

# Influence of Graduation Quality and Flight Training as a Vocational School on International Standard Job Opportunities

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**Abstract** – This article aims to analyze the influence of graduate quality and flight training on international standardized job opportunities in Civil Aviation Safety and Engineering Academy of Surabaya. This explanatory research with a quantitative approach involves 75 graduates at Civil Aviation Safety and Engineering Academy of Surabaya. Data collection in this study was collected through a questionnaire. The data analysis technique we used was SEM analysis with the PLS program. This result indicates that graduates quality and flight training as vocational training have a significant and positive impact on international standard job opportunities in Civil Aviation Safety and Engineering Academy of Surabaya.

**Keywords** – Graduates Quality, Training, Job Opportunities.

## 1. Introduction

Unemployment is an employment problem often faced in every country, especially developing countries such as Indonesia. According to Central Bureau Statistics, the total workforces in Indonesia on February 2018 was as 133.94 million people that increased to 2.39 million from the total workforces on February 2017. From the total of 133.94 million people, there were 127.07 million people who were working, whereas 6.87 million people were categorized as unemployed.

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On February 2018, unemployment decreased to 140 thousand people, parallel with Open Unemployment Level that decreased into 5.13 percent. Open Unemployment Level is an indicator that can be used for measuring the employee offering levels which are not absorbed by markets. Based on Central Bureau Statistics data, viewed from educational levels, Open Unemployment Level for Vocational High School was the highest among other educational levels, i.e., 8.92 percent [1]. According to the Educational and Cultural Minister, the main problem of Vocational High School graduates is that there is no suitability between industrial needs and employees. Vocational High Schools are also valued to have obstacles including teachers. The number of SMKs increases every year, but this has not put together yet with efforts to improve the quality and process of accreditation considering that there are still 29,043 areas of expertise in Vocational Schools whose status is not accredited yet [2].

By looking at the conditions that occur in Indonesia, it can be perceived that vocational graduates will find it difficult to compete with other countries in obtaining job opportunities, especially in international standardized companies. And also, it also can be found in the era of globalization and intense competition now today and in the future. Therefore, it is the responsibility of the world of education, especially vocational education to be able to produce quality graduates.

Vocational education as part of the national education system plays a very strategic role in the realization of a quality workforce. This is because SMK graduates now tend to be more wanted and recognized so that their expectations for employment are also getting higher. To improve the quality of vocational education, the Director of Vocational Education in the Ministry of Education and Culture stated that the government continues to synchronize the curriculum with the needs of business world. Also, quality can be improved through close cooperation and developing competencies that are currently needed [3]. Thus the importance of the quality of these graduates will be the main focus

within vocational education or vocational education in improving the quality of education.

In addition, to reduce unemployment and increase employment opportunities or higher job opportunities, there is a need for adequate training which provides better skills to graduate students. Training is the main thing for vocational education. Basically Vocational School is formal education that has a unique training pattern directly to students to become graduates who are ready to plunge professionally and participate in the business or corporate world, such as the definition of National Education System Law article 15 which states that Vocational Education is secondary education that prepares students to work in certain fields. The training aims to increase knowledge, improve skills and change attitudes [4].

Based on a theoretical and empirical review of the literature, this research was conducted to analyze the effect of graduate quality and flight training as vocational training on international standardized job opportunities at the Academy of Engineering and Aviation Safety.

## 2. Review of Literature

### *Quality of Graduates*

Quality is a primary factor that influences a person's choice for various types of products and services [5]. The word quality has a variety of interpretations, it cannot be defined single and it is very dependent on the context. According to Lestari et al. [6] classical notion of quality shows the nature that describes the excellent degree of an item or service that is produced or supplied by an institution with specific criteria.

Thus in the context of education, the quality of graduates can be defined as the quality of students produced or supplied by an institution or educational institution reviewed through specific criteria. The factors that influence the quality of graduates are the characteristics of education taught by educators [7], the assessment system used, the curriculum provided [8], and the collaboration of schools with business world that are suitable to be applied to vocational subject learning [6].

### *Training*

According to Rivai and Ella [9], training is the process of systematically changing one's behavior to achieve organizational goals. Training relates to expertise and ability of a person to carry out current work. Training has a current orientation and helps someone to acquire certain skills and abilities to succeed in carrying out their work.

