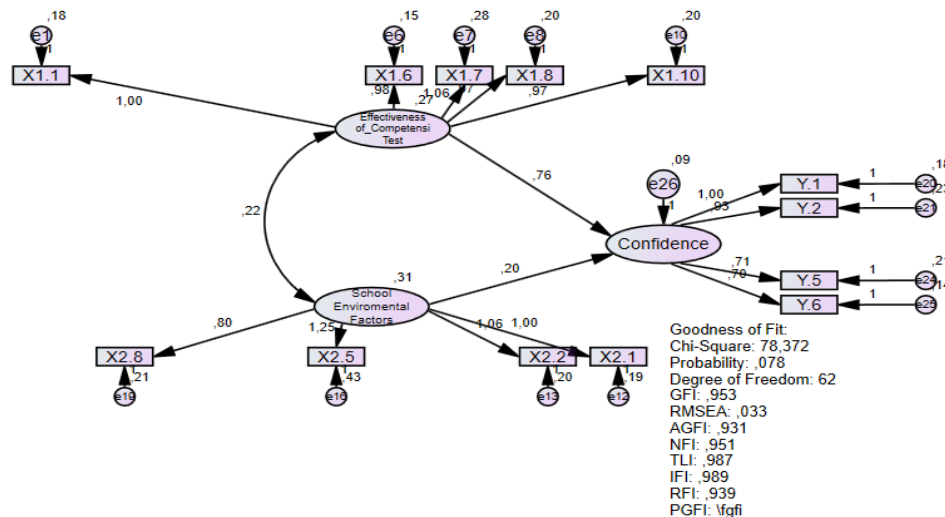


Figure 2. Structural Model after Modification

Table 5. Goodness Of Fit (GOF) Test Results of the model after modification

Goodness- of – fit index	Cut-of value	Analysis Results	Model Evaluation
Chi square	Minimum	78,221	Good
Sig.Probability	$\geq 0,05$	0,078	Not yet
GFI	$\geq 0,90$	0,953	Good
AGFI	$\geq 0,90$	0,931	Good
CMIN/DF	$\leq 2,0$	1,264	Good
TLI	$\geq 0,90$	0,987	Good
CFI	$\geq 0,90$	0,989	Good
RMSEA	$\leq 0,08$	0,033	Good

The evaluation was carried out using several criteria of *goodness of fit* index to measure whether the proposed model was good or not (Hair et al, 1998). This test aims to find out how appropriate or fit the model is in the study. The results of the *model's goodness of fit* (GOF) testing are as follows:

Early model Goodness of Fit (GOF) Test

Based on the results of the goodness of fit test in table 4.48, it shows that the values of the *Chi-square* index, RMSEA, GFI, AGFI, CMIN / DF, TLI and CFI have not met the requirements of the *goodness of fit* index criteria. From the results of testing the *goodness of fit* indicates that the model in the study has not been accepted. Therefore, it is necessary to modify the model to form an alternative model that has good *goodness of fit* criteria by eliminating several indicators that have factors the smallest loading.

Based on the results of the test analysis of the goodness of fit criteria after modification, it can be seen in table 4.35 showing that the value of the *Chi-square*, RMSEA, GFI, AGFI, CMIN / DF, TLI and CFI indices is good and meets the requirements of the

criteria for goodness of fit index, the probability value is not yet good, but overall it can be said that the model is acceptable for research.

Hypothesis Testing and Discussion

Relationship escort construct deep Hypothesis Shown with value regression weight (Hair et al., 1998). On the test Hypothesis in, will significant When value $CR \geq 1.96$ and $P \leq 0.05$. Strength influence get views at value estimate.

Tabel 6. Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
X1.1<--- Effectiveness Of Competency Tests	1				
X1.6<--- Effectiveness Of Competency Tests	0,985	0,077	12,806	***	par_1
X1.7<--- Effectiveness Of Competency Tests	1,056	0,093	11,328	***	par_2
X1.8<--- Effectiveness Of Competency Tests	0,973	0,083	11,675	***	par_3
X1.10<---Effectiveness Of Competency Tests	0,972	0,082	11,832	***	par_4
X2.1<--- School Environment	1				
X2.2<--- School Environment	1,061	0,085	12,451	***	par_5
X2.5<--- School Environment	1,246	0,113	11,019	***	par_6
X2.8<--- School Environment	0,8	0,075	10,629	***	par_7
Y.1<--- Confidence	1				
Y.2<--- Confidence	0,925	0,078	11,836	***	par_8
Y.5<--- Confidence	0,712	0,071	10,103	***	par_9
Y.6<--- Confidence	0,702	0,06	11,709	***	par_10

The results above show that all indicators are valid because they are significantly correlated with their constructs, namely with a P value < 0.05 . The influence of latent free variables on latent bound variables.

CONCLUSION

Based on the activities that have been described in the discussion, the following conclusions can be made: (1) From the results of the study, it can be concluded that the self-confidence of SMK students in Bekasi City arises due to the implementation of the effectiveness of the competency test. This means showing that students consider the effectiveness of the implementation of competency tests that can increase skills, speakers who convey well, competency test materials and supportive facilities so as to affect student self-confidence, (2) In addition, the self-confidence of SMK students in Bekasi City is influenced by factors The school environment consists of the relationship between teachers and teachers, teachers with students and adequate infrastructure so as to create a comfortable and conducive learning environment, (3) These two variables are very dominant in shaping

the self-confidence of SMK students in Bekasi City. From the variables tested by the author, the results of the analysis were obtained by testing the validity and reliability that the two variables (the effectiveness factor of the competency test and the school environment factor) with the results of each variable were valid and showed a fairly high reliability rate. In analysis SEM (*Structural Equation Modelling*) obtained the result that the effectiveness factor of the competency test and school environmental factors have a significant influence in influencing the student's confidence factor or in other words, receiving H1. The author feels that this is enough to answer the purpose of this writing.

Suggestions for schools should be that schools, especially vocational schools, both public and private, should continue to carry out tests so that they can make SMK graduates more confident in competing with the industrial world and schools must further improve factors related to the school environment, for example, the relationship between teachers must be more harmonious, the relationship between teachers and students (teachers must be more patient, can increase enthusiasm for learning, foster good relationships with parents), so as to make SMK graduates more confident. The advice for subsequent researchers to conduct research outside the free variables used in this study as a measuring tool to find out factors that can increase the self-confidence of SMK alumni, for example family environmental factors. For subsequent researchers, it is recommended to be able to replace indicator-indicators that are more relevant to the research so that they can obtain the expected research results and be closer to the truth. In addition, subsequent studies can also increase the number of respondents studied.

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