

PROACTIVE LEADERSHIP AND STRUCTURED SAFETY PRACTICES:
ENHANCING OCCUPATIONAL HEALTH AND SAFETY PERFORMANCE
THROUGH MANAGEMENT INVOLVEMENT

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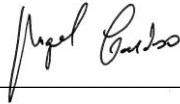
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ABSTRACT

PROACTIVE LEADERSHIP AND STRUCTURED SAFETY PRACTICES:
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Occupational health and safety are pivotal in maintaining a sustainable and productive work environment. It is also no longer viewed as a back-office compliance activity but also a critical pillar in strategic management of modern enterprises. This dissertation investigates the role of how proactive leadership, managerial accountability, and structured workplace safety protocols collectively shape the organizational performance and employee well-being. The study employed a quantitative cross-sectional survey design, collecting data from 250 participants representing various designations, industries, and experience levels. A structured questionnaire comprising 26 health and safety statements was used to assess two key dimensions of health and safety management and practices.

Findings highlight a significant alignment between high-performing organizations and those that embed safety into their operational standards. The study identifies consistent trends where strong executive oversight, workforce participation in safety governance, and

investments in training and emergency preparedness directly contribute to reduced incident rates, enhanced workforce morale, and improved productivity. Through descriptive statistics, ANOVA, and correlation analysis, the research confirms the hypothesis that management-driven OHS integration yields measurable business value.

This research not only contributes to academic literature on occupational health and safety management systems (OHSMS) but also provides a practical blueprint for executives aiming to align workplace safety with corporate objectives, risk mitigation strategies, and sustainable development goals. In an era of heightened ESG expectations and regulatory surveillance, the study underscores the competitive advantage gained by organizations that treat OHS as a core business function rather than a statutory obligation.

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LIST OF ABBREVIATIONS

SME's	Small and Medium Enterprise
OHSMS	Occupational Health & Safety Management System
OHS	Occupational Health and Safety
H&S	Health and Safety
SOPs	Standard Operating Procedure
KPIs	Key Performance Indicators
PPE	Personal Protective Equipment
ILO	International Labour Organization
WHO	World Health Organization
BOCW	Building and other Construction Workers(Regulation of Employment and Conditions of Service) Act, 1996
OSHC	The Occupational Safety, Health, and Working Conditions Code
ISO	International Organization for Standards
HSE	Health & Safety Executive
ESG	Environmental, Social And Governance

CHAPTER I: INTRODUCTION

1.1 Introduction

The term “OCCUPATIONAL HEALTH AND SAFETY” refers to the social, mental, and physical well-being of all employees in various sectors of the organization. This has been the most important factor of human concern. The motive is to provide a safe working environment for the respective employees, as well as to preserve the well-being of people and the surrounding community. The discipline covers a broad distribution, involving multiple distinct specializations. The introduction sets foundation for understanding how OHS policies align with organizational goals. It emphasizes compliance risk management, and employee welfare with key factors in sustaining productivity and profitability.

Industrialization has brought with it a wake of several problems, such as accidents at the workplace and occupation-related illnesses. The construction/manufacturing industry presents an overall high level of accident rate, both fatal and non-fatal, and suffers from far bigger impacts when incidents occur. OHS plays a vital role in shaping organizational performance, as it directly impacts several key performance indicators(KPIs). A safe work environment not only reduces the frequency of workplace accidents but also leads to lower occupational costs, decreased employee absenteeism, and improved staff retention. These factors collectively contribute to the overall efficiency and sustainability of an organization. The importance of OHS cannot be exaggerated, as workplace hazards and poor OHS practices can have drastic consequences.

In the context of modern dynamics, OHS has emerged as strategic essential. OHS represents a fundamental pillar in the structure of effective and responsible business practice. While ensuring the protection of the health of the employees, providing a good

working environment, reducing the risk in the working environment, detecting undesirable events before they happen, and preventing their occurrence(Şenol, 2019). Effective OHS practices are essential to prevent workplace hazards, reduce risks, and promote a safe and healthy work environment. This chapter sets the foundation for the study by exploring how management involvement and workplace practices form a collective model that supports a long-term business sustainability.