Furthermore, Mustaqim [10] also define training as an attempt to improve the performance of their responsibilities, or a work that has to do with their work. Whereas according to Siahaan and Simatupang [11] the definition of training is a teaching and learning process by using certain techniques and methods conceptually [12], and it can be said that training intends to improve the skills and abilities of a person or group of people.

Beside that Mathis and Jackson [13], define training as a process in which people achieve certain abilities in order to help realizing organizational goals. Because of this, the process is bound to various organizational purposes, it can also be viewed narrowly or broadly. Then based on Siswanto [14] who argues that training is the management of education and training as a whole includes the functions contained therein, namely planning, regulation, control and assessment of general activities and skills training, as well as special education and training.

### *Job Opportunity*

Based on Sukirno [15] job opportunities are a situation in which all workers who want to work at a certain wage level will quickly get a job. Job opportunities are the number of people who can be accommodated to work in an agency. This job opportunity will supply all available labor if the available employment is sufficient or balanced with a large number of available labors.

Job opportunities can be created if there is a demand for labor in the labor market, so in other words job opportunities can also be interpreted as a demand for labor, namely a condition that describes the availability of jobs that are ready to be filled by job bidders (job seekers).

## 3. Research Methodology

This research is explanatory research. It is used to analyze relationships between variables through hypothesis testing [16]. This study uses a quantitative approach, namely research method that uses statistical analysis in the form of numbers [17].

These populations were graduates at the Academy of Engineering and Aviation Safety. The sample is a part of number and characteristics possessed by the population [17]. Then, this research uses purposive sampling technique, by which samples are taken on the criteria determined by the researcher. The sample size used is a multivariate type that refers to the sample measurement guidelines; in [18] uses 15 variable indicators. So this study uses a sample of  $5 \times 15 = 75$  graduates of the Academy of Engineering and Aviation Safety.

This method is the survey method that uses a questionnaire. According to Tarsito [17], questionnaire is given to respondent, namely a set of written statements to be answer. A Likert scale is used as a scale scaling method. The variables measured in the Likert scale are translated back into the form of sub-variables, in which the sub-variables are retranslated into measurable components.

The data analysis is chosen to analyze the data and test the hypothesis in this study, and it is The Structural Equation Model (SEM) [18]. Then, to answer the hypothesis Partial Least Square (PLS) is used. Based on Gozali [16], the calculation has to be done using a Smart Partial Least Square (PLS) tool, because it is in the form of a multi-lane and the model used it is in the form of Reflective. Since it has a multi-lane relationship and is formative and reflective, and the calculation model is done by using Smart PLS tools. The sample in this study was fulfilled by 75 respondents.

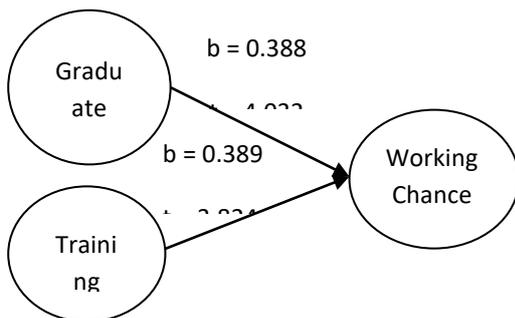
#### 4. Results

##### *Inner Model Evaluation*

The inner model is called inner relation, structural model and substantive theory, which is why it is very important to specify influences inter research variables (structural model).

##### *Inner Model Test or Structural Model Test*

The results of the analysis for the level of conformity on the structural model that is built show that the overall model has been "relevant" to explain the variables studied and their effect on each variable. In assessing the model with PLS, it starts by looking at R-Square for each latent dependent variable. Changes in the value of R-Square can be used to assess the effect of certain independent latent variables on latent dependent variables whether they have substantive effects. For endogenous latent variables in a structural model that has a result of R2 of 0.67 indicating that the model "good", R2 of 0.33 indicates that the model "moderate", R2 of 0.19 indicates that the model is "weak" [19].



