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Analysis of Knowledge Management and Instructor Competence on Training Satisfaction with Industrial Relations as Moderation Variables at LP3I Sidoarjo

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A R T I C L E I N F O

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A B S T R A C T

The purpose of this study is to ascertain how knowledge management and instructor competency at LP3I Sidoarjo affect training satisfaction with industrial relations as a moderating variable. 94 respondents—representatives of the 2019 and 2020 Batch—who have completed a two-year professional education program were given questionnaires as part of a quantitative research project. SmartPLS was utilized for data processing, and disproportionate stratified random sampling was the sampling technique. The research's analysis's findings indicate that: 1) Knowledge management hasn't been able to directly raise training satisfaction. 2) Training satisfaction can be positively impacted by instructor competency. 3) Knowledge management and training satisfaction have not benefited from industrial relations. 4) Training satisfaction and instructor competency can both benefit from industrial relations.

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INTRODUCTION

As education develops, so does the system that will be applied to educational institutions. The demands of an increasingly advanced industry make educational and training institutions have to match the needs of the industry to meet the aspects of knowledge that they want to convey to students. Education and training institutions as an alternative in terms of helping to increase competence in the field of human resources to meet needs are the industrial world and the business world. Every organization, regardless of industry, needs education and training programs because they allow each individual to determine the efficacy of the programs that have been followed. Basically, the terms education and training have the same meaning but have different meanings. Education is an activity that trains participants to be prepared for an organization or agency. Training is an activity to improve the skills and abilities that have occupied a position in an organization or agency (Nugraha, Firman, & Asri, 2020).

These challenges encourage education and training institutions to develop quickly to prepare their students to be ready to develop and ready to face competition in the industrial world through the application and implementation of knowledge management. in the learning process carried out. According to Aziz, (2020), a school or educational institution is an organization that is a source of knowledge development, so knowledge management has a very important role in it. Therefore, the implementation of knowledge management is expected to provide benefits for educational institutions to find out the strengths of students in re-implementing the knowledge they have acquired during the education and training period and accelerating the creation of new knowledge from existing knowledge.

Knowledge management has a very important role in carrying out the survival and competitiveness of an organization. Changes in knowledge management in the business world and industrial world, have a huge impact from the cultural and educational aspects. This is caused by a change in the industrial community towards knowledge and technology-based community so the impact of this change is the need for new knowledge and technology-based qualifications for new jobs that have special qualification standards which are still minimally owned by workers in the industry (Wijaya, Sudjimat, & Nyoto, 2016). So this is what encourages educational and training institutions to have answers to changes and updates that are continuously demanded to always move forward and develop. In line with industrial developments, the educational curriculum that will be applied to students must be in line with the current industry.

As an educational institution with the application of the learning concept of 70% practice and 30% theory, the Indonesian Professional Education and Development Institute (LP3I) Sidoarjo has the same goal of producing graduates who are ready to work with an educational program that is taken for two years. In this case, the application of knowledge management at LP3I Sidoarjo is an activity designed to increase knowledge systems which are very useful in an organization. For this reason, strong knowledge management is needed so that

this knowledge takes root in every individual in the (Sukarno & Kustini, 2018) organization.

The application of practice-based learning encourages students to be more proactive in absorbing knowledge. So that when you graduate you have the competencies needed by the industrial world. LP3I Sidoarjo in terms of being an education and training institution provides learning facilities with reference to the needs of students to enter the industrial world. Susanto and Sukarno (2022) argue that companies that have skills or competencies can determine alternatives to improve the organization so as to influence success. In this case, students will feel their success during their education and training as seen from the skills and competence of the teachers or instructors in helping prepare students to be ready to enter the world of work.

