

# Human Capital and Partnership Affect the Quality of Graduates of Vocational High School through Organizational Culture

Isniar Budiarti, Erni Tisnawati Sule, Hilmiana, Umi Narimawati

**Abstract:** Along with the development of technology, especially in education, vocational schools should be able to produce qualified graduates. But the obstacles faced today are low human capital and minimal partnership relations with stakeholders. Therefore, it needs a good and solid organizational culture to improve the quality of graduates. This research tries to reveal the influence of human capital and partnership to increase quality of graduates through organizational culture. The study used structural equation model (SEM) and the respondents consist of 290 from 343 vocational school in West Java Indonesia. The findings is that an organizational culture as intervening variabel and has very dominant influence in improving the quality of graduates in vocational school.

**Index Terms:** Human Capital; Partnership; Organizational Culture; Quality of Graduates.

## I. INTRODUCTION

Education must be able to face global challenges in the increasingly tangible competition among nations, demanding high quality human resources to compete in national and global environments. Quality human resources are people who have advantages in physical endurance, mental, mastery of science, technology, discipline, responsible, honest and loyal to the country, solidarity, dedication, have certain skills, and future-oriented [1] stated that in this global era the most important is how to enable education as a process of preparing learners to successfully pursue their future. Vocational education is education that prepares students to be able to work in certain areas of work. Rupert Evans defined that vocational education as part of an educational system that prepares a person to be better able to work in a work group or one occupation than any other field of work. Foster (1965a) stated that students are very realistic about

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their best career interests, and do not always depend on the orientation of the school. In particular, he argues that schools are a gateway to the modern economic sector - and as an escape from poor prospects in many rural areas. The core argument of the mistakes of vocational schools, according to Foster, is that "schools are less able to provide market desires and expertise needed. So long as parents and students perceive the function of education in this manner, agricultural education and vocational instruction in the schools is not likely to have a determinative influence on the occupational aspirations and destinations of students. Aspirations are determined largely the individual's perception of opportunities within the exchange sector of the economy, destinations by the actual structure of opportunities in that sector

The education world in Indonesia experienced four key crises namely: quality, external relevance, elitism and management. Specifically, the external relevance of vocational secondary schools remains a problem, with regard to the rise in the open unemployment rate of vocational high school graduates reported medio of July 2018 by the Central Bureau of Statistics nationally is 1,845,144 or increase of 17% from 2015.

**Table I:** Labor Force Population and Open Unemployment Rate (TPT) According to Education

No.	Education	Work	Unemployment	Total	OUR (%)
1.	Elementry School	8.873.253 (44.57%)	711.947 (38,58%)	9.585.200 (44.06%)	5,99
2.	Junior High School	3.721.025 (18.69%)	472.562 (25,61%)	4.193.587 (19.28%)	6,92
3.	High School	3.281.702 (16.48%)	452.835 (24,54%)	3.734.537 (17.17%)	8,06
4.	vocational high school	1.920.432 (9.64%)	166.734 (9,04%)	2.087.166 (19.59%)	0,6
5.	Diploma I,II,III/Academy	588.237 (2.95%)	32,826 (1,78%)	621.063 (2,85%)	1,17
6.	University	1.524.671 (7.66%)	8,240 (0,45%)	1.532,911 (7,05%)	7,21
<b>Total</b>		<b>19.909.320</b>	<b>1.845.144</b>	<b>21.754.464</b>	

**Source:** Central Bureau of Statistics of West Java Province No. 31/05/32. Year 2018



Deal and Peterson (1994), stated that the concept of school culture embracing a wide variety of beliefs, goals, purposes, thoughts, knowledge and expectation. Cultural concepts include the breadth of knowledge, objectives, goals, thoughts, knowledge and expectations. Culture becomes the cornerstone of every policy or rule and directs the behavior of individuals within the school organization[37].

## II. LITERATURE REVIEW

### A. Human Capital

Rastogi (2000) states that human capital is an important input for the organization for continuous employee improvement, especially knowledge, skills and abilities. Thus, human capital is referred to as the knowledge, skills, competence, and attributes contained within the individual that facilitate the creation of personal, social and economic well-being [20] suggested that the competence of human resources or human capital is considered as the vein of an organization and human capital is a very crucial resource to innovate and develop the organization.

Furthermore, Hsu and Wang (2012), defined that human capital is all business capital that is embedded in the employees and not owned by the organization. This capital can be taken by employees, and includes the competence of employees and managers, experience, knowledge, skills, attitudes, commitment and wisdom as well as job control. From some opinions of experts when examined there are several definitions of human capital such as Bontis and Serenko (2009) argue, human capital includes three factors, namely 1) competence, 2) experience, and 3) knowledge possessed by an individual. Carmeli and Tishler (2004) and Castro and Saez (2011), suggested the dimensions of competence, education and work experience, in which dimensions are suitable to apply, suitable for use in various public organizations and private organizations. According Mayo (2000), that human capital has five basic components of leadership, working groups, individual motivation, organizational climate, and individual capabilities[28][30].