Picture 1. PLS Inner Model

The results of the analysis that has been carried out indicate that the variable Quality of Graduates and Training that affect the Job Opportunities variable has an R2 value of 0.425 which indicates that the model is "moderate". It means that The Quality of Graduates and Training can explain job Opportunities at 42.5% while the rest, which is 57.5%, is influenced by other factors that are not examined in this study.

##### *Hypothesis Testing Results*

##### **Hypothesis Test 1 (H1)**

Based on the results regarding the first hypothesis testing, it shows that the quality of graduates has a significant effect on job opportunities. This is evidenced by the value of the T-statistic greater than 1.96, which is 4,032. Thus the first hypothesis in this study which states "The quality of aviation graduates as vocational training has a significant and positive effect on the International Standard Job Opportunities in the Academy of Engineering and Aviation Safety" verified the truth. The direction of the relationship that occurs in the two variables is positive, which means that the better the quality of graduates, the more employment opportunities will be increased by having a large influence of 0.388.

##### **Hypothesis 2 (H2)**

Based on the results of testing the second hypothesis it is proven that training has a significant effect on job opportunities. This is evidenced by the value of the T-statistic greater than 1.96, which is 3.824. Thus the second hypothesis in this study which states "Flight training as vocational training significantly and positively influences the International Standard Job Opportunities in the Academy of Engineering and Aviation Safety" is proven as correct. The influence that occurs between training variables with job opportunities is positive, which means that the better the training, the more employment opportunities will be increased by having a large influence of 0.389.

#### 5. Discussion

##### *Effect of Graduate Quality on International Standard Job Opportunities at the Academy of Engineering and Aviation Safety*

The results of the data analysis have proven that Graduate Quality has a significant and positive effect on International Standard Job Opportunities at the Academy of Engineering and Aviation Safety as evidenced by the T-statistic value of 4,032 which means higher than 1.96, so that it can be explained

that high employment opportunities can form through the existence of good quality graduates. Thus it can be concluded that the first hypothesis which states "Quality of aviation graduates as vocational training has a significant and positive effect on International Standard Employment Opportunities in the Academy of Aviation Safety and Engineering", was declared accepted and proven true.

The quality of graduates can be defined as the quality of students produced or supplied by an institution or educational institution reviewed through certain criteria. The success of an educational institution in improving the quality of graduates is to produce superior and ready-to-work graduates so that they have more excellent opportunities to obtain employment opportunities [20]. It is in line with the findings in this study that prove the effect on the variable quality of graduates on job opportunities is positive. It can be interpreted as a direct influence. Thus it can be concluded that the better the quality of graduates created by the Academy of Engineering and Aviation Safety, the more high employment opportunities are obtained by students. The results in this study are in line with the results of the study [6] which found that the quality of graduates had a positive and significant impact on employment opportunities perceived from the work waiting period and relevance.

### ***Effects of Training on International Standard Job Opportunities at the Academy of Engineering and Aviation Safety***

The results of data analysis have proven that training has a significant and positive effect on International Standard employment opportunities at the Academy of Engineering and Aviation Safety as evidenced by the T-statistic value of 3,824 which means higher than 1.96, so that it can be explained that high employment opportunities can be formed through good training. Thus it can be concluded that the second hypothesis which states "Flight training as vocational training has a significant and positive effect on International Standard Job Opportunities in the Academy of Aviation Engineering and Safety", was declared accepted and proven true.

Furthermore, Mardikanto [20] argues that training plays an essential role in preparing individuals to enter the labor market for obtaining employment opportunities. One measure for the success of a training program is its ability to improve the ability of an individual to become superior and competent so that they are ready to enter the labor market and have great opportunities.

## **6. Conclusion**

Graduate qualities influence significantly toward job opportunities with International Standards in Technique Academy and Aviation Safety. The influences of both variables are positive, so the better the graduate qualities, and the higher job opportunities. Therefore, the first hypothesis is accepted and it is proven as truth.

Training influences significantly toward job opportunities with International Standard in Technique Academy and Aviation Safety. The influences of both variables are positive, so the better the training, and the higher are job opportunities. Therefore, the second hypothesis is accepted and it is proven as a true one. Future research may investigate what can develop these research results by adding other variables outside this research, and it can also give contributions to job opportunities improvements.