Students are required to fulfill aspects of personal competence while attending education and training. It is hoped that these competencies will be able to produce graduates from LP3I Sidoarjo who are able to compete in the industrial world. These competencies are also a reference in preparing the learning process that will be carried out during the education and training period. The more the industrial world develops, the more complex the competencies required by the industrial world become. As a reference for competency, graduates from LP3I Sidoarjo are expected to meet established standards. Problems related to quality, relevance, and competitiveness among graduates faced by students need to be solved so that the goals vision, and mission of applying the link and match concept with the industrial world can be realized. In the context of developing vocational-based professional education, efforts to improve the curriculum play a very strategic role. Very fast changes in the world of work indicate that the curriculum in education needs to be constantly reviewed to see whether there is still a match between what is taught in schools and the needs of the world of work.

Examining more deeply knowledge management according to research conducted by (Rahman, Dzunur'aini, & Nur'aini, 2022), (Winarto, 2020)and (Susanto & Sukarno, 2022)states that knowledge management has a very good influence on individuals and organizations from the perspective of motivation, performance, and competence. It can be concluded that graduates who have acquired certain knowledge have more motivation to develop their attitudes and knowledge in other fields. However (Hasbi, Ahmad, & Muhamad, 2020), it state that knowledge management has a positive but not very significant influence on improving performance. It can be concluded that there is still a lack of knowledge management in individuals if there is no encouragement and motivation that triggers learning.

The application of knowledge management in educational institutions can be identified through the learning process applied to LP3I Sidoarjo which is continuously experiencing curriculum and practice developments. It is inseparable from the learning media used to support learning that is applied indoors using technology as a learning support for each student. The development of information and communication technology (ICT) is currently developing very quickly and can be used as a support in the teaching and

learning process in the world of higher education but is also used in educational and training institutions. E-learning has the potential to increase learning opportunities for students who do not understand learning after it is explained in class. Thus, e-learning can encourage a significant and active approach to learning focused on students, not on lecturers. Because learning can be obtained from various types of media and supports.

The more the industry develops, the more challenges that will be faced by the world of education in competency development to prepare graduates to enter the world of work. Vocational education as a human resource development institution must be able to play a role in developing skills in its graduates (Sulistyanto, Mutohhari, Kurniawan, & Ratnawati, 2021). So it is in line with the objectives of LP3I Sidoarjo and the need for synchronization and collaboration as a form of development from an Education and DUDI (Business and Industrial World) perspective so that graduates are ready to face an increasingly complex world of work. As a form of readiness for graduates from LP3I Sidoarjo to enter the industrial world, graduates who have undergone training and education for two years will be placed with industrial relations who have worked together and are spread across the Sidoarjo district. In this way, graduates are ready for development and implementation in the industrial world.

THEORETICAL REVIEW

Knowledge Management

In other words, knowledge management is derived from processes, systems, and culture related to organizational processes, brands, individual knowledge, intellectual property rights, licenses, and organizational knowledge (databases, understanding of organizational processes and relationships). Knowledge management is the process by which an organization produces prosperity from an intellectual perspective (thought) or knowledge base assets, namely something of value without physical dimensions attached to the individual. According to Akbar(2018) Planning, gathering, organizing, guiding, and regulating data and information that has been mixed with different ways of thinking and analyzing from different reliable sources is the process of knowledge management. In essence, knowledge management itself is a management strategy in terms of finding, capturing, sharing, and applying parts of knowledge that have the aim of supporting organizations in creating a structure that is able to maintain, create, develop, and apply knowledge not only for solving problems but also for achieving organizational goals (Mukhlasin & Budi, 2017)However, Abubakar et.al (2017)stated that Knowledge management itself is seen as a process and supporting activity, meaning that many related activities are formed to carry out key elements of Knowledge management strategy and operations.

There are two categories of knowledge: implicit knowledge and explicit knowledge. Knowledge that exists in the human mind but is very difficult to define and communicate with others is known as implicit knowledge. This knowledge manifests itself in the form of judgment, skills, values, and beliefs. Contrarily, explicit knowledge is information that has been or may be codified

in written forms, such as documents or other tangible materials, making it simple to transmit and convey via a variety of media, such as CDs, video and audio tapes, manual goods, and formulas. Through socialization, combination, and internalization, the two forms of implicit and explicit information are transformed into four different types of conversion processes that result in new knowledge. (Sopandi & Sa'ud, 2016).

