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**SEM PLS ANALYSIS OF TRAINING AND COMPETENCY OF EMPLOYEE QUALITY  
AND EMPLOYEE PRODUCTIVITY:  
CASE STUDY BANK NAGARI WEST SUMATERA**

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**ARTICLE INFORMATION**

Received: 21 February 2020

Revised: 29 February 2020

Issued: 02 March 2020

(filled in by Editor)

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DOI:10.31933/DIJMS

**Abstract:** This research aims to determine the effect of: 1) training and competence on the work quality of employees of Bank Nagari, West Sumatra directly. 2) training, competency and quality of work on the work productivity of Bank Nagari employees of West Sumatra directly. 3) training and competence through work quality on the work productivity of Bank Nagari employees of West Sumatra indirectly. The population is 295 people and the sample is 75 using the slovin formula. The analysis used is path analysis with SEM PLS data analysis techniques. The results showed a positive and significant influence of job training variables on work productivity, competence on work quality and work quality on work productivity. Whereas indirectly job training has no influence on work productivity. However, competence has an influence on work productivity through direct work quality. The results of the coefficient of determination analysis ( $R^2$ ) of 0.231 and 0.361, which means that training and competence for work quality and work productivity are 23,1% and 36,1%.

**Keywords:** Relations Customer, Product Attributes, Customer Value, Customer Loyalty

## INTRODUCTION

Human resources are the most important part of an organization or company. Human resource is a driving factor in achieving the goals of the company. Therefore, companies must have the human resources that professionals, has a high capacity and skills in their functions and roles for both individuals and for the organization's objectives. Considering the important role of employees in the company, various ways to increase employee productivity have been taken by the company, such as by providing training to employees and paying attention to employee competencies which ultimately are expected to improve employee work quality so

that employee productivity will also increase. Employees are valuable company assets and must be managed properly in order to make optimal contributions because employees do not feel comfortable in their work, are less valued, cannot develop all their potential, then automatically these employees can not focus and concentrate fully in developing the abilities and skills of the job. Employees' abilities and skills can be developed through training. Training is a planned effort by the company to improve employee knowledge, skills and abilities. With the implementation of appropriate training, the company is expected to improve employee work effectiveness in achieving predetermined work results. The training can be aimed at both old employees and new employees. Training is the process of teaching new employees or existing, basic skills they need to perform their jobs. The old employees also needs to learn and be trained with the aim to improve poor performance, learn the knowledge and technology as well as new skills, as well as to adapt to the development of the organization and a new organizational policy (Desler, 2015).

One company that is in dire need of human resources that quality is the company's banks, such as Bank of Regional Development, better known by the Bank Nagari West Sumatra. In 2019, Bank Nagari, West Sumatra is determined to be able to increase the distribution of SMEs loans to small business people who are just starting out. For this reason, employees are required to have high productivity in order to have extensive knowledge, high product understanding and the ability to assess consumers which is useful for dealing with a variety of consumers who will use the services offered to be more effective and efficient. However, the productivity of employees of the Regional Development Bank of West Sumatra Central Office has not produced the desired results.

In addition, Bank Nagari in West Sumatra until the end of 2018 is still experiencing problems regarding the lack of ideas and innovation for the next year for the sake of a better company. This is certainly inseparable from the skills of employees in assessing the development of times and trends that will occur in the future. The knowledge and skills of employees in reading the development of times and trends will be needed by the company so that the goals for the company can be better achieved quickly. training is an important organizational investment in human resources that involves all human resources to gain knowledge and learning skills so that they can use them in work (Wibowo, 2017).

In addition, the company also applies time limits to employees in terms of providing reports on ideas for product innovation to the officials concerned in their fields. Companies need reporting for innovations the following year so that products released are always increasing and keep abreast of the times and trends from year to year, easy to use and can be accounted for its usefulness

This obstacle certainly will not occur if the employee they have is competent in their field. Employee competence is needed in carrying out company activities. Organizational performance does not only depend on the competence of the workforce but also on their ongoing evaluation and development to meet global competition. For obvious economic and business reasons, organizations always pay attention to the competencies of their people (Chouhan & Srivastava, 2014).

