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Analysis of Factors Related to Consciousness Occupational Safety and Health (K3) in Students Class XII Automotive Department High School Vocational School (SMK) Negeri 3 Gorontalo

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ABSTRACT

Awareness of K3 behavior must be instilled from an early age. Vocational schools are one of the means to introduce and instill students' awareness to behave in K3. Therefore, it is important to provide education and implement K3 correctly in the school environment. factors that affect K3 awareness in schools are knowledge, K3 supervision from both teachers and schools, K3 facilities such as (PPE) or special equipment, and K3 information. Awareness of K3 in students must be really applied in the form of their attitude during practice and their actions when practicing, so that accidents can be avoided even from the source of the material. The purpose of this study is to analyze factors related to K3 awareness in automotive students. This type of research is with a cross sectional approach. The research population of all grade XII students majoring in automotive at SMK Negeri 3 Gorontalo was 46 students, with a sampling technique, namely total sampling. Data in univariate and bivariate analyses used chi squere tests. The results of the study showed that the variables related to K3 awareness were K3 knowledge (p=0.015), supervision (p=0.007), PPE use (p=0.037), and information sources (p=0.010). It can be concluded that there is a significant relationship between K3 knowledge, supervision, the use of PPE and information sources and K3 awareness in students. Advice for students to always improve and implement the K3 knowledge that has been obtained and for the school to improve learning media, or add or add references to books about K3 besides also paying attention to students' attitudes and actions during the practical learning process.

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INTRODUCTION

Vocational High Schools (SMK) as a forum for the formation of skilled human resources must strive to produce a capable workforce according to the needs of the industrial world. So it is hoped that students can adjust to meet the needs of work demands in the industrial world. Including the implementation of occupational safety and health (K3) which is important to do in a production process in an industry. K3 knowledge and behavior is time to be known by all levels of society, including students. The K3 program is given in schools, so it will help vocational school students when entering the world of work (Fudtriani, 2023).

Awareness of K3 behavior is instilled, one of which is by providing occupational health and safety education so that students' knowledge becomes broad and positive attitudes about K3 can be grown. Occupational health and safety (K3) is a way to make the workplace safe and comfortable so that there are no work accidents and work efficiency and productivity increase (Hidayat, 2019).

One of the factors that affects K3 awareness in schools is knowledge. The increase in knowledge is also influenced by the way peer educators deliver material using simple language so that it is easy to understand. K3 knowledge is the ability to know and get information related to occupational health and safety obtained from vision and hearing results (Sulistiyani et al., 2022).

In addition, K3 supervision is needed both from teachers, K3 supervision is an activity to ensure that the Occupational Safety and Health (K3) program is implemented in accordance with laws and regulations. The goal is to reduce the risk of work accidents. K3 supervision is carried out by K3 supervisors who have duties and responsibilities, including conducting routine inspections to detect potentially dangerous work conditions or practices, identifying potential hazards in the workplace and assessing risks that may arise, and ensuring that safety procedures are followed by workers (Lapu et al., 2023).

K3 facilities are facilities and equipment provided to provide first aid to victims of accidents or emergency incidents at work. The facility aims to provide appropriate initial medical care and reduce the impact of injuries on employees. K3 facilities that must be present in the workplace are personal protective equipment (PPE) and/or special equipment. K3 or Occupational Safety and Health is an effort to create a safe, healthy and comfortable work environment (Rahmantiyoko et al., 2019).

A source of information is anything that provides data, facts, or knowledge in the form of information. Information sources can be obtained from various media, both physical and digital, and vary in their forms and types. Some examples of information sources are print media, such as newspapers and magazines, electronic media, such as television, radio, and the internet, as well as health worker activities, such as training. Sources of K3 (Occupational Health and Safety) information can also be in the form of: K3 communication, Information about announcement standards, Safety Data Sheets (SDS), Incident reports and nearmiss reports. K3 information is important to make the right decisions regarding a safe and healthy work environment.

According to Mustari (2022), the implementation of K3 in schools and its understanding of students and teachers is still very lacking. Many people only have basic knowledge of K3 without understanding the other essential aspects. Another study conducted by Ing-Marie Andersson, (Handayani, 2024) stated that teachers and supervisors do not plan K3 training in accordance with the provisions and systematic management of the work environment but teachers base their training on their own experiences. Therefore, it is important to provide education and apply

K3 correctly in the school environment. This aims to prevent various risks, hazards, and accidents that can be detrimental students, teachers, or anyone else at the school.