## **References**

- [1]. Putri, R. D., & Sari, S. P. (2018). Implementation of John Holland's Career Theory in Guidance and Counseling. *Enlighten (Jurnal Bimbingan dan Konseling Islam)*, 1(2), 126-132.
- [2]. Harlis, F. P., & Alexandri, M. B. (2019). perbandingan kebijakan perluasan kesempatan kerja di india dan di Indonesia pada studi kasus: kabupaten sumedang. *Responsive*, 1(3), 109-114.
- [3]. Khoiron, A. M., Al-Janani, D. H., & Widayat, W. (2018). Pelatihan Perancangan Komponen Otomotif Berbasis Autodesk Inventor Terhadap Kompetensi Peserta Didik SMK N 7 Semarang. *SNKPPM*, 1(1), 472-475.
- [4]. Lestari, P. A., & Sriathi, A. A. A. (2012). Pengaruh Pelatihan Kerja, Lingkungan Kerja Fisik Serta Motivasi Terhadap Produktivitas Kerja Pegawai Pada PT. TASPEN (PERSERO) Kantor Cabang Denpasar. *E-Jurnal Manajemen*, 2(9).
- [5]. Kumar, V., & Pansari, A. (2016). Competitive advantage through engagement. *Journal of Marketing Research*, 53(4), 497-514.
- [6]. Lestari, Winda. D., Burhanuddin., Triwiyanto, Y. (2017). *Kualitas Lulusan, Motivasi, dan Pengaruhnya Terhadap Penempatan Kerja Alumni Smkn Se-Kota Malang*. Malang: Unipress
- [7]. Siswono, T. Y. E., Hartono, S., & Kohar, A. W. (2018). Effectiveness of Project Based Learning in Statistics for Lower Secondary Schools. *Eurasian Journal of Educational Research*, 18(75), 197-212.
- [8]. Siswono, T. Y. E., Kohar, A. W., & Hartono, S. (2018). Designing Tasks to Examine Mathematical Knowledge for Teaching Statistics for Primary Teachers. In *Journal of Physics: Conference Series* (Vol. 947, No. 1, p. 012008). IOP Publishing.
- [9]. Rivai, V., & Sagala, E. J. (2004). *Manajemen Sumber Daya Manusia Untuk Perusahaan*, Jakarta: PT. Raja Grafindo Persada.Gomes.

- [10]. Mustaqim, M. (2016). Prinsip Syariah Dalam Manajemen Sumber Daya Manusia (studi atas implementasi manajemen sumber daya manusia UMKM di Kudus). *Jurnal Penelitian*, 10(2).
- [11]. Siahaan, E., & Simatupang, E. M. (2017). Pengaruh Pelatihan dan Motivasi Kerja Terhadap Kinerja Karyawan pada PT Perkebunan Nusantara III (PERSERO) Medan. *Jurnal Agrica*, 8(2).
- [12]. Prawoto, B. P., Hartono, S., & Fardah, D. K. (2018, November). Prospective teachers' difficulties in second order linear differential equation: a case of constructing methods in solving a non-homogeneous problem. In *Journal of Physics: Conference Series* (Vol. 1108, No. 1, p. 012002). IOP Publishing.
- [13]. Mathis, R. L., & Jackson, J. H. (2002). *Manajemen Sumber Daya Manusia Buku 2*. Jakarta: Salemba Empat.
- [14]. Siswanto, B. (2005). *Manajemen Tenaga Kerja Indonesia Pendekatan Administratif dan Operasional*. Jakarta: Bumi Aksara.
- [15]. Sukirno, S. (2004). *Makro Ekonomi Teori Pengantar Edisi Ketiga*. Jakarta: Raja Grafindo Persada.
- [16]. Silalahi, U. (2009). *Metode Penelitian Sosial*, Bandung: Refika Aditama.
- [17]. Tarsito, S. (2014). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta
- [18]. Ferdinand, A. (2014). *Metode Penelitian Manajemen edisi kelima*. Semarang: Badan Penerbit Universitas Diponegoro.
- [19]. Ghozali, I. (2006). *Aplikasi analisis multivariate dengan program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.
- [20]. Mardikanto, T. (2016). Peningkatan Relevansi Pelatihan dengan Kesempatan Kerja. *Jurnal Ilmu Pendidikan*, 6(2).