So it can be said that human capital is a form of human investment including education, knowledge, skills, and experience so as to be a quality human resources and able to provide added value for the organization.

### B. Partnership

The research results Okpor, Ikechukwu; Najimu, Hassan (2012), about private school partnerships with acquisition skills education and vocational education. Research results Okoye, K R E; Chijioke, Okwelle P. (2013) that training in vocational education held by industry and the private sector helps the industrial sector to gain a skilled workforce, knowledgeable and professional career. Christine [2][3][4], that collaboration or partnership is to enhance and combine the power of society with education of change for the common good. Palestin B. (2007) states that partnership is a relationship or cooperation between two or more parties, based on equality, openness and mutual benefit or benefit. In line with Tracey Allen (in Arifin, 2012), states concrete results from partnership cooperation is expected to provide benefits, especially in supporting the implementation of professional academic education programs.

While Partnership is a facilitator in promoting sustainable

national development especially in vocational education. So it can be concluded that this can be realized if the world of education is willing to establish relationships or cooperation between private sectors with the public sector to partner effectively as built vocational technical education[33][36].

### C. Organizational Culture

According to Robbins (2003), organizational culture is a shared system of shared values and shared values of the organization, which serves to create a clear distinction between one organization and another, creates a sense of identity for members of the organization, facilitates the emergence of commitment collective organization, enhancing social system stability, and creating mechanisms of meaning and control that guide the attitude and behavior of members of the organization. Deal and Kennedy as quoted Robbins (2001) describes the organizational culture as the dominant values supported by the organization.

Furthermore, Parra and Castillo (2013)[13][14] define organizational culture as a set of values, beliefs and patterns of behavior that shape the basic identity of an organization, and derive from the founders' thinking, which evolves over time by accumulated experiences, new social trends and changes in managers until with today. Ballou (2010) says that the organizational culture is a value and mutual trust that helps individuals understand organizational functions and give them norms of behavior within the organization[22][23]. She uses eight dimensions of organizational culture, namely innovation, attention to detail, result orientation, aggressiveness, support, emphasis on rewards, team orientation, and firmness. The results obtained are aggressiveness limiting satisfaction, and employees recognize that job satisfaction is affected by justice, opportunities for personal growth, enthusiasm for work and good reputation [15][16] conducted empirically, test the influence of managerial capabilities and organizational culture on financial performance.

Based on some of the expert opinions above, the concept of organizational culture raises a variety of perspectives, but basically that organizational culture is related to the system of shared meaning that is believed by all members of the organization (refers to a system of shared meaning held by members), where the same meaning that contained within the organizational culture[17].

### D. Quality of Graduates

Quality refers to Juran (1998), is fitness for use, this means that a product or service should be in accordance with what is required or expected by the user. Parsley and Carrigan (1994) argued that the term quality is defined as the superior or the achievement of a perfect standard that begins with a standard grade assessment, or something that has only an acceptable minor error. Furthermore[5][6], defined that quality as a dynamic condition related to products, services, human resources, processes, and environments that meet or exceed expectations.

While Kotler (2007), defines quality as the overall characteristics and nature of goods and services that affect the ability to meet the needs [7][8][9], that quality in education must be in accordance with the required or standardized, both

input, process and output. Benedicta (2016), suggested soft skill competence, skill competence and show that, significant soft skill effect on competence (initiative, confidence and assertiveness) intent to become entrepreneur. Wang and Huang (2017), uses four dimensions: development ability, social ability, professional ability and personal qualities, and the results of his research there are several correlations between the four dimensions[10][11].

From some of the description above, it can be concluded that the graduate quality constructs in this study is achievements achieved by graduates through input, process and output, within a certain period of time that has the ability to meet the needs and expectations of users. The ability to innovate has the greatest influence on development ability, organizational capability and coordination have the greatest influence on social capability, operational ability has the greatest influence on professional competence, and professional ethics has the greatest effect on personal quality.

The hypothesis of this study assume that human capital affect the quality of graduate vocational high school through organizational culture (H1). Hereafter, this study assume that partnership affect the quality of graduate vocational high school through organizational culture (H2)[12].