Based on the results of initial observations in the automotive department conducted by the author on 10 students of SMK Negeri 3 Gorontalo in September, it showed that there were 7 students who did not use Personal Protective Equipment with a presentation of 70%. There are 3 students who have poor knowledge about K3 awareness with a presentation of 30%. In a brief interview with students in the automotive lab section, there was a work accident caused by the negligence of the students themselves. Work accidents that occur among students who practice are caused by carelessness and not being careful when doing practices so that students have accidents, starting from minor injuries such as swelling in the eyes and injuries to the hands due to the use of hand grinding machine tools and causing injuries. SMK 3 Negeri Gorontalo does not have training on work safety based on the information obtained that at SMK Negeri 3 Gorontalo often carries out safety talks or providing information related to matters related to work safety before doing work.

Based on the background and problems obtained above, the researcher is related to conducting research on "Analysis of Factors Related to K3 Awareness in Students of SMK Negeri 3 Gorontalo majoring in Automotive".

RESEARCH METHODS

Location and Time of the Research

The location of this research was carried out at SMK Negeri 3 Gorontalo Jalan Bali No 2. Pulubala, Kec. Kota Tengah Kota Gorontalo. This research was conducted for 1 month in January.

Research Design

This research is an analytical survey research using a cross sectional approach design, which is a type of research that is conducted only once at the time of measurement or observing data on independent variables (K3 knowledge, supervision, use of PPE and information sources) and dependent (K3 awareness) at the same time.

Research Variables

The variables in this study consist of independent variables of K3 knowledge, supervision, use of PPE and information sources and dependent variables of K3 awareness.

Population and sample

The population in this study is all grade XII students majoring in automotive at SMK Negeri 3 Gorontalo with a total of 46 people using total sampling techniques.

Data Collection Techniques

The data collection technique is divided into primaries, namely data compilation which is carried out directly by collecting objects using questionnaires. While secondary data is data that is collected to complement to meet the needs of researchers.

Data Analysis Techniques

The data analysis technique is divided into univariate and bivariate. Univariates are used to analyze each variable. Bivariate is used to analyze two related or correlated variables using the chi squere test.

RESULTS

Univariate Results

This research was conducted in January 2025. The location of the research was carried out at SMK Negeri 3 Gorontalo

Characteristics of Respondents by Age

Table 1. Characteristics of Respondents Based on Age Group

Age Group (Years)	Sum				
	n	0/0			
17 Years	9	19,6			
18 Years	37	80,4			
Total	46	100,0			

Source: Primary Data, 2025

Table 1 shows that the frequency of age is known to be distributed into 2 age groups, namely 17 years and 18 years, where the highest frequency of grade XII students is 18 years old with a total of 37 respondents (80.4%) and in the age group of 17 years as many as 9 respondents (19.6%).

Characteristics of Respondents by Gender

Table 2 Characteristics of Respondents by Gender

Gender		Sum
	n	%
Man	45	97,8
Woman	1	2,2
Total	46	100,0

Source: Primary Data, 2025

Table 2 shows the frequency of the gender of most of the students are male and there is only 1 female respondent (2.2%) who is male, which is as many as 45 respondents (97.8%).

Distribution of Respondents Based on K3 Knowledge

Table 3 Distribution of Respondents by Means

K3 Knowledge

K3 Knowledge	Sum				
	n	%			
Good	25	54,3			
Enough	21	45,7			
Total	46	100,0			

Source: Primary Data, 2025

Table 3 shows that the distribution of K3 knowledge in grade XII students majoring in automotive is in the category of knowledge, as many as 25 respondents (54.3%) and in the knowledge category as much as 21 respondents (45.7%). The respondents were most distributed in the category of good knowledge.

Distribution of Respondents by Supervisor

Table 4 Distribution of Respondents by Supervision

Supervision		Sum
	n	0/0
Good	15	32,6
Enough	31	67,4
Total	46	100,0

Source: Primary Data, 2025

Table 4 shows that the distribution of the supervision category for grade XII students majoring in automotive at SMK Negeri 3 Gorontalo is that there is supervision with a good category of 15 respondents (32.6%) and in the sufficient supervision category as many as 31 respondents (67.4%).