Instructor Competency

Companies need to pay attention to staff competency concerns within the organization/company because competency is one of the determining elements in increasing performance. One fundamental quality that sets a person or employee apart from others is competence. In cases where two individuals possess disparate competencies. Competence demonstrates professional, high-value abilities and knowledge in a certain field, demonstrating the superiority of that field. According to Mathis & Jackson, (2010) several competencies that individuals must have. According to them, there are three competencies that a human resource practitioner must possess, namely first knowledge of business and organization, then knowledge of influence and change management as well as specific knowledge and expertise of human resources.

In facing a global and competitive business environment, many companies find it important to identify the skills needed by employees to produce good performance. As a result, companies began to apply competency models to help identify the knowledge, skills, and personal characteristics in the form of attitudes and personality that are needed to produce optimal performance (Labola, 2019). Competency models are also useful for ensuring that training and development programs contribute to the development of knowledge, abilities, and personal characteristics of employees. According to Gani, (2020), the competency or ability possessed by trainers or education educators is very important. Competency models are very helpful in every job such as knowledge, abilities, behavior, and personal characteristics that describe each competency (Zubaidi, Cahyono, & Maharani, 2019). So it can be interpreted that the educational process can be said to be successful or not depending on what is taught by the education staff through the teaching and learning process to achieve common goals.

Training

A company's organized effort to support learning about the competencies required and connected to work is called training. These competencies comprise attitudes, knowledge, and abilities that are crucial or directly impact worker performance. Employee training aims to help people master the attitudes, knowledge, and abilities highlighted in the program and incorporate them into their everyday work.

Training Satisfaction

Ideally, training should be designed to realize the goals of the organization, while at the same time realizing the goals of the individual worker.

Training is often considered the most common activity and leaders support training because through training, workers will become more skilled and therefore more productive even though these benefits must be weighed against the time consumed when workers are being trained. Training is a learning process designed to change people's performance in doing their jobs (Pramudyo, 2017).

According to Sutrisno (2019), the training is aimed at completing skills in doing work, as well as being able to use work equipment properly. However, another thing states that training is an effort to improve the quality of human resources. Training assists employees in understanding practical knowledge and its application, in order to improve the skills, abilities, and attitudes required by the company in an effort to achieve goals (Rachmawati, 2017). Thus it can be interpreted that training is a process of teaching certain knowledge and skills as well as attitudes so that each individual is more skilled and able to carry out responsibilities better, in accordance with the expected standards.

Industrial Relations

Law No. 5 of 1984 Concerning Industry defines industry as any economic activity that transforms raw materials, semi-finished goods, finished goods, and/or raw materials into goods that have a higher value for their use. This definition also includes industrial design and engineering activities. Collaboration between educational institutions and the world of business and industry (DUDI) in courses and training institutions, namely through the implementation of cooperation between the two parties and the world of work, can be realized in the form of production and services unit work groups (UPJ) and special work bureaus (BKK) or groups other. Meanwhile, the world of business and industry is an environment or field of activity for a person to complete or do something that produces means of fulfilling existing needs, such as goods or services, and getting paid wages (Yuliani, 2013). This collaboration is not just a supporter but cooperation in the sense of equal partnership (*partnership*).

In collaboration between educational institutions and industry, it is not only a complement in providing advice or consultation in vocational education, but also in providing training and sharing authority and equal responsibility in improving the quality of education. It is hoped that the collaboration between educational institutions and DUDI can increase the effectiveness of achieving vocational education goals. Vocational based. Because of this, collaboration between educational institutions and DUDI in the form of industrial work practice is better than practice during the learning process.

RESEARCH METHODS

This study employed a quantitative research design, which entails gathering, organizing, processing, and evaluating data as numerical representations that are then subjected to specific treatments and analysis. This qualitative descriptive study aims to characterize and interpret the object in its original form. Quantitative research focuses on the analysis of numerical data, or numbers, which are then examined using the proper statistical techniques.

Madani and colleagues, 2020). Thus, associative qualitative research is the methodology employed in this study. Associative research, according to Sugiyono (2019), is a method of formulating a research problem that inquires about the relationship between two or more variables.

