



“IPK EMPAT” Module Training to Improve Soft Skills among University Students

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Highlights

- There is gap between graduates' competencies and competence expected by industrial needs and Directorate Higher Education (DIKTI).
- “IPK EMPAT” tries to fill the gap between graduates' competence and competencies that expected. “IPK EMPAT” training module could improve students' soft skills.

Abstract

Background: There is a gap between the competencies of college graduates and the needs of the world of work. Universities are considered unable to meet expectations in the development of soft skills, so there is a need for efforts to increase student competence. *Study aims:* This study aims to fill the existing gaps related to graduate competencies and the expected competencies with the "IPK EMPAT" Module training. *Method:* . The research design used was a pretest post-test control group design. There were 70 students in that became participants; 35 experimental groups and 35 control groups. The pre test was given before the training and the post test was given after the “IPK EMPAT” module training conducted. The collected data were processed by the U-Mann Whitney. *Result:* The results showed a significant difference ($p=0.000$) between the experimental group (Mean Rank 53.00) and the control group (Mean Rank 18.00). *Conclusion:* The research hypothesis (H_a) was accepted, namely the “IPK EMPAT” training could improve students' soft skills. The results of this study provide optimism for improving soft skills with training.

Keywords: Training, Soft Skills, “IPK EMPAT” Module

INTRODUCTION

The world is developing fast along with the development of technology, especially digital technology. Technology is an aspect of the development of Industry 4.0 in addition to organizational and human aspects (Prodi et al., 2021). There is a term disruption that is commonly used to describe how quickly changes occur. These changes demand adjustments, product innovations, and new ways in the industrial world in order to survive. Many industries have gone out of business because they cannot keep up with the demands. Consequently, incoming Human Resources (HR) must also have the competence to support the existing rapid changes. Suryani (2019) stated that soft skills in the form of character building, integrity, communication skills, and the ability to work together are important in the era of disruption 4.0. However, the problems that occur indicate that there is still a gap between graduate competencies and the competencies expected by professional organizations and the Directorate of Higher Education (DIKTI) (Agustin, 2012). Gruzdev et al.'s research. (2018) states that job providers are dissatisfied with the formation of soft skills by universities for their students. The discrepancy between the expectations of job providers and the ability of graduates to meet the needs of the world of work is an employment problem (Low et al., 2019). Low et al. (2021) mention that the gap that occurs is ability related to resilience, curiosity, adaptability, entrepreneurial thinking, pursuing convictions, and vision. Therefore, tertiary institutions need to continue to evaluate and make changes in order to align with the expectations and needs of their graduate stakeholders.

Some of the competencies that are generally required in the world of work are the willingness to learn, good ability in teamwork, hard work and willingness to take on "extra" work, good self-control, and the ability to think analytically (Pang et al., 2018). The industrial era 4.0 requires an ability that focuses on creativity (Cropley, 2020). Cropley (2020) explains that abilities that focus on creativity are abilities that consist of managing complexity, thinking critically, the ability to look ahead, the ability to tolerate various uncertainties, self-efficacy, and communicating skillfully. Manara Manara (2014) conducted a study to find out the needs of the industrial world, especially for Human Resource Development (HRD) candidates. In terms of hard skills, psychology graduates who will become HRD must have an understanding of labor regulations (19.79%), recruitment and selection skills (14.5%), the ability to provide employee training (12.98%), and the ability to use test kits psychology, (11.83%). The expected soft skills are communication skills (12.09%), the ability to work independently or in a team (9.89%), resistance to stress or work pressure (9.62%), and personality competence (7.96%). Syamsidar (2017) mentions the importance of mastering English for college graduates.

Efforts to improve the skills needed by the world of work need to be done. The government is making efforts to overcome this by providing pre-employment training for prospective workers. For students, in addition to diplomas and grade transcripts, they also receive a Diploma Complementary Certificate (SKPI) as stipulated in the Regulation of the Minister of Research, Technology, and Higher Education of the Republic of Indonesia Number 59 of 2018. SKPI is a document that contains information about fulfilling graduate competencies in an Education Program Tall. SKPI can contain additional information about student academic achievement, including student achievement in co-curricular, extracurricular, or non-formal education. Thus, students are not only equipped with hard skills but also soft skills. Soft skills are important for student learning and the potential for career success (Tseng et al., 2019). Increasing student skills needs to be carried out by various parties including universities and companies. Employers and Higher Education Institutions need to work together not only to increase student's

awareness of the importance of soft skills but also to guide them in taking individual responsibility for acquiring and developing skills to continuously adapt to a changing labor market and enhance employability (Succi & Canovi, 2020).