Distribution of Respondents Based on PPE Use

Table 5 Distribution of Respondents Based on PPE Use

Use of PPE	Sum			
	n	%		
Good	21	45,7		
Bad	25	54,3		
Total	46	100,0		

Source: Primary Data, 2025

Table 5 shows that the distribution of PPE use is most distributed in the use of bad PPE as many as 25 respondents (54.3%) and in the category of good PPE use as many as 21 respondents (45.7%).

Distribution of Respondents Based on Information Sources

Table 6 Distribution of Respondents by Source of Information

Awareness	Sum			
K3	n	%		
Good	28	60,9		
Enough	12	26,1		
Less	6	13,0		
Total	46	100,0		

Source: Primary Data, 2025

Table 6 shows that the most results were in good information sources as many as 29 respondents (63.0%) and the least bad information sources as many as 17 respondents (37.0%).

Distribution of Respondents Based on K3 Awareness

Table 7 Distribution of Respondents Based on K3 Awareness

Awareness	Sum				
K3	n	%			
Good	28	60,9			
Enough	12	26,1			
Less	6	13,0			
Total	46	100,0			

Source: Primary Data, 2025

Table 7 shows that the distribution of K3 awareness was obtained as a result of K3 awareness with a good category of 28 respondents (60.9%), K3 awareness with an adequate category of 12 respondents (26.1%) and K3 awareness with a poor category of 6 respondents (13.0%).

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Bivariate Analysis

The Relationship of K3 Knowledge with K3 Awareness of Grade XII Students majoring in Automotive

Table 8 The Relationship between K3 Knowledge and K3 Awareness of Grade XII Students of the Automotive Department of State Vocational Vocational Schools 3 Gorontalo

			K3 A	Sum					
K3 Knowledge		Good	E	nough		Less	_		P Value
	n	%	n	%	n	%	n	%	
Good	18	64,3	7	58,3	0	0,0	25	54,3	0,015
Enough	10	35,7	5	41,7	6	100,0	21	45,7	
Sum	28	100,0	12	100,0	6	100,0	46	100,0	_

Source:D ata Primer 2025

The results of the above distribution were obtained from 46 respondents, there were good K3 knowledge with good K3 awareness as many as 18 respondents (64.3%) and sufficient knowledge with poor K3 awareness as many as 6 respondents (100%). Meanwhile, in good knowledge with K3 awareness, there were 7 respondents (58.3%) and knowledge with good K3 awareness, there were 10 respondents (35.7%).

The results of the statistical test obtained a p value of 0.015 with a value which means that there is a relationship between K3 knowledge and K3 awareness in a=0,05grade XII students majoring in automotive at SMK Negeri 3 Gorontalo.

The Relationship between Supervision and K3 Awareness in Grade XII Students majoring in Automotive

Table 9 The Relationship between Supervision and K3 Awareness in Grade XII Students majoring in Automotive

		·	K3 A	Sum	·				
Supervision		Good	E	nough		Less	_		P Value
	n	%	n	%	n	%	n	%	
Good	14	50,0	1	6,7	0	0,0	15	32,6	0,007
Enough	14	50,0	11	91,7	6	100,0	31	67,4	_
Sum	28	100,0	12	100,0	6	100,0	46	100,0	<u> </u>

Source:D ata Primer 2025

Based on the results of the Statistical Test above, obtained from 46 respondents, it shows that there are good supervisors with good K3 awareness as many as 14 respondents (50%) and sufficient supervision with less K3 awareness as many as 6 respondents (100%). In the category of good education with K3 awareness, there is only 1 respondent (6.7%) and in the supervision is sufficient with awareness of K3, there are only 11 respondents (91.7%).

The results of the statistical test obtained a p value of 0.007 with a value which means that there is a relationship between supervision and K3 awareness in a=0,05grade XII students majoring in automotive at SMK Negeri 3 Gorontalo

The Relationship between the Use of PPE and K3 Awareness in Grade XII Students of the Automotive Department

Table 10 Relationship between the Use of PPE and K3 Awareness in Grade XII Students of the Automotive Department

	K3 Awareness							1	P Value
Use of PPE	Use of PPE Good E		Enough Less						
	n	%	n	%	n	%	n	%	
Good	16	57,1	5	41,7	0	0,0	21	45,7	0,037
Bad	12	42,9	7	58,3	6	100,0	25	54,3	_
Sum	28	100,0	12	100,0	6	100,0	46	100,0	_

Source: Primary Data, 2025

Based on the table above, from 46 respondents, there were 16 respondents (57.1%) using PPE with good K3 awareness (57.1%) and using bad PPE with poor K3 awareness as many as 6 respondents (100%). In the category of good PPE use with K3 awareness, there were 5 respondents (41.7%) and the use of bad PPE with good K3 awareness there were 12 respondents (42.9%) while in the use of bad PPE with K3 awareness

with K3 awareness, there are enough 7 respondents (58.3%).