Operational Definition and Measurement of Variables

Table 1. Definition of Operational Variables

Variable	Definition	Indicator
Independent Variable		
Knowledge management (X1)	*Knowledge management* attempts to increase useful knowledge within the organization.	• *Knowledge Acquisition* • *Knowledge Sharing* • *Knowledge Utilization* (Sahibzada, Latif, Xu, & Khalid, 2020)
Instructor Competency (X2)	The competence of the instructor to deliver material that will be used to support the training process carried out during class.	• Digital Literacy Skills • Creativity Skills • Critical Thinking Skills • Communication Skills (Sulistyanto, Mutohhari, Kurniawan, & Ratnawati, 2021)
Dependent Variable		
Training Satisfaction (Y)	An important factor for the continuity of training participants is being able to gain knowledge and implement it during training	• E-learning • Flexible learning • Increased knowledge • Achieve the desired goal (Li, Lu, Hou, Cui, & Darbandi, 2021)
Moderation Variable		
Industrial Relations (Z)	Industrial Collaboration with Educational Institutions is a form of close partnership between the world of education and the world of industry.	• Link and match program • Graduates/Alumni • Industrial cooperation • Readiness and interest of participants (Irwanto, 2021)

Population and Sample

The entire number of items or people with specific attributes chosen by the researcher to be investigated and conclusions made from are referred to as the population. The 308 students in the training class of 2019 and 2020 make up the population of this study.

The sample is part of the number and characteristics possessed by the population. For this reason, samples taken from the population must be truly

representative (Sugiyono, 2019). Thus, the sample that will be used as a data source must be representative and have the characteristics to be studied. The sampling technique used by the researcher is a *disproportionate stratified random sampling technique* (proportional stratified random sample). namely, a sampling technique that is carried out when the characteristics or elements in the population are not homogeneous and are less or disproportionately stratified (Hardani, et al., 2020).

Determination of sample size using the *Isaac and Michael* formula because in taking the sample the number must be representative so that the results of the study can be generalized and the calculations can be carried out simply (Sugiyono, 2019). The determination uses *the Isaac and Michael* formula as follows:

$$S = \frac{\lambda^2 . N . P . Q}{d^2 (N - 1) + \lambda^2 P . Q}$$

Information:

S = Number of samples

λ^2 = Chi Square whose price depends on the price of freedom and the degree of error. For 1 degree of freedom the Chi Square price = 6.634, while for 5% freedom the Chi Square price = 3.841. The Chi-Square value for 10% error = 2.706.

N = Total Population

P = Correct probability (0,5)

Q = Probability of being wrong (0 .5)

d = Difference between sample means (0 .01 ; 0.05, and 0.10)

The total population in this study was 308 students, so the percentage to be used is 10% and the calculation results can be rounded to achieve suitability. So to find out the number of samples in the study used calculations using a 90% confidence level, and an error rate of 10% by calculating using the *Isaac and Michael Formulas* as follows: N = 308 people (total student population) λ^2 = 10%

$$S = \frac{2{,}706^2 . 308 . 0{,}5 . 0{,}5}{0{,}01(307) + 2.706^2 \; 0{,}5 . 0{,}5}$$

$$S = \frac{208{,}36}{3{,}75}$$

S = 55.6 rounded up to **56** people/respondent

RESEARCH RESULTS

Results of Research Data Analysis

Based on the data collection in the research and the results of data analysis using the SmartPLS software, the evaluation results of the measurement model (*outer model*), structural model (*inner model*), and hypothesis testing are as follows:

