

The Comparative Analysis of Graduate Competency of School of Economics (STIE) SATRIA Before and After Working

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ABSTRACT

Competency is one of the valuable aspect to improve employee performance. The purpose of this research was to analyse the different competency of STIE Satria graduates before and after working. Participants were STIE Satria graduates during a period of 2015 to 2019. Number of samples was 75 respondents determined by purposive random sampling method. The competency variable was measured by an instrument developed by Spencer and Spencer. Data were collected by distributing a questionnaire and analyzed using paired t-test. The results showed that the competency of STIE Satria graduates before and after working were significantly different. Based on the result, STIE Satria needs to improve its graduate competency in order to meet the needs of company.

Keywords: Competency; Employee performance; Graduates.

1. Introduction

Management of human resources in the organization is a very important function in achieving organizational goals. The increasing competition between organizations and technological advances in the era of globalization requires every organization to have qualified and competent human resources in their fields. Graduate competency standards at the higher education level aim to prepare students to become members of society who have noble character, knowledge, skills, and attitudes to discover, develop, and apply science, technology and art that are beneficial to humanity.

Higher education institutions and industry have a very important relationship for the development of human resources in order to produce workers who are ready to work, innovative, productive, and skilful (Jailani and Fadilah, 2011). According to Venkatraman (2007), the relationship between institution and industry needs to be flexible in the aspect of (1) the management of the process of education; (2) curriculum; (3) assesment; (4) method of delivery, and (5) lecturer. Therefore, careful planning and all-round cooperation will lead to the expanding requests for quality human resource (Hasnahet *al.*, 2009; Saari and Rashid, 2013).

STIE Satria is a private higher education that has produced 1600 graduates in management and accounting who have worked in various sectors, both government-owned and private companies. As a provider of human resources for stakeholders both from the profession, graduate users and the general public, STIE Satria has to improve graduate competencies in their fields so that they are ready to enter the work market. STIE Satria graduates' competencies include attitudes, knowledge and skills which are stated in the formulation of graduate learning outcomes.

Competence according to Spencer and Spencer (1993) is a person's underlying characteristics related to the effectiveness of individual performance in his work or individual basic characteristics that have a causal relationship or as a cause-effect with criteria that are used as a reference, effective or excellent or superior performance in the workplace or in certain situations. Competence is the basis for how the work is carried out by employees in accordance with the demands of the work for which they are responsible so as to achieve high performance.

Higher education graduates who are highly competitive in the world of work must have components of competence such as cognitive, affective, and psychomotor. Cognitive is an individual's intellectual ability to think, act and apply knowledge according to their field of expertise. Affective is the emotional or feeling segment of an attitude that is reflected in the statement. Meanwhile, psychomotor relates to the skills possessed by a person. Skills can be seen in accordance with a person's skills in behaviour (Spencer and Spencer (2010)). These three components form an ability called competence.

Work can be interpreted as an effort made by humans to earn income in order to fulfil certain goals. A person works because there is something he wants to achieve and hopes that the work activities carried out will lead to a more satisfying state than the previous situation (Anoraga, 2014). Based on tracer studies, the competency of STIE Satria graduates is still not optimal yet, in terms of knowledge, expertise, and skills.

Based on the above description, the formulation of the research problem was any differences in graduate competencies before and after work. The objective of the research was to analyse the significant difference of graduate competency before and after working.

2. Literature Review

2.1 Competency

A competency is an individual characteristic that can be measured or counted reliably and that can be shown to differentiate significantly between superior and average performers, or between effective and ineffective performers. Meanwhile, competency can be described as a set of behavior patterns that an incumbent needs to bring to a position in order to perform its tasks and functions in the delivery of desired results or outcomes (Woodruffe, 1992; Bartram et al., 2002; Vathanophas and Thai-Ngam, 2007). Spencer & Spencer (1993) stated that competency is a fundamental characteristic that affects individual's way of thinking and acting, as well as facing all situations encountered, and surviving in the long phase in life as human beings. Competency as "an underlying characteristic of an individual is causally related to criterion-referenced effective and/or superior performance in a job or situation". Underlying characteristic means the competency is a fairly deep and enduring part of a person's personality and can predict behavior in a wide variety of situations and job tasks. Causally related means that a competency causes or predicts behavior and performance. Criterion-referenced means

that the competency actually predicts who does something well or poorly, as measured on a specific criterion or standard.