Widhiarso (2009) through his paper stated that emotional intelligence, a healthy lifestyle, and effective communication are several soft skills related to success in the world of work. Emotional intelligence is related to the ability to manage emotions, empathize, understand other people's feelings, and interact with others. A healthy lifestyle will affect students' resilience, flexibility, and self-concept. Effective communication will affect self-confidence and social support from the surroundings. More broadly, soft skills are defined as a set of skills that have an important influence on a person in interacting with others. Some abilities called soft skills include; communication skills, creative thinking skills, critical thinking skills, team building, and other abilities related to one's personality. Soft skills can be developed through training. Soft skills are highly valued by job providers, considering that soft skills can significantly help the success of the goals of the company itself (Gruzdev et al., 2018).

Hairi, Toe, & Razzaly (2011) conducted a study to determine the competencies needed by the world of work and their relation to unemployment. The results show that soft skills have an important role in the world of work and it is possible for those who do not have soft skills that are appropriate to the world of work which makes them not welcome in work. The research which also evaluates the Intel eLite training program claims that training is a means to develop soft skills. The soft skills in question are communication skills, cooperation, decision-making and problem-solving, creativity and critical thinking as well as task management skills.

Ariyani (2013) conducted a study to find out how far the soft skills competency level of students is. These soft skills include motivation, flexibility, awareness to develop oneself or learn, integrity, ability to work in a team, and ability to build relationships. The results show that generally students have a level of soft skills in the moderate or average category. Mustikawati, et al (2016) conducted a study related to the soft skills needed by the world of work in accounting majors. The results show that communication skills, critical thinking skills, team working skills, the ability to manage programs and projects as well as the ability to solve problems and make decisions are important competencies needed in the world of work.

Muhmin (2018) states that soft skills can be trained in three alternative ways. First, through separate courses specifically designed to develop soft skills and ensure that they target cognitive, affective, and psychomotor aspects as a whole. The second teaches soft skills by integrating them into courses. The important thing to do is to use a student-focused approach and a method that allows students' potential to be honed. The third is teaching soft skills by making teachers or lecturers a role model for students. Murtiningsih (2018) conducted a study related to improving soft skills in project-based learning methods in the Business Practice course. This method provides an opportunity to train students to develop soft skills in the form of communication skills, collaboration skills, self-confidence, and leadership abilities.

Observing these facts, it is important to improve students' soft skills to hone the competencies needed after graduation later. This research was conducted to find out to what extent the IPK EMPAT Module training (Integrity, Confidence, Communication, Empathy, and Resilient Leaders) can improve students' soft skills. The hypothesis put forward is that the "IPK EMPAT" training can improve students' soft skills.

METHOD

Study design

The research design used was a pretest post-test control group design where the experimental group and the control group were given a pre-test and a post-test. The intervention in the form of training was given to the experimental group while the control group was not given training. The training is carried out online setting using zoom meeting media. The intervention consists of two sessions.

Participant

Subject selection was carried out by purposive sampling technique. Purposive sampling is a non-random sampling technique in which the sample is taken by the researcher by specifying special characteristics that are in accordance with the research objectives, so that it is expected to provide answers to research problems.

The following are the criteria for selecting research subjects:

1. Active students. This is in accordance with the research objectives whose targets are students.
2. Soft Skill score in the category of "Moderate". The "moderate" score was chosen to provide an opportunity for an increase or decrease with or without treatment.

Willingness to follow the whole process. As part of research ethics, willingness to follow the entire process is the right of the prospective subject himself. Prospective subjects who are willing will then become research subjects and will be divided into a control group or an experimental group. The research subjects were students of Road and Bridge Construction Technology, Politeknik Pekerjaan Umum and Nutrition Science, Universitas Muhammadiyah Semarang. There are 70 subjects; 35 as the experimental group and 35 as the control group with soft skills scores in the moderate category.

Instruments

Data collection uses self-developed soft skills scale. The soft skills scale consists of 30 items, each containing 6 items: integrity, confidence, communication, empathy, and leadership.

Procedure

The intervention used was in the form of "IPK EMPAT" training which consisted of materials related to integrity, self-confidence, communication, empathy, and leadership.

Table 1.

