



# The Identification of Occupational Safety and Health Awareness Factors Among TNB Employees at Jalan Lahat Ipoh, Perak

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## Full Paper

### Article history

Received

26 July 2023

Received in revised form

26 July 2023

Accepted

11 August 2023

Published online

30 September 2023

## Abstract

Awareness in occupation safety and health at workplace are most important factors. The safe side of any workplace happens when precise protocol is applied throughout every process which is carried out. An organizational management system should facilitate its organization and employees by providing defined information of occupational health and safety risks allied with the business of the organization. Factors which are associated with the awareness intensity are more likely hazardous working area, safety and health conditions, lack of emergency plans and etc. This overall research was carried out at Tenaga Nasional Berhad (TNB), Jalan Lahat Ipoh Perak. This research is mainly targeted for the workers of TNB Jalan Lahat Ipoh, Perak includes management and staff. This research is conducted by use of 94 sets of questionnaires which are equally distributed among all the employees. This questionnaire comprises about total of four (4) segments where part 1 consists of demographic information, part 2 consists of employee and occupational safety and health policies. Part 3 consists of organizations responsibilities, standards, and documentation and part 4 comprises of planning, implementation and performance level of OSH in an organization. This study indicates the relationship between employees towards the knowledge of safety awareness at workplace and management of safety measures.

*Keywords:* - Awareness, Occupation Safety and Health, workplace safety

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## 1. Introduction

Safety awareness has a common definition where it is defined as avoidance of any kind of accidents to human beings such as injury or harm. Having awareness of safety is so significant that it comes naturally within all human beings. It is because safety values and beliefs are always cultivated within everyone from a very young age. Despite it is a norm that is practiced globally (Stephen, 2018).

On the other hand, narrowing down the definition of safety awareness in specific work area an organization, Clarke and Cooper has identified safety awareness as one the core of assumptions and beliefs that an organization member hold on the concern on safety issues. The normal

behaviors of the superiors such as the managers and the others work forces in an organization towards practicing the safety collectively is particularly important to be observed. This could help the team to collectively stand on the common ground and ensure to follow the safety awareness practice together. To prevent fatal accidents and injuries that could take place in any work environment (Clarke & Cooper, 2000).

It is a core practice that should be practiced globally in every workplace from all types of sectors and industries. Regardless of every public and private sector, the need of awareness on safety measurements to ensure all possible hazards are taken seriously and precautions are identified and practiced in an organization by the staff.

Proper safety awareness will be achieved in an organization when there is a proper management system being practiced in the organization within the staff. They will need to ensure that, the staffs understand the importance of ensuring the safety and practicing its values and beliefs on the common ground when they are in the organization. Safety policies and safety rules and regulations must be taken seriously by the management firsthand before it is cultivated within the other work force in every organization.

Different organizations and sectors have different safety and health policies that are implemented by the management to be practiced. For example, manufacturing industries have higher and tedious physical safety rules and regulation implemented since there are possibility for major hazards to take place when staffs work along with huge machineries. But looking into the organization from the management industry has different safety and health policies since they do not work with machinery. But they could be exposed to hazards such as wiring short circuits, improper carpet installations, dust and heat prone areas and many more (Frankfurt, 2018).

To ensure all the organizations from different industries and sectors has been following the right safety and health policies, a public health agency named OSHA, Occupational Safety and Health Administrations have been providing extensive safety and health guidelines and safety policies for every place and different organization. They help to identify hazards and necessary precautions to be taken. The OSHA believes in the right to a safe workplace is a basic human right, and workers should not have to choose between their life or their job, OSHA 3302-01R 2020.

The Malaysia, Organizational Safety and Health Act (1994) provides a legitimate guidelines, rules and regulations and policies that need to be implemented and cultivated within all the organizations, workplaces, and staffs and to encourage a tedious and higher level of safety and health precautions.

The OSHA act also ensures that the importance of the awareness of safety and health reached to all organizations and industries effectively and widely. The act emphasizes safety and ensures that the guidelines and policies that they have implemented have been strictly followed by the organization and industry. The OSHA act also implemented the regulations into the law, to ensure that this regulation is taken seriously and being practiced strictly in all workplaces by all work forces. It works as a self-regulated scheme in the law, where the guidelines are amended accordingly to the organization and industries. The main mission of the OSHA Act is to ensure safe working environment in all workplaces and within all Malaysian employees.

Regardless of every workplace, it has its own risk, it is OSHA main mission to ensure every workplace that an employee works will face no risk in on injury or life. Not only by helping the employees and employers to identify the hazards in their workplace but also to ensure that the guidelines and rules and regulations that is implemented

accordingly is being followed by the employees effectively. This is where the needs of awareness programmers by OSHA being shared widely to employers and employees in Malaysia.

The awareness programme of Safety and Health in the workplace will help to minimize the risk of possible diseases, fatal accidents and injurious to take place in the work site both indoor and outdoor. It is the duty of the employers to ensure the employees in their organization are well protected on the worksite and they are exposed to the most minimal level of risk to their health and life.

