Soft skills Analysis of Labor Candidates to face ASEAN Economic Community

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Abstract. The purpose of this research is to analyze soft skills from the aspect of communication skills and problem solving skills by analyzing the factors, which have the variables form. This research is a kind of quantitative research with analytical technique using standard mean and standard deviation. Hypothesis testing is done by one-party t-test. The method used in this research is survey method. The populations in this research are all students accounting majors class XII of State Vocational High School in industrial area as prospective worker with a sample from school selected by stratified random sampling in the academic year 2016/2017. While the student sample selection is done by random sampling. Questionnaire data collection is done by giving a set of questions or written statement to the respondent to be answered. The analysis of the research results shows that soft skills from the aspects of communication skills and problem-solving skills are included in the high category.

1. Introduction
The integration of the ASEAN Economic Community has been done at the end of the year 2015. ASEAN single market based of production consists of 5 main elements (i) free flow of goods (free flow of goods); (ii) free flow for services; (iii) free flow of investment; (iv) free flow capital; (v) free flow for skill able. To support these five elements, it is necessary to strengthen the competitiveness, such as the labor soft skills in services sector. Even more so, we need an institution that can be explore both how value becomes ascribed to goods, services and ideas in market economies, and how norms around career-development, work/life balance, and conduct of creative work become established and reified [1].

Compared to other sectors, the service sector has an approximately 45% role in increasing state revenues. Therefore, it is a logical thing, if Indonesia is not only paying attention to the natural resource commodities that are vulnerable to price decline, but also starting to pay attention to the sector of skilled labor. Vocational graduates are one of the skilled workers who must be increased their competitiveness.

The ASEAN Economic Community (AEC) 2015 has become the inevitability of the birth of the economic integration agreement to be achieved and as a follow-up to the realization of the ASEAN Free Trade Area (AFTA) as the strengthening of regional competitiveness anticipates the phenomenon of economic globalization process. No other aspect of economic integration has attracted more investor attention than customs harmonisation [2]. The process of globalization is a fundamental or structural change of the world economy, and this process will continue at a faster pace, increase, and
change the pattern of world community needs. MEA provides new opportunities for people mobility, goods and services in the ASEAN region by crossing country boundaries without tariff and non-tariff barriers by equalizing the prices of goods and production factors interstate in single market. The economic integration has a positive and negative impact.

MEA globalization expectations are benefiting tremendously from global trade or economic traffic compared to costs and risks faced so that it will enhance Indonesia's economic growth particularly and the ASEAN region with the creation of greater economic opportunities, a boost in efficiency and competitiveness, and opening up the opportunities in general the labor in the ASEAN region which in turn will improve the welfare of the ASEAN community, especially Indonesia. But the negative impact, for countries that are not ready to be marginalized, especially in the progress of information, a reliable labor, as well as the traditional cultural society, such as changing the work patterns or improve the spirit and work discipline or the ability or quality of work is an aspect skill of soft skills. Soft skills training may enhance employment prospects by giving youth better skills and confidence for looking for jobs and by making them more productive in their first month [3].

The negative consequences of the economic integration of the ASEAN people are the overwhelming influx of labor services in Indonesia and if Indonesia's labor capability is not enhanced to offset the quality of human resources from other countries, it is not impossible that at one time our labor market will be dominated by foreigners and We will become spectators in our own country. If so, there will be more unemployment and new social and economic problems arise.

2. Methods
The purpose of this research is to find out the description of the aspects of communication skills and problem-solving skills by analyzing the factors that form these variables. This research is a kind of quantitative research with analytical technique using standard mean and standard deviation. Hypothesis testing is done by one-party t-test. The method used in this research is survey method.

The population in this study is all students accounting class XII State Vocational High School in industrial area as a prospective labor with sample of schools selected stratified random sampling based on the determination of the strategic area of Banten province industry in the academic year 2016/2017. The strategic areas of industry in Banten are Cilegon, Serang and Tangerang (PP No. 26 Year 2008). The schools are SMKN 1 Ciruas, SMKN 1 Kragilan, SMKN 1 Tunjung teja, SMKN 2 Tangerang, SMKN 4 Tangerang, and SMKN 7 Tangerang While the sample selection of students is done by random sampling as much as 230. Questionnaire data collection is done by giving a set of questions or written statement to the respondent to be answered.