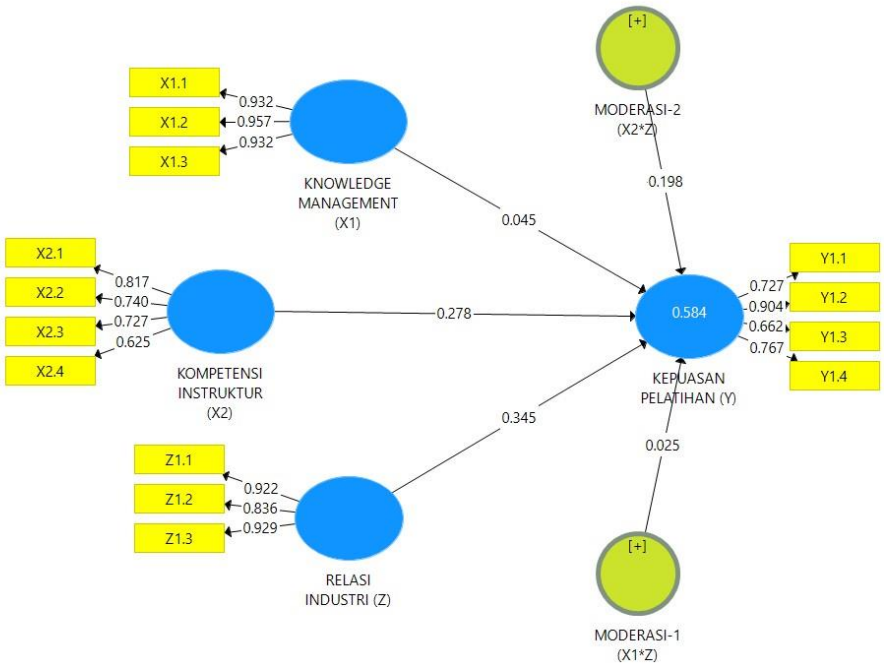

Figure 1. Results of the Research Model

Outer Model Testing (Measurement Model)

Measurement of the outer model that establishes, via validity and reliability testing, the relationship between each indication and the variables.

Validity test

A measure of a questionnaire instrument's validity or error is called validity. The measurement findings should be accurate if the questionnaire is genuine and accurate. The degree to which the data collected does not stray from the description of the variable in question is indicated by the instrument's high or low validity. Rather, a poor validity instrument is one that has less validity. The large indicator variance that the hidden variable has is indicated by the average variance extracted (AVE) value. Good validity for the latent variable is shown by a convergent AVE value greater than 0.5. *The average variance extracted (AVE)* value is contained in Table 2. Because the AVE model is good if the AVE value of each construct is greater than 0.5.

Table 2. Average Variance Extracted (AVE) Value

Variable	Average Variance Extracted (AVE)	Standard AVE value
Training Satisfaction (Y)	0.59 3	0.5
Knowledge Management (X1)	0.884 _	0.5
Instructor Competency (X2)	0.533 _	0 . 5
Moderation -1 (X1*Z)	1,000	0 . 5
Moderation -2 (X2*Z)	1,000	0.5
Industrial Relations (Z)	0.804	0.5

Source: Primary Data Processed, 2023

Table 2. shows that the test results show the AVE value for the construct (variable), all variables have a value greater than 0.5 (above the required value) whereas the variable that has the highest AVE value is the Knowledge Management variable *of* 0.884.

Reliability Test

A reliability test was conducted to prove the accuracy, consistency, and precision of the instrument in measuring constructs. Testing is measured using composite reliability and Cronbach's alpha. The results of the tests carried out are in Table 3 as follows.

Table 3. Reliability Test Results

Variable	**Composite Reliability**	**Cronbach's Alpha**
Training Satisfaction (Y)	0.765 _	0.852 _
Knowledge Management (X1)	0.935 _	0.958 _
Instructor Competency (X2)	0.717 _	0.819 _
Moderation -1 (X1*Z)	1,000	1.00
Moderation -2 (X2*Z)	1,000	1.00
Industrial Relations (Z)	0.879	0.925

Source: Primary Data Processed, 2023

Table 3 shows that the construct reliability measured will be declared reliable if it has a composite reliability value above 0.70 and Cronbach's alpha above 0.60 then the indicator is said to be consistent in measuring the latent variable. The test results show that the construct (variable) of the variable Knowledge Management, Instructor Competence, Industry Relations, Training Satisfaction, Moderation-1 (X1*Z) and Moderation-2 (X2*Z) have a value greater than 0.70 and Cronbach's alpha has a value greater than 0.60 so it can be concluded that all variables declared reliable.

