



UNIVERSITI
MALAYSIA
KELANTAN

**Safety and Health Awareness in the Workplace among Oil
Palm Plantation Workers**

Nurul Ain Binti Zainudin

F18B0180

**A thesis submitted in fulfilments of the requirements for the
degree of Bachelor of Applied Science (Agrotechnology) with
Honours**

Faculty of Agro Based Industry

Universiti Malaysia Kelantan

2021

DECLARATION

I hereby declare that the work embodied in this report is the result of my own research except for the excerpt as cited in the references.



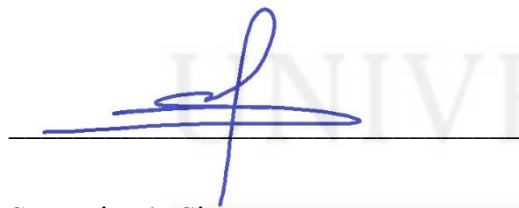
Signature

Student's Name : Nurul Ain Binti Zainudin

Matric Number : F18B0180

Date : 20 Feb 2022

Verify by :



Supervisor's Signature

Supervisor's Name : Madam Tengku Halimatun Sa'adiah Binti T Abu Bakar

Stamp : 
TENGKU HALIMATUN SA'ADIAH
BINTI T. ABU BAKAR
Lecturer
Faculty Of Agro-Based Industry
Universiti Malaysia Kelantan
Jeli Campus

Date : 20 Feb 2022

ACKNOWLEDGEMENT

Alhamdulillah, all praises to Allah for His blessings for me in completing this thesis. Firstly, I would like to express my gratitude to everyone who has supported me in completing my final year project. My acknowledgement also go to Faculty of Agro Based Industry (FIAT) for giving and organizing final year project to all year students.

I would like to express my deepest appreciation to my supervisor Madam Tengku Halimatun Sa'adiyah Binti T Abu Bakar for guiding me from the beginning until my research survey has been completed. She also gave me some lessons, motivations, inspirations and information while handling this social science research.

I would like to give a profound appreciation to my parents and family for their support and passion to me in finishing my research even though the time given to complete this project is limited. Besides that, thanks to my friend for helping me completing this survey.

Last but not least, special thanks to all people that involved in completing my thesis. Hopefully, my research can be one of the references to others and do wish luck for my future.

UNIVERSITI
MALAYSIA
KELANTAN

Safety and Health Awareness in the Workplace among Oil Palm Plantation

Workers

ABSTRACT

Nowadays, the issue of occupational safety and health is of great concern in our country. The agriculture sector shows the second higher number on the incident in the workplace after manufacturing sector. This is because employees lack awareness of safety and health in the workplace that can lead to increasing accident. Therefore, this study aims to identify the safety and health awareness in the workplace among oil palm plantation workers. The independent variables in this study will be attitudes, subjective norms, behavioural control, knowledge and practices. While the dependent variable is the safety and health awareness of workers in oil palm plantations. A quantitative research design will be used and the questionnaire will be adapted based on the Theory of Planned Behaviour (TPB) and KAP model. Simple-Random Sampling will be employed to select 180 oil palm plantation workers. SPSS version 26.0 will be used to analyse reliability tests, descriptive and correlation analysis. Based on the result, this study also explained that all the variables have high mean score. Result also show that there is significant relationship between attitudes, subjective norm, perceived behavioural control, practices and knowledge with safety and health awareness in the workplace among oil palm plantation workers. Hopefully this study will increase the awareness of workers in oil palm plantations on safety and health issues although it is difficult to apply in employment but it will help improve the quality of labour and high workers.

Keyword: safety and health, awareness, workers, oil palm plantation, Theory Planned Behaviour (TPB), Knowledge, Attitude and Practices (KAP)

UNIVERSITI
MALAYSIA
KELANTAN

Kesedaran Keselamatan dan Kesihatan di Tempat Kerja di kalangan Pekerja Ladang Kelapa Sawit

ABSTRAK

Pada masa kini, isu keselamatan dan kesihatan pekerjaan amat membimbangkan di negara kita. Sektor pertanian menunjukkan angka kedua lebih tinggi dalam insiden di tempat kerja selepas sektor pembuatan. Ini kerana pekerja kurang kesedaran tentang keselamatan dan kesihatan di tempat kerja yang boleh menyebabkan peningkatan kemalangan. Oleh itu, kajian ini bertujuan untuk mengenal pasti kesedaran keselamatan dan kesihatan di tempat kerja dalam kalangan pekerja ladang kelapa sawit. Pembolehubah bebas dalam kajian ini ialah sikap, norma subjektif, kawalan tingkah laku, pengetahuan dan amalan. Manakala pembolehubah bersandar ialah kesedaran keselamatan dan kesihatan pekerja di ladang kelapa sawit. Reka bentuk kajian kuantitatif akan digunakan dan soal selidik akan diadaptasi berdasarkan Teori Tingkah Laku Terancang (TPB) dan model KAP. Persampelan Rawak Mudah akan digunakan untuk memilih 180 pekerja ladang kelapa sawit. SPSS versi 26.0 akan digunakan untuk menganalisis ujian kebolehpercayaan, analisis deskriptif dan korelasi. Berdasarkan hasilnya, kajian ini juga menjelaskan bahawa semua pemboleh ubah mempunyai skor min tinggi. Hasil kajian juga menunjukkan bahawa terdapat hubungan yang signifikan antara sikap, norma subjektif, kawalan tingkah laku, latihan dan pengetahuan dengan kesedaran keselamatan dan kesihatan di tempat kerja dalam kalangan pekerja ladang kelapa sawit. Semoga kajian ini dapat meningkatkan kesedaran pekerja di ladang kelapa sawit terhadap isu keselamatan dan kesihatan walaupun sukar diaplikasikan dalam pekerjaan tetapi ia dapat membantu meningkatkan kualiti tenaga kerja dan pekerja yang tinggi.

Kata kunci: keselamatan dan kesihatan, kesedaran, pekerja, ladang kelapa sawit, Tingkah Laku Terancang Teori (TPB), Pengetahuan, Sikap dan Amalan (KAP)

UNIVERSITI
MALAYSIA
KELANTAN

TABLE OF CONTENT

DECLARATION	i
ACKNOWLEDGEMENT	ii
ABSTRACT.....	iii
ABSTRAK.....	iv
TABLE OF CONTENT.....	v-vii
LIST OF FIGURES	viii
LIST OF TABLES	ix
CHAPTER 1	1
INTRODUCTION	1
1.1 Oil Palm Industry	2
1.2 Occupational Safety and Health Act 1994 (OSHA)	3
1.3 Safety Performance	4
1.3.1 Safety Performance in Agriculture Sector	5-6
1.4 Problem Statement	7-8
1.5 Hypothesis of the Study	8
1.6 Research Question.....	9
1.7 Objectives.....	9
1.8 Scope of Study	10
1.9 Significance of Study	10-11
CHAPTER 2	12
LITERATURE REVIEW	12
2.0 Concept of Awareness Safety and Health in Workplace	12-13
2.1 Theoretical Framework	14
2.1.1 Theory of Planned Behavior (TPB)	14-16
2.1.2 KAP Model	17-18
2.2 Factor explaining Safety and Health Awareness in Workplace	19
2.2.1 Attitude	19-20
2.2.2 Subjective Norm	20
2.2.3 Perceived Behaviour	21
2.2.4 Practice.....	22
2.2.5 Knowledge	23

2.3 The Effect of Attitude, Subjective Norm, Perceived Behaviour, Practice and Knowledge	24
2.3.1 The Effect of Attitude on Safety and Health Awareness among Oil Palm Plantation Workers in the Workplace	24-25
2.3.2 The Effect of Subjective Norm on Safety and Health Awareness among Oil Palm Plantation Workers in the Workplace.....	25-26
2.3.3 The Effect of Perceived Behavioral Control on Safety and Health Awareness among Oil Palm Plantation Workers in the Workplace.....	26-27
2.3.4 The Effect of Practices on Safety and Health Awareness among Oil Palm Plantation Workers in the Workplace	27
2.3.5 The Effect of Knowledge on Safety and Health Awareness among Oil Palm Plantation Workers in the Workplace	28
2.4 Summary	29
CHAPTER 3	30
METHODOLOGY	30
3.0 Introduction	30
3.1 Research Design.....	30
3.2 Research Framework.....	31
3.3 Instrumentation.....	32-33
3.4 Population and Sample.....	33
3.5 Sample Size	33-34
3.6 Data Preparation	34
3.6.1 Pilot Study.....	34
3.6.2 Reliability Test.....	35-36
3.6.3 Data Analysis	36
3.7 Summary	37
CHAPTER 4	38
RESULT AND DISCUSSION	38
4.0 Introduction	38
4.1 Descriptive Analysis	39
4.1.1 Demographic Profile.....	40-43
4.1.2 Level of Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers	44-48
4.1.3 Level of Attitude on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers	49-53
4.1.4 Level of Subjective Norm on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers	54-58

4.1.5 Level of Perceived Behavioral Control on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers 59-63

4.1.6 Level of Practices on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers 64-68

4.1.7 Level of Knowledge on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers 69-73

4.2 Normality Test 74

4.3 Correlation Analysis 74

 4.3.1 Spearman Correlation 75-76

 4.3.1.1 The Relationship between Attitude with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers 77

 4.3.1.2 The Relationship between Subjective Norm with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers 78

 4.3.1.3 The Relationship between Perceived Behavioral Control with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers 79

 4.3.1.4 The Relationship between Practices with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers 80

 4.3.1.5 The Relationship between Knowledge with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers 81-82

4.4 Summary 83

CHAPTER 5 84-85

CONCLUSION AND RECOMMENDATION 84-85

 5.0 Conclusion 84-85

 5.1 Recommendation 86

REFERENCES 87-92

QUESTIONNAIRE/SOALAN KAJI SELIDIK 93-106

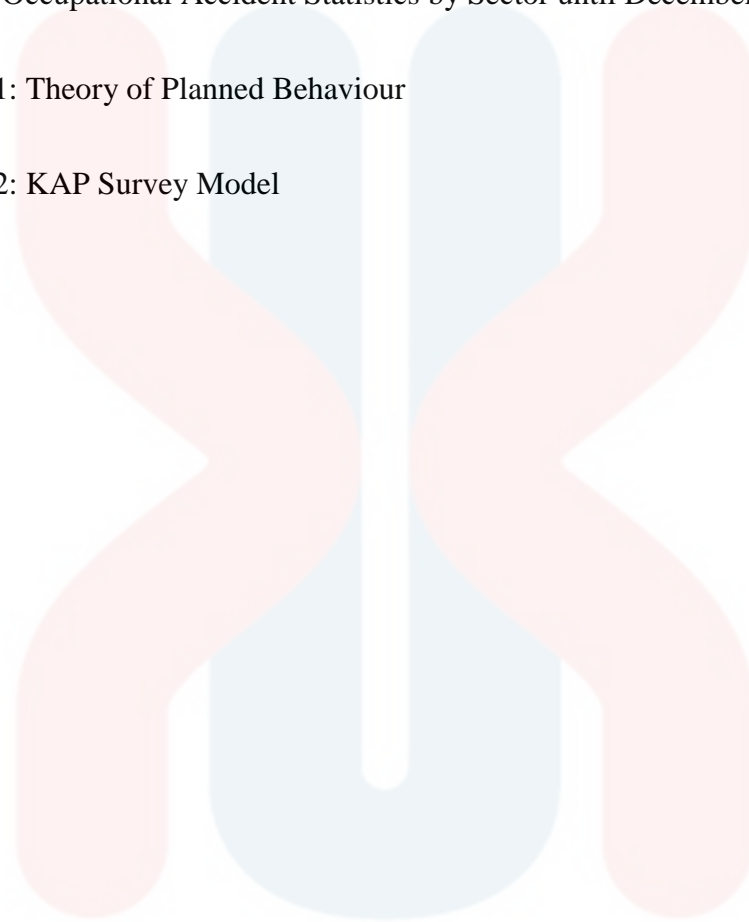


LIST OF FIGURES

Figure 1.1: Occupational Accident Statistics by Sector until December 2020

Figure 2.1.1: Theory of Planned Behaviour

Figure 2.1.2: KAP Survey Model



UNIVERSITI
MALAYSIA
KELANTAN

LIST OF TABLES

Table 3.2: Reliability test

Table 4.1: Demographic profile of the workers in oil palm plantation

Table 4.2: Descriptive analysis for Safety and Health Awareness

Table 4.3: Mean score of Safety and Health Awareness

Table 4.4: Descriptive analysis for Attitude

Table 4.5: Mean score of Attitude

Table 4.6: Descriptive analysis for Subjective Norm

Table 4.7: Mean score of Subjective Norm

Table 4.8: Descriptive analysis for Perceived Behavioural Control

Table 4.9: Mean score of Perceived Behavioural Control

Table 4.10: Descriptive analysis for Practice

Table 4.11: Mean score of Practice

Table 4.12: Descriptive analysis for Knowledge

Table 4.13: Mean score of Knowledge

Table 4.14: Normality test

Table 4.15: Rule of Thumb for Interpreting the Size of a Correlation Coefficient

Table 4.16: The Spearman's Correlation Analysis

CHAPTER 1

INTRODUCTION

1.0 Introduction

The sections that consists of this chapter are the background of the study, which explains the safety performance in Malaysia, followed by their importance and role. This chapter also stated about problem statement, hypothesis, research question, objectives, scope of study and significance of study.

UNIVERSITI
MALAYSIA
KELANTAN

1.1 Oil Palm Industry

Malaysia's agriculture sector is the third most important industry in the country's economy. The oil palm plantation field is the biggest and most significant contributor to GDP in the agricultural industry (GDP). Malaysia is widely recognized as the world's second-largest producer and exporter of palm oil, after Indonesia (Suhaimi, 2019). Oil palm plantations are important because they are at the beginning of the value chain and provide palm oil mills with raw materials required by the oil palm industry and other sectors (Luqman, 2021)

The expansion of the global food market has increased the global demand for palm oil. As different innovations are used to improve the added value and performance that can be achieved, the sector continues to evolve in line with technical advances. According to the Malaysia Palm Oil Board (MPOB) report, the area of oil palm plantations in 2019, is 5.90 million hectares, an increase of 0.9% compared to 5.85 million hectares in the previous year (Johan, 2019). Peninsular Malaysia has the most oil palm plantations in Malaysia, with 1.59 million hectares (26.9%), followed by Sabah, which has 1.54 million hectares (26.2%). According to new research (MPOC, 2020) in 2018 the oil palm plantation industry contributed 37.7% of GDP and RM64.84 billion to Malaysia's overall exports in 2019 (Mahadin, 2021).

1.2 Occupational Safety and Health Act 1994 (OSHA)

OSHA is a comprehensive piece of legislation covering almost all workplaces in Malaysia. The Act is also known as Act 514 which has been in force since April 1994. OSHA's philosophy is that the responsibility for safety and health in the workplace rests with employers and employees (Wahab, 2021). The approach in this act has long been implemented by developed countries and Malaysia is the first country in Asia to do so. OSHA will be updated from time to time through the establishment of specific regulations that clarify the requirements of the act and ensure that the risks inherent in various types of workplaces can be properly identified and controlled. Since OSHA was launched in 1994, it has been found that many organizations have complied with it. Among the evidence is that there are organizations that have complied with the main requirements of the act such as establishing safety and health policy, forming a safety and health committee that serves as the main reporter of occupational safety and health programs in the organization and form the position of safety and health officers in their organizational structure.

1.3 Safety Performance

Occupational safety and health policies and procedures play an important role in the prevention of occupational injuries and diseases (Ishwarya and Rajkumar, 2020). In several working environment, workers are exposed to on site hazards which can result in fatalities and serious injuries. Despite improvements in working conditions, the high number of unintentional injuries reported in different industrial and productive working sectors continues to represent a relevant issues. Thus, the promotion of safety behaviours and the need to increase the employees' risk perception in the workplace has become one of the primary focuses.