Blue Print Soft Skill Training Materials

Training Title	Material Detail	Indicators
Integrity	The definition of integrity	Understand the meaning of integrity
	The importance of integrity	Able to set an example of integrity
	Example of integrity	Able to practice integrity behavior
	How to develop integrity.	Able to be an example of integrity behavior
Self Confidence	Definition of self-confidence	Understand the meaning of confidence
	The importance of confidence	Able to set a confident example

	An example of a confident person How to develop self-confidence	Able to practice actions with confidence Able to set an example in action with confidence
Communication	Definition of communication skills The importance of communication skills An example of a good form of communication How to develop communication skills	Understand the meaning of communication Able to provide examples of good communication Able to practice good communication Able to be an example in good communication
Empathy	Understanding empathy The importance of empathy An example of empathy How to develop empathy	Understand the meaning of empathy Able to give examples of empathy Able to practice empathy Able to be an example in empathy
Leadership	Definition of leader The importance of being a leader An example of a good leader How to develop leadership	Understand the meaning of a leader Able to set an example of a tough leader behavior Able to practice the behavior of a leader Able to be an example in leadership

Data Analysis

Pretest and posttest data in the experimental group and control group were processed by U-Mann Whitney calculations using SPSS version 25.0.

RESULT

The results of the data analysis show that the "IPK EMPAT" Training module is effective in improving student soft skills. Based on the results of data analysis, it can be concluded that the research hypothesis (Ha) is accepted.

Table 2

Comparison Test of Experimental and Control Group Pre-Test Scores

Group	Mean Rank	P Value
Experiment Group	40.16	0.055
Control Group	30.84	

Table 2 is the result of the Mann-Whitney U analysis to compare the pre-test scores between the experimental group and the control group. The results of the data analysis showed that there was no significant difference between the experimental group and the control group in the pre-test scores.

Table 3

Comparison of Experimental and Control Group Post-Test Scores

Group	Mean Rank	P Value
Experiment Group	53.00	0.000
Control Group	18.00	

Table 3 is the output result of the Mann Whitney U analysis which compares the posttest scores of the experimental group and the control group. The results of the Mann Whitney U analysis showed that the value of $p = 0.00$ so that the two groups had a significant difference. The Mean Rank value of the experimental group was 53.00 while the control group was 18.00 so that the experimental group had a higher score.

Table 4
Comparison Test of Post-Tests Scores of Experimental Groups

Score	Mean Rank	P Value
Pre-Test Scores	0.00	0.000
Post-Test Scores	18.00	

Table 4 is the result of the Wilcoxon test. The Wilcoxon test was used to compare the pretest and posttest scores of the experimental group. The results of the Wilcoxon test showed that there was a significant difference ($p = 0.00$) between the pretest and posttest scores and the posttest score was higher.

DISCUSSION

The purpose of this study was to determine the effectiveness of the "IPK EMPAT" module training. Based on the data analysis above, the training can develop students' soft skills. The results of this study support other research conducted by Kusmiran (2017) that soft skills training has proven to be effective in improving soft skills. The research was conducted for nurses in hospitals to improve their skills in providing services (caring).

The training that has been provided needs to be supported by its application. The application of the training is an indication of the existence of soft skills obtained from the training to survive and develop. Joga, Prasetya, & Haribowo (2013) conveyed from the results of their analysis regarding the condition of students that students need to be continuously accompanied and given enthusiasm in developing soft skills.

The existence of training provides an opportunity to accelerate the soft skills possessed compared to those without training. As a result of research from Astuty (2010) that there are differences in self-efficacy before and after training and it doesn't take long to improve. Even more so when the participants were satisfied with the training they received and understood the material presented. Thus, the enthusiasm factor in the participants also influences the success of the objectives of the training.

In today's digital era, it is also necessary to utilize technology in conducting training. In this case, the IPK EMPAT soft skills training was originally designed face-to-face but due to Covid-19 and face-to-face meetings were not possible so it was carried out online. Sukmanto, Djastuti, and Rahardja (2017) stated that e-learning can be used to improve soft skills and hard skills. His notes on interesting features make learning fun.

CONCLUSION

The results of this study indicate that the "IPK EMPAT" training is able to improve student soft skills. This is indicated by an increase; integrity, self-confidence, communication, empathy, and leadership in the group that was given the "IPK EMPAT" training. The results of

this study have implications that improving soft skills can be done through training with a directed curriculum.

The following are some suggestions based on the results of the research that has been done;

1. The training participants are expected to be able to participate actively when participating in the training because the participants' activeness plays an important role in the success of achieving the objectives of the training material delivered.
2. For subsequent research, it can be developed to study the effectiveness of training by using technological developments as a medium in delivering training materials.
3. Soft skills improvement can be done through training with a directed curriculum.

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CONFLICT OF INTEREST

There is no conflict of interest in this research.

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