Spencer & Spencer (1993) identified five types of competency characteristics consisting of motives, traits, self-concept, knowledge and skills. Firstly, motives are the things that an individual consistently thinks about or wants that stimulate action. Motives drive, direct and select behavior toward certain actions or goals and away from others. Secondly, traits are physical characteristics and consistent responses to situations or information. Thirdly, self-concept is an individual's attitudes, values or self-image. Fourthly, knowledge is the information that an individual has in specific content areas. Finally, skill is the ability to perform a certain physical or mental task. Knowledge and skill competencies tend to be visible and relatively surface characteristics, whereas self-concept, traits and motive competencies are more hidden, deeper and central to personality. Surface knowledge and skill competencies are relatively easy to develop, and training is the most cost-effective way to secure those employee abilities (Spencer & Spencer, 1993).

Twenty generic competency from competence of work (Spencer and Spencer, 1993) are as follow: achievement orientation, concern for order; initiative, information seeking, interpersonal understanding, customer service orientation, impact and influence, organizational awareness, relationship building, developing others, directiveness, teamwork, team leadership, analytical thinking, conceptual thinking, expertise, self-control, self-confidence, flexibility, and organizational commitment. According to Spencer and Spencer, competency can be organized from 5 dimension of competencies: motives, self-concept, knowledge, skills, and ability. However according to Vathanophas and Thai-Ngam (2007), competency is divided into motives, self-concept, skills, and ability.

2.2 Value of Competency

The value of competency has been widely explored. The results of the study suggested that six human resource conditions have to be met. These conditions were a performance-oriented culture, low turnover, high level of employee satisfaction, a cadre of qualified replacements, effective investment in employee compensation and development, and the use of institutional competencies (success factors) in employee selection and performance evaluation processes (Berger & Berger, 2004). Mitraniet al. (1992) mentioned the need for competency and predict that organizations of the future will be built around people.

The competency approach in selection and assessment is based on classifying, identifying, and measuring individual differences for particular work-related constructs that are relevant to successful job performance (Bartram, 2004). Cummings and Worley (2001) similarly stated that organizational changes frequently demand new knowledge, skills and behavior from employees. They argue that in many cases changes could not be implemented unless employees gained new competencies. They also suggest that change agents are needed to provide multiple learning opportunities, such as traditional training programs, on-the-job counselling and coaching, and experiential simulations, covering both technical and social skills, and that it must be ensured that such learning occurs.

2.3 Impact of Working on Employee Competency

Work can be interpreted as an effort made by humans to earn income in order to fulfill certain goals. A person works because there is something he wants to achieve and hopes that the work activities carried out will lead to a more satisfying state than the previous situation (Anoraga, 2014). According to Spencer and Spencer (2010) a person who is competent to do the job skills easy, fast, and intuitive and very rarely or never make mistakes Training and development is a company program carried out for new employees that aims to improve influencing employee performance through the development of employee knowledge, skills, ability, competencies and behaviour (Appiah, 2010). The employees valued work experience as the main source of their competence and their competence mainly through learning at work. Based on the above description, the research hypothesis was that competency of graduate of School of Economics Satria before and after working was significantly difference.

3. Research Methodology

Participants were selected from 1600 graduates of School of Economic Satria Purwokerto. Number of samples were 75 graduates in last five years who had been working determined by purposive random sampling method. This research conducted by a survey method with questionnaire as a survey instrument. Competency of graduate of School of Economics Satria was measured using twenty generic competency proposed by Spencer and Spencer (1993) as the most widely used in organization. Five dimensions namely knowledge, skill, motive, trait, and self-concept were measured using a 5 point scale by Likert. First step validity, reliability and normality test analysis was conducted to check stability, consistency, and normality of measurement. Furthermore, the main analysis used paired t test method to determine differences in graduate competencies before and after work.

4. Results

4.1 Characteristic of respondent

Table 1 showed the age composition of the respondents consisted of 40% of younger than 30 years, 45% of 30-35 years old, and 15% of older than 35 years. Gender of the respondents was 48% males and 52% females According to workplace, 27% respondents worked in public companies, and 63 % worked in private companies.