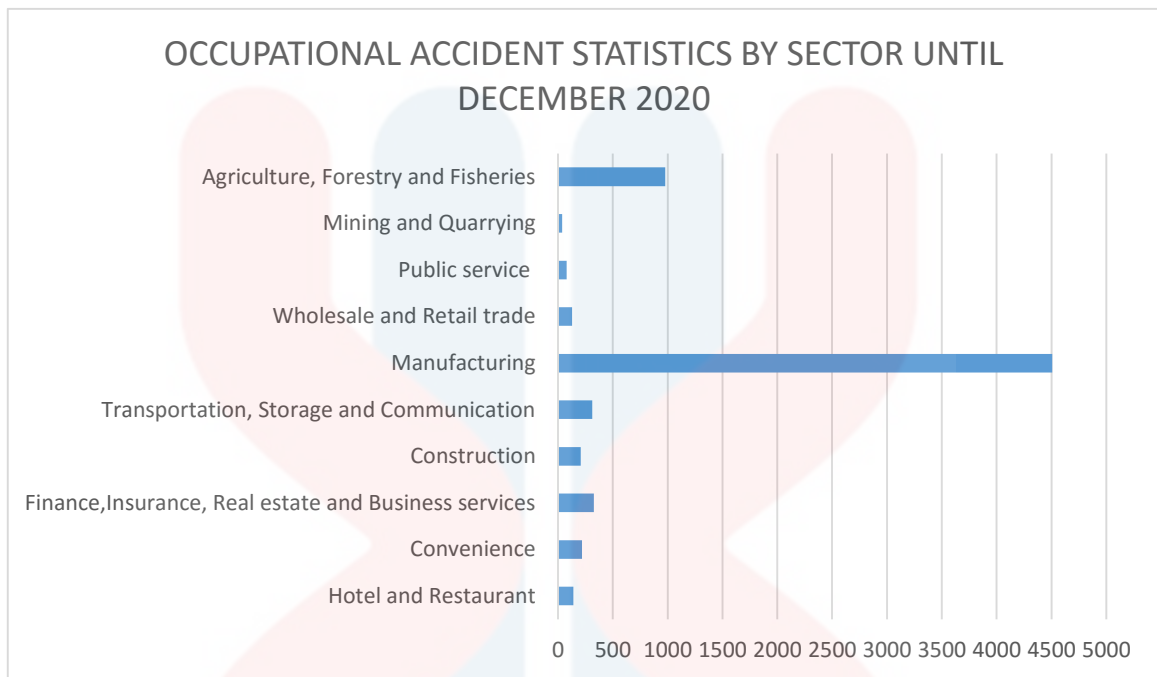
Safety enforcement is characterized as occupational conduct that focuses on meeting minimum safety requirements, such as following safety protocols and wearing personal protective equipment (PPE). While safety participation is a necessary behaviour or concern for safety in the workplace such as safety concerns, voluntary employee initiatives to participate in safety activities and programs, promoting safety programs and policies, attending safety meetings or helping colleagues solve related problems with job security (Wahab, 2021)

1.3.1 Safety Performance in the Agriculture Sector

The agriculture sector in Malaysia can be categorised into food subsector (e.g. crop, livestock and fisheries) and industrial commodities (e.g. oil palm, rubber, cocoa, wood and timber, and pepper). The two pillars of industrial commodities, oil palm and rubber continued to benefit from export demand which added to higher export incomes. The hazardous working conditions in agriculture can increase the risk of occupational accidents, including open work, seasonal work, a variety of task, variation in working postures, contact with the animals and plants, contact with chemicals, utilisation of machines, isolated work and more (Vigoroso, Caffaro, Micheletti Cremasco & Cavallo, 2021). Machineries used in agriculture, such as tractors and harvesters have the highest frequency and fatality rates of injury (Vigoroso et al., 2021).

On the other hand, exposure to pesticides and other agrochemicals can cause poisoning and in certain cases, lead to work-related cancer and death. Besides, there are also other hazards caused by multiple contacts with poisonous and wild animals, plants and biological agents which may give raise to allergies, respiratory disorders stress and psychological disorders. Figure 1.1 shows the Occupational Accident Statistics by Sector until December 2020 and unfortunately, the agriculture sector was recorded as the second highest number of accident (979) behind manufacturing sector (4506).

Figure 1.1: Occupational Accident Statistics by Sector until December 2020



(Source: Department of Safety and Health (DOSH), 2020)

1.4 Problem Statement

Agriculture ranks among the most hazardous jobs. Farmers are at risk for fatal and nonfatal injuries, work-related lung disease, noise-induced hearing loss, skin diseases and certain cancers associated with chemical use and prolonged sun exposure (Geleta, Alemayehu, Asrade, & Mekonnen, 2021). Farming is one of the few work in which the families who often share the work and live on the premises are also at risk for injuries, illness and death. Based on statistics, the total of occupational accident in the agriculture sector is 979 which are the second highest behind the manufacturing sector (Wahab, 2021). Even though the manufacturing sector is the highest but safety issues in the workplace need to be emphasized.

According to Moradhaseli, Mirakzadeh, Rostami, & Ataei, (2018) awareness of safety and health in the agriculture sector are moderate level. This issues occurs due to workers lack of safety knowledge and unavailability of proper safety training are the reminder that the accidents rates among them will increase. Even though it in moderate, but safety and health issue in the workplace need to emphasize and the employment sector plays a very important role in the development and progress of the country. While to retain this issue from rising, we need to produce a professional and skilled workforce to ensure that the industry continues to develop and grow rapidly.

Hence, this study aims investigate the safety and health awareness in the workplace among oil palm plantation workers based on the Theory of Planned Behaviour (TPB) and Knowledge, Attitude and Practice (KAP) model. In the future, this study hopefully can help workers to increase their awareness of safety and health and gain more

knowledge and practices about safety and health, and be able to get the opportunity to expose to occupational safety and health program.

1.5 Hypothesis of the Study

H1: There is a significant relationship between attitude with safety and health awareness in the workplace among oil palm plantation workers.

H2: There is a significant relationship between subjective norm with safety and health awareness in the workplace among oil palm plantation workers.

H3: There is a significant relationship between perceived behaviour with safety and health awareness in the workplace among oil palm plantation workers.

H4: There is a significant relationship between practice with safety and health awareness in the workplace among oil palm plantation workers.

H5: There is a significant relationship between knowledge with safety and health awareness in the workplace among oil palm plantation workers.

1.6 Research Questions

1. What is the level of safety and health awareness in the workplace among oil palm plantation workers?
2. What is the level of attitudes, subjective norm, perceived behaviour, knowledge and practice in the workplace among oil palm plantation workers?
3. There is any relationship between attitudes, subjective norm, perceived behaviour, practice and knowledge with safety and health awareness in the workplace among oil palm plantation workers

1.7 Objectives

This study was conducted to:

1. Identify the level of safety and health awareness in the workplace among oil palm plantation workers.
2. Determine the level of attitude, subjective norm, perceived behaviour, practice and knowledge on safety and health awareness in the workplace among oil palm plantation workers.
3. Analyse the relationship between attitude, subjective norm, perceived behaviour, practice and knowledge on safety and health awareness in workplace among oil palm plantation workers

1.8 Scope of the Study

In this study, the safety and health awareness in the workplace among oil palm plantation workers is the focus of this study. While the independent variables are attitudes, subjective norm, perceived behaviour, practice and knowledge. In order to this several factor that influence workers in the oil palm plantation in Peninsular Malaysia will be chosen as targeted respondents and population. The total target respondents are 150 workers in the oil palm plantation sector.

1.9 Significance of the Study

This research was conducted to study the safety and health awareness in the workplace among oil palm plantation workers. Important for this study to know the level of awareness of workers in oil palm plantation about safety and health that can increase the knowledge about the safety and health in the workplace.

Based on DOSH policy, workplace safety challenges must be addressed in order to reduce the risk of accident and death. DOSH also works to increase the quality of its goods and facilities, as well as the safety and health performance of its employees. Management, employers, and staff must all cooperate together to avoid duty non-compliance and workplace accidents. Meanwhile, it also ensures that all employers and workers receive intelligence, advice, preparation, and supervision in order to carry out delegated duties correctly and in a quality manner, thus reducing all risks to safety and health (Wahab, 2021).

This study can help employees make easier steps to raise awareness among employees about this policy that has been mentioned by the government. In this study will also improve their knowledge and practice to prevent the occurrence of non-compliance and accidents in the workplace. The government also called for involvement in programs and talks related to occupational safety and health to reduce risks and improve the quality of employment of workers. Besides that, when they raise awareness on occupational safety and health, Malaysia will produce a skilled and professional workforce in various fields and reduce the risk of injuries and deaths in the workplace

CHAPTER 2

LITERATURE REVIEW

2.0 Concept of Awareness Safety and Health in the Workplace

The state or ability to perceive, feel, or be conscious of events, objects, or sensory patterns is referred to the concept of awareness. Gafoor (2012), stated that awareness can also be defined as knowing, realizing, or being interested in learning about something, or knowing that something is important. The states of awareness are linked to the states of experience, so the structure represented in awareness is mirrored in the structure of experience.

According to a previous study by Erbay, & Canim (2018), there are several definitions of the concept of awareness from their research, such that awareness is the direction of attention to the immediate flow of experience voluntarily and without judging, another definition of awareness is the distinction of subjective experiences and the determination of their confessions. Furthermore, Erbay & Canim (2018), stated that the concept of awareness is a process where the internal and external flow of stimuli is observed without consideration. As noted, the concept of consciousness has many definitions of various types.

The term "awareness" means "recognition" or "being aware." It is also important to be able to see in addition to seeing. You are aware of something if you can see instead of seeing. Consciousness differs from person to person. Mentioning to Sivabalan, Ibrahim, Mohamad, & Zakaria, (2018) the concept of awareness is related to a person's level of knowledge of a thing. For example, the things that person x recognizes when he sees a drawing and the things that person y recognizes when he sees the same drawing may be very different. This condition also reveals details about the human brain's lifestyle and structure.

Thus, the concept of awareness among workers is important because there is a high possibility of workers to aware of safety and health in the workplace (Shawal, Guan, Mohd Suadi Nata, How, & Tamrin, 2018). According to Moradhaseli et al., (2018), not only workers but the employer also need aware of the issues related to safety and health and fully aware of their effect on these issues. It is important to establish safety and health because it highlights possible dangers and threats posed by employees in an occupation, thus providing workers with health precautions and safety protocols for their welfare.

According to Moradhaseli et al., (2018), he concludes that the most crucial step in safety and health is to have a high-level concept of awareness. The issues from safety and health is critical issue for global public issues because these issues can lead to increasing occupational disease and injuries affect worldwide (Lucchini & London, 2014). A study concluded that workers' awareness of safety and health is moderate due to lack of knowledge, and they are not aware of safety and health issues in the workplace.

2.1 Theoretical Framework

Theory Planned Behaviour (TPB) is used to forecast a person's aim of taking part in a specific behaviour at a given time and location. The hypothesis was intended to describe all behaviours that people would attempt to manipulate. TPB is a common tool for predicting and describing a variety of domains (Miller, 2011). Knowledge, Attitude and Practice (KAP) model is a quantitative method of predetermined questions formulated in standard questionnaires which provide access to quantitative and qualitative information. The KAP study can measure the extent of the known situation by verifying or denying the hypothesis that is giving a new target to the reality of the situation.

2.1.1 Theory of Planned Behaviour (TPB)

Organizations have human and other tangible resources that encourage safe behavior and use these resources to ensure a safe working environment. To some extent, human behavior in the application of organizational resources determines the level of workplace safety. Ajzen's Theory of Planned Behavior (TPB) is one of the most widely used psychological theories in understanding human behavioral changes across disciplines.

TPB, according to Ajzen (1991), provides a framework for investigating the relationship between beliefs and behavior. The model explains how individual factors influence someone's decision to engage in a particular behaviour. The latter contends that

three components of TPB, namely attitude toward behavior, subjective norms, and perceived behavioral control, all influence behavior. As a result, attitude toward behaviour (ATB, i.e. behavioral beliefs), subjective norms (SN, i.e. normative beliefs or social influences), and perceived behavioral control (PBC, i.e. ease/difficulty of engaging in an action) all influence one's intention to exhibit an action (Ajzen, 1991). A combination of these factors results in the power of an individual's intention in a behavior.

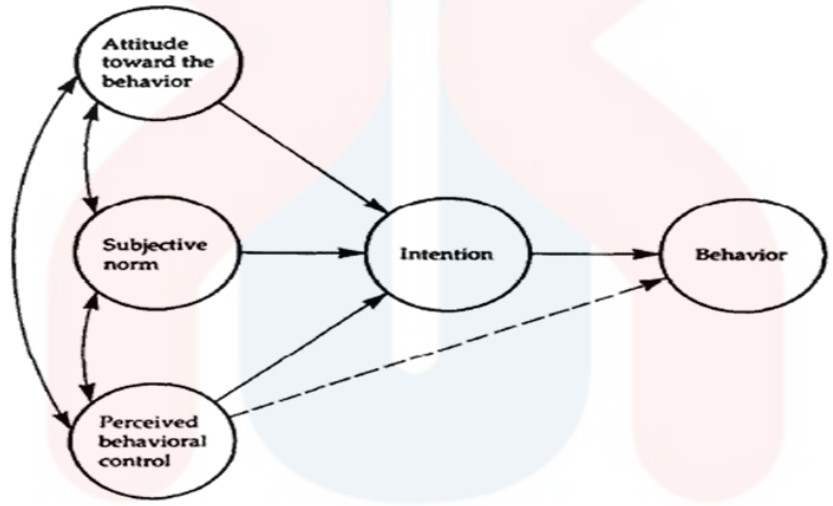
The attitude is referring to the favorable or unfavorable of the person to evaluate their performance. Attitude is defined as how a person view and evaluates something or someone, a predisposition or a tendency to respond positively or negatively to a specific idea, object, person, or situation, and it can influence other people. It shows someone sensitive to something and can help to predict and understand environmental and individual factors affecting behaviour (Tusyanah, Fadlilah, Rahmawati, & Susilowati, 2020)

Subjective norms are the prediction of the social factors to comply with the performance of the behavior. It means that society is a huge influencer that influences the person either to perform or not the behaviour (Tusyanah et al., 2020). Perceived behavior control has affected by attitude and subjective norms. It more likely where the person is under control to carry out the behavior based on the relation between attitude and subjective norms.

So, using this TPB as a principle to be implemented in this analysis of awareness towards workers in the oil palm plantation in safety and health that were conducted in Selangor is fitting necessary was commonly used to overcome safety issues. Malaysia is known for the effort on becoming developed country that produce a skilled and professional workforce and TPB has been employed in one of the studies on distributor perspective (Koo, Nurulazam, Rohaida, Teo, & Salleh, 2014). In this study, this theory is

applied as a basis to support the relationship between the awareness of workers towards their safety and health in oil palm plantations. Figure 2.1 shows the TPB from Ajzen (1991) with attitude, subjective norms, perceived behavior control influences the intention and behavior.

Figure 2.1.1: Theory of Planned Behaviour



(Source: Ajzen,1991)

2.1.2 KAP Model

A KAP model usually is conducted to collect information on the knowledge, attitudes, and practices. Knowledge, Attitudes, and Practices (KAP) methods are the quantitative method of predetermined questions formulated in standard questionnaires which provides access to quantitative and qualitative information. The KAP survey reveals misunderstandings that may represent barriers to the activities to be implemented and potential barriers to behavior change.

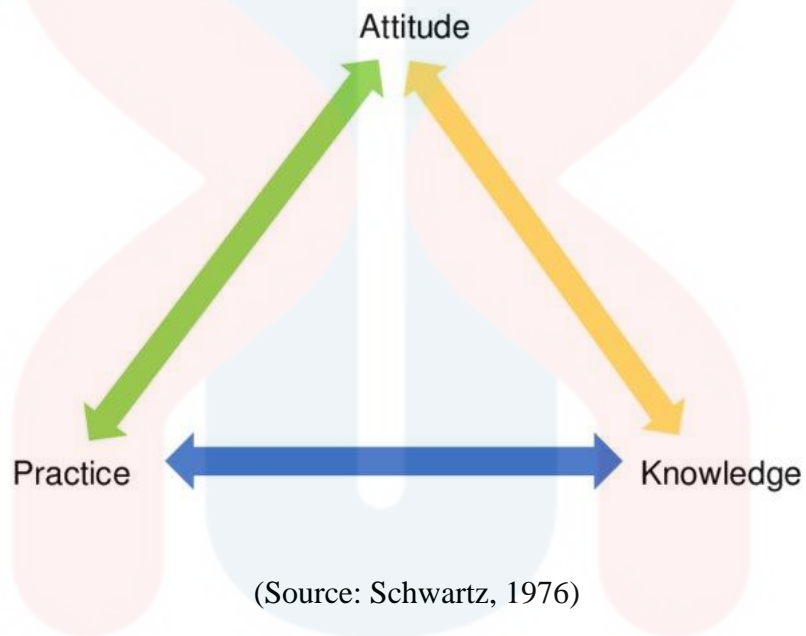
The theoretical basis for the development of hypothesis relationships is the knowledge, attitude, and practice (KAP) model. According to the KAP model, knowledge positively influences an individual's attitudes, which in turn influences practices or behaviors. Essentially, oil palm plantation workers' safety knowledge is important in determining their attitudes and, ultimately, practices regarding personal protective equipment (PPE), occupational hazards and safety, safety rules, and proper procedures for plantation work.

Several studies have attempted to use such models over the years to investigate attitudes and practices of awareness and health in the workplace in a variety of contexts. For example, Kwol, Eluwole, Avci, & Lasisi, (2020) while investigating oil palm plantation workers in Peninsular Malaysia concluded that poor knowledge of safety and health awareness negatively impacts their behavior, but also suggested that practices and experiences may buffer the negative impact of knowledge poor security.

In the previous study, Andrade, Menon, Ameen, & Kumar Praharaj, (2020) used Knowledge, Attitudes, and Practice (KAP) Surveys in Psychiatry to identify levels of

awareness about mental health and mental-healthcare-seeking practices before designing and implementing educational or interventional programs in the population.

Figure 2.1.2: KAP Survey Model



2.2 Factor Explaining Safety and Health Awareness in Workplace among Oil Palm Plantation Workers

This section explained attitude, subjective norm, perceived behavioural control as the factors that can influence the safety and health awareness in the workplace among oil palm plantation workers.

2.2.1 Attitude

Attitude can be defined as how a person views and evaluates something or someone, a predisposition, or a tendency to respond positively or negatively toward a certain idea, object, person, or situation and it can influence other people (Almutairi, Tamrin, Guan, & How, 2020). From the previous study was found that almost 85% to 98% of accidents that occur in the workplace from the unsafe behaviour of some individuals who are not sensitive to the risk of injury (Shawal et al., 2017)

Surveys such as that conducted by Dahalan, D'Silva, Zaremohzzabieh, Krauss, Arif, & Ismail, (2020) the respondents' attitude toward the agricultural sector is positive, with a mean score of positive attitude. It can say that this is a positive sign that agriculture student should take note of. Assert that a positive attitude among highly educated youth in the agricultural sector is a good predictor of the country's future.

Supported by Baksh, Ganpat, & Narine, (2015) stated that farmers in Trinidad have a moderate attitude toward occupational health and safety hazards. Farmers also

believe that providing them with more up-to-date information and advice on-farm health and safety will not only make their jobs less dangerous but will also positively change their attitudes toward safety.