To find out the description of student involvement level in observational learning, level of communication skill, level of problem solving skill and level of readiness of work used descriptive analysis technique developed by [4] with ideal criteria and ideal deviation standard [5] which refers to the score categorization. The formula used is as follows [6]:

\[ M_i = \frac{1}{2} (ST + SR) \]  
\[ D_{Si} = \frac{1}{6} (ST - SR) \]

Where:
- \( M_i \) = ideal Mean
- \( ST \) = Highest Score
- \( D_{Si} \) = Ideal Standard Deviation
- \( SR \) = Lowest Score

The calculation result from the descriptive statistical data processing is placed in the range of new intervals and continuum lines. The categorization to describethe above variables is based on the range of categorization variables. Testing of descriptive hypothesis using t-test one sample because data include interval with following formula:
\[ t = \frac{\bar{x} - \mu_0}{\sigma/\sqrt{n}} \]  

(3)

Source: Sugiyono (2015, pp. 250) [7]

t = the calculated value  
x = average value  
\( \mu_0 \) = the hypothesized value  
\( \sigma \) = sample standard deviation  
n = number of sample members

Testing accepted or rejected the hypothesis up to the hypothesis with the condition if \( t \)-count > \( t \)-table, then the hypothesis accepted and vice versa if \( t \)-count < \( t \)-table, then the hypothesis rejected.

3. Results and Discussion

In the labor market, to perform a job requires quality or skill / expertise. The skills that have by a labor, basically divided into two, namely hard skills and soft skills. Hard skills are a professional skill, that is, a person's skill to perform certain professions that are real or visible, including intellectual ability (IQ), whereas soft skills are abilities that cannot be seen in the eyes, including emotional management ability [8].

Soft skills is a representation of emotional intelligence, which is divided into two abilities, namely the ability of intrapersonal and interpersonal [9]. Intrapersonal ability is someone's skill to know and control his own emotions. This competence consists of an understanding of success, self-evaluation, self-image, goal setting, self-motivation, emotional control and self-esteem. Interpersonal skill is the power of a person to associate and interact with others. This ability consists of interaction relationship, sense of kinship, assertive communication, maintaining peer relationships, self-image and nurture positive relationships. The notion of hard skills and soft skills is as follows [10]:

"While hard skills for technical skills and the factual knowledge needed to do the job, soft skills allow you to more technical use your technical abilities and knowledge. Soft skills encompass personal, social, communication, and self-management behaviors. They cover a wide spectrum of abilities and traits: being self-aware, trustworthiness, conscientiousness, adaptability, critical thinking, attitude, initiative, empathy, confidence, integrity, self-control, organizational awareness, likability, influence, risk taking, problem solving, leadership, time management, and then some"

Based on the above quote, hard skills refer to the technical expertise and skills or mastery of knowledge needed to solve the problems, soft skills make a person more effective use of technical skills and knowledge. Soft skills include personal, social behavior, communication, and self-management. Soft skills cover a wide range of capabilities and traits: self – knowing, trust, introspection, interaction with the environment, critical thinking, attitude, initiative, empathy, credibility, integrity, self-control, community awareness, risk taking, problem solving, leadership, and time management. Therefore, soft skills are the abilities and traits that make a person more effective using his technical skills and knowledge.

Soft skills are very significant that support a career in accordance with IPS SMK competency standards 2006; and aspects of personal skills and social skills in the 2013 curriculum are communication skills and problem-solving skills [9]. Communication is the production and exchange of certain information and meanings by means of signs or symbols [8]. While problem solving is a way to increase confidence and reduce anxiety and positive [12] [13].

The students of class XII of SMK are prospective labors. Manpower is any person who is capable of doing work to produce goods and or services either to meet their own needs or for the community (PP No. 50 of 2012). While the ASEAN Economic Community is a union of several countries consists
of Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand, Cambodia, Laos, Myanmar and Vietnam who integrate themselves to work together in the economic field [14].