Table 1. The characteristics of the respondents
Source: Data Processed, 2021

Items	Groups	n	(%)
Age	Below 30	30	40
	30 - 35	34	45
	Older than 35	11	15
Gender	Male	36	48
	Female	39	52
Workplace	Public company	20	27
	Private company	55	73

4.2 Validity Test

By comparing correlation index in Pearson Product Moment with significance level of 5%, the correlation values should be above 0.227. The result showed that the correlation index is greater than 0.227 and therefore the data is considered as valid.

4.3 Reliability Test

Table 2 showed the reliability test used Alpha Cronbach. If Alpha is more than 0.6 then it is reliable. The result showed that Alpha Cronbach is 0.874 which was above the acceptance limit of 0.6. Therefore, the data is reliable.

Table 2. Reliability Statistics
Source: Data Processed, 2021

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	no of Items
0.874	0.876	20

4.4 Normality Test

To identify the normality test, the table of one sample Kolmogorov Smirnov test will show the normality of the data. One sample Kolmogorov Smirnov is one of the nonparametric tests to analyse the normality distributed or not. Result shows the value of Kolmogorov Smirnov of Pre Working is 0.190. The data of Pre Working is greater than 0.05 ($p > 0.05$). It means that the data is normally distributed. The value of Kolmogorov Smirnov of Post Working is 0.190. The data of Post Working was greater than 0.05 ($p > 0.05$). It means that the data was also normally distributed.

4.5 Paired sample T- Test

Paired sample t-test is a statistical technique that is used to compare two population means in the case of two samples that are correlated. Paired sample t-test is used in 'before-after' studies, or when the samples are the matched pairs. Determine whether there is a significant difference between the average values of the same measurement made under two different conditions.

The mean scores before and after working are being compared in order to find the difference or correlation. Table 3 showed the mean and standard deviation. The score pre working was 3.3424 and score post working was 3.8284. These results indicated that the post working mean score was higher than the pre working. Table 4 showed mean score of twenty items of competencies before and after working.

Data were analysed by descriptive statistics and the interpretation for the mean modified by Landall (1997) in Saari and Rashid (2013) with the mean value 1.0 to 2.33 = low level, 2.34 to 3.67 = moderate level and 3.68 to 5 = high level. The correlation of pre training and post training was 0.217 which means there was a strong positive correlation among all variables.

Table 3. Paired Sample Statistics
Source: Data Processed, 2021

	Mean	n	Std. Deviation	Std. Error Mean
Pair 1 Post Working	3.8284	75	0.2106	0.0243

Pre Working	3.3424	75	0.3430	0.0396
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Table4: Mean score, standard deviation and level of competency of graduate before and after working
Source: Data Processed, 2021

Items of competency	Mean	s.d.	Level	Mean	s.d	Level
	Before	Before		After		
Knowledge in science field	3.74	0.6746	High	3.85	0.5011	High
Knowledge in general science	3.04	0.6711	Moderate	3.41	0.5948	Moderate
Conceptual thinking	3.71	0.7145	High	4.01	0.8015	High
Analytic thinking	3.67	0.7005	Moderate	3.81	0.7968	High
Expertise in field	3.05	0.6954	Moderate	3.55	0.5017	Moderate
Leadership	3.92	0.7490	High	4.18	0.6889	High
Work in team	3.96	0.8127	High	4.26	0.7593	High
Communication	3.62	0.7843	Moderate	3.63	0.7221	Moderate
Achievement orientation	3.18	0.7478	Moderate	3.83	0.6127	High
Organization awareness	3.08	0.8180	Moderate	3.92	0.7352	High
Organizational commitment	3.14	0.7831	Moderate	3.94	0.7682	High
Long live learning	3.01	0.7621	Moderate	3.56	0.7540	Moderate
Self confident	3.13	0.7039	Moderate	3.83	0.6279	High
Self control	3.09	0.7198	Moderate	3.91	0.6717	High
Initiative	3.18	0.7478	Moderate	3.54	0.7322	High
Interpersonal understanding	3.02	0.8049	Moderate	3.82	0.7877	High
Costumer orientation	3.13	0.6844	Moderate	3.92	0.5240	High
Developing other	3.01	0.7069	Moderate	3.60	0.5445	Moderate
Flexibility	3.88	0.8536	High	3.91	0.7711	High
Relation building	3.86	0.8436	High	4.08	0.7741	High
Overall Mean	3.34	0.3430	Moderate	3.82	0.2106	High

Table 5. Paired Samples Test
Source: Data Processed, 2021

	Paired Differences	t	df	Sig. (2-tailed)					
					Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference	
								Upper	Lower
Pair 1 Post Work - Pre Work	0.4860	0.2702	0.03121	0.4238	0.5481	15.574	74	0.000	