Different from Moradhaseli et al., (2018) in her previous study in Pakistan showed that the level of attitude about safety and health among the farmers is low. It shows that their safety performance was poor including in the use of protective equipment during applying pesticides. The level of attitude with safety and health awareness in the workplace is low and from the previous study had stated that attitude is the most influential factor because they believe that attitude someone can be a factor of an unsafe condition in these accidents (Shawal et al., 2017). Many past researchers have found that a poor safety culture is also a cause of accidents in the workplace (Lin, Mufidah, & Persada, 2017).

2.2.2 Subjective Norm

Subjective norm is also independent variables that influence the safety and health awareness in the workplace among oil palm plantation workers in Peninsular Malaysia. It is governed by normative beliefs, and a positive or negative acceptance of the behaviour can be viewed as a social pressure to a person (Ham, Jeger, & Frajman Ivković, 2015).

AuYong, Zailani, & Surlenty, (2017) found in their study that the level of the subjective norm with safety and health awareness in the workplace is moderate. It shows that our friends, family, government, social media, and society can be the normative

beliefs. The subjective norm of oil palm plantation workers will determine whether it is also one of the factors that influence safety and health awareness in the workplace

2.2.3 Perceived Behavioural Control

Perceived behaviour control plays a significant part in the theory of planned behaviour. According to Ajzen (1991) perceived behavioural control reflects a person's actions in his or her ability to form behavioural intention. Importantly, perceived behaviour control can be the main factor in work accidents. Attitude are influenced the behaviour, unsafe behaviour will affect the safety in the workplace.

According to Fogarty & Shaw (2017), safety and health are an influence on the physical work environment and work procedures of employees to prevent errors and accident in the workplace. Examples of these external influences include lack of equipment, lack of personnel, lack of time, and production pressures. Based on the previous study, these factors are often combined under the construct of workplace pressures, elements of work that are beyond the control of individual workers, yet likely to impact their perceived ability to complete tasks in accordance with procedures (Fogarty & Shaw, 2017).

Many historians have argued that the availability of adequate resources and the ability to control behavioural barriers have an impact on behaviour performance. As stated by Dahalan, et al. (2020) was discovered that the mean score of perceived behavioural control in the agriculture sector was moderate. It shows that, despite respondents' positive attitudes toward agriculture, they lack the confidence to do what they should when involved in agriculture. It is possible that Malaysian youths' lack of

confidence in the agricultural sector is due to a moderate score on the behavioural control factor. This is due to the belief that attitudes and behavioural control have a strong influence on an individual's intention to enter the agricultural sector.

2.2.4 Practice

Practice refers to the ways in which they demonstrate their knowledge and attitude through their actions. According to Osman, Awang, Hassan, & Yusof (2015) said that practices at the works of a company will ensure the awareness of the workers and can build the workers in stability condition. On the other hand, it also will give a high of support to the performance at the workplace without any injuries or hurt.

Tagurum et al. (2021), research found that workers understand good practises for workplace safety and health awareness. It demonstrates that oil palm plantation workers' workplace practices produce relatively good results, where they are also aware of safety and health practices to reduce and prevent accidents.

Contrast with Shawal et al., (2017), on her previous study were mentioned that any practice that include bad workmanship or deterioration from used or mismanagement can affect their safety and health among workers. It shows the level of practice in safety and health awareness is low and some of the workers are not very serious about any risks that may arise due to deficiencies of practices on safety and health in the workplace.

2.2.5 Knowledge

Knowledge can be defined as an individual's understanding of information about a subject gained through experience or study. This definition is supported by Almutairi et al., (2020) which in his previous study defines knowledge as a values, contextual information, expert insight and incorporating new experiences and information.

A study from Moradhaseli et al., (2018) stated that the level of knowledge among workers towards safety and health is low due to lack of knowledge and awareness that caused injuries and disease among them. It also shows that workers knowledge about safety and health was not sufficient and were related to the effect of workers on the occurrence of any injuries or accident.

Supported by Lunner-Kolstrup and Ssali (2016) discovered that this study indicate that the farmers interviewed have low knowledge of risk factors and agricultural health and safety issues. According to the findings, farmers did not think these injuries were worth noting, reporting, or seeking medical attention for. Because of facilities, remote rural areas, a lack of financial resources, and a lack of trust in medical services, medical clinics are rarely visited. They are clearly uninformed about safety and health.

2.3 The Effect of Attitude, Subjective Norm, Perceived Behaviour, Knowledge and Practice on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

This section explained the effect of attitude, subjective norm, perceived behaviour, knowledge and practice on safety and health awareness in the workplace among oil palm plantation workers.

2.3.1 The Effect of Attitude on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Attitude is an evaluation of a specific behaviour involving the object of attitude (Almutairi et al., 2020). A review of the literature conducted showed that the unsafe attitudes shown by individuals and the weak emphasis on safety culture by organizations were the reasons why accidents in the agriculture sector continue to occur. This assumption was made after studies conducted showed that the main cause of accidents at work is due to the insecure attitude of an individual (Avakh, Nourian, Afshari, & Afshari, 2017).

According to Mukhtar, Yusof, & Isa, (2020), there is a significant relationship between attitude toward safety and health awareness. The majority of workers had a positive attitude when they had a high level of knowledge about occupational safety and health. Safety performance which is the end result is heavily influenced by a safety culture

and safety attitudes. Based on the explanation given, it is appropriate that a detailed conceptual review be conducted that focuses on the relationship between safety and health awareness in the workplace among workers in the agricultural sector. A review of the literature also suggests that safety attitudes can be placed as a mediating variable. A high organizational safety culture coupled with a good individual safety attitude will improve the safety performance of the individual and the organization as a whole.

2.3.2 The Effect of Subjective Norms on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Subjective norms are an individual's perception of the social pressure to perform or not to perform the target behaviour. It can also be defined as the individual's perception of other people's view and thoughts on the suggested behaviour (Ham, Jeger, & Frajman Ivković, 2015). These perception can play an influential role and put pressure on an individual to perform a particular behaviour. In Malaysia, subjective norms play an important role where family member, friends and colleagues are individually strong points of reference (Yean, Johari, & Sukery, 2015).

Empirical studies have shown that subjective norm have a positive relationship with safety and health awareness in workplace among oil palm plantation workers (Avci, & Yayli, 2014). Workers are sometimes exposed to hazardous chemical used in their job. Not many workers are exposed and have the right perception of chemical risks and it will effects of the individual and organizational of safety and health injury.

As the author, Au Yong et al. (2017), the safety and health awareness in the workplace among oil palm plantation workers is significantly and positively affected by subjective norms. Supported by Tualeka and Widajati (2018), the correlation coefficient between subjective norm and safety and health awareness among oil palm plantation workers is a significant and positive correlation.

2.3.3 The Effect of Perceived Behaviour on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

The perceived behavioural control of the focal person in a decision-making-situation may influence his or her behavioural intentions (Ajzen, 1991). Attitude can have an impact on perceived behavioural control. Perceived behavioural control and subjective norms is influencing factor for workers in safety and health (Suhaila Abdul Kadir, 2017).

A study from Vinodkumar & Bhasi (2010), stated that there is a positively influence the attitude and behaviour with regard to safety, thereby reducing accidents in the workplace. The result from their study shows that there is a positive relationship between perceived behaviour controls with a level of awareness.

The relationship between perceived behavioural control with safety and health awareness in the workplace among oil palm plantation workers show a significant result. As per author, Dahalan et al. (2020), perceived behavioural control has a significant and positive effect on workplace safety and health awareness among oil palm plantation workers. According to Berni, Menouni, El, Duca, Kestemont, Godderis, & El, (2021), the

analysis discovered a significant difference in the respondents' perceived behaviour control towards the agricultural sector.

2.3.4 The Effect of Practice on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Agriculture is one of the earliest professions practices and involves a unique system of works. The (KAP) of agriculture workers can have a negative impact on their wellbeing. Based on a previous study Mazlan & How (2017) stated that the level of awareness on practices is low due to the lack of practices on handling pesticides and educational background and will increase the potential health risks to pesticides handlers.

According to Mazlan and How (2017), level of awareness on practices is low when workers did not do a proper practice or do not wear a full PPE in handling chemical hazards. For example, all pesticide handlers are at risk of developing adverse health effects from prolonged exposure to the dangerous pesticide mixture during pesticide application because they exposure to hazards that will affect their safety and health.

From a previous study by Khairuddin and Rosleea (2019), who stated that workplace safety and health awareness among oil palm plantation workers was significantly and positively correlated with practises level. Supported by Taufek, Zulkifle, & Kadir, (2016) the correlation coefficient between practises with safety and health awareness in the workplace among oil palm plantation workers is significant and positive.

2.3.5 The Effect of Knowledge on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Knowledge is awareness, understanding or information on subjects acquired through experience or research, whether known to one person or a general person. Lack of knowledge, negative attitude, and unsafe behaviour are one of the factor that effect safety and health (Moradhaseli et al., 2018). The level of education and understanding of safety and health in the workplace is less emphasized and it causes employees to lack understanding of the risk of hazards for all the jobs they do (Nasab, Ghofranipour, Kazemnejad, Khavanin, & Tavakoli, 2009). If safety knowledge is emphasized, the risk of accidents in the workplace can be reduced.

The correlation coefficient between knowledge with safety and health awareness in the workplace among oil palm plantation workers is significant at 0.616 level. Similarly, Al-Hanawi, Angawi, Qattan, & Alsharqi, (2020) found a significant relationship between knowledge of safety and health awareness in the workplace among oil palm plantation workers in previous studies. According to Baksh et al. (2015), the correlation value between knowledge and safety and health is 0.824. This value indicates a strong link between knowledge and safety and health awareness among oil palm plantation workers.

2.4 Summary

This chapter describe the awareness towards workers in oil palm plantation on safety and health and the theory used in this study has been explained. In this chapter also briefly explain awareness towards workers in oil palm plantation on safety and health based on independent variables such as attitude, subjective norms, perceived behaviour control, knowledge, and practices use the Theory of Planned Behaviour (TPB) and KAP model



CHAPTER 3

METHODOLOGY

3.0 Introduction

To achieve the purpose of this study, this chapter was describe the methodology used. This chapter consists of four sections which the first section was describe the research design, conceptual framework and the model used. Then the second and third section explains the types of data and the design of the questionnaire respectively. The final section, covers the methods of analysis used in this study.

3.1 Research Design

To get information from the respondents based on this research, the quantitative research design was used. Independent variable was safety and health awareness in the workplace among oil palm plantation workers. Data analyzed by using SPSS to enter data and analysis about the demographic profile, independent and dependent variables

3.2 Research Framework

Research framework prepared to determine the level of awareness of workers in oil palm plantations towards their safety and health. The dependent variable was safety and health awareness in the workplace among oil palm plantation workers, while independent variables are attitude, subjective norm, perceived behavior, knowledge, and practice that has been adapted from Theory of Planned Behaviour (TPB).

Independent Variables

Dependent Variables

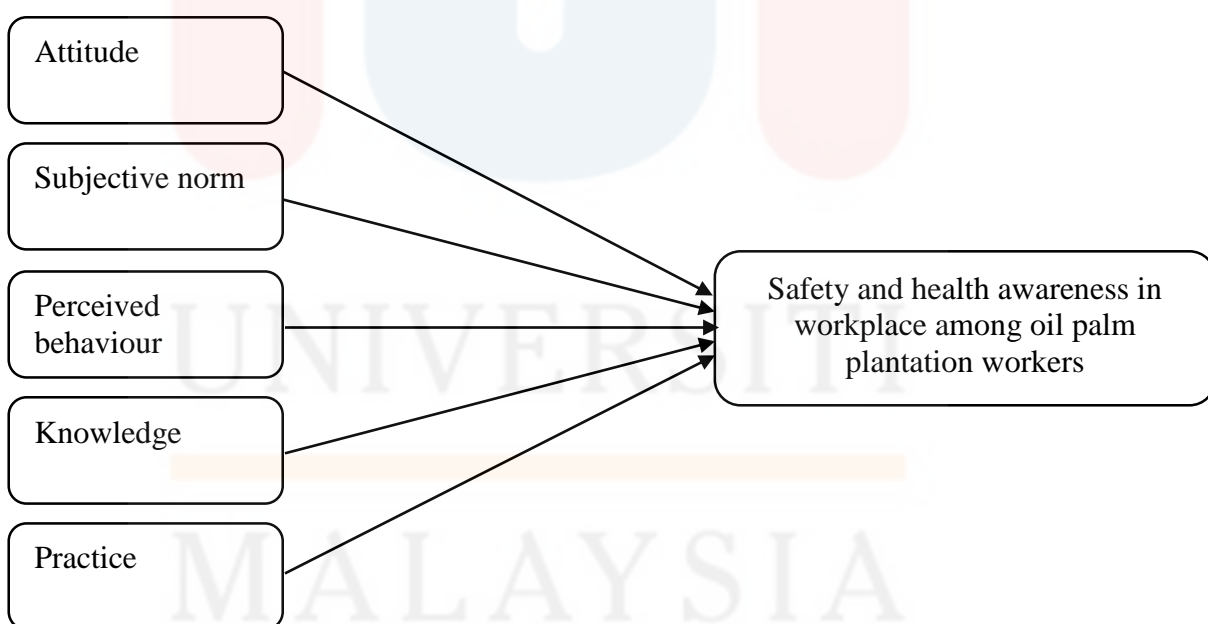


Figure 3.1: The conceptual framework

(Source: Adapted TPB model from Ajzen (1991) and KAP model from Schwartz (1976))

3.3 Instrumentation

The questionnaire has been distributed to respondents among workers in oil palm plantations and complete questionnaires were taken into analysis. This study what influenced safety and health awareness in the workplace among oil palm plantation workers are attitudes, subjective norm, perceived behavior, practice, and knowledge. The questionnaires involved 7 sections which are A, B, C, D, E, F, and G. Section A is the demographic profile include such gender, age, educational while section B is safety and health awareness (dependent variable) and section C, D, E, F, and G are the independent variables that include attitude, subjective norm, and perceived behavior control, practice and knowledge. The response on the questionnaire was recorded using the 5-point scale for awareness, attitude, subjective norm, perceived behavioral control, and practices which present strongly disagree, disagree, neither agree nor not, agree and strongly agree for scale 1 to 5 respectively, while for knowledge was recorded using the 3-point scale which presently don't know, not sure and know for scale 1 to 3 respectively:

1. Section A: Contain questions regarding the demographic profile.
2. Section B: Contain questions regarding safety and health awareness.
3. Section C: Contain questions regarding the attitude with safety and health awareness in the workplace among oil palm plantation workers.
4. Section D: Contain questions regarding the subjective norm with safety and health awareness in the workplace among oil palm plantation workers.
5. Section E: Contain questions regarding the perceived behavior with safety and health awareness in the workplace among oil palm plantation workers.

6. Section F: Contain questions regarding the practice of safety and health awareness in the workplace among oil palm plantation workers.
7. Section G: Contain questions regarding the knowledge of safety and health awareness in the workplace among oil palm plantation workers.

3.4 Population and Sample

Workers in the oil palm plantation in Peninsular Malaysia were selected as population and sample for this study because it has shown the number of awareness in safety and health in the agriculture sector are moderate (Moradhaseli et al., 2018). The total target respondents were 150 workers on the oil palm plantation.

3.5 Sample Size

This study targeted the workers in the oil palm plantation determined the safety and health awareness in the workplace among oil palm plantation workers. The sampling technique used for this study is a simple random sampling in which the sample has been chosen randomly out of the workers in the oil palm plantation industry in Peninsular Malaysia. The sample size was 150 respondents and all of them needed to answer the prepared questionnaires. Moreover, larger sample sizes reduce sampling error but at a decreasing rate (Madanchian, Hussein, Noordin, & Taherdoost, 2018). It is suggested that

the sample size need to be over 100. Thus, 150 samples can be categorized in a good state and appropriate (de Winter, Dodou, & Wieringa, 2009).

3.6 Data Preparation

The completed questionnaire has been tested by the pilot study to check the questionnaire. After that, the pilot test, it has been analyzed by using a reliability test.

3.6.1 Pilot Study

Pre-test has been conducted by distributing it to workers in oil palm plantations to ensure their possibilities responses, significant results, and reach the workers' level of awareness. The sample size of 30 respondents has been used and it is enough to measure the viability of the study as to whether the questionnaire provided is acceptable or not and whether it is easy to understand or not. The Statistical Package for Social Science Software (SPSS) is used in this study to analyze the data collected.

3.6.2 Reliability Test

Reliability analysis is commonly used to measure the scale reliability and to measure the questionnaires' reliability that also provided information of that Cronbach's Alpha relationship between individual items used in this study. If the response is stable after the test administration is repeated, the variables are reliable. The range could be between 0.00 – 1.00 and the value is differs based on the number of items of scale and inter-item links. The reliable variable can be accepted if Cronbach's Alpha is at least 0.6 and more reliable when the test is greater (Klein, Fiedler, & Rose, 2011).

The result of the reliability analysis is shown in Table 3.2 which includes the awareness, attitude, subjective norm, perceived behavioral control, practice, and knowledge in the workplace among oil palm plantation workers. All variables are good for this study if Cronbach's Alpha reading is above 0.9. It can be concluded that TPB and KAP are suited for this study as the result shows that there is a consistency among variables of the TPB and KAP is relevant

Table 3.2: Reliability test

Variable	Cronbach's Alpha	Number of item
Awareness	0.952	8
Attitude	0.961	8
Subjective Norm	0.942	9
Perceived Behavioural Control	0.947	9
Practice	0.948	8
Knowledge	0.932	9

3.6.3 Data Analysis

The data have been checked to ensure the accuracy of the data collected from the survey. The data has been checked by checking the frequency and descriptive statistics as well as the coding and the data entry. The descriptive statistics such as measurement of mean, minimum, maximum, frequency, percentages, and standard deviation have been calculated and interpreted using the SPSS program. After collecting all the data, the SPSS program has been used to analyze the data in order to achieve the study's objectives. This data has been analyzed using a method such as reliability test, descriptive analysis, and correlation analysis.