3.1 Level of communication skills

Variable levels of communication skills are measured through five indicators: the skills of articulating thoughts and ideas effectively using oral, written and nonverbal communication skills in various forms and contexts; Effective listening skills to describe meaning including knowledge, values, attitudes and intentions; Communication skills for purposes; Skills utilizing some media and technology; And the skills to communicate effectively in various environments [15]. A high level of communication skill assessment indicates that all five indicators are rated in the high category. The respondent's acknowledgment also indicated that the 50-point statement submitted regarding the level of communication skills included in the high category.

This condition describes that the skills measure articulates thoughts and ideas effectively using oral, written and nonverbal communication skills in various forms and contexts; Effective listening skills to describe meaning including knowledge, values, attitudes and intentions; Communication skills for various purposes; Skills utilizing some media and technology; And the skills of communicating effectively in various environments in an effort to find out the level of communication skills as indicators are highly valued. Hypothesis testing of the variables of communication skills is done by means of average test, to know whether the communication skills in the high category. The hypothesis proposed in the proportion test is as follows:

Ha: $\rho x_1 > 167$, meaning that the average level of communication skill is high  
Ho: $\rho x_1 < 167$, meaning the average level of communication skill is less high

The result shows that the scoring proportion score for the communication skill variable is $= 173.76$, where $\mu_0$ of 167 is the high criterion limit. T-Test is done using test statistic as follows:

$$t = \frac{\bar{x} - \mu_0}{\sigma/\sqrt{n}} = \frac{173.76 - 167}{14.28/\sqrt{230}} = 7.18$$

T-table value with 95% confidence level and degree of freedom equal to $n-1 = 229$ is 1.645. Ho ignore criteria if t-count $> t$-table, where from the calculation results obtained that 7.18 $> 1.645$, then Ho is rejected and Ha accepted. Therefore, the hypothesis that the average communication skill is high is acceptable or there is no difference between the expected in the population with the data collected in the sample. The level of communication skills in the high category with an average score of 173.76, as illustrated through the continuum line as follows figure 1:

**Figure 1.** The level of communication skills in the high category.

Aspects of communication skills effectively use oral, written and nonverbal communication skills in various forms and contexts in the high category as contributed by the mastery of communication with oneself through the process of thinking, self-control by guarding oral words of humiliation,
respect for others, showing sympathetic / tolerant and understanding of others' perspectives, written communication and communication with good gesture.

Aspects of communication skills seen from listening skill effectively to describe the meaning, including knowledge, values, attitudes and intentions are still categorized as high as a result of mastery of good ability about: the ability to set the rhythm of speech and listening; Listening ability when the other person talks well and thoroughly; Ability to grasp the intent of body language versus communication; Ability to respond well, after others have finished talking; The ability to listen to others with the utmost care to grasp the meaning of speech; Ability to respond to speaker comments; And the ability to understand other people’s intentions without criticizing them.

The communication skills of this aspect seen from its objectives in the high category are supported by good abilities in terms of: asking for information/opinions of friends when encountering difficulties; entertaining a weary friend doing the task; Foster trust; and help based on the needs of others. Similarly, communication skills in utilizing communication tool as telephone devices in the office; Utilize any electronic social media to communicate, such as website, face book, twitter, instrumental or otherwise; And utilize the mobile phone to communicate included in the high category.

The skill level communicates effectively in diverse environments is also highly categorized. It cannot be separated from communication skills with older people or with peers, diverse environmental attitudes, and attitudes to conflict and communication skills with people of diverse backgrounds, and adaptability in a good workplace.

3.2 Level of problem solving skills

The variable of problem solving skill level is measured through three indicators namely decision making skill, analytical skill of system / activity of inquiry, and skill of designing developed program [15]. Assessment of problem-solving skill level indicates that all three indicators are rated in the high category. The respondent's acknowledgment also shows that against the 57 items of proposed statements regarding the level of problem solving skills included in the high category.