According to Spencer competence is a characteristic that underlies a person relating to the effectiveness of individual performance in his work or individual characteristics that have a causal relationship or as a cause and effect with criteria that are used as a reference, effective or excellent or superior performance at work or in certain situations (Moeharino, 2014).

If the company already has employees who have been trained and competent, then it is not difficult to improve the quality of work of employees. Quality of work is a result that can be measured by the effectiveness and efficiency of a job performed by human resources or other resources in achieving company goals or objectives well and efficiently (Flippo, 2005).

The results of the study (Yanti, 2018), showed that work quality has a significant effect on job satisfaction. In addition, training also affects the work productivity of employees (Khadafi, 2016).

Based on the above conditions, the following problems can be formulated: 1 ) Does job training and competence affect the work quality of employees of Bank Nagari Sumatera Barat. 2 ) Does job training, competency and work quality affect the work productivity of employees of Bank Nagari, West Sumatra. 3 ) Does job training and competence through work quality affect the work productivity of employees of Bank Nagari, West Sumatra?

## LITERATURE REVIEW

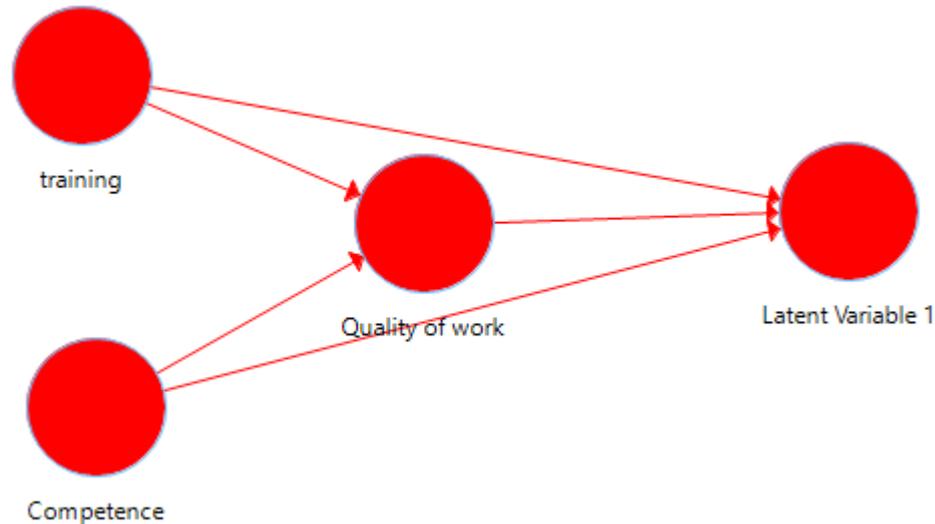
According to Ivancevich, training is an effort to improve the performance of employees in their current jobs or in other jobs that will be held soon (Edy Sutrisno, 2016). According to (Widodo, 2015) training is a series of individual activities in systematically increasing expertise and knowledge so as to be able to have professional performance in their field. So it can be concluded that the training is a process to improve employee competence and can train the ability and knowledge of employees to carry out work effectively and efficiently in order to achieve the objectives of a company.

According to Ruky, competence is a number of key behaviors needed to carry out certain roles to produce satisfying work performance (Edy Sutrisno, 2016). A while (Mangkunegara, 2015) explained that competence is an ability related to knowledge, skills and personality characteristics that directly affect performance. Competence is an ability to carry out or do a job or task based on skills and knowledge and is supported by the work attitude demanded by the job (Wibowo, 2017).

With high competence, a person will produce high-quality work as well. Quality of Work Life is a comprehensive concept consisting of physical and psychological health, economic situation, personal beliefs and interactions with the environment (Khorsandi, 2010). The working atmosphere will create a quality of work-life that will be conducive in order to the achievement of organizational goals were improving the Quality of Work Life will get a positive impact on job satisfaction (Paseki,2013). Employees who have job satisfaction and high enthusiasm will always increase their work productivity in carrying out all kinds of tasks and responsibilities are given.

According to (Sedarmayanti, 2017) productivity is how to produce and improve the results of goods and services as high as possible by utilizing resources efficiently. productivity is a comparison between the output to the input, wherein its output must have added value and a better process engineering (Hasibuan, 2017).