3.7 Summary

In this chapter, the methodology of this study has been briefly explained. In research design, the quantitative method has been demonstrated by using SPSS. This is used to analyze the data according to the study objectives. The research framework indicates the dependent variable which is safety and health awareness in the workplace among oil palm plantation workers in Peninsular Malaysia and five independent variables which are the attitude, subjective norm, perceived behavior, practices, and knowledge. Besides that, 150 respondents among oil palm plantation workers have been choosing as the sample size.

CHAPTER 4

RESULT AND DISCUSSION

4.0 Introduction

This chapter covers the result and discussion of the study. The simple random sampling method was done on 150 workers of oil palm plantation. The workers of oil palm plantation were chosen randomly by considering the limitations. The workers of the oil palm plantation were interviewed, and the questionnaires were collected for further analysis. The analysis discussing on the objectives of the study which are based level of awareness, attitude, subjective norm, perceived behavioural control, practice, knowledge and the relationship between attitude, subjective norm, perceived behavioural control, practice and knowledge safety and health awareness in the workplace.

4.1 Descriptive Analysis

Descriptive analysis is based on data collected through reviews. It contains the level of attitude, subjective norm, perceived behavioural control, practice, knowledge and safety and health awareness in the workplace among oil palm plantation workers including percentage and frequency. This analysis was determined the percentage, frequency and mean score for each variable.



4.1.1 Demographic Profile

The descriptive analyses are carried out to measure the demographic profile of safety and health awareness among oil palm plantation workers. Demographic information includes gender, age, marital status, education level, religion, race, working experience, job task and current injury.

According to the overall findings, men who work in oil palm plantations are (92.7%) compared to women (7.3%). As is well known, men outnumber women on farms because farm work requires more energy and the scope of work required is not suitable for women. Next, the highest percentage of workers in oil palm plantations ages between 30-39 years is (42.6%), followed by ages between 40-49 years (28.6%), with a further linking the ages of 20-29 years (16.1%) and 50-59 years (12.7%). In terms of marital status, married people had the highest percentage (80.7%), followed by singles (80.1%) and widows (1.3%).

Pertaining to the educational level, graduated from high school (SRP/SPM/STPM) (66.0%) showed the highest percentage, then followed by the person who's graduated from high education level (Diploma/Degree/Master) (20.7%), technical certificate (12.0%) and not going to school (1.3%). In the religion composition, Islam respondent are the highest (88.0%) followed by Hindu (11.3%) and Christian (0.7%) among oil palm plantation workers in Peninsular Malaysia. While for the race, Malay respondent are the highest (86.7%) followed by Indian (12.7%) and others are the lowest percentage (0.7%).

On the other hand, the highest percentage of working experience that involved in oil palm plantation is 11-15 years (21.3%), then 16-20 years (20.7%), below than 5 years

(18.0%), 6-10 years (16.7%) and 21-25 years (16.7%), 26-30 years (3.3%), 31-35 years (2.0%) and the lowest duration is 36-40 years (1.3%).

Based on the result shows the majority of respondents of oil palm plantation workers involved with job tasks with the highest percentage is all job tasks include on harvesting, manuring, weeding and pruning which is 45.3%, followed by supervisor (19.4%), then job tasks for bunch weight, leaf sampling and oil palm research shared the same percentage which is 6.7%. Next job tasks for culling, the respondent is 4.0%, followed by field operator, mapping and pollination shared the same percentage which is 2.7%. Lastly same goes for the estate manager and trail & rut in foliar sampling also shared the same percentage which is 1.3% of oil palm plantation workers.

The majority of oil palm plantation workers have been involved in workplace accidents. Accidents or injuries that occur to oil palm plantation workers usually involve work that exposes them to hazards by requiring them to use equipment or machinery while performing their duties. According to the table, a total of 50 oil palm plantation workers (33.3%) have been wounded or had fatal injuries. Another 100 people (66.7%) have never been injured at work. This demonstrates that almost all oil palm plantation workers are concerned about safety and health in the workplace.

Table 4.1: Demographic profile of oil palm plantation workers

	Character	Frequency	Percent
Gender	Male	139	92.7
	Female	11	7.3
Age	20-29	24	16.1
	30-39	64	42.6
	40-49	43	28.6
	50-59	19	12.7
Marital status	Married	121	80.7
	Single	27	18.0
	Widow	2	1.3
Education level	Graduated from high education level (Diploma/Degree/Master)	31	20.7
	Graduated from high school (SRP/SPM/STPM)	99	66.0
	Technical certificate	18	12.0
	Not schooling	2	1.3
Religion	Islam	132	88.0
	Hindu	17	11.3
	Christian	1	0.7
Race	Malay	130	86.7
	Indian	19	12.7
	Others	1	0.7
Work experience	< 5 years	27	18.0
	6-10 years	25	16.7
	11-15 years	32	21.3
	16-20 years	31	20.7

	21-25 years	25	16.7
	26-30 years	5	3.3
	31-35 years	3	2.0
	36-40 years	2	1.3
Job task	All (harvesting, manuring, weeding, pruning)	68	45.3
	Bunch weight	10	6.7
	Culling	6	4.0
	Estate manager	2	1.3
	Field operator	4	2.7
	Leaf sampling	10	6.7
	Mapping	4	2.7
	Oil palm research	10	6.7
	Pollination	4	2.7
	Supervisor	29	19.4
	Trail & rut in foliar sampling	2	1.3
Current injury	Yes	50	33.3
	No	100	66.7

4.1.2 Level of Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Table 4.2 displays the descriptive analysis results for safety and health awareness among oil palm plantation workers. Approximately 48.7% of oil palm plantation workers agree with the statement "I am clear about my rights and responsibilities in relation to workplace safety and health," with 45.3% strongly agreeing. The statement was supported by 4.0% of oil palm plantation workers who neither agree nor not, 1.3% of oil palm plantation workers who strongly disagreed, and 0.7% of oil palm plantation workers who disagreed. It demonstrates that the majority of oil palm plantation workers believe that safety and health awareness are prioritized in their workplace.

The result shows that 50.7% of oil palm plantation workers strongly agree with the statement "I know how to perform my job in a safe manner", 46.0% of oil palm plantation workers agree, then 1.3% of oil palm plantation workers strongly disagree and disagree and 0.7% of oil palm plantation workers neither agree or not with the statement. 96.7% of oil palm plantation workers know how to perform a job in a safe manner in the workplace.

49.3% of oil palm plantation workers strongly agree with the statement "I know what the necessary precautions are that I should take while doing my job." The statement is supported by 47.3% of oil palm plantation workers. The lowest percentages are 2.0% and 1.3%, which are both either agree or not and strongly disagree with the statement. It demonstrates that the majority of oil palm plantation workers are aware of the precautions in the workplace.

For the statement of “I am aware of the importance of adhering to safe operation standards (SOP) to reduce the risk of safety on the plantation”, 55.3% of oil palm plantation workers strongly agree, 40.0% of oil palm plantation workers agree and 4.6% of oil palm plantation workers disagree and strongly disagree with the statement. As a result, oil palm plantation workers believe that adhering to safe operating procedures (SOP) to reduce the risk of safety on the plantation is critical.

According to Table 4.2, 56.7% of oil palm plantation workers strongly agree with the statement "I am aware that personal protective equipment (PPE) is important to reduce the risk of accidents at work," while 37.3% agree. Following that, 2.0% of oil palm plantation workers either agree or not, while 1.3% disagree with the statement. Finally, 2.7% of workers on oil palm plantations strongly disagree with the statement. According to the statement, the majority of oil palm plantation workers believe that personal protective equipment (PPE) is essential for reducing the risk of workplace accidents.

“I realize that it is important to report accidents on the plantation”, is a statement with the response 57.3% of oil palm plantation workers strongly agree and 36.0% of oil palm plantation workers agree with the statement. On neither agree or not, 4.0% of oil palm plantation workers agree with the statement, while only 1.3% disagree. Finally, 1.3% of workers on oil palm plantations strongly disagree with the statement. According to the responses, the majority of oil palm plantation workers strongly agree that it is critical to report any accidents that occur on the plantation to the company.

56.7% of oil palm plantation workers strongly agree with the statement “I realized that accidents could happen if I was careless in doing work on the plantation”, and 34.7% of oil palm plantation workers agree with the statement. While 4.7% of oil palm plantation workers neither agree or not with this statement, 2.7% and 1.3% of oil palm plantation workers disagree and strongly disagree with the statement. According to the statement,

the majority of oil palm plantation workers strongly agree that anything can happen if they are careless in their work on the field.

The findings show that 48.0% of oil palm plantation workers strongly agree with the statement “I realized that I need to attend safety and health training in the workplace from time to time”, and 46.7% of oil palm plantation agree with the statement. Then, 3.3% of oil palm plantation workers neither agree or not, 0.7% of response disagree and 1.3% strongly disagree with the statement. As a result, mostly oil palm plantation workers realized that they need to attend safety and health training in the workplace from time to time to reduce any risk.

Table 4.2: Descriptive analysis for safety and health awareness

Statement	Percentage (%)					SD	Mean
	1	2	3	4	5		
I am clear about my right and responsibilities in relation to workplace safety and health	1.3	0.7	4.0	48.7	45.3	0.717	4.36
I know how to perform my job in a safe manner	1.3	1.3	0.7	46.0	50.7	0.709	4.43
I know what the necessary precautions are that I should take while doing my job	1.3		2.0	47.3	49.3	0.670	4.43
I am aware of the importance of adhering to safe operation standards (SOP) to reduce the risk of safety on the plantation	1.3	1.3	2.0	40.0	55.3	0.730	4.47
I am aware that personal protective equipment (PPE) is important to reduce the risk of accidents at work	2.7	1.3	2.0	37.3	56.7	0.831	4.44
I realize that it is important to report accidents on the plantation	1.3	1.3	4.0	36.0	57.3	0.757	4.47
I realized that accidents could happen if I was careless in doing work on the plantation	1.3	2.7	4.7	34.7	56.7	0.814	4.43

I realized that I need to attend safety and health training in the workplace from time to time	1.3	0.7	3.3	46.7	48.0	0.713	4.39
--	-----	-----	-----	------	------	-------	------

*Indicator: 1. Strongly Disagree 2. Disagree 3. Average 4. Agree 5. Strongly Agree

The mean score of safety and health awareness among oil palm plantation workers is a high mean score (M= 4.4275, SD= 0.64054). According to the findings of a study of safety and health awareness among oil palm plantation workers in the workplace, workers have a high and positive level of awareness. This demonstrates that Sime Darby is a long-established company with a complete SOP for occupational safety and health and it shows that Sime Darby's awareness is higher than that of independent plantation farmers.

According to Moradhaseli et al., (2018), their research also found that the mean score for level of awareness on safety and health was moderate. The awareness of farmers was thoroughly investigated regarding safety and occupational health in Iran. The majority of farmers were in their 40s and 50s which their activity is significantly influenced by long-term work-related stress.

According to a study Lunner-Kolstrup and Ssali (2016) found that the results obtained in this study indicate that the farmers interviewed have low awareness of risk factors and health and safety issues related to agriculture. This because the farmers in agriculture sector would not alert with the risk and safety and health issues

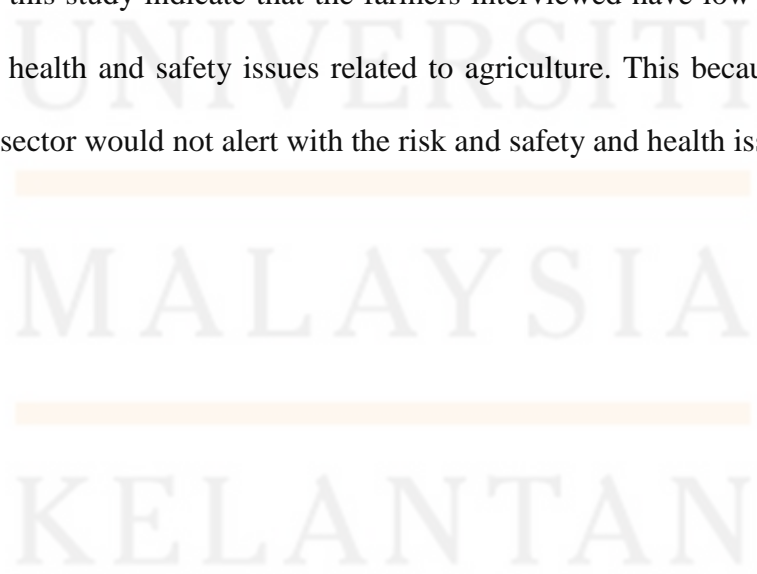


Table 4.3: Mean score of safety and health awareness

Variable	Frequency	Percentage (%)	Mean	SD
Awareness			4.4275	0.64054
Low (1.00-2.33)	2	1.3		
Medium (2.34-3.67)	6	4.0		
High (3.68-5.00)	142	94.7		

4.1.3 Level of Attitude on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Table 4.4 displays the descriptive analysis results for oil palm plantation workers' attitudes toward workplace safety and health awareness. About 48.0% of oil palm workers strongly agree with the statement "I am always careful in doing things in my workplace," while 45.3% agree with the statement. Following that, 5.3% of oil palm plantation workers neither agree or not, and 1.3% strongly disagreed with the statement. It demonstrates that the majority of oil palm plantation workers strongly agree that they take precautions in the workplace to avoid accidents.

The results show that 43.3% of oil palm plantation workers strongly agree with the statement "I am confident that the personal protective equipment (PPE) while working can reduce the risk of hazardous", 50.0% agree, and 2.7% neither agree or not with the statement. It is approximately 2.7% of oil palm workers who disagree with the statement, while the remaining 1.3% of oil palm workers strongly disagree with the statement. The statement reveals that most of oil palm plantation workers are confident that the personal protective equipment (PPE) while working can reduce the risk of hazardous in the workplace.

41.3% of oil palm plantation workers strongly agree with the statement "I will follow my employer's instruction because he has the responsibility to reduce exposure of hazards on workers". The statement is supported by 51.3% of oil palm plantation workers agree with the statement. 6.0% of the response neither agree nor while 1.3% are strongly disagree with the statement. As a result, it appears that the majority of oil palm plantation workers follow their employers' instructions to reduce worker exposure to hazards.

“I have to follow workplace safety rule to avoid an accident”, is a statement with the response 54.7% of oil palm plantation workers strongly agree and 41.3% of response agree with the statement. About 2.7% of oil palm plantation workers neither agree or not with this statement and 1.3% strongly disagree with it. It shows that most respondent strongly agree to follow workplace safety rule to avoid an accident.

The result shows that 56.0% of oil palm plantation workers strongly agree with the statement “I believe that safety training is important to be aware of hazards and risks in the workplace”. Then 34.7% of response agree, 1.3% neither agree or not for this statement and the rest 2.7% strongly disagree with it. According to the statement, the majority of response believe that safety training is important to be aware of hazards and risks in the workplace.

According to Table 4.4, 45.3% of response strongly agree with the statement “I am confident that by following the safe operation procedures (SOP) set by the farm management can prevent accidents while doing work on the farm”. This statement has 48.0% of response agree and 4.0% neither agree or not. Lastly, 1.3% of oil palm plantation disagree and the remaining 1.3% also strongly disagree with the statement. As a result, the majority of oil palm plantation workers agree and are confident that following the safe operation procedures (SOP) established by farm management can prevent accidents while working on the farm.

“I will make sure all used equipment is cleaned and stored back in its original place”, is a statement with the response 46.0% of oil palm plantation strongly agree and 49.3% of oil palm plantation workers agree with the statement. About 2.0% of the response neither agree or not, then 1.3% of oil palm plantation workers disagree and the remaining 1.3% of response strongly disagree with the statement. The statement reveals

that 95.3% of oil palm workers strongly agree and agree to make sure all used equipment is cleaned and stored back in its original place.

According to the statement “I will report immediately when there is an accident on the farm”, 57.3% of oil palm plantation workers strongly agree and 36.0% agree. While 5.3% of oil palm workers neither agree or not and 1.3% of oil palm workers strongly disagree with the statement. It demonstrates that when there is an accident on the farm, the majority of oil palm plantation workers will report it immediately.

Table 4.4: Descriptive analysis for attitude on safety and health

Statement	Percentage (%)					SD	Mean
	1	2	3	4	5		
I am always careful in doing things in my workplace	1.3		5.3	45.3	48.0	0.712	4.39
I am confident that the personal protective equipment (PPE) while working can reduce the risk of hazardous	1.3	2.7	2.7	50.0	43.3	0.770	4.31
I will follow my employer’s instruction because he has responsibility to reduce exposure of hazards on workers	1.3		6.0	51.3	41.3	0.706	4.31
I have to follow workplace safety rule to avoid an accident	1.3		2.7	41.3	54.7	0.683	4.48
I believe that safety training is important to be aware of hazards and risks in the workplace	2.7	1.3	5.3	34.7	56.0	0.867	4.40
I am confident that by following the safe operation procedures (SOP) set by the farm management can prevent accidents while doing work on the farm	1.3	1.3	4.0	48.0	45.3	0.742	4.35
I will make sure all used equipment is cleaned and stored back in its original place	1.3	1.3	2.0	49.3	46.0	0.719	4.37
I will report immediately when there is an accident on the farm	1.3		5.3	36.0	57.3	0.721	4.48

*Indicator: 1. Strongly Disagree 2. Disagree 3. Average 4. Agree 5. Strongly Agree

Based on the result in Table 4.5 the mean score of attitude on safety and health awareness in the workplace among oil palm plantation workers is consider as high mean score ($M= 4.3867$, $SD= 0.64153$). This shows that the respondents have a positive attitude towards safety and health awareness and oil palm plantation workers are aware of attitude on safety and health in the workplace.