### III. METHOD AND RESEARCH DESIGN

This research use SmartPLS.20 model to test the structural model and hypothesis. The purpose of this research is to reveal the affect of human capital and partnership to the quality of graduate vocational high school through organizational culture to be novelty in the form of model finding through hypothesis testing. Hypothesis testing is done by using quantitative research design that is by making research question using semantic differential scale with criterion answer 5 to be asked to director and staff of vocational high school in West Java. The number of samples used in this study was calculated based on the provisions in using structural equation modeling. Schumacker and Lomax (2004), suggested the number of samples is at least 5 times the number of parameters. In this study there are 57 parameters, consisting of 40 first order loading factors, 9 second order loading factors, 5 path coefficients, 1 correlation coefficient and 2 other factors. So the minimum number of samples needed in this study is as many as 290 Vocational High Schools in the Region IV Bandung Raya West Java Province[20][21].

Participants were asked to indicate their agreement with each of the 68 items questionnaire was assessed using a 5-point Likert scale (1 = lowest and 5 = highest) for human capital, partnership (1 = worse and 5 = excellent), and quality of graduate (1 = worse and 5 = excellent). A questionnaire was designed to assess human capital and partnership towards quality of graduate through organizational culture. The researcher examined the internal scale reliability of the each variables questionnaire and the scale was found to have good internal consistency to examine n= 290, significant level 5%, and t table = 2.253, and dimension of constructs are as showed in table II.

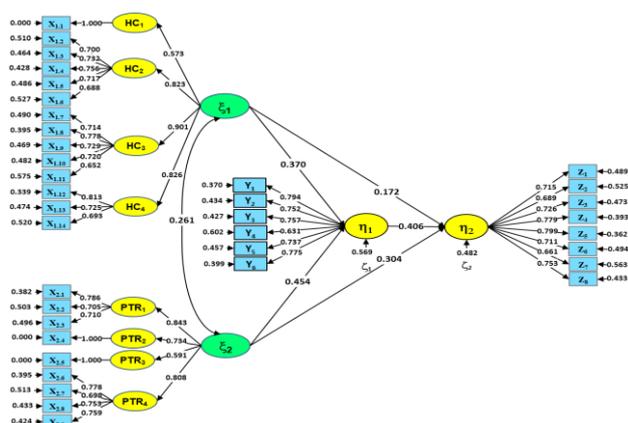
**Table II:** Variables, Dimensions, and Measurement

Variables	Dimensions	Measurement
Human capital	Education	1. Academic cualification
	Knowledge	1. Practice

		2. intellectuality
		3. Small talk
		4. Spirituality
Competence		1. Personality
		2. Managerial
		3. Entrepreneurship
		4. Supervision
		5. Social
Managerial skills		1. Conceptual skills
		2. Humanity skills
		3. Technical skills
Apprenticeship program		1. Student debriefing
		2. Student placement
		3. Student coaching
Training program		1. Visiting company
		1. Partners in production
Production program		1. Partnership in recruitment
		2. Community problem solving
		3. Program relevance to community needs
Graduate distribution program		4. Become a skilled community
		1. Planning contribution
		1. Easy to implementation
		1. Goal procedure planning
Quality of graduate	Significant Flexibility	1. Guarantee ability
	Relevance	1. System recovery for future
	Uncertainty	1. Plan for time graduate
	Adaptation skills	1. Measurement tools
	Time	1. Implementation for future
	Monitoring	1. School values
	Learning materials	1. Behavior standard norms
	Behavior rules	1. Achievement of education quality
	Norms	1. Organizational members belief
	Dominant values	
Organization culture	Philosophy	

### IV. DATA ANALYSIS AND FINDING

The hypothesis testing is intended to examine the influence of human capital and partnership towards graduate quality through organizational culture. The path diagram belows can be written in the structural equation as follows :  $\eta_2 = 0.410\xi_1 + 0.465\xi_2 + 0.506\xi_1$  : human capital,  $\xi_2$  : partnership,  $\eta_2$  : organizational culture.



**Fig 1:** Structural Model Research of Human Capital and Partnership to Quality of Graduates Through Organizational Culture

The magnitude of human capital influences 19.8% and partnership 15.5% to organizational culture. It can be seen from the table results of the correlation of these two variables. Evaluation of causal relationships between variables of research is carried out through verification of structural



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models[18]. Based on data processing obtained verification of the influence between variables as presented in the following table III.

**Table III:** Inter Variable Effect Verification Results

Path	Direct		Indirect		R <sup>2</sup>
	Coefficient	t-value	Coefficient	t-value	
$\xi_1 \rightarrow \eta_1$	0,370	4,652	-	-	0,431
$\xi_2 \rightarrow \eta_1$	0,454	5,493	-	-	
$\xi_1 \rightarrow \eta_2$	0,172	2,172	-	-	0,518
$\xi_2 \rightarrow \eta_2$	0,304	3,437	-	-	
$\eta_1 \rightarrow \eta_2$	0,406	4,059	-	-	
$\xi_1 \rightarrow \eta_1$	-	-	0,150	3,171	
$\xi_2 \rightarrow \eta_1$	-	-	0,184	3,485	
$\rightarrow \eta_2$					

Table III shown that human capital and partnership simultaneously have an effect of 43.1% on organizational culture. Then human capital, partnerships and organizational culture together have an effect of 51.8% on the quality of graduates, while the remaining 48.2% is the influence of other factors not examined. Furthermore, hypothesis testing is done to prove the presence or absence of the influence of human capital and partnerships on organizational culture and its impact on the quality of graduates.