Based on the foregoing, this research framework can be made as shown in Figure 1 below:



**Figure 1.** Conceptual Framework

Based on the framework of thought, the following research hypotheses can be made:

1. It is suspected that job training and competence have a significant effect on the work quality of employees of Bank Nagari, West Sumatra.
2. It is suspected that job training, competency, and quality of work have a significant effect on the work productivity of employees of Bank Nagari, West Sumatra.
3. It is suspected that job training and competence through work quality have a significant effect on the work productivity of Bank Nagari employees of West Sumatra.

## RESEARCH METHODS

This research was conducted at the headquarters of Bank Nagari, West Sumatra. The population in this study was all employees of the head office of Bank Nagari West Sumatra, amounting to as many as 295 people. The determination sample was done using the formula so that slovin obtained a sample of 75 people (Agussalim., 2014).

The analytical method used in this research is quantitative analysis. Quantitative analysis is used to answer the first, second and third problems using path analysis (M. Agussalim, 2015). The data analysis technique was carried out using SEM through the Smart PLS3 program.

Hypothesis testing is done by T test (partial) and F test (simultaneous) with a tolerance of 5 percent error. Before further analysis, the research instrument test (questionnaire with validity and reliability) is conducted. Validity Test aims to measure the

validity of a questionnaire (Malhotra, 2009). According to (Ghozali, 2006) A questionnaire is said to be valid if the value of the variable loading factor is greater than 0,5 (0,5 > Sig.) Reliability Test is an index that shows a questionnaire can be trusted or not (Ghozali, 2006).

## FINDINGS AND DISCUSSION

### Validity and Reliability test results

The results of the validity testing of job training, competence, work quality as mediating variables and work productivity of this study can be seen in table 1.

**Table 1. Endogenous construct loading factor value**

| Exogenous Constructions | Indicator code | Factor loading |
|-------------------------|----------------|----------------|
| Training                | T1             | 0,832          |
|                         | T2             | 0,710          |
|                         | T3             | 0,656          |
|                         | T4             | 0,711          |
|                         | T5             | 0,797          |
| Competence              | C4             | 0,665          |
|                         | C6             | 0,924          |
| Quality of work         | Q1             | 0,782          |
|                         | Q2             | 0,848          |
|                         | Q4             | 0,654          |
| Productivity            | P1             | 0,786          |
|                         | P2             | 0,765          |
|                         | P3             | 0,684          |
|                         | P4             | 0,742          |
|                         | P6             | 0,569          |

*Source: Smart Processing Results pls 3 , 2020*

Based on table 1 it can be seen the loading factor value for each research variable > 0,5 so that it can be concluded that the convergent validity of all endogenous construct groups is valid. The higher the loading factor value in the construct shows the higher the contribution of the indicator in the construct.

The reliability test results of each variable in this study can be seen in table 2.