Supported by Baksh et al., (2015), farmers' attitude toward occupational health and safety hazards in Trinidad is at a moderate level ($M= 3.59$, $SD= 0.50$). With respect to overall attitude towards safety, mean frequencies showed that the majority of farmers had fairly positive attitude towards safety. Farmers believe that if they are given more up-to-date information and advice about farm health and safety, it will not only make their job less hazardous, but it will also positively change their attitudes toward safety.

Different with Dahalan et al., (2020), the respondents' attitude towards the agricultural sector is at a high level and mean score of attitude ($M= 4.1890$, $SD= 0.50716$). This shows a positive sign and should be reflected by the agriculture students. Because of the respondents' field of study, the findings of this study are expected. Assert that a positive attitude among highly educated youth in the agricultural sector is a good predictor of the country's future

Table 4.5: Mean score of attitude on safety and health

Variable	Frequency	Percentage (%)	Mean	SD
Attitude			4.3867	0.64153
Low (1.00-2.33)	2	1.3		
Medium (2.34-3.67)	9	6.0		
High (3.68-5.00)	139	92.7		

4.1.4 Level of Subjective Norm on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Table 4.6 shows the descriptive analysis results for the subjective norm on safety and health awareness in the workplace among oil palm plantation workers. About 39.3% of oil palm plantation worker strongly agree with the statement “My family members reminded me of safety and health practices in the workplace”, and 47.3% agree with the statement. Following that, 10.0% of oil palm plantation neither agree or not, 2.0% of oil palm plantation disagree and the remaining 1.3% strongly disagree with the statement. It demonstrates that the majority of oil palm plantation workers agree that family members constantly remind them about workplace safety and health.

The result shows that 36.7% of oil palm plantation workers strongly agree with the statement “My supervisor always reminded me to abide by the safety and health rules at the oil palm plantation”, 50.7% agree and 10.0% are neither agree or not with this statement. For this statement, the percentage for disagree and strongly disagree are both 1.3%. According to the statement, the majority of oil palm plantation workers believe that their supervisor always reminded them to follow the oil palm plantation's safety and health rules.

36.0% of oil palm plantation workers strongly agree and 48.7% agree with the statement “My colleagues always remind me to wear personal protective equipment (PPE) such as gloves and safety helmet while doing a job”. While 11.3% of oil palm workers neither agree or not, 2.7% disagree and 1.3% strongly disagree with the statement. It demonstrates that when their co-workers constantly remind them to wear

personal protective equipment (PPE) such as gloves and a safety helmet while doing a job, it reduces workplace risk.

Table 4.6 shows that 32.7% of respondents strongly agree with the statement “Farm manager always update the information about safety and health awareness to workers”. This statement has 55.3% of respondents agreeing and a either agree or not is 5.3%. Lastly, 1.3% of oil palm plantation disagree and the remaining 2.0% strongly disagree. As a result, the majority of oil palm plantation workers believe that farm managers keep them up to date on safety and health issues.

38.0% of oil palm plantation workers strongly agree with the statement “Safety officers play an important role in ensuring the safety and health of employees in the event of an accident”. The statement is supported by 50.7% agree. Following that, 5.3% of respondent neither agree or not, 2.7% disagreed and 3.3% strongly disagree with the statement. It reveals that approximately 88.7% of oil palm workers agree that safety officers play an important role in ensuring employee safety and health in the event of an accident.

“Training on safety and health in oil palm plantations helped me to be more careful in carrying out my duties”, is a statement that 38.7% of oil palm plantation strongly agree and 52.0% agree with statement. Approximately 5.3% of those who responded neither agree or not, 2.7% of oil palm plantation workers disagreed and the remaining 1.3% of response strongly disagree with the statement. According to the statement, 90.7% of oil palm workers strongly agree and agree that training on safety and health in oil palm plantations has helped them to be more careful in carrying out their duties.

According to Table 4.6, 58.7% of oil palm workers strongly agree, 34.7% of them agree, and 5.3% neither agree or not with the statement “News and issues of accidents

that have occurred in oil palm plantations made me realize the importance of adhering to safety and health regulations on the plantation”. Finally, only 1.3% of oil palm plantation workers strongly disagree with the statement. As a result, oil palm plantation workers believe that news and issues concerning accidents on oil palm plantations have made them realise the importance of adhering to plantation safety and health regulations.

“Awareness campaigns to prevent injuries and accidents made me aware of the risk of injuries and accidents in oil palm plantations”, is a statement with 49.3% of oil palm plantation workers strongly agreeing and 42.0% agreeing. Neither agree or not the respondent has 6.0%, while the statement disagree and strongly disagree have the same percentage of 1.3%. As a result, the vast majority of oil palm plantation workers support awareness campaigns aimed at preventing injuries and accidents in oil palm plantations.

According to the findings, 43.3% of oil palm plantation workers strongly agree with the statement “The Occupational Safety and Health Committee always reminds me to control the risk of injuries and accidents in oil palm plantations”, while 45.3% agree with the statement. Then, neither agree or not, 6.0% of respondent agree with the statement, 3.3% disagree and 2.0% are strongly disagree. It demonstrate that the majority of oil palm plantation workers accept that the occupational safety and health committee constantly reminds them to control the risk of injuries and accidents on oil palm plantation.

Table 4.6: Descriptive for subjective norms on safety and health awareness

Statement	Percentage (%)					SD	Mean
	1	2	3	4	5		
My family members reminded me of safety and health practices in the workplace	1.3	2.0	10.0	47.3	39.3	0.808	4.21
My supervisor always reminded me to abide the safety and health rules at the oil palm plantation	1.3	1.3	10.0	50.7	36.7	0.777	4.20
My colleagues always remind me to wear personal protective equipment (PPE) such as gloves and safety helmet while doing a job	1.3	2.7	11.3	48.7	36.0	0.825	4.15
Farm manager always update the information about safety and health awareness to workers	2.0	1.3	8.7	55.3	32.7	0.792	4.15
Safety officers play an important role in ensuring the safety and health of employees in the event of an accident	3.3	2.7	5.3	50.7	38.0	0.903	4.17
Training on safety and health in oil palm plantations helped me to be more careful in carrying out my duties	1.3	2.7	5.3	52.0	38.7	0.783	4.24
News and issues of accidents that have occurred in oil palm plantations made me realize the importance of adhering to safety and health regulations on the plantation.	1.3		5.3	34.7	58.7	0.721	4.49
Awareness campaigns to prevent injuries and accidents made me aware of the risk of injuries and accidents in oil palm plantations	1.3	1.3	6.0	42.0	49.3	0.722	4.37
The Occupational Safety and Health Committee always reminds me to control the risk of injuries and accidents in oil palm plantations	2.0	3.3	6.0	45.3	43.3	0.867	4.25

*Indicator: 1. Strongly Disagree 2. Disagree 3. Average 4. Agree 5. Strongly Agree

Based on the result in Table 4.5 the mean score of subjective norm on safety and health awareness in the workplace among oil palm plantation workers is consider as high mean score (M= 4.2489, SD= 0.61652). This shows that the respondents have a positive subjective norm towards safety and health awareness in the workplace among oil palm plantation workers.

According to Berni et al., (2021), their research found that subjective norm shows a relatively strong perception by farmers. It also received a high mean score of 3.07. Supported by Au Yong et al., (2017) also found that subjective norm with safety and health awareness shows a moderate mean score. From their study shows that, society, family and friend are influenced the subjective norm.

Table 4.7: Mean score of subjective norms on safety and health

Variable	Frequency	Percentage (%)	Mean	SD
Subjective norms			4.2489	0.61652
Low (1.00-2.33)	2	1.3		
Medium (2.34-3.67)	13	8.7		
High (3.68-5.00)	135	90.0		

4.1.5 Level of Perceived Behavioural Control on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Table 4.8 shows the descriptive analysis results for perceived behavioural control on safety and health awareness in the workplace among oil palm plantation workers. About 37.3% of oil palm plantation worker strongly agree with the statement “It easy for me to get information about the safety and health in the workplace”, and 41.3% agree with the statement. Following that, 15.3% of oil palm plantation neither agree or not, 3.3% of oil palm plantation disagree and the remaining 2.7% strongly disagree with the statement. It demonstrates that the majority of oil palm plantation workers easy to get information about safety and health in the workplace.

The result shows that 33.3% of oil palm plantation workers strongly agree with the statement “I am knowledgeable about safety and health in the workplace”, 50.7% agree and 13.3% are neither agree or not with this statement. For this statement, the percentage for disagree and strongly disagree are both 1.3%. According to the statement, the majority of oil palm plantation workers understand the knowledge about safety and health in the workplace.

36.7% of oil palm plantation workers strongly agree and 48.7% agree with the statement “It is easy for me to follow the rules of safety and health that have been set by the farm management”. While 10.7% of oil palm workers neither agree or not, 2.7% disagree and 1.3% strongly disagree with the statement. It demonstrates that oil palm plantation workers easy to follow the rules of safety and health that have been set by the farm management.

Table 4.8 shows that 37.3% of respondents strongly agree with the statement “I always use personal protective equipment (PPE) before carrying out work in oil palm plantations”. This statement has 51.3% of respondents agreeing and neither agree or not of 10.0%. Lastly, 1.3% of oil palm plantation strongly disagree with the statement. As a result, the majority of oil palm plantation workers use personal protective equipment (PPE) before carrying out work in oil palm plantation.

40.0% of oil palm plantation workers strongly agree with the statement “I had no problem attending safety and health training organized by the farm management”. The statement is supported by 54.0% agree. Following that, 3.3% of respondent neither agree or not, 1.3% disagreed and 1.3% strongly disagree with the statement. It reveals that approximately 94.0% of oil palm workers agree they have no problem in attending safety and health training.

“I have enough awareness and information about safety and health issues in the workplace”, is a statement that 37.3% of oil palm plantation strongly agree and 49.3% agree with the statement. Approximately 9.3% of those who responded neither agree or not, 1.3% of oil palm plantation workers disagreed and the remaining 2.7% of responded strongly disagree with the statement. According to the statement, 86.6% of oil palm workers strongly agree and agree that they have enough awareness and information about safety and health issues in workplace.

According to Table 4.8, 43.3% of oil palm workers strongly agree, 45.3% of them agree, and 6.7% neither agree or not with the statement “It is easy for me to make a report if there is an accident on the farm”. Finally, only 3.3% of oil palm plantation workers strongly disagree with the statement and 1.3% strongly disagree. As a result, oil palm plantation workers believe that easy for them to make a report if there is an accident on the farm.

“The safe operation procedures (SOP) set by the farm management are easy for me to understand”, is a statement with 34.0% of oil palm plantation workers strongly agreeing and 50.7% agreeing. Neither agree or not the respondent has 10.0%, while the statement with disagree is 4.0% and strongly disagree is 1.3%. As a result, the vast majority of oil palm plantation workers easy to follow the safe operation procedures (SOP) set by the farm management.

According to the findings, 28.7% of oil palm plantation workers strongly agree with the statement “I have the knowledge to assist in responding to any health and safety concerns at my workplace”, while 50.7% agree with the statement. Then, neither agree or not, 16.7% of respondent agree with the statement, 2.7% disagree and 1.3% are strongly disagree. It demonstrate that oil palm plantation workers agree about the knowledge to assist in responding to any health and safety concerns at my workplace.

Table 4.8: Descriptive for perceived behavioral control on safety and health

Statement	Percentage (%)					SD	Mean
	1	2	3	4	5		
It easy for me to get information about the safety and health in workplace	2.7	3.3	15.3	41.3	37.3	0.949	4.07
I am knowledgeable about safety and health in workplace	1.3	1.3	13.3	50.7	33.3	0.791	4.13
It is easy for me to follow the rules of safety and health that have been set by the farm management	1.3	2.7	10.7	48.7	36.7	0.823	4.17
I always use personal protective equipment (PPE) before carrying out work in oil palm plantations	1.3		10.0	51.3	37.3	0.737	4.23
I had no problem attending safety and health training organized by the farm management	1.3	1.3	3.3	54.0	40.0	0.721	4.30

I have enough awareness and information about safety and health issues in workplace	2.7	1.3	9.3	49.3	37.3	0.857	4.17
It is easy for me to make a report if there is an accident on the farm	1.3	3.3	6.7	45.3	43.3	0.831	4.26
The safe operation procedures (SOP) set by the farm management are easy for me to understand	1.3	4.0	10.0	50.7	34.0	0.843	4.12
I have the knowledge to assist in responding to any health and safety concerns at my workplace	1.3	2.7	16.7	50.7	28.7	0.827	4.03

*Indicator: 1. Strongly Disagree 2. Disagree 3. Average 4. Agree 5. Strongly Agree

Based on the result in Table 4.9 the mean score of perceived behavioral control on safety and health awareness in the workplace among oil palm plantation workers is consider as high mean score (M= 4.1652, SD= 0.69140). The survey questions found that oil palm plantation workers understand their ability to perform certain behaviors based on the given statements. The presence of adequate resources and the ability to control behavioral barriers influence behavior performance. The greater the perceived behavioral control and the lower the perceived obstacles, the greater the perceived behavioral control and the stronger the intention to perform behaviors.

According to Dahalan et al., (2020) found that the mean score of perceived behavioral control towards the agriculture sector was moderate score (M= 3.6411, SD= 0.69930). It demonstrates that, despite respondents' positive attitudes toward the agricultural sector, they lack the confidence to do what they should when involved in the agricultural sector. It is possible that a moderate score on the behavioral control factor is causing Malaysian youths to lack confidence in the agricultural sector. This is because attitudes and behavioral control are thought to have a strong influence on an individual's intention to enter the agricultural sector.

Table 4.9: Mean score of perceived behavioural control

Variable	Frequency	Percentage (%)	Mean	SD
Perceived behavioral control			4.1652	0.69140
Low (1.00-2.33)	2	1.3		
Medium (2.34-3.67)	24	16.0		
High (3.68-5.00)	124	82.7		

4.1.6 Level of Practices on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Table 4.10 displays the descriptive analysis results for practices on safety and health awareness among oil palm plantation workers. Approximately 44.7% of oil palm plantation workers strongly agree with the statement "I work accordance with the instructions of plantation supervisors", with 48.7% agree. The statement was supported by 4.0% of oil palm plantation workers who neither agree or not and 2.7% of oil palm plantation workers who strongly disagreed. It demonstrates that the majority of oil palm plantation workers work accordance with the instructions of plantation supervisors.

The result shows that 38.7% of oil palm plantation workers strongly agree with statement "I remind other workers about the dangers and safety of work", 51.3% of oil palm plantation workers agree, then 8.7% of oil palm plantation workers neither agree or not and 1.3% of oil palm plantation workers vote for strongly disagree with the statement. As a result, oil palm plantation workers always remind each other about the danger and safety of work.

38.0% of oil palm plantation workers strongly agree with the statement "I minimize the risks of accidents on the farm by using personal protective equipment (PPE)". The statement is supported by 51.3% of oil palm plantation workers. The lowest percentages are 8.0% neither agree or not and 1.3%, which are both disagree and strongly disagree with the statement. It demonstrates that the majority of oil palm plantation workers are aware and minimize the risks of accidents on the farm by using PPE.

For the statement of "I always follow the correct procedures for safe operation procedures (SOP) for plantation work", 42.0% of oil palm plantation workers strongly

agree and 51.3% of oil palm plantation workers agree. While 5.3% of oil palm plantation workers neither agree or not and 1.3% strongly disagree with the statement. As a result, oil palm plantation workers always follow the correct procedures for safe operation procedures (SOP) for plantation work.

According to Table 4.10, 42.0% of oil palm plantation workers strongly agree with the statement "I am aware that personal protective equipment (PPE) is important to reduce the risk of accidents at work," while 51.3% agree. Following that, 5.3% of oil palm plantation workers neither agree or not and 1.3% strongly disagree with the statement. According to the statement, the majority of oil palm plantation workers believe that personal protective equipment (PPE) is essential for reducing the risk of workplace accidents.

"I practice safety rules related to work safety in oil palm plantations", is a statement with the response 40.7% of oil palm plantation workers strongly agree and 52.0% of oil palm plantation workers agree with the statement. Neither agree or not, 4.7% of oil palm plantation workers agree with the statement, while only 1.3% disagree. Finally, 1.3% of workers on oil palm plantations strongly disagree with the statement. According to the responses, the majority of oil palm plantation workers they follow work safety regulations.

35.3% of oil palm plantation workers strongly agree with the statement "I am not joking with colleagues while working", and 47.3% of oil palm plantation workers agree with the statement. While 14.7% of oil palm plantation workers neither agree or not with this statement and both are 1.3% of oil palm plantation workers disagree and strongly disagree with the statement. According to the statement, the majority of oil palm plantation workers do not joke with their colleagues while working.

The findings show that 50.7% of oil palm plantation workers strongly agree with the statement “I would wash my hands after doing work on the farm especially after spraying pesticides and before eating”, and 41.3% of oil palm plantation agree with the statement. Then, 4.0% of oil palm plantation workers neither agree or not, 2.7% of response disagree and 1.3% strongly disagree with the statement. As a result, most oil palm plantation workers realised the importance of washing their hands after performing tasks, particularly after using pesticides and before eating.

The result shows that 30.7% of oil palm plantation workers strongly agree with the statement “I did not eat, drink and smoke while working on the farm”, 43.3% agree and 18.7% are neither agree or not with this statement. Then, 4.7% of respondent disagree and 2.7% strongly disagree. According to the statement, 74% of oil palm plantation workers did not eat, drink and smoke while working on the farm.