The results of the statistical test obtained a p value of 0.037 with a value which means that there is a relationship between the use of PPE and K3 awareness in a=0,05grade XII students majoring in automotive at SMK Negeri 3 Gorontalo.

The Relationship of Information Sources with K3 Awareness in Grade XII Students of the Automotive Department

Table 11 The Relationship of Information Sources with K3 Awareness in Grade XII Students of the Automotive Department

			K3 A	Sum		P Value			
Resources	(Good		Enough		Less			
	n	%	n	%	n	%	n	%	
Good	22	78,6	6	50,0	1	16,7	29	63,0	0,010
Bad	6	21,4	6	50,0	5	83,3	17	37,0	_
Sum	28	100,0	12	100,0	6	100,0	46	100,0	_

Source: Primary Data, 2025

Based on the table above, it shows that there are good sources of information with good K3 awareness as many as 22 respondents (78.6%) and bad information sources with poor K3 awareness as many as 5 respondents (83.3%). And in the source of information, both with K3 awareness, there are enough 6 respondents (50.0%) and less K3 awareness

There was 1 respondent (16.7%). In the source of bad information with K3 awareness, there are only 6 respondents (50.0%). The results of the statistical test obtained a p value of 0.010 with a value which means that there is a relationship between the source of information and K3 awareness.a=0.05

DISCUSSION

The relationship between K3 knowledge and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo

The results of the statistical test obtained a p value of 0.015 with a value which means that there is a relationship between K3 knowledge and K3 awareness in grade XII students majoring in automotive at SMK

Negeri 3 Gorontalo. This happens because there are some students who have knowledge about K3 but are not aware of the importance of K3 during practicum, students still think that the application of K3 in schools is not really needed. Therefore, with all the knowledge that students have, it must be in line with awareness because it can develop behaviors and attitudes that are aware of occupational safety and health during practicum, this means that knowledge is very related to occupational safety and health awareness in the school environment. Based on the theory by a<=0,05 (Rahmatunnazhifah et al., 2023) Knowledge is a domain that can shape behavior, the formation of behavior through increasing knowledge is expected to change the climate of safety and health in the work environment so that the K3 culture can be formed. The better a person's knowledge, the better the action will be.

Based on table 4.8, it was found that K3 knowledge was good and K3 awareness was sufficient as much as 7 (58.3%). If viewed based on the domain of knowledge, students already know, understand, analyze but are still lacking in application. The form of action taken by the students is only limited to wearing gloves without paying attention to other vital parts of the body that must be protected, students also prefer to speed up the work so that they can still have time to relax or have a lot of wipes.

This theory is supported by (Uyun & Widowati, 2022) the cognitive abilities used in almost all types of work namely perception, memory, the process of understanding information, and judgment. Errors and lapses in cognitive function can lead to dangerous situations. A person's knowledge of an object

It contains two aspects, namely positive aspects and negative aspects. These two aspects will determine how a person behaves towards objects. Good knowledge will encourage individuals to take actions that minimize the dangers that will arise and will also increase awareness of occupational safety and health.

This is in line with research conducted by knowledge is one of the aspects that need to be considered to improve K3, so that it can be said that the better the K3 knowledge of students, the better the awareness of K3 behavior of students will also be better. On the other hand, if the students' K3 knowledge is worse, the awareness of K3 behavior of students will also be worse. To form awareness of K3, it is necessary to increase knowledge. (N. Sari et al., 2022)

Knowledge is the understanding or information about the subject that individuals gain through education or experience. Knowledge of occupational safety and health is very necessary to help individuals in their work and minimize the impact that will be caused. This is needed by students to help minimize the impact of occupational safety and health. If behavior is based on knowledge, awareness and positive attitudes, then this behavior will be better than if it is not based on knowledge, awareness and positive attitudes, it will provide a positive relationship that is directly proportional. (Bahtiar et al., 2024)