Inner Model Testing (Structural Model)

The structural model or *inner model* describes the relationship between independent (exogenous) latent variables and dependent (endogenous) latent variables. Structural model analysis is carried out to ensure that the structural model built is robust and accurate.

Coefficient of Determination or R-Square Test

The coefficient of determination test or *R-Square* (R^2) is a very important test in regression, whether or not the regression model used can be seen from the determination test. The $R^{2\ value}$ explains how much the exogenous (independent/free) variables in the model are able to explain the endogenous (dependent/dependent) variables. The results of the coefficient of determination test or R - *Square* (R^2) are shown in Table 4 as follows.

Table 4. *R-Square* Test Results

Variables	*R 2 -R-Square*
Training Satisfaction (Y)	0.584

Source: Primary Data Processed, 2023

Based on the results of the determination test in Table 4. shows that the value of R 2 = 0.584. This can interpreted the model able to explain the phenomenon or problem of Training Satisfaction of 58.40 %. Meanwhile, the remainder (41.60 %) is explained by other variables (apart from Knowledge Management, Instructor Competency, Industry Relations, Moderation-1 (X1*Z), and Moderation-2 (X2*Z)) which have not been included in the model and *have errors*. It means Training Satisfaction is influenced by Knowledge Management, Instructor Competency, Industrial Relations, Moderation-1 (X1*Z), and Moderation-2 (X2*Z) amounting to 58.40 % while 41.60 % is influenced by variables other than Knowledge Management, Instructor Competence, Industry Relations, Training Satisfaction, Moderation-1 (X1*Z) and Moderation-2 (X2*Z) or explained by other variables.

Hypothesis test

Based on the hypothesis test carried out, from the path coefficient in Table 4.16, it can be seen that the original sample value, p-value, and t-statistics are used as a reference for making a decision whether the hypothesis is accepted or the hypothesis is rejected.

Table 5. Path Coefficient Results

	Variables	Original Sample	T-Statistics	P-Value	Results
H1	Knowledge Management (X1) -> Training Satisfaction (Y)	0.045	0.527	0.599	Non Significant
H2	Instructor Competency (X2) -> Training Satisfaction	0.278	2,550	0.011	Significant
H3	Moderation 1 Industry Relations (Z) (X1*Z) Knowledge Management (X1) -> Training Satisfaction (Y)	0.025	0.272	0.786	Non Significant
H4	Moderation 2 Industry Relations (Z) (X2*Z) Instructor Competency (X2) -> Training Satisfaction	0.198	2,541	0.011	Significant

Source: Primary Data Processed, 2023

From the results of the analysis of Table 4.16, it can be explained that each of them has the following analysis

1. The first hypothesis regarding the Knowledge Management variable (X1) has a non-significant effect on Training Satisfaction (Y). The calculation results show that the t-statistics value is below the t-table (0.527 < 1.96) with a p-value =
2. 0.599 greater than the value α = 0.05 (5%), while the path coefficient value (original sample) of 0.045 which shows the direction of the relationship between Knowledge Management (X1) and Training Satisfaction (Y) is positive. So the first hypothesis is Non Significant.
3. The second hypothesis regarding the Instructor Competency variable (X2) has a significant positive effect on Training Satisfaction (Y) The calculation results show that the t-statistics value is above the t-table (2.550 > 0.05) with the obtained p-values = 0.011 smaller than the value α = 0.05 (5%), while the path coefficient (original sample) is 0.278 which indicates the direction of the relationship between Instructor Competence (X2) and Training Satisfaction (Y) is positive. So the second hypothesis is Significant.
4. The third hypothesis is that Industrial Relations as a Moderation variable-1 (X1*Z) Knowledge Management (X1) has a non-significant effect on Training Satisfaction (Y). The calculation results show that the t-statistics value is below the t- table (0.272 < 1.96) with p-values obtained = 0.786 is greater than the value α = 0.05 (5%) The path coefficient (original sample) is 0.025, which shows whether the direction of the Industrial Relations (Z) relationship is able to moderate the relationship between Knowledge Management (X1) and Training Satisfaction (Y). is positive. So the third hypothesis is Non Significant.
5. The fourth hypothesis is that Industrial Relations as a Moderation variable Moderation-2 (X2*Z) Instructor Competence (X2) has a Significant Positive effect on Training Satisfaction (Y) The calculation results show that the t-statistics value is above the t-table (2.541 > 0.05) with a p-value = 0.011 which is smaller than the α value = 0.05 (5%), while the path coefficient (original sample) is 0.198 which shows the direction of the relationship between Industrial Relations (Z) and whether it is able to moderate the relationship between Instructor Competency (X2) and Training Satisfaction (Y). is positive. So the fourth hypothesis is Significant.