4.10: Descriptive for practices on safety and health awareness

Statement	Percentage (%)					SD	Mean
	1	2	3	4	5		
I work accordance with the instructions of plantation supervisors	2.7		4.0	48.7	44.7	0.790	4.33
I remind other workers about the dangers and safety of work	1.3		8.7	51.3	38.7	0.728	4.26
I minimize the risks of accidents on the farm by using personal protective equipment (PPE)	1.3	1.3	8.0	51.3	38.0	0.763	4.23
I always follow the correct procedures for safe operation procedures (SOP) for plantation work	1.3		5.3	51.3	42.0	0.700	4.33
I practice safety rules related to work safety in oil palm plantations	1.3	1.3	4.7	52.0	40.7	0.738	4.29

I am not joking with colleagues while working	1.3	1.3	14.7	47.3	35.3	0.811	4.14
I would wash my hands after doing work on the farm especially after spraying pesticides and before eating	1.3	2.7	4.0	41.3	50.7	0.799	4.37
I did not eat, drink and smoke while working on the farm	2.7	4.7	18.7	43.3	30.7	0.961	3.95

*Indicator: 1. Strongly Disagree 2. Disagree 3. Average 4. Agree 5. Strongly Agree

Based on the result in Table 4.11 the mean score of practices on safety and health awareness in the workplace among oil palm plantation workers is consider as high mean score ($M= 4.2375$, $SD= 0.62772$). Agreed by Mukhtar et al., (2020), state that majority of the workers had medium practices in their working places. This is because a small number of workers in the agricultural sector are less stressed about practices while working, resulting in a lack of knowledge about good practices.

As the author, Tagurum et al., (2021) from their research found that workers understand about the good practices on safety and health awareness in the workplace. It demonstrates that the practices used in the workplace by oil palm plantation workers produce relatively good results, where they are also aware of safety and health practices to reduce and prevent accidents.

4.11: Mean score of practices

Variable	Frequency	Percentage (%)	Mean	SD
Practices			4.2375	0.62772
Low (1.00-2.33)	2	1.3		
Medium (2.34-3.67)	13	8.7		
High (3.68-5.00)	135	90.0		

4.1.7 Level of Knowledge on Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

Table 4.12 shows the descriptive analysis results for knowledge on safety and health awareness in the workplace among oil palm plantation workers. About 80.0% of oil palm plantation workers know with the statement “While on the farm, clothing should always be neat and orderly and avoid wearing loose and thin clothing”, and 15.3% are not sure with the statement and the remaining 4.7% don’t know with the statement. It demonstrates that the majority of oil palm plantation workers knowing what kind of clothing to wear when working on the farm.

The result shows that 88.7% of oil palm plantation workers know with the statement “The use of Personal Protective Equipment (PPE) is one of the methods to protect yourself from accidents at work”, 10.0% not sure and 1.3% are don’t know with this statement. According to the statement, the majority of oil palm plantation workers believe that the use of Personal Protective Equipment (PPE) is one of the methods to protect ourselves from accidents at work.

84.0% of oil palm plantation workers know and 10.0% are not sure with the statement “While driving a tractor to avoid carrying passengers along and should drive at the lowest speed”. While the remaining 6.0% of oil palm workers don’t know with the statement. It demonstrates that they understand they should drive the lowest speed while driving a tractor.

Table 4.12 shows that 81.3% of respondents know with the statement “Make sure the equipment or machines are at a high level of safety and make sure the maintenance of machines and electrical equipment is on schedule”. This statement has 13.3% of

respondents not sure and a vote for don't know is 5.3%. As a result, 81.3% of oil palm plantation workers know to make sure the equipment or machines are at a high level of safety and make sure the maintenance of machines and electrical equipment is on schedule.

88.6% of oil palm plantation workers know with the statement "Hats should be worn in hot work areas so that workers are not directly exposed to the sudden scorching heat and cause heat stress problems". The statement is supported by 10.0% not sure. Following that, 1.3% of respondent don't know with the statement. It reveals that the majority of oil palm workers agree that wearing hats in hot work can avoid heat stress problems.

"When poisoning weeds should follow the direction of the wind in order to prevent the poison from hitting our body", is a statement that 92.0% of oil palm plantation know and 6.7% not sure with the statement. Approximately 1.3% of those who responded voted on don't know, with the statement. According to the statement, 92.0% of oil palm workers know the instruction while poisoning weeds to prevent any risk.

According to Table 4.12, 87.3% of oil palm workers know, 11.3% of them are not sure and 1.3% don't know with the statement "While doing the spraying, be sure to wear a specially prepared cloth or apron, special goggles, gloves and boots". As a result, the majority of oil palm plantation workers wear a full PPE while spraying to prevent any risk in the field.

"Danger and safety warning signs on the farm must be clear and adequate", is a statement with 85.3% of oil palm plantation workers know and 12.7% not sure, while the statement don't know the percentage is 2.0%. As a result, the vast majority of oil palm plantation workers support awareness campaigns aimed at preventing injuries and accidents in oil palm plantations.

According to the findings, 80.0 % of oil palm plantation workers know with the statement “Reports of accidents or dangerous occurrences must be reported within 7 days to the employer and the nearest Department of Occupational Safety and Health by submitting using an approved form”, while 19.3% not sure with the statement. Then, 0.7% of respondent don’t know with the statement. It demonstrate that the majority of oil palm plantation workers know that DOSH will accept the report of accidents or dangerous occurrences within 7 days.

4.12: Descriptive for knowledge on safety and health awareness

Statement	Percentage (%)			SD	Mean
	1	2	3		
While on the farm, clothing should always be neat and orderly and avoid wearing loose and thin clothing	4.7	15.3	80.0	0.530	2.75
The use of Personal Protective Equipment (PPE) is one of the methods to protect yourself from accidents at work	1.3	10.0	88.7	0.372	2.87
While driving a tractor avoid carrying passengers along and should drive at the lowest speed.	6.0	10.0	84.0	0.542	2.78
Make sure the equipment or machines are at a high level of safety and make sure the maintenance of machines and electrical equipment is on schedule	5.3	13.3	81.3	0.539	2.76
Hats should be worn in hot work areas so that workers are not directly exposed to the sudden scorching heat and cause heat stress problems	1.3	10.0	88.6	2.973	3.21
When poisoning weeds should follow the direction of the wind in order to prevent the poison from hitting our body	1.3	6.7	92.0	0.335	2.91
While doing spraying, be sure to wear a specially prepared cloth or apron, special goggles, gloves and boots	1.3	11.3	87.3	0.385	2.86
Danger and safety warning signs on the farm must be clear and adequate	2.0	12.7	85.3	0.424	2.83

Reports of accidents or dangerous occurrences must be reported within 7 days to the employer and the nearest Department of Occupational Safety and Health by submitting using an approved form	0.7	19.3	80.0	0.422	2.79
--	-----	------	------	-------	------

*Indicator: 1. Don't know 2. Not sure 3. Know

Based on the result in Table 4.13 the mean score of knowledge on safety and health awareness in the workplace among oil palm plantation workers as high mean score (M= 2.8289, SD= 0.27236). Based on a study I conducted of knowledge on safety and health awareness among oil palm plantation workers in the workplace, I discovered that workers have a high level of knowledge on safety and health.

Supported to a study Lunner-Kolstrup and Ssali (2016) found that the results obtained in their study indicate that the farmers interviewed have low knowledge of risk factors and health and safety issues related to agriculture. From the research state that farmers did not consider these injuries worthwhile noting, reporting or seeking medical care for. It is because medical clinics are rarely visited due to facilities, remote rural areas, a lack of financial resources, and a lack of trust in medical services. It is clear that they are uninformed about safety and health.

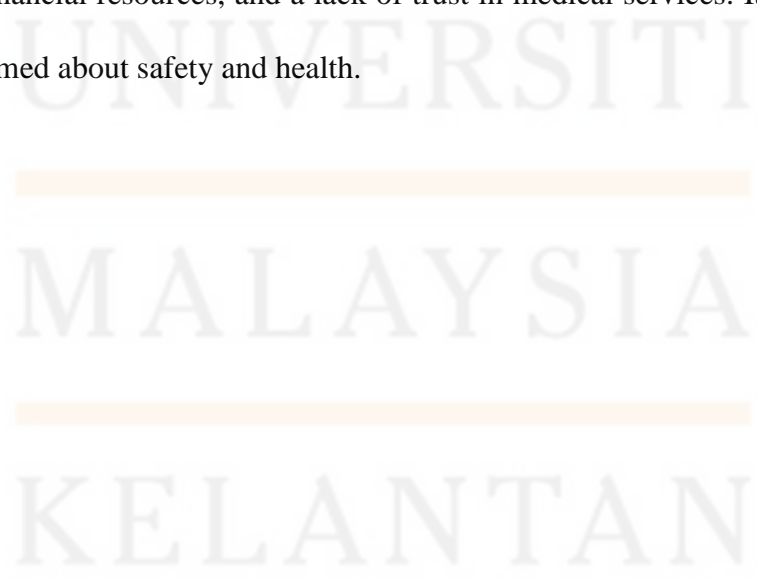


Table 4.13: Mean score of knowledge

Variable	Frequency	Percentage (%)	Mean	SD
Knowledge			2.8289	0.27236
Low (1.00-2.00)	3	2.0		
High (2.01-3.00)	147	98.0		

4.2 Normality Test

A normality test is used to determine whether sample data was obtained from a normally distributed population (within some tolerance). Because there are more than 50 populations in this study, a Kolmogorov-Smirnov^a was used from Table 4.14. According to the results of the test, safety and health awareness do not follow a normal distribution (P=0.000). The variable of safety and health awareness is not significant because the value is 0.05.

Table 4.14: Normality test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistics	df	Sig	Statistics	df	Sig
Safety and health awareness	0.535	150	0.000	0.231	150	0.000

4.3 Correlation Analyse

Correlation analysis was used in this section to examine the relationship between attitude, subjective norm, and perceived behavioural control, practices and knowledge with safety and health awareness in the workplace among oil palm plantation workers. The Spearman correlation was used to examine these relationships.

4.3.1 Spearman Correlation

The Spearman correlation coefficient was computed to assess the relationship between two variables (Ramzai, 2020). The Spearman's correlation is used to identify the relationship between attitude, subjective norm, perceived behavioral control, practices and knowledge with safety and health awareness in the workplace among oil palm plantation workers. The correlations test aims to examine the strength and direction of the relationship between the researched variables (Cavallo, 2020).

The correlation coefficient is a statistical measure that estimates the strength of the relationship between the relative movements of two variables (Cavallo, 2020). The values range from -1.0 to 1.0. A number greater than 1.0 or less than -1.0 indicates a correlation measure error. A correlation of -0.0 indicates that there is no correlation, whereas a correlation of 1.0 indicates that there is no correlation. A correlation of 0.0 does not indicate a relationship between the movements of the two variables. Other than that, the rule of thumb for interpreting the size of a correlation coefficient was used to estimate the strength of the relationship between the relative movements of two variables. The table below shows the rule of thumb for interpreting the size of a correlation coefficient

Table 4.15: Rule of Thumb for Interpreting the Size of a Correlation Coefficient (Hinkle DE, 2003)

Size of correlation	Interpretation
0.90 to 1.00 (-0.90 to -1.00)	Very high positive (negative) correlation
0.70 to 0.90 (-0.70 to -0.90)	High positive (negative) correlation
0.50 to 0.70 (-0.50 to -0.70)	Moderate positive (negative) correlation
0.30 to 0.50 (-0.30 to -0.50)	Low positive (negative) correlation
0.00 to 0.30 (0.00 to -0.30)	Negligible correlation

4.3.1.1 The Relationship between Attitude with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

In Table 4.16 the correlation coefficient between attitude with safety and health awareness in the workplace among oil palm plantation workers is significant ($p= 0.848$, $r= 0.000$). The role in attitude for interpreting the size of correlation coefficient in Table 4.15 shows a high positive correlation between attitude with safety and health awareness in the workplace among oil palm plantation workers. Meaning that the attitude is highly positively correlated and significantly with safety and health awareness in the workplace among oil palm plantation workers.

This proved by Monazzam and Soltanzadeh (2009) stated that attitude with safety and health awareness significantly and positively correlated with attitude level which supports the statement. Mukhtar, et al. (2020) mentioned that there is a significant relationship between attitude with safety and health awareness in the workplace among oil palm plantation workers. When workers had a high level of knowledge about occupational safety and health, the majority of them had a positive attitude. Therefore, the result is accepted Hypothesis 1 which predicted that attitude has a significant relationship with safety and health awareness in the workplace among oil palm plantation workers.

4.3.1.2 The Relationship between Subjective Norm with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

The correlation coefficient between subjective norm with safety and health awareness in the workplace among oil palm plantation workers is significantly ($p= 0.721$, $r= 0.000$) level in Table 4.16. The rule of thumb for interpreting the size of a correlation coefficient in Table 4.15 shows the high positive correlation between subjective norm with safety and health awareness in the workplace among oil palm plantation workers.

According to the author, Au Yong et al., (2017), subjective norms have a significant and positive impact on workplace safety and health awareness among oil palm plantation workers. As stated by Tualeka and Widajati (2018), the correlation coefficient between subjective norm and workplace safety and health awareness among oil palm plantation workers is significant and positive. The findings indicated that Hypothesis 2, which predicted subjective norms have a significant relationship with workplace safety and health awareness among oil palm plantation workers, was accepted.

4.3.1.3 The Relationship between Perceived Behavioural Control with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

The relationship between perceived behavioural control with safety and health awareness in the workplace among oil palm plantation workers show a significant ($p=0.385$, $r=0.000$) level in Table 4.16. It means that perceived behavioural control with safety and health awareness in the workplace among oil palm plantation workers has a low positive correlation based on the rule of thumb for interpreting the size of a correlation coefficient in Table 4.15.

According to the author, Dahalan et al., (2020), perceived behavioural control has a significant and positive effect on workplace safety and health awareness among oil palm plantation workers. According to Berni et al., (2021), the analysis discovered a significant difference in the respondents' perceived behaviour control towards the agricultural sector. The results indicated that Hypothesis 3 was accepted, which predicted that perceived behavioural control has a significant relationship with workplace safety and health awareness among oil palm plantation workers.

4.3.1.4 The Relationship between Practices with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

In Table 4.16 the correlation coefficient between practices with safety and health awareness in the workplace among oil palm plantation workers is significant ($p= 0.529$, $r= 0.000$) level. The role in practices for interpreting the size of correlation coefficient in Table 4.15 shows a moderately positively correlation between practices with safety and health awareness in the workplace among oil palm plantation workers. Meaning that the practices are moderate positive correlated and significantly with safety and health awareness in the workplace among oil palm plantation workers.

This proven by Khairuddin and Rosleea (2019) stated that safety and health awareness in the workplace among oil palm plantation workers was significantly and positively correlated with practices level which supports the statement. Taufek et al., (2016) support stated that the correlation coefficient between practices with safety and health awareness in the workplace among oil palm plantation workers is a significant and positive correlation. Therefore, the result is accepted Hypothesis 4 which predicted that practices have a significant relationship with safety and health awareness in the workplace among oil palm plantation workers.

4.3.1.5 The Relationship between Knowledge with Safety and Health Awareness in the Workplace among Oil Palm Plantation Workers

The correlation coefficient between knowledge with safety and health awareness in the workplace among oil palm plantation workers is significant ($p= 0.616$, $r= 0.000$) level in Table 4.16. The rule of thumb for interpreting the size of the correlation coefficient in Table 4.15 shows a moderate positive correlation between knowledge with safety and health awareness in the workplace among oil palm plantation workers.

Similarly, past studies were done by Al-Hanawi et al., (2020) show there is a significant relationship between knowledge with safety and health awareness in the workplace among oil palm plantation workers. Baksh, et al., (2015) stated that the correlation value between knowledge with safety and health is 0.824. This value indicates a solid relationship between knowledge with safety and health awareness in the workplace among oil palm plantation workers. Hypothesis 5 that predicted knowledge has a significant relationship with safety and health awareness in the workplace among oil palm plantation workers was accepted by the result of correlation analysis.

Table 4.16: The Spearman's Correlation Analysis

		Correlations						
		Safety Awareness	Attitude	Subjective Norm	Perceived Behavioural Control	Practices	Knowledge	
Spearman's rho	Safety Awareness	Correlation Coefficient	1.000	.848**	.721**	.385**	.529**	.616**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000
		N	150	150	150	150	150	150
	Attitude	Correlation Coefficient	.848**	1.000	.600**	.300**	.434**	.527**
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000
		N	150	150	150	150	150	150
	Subjective Norm	Correlation Coefficient	.721**	.600**	1.000	.623**	.496**	.454**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000
		N	150	150	150	150	150	150
	Perceived Behavioural Control	Correlation Coefficient	.385**	.300**	.623**	1.000	.623**	.350**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000
		N	150	150	150	150	150	150
	Practices	Correlation Coefficient	.529**	.434**	.496**	.623**	1.000	.454**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000
		N	150	150	150	150	150	150
	Knowledge	Correlation Coefficient	.616**	.527**	.454**	.350**	.454**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.
		N	150	150	150	150	150	150

** . Correlation is significant at the 0.01 level (2-tailed).

4.4 Summary

This chapter discussed on the results of the study which validate the main variables of Theory Planned Behaviour (TPB) and Knowledge, Practice and Attitude (KAP) in the context of safety and health awareness in the workplace among oil palm plantation workers. By using TPB and KAP as a model, results showed that all independent variables showed a significant value for all the variables. This suggests that TPB and KAP is efficient model to predict safety and health awareness in the workplace among oil palm plantation workers.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.0 Conclusion

This study consists of three objectives: the first objective is to identify the level of awareness on safety and health in the workplace among oil palm plantation workers. Second, determine the level of attitude, subjective norm, perceived behaviour, practices and knowledge on safety and health awareness in the workplace among oil palm plantation workers. The third objective is to analyse the relationship between attitude, subjective norm, perceived behaviour, practices and knowledge on safety and health awareness in the workplace among oil palm plantation workers. All of the study's objectives had been met, and the conclusion had been reached.