**Tabel 2. Hasil Uji Reliabilitas**

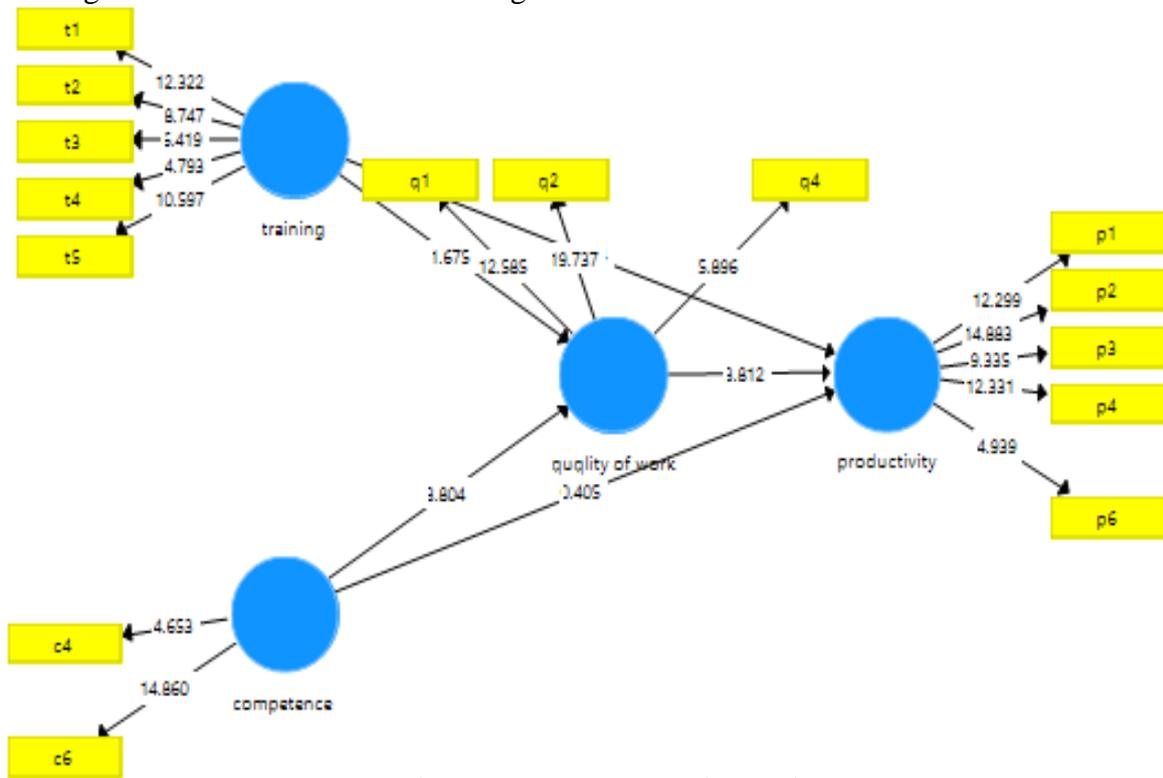
| Variabel            | Composite Reliability | Cronbach's Alpha | Note     |
|---------------------|-----------------------|------------------|----------|
| Training (X1)       | 0,860                 | 0.798            | Reliabel |
| Competence (X2)     | 0,782                 | 0.496            | Reliabel |
| Quality of work (Z) | 0,808                 | 0.642            | Reliabel |
| Productivity (Y)    | 0,837                 | 0,756            | Reliabel |

*Source: Results of Treatment Smart pls 3, 2020*

Based on table 2 shows that the composite reliability value is above 0.70. A model is said to be reliable if it has a composite reliability value above 0.70. So it can be concluded that the four research variables are reliable.

**Hypothesis Testing**

Smart hypothesis testing pls done by evaluating the inner model and partial test to answer the research hypothesis. The results of hypothesis testing that have been carried out on a significant model can be seen in Figure 2 below.



**Figure 2. Model Path Analysis**

Testing on significant models is done by looking at the R square value which is a goodness-fit test of the model. R square test results can be seen in table 3.

**Table 3. Values R<sup>2</sup>**

| Variabel            | Composite Reliabilty |
|---------------------|----------------------|
| Quality of work (Z) | 0,231                |
| Productivity (Y)    | 0,361                |

From Table 3. R square values for the variable work productivity of employees (Y) and work quality (Z) of 0.361 and 0.231. So it can be concluded that the contribution of training and competence to work quality and work productivity is 23.1% and 36.1%. For the Model Suitability Test (goodness of fit test) use the Q-square equation as follows:

$$\begin{aligned}
 Q^2 &= 1-(1- \text{Work Quality} ) (1- \text{Productivity}) \\
 &= 1-(1-0,231) (1-0,361) \\
 &= 1-(0,769) (0,639) \\
 &= 0,5086. \text{ Thus the value of } Q^2 \\
 &= 0,5086 > 0 \text{ which means the model has compatibility.}
 \end{aligned}$$

The results of hypothesis testing can be seen in table 4.

**Table 4. Path Coefficient**

| Variabel                               | P value |
|--|---------|
| Training (X1) → quality of work (Z)    | 0,095   |
| Training (X1) → Productivity (Y)       | 0,000   |
| competence (X2) → quality of work (Z)  | 0,000   |
| competence (X2) → Productivity (Y)     | 0,686   |
| Quality of work (Z) → Productivity (Y) | 0,000   |

Based on table 4 can be explained the results of hypothesis testing as follows:

1. The value of  $\rho$  value training on the quality of work is  $0.095 > 0.05$ . So it can be concluded that training has a positive and not significant effect on work quality.
2. The value of  $\rho$  raining value to work productivity is  $0,000 < 0.05$ , so it can be concluded that the training has a positive and significant effect on productivity products.
3. The value of competency  $\rho$  value to the quality of work is  $0,000 < 0.05$ , so it can be concluded that competence has a positive and significant effect on productivity.
4. The value of competency  $\rho$  value on work productivity is  $0.686 > 0.05$ , so it can be concluded that competence has a positive and not significant effect on productivity products.
5. The value of  $\rho$  value of work quality on productivity is  $0,000 < 0.05$ , so it can be concluded that the quality of work has a positive and significant effect on productivity products.