DISCUSSION

The Influence of Knowledge Management on Training Satisfaction

From the test results on the effect of knowledge management (KM), it has not been able to contribute to training satisfaction, meaning that the increasing or complex value of KM, the lower the level of training satisfaction in LP3I Sidoarjo students.

The knowledge Management variable does not significantly influence the training satisfaction variable because the application of KM is not optimal in terms of the process of providing material and practice which causes students

not only to get theory but to hone the skills of the students is very lacking. Training satisfaction is considered effective and good if the participants are able to apply the knowledge they have acquired during the teaching and learning process. This research is in line with research conducted by which (Kusuma, 2013)states that KM has not been able to increase the effectiveness of learning in organizations, so in this case, KM is very important in terms of practice and the selective application of knowledge from previous decision-making experience for current and future decision-making activities by the aim is to increase satisfaction with the learning and training process carried out by students from LP3I Sidoarjo.

This opinion is also supported by research conducted (Anggapraja, 2016) states that KM aims to increase the knowledge of each individual by carrying out regular human resource development. Since COVID-19 continued to impose learning and practice restrictions from 2020 to 2022, regular knowledge management (KM) improvements were lacking. These should have been carried out and facilitated by LP3I Sidoarjo to support increasing competency and training satisfaction, but they weren't because of the implementation during the 2019 and 2020 class years.

Based on the previous discussion and supported by the results of research which discusses the KM received by LP3I Sidoarjo students has not been able to directly increase training satisfaction, therefore there needs to be regular development to improve and be able to apply KM so that the knowledge obtained is able to encourage the skills and knowledge of each student to receive good teaching in accordance with the standards required by the world of work, especially in the next generation.

The Influence of Instructor Competence on Training Satisfaction

From the test results on the influence of Instructor Competency being able to contribute to training satisfaction for LP3I Sidoarjo students, this means that the higher the instructor's competency score, the higher the training satisfaction obtained by LP3I Sidoarjo students.

Instructor competence is a reference to whether students are satisfied with the material being taught and whether the delivery of learning is acceptable to each student. Each lecturer or instructor will always have different teaching skills even though students come from various backgrounds because LP3I Sidoarjo itself is a practice-based vocational education in which teaching always prioritizes practice over theory. This is a concern for management in determining the quality of lecturers according to their competence and field of study. In accordance with research conducted by those (Murni, Imaduddin, & Karlina, 2019)who show the influence of lecturer competence on student learning outcomes. This encourages the formation of training satisfaction which is followed by LP3I Sidoarjo students in carrying out learning for two years. When delivering the material, the lecturer will ensure that the material is conveyed well to the students.

Based on the previous discussion and the support of the research results, the instructor competencies in the Sidoarjo LP3I environment already have

competency standards needed by students who are able to support them in achieving training satisfaction. The skills possessed by lecturers in supporting development and readiness to enter the world of work are needed by students to demonstrate the quality of graduates desired by LP3I Sidoarjo.