The results were analysed using descriptive statistics, referring to the mean score of awareness, attitude, subjective norm, perceived behaviour, practises, and knowledge on workplace safety and health among oil palm plantation workers. The mean score of awareness on safety and health in workplace among oil palm plantation workers is high (M= 4.4275, SD= 0.64054). Findings for all independent variables show high mean score with results for attitude (M= 4.3867, SD= 0.64153), subjective norm (M= 4.2489, SD=

0.61652), perceived behaviour (M= 4.1652, SD= 0.69140) and practices (M= 4.2375, SD= 0.62772), while low mean score is result for knowledge (M= 2.8289, SD= 0.27236).

The data was analysed using spearman correlation to determine the relationship between safety and health awareness with attitude, subjective norm, perceived behavioural control, practices, and knowledge, and the results were significant at the 0.01 level. The correlation was significantly positive, and all oil palm plantation workers were aware of workplace safety and health awareness. The correlation analysis confirmed that the predicted result has a significant relationship with workplace safety and health awareness among oil palm plantation workers.

5.1 Recommendations

Based on the result and the conclusion drawn, some recommendation would be recommended in order to improvise the future research work. First and foremost, the research also can be done to Sabah and Sarawak or covering the whole country so that the significant of the study can be improvised in order to overlook the level of safety and health awareness among oil palm plantation workers in the workplace in Malaysia thus the study will be more meaningful. The future research includes Sabah and Sarawak might have a diversity number of sample population age, gender, religion, job task and opinion towards safety and health certification. Besides that, I would like to suggest that this survey not only focus on oil palm workers but in other agriculture sectors as well, especially on those who do not have a safety and health (OSHA) certificate in the workplace. Apart from that, studies can also be done by other theories such as Theory of Reasoned Action (TRA).

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Al-Hanawi, M. K., Angawi, K., Alshareef, N., Qattan, A., Helmy, H. Z., Abudawood, Y., . . . Chirwa, G. C. (2020). Knowledge, attitude and practice toward COVID-19 among the public in the Kingdom of Saudi Arabia: a cross-sectional study. *Frontiers in public health*, 8, 217.
- Almutairi, N. S., Tamrin, S. B. B. M., Guan, N. Y., & How, V. (2020). Review of knowledge, attitude, and practice among laboratory workers towards occupational safety and health. *Malaysian J. Med. Heal Sci*, 16(1), 297-303.
- AMOAHA, C., FRIMPONG-MANSO, A., ZANGODUMO, S. N., KISSIWAA, V. M. A., & AMOAHA, B. (2021). COVID-19 Response in Ghana: Missed Preventive Behavioral Opportunities and Lessons through Relevant Psychological Conceptual Frameworks. *All Nations University Journal of Applied Thought*, 8(2), 1-16.
- Andrade, C., Menon, V., Ameen, S., & Kumar Praharaj, S. (2020). Designing and conducting knowledge, attitude, and practice surveys in psychiatry: Practical guidance. *Indian Journal of Psychological Medicine*, 42(5), 478-481.
- AuYong, H., Zailani, S., & Surienty, L. (2017). Considering Subjective Norms and Safety Performance in Logistics Sustainability: A Pilot Study.
- Avakh, A., Nourian, R., Afshari, M., & Afshari, M. (2017). Evaluating the knowledge, attitude and safety performance in the prevention of occupational accidents among workers in one of Iran Khodro's piece making companies. *Iranian journal of health, safety and environment*, 4(4), 859-865.
- Avci, C., & Yayli, A. (2014). Examining safety behaviour with the safety climate and the theory of planned behaviour. *International Journal of Arts & Sciences*, 7(4), 611.

- Baksh, K., Ganpat, W., & Narine, L. (2015). Farmers knowledge, attitudes and perceptions of occupational health and safety hazards in Trinidad, West Indies and implications for the Agriculture sector. *Journal of Agricultural Extension and Rural Development*, 7(7), 221-228.
- Berni, I., Menouni, A., El, I. G., Duca, R.-C., Kestemont, M.-P., Godderis, L., & El, S. J. (2021). Understanding farmers' safety behavior regarding pesticide use in Morocco. *Sustainable Production and Consumption*, 25, 471-483.
- Berx, N., Decré, W., Morag, I., Chemweno, P., & Pintelon, L. (2022). Identification and classification of risk factors for human-robot collaboration from a system-wide perspective. *Computers & Industrial Engineering*, 163, 107827.
- Cavallo, B. (2020). Functional relations and Spearman correlation between consistency indices. *Journal of the Operational Research Society*, 71(2), 301-311.
- Dahalan, D., D'Silva, J. L., Zaremohzzabieh, Z., Krauss, S. E., Arif, I., & Ismail, N. T. (2020). THE ATTITUDE AND PERCEIVED BEHAVIOR CONTROL AMONG AGRICULTURE STUDENTS IN MALAYSIA TOWARDS THE AGRICULTURE SECTOR.
- De Roover, K., Vermunt, J. K., Timmerman, M. E., & Ceulemans, E. (2017). Mixture simultaneous factor analysis for capturing differences in latent variables between higher level units of multilevel data. *Structural Equation Modeling: A Multidisciplinary Journal*, 24(4), 506-523.
- de Winter*, J. C., Dodou*, D., & Wieringa, P. A. (2009). Exploratory factor analysis with small sample sizes. *Multivariate behavioral research*, 44(2), 147-181.
- Erbay, M., & Canim, D. S. (2018). Review of Concept of Awareness Over Historical Environment & Buildings in Connection With Woman Users: A Pilot Study in Trabzon City. *RESEARCH AND DEVELOPMENT ON SOCIAL SCIENCES*, 367.
- Fogarty, G. J., & Shaw, A. (2003). *Safety climate and the theory of planned behaviour: Towards the prediction of unsafe behaviour*. Paper presented at the Proceedings of the 5th Australian Industrial and Organizational Psychology Conference 2003.
- Gafoor, K. A. (2012). Considerations in the Measurement of Awareness. *Online Submission*.
- Geleta, D. H., Alemayehu, M., Asrade, G., & Mekonnen, T. H. (2021). Low levels of knowledge and practice of occupational hazards among flower farm workers in southwest Shewa zone, Ethiopia: a cross-sectional analysis. *BMC public health*, 21(1), 1-12.
- Guerin, R. J., & Toland, M. D. (2020). An application of a modified theory of planned behavior model to investigate adolescents' job safety knowledge, norms, attitude and intention to enact workplace safety and health skills. *Journal of safety research*, 72, 189-198.

- Ham, M., Jeger, M., & Frajman Ivković, A. (2015). The role of subjective norms in forming the intention to purchase green food. *Economic research-Ekonomska istraživanja*, 28(1), 738-748.
- Ishwarya, G. A., & Rajkumar, D. (2021). Analysis of ergonomic risk factors in construction industry. *Materials Today: Proceedings*, 37, 2415-2418.
- Johan, N. M. (2019). *Oil Palm Planted Area 2019*. MPOB. Retrieved January 24, 2022, from <https://bepi.mpob.gov.my/index.php/en/area/area-2019/oil-palm-planted-area-as-at-dec-2019>
- Kadir, S. A., & Merican, R. (2017). Factors influencing entrepreneurial intention among Malaysian youth. *International Journal of Accounting, Finance and Business*, 2, 33-48.
- Khairuddin, M. Z. F., & Rosleea, N. A. M. (2019). The Relationship between Safety Behaviour and Safety Climate among Firemen. *Journal of Occupational Safety and Health*, 29.
- Klein, P. J., Fiedler, R. C., & Rose, D. J. (2011). Rasch analysis of the Fullerton Advanced Balance (FAB) scale. *Physiotherapy Canada*, 63(1), 115-125.
- Koo, K. E., Nurulazam, M. A., Rohaida, M. S., Teo, T. G., & Salleh, Z. (2014). Examining the potential of safety knowledge as extension construct for theory of planned behaviour: Explaining safety practices of young adults at engineering laboratories and workshops. *Procedia-Social and Behavioral Sciences*, 116, 1513-1518.
- Kwol, V. S., Eluwole, K. K., Avci, T., & Lasisi, T. T. (2020). Another look into the Knowledge Attitude Practice (KAP) model for food control: An investigation of the mediating role of food handlers' attitudes. *Food Control*, 110, 107025.
- Lin, S.-C., Mufidah, I., & Persada, S. F. (2017). Safety-culture exploration in Taiwan's metal industries: Identifying the workers' background influence on safety climate. *Sustainability*, 9(11), 1965.
- Lucchini, R. G., & London, L. (2014). Global occupational health: current challenges and the need for urgent action. *Annals of global health*, 80(4), 251-256.
- Lunner-Kolstrup, C., & Ssali, T. K. (2016). Awareness and need for knowledge of health and safety among dairy farmers interviewed in Uganda. *Frontiers in public health*, 4, 137.
- Luqman H. Z. (2021, December 30). *Kemampuan industri sawit mampu tarik pelabur*. Berita Harian. Retrieved January 24, 2022, from <https://www.bharian.com.my/bisnes/lain-lain/2021/12/905609/kemampuan-industri-sawit-mampu-tarik-pelabur>

- Madanchian, M., Hussein, N., Noordin, F., & Taherdoost, H. (2018). The impact of ethical leadership on leadership effectiveness among SMEs in Malaysia. *Procedia Manufacturing*, 22, 968-974.
- Mahadin, M. U. (2021b, November 29). *Department of Statistics Malaysia Official Portal*. Department of Statistics Malaysia. Retrieved February 10, 2022, from https://www.dosm.gov.my/v1/index.php?r=column/ctwoByCat&parent_id=45&menu_id=Z0VTZGU1UHBUT1VJMF1paXRRR0xpdz09
- Mazlan, S. M. B., & How, V. (2017). Beyond self-report or reality: The health symptoms and the knowledge, attitude and practice of pesticide usage among estate workers in oil palm plantations, Malaysia. *Journal of Occupational Safety and Health*, 1.
- Mior, S. M., Leman, A., Baharudin, M., & Masripan, R. (2016). *A preliminary study of knowledge, attitude and practices of pesticide use among oil palm workers in Johor*. Paper presented at the MATEC Web of Conferences.
- Monazzam, M., & Soltanzadeh, A. (2009). The relationship between the worker's safety attitude and the registered accidents. *Journal of research in health sciences*, 9(1), 17-20.
- Moradhaseli, S., Mirakzadeh, A., Rostami, F., & Ataei, P. (2018). Assessment of the farmers' awareness about occupational safety and health and factors affecting it; a case study in Mahidasht, Kermanshah Province. *Health Education and Health Promotion*, 6(1), 23-29.
- MPOC. (2020, July 16). *Malaysia's palm oil, palm-based product exports estimated at RM65-70b for 2020*. Malaysian Palm Oil Council. Retrieved January 24, 2022, from <https://mpoc.org.my/malaysias-palm-oil-palm-based-product-exports-estimated-at-rm65-70b-for-2020/>
- Mukhtar, M. Y. M., Yusof, A. M., & Isa, M. L. M. (2020). *Knowledge, attitude and practice on occupational safety and health among workers in petrochemical companies*. Paper presented at the IOP Conference Series: Earth and Environmental Science.
- Nasab, H. S., Ghofranipour, F., Kazemnejad, A., Khavanin, A., & Tavakoli, R. (2009). Evaluation of knowledge, attitude and behavior of workers towards occupational health and safety. *Iranian journal of public health*, 38(2), 125-129.
- Osman, R., Awang, N., Hassan, S., & Yusof, N. M. (2015). Level of awareness on behaviour-based safety (BBS) in manufacturing industry towards reducing workplace incidents. *International Journal of Education and Research*, 3(1), 77-88.
- Peng, L., & Chan, A. H. (2019). Exerting explanatory accounts of safety behavior of older construction workers within the theory of planned behavior. *International journal of environmental research and public health*, 16(18), 3342.

- Ramzai, J. (2020). Clearly explained: pearson v/s spearman correlation coefficient. *Towards data science*. Accessed, 10.
- Schwartz, N. E. (1976). Nutrition knowledge, attitudes and practices of Canadian public health nurses. *Journal of Nutrition Education*, 8(1), 28-31.
- Sharif, E. A. B. M. AN ANALYSIS OF THEORY OF PLANNED BEHAVIOUR- UNDERSTANDING SENIOR CITIZEN BEHAVIOURAL INTENTION (BI) TO USE RAPIDKL TOUCH N GO AT KLANG VALLEY, MALAYSIA. *Management*, 3(10), 64-75.
- Shawal, F. N. S., Guan, N. Y., Mohd Suadi Nata, D. H., How, V., & Tamrin, S. B. M. (2018). Knowledge, Attitude, and perception of risk management of steam boilers among workers in palm oil mills. *Work*, 60(1), 153-162.
- Sivabalan, T., Ibrahim, F., Mohamad, M. S., & Zakaria, E. (2018). Tahap Konsep Kendiri, Kesedaran Komuniti, Sokongan Sosial dan Pengintegrasian Sosial bagi Pesalah Muda di Malaysia (Level of Self-Concept, Sense of Community, Social Support and Social Integration among Young Offenders in Malaysia). *Akademika*, 88(3).
- Suhaimi, K. (2019, December 12). *5 Negara Pengeluar Minyak Kelapa Sawit Paling Besar Di Dunia*. iluminasi. Retrieved January 24, 2022, from <https://iluminasi.com/bm/5-negara-pengeluar-minyak-kelapa-sawit-paling-besar-di-dunia.html>
- Tagurum, Y. O., Ezeani, O. B., Bakoshi, K. A., Adam, Z. M., Afolaranmi, T. O., & Banwat, M. E. (2021). Awareness and practice of safety measures against occupational hazards among aluminium foundry workers in Jos, Nigeria. *International Journal of Research in Medical Sciences*, 9(6), 1561.
- Taufek, F. H. B. M., Zulkifle, Z. B., & Kadir, S. Z. B. A. (2016). Safety and health practices and injury management in manufacturing industry. *Procedia economics and finance*, 35, 705-712.
- Tualeka, A. R., & Widajati, N. (2018). A Correlation Analysis of Attitude, Subjective Norm and Behavioral Control Toward the Intention of Safety Behavior. *Indian Journal of Public Health Research & Development*, 9(5), 137-141.
- Tusyanah, T., Fadlilah, A., Rahmawati, F. D., & Susilowati, N. (2020). Analyzing Students' Entrepreneurial Intention Based on The Theory of Planned Behavior (TPB) With Internship as the Moderating Variable. *Economic Education Analysis Journal*, 9(3), 816-830.
- Vigoroso, L., Caffaro, F., Micheletti Cremasco, M., & Cavallo, E. (2021). Innovating Occupational Safety Training: A Scoping Review on Digital Games and Possible Applications in Agriculture. *International journal of environmental research and public health*, 18(4), 1868.

- Vinodkumar, M., & Bhasi, M. (2010). Safety management practices and safety behaviour: Assessing the mediating role of safety knowledge and motivation. *Accident Analysis & Prevention*, 42(6), 2082-2093.
- Wahab, B. N. A. (2021, January 21). *Official Website Department of Occupational Safety and Health - Quality, Occupational Safety And Health Policy*. Dosh. Retrieved January 24, 2022, from <https://www.dosh.gov.my/index.php/40-about-us/dosh-policy/85-safety-and-health-policy>
- Yean, T. F., Johari, J., & Sukery, A. F. M. (2015). THE INFLUENCE OF ATTITUDE, SUBJECTIVE NORMS, AND PERCEIVED BEHAVIOURAL CONTROL ON INTENTION TO RETURN TO WORK: A CASE OF SOCSO'S INSURED EMPLOYEES. *Kajian Malaysia: Journal of Malaysian Studies*, 33.

APPENDIX



SAFETY AND HEALTH AWARENESS IN WORKPLACE AMONG OIL PALM PLANTATION WORKERS

KESEDARAN KESELAMATAN DAN KESIHATAN DI TEMPAT KERJA DI KALANGAN PEKERJA LADANG KELAPA SAWIT

Dear respondents:

- 1) **This research is to:**
 - i. **Identify the level of safety and health awareness in workplace among oil palm plantation workers.**
 - ii. **Determine level of attitude, subjective norm, perceived behaviour, knowledge and practice safety and health awareness in workplace among oil palm plantation workers.**
 - iii. **Analyse relationship between attitude, subjective norm, perceived behaviour, knowledge and practice on safety and health awareness in workplace among oil palm plantation workers.**
- 2) **Please answer all questions.**
- 3) **Thank you for your cooperation and information given.**

Kepada responden:

- 1) *Kajian ini adalah untuk:*
 - i. *Mengenalpasti tahap keselamatan dan kesihatan di tempat kerja di kalangan pekerja ladang kelapa sawit.*
 - ii. *Tentukan tahap sikap, norma subjektif, tingkah laku yang dirasakan, pengetahuan dan amalan mengenai keselamatan dan kesedaran kesihatan di tempat kerja di kalangan pekerja ladang kelapa sawit.*
 - iii. *Menganalisis hubungan antara sikap, norma subjektif, tingkah laku yang dirasakan, pengetahuan dan amalan mengenai keselamatan dan kesedaran kesihatan di tempat kerja di kalangan pekerja ladang kelapa sawit.*
- 2) *Sila jawab semua soalan.*
- 3) *Terima kasih di atas kerjasama dan maklumat yang diberikan.*

SECTION A: DEMOGRAPHIC INFORMATION OF OIL PALM PLANTATION WORKERS

Please tick (/) in the appropriated box to indicate your answer.

BAHAGIAN A: MAKLUMAT DEMOGRAFI PEKERJA LADANG KELAPA SAWIT

Sila tandakan (/) di kotak yang sesuai untuk menunjukkan jawapan anda.