This condition illustrates that the size of decision-making skills, analytical skills, and job designing skills in an effort to find out the skill level of problem solving as an indicator is highly valued. Hypothesis testing of problem solving skill variables is done by means of average test, to find out whether the problem solving skill is in high category. The hypothesis proposed in the proportion test is as follows:

Ha: ρx2> 186, meaning the average level of problem solving skills is high
Ho: ρx2 <186, meaning the average level of problem solving skills is less high

The result shows that the scoring proportion score for the problem solving skill variable is = 193.32, where μ0 for 186 is the high criterion limit. T-test is done using test statistic as follows:

\[ t = \frac{\bar{x} - \mu_0}{\sigma/\sqrt{n}} = \frac{193.32 - 186}{18, \sqrt{230}} = 6.15 \]

T-table value with 95% confidence level and degree of freedom equal to n-1 = 229 is 1.645. Ho ignore criteria if t-count> t-table, where from the calculation results obtained that 6.15> 1.645, then Ho is rejected and Ha accepted. Thus the hypothesis that the average problem solving skill is high is acceptable or there is no difference between the expected in the population and the data collected in the sample. The skill level of problem solving in the high category with an average score of 181.86, as illustrated by the continuum line as follows figure 2.
Aspects of decision-making skills include high-scalable categories of ability to find new ideas to solve problems when solutions are not found; The skill of finding alternative solutions to problems is not just an answer; The ability to carefully consider the issues that need to be resolved first; Ability to use the knowledge they possess to solve the problems;

The ability to monitor and evaluate progress in the problem-solving process; ability to take decisions / act with caution; ability to propose ideas, to argue and communicate to the stakeholders; The ability to search the facts underlying the problem as a way in decision making; The ability to make decisions objectively and rationally; The ability to decide from multiple choices; Ability to calculate the costs and benefits of various decision outcomes; And thinking ability to make decisions by comparing the virtues and shortcomings of any good alternative.

Aspects of measurable analytical skills of contributing the ability to choose a particular solution; Ability to understand the root of a problem, then make a decision; The ability to explore or delve deeper into the problem to narrow the problem to the point where a specific solution can be searched; The ability to assess the current situation and evaluate what is needed (way) to reduce the problem; The ability to find what resources and information are available to solve the problem; Ability to identify obstacles that hinder the progress of problem resolution;

Ability to analyze alternative problem solving; Critical thinking skills to analyze problem solving; The ability to distinguish between facts and opinions to produce correct conclusions; The ability to review the problem critically from different points of view, the ability to choose the right and proper way; Ability to evaluate various problem solving options; The ability to think creatively to produce correct answers to problems. Deep analytical skills to solve complex problems; the ability to analyze a broad view of things; and understanding of a problem gained from interaction with interested parties well.

While high level programming or job design skills are well identified from the ability to engage discussions with others to seek creative solutions to a problem; Ability to explain sitting problems together; The ability to plan a systematic and sequential approach to solving problems; Ability to use technology help to solve problems such as computer, internet browsing or digital communication media; Ability to manage the problem solving flow set to achieve the objectives made; Ability to develop a solution strategy for a problem; Ability to evaluate the effectiveness of solutions to achieve the best results; Ability to make the right steps to solve problems quickly;

Ability to use good ways to solve problems; Ability to build harmony amid different views; Openness and support of all parties; Ability to discuss problems together and focus; The ability to choose the issues that are important to be solved immediately; The ability to integrate new knowledge and skills with prior knowledge and skills; Ability to cooperate and negotiate to solve problems; And the ability to develop the necessary problem solving which is a fusion of any interrelated basic knowledge differences.

4. Conclusions
Based on the research result, the communication skill level of the students is high. The level of communication skills is supported by the mastery of the skills of articulating thoughts and ideas
effectively using oral, written and nonverbal communication skills in various forms and contexts; Effective listening skills to describe meaning including knowledge, values, attitudes and intentions; Communication skills for various purposes; Skills utilizing some media and technology; And the skills to communicate effectively in diverse environments that have an average score in the high category, whereas the problem solving skill of the students is high. The skill level demonstrates decision-making skills, analytical skills of work or work activities, and the skills of designing work tasks well done to contribute significantly.

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