The objective of this study is to investigate the level of awareness on the safety and health within the staff in the TNB Jalan Lahat, Ipoh Perak.

## 2. Methodology

This research study was conducted at one of the main branch states of Perak which is also known as a “Wisma TNB Ipoh”. This branch is in the central city of Perak and precisely at Jalan Lahat Ipoh. The sampling method which has been used for this research is “Probability Sampling” method. Probability sampling is defined as a sampling technique during which the researcher chooses samples from a bigger population employing a method supporting the idea of probability. Probability sampling uses statistical theory to randomly select a small group of individuals (sample) from an existing large population then predict that each one their responses will match the general population (Nayeem, 2017).

By implementing this method, researchers can split the set of questionnaires data which is known as extensive population into smaller groups to represent the analysis of entire population without any overlap. This questionnaire sampling method is also classified by few factors such as age, gender, education as well as employment position under TNB Ipoh branch.

Employees are categorized into 4 main divisions which are Management, Technical Worker, Non-technical worker, and private sector (cleaning, gardening & security). Thus, a questionnaire-based survey was implemented for them. A set of 94 questionnaires are equally distributed among all the employees working under Tenaga Nasional Berhad Ipoh Branch respectively. Moreover, the questions given were carried out to understand the level of awareness of staff and management’s safety based on the knowledge of the OSHA act 1994.

## 3. Result and Discussion

From the data collection based on the questionnaires, a total of 94 participants were voluntarily joined and out of 94 questionnaires which been administered, all were filled in and returned. Based on the 94 questionnaires received, 12 questionnaires had incomplete information which directly affected the results analysis. So, the overall response rate to this survey represents 82.0%, which is

believed to be a perfect conclusion for this research. According to Nigel, 50% response rate is basically sufficient, 60% good and above 70% rated excellent (Nigel, 2019).

### 3.1 Participants Characteristic Analysis

The first key element of this demographic segment research is gender. The majority participants who participated in this research are 52 males which comprised of 63.41% and followed by 30 females with an average of 36.59%.

Age plays an important role in research to identifying variety perception by indicating the level of maturity. Ages are divided into three (3) main categories such as 25-35 years old, 36-46 years old and followed by 47-60 years old. Participants who are aged from 36 – 46 years old comprise higher percentage of results which is 37.8%. The second highest percentages of participants are aged from 25-35 years old, which involves 32.9%. While the minority of participants are aged 47-60 years old, and their percentage of analysis will be 29.3%.

Another demographic input of this research is working position or best to say their designation. Each is categorized into four (4) phases such as Management, Technical, Non-Technical and Private sector (Cleaner, gardener & security guards). The highest evaluations are taken from the technical department which comprises 30.5% of total respondents. The second highest department would be non-technical, which encompasses about 26.8% and followed by Management which comprises 24.4%. The least proportion of respondents is from the private sector where they occupied about 18.3%. Private sector respondents are comprised of security guards, gardeners, and cleaners.

Education plays an important role in this evaluation, and they're equally divided into three (3) main categories which are known as SPM-CERT, Diploma-Degree, and Master-Doctorate. When comparing with education factor, the highest respondents are from Diploma-Degree background which encompasses 42.7%. While Master-Doctorate respondents comprise 32.9% and the minority of population are from SPM-Cert education which is also comprises of 24.4%.

Working experience input is also included in this research. The purpose of implementing working experiences is to identify their overall experiences which envelopes into their employment journey. Besides that, researchers can easily evaluate the analysis by use of extensive view of professional association of employees towards organization based on given profession. Working experience was divided into four (4) such as: less than 5 years, 10 years, 15 years and more than 20 years. The highest working experiences involved in this research is 15 years which comprises of 31.7% of respondents. The second highest respondents of this research are who worked for more than 20 years which comprises about 26.8% of staffs. Thirdly, a fraction of 25.6 % of respondents have 5 years of working experience and

lastly, the minor respondents are comprising of 15.9% who are worked for 10 years joined this study.

### 3.2 Employee and Occupation Safety and Health Policy Analysis

The relationship between employees and occupation safety and health policy, it is necessary to understand that it is a way of organizing the cooperation measures between both parties.

86.59% of TNB Ipoh branch employees agree that their working environment and occupation are safer. Among them about 13.41% reported that their working environment is not safer. As a result of the awareness of OSH policy, most employees are understanding the key concept of implementing OSH policy at workplace. An average of 78.05% of people reported that their organization does implement OSH policy. While 21.95% of employees are not aware that their company has an OSH policy which really could have a bad impact in future. It is because, OSH policy helps to minimize the effects of hazards as well as benefit the company too.

73.17% reported that they received proper training facilities in understanding OSH implementation at workplace. 26.83% of employees stated that they didn't receive training facility on OSH which is unacceptable because it is necessary for an organization to provide them with proper training to avoid any hazards-based impacts.

93.90% of employees reported that the organization has distributed OSH policy to employees equally in conjunction with safety of workplace environment. Providing an appropriate source of information for employees in the workplace enables them to work logically to avoid or manage any state of danger. On other hand, an organization should provide adequate protection tools for their employees to protect them against any health or safety issue while they're on the job. 97.56% of employees reported that their organization has a sufficient set of protection tools to protect them all the way. It shows that employees truly understand the nature of organization.