## Discussion

### 1. The Effect of job training and competence on the quality of Employee Work

Based on the results of the hypothesis t test, showed that job training had a positive and not significant effect on work quality. While competence has a positive and significant effect on work quality.

If competence increases, the quality of employee work will also improve. Conceptually, the results of this study support the theory that competence is an ability to carry out or do a job or task based on skills and knowledge and is supported by the work attitude required by the job (Wibowo, 2017). One's competency can be increased through job training so that it will improve the quality of work. The results of this study are also in line with research conducted by (Waris, 2015) where the results of the study indicate that there is a positive effect of training and competence on performance which will also have an impact on improving work quality.

### 2. The Effect of job training, competence, and quality of work on Employees productivity

Hypothesis test results indicate that work training and work quality have a positive and significant effect on work productivity. This means that if job training and work quality increase food can increase work productivity. While competence has a positive and not significant effect on work productivity.

Work quality is one of the elements that are evaluated in assessing employee work productivity. (Hasibuan, 2017) states that appraisal is a management activity to evaluate

employee behavior and work results and determine further policies. Two things are evaluated in assessing employee performance based on the above definition, namely employee behavior, and work quality. Employees need to be developed continuously in order to obtain quality human resources in the real sense that the work carried out will produce something that is desired. Quality is not just clever but fulfills all the qualitative requirements demanded by a company so that the company's goals are truly achieved and implemented according to plan.

The results of this study are consistent with research conducted by (Suryadi, 2018), The Effect of Work Quality and Work Efficiency on the Work Productivity of TNI-AD Bintara in korem 032 / Wirabraja which found that work quality has a significant effect on work productivity. This is in line with research conducted by (Mawu, 2018), The Effect of Quality of Work Life and Job Satisfaction on Employee Productivity of the Office of the Regional Secretariat of the Southeast Minahasa Regency which found that work quality significantly affected work productivity.

And also supported by research conducted by (P. M. dan Agussalim, 2013) about the effect human capital on entrepreneurs competences, where the results of the research also found that there is a positive and significant effect of motivation on entrepreneurial competency dan managerial competency.

### 3. The effect of training and competence through work quality on employee productivity

Hypothesis test results indicate that indirect competence has a significant effect on work productivity through work motivation. Whereas training has no direct effect on work productivity through work quality. But training only has a direct effect on work productivity. The results of this study are consistent with research conducted by

(Abubakar, 2018) The Effect of Employee Competence on Employee Productivity in the City of Bandung Health Office where the results show that competence has a significant effect on employee work productivity. This is also in line with research conducted by (Jumantoro, 2019) Effect of Competency, Work Motivation, Workload, and Training on Work Productivity of Human Resources at the Ponorogo Independent Children's Business Cooperative Cooperative which gets the result that competence has an influence on work productivity of human resources.

## CONCLUSION AND SUGGESTION

### Conclusion

The conclusions of this research are:

1. Job training directly affects the work productivity of employees of Bank Nagari, West Sumatra.
2. Indirectly, job training does not affect the work productivity of employees of Bank Nagari, West Sumatra.
3. Competence has an indirect effect on work productivity through the work quality of employees of Bank Nagari, West Sumatra.
4. Competence does not directly affect the work productivity of employees of Bank Nagari, West Sumatra.

## Suggestion

Technical advice: 1) The leaders of Bank Nagari, West Sumatra should always conduct training for their employees to develop their employees' skills and work abilities so that they have an impact on increasing work productivity. 2) The company must also improve the competence of its employees so that the quality of work of employees increases so that employee productivity will also increase. Academic advice: This research needs to be followed up to see what factors can effect employee work productivity. The next researcher can add other independent variables as a determinant of employee work productivity, such as compensation, organizational culture, leadership, and others.