Source: Data Processed, 2021

Table 5 showed the significance of paired samples test of 0.000. If the significance value is less than 0.05 (<0.05), there is a significance difference, it means that there was a significant difference in graduate competency before and after working. The mean column displayed the averaged difference of pre working and post working with value of 0.4860. The standard deviation showed a value of 0.2702. This standard error mean was 0.03121. The 95% Confidence Interval of the Difference provides an estimate of the boundaries between which the true mean difference

lies in 95% of all possible random samples of 75 respondents similar to the ones participating in this research which the lower value was 0.5481 and upper was 0.4238. In the t column, the value was greater than table (1.650) with 5% of significant level which was 15.574. Therefore, the hypothesis was accepted which means there was a significant difference in graduate competency measured by working experiences.

5. Discussion

Education institution and company can improve the quality of the human resources in a various way. Education institution can manage the process of education, improving the curriculum, assessment, method of delivery and developing lecturers. The company conducted a variety of ways to improve the quality of employees, especially in the development of skill that exist within each of them. Human resources development is an important thing that aims to achieve success, like every company do. To develop performance of employees, the company make a one manner that believed capable to create a human resource that reliable, have skilled and able to work well also have a goal to achieve corporate success. The company took one of the program that are believed to improve the quality of employees and develop the performance that exist within them. The result of paired sample test showed that there was a significant difference in before and after working. It means that the graduates competency before and after working was different. Graduates cannot do their job effectively before working, but employees are more capable of doing their jobs and can develop their ability in order to reach the company success after working.

6. Conclusion

After carefully examining all the given result, it can be concluded that:

- Before working, graduates of School of Economics Satria do not have work experience and have not participated in training and development programs carried out by the company so that their competence is not maximized.
- After working, graduates of School of Economics Satria has had a period of service and participated in various training and development programs carried out by the company so that they easier in conducting their jobs.

References

Anoraga, P. (2014). *Psikologi Kerja*. Rineka Cipta, Jakarta.

Appiah, B. 2010. *The Impact of Training on Employee Performance: A Case Study of HFC Bank (Ghana) Ltd.* Thesis. Ashesi University.

Bartram, D. (2004). *Assessment in Organizations. Applied Psychology: An International Review*, 53(2), p.237-259.

Berger, L., & Berger, D. (2004). *The Talent Management Handbook. Creating Organizational Excellence by Identifying, Developing, and Promoting Your Best People*. New York: McGraw-Hill.

Cummings, T., & Worley, C. (2001). *Organization Development and Change*. Ohio: South Western College Publishing.

- Hasnah, A., Luqman, A., Sanep, A., & Noraziah, A. (2009). Needs, interest and contributions of Educational Planning in the Economic Development of Malaysia. *Journal of Science Sciences and Humanities*, 4(1), 13–29.
- Jailani, Ahmad, M. Y., & Fadilah M. A. (2011). The implementation of generic skills at technical schools: Comparative analysis in different platform. *Journal of Techno-Social*, 3(2), 23-41.
- Mitrani, A., Dalziel, M., & Fitt, D. (1992). Competency Based Human Resource Management Value Driven Strategies for Recruitment and Reward. *Paris: Hay Group*.
- Venkatraman, S. (2007). A framework for implementing TQM in higher education programs. *Journal Quality Assurance in Education*, 15(1), 92–112.
- Saari, Hazril Azmin and Rashid, Abdullah Mat. (2013). Competency Level of Employability Skills among the Apprentices of the National Dual Training System: A Comparative Analysis of Industry Perception by Company Status. *International Journal of Education and Research*, 1 (11), 1-12.
- Sekaran, U. and Bougie, R. 2009. *Research Methods for Business: A Skill Building Approach*. 5th Edition. John Wiley and Sons, United Kingdom.
- Spencer, L. & Spencer, S. (1993). *Competence at Work: Models for Superior Performance*. New York: John Wiley & Sons, Inc.
- Spencer, M.L. & Spencer, M.S. (2010). *Model of competency and performance*. New York: John Wiley & Sons.
- Vathanophas, Vichita & Thai-Ngam, Jintawee. (2007). Competency Requirements for Effective Job Performance in The Thai Public Sector. *Contemporary Management Research*, 3(1), 45-70.