The influence of human capital and partnerships toward organizational culture. The result effect of each exogenous variable (human capital and partnership) is calculated on the organizational culture as showed on table IV. below.

**Table IV** The Effect of Each Exogenous Variable on Organizational Culture

Exogenous Variable	Path-coefficient t	Direct	intervening		Total
			$\xi_1$	$\xi_2$	
$\xi_1$	0,370	13,7%		4,4%	18,1%
$\xi_2$	0,454	20,6%	4,4%		25,0%
<b>Simultaneously</b>					<b>43,1%</b>

Simultaneously both exogenous variables (human capital and partnership) contribute or influence by 43.1% on organizational culture in vocational schools in the Greater Bandung area. While the remaining 56.9% is the influence of other factors outside of the two exogenous variables studied. Between the two independent variables, partnerships provide a greater influence on the organizational culture of vocational schools than human capital.

**Table V:** Hypothesis Testing Results

Hypothesis	$\gamma$	r <sup>2</sup>	t	Results
Human capital $\rightarrow$ organizational culture	0.198	0.04	3.630	Hypothesis accepted
Partnership $\rightarrow$ organizational culture	0.155	0.02	3.095	Hypothesis accepted

Table V above shown that partially human capital variables (t count > t table) where the value of r<sup>2</sup> = 4% biggest than partnership to the quality of graduate, and the amount of

indirect influence is 0.0008. These results shown that a excellent human capital such as education, knowledge, competence, and managerial skills are instrumental in improving the quality of graduates[19]. This is in line with Ayman (2010) that effective sharing of knowledge among academics at higher education institutions is essential. Also revealed by Felicia (2015), found that knowledge sharing is very influential on performance improvement. the achievement of competitive advantage is a major predictor of the achievement of strong organizational performance.

And partnership factors such as apprenticeship program, training program, production program, and graduate distribution program are needed to increase the quality of graduates.

**Table VI:** Hypothesis Testing Result

Hypothesis	$\gamma$	r <sup>2</sup>	F	Results
Organizational culture $\rightarrow$ quality of graduates	0.506	0.25	18.953	Hypothesis accepted

Based on the results of the SPSS v.20 output above it shows the calculated F value is greater than the F table value (18.953 > 3.32) with a significant level below 0.05, which is 0.000. And the simultaneous test decision making in regression analysis it can be concluded that the human capital (X<sub>1</sub>) and partnership (X<sub>2</sub>) have a significant effect to increase the quality of graduates. The structural equation of path diagram of simultaneously :  $\eta_2 = 0.198\xi_1 + 0.155\xi_2 + 0.672\beta + 0.815$

Thus, organizational culture such as behavior rules, norms, dominant values, and philosophy has an important role in improving the quality of graduates, because it becomes a mediating variable of human capital and partnership in influencing the quality of graduates positively and significantly.

In line with the opinion of Shah Raza (2010) that conducive organizational climate, such as lecturers are given the opportunity to discuss academic problems in groups, seminars and conferences, will improve the performance of lecturers.

## V. DISCUSSION

The estimation of the largest coefficient of determination in the latent variable quality of graduates can be seen in the indicators of improving the system implemented in the future. These results indicate that improving the system in the future is the most powerful factor in reflecting the quality of graduates, then the indicators of the ability to provide guarantees. On the other hand, indicators of tools to measure the success of implementation in every aspect of the activity are the weakest in reflecting the latent variables of the quality of graduates. So based on the results that human capital partially influences the organizational culture of vocational schools in the Greater Bandung area. human capital has a direct influence of 13.7% on organizational culture. indirect effect of 4.4% so that the total effect of human capital on organizational culture is 18.1 percent. Thus it can be concluded that partnerships affect the quality of graduates through



organizational culture.

## VI. CONCLUSIONS

The quality of graduates in vocational schools, especially in the province of West Java is influenced by human capital and partnerships, but the most dominant concept of influence is through organizational culture that applies to every vocational school. Because organizational culture becomes an intervening variable that has a huge influence in improving the quality of graduates.

However, in terms of the output of the graduates did not fully meet the criteria needed by stakeholders or industry. And this is what is further research to assess how the pattern of vocational education is easily accepted and needed by the industries.

## SUGGESTIONS

Vocational schools must be oriented to competencies that are in line with the times and technology. By improving the quality of human resources as human capital and partnerships that encourage and drive superior programs, as well as an organizational culture that prioritizes discipline of learning and solid teamwork.

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