## REFERENCE

- Abubakar, R. R. T. (2018). *Pengaruh Kompetensi Pegawai Terhadap Produktivitas Kerja Pegawai Dinas Kesehatan Kota Bandung*.
- Agussalim. (2014). *Statistik dasar*. Padang: Ekasakti Press.
- Agussalim, M. (2015). *Statistik Lanjutan*. Padang: Ekasakti Pres.
- Agussalim, P. M. dan. (2013). Human Capital and Survival of Small Scale Food Processing Firms Under Economic Crisis In Central Java Indonesia. *Journal of Business and Management Research*. *Www.Ajbm.Com*. ISSN:1839-0846, 3(1), 16–29.
- Chouhan, V. S., & Srivastava, S. (2014). Understanding Competencies and Competency Modeling — A Literature Survey. *IOSR Journal of Business and Management*, 16(1), 14–22. <https://doi.org/10.9790/487x-16111422>
- Desler, G. (2015). *Manajemen Sumberdaya Manusia*. Jakarta: Salemba Empat.
- Edy Sutrisno. (2016). *Manajemen Sumber Daya Manusia* (8th ed.). Jakarta: Prenada Media Group.
- Flippo, E. B. (2005). *Manajemen Personalia Jilid 2* (Ke enam). Jakarta: Erlangga.
- Ghozali, I. (2006). *Aplikasi Analisis Multivariate dengan program SPSS*. Semarang: Universitas Diponegoro.
- Hasibuan, M. (2017). *Manajemen Sumberdaya Manusia* (Revisi). Jakarta: Bumi Aksara.
- Jumantoro, R. (2019). *Pengaruh Kompetensi, Motivasi Kerja, Beban Kerja, Dan Pelatihan Terhadap Produktivitas Kerja Sumber Daya Manusia Koperasi Serba Usaha Anak Mandiri Ponorogo*.
- Khadafi, D. M. (2016). *Pengaruh Pelatihan Terhadap Produktivitas Kerja Karyawan*. Samarinda: CV. Sinar Utama Group.
- Khorsandi, A. F. F. J. M. R. & M. (2010). Health-Related Quality of Life In Staff and Hospital Personnel of Arak Medical University. *Persian Journal*, 13(1), 40–48.
- Malhotra, N. K. (2009). *Basic Marketing Research: A Decision–Making Approach*. New Jersey: Prentice-Hall, Pearson Education Inc. Upper Saddle River., (third edition).
- Mangkunegara, A. P. (2015). *Manajemen Sumber Daya Manusia Perusahaan*. Bandung: Remaja Rosdakarya.

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- Mawu, K. S. (2018). *Pengaruh Kualitas Kehidupan Kerja Dan Kepuasan Kerja Terhadap Produktivitas Kerja Pegawai Kantor Sekretariat Daerah Kabupaten Minahasa Tenggara*.
- Moeharino. (2014). *Pengukuran Kinerja Berbasis Kompetensi (Revisi)*. Jakarta: PT Raja Grafindo Persada.
- Sedarmayanti. (2017). *Manajemen Sumberdaya Manusia*. Bandung: PT. Refika Aditama.
- Suryadi, A. (2018). *Pengaruh Kualitas Kerja dan Efisiensi Kerja terhadap Produktivitas Kerja Bintara TNI-AD di Makorem 032/Wirabaja*.
- Waris, A. P. M. dan A. (2015). Effect of Training, Competence and Discipline on Employee Performance in Company (Case Study in PT. Asuransi Bangun Askrida). *Procedia - Social and Behavioral Sciences*, 211, 1240–1251. <https://doi.org/10.1016/j.sbspro.2015.11.165>
- Wibowo. (2017). *Manajemen Kinerja (ke Enam)*. Jakarta: Rajawali Pers.
- Widodo, E. (2015). *Manajemen Pengembangan Sumber Daya Manusia*. Yogyakarta: Pustaka Pelajar.
- Yanti, N. Y. E. S. (2018). Quality of Work Life Analysis ( QWL ) through Motivation of Work on Employee Satisfaction : Case Study Lembah Karet Corp , Indonesia. *European Academic Research ISSN 2286-4822; www.Euacademic.Org*, VI(5), 2061–2079.