The relationship between supervision and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo

The results of the statistical test obtained a p value of 0.007 with a value which means that there is a relationship between supervision and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo. This is related to the supervision of students who are more obedient and aware of occupational health and safety (K3). Supervision also helps to control and improve student behavior during practicum and ensures that students comply with K3 procedures and have good K3 awareness. Therefore, supervision is closely related to K3 awareness. This means that supervision is one of the important aspects of occupational safety and health awareness among students, the higher the supervision provided will minimize and prevent accidents during practicum. Such as the theory that says that supervision can help increase awareness of K3 by providing feedback and advice to workers on how to improve work safety (Surya, 2020).a<=0,05

Based on table 4.9, it was found that supervision was sufficient with K3 awareness of 14 people (50%), this happened because some students had been equipped with knowledge of occupational safety and health so that teachers did not supervise completely, teachers only supervised at the beginning of the practicum. Students who already understand occupational safety and health awareness will pay attention to all actions taken and use complete PPE.

This theory is supported (Hidayati & Ekaputri, 2020) by Supervision is a process of activities that are continuously carried out to find out what work has been carried out, then an assessment is held and corrects whether the implementation is in accordance with the proper implementation. K3 supervision is to examine, measure, evaluate and determine the follow-up of the results of the implementation of the assigned functions and tasks. Changes in individual behavior begin with the stage of compliance, identification, and then internalization. At first, individuals obey without voluntarily taking the action and often because they want to avoid punishment or sanctions, if they can comply with the recommendation, then usually the changes that occur at this stage are temporary, meaning that the action is carried out as long as there is a supervisor. However, when the supervisor relaxed the behavior was abandoned again

This is in line with the research that supervision is a supporting aspect of K3 awareness carried out by students and can prevent bad things during practicum. It can also improve student discipline in complying with occupational safety and health during practicum. (Ibrahim et al., 2023)

Responsibility and accountability are effective supervision and strengthen individual responsibility and accountability for K3 prevention measures during practicum.

The relationship between the use of personal protective equipment (PPE) and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo

The results of the statistical test obtained a p value of 0.037 with a value which means that there is a relationship between the use of PPE and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo. This is because personal protective equipment (PPE) is available at school, but some students do not use it completely, some only use one or two types of PPE available during practicum. With the availability of PPE, students must be aware of the importance of K3, PPE is also a means from the school to ensure that students comply with work safety procedures by using personal protective equipment (PPE). It is supported by the theory of education and motivation by (Albert Bandura, 1977) who said that the use of personal protective equipment (PPE) can be a means of education and motivation for workers about the importance of occupational safety and the importance of complying with occupational health and safety (K3) procedures. a<=0,05

Based on table 4.10, the results were obtained that the use of PPE was bad with good K3 awareness as many as 12 (49.2%). This happens because some students are indifferent to the use of personal protective equipment (PPE) and tend to not obey the rules given during the practicum. The lack of use of personal protective equipment (PPE) is an aspect of students' lack of discipline in applying it in practicum even though students are equipped with awareness of occupational safety and health.

Based on the theory, the (Noviandry, 2018) use of PPE is carried out if efforts to mitigate hazards through elimination, substitution, engineering, and administration are not optimal in controlling the hazards in the workplace. The discipline of vocational school students using PPE in practical learning is not fully in accordance with the K3 Law. In fact, this can prevent the occurrence of student work accidents where the occurrence of accidents is greatly influenced by the habits or culture of K3 application related to the knowledge and understanding, attitude and practical experience of students in the use of PPE. In addition, the work culture factor in the workplace will also affect the atmosphere of the workers in which they work. For example, vocational school graduates working in foreign companies (Multy National Corporate) will be different from the work atmosphere in national or local companies.