The Influence of Knowledge Management on Training Satisfaction with Industrial

Relations as a Moderation

From the test results on the Industrial Relations variable, it has not been able to contribute significantly and strengthen knowledge management (KM) and training satisfaction, meaning that the higher the value of industrial relations, the less able to provide encouragement to KM and training satisfaction obtained by LP3I Sidoarjo students.

the management of knowledge towards self-management the term knowledge management. This is a strategy that must be directed at the organization regarding knowledge so that it can increase the satisfaction of stakeholders who have competence and are competitive. However, this research shows that knowledge management is still very low in LP3I Sidoarjo. Industrial relations, a strengthening factor in this research, is still unable to increase the value of KM to support the training satisfaction obtained by LP3I Sidoarjo students. This is not the only reason why management is still weak and why KM is still viewed as weak. This is not in line with research conducted by Biasutti & EL-Deghaidy (2012)which shows that KM is able to improve the quality of education driven by industrial technology. The same thing was also stated by those (Khanal & Poudel, 2017)who stated that KM was able to create satisfaction and be more efficient in the satisfaction of training participants through industrial encouragement. So this becomes a driving force for future improvements.

It is concluded that Industrial Relations has not been able to have a positive or non-significant impact on KM and training satisfaction carried out by LP3I Sidoarjo students based on the previous discussion and the findings of this study. Industrial relations are able to provide an overview, encouragement, and skill improvement for students in fulfilling knowledge which will later be used as a support when entering the world of work. The higher the KM score itself, the better the training satisfaction that students will receive. However, there are other factors that can affect the value of industrial relations on the value of KM and training satisfaction, such as constraints in imparting knowledge, application of knowledge, and distribution of knowledge. Whereas for students in the 2019 and 2020 classes, there were restrictions because at that time there was an outbreak of Covid-19 which caused the learning system and practice system from the industry to be abolished which caused students not to get the maximum KM process that should be obtained from the education and training provided. is in accordance with established standards.

The Influence of Knowledge Management on Training Satisfaction with Industrial
Relations as a Moderation

From the test results on the Industrial Relations variable, it is able to make a positive contribution to the involvement of instructor competence in training satisfaction, meaning that the higher the value of industrial relations, the more it will be able to increase and encourage instructor competence and training satisfaction obtained by LP3I Sidoarjo students.

Vocational education institutions are closely related to student development with reference to the current industry. Because competency development through the industrial world is very much needed for students and teachers. The results of this research are in line with research conducted by Hidayatullah, Sukarno & Sawitri (2023)which states that competence can provide a direct boost to satisfaction. So the value of industrial relations as a reinforcement is able to provide competence and satisfaction with the training held by LP3I Sidoarjo. With the concept of direct practice, instructors are also required to always provide training that is in accordance with industry needs. Judging from the competence of the instructors, who are actually workers, they also provide their knowledge to increase the knowledge of LP3I Sidoarjo students so that the knowledge they gain is in line with their competencies in the world of work. obtained.

According to the findings of this study and the preceding discussion, Industrial Relations might enhance or positively affect the instructor's competency with regard to training satisfaction as reported by LP3I Sidoarjo students. Industrial relations are able to provide an overview, encouragement, and skill improvement for instructors, management, and especially students in fulfilling knowledge that will later be used as a support when entering the world of work.

CONCLUSION AND RECOMMENDATION

Based on the results and discussion of the variables Knowledge Management, Instructor Competency, Training Satisfaction, and Industrial Relations as Moderators, the following conclusions can be drawn from the analysis:

1. Knowledge Management (KM) has not been able to make a significant contribution to the training satisfaction obtained by graduates from LP3I Sidoarjo.
2. Instructor Competence is able to contribute positively and significantly to the Training Satisfaction obtained by graduates from LP3I Sidoarjo.
3. Industrial Relations as a moderator has not been able to make a significant contribution to Knowledge Management (KM) and Training Satisfaction obtained by graduates from LP3I Sidoarjo.
4. Industrial Relations as a moderator is able to contribute positively and significantly to Instructor Competence and Training Satisfaction obtained by graduates from LP3I Sidoarjo.

FURTHER STUDY

It is hardly surprising that researchers discovered multiple issues with language, writing, presentation style, and report presentation given their limitations. To achieve the finest results possible, scholars go to a range of sources for support and helpful critique.

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