1	Gender/ <i>Jantina</i>	<input type="checkbox"/> Male/ <i>Lelaki</i> <input type="checkbox"/> Female/ <i>Perempuan</i>
2	Age/ <i>Umur</i>	_____ years old
3	Marital Status/ <i>Status perkahwinan</i>	<input type="checkbox"/> Married/ <i>Berkahwin</i> <input type="checkbox"/> Single/ <i>Bujang</i> <input type="checkbox"/> Widow/ <i>Janda</i>
4	Education Level/ <i>Peringkat pendidikan</i>	<input type="checkbox"/> Not Schooling/ <i>Tidak bersekolah</i> <input type="checkbox"/> Graduated from high school (SRP/SPM/STP)/ <i>Tamat sekolah menengah (SRP/SPM/STP)</i> <input type="checkbox"/> Technical certificate/ <i>Kem skill</i> <input type="checkbox"/> Graduated from high education level (Diploma/Degree/Master)/ <i>Tamat pengajian tinggi (Diploma/Sarjana Muda.Sarjana)</i>
5	Religion/ <i>Agama</i>	<input type="checkbox"/> Islam/ <i>Islam</i> <input type="checkbox"/> Christian/ <i>Kristian</i> <input type="checkbox"/> Hindu/ <i>Hindu</i> <input type="checkbox"/> Buddhist/ <i>Buddha</i> <input type="checkbox"/> Others, please state/ <i>Lain-lain, sila nyatakan:</i> _____
6	Race/ <i>Bangsa</i>	<input type="checkbox"/> Malay/ <i>Melayu</i> <input type="checkbox"/> Chinese/ <i>Cina</i> <input type="checkbox"/> Indian/ <i>India</i>
7	Work experience in oil palm plantation/ <i>Pengalaman bekerja di ladang kelapa sawit</i>	_____ years
8	Job task/ <i>Tugas pekerjaan</i>	<input type="checkbox"/> Harvesting/ <i>Penuaian</i> <input type="checkbox"/> Manuring/ <i>Pembajaan</i> <input type="checkbox"/> Weeding/ <i>Merumpai</i> <input type="checkbox"/> Pruning/ <i>Pemangkasan</i>

		<input type="checkbox"/> Others, please state/Lain-lain, sila nyatakan: _____
9	Current injury experience on an oil palm plantation/ <i>Pengalaman kecederaan semasa di ladang kelapa sawit</i>	<input type="checkbox"/> Yes/ <i>Ya</i> <input type="checkbox"/> No/ <i>Tidak</i>



Instruction: For statement on SECTION B, C, D, E, F, and G please read for each item and indicate your answer between one (1) to five (5). Your score (1) would indicate you strongly disagree with the statement and score (5) would indicate you strongly agree with respective statement.

Arahan: Untuk pernyataan mengenai BAHAGIAN B, C, D, E, F, dan G. Sila baca setiap soalan dan nyatakan jawapan anda antara satu (1) hingga lima (5). Skor anda (1) akan menunjukkan anda sangat tidak setuju dengan pernyataan tersebut dan skor (5) menunjukkan anda sangat setuju dengan pernyataan berkenaan.

Strongly disagree/ <i>Sangat tidak setuju</i>	Disagree/ <i>Tidak setuju</i>	Average/Sederhana	Agree/ <i>Setuju</i>	Strongly agree/ <i>Sangat setuju</i>
1	2	3	4	5

SECTION B: SAFETY AND HEALTH AWARENESS IN WORKPLACE AMONG OIL PALM PLANTATION WORKERS

Each statement below represents the safety and health awareness in workplace among oil palm plantation workers.

BAHAGIAN B: KESEDARAN KESELAMATAN DAN KESIHATAN DI TEMPAT KERJA DI KALANGAN PEKERJA DI LADANG KELAPA SAWIT

Setiap kenyataan di bawah mewakili kesedaran keselamatan dan kesihatan di tempat kerja dalam kalangan pekerja ladang kelapa sawit.

At my workplace/ <i>Di tempat kerja saya</i>		1	2	3	4	5
1	I am clear about my right and responsibilities in relation to workplace safety and health <i>Saya jelas mengenai hak dan tanggungjawab saya berkaitan dengan keselamatan dan kesihatan di tempat kerja</i>					
2	I know how to perform my job in a safe manner <i>Saya tahu bagaimana menjalankan tugas dengan selamat</i>					
3	I know what the necessary precautions are that I should take while doing my job <i>Saya tahu langkah berjaga-jaga yang perlu saya lakukan semasa menjalankan tugas</i>					
4	I am aware of the importance of adhering to safe operation standards (SOP) to reduce the risk of safety on the plantation					

	<i>Saya sedar pentingnya mematuhi standard kerja selamat (SKS) untuk mengurangkan risiko keselamatan di ladang</i>					
5	I am aware that personal protective equipment (PPE) is important to reduce the risk of accidents at work <i>Saya sedar bahawa alat pelindung diri (PPE) penting untuk mengurangkan risiko kemalangan di tempat kerja</i>					
6	I realize that it is important to report accidents on the plantation <i>Saya sedar bahawa penting untuk melaporkan kejadian kemalangan di ladang</i>					
7	I realized that accidents could happen if I was careless in doing work on the plantation <i>Saya sedar bahawa kemalangan boleh berlaku jika saya cuai dalam melakukan kerja di ladang</i>					
8	I realized that I need to attend safety and health training in the workplace from time to time <i>Saya sedar bahawa saya perlu menghadiri latihan keselamatan dan kesihatan di tempat kerja dari semasa ke semasa</i>					

SECTION C: ATTITUDE

Each statement below represents attitude on safety and health awareness in workplace among oil palm plantation workers.

BAHAGIAN C: SIKAP

Setiap kenyataan di bawah melambangkan sikap mengenai kesedaran keselamatan dan kesihatan di tempat kerja dalam kalangan pekerja ladang kelapa sawit.

In my opinion/Pada pendapat saya		1	2	3	4	5
1	I am always careful in doing things in my workplace <i>Saya sentiasa berhati-hati dalam melakukan sesuatu di tempat kerja saya</i>					
2	I am confident that the personal protective equipment (PPE) while working can reduce the risk of hazardous <i>Saya yakin dengan menggunakan alat pelindung diri (PPE) semasa bekerja dapat mengurangkan risiko bahaya</i>					
3	I will follow my employer's instruction because he has responsibility to reduce exposure of hazards on workers <i>Saya akan mematuhi arahan majikan saya kerana beliau mempunyai tanggungjawab untuk mengurangkan pendedahan bahaya kepada pekerja</i>					
4	I have to follow workplace safety rule to avoid an accident <i>Saya harus mengikuti peraturan keselamatan di tempat kerja untuk mengelakkan kemalangan</i>					
5	I believe that safety training is important to be aware of hazards and risks in the workplace <i>Saya percaya bahawa latihan keselamatan adalah penting untuk mengetahui bahaya dan risiko di tempat kerja</i>					
6	I am confident that by following the safe operation procedures (SOP) set by the farm management can prevent accidents while doing work on the farm <i>Saya yakin dengan mengikut prosedur kerja selamat (PKS) yang ditetapkan oleh pihak pengurusan ladang dapat mengelakkan berlakunya kemalangan semasa melakukan kerja di ladang</i>					
7	I will make sure all used equipment is cleaned and stored back in its original place					

	<i>Saya akan memastikan segala peralatan yang sudah digunakan akan dibersihkan dan disimpan semula di tempat asal</i>					
8	<p>I will report immediately when there is an accident on the farm</p> <p><i>Saya akan melaporkan dengan segera bila berlakunya kemalangan di ladang</i></p>					

SECTION D: SUBJECTIVE NORM

Each statement below represents subjective norm on safety and health awareness among oil palm plantation workers.

BAHAGIAN D: NORMA SUBJEKTIF

Setiap kenyataan di bawah mewakili norma subjektif mengenai kesedaran keselamatan dan kesihatan di tempat kerja dalam kalangan pekerja ladang kelapa sawit.

In my opinion/Pada pendapat saya		1	2	3	4	5
1	My family members reminded me of safety and health practices in the workplace <i>Ahli keluarga saya mengingatkan saya tentang amalan keselamatan dan kesihatan di tempat kerja</i>					
2	My supervisor always reminded me to abide the safety and health rules at the oil palm plantation <i>Penyelia saya selalu mengingatkan saya untuk mematuhi peraturan keselamatan dan kesihatan di ladang kelapa sawit</i>					
3	My colleagues always remind me to wear personal protective equipment (PPE) such as gloves and safety helmet while doing a job <i>Rakan sekerja saya selalu mengingatkan saya untuk memakai alat pelindung diri (PPE) seperti sarung tangan dan topi keledar keselamatan semasa menjalankan tugas</i>					
4	Farm manager always update the information about safety and health awareness to workers <i>Pengurus ladang sentiasa mengemas kini maklumat mengenai kesedaran keselamatan dan kesihatan kepada pekerja</i>					
5	Safety officers play an important role in ensuring the safety and health of employees in the event of an accident <i>Pegawai Keselamatan memainkan peranan yang penting dalam memastikan keselamatan dan kesihatan pekerja terjamin apabila berlaku kemalangan</i>					
6	Training on safety and health in oil palm plantations helped me to be more careful in carrying out my duties <i>Latihan mengenai keselamatan dan kesihatan di ladang kelapa sawit membantu saya untuk lebih berhati-hati dalam menjalankan tugas berkenaan bahaya dan risiko di tempat kerja</i>					

7	<p>News and issues of accidents that have occurred in oil palm plantations made me realize the importance of adhering to safety and health regulations on the plantation.</p> <p><i>Berita dan isu kemalangan yang pernah terjadi di lading sawit menyedarkan saya pentingnya untuk mematuhi peraturan keselamatan dan kesihatan di ladang</i></p>					
8	<p>Awareness campaigns to prevent injuries and accidents made me aware of the risk of injuries and accidents in oil palm plantations</p> <p><i>Kempen kesedaran untuk mencegah kecederaan dan kemalangan menyedarkan saya akan risiko kecederaan dan kemalangan di ladang kelapa sawit</i></p>					
9	<p>The Occupational Safety and Health Committee always reminds me to control the risk of injuries and accidents in oil palm plantations</p> <p><i>Jawatan Kuasa Keselamatan dan Kesihatan Pekerja selalu mengingatkan saya untuk mengawal risiko kecederaan dan kemalangan di ladang kelapa sawit</i></p>					

SECTION E: PERCEIVED BEHAVIOURAL CONTROL

Each statement below represents perceived behavioural control on safety and health awareness among oil palm plantation workers.

BAHAGIAN E: KAWALAN TINGKAH LAKU

Setiap kenyataan di bawah mewakili kawalan tingkah laku mengenai kesedaran keselamatan dan kesihatan di tempat kerja dalam kalangan pekerja ladang kelapa sawit.

In my opinion/Pada pendapat saya		1	2	3	4	5
1	It easy for me to get information about the safety and health in workplace <i>Mudah bagi saya untuk mendapatkan maklumat mengenai keselamatan dan kesihatan di tempat kerja</i>					
2	I am knowledgeable about safety and health in workplace <i>Saya berpengetahuan mengenai keselamatan dan kesihatan di tempat kerja</i>					
3	It is easy for me to follow the rules of safety and health that have been set by the farm management <i>Mudah untuk saya mengikuti peraturan keselamatan dan kesihatan yang telah ditetapkan oleh pihak pengurusan ladang</i>					
4	I always use personal protective equipment (PPE) before carrying out work in oil palm plantations <i>Saya selalu menggunakan alat pelindung diri (PPE) sebelum menjalankan kerja-kerja di lading kelapa sawit</i>					
5	I had no problem attending safety and health training organized by the farm management <i>Saya tidak ada masalah untuk menghadiri latihan keselamatan dan kesihatan yang dianjurkan oleh pihak pengurusan ladang</i>					
6	I have enough awareness and information about safety and health issues in workplace <i>Saya mempunyai cukup kesedaran dan maklumat mengenai masalah keselamatan dan kesihatan di tempat kerja</i>					
7	It is easy for me to make a report if there is an accident on the farm <i>Mudah untuk saya membuat laporan jika berlakunya kemalangan di ladang</i>					

8	<p>The safe operation procedures (SOP) set by the farm management are easy for me to understand</p> <p><i>Prosedur kerja selamat (PKS) yang ditetapkan oleh pihak pengurusan ladang mudah difahami oleh saya</i></p>					
9	<p>I have the knowledge to assist in responding to any health and safety concerns at my workplace</p> <p><i>Saya mempunyai pengetahuan untuk membantu menjawab segala masalah kesihatan dan keselamatan di tempat kerja saya</i></p>					

SECTION F: PRACTICE

Each statement below represents practice on safety and health awareness among oil palm plantation workers.

BAHAGIAN F: LATIHAN

Setiap kenyataan di bawah mewakili latihan mengenai kesedaran keselamatan dan kesihatan dalam kalangan pekerja di ladang kelapa sawit.

In my opinion/Pada pendapat saya		1	2	3	4	5
1	I work accordance with the instructions of plantation supervisors <i>Saya bekerja mengikut arahan penyelia ladang</i>					
2	I remind other workers about the dangers and safety of work <i>Saya mengingatkan pekerja lain tentang bahaya dan keselamatan kerja</i>					
3	I minimize the risks of accidents on the farm by using personal protective equipment (PPE) <i>Saya meminimumkan risiko kemalangan di lading dengan menggunakan alatan pelindung diri (PPE)</i>					
4	I always follow the correct procedures for safe operation procedures (SOP) for plantation work <i>Saya selalu mengikut prosedur yang betul bagi prosedur kerja selamat (PKS) bagi kerja-kerja di ladang</i>					
5	I practice safety rules related to work safety in oil palm plantations <i>Saya mengamalkan peraturan keselamatan yang berkaitan dengan keselamatan kerja di ladang kelapa sawit</i>					
6	I am not joking with colleagues while working <i>Saya tidak bergurau dengan rakan sekerja semasa bekerja</i>					
7	I would wash my hands after doing work on the farm especially after spraying pesticides and before eating <i>Saya akan membasuh tangan selepas melakukan kerja di ladang terutama selepas menyembur racun dan sebelum makan</i>					
8	I did not eat, drink and smoke while working on the farm					

	Saya tidak makan, minum dan merokok semasa melakukan kerja di ladang				
--	--	--	--	--	--

Instruction: For statement on SECTION G please read for each item and indicate your answer between one (1) to three (3). Your score (1) would indicate you don't know with the statement and score (3) would indicate you know with respective statement.

Arahan: Untuk pernyataan mengenai BAHAGIAN G. Sila baca setiap soalan dan nyatakan jawapan anda antara satu (1) hingga tiga (3). Skor anda (1) akan menunjukkan anda tidak mengetahui dengan pernyataan tersebut dan skor (3) menunjukkan anda mengetahui dengan pernyataan berkenaan.

Don't know/Tidak mengetahui	Not sure/Tidak pasti	Know/Mengetahui
1	2	3

SECTION G: KNOWLEDGE

Each statement below represents knowledge on safety and health awareness among oil palm plantation workers.

BAHAGIAN G: PENGETAHUAN

Setiap kenyataan di bawah mewakili pengetahuan mengenai esedaran keselamatan dan kesihatan dalam kalangan pekerja di ladang kelapa sawit.

In my opinion/Pada pendapat saya		1	2	3
1	While on the farm, clothing should always be neat and orderly and avoid wearing loose and thin clothing <i>Semasa berada di ladang, pakaian haruslah sentiasa kemas dan teratur dan elakkan memakai pakaian yang longgar dan nipis</i>			
2	The use of Personal Protective Equipment (PPE) is one of the methods to protect yourself from accidents at work <i>Penggunaan alat pelindung diri (PPE) merupakan salah satu kaedah untuk melindungi diri daripada mendapat kemalangan di tempat kerja</i>			
3	While driving a tractor avoid carrying passengers along and should drive at the lowest speed. <i>Semasa memandu traktor elakkan membawa penumpang bersama dan harus memandu dalam kelajuan yang paling rendah</i>			

4	<p>Make sure the equipment or machines are at a high level of safety and make sure the maintenance of machines and electrical equipment is on schedule</p> <p><i>Pastikan peralatan atau mesin berada pada tahap keselamatan yang tinggi dan pastikan penyelenggaraan mesin dan peralatan elektrik mengikut jadual.</i></p>			
5	<p>Hats should be worn in hot work areas so that workers are not directly exposed to the sudden scorching heat and cause heat stress problems</p> <p><i>Topi perlu dipakai di kawasan kerja yang panas terik agak pekerja tidak terdedah terus kepada panas terik yang mendadak dan mengakibatkan masalah "heat stress"</i></p>			
6	<p>When poisoning weeds should follow the direction of the wind in order to prevent the poison from hitting our body</p> <p><i>Semasa meracun rumput harus mengikut arah angin bagi tujuan mengelakkan racun terkena pada badan kita</i></p>			
7	<p>While doing spraying, be sure to wear a specially prepared cloth or apron, special goggles, gloves and boots</p> <p><i>Semasa melakukan kerja meracun, pastikan kita memakai baju yang telah disediakan khas atau apron, goggles yang khas, sarung tangan dan kasut boot</i></p>			
8	<p>Danger and safety warning signs on the farm must be clear and adequate</p> <p><i>Tanda-tanda amaran bahaya dan keselamatan di ladang mestilah jelas dan mencukupi</i></p>			
9	<p>Reports of accidents or dangerous occurrences must be reported within 7 days to the employer and the nearest Department of Occupational Safety and Health by submitting using an approved form</p> <p><i>Laporan tentang kemalangan atau kejadian berbahaya perlu dilaporkan dalam masa 7 hari kepada majikan dan Jabatan Keselamatan dan Kesihatan Pekerjaan yang terdekat dengan menghantar dengan menggunakan borang yang diluluskan</i></p>			