This is in line with the research stating that most of the respondents do not use completely only masks, gloves and hats and rubber sandals because all that exists is that, indeed at the beginning the workers work are given complete but because the workers do not wear them, then only what the workers ask for are provided. Another reason workers do not wear it is because if they wear it completely, they feel that they are not free to move and are not practical. They are also not afraid of being exposed to fireworks during grinding and the combustion process because it is based on their experience. This is a psychological factor for workers who have to wear it and this aspect must be considered so that new problems do not arise for the wearer. (D. Sari & Isharyanto, 2018)

Personal protective equipment (PPE) must be worn by every worker at work (including vocational school students) who conduct practical learning in workshops, food processing laboratories/kitchens and other practice places. PPE is an important part of the implementation of K3 in workshops, laboratories, food processing kitchens (catering), and even when workers do work in open spaces such as construction, electrical, marine, etc. Personal Protective Equipment is the lowest level risk control tool,

The relationship between information sources and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo

The results of the statistical test obtained a p value of 0.010 with a value which means that there is a significant relationship between the source of information and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo. This happens a <= 0.05

because students get information about occupational health and safety (K3) from learning activities and add sources of information from other media such as the internet or books about K3. However, there are also students who seek information through discussions with teachers and with more information that can increase students' knowledge of occupational safety and health awareness (K3). Information sources can increase students' knowledge and can take preventive measures to minimize accidents during practicum, this is an indication that the information received by students can form awareness of occupational safety and health in students so that it can be said that information sources are very related to occupational safety and health awareness in students. Supported by the theory of knowledge and attitudes by (Sutarto, 2019) which states that individual knowledge and attitudes are influenced by the information received, information sources can be a means of increasing workers' knowledge and awareness attitudes about occupational health and safety (K3).

Based on 4.11, the results were obtained that the source of information was bad with occupational safety and health awareness as many as 6 people (21.4%). This happens because some students lack

information about occupational safety and health, so that students are not exposed to occupational safety and health during practicum. The reason is that students are lazy to look for information and prefer to spend time resting and playing games with friends. Although the source of information is poor, students with good K3 awareness are caused by the supervision factor from the teacher when doing practicums.

This theory is supported by (Astari & Ardyanto, 2019) stating that the delivery of information sources through various media can be a means to increase knowledge. The addition of this media cannot be done only once but must be done regularly in order to be able to develop good K3 behavior and become a culture. An individual who is exposed to information about occupational safety and health is likely to form good behavior and behavior, making actions carefully and in a structured manner.

This research is in line with This shows that there is still a lack of K3 communication media delivered to all employees, even though K3 communication media can provide information about PPE needed by employees to form good behavior and work culture. According to Azwar (2013), electronic and print media have a great influence on the formation of a person's opinions and beliefs. The provision of information through the mass media about something is expected to provide a new cognitive foundation for the formation of attitudes. (Astari & Ardyanto, 2019)

Sources of information are media that play an important role for a person in determining attitudes and decisions to act. Increasing the interest of Women of Childbearing Age (WUS) encourages WUS itself to always try to find information in various forms. The source of information can be obtained freely from peers, books, movies, videos, and even easily open websites via the internet. Everything that is an intermediary in conveying information, information media for mass communication. Information sources can be obtained through print media (newspapers, magazines), electronic media (television, radio, internet), and through health worker activities such as training held (Notoatmodjo, 2019). Information obtained from various sources will affect a person's level of knowledge. A person gets a lot of information, so he tends to have extensive knowledge. The more people read, the better knowledge will be than just hearing or seeing.

Research Limitations

In this study, there are several limitations experienced by researchers, limitations of data analysis that only use chi squere analysis where this study only sees a relationship between the two variables, not to determine the level of strength of the relationship

Each variable is independent and time constraints which the researcher must efficiently time so as not to interfere with teaching and learning activities and rest time of the students.

CONCLUSION

Based on the results of the research on factors related to K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo, conclusions can be drawn as follows:

There is a significant relationship between K3 knowledge and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo with a p value of 0.015.

There was a significant relationship between supervision and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo with a p value of 0.007.

There was a significant relationship between the use of personal protective equipment (PPE) and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo with a p value of 0.037.

There was a significant relationship between information sources and K3 awareness in grade XII students majoring in automotive at SMK Negeri 3 Gorontalo with a p value of 0.010.

SUGGESTIONS

In order to further improve all K3 knowledge in students by improving learning media, or adding or adding references to books about K3, besides also paying attention to students' attitudes and actions during the practical learning process so that learning goals can be achieved. The school not only increases knowledge but also the application of K3 in the school environment must be implemented in learning activities during parktik. and evaluate the implementation of K3 so that it can run well

In order to always improve and implement the K3 knowledge that has been acquired, so that during the activities of the teaching and learning process in practice can run smoothly and minimize work accidents during practice.

For the next researcher, it is somewhat researched other factors that have the potential to affect K3 awareness and uses data analysis that shows more related factors

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