### 3.3 Organization Responsibilities, Standards & Documentation Analysis

Employers have a responsibility to provide a safer workplace for their employees under OSH laws and regulations as management and organization are interrelated. Employers should ensure that their organizational structures help to realize objectives and improve its OSH performance even beyond legal requirements.

Organization plays important roles in setting up OSH policies for the betterment of their employees. Every organization should consist of its own OSH committee team to serve the organization's safety culture. OSH committee team are able increase the awareness of safety at the facility. Therefore, employees at TNB Ipoh branch agree that their company have OSH committee team to integrate the safety and health priorities into the working

corporate culture which comprises about 92.68%. They're able to help by providing adequate training for employees and management while about 7.32% of employees denies those statements.

Employees also reported that their organization's OSH committee endorsed a safer and healthy working culture environment for themselves which is comprises about 97.56% and only 2.44% employees denied the statement. 56.10% of employees reported that their higher officials received proper formal OSH training before the organization mutually endorsed the OSH act. While an average of 43.90% employees denied it as they didn't aware or understand the concept of OSH laws. For an organization to endorse with ISO certified, the employers or management should undergo many phases of evaluations to be granted. As TNB is known as Multinational Companies, they are now certified with MS ISO 9001: 2000 Certification.

79.27% of employees reported that they agree that management have organize their competencies of OSH are maintain well or best to say up to date. Management should always keen the competencies of their staff as it will directly increase a good productively at workplace.

48.78% of employees agree that they have undergone medical surveillance programs such as DOSH, OSHA etc. while another 51.22% of employees denies that they didn't go for medical test. This indicates that one-half of them didn't take medical surveillance program.

95.12% employees have reported that TNB is certified with proven competence system like ISO, OSHMS and about 4.88% employees have denied it. TNB has won national recognition by the Government of Malaysia through the standards of MS ISO 9001, MS ISO/IEC 17025, MS ISO/IEC 17020.

### 3.4 Planning, Implementation & Performance Analysis

This segment of the questionnaire is about how an organization does plan, implements, and performs strategies in accordance with OSH implementation. An average of 81.71% employees reported that TNB does perform Hazard Identification, Risk Assessment as well as risk control and another 18.29% has denied the statement. For risk assessment factor, TNB has launched TNB-Group wide Risk Assessment practice to identify the key issue of risks.

TNB emphasizes health risk assessment before assigning to specify job and majority employees answered "Yes" with an average of 63.41%. It is compulsory for an organization to send their employees for health risk assessment test to identify their potential for health information so that they're eligible to enter for the assigned work. Furthermore, employees of TNB also stated that their organization does have work procedure associated with the scope of the services and 89.03% employees agreed with the given statement.

An average of 60.98% of TNB employees reported that their organization does consist of the Emergency Response Plan (ERP). Specific contingency plans are in-situ and are regularly tested to ensure the continuity of critical functions and services within the event of an emergency.

Question 19 emphasizes noncompliance notice related to OSH by TNB and all of them answered "NO" which comprises 100%. While question 20 focuses on fatalities incident at TNB workplace. Most employees answered "Yes" which comprises of 100.00%. Employees indicates that there are not any death incidents happened due to any misconduct. Question 21 emphasis on Lost Time Injury (LTI) at TNB, Ipoh Branch. All employees answered "No" as there is no Lost-Time-Injury happened even though employees worked more than 12 hours for any specific assigned job.

## 4. Conclusion

The conclusion indicates that the level of implementation of Occupational Safety and Health as tool is high. This indicates that the safety policy on OSH which followed in organization serves as a good guide for implementation of OSH Management System and adequate allocation of resources. The exposure of OSH among organization employees is well structured and maintained.

A safe working environment and occupation will lead employees to pursue their task confidently without any fear or second thoughts; based on the conducted survey 86.59% of TNB Ipoh branch staff stated that the feel safer and confident to work while the 13.41% reported their working environment neither safe nor they confident to work there. To overcome this the management should thoroughly reanalyze their OSH policy again to avoid any unethical risks at the workplace. It is because, OSH policy helps to minimize the effects of hazards as well as benefit the company too (Baron, 2019).

To improve and implement OSH in between those not aware of it and as a legal and important requirement, TNB should expose the employees to OSH by providing them with proper training to avoid any hazard-based impacts.

Other than awareness, TNB also needs to ensure the safety of employees by giving them necessary kits such as, harness, first aid kit, fire spray, electric resistant glove, safety boots etc. These types of safety elements will ensure the safety of employees which will make them confident and feel safe while completing their task. Employees should be aware of what will happen if they neglect the proper PPE, don't report hazards, or fail to recognize how their own states of mind affect their safety. A strong PPE training is to ensure protective equipment is used every time to thrive a safety oriented, positive culture (Ramlan, 1977).

## Acknowledgement

This study could not have been possible without the approval of the authority of TNB Jalan Lahat, Mr Aanathen Patchimuthu where data was collected and the collaboration who participated in this research.

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