The increased complexity of industrial operation, fast -paced technological evolution and a growing focus on environmental, social, and governance (ESG) accountability have brought workplace safety to the forefront of boardroom discussions. However, gaps remain in how organizations translate policy into practice, especially when management fails to actively engage or empower employees in the safety ecosystem. By positioning OHS as a core operational enabler, this research addresses the critical need for integrated leadership and structured practices that align safety with corporate mission and stakeholder expectation. Poor health and safety practices can lead to operational disruptions, increased compensation costs, legal liabilities, and reduced employee morale. Conversely, proactive OHS enhances brand reputation and investor confidence,

1.2 Research Problem

It has been observed that many institutions and companies often focus mostly on occupational health and safety policies documentation and fail to understand the shortcomings of what is necessary to improve a better understanding of good safety culture within the organization. Companies seldom identify their employees during effective management of OHS. The safety management system is adopted by a small percentage of employees, thereby resulting in incompetent adaptation and reporting incidents. Moreover,

various safety concerns, such as risks, near-misses, and incidents, often go unreported. This is primarily because the responsibility for reporting events solely lies with the employees.

Lack of adequate resources represents a significant barrier that can adversely affect the implementation and effectiveness of OHS measures. It is the responsibility of management to ensure the provision of adequate and appropriate resources—encompassing qualified personnel, sufficient time, necessary financial allocations, relevant information, safe operating procedures, appropriate facilities, and properly maintained tools and machinery—to safeguard employee health and safety and to enable operational efficiency(Irwin et al., 2023). The lack of desire by the organization to involve and engage employees to drive the morale of the employees towards safety requirements is the cause of failure in the organization. The necessary information on work-related issues can only be provided by the employees handling the task to improve the safety conditions.

1.2.1 Workplace Changes

The fast development in technological advancement and the use of improved machinery and architectural upgrades are a cause of change in workplace activities. The employees may not be equipped of supportive to support the change, which could pose a significant risk to themselves as well as society. The majority of construction-related accidents are caused by the lack of adequate safety training, as well as negligence in making the workplace safer or creating a safe environment to execute the tasks(Azil & Jabar, 2022).

1.2.2 Demographic evolution

It has been observed that the aging workforce is uncertain to adapt to the technological development and use of improved machinery, depending on their learned knowledge and or their past life experience. The attitude and the mindset of the aged workforce are very hard to explain to get them to transition in adapt to new technology. Also, there is the younger generation who are less experienced but may have the right qualifications still lack the practical understanding of the work processes.

1.2.3 Economic instability

In the commencement of this century, the world has seen economic downturns through the 2008 economic recession and the 2019 COVID pandemic. These situations have created an unforeseen economic uncertainty, making it challenging for organizations to make practical decisions and invest in the development of the organization's safety culture.

1.2.4 Skill set development or training needs

Upskilling the employees at the workplace is also a major concern for the organization, as it comes with a price. There is a mindset within the organization that they would like to hire a new employee with all the skill set achieved by the employee in the respective field of work, so that the company does not need to invest in the employee's development. Likewise, the employee will assume that it is the responsibility of the organization that it should provide the necessary skill training required for the execution of the task for which the employee is hired to perform. Because the employees are hired upon having their basic educational qualifications, which is a basic need for securing a job.

There is a huge challenge for organizations to develop the capability and confidence of their workforce to operate the equipment safely with the advancement in technology. There is also a significant impact on the physical and mental health of the employees, which in turn affects their performance and well-being. Mental stress is also one of the factors that can lead to workplace accidents.

1.3 Purpose of research

The purpose of this research is to understand and aim towards the following concepts in the field:

The organised implementation of occupational health and safety policy and procedure in safety in an organization/institution and the drawbacks/failure to implement the same for the better performance of the company. Promoting Worker Health and Well-being focuses on understanding the effects of work-related stress, exposure to harmful substances, and ergonomics on workers' physical and mental health. It also promotes strategies for enhancing overall worker wellness. Improving Safety Standards and Regulations plays a critical role in shaping workplace safety standards and regulations by providing evidence-based recommendations. It supports regulatory bodies in developing laws and guidelines that protect workers. Training and Education in OHS also lead to the development of training programs and educational resources to teach both employers and employees about safety protocols, risk management, and healthy work habits.

The provision acquired by the employees is suitable and sufficient to execute their task in the worksite without putting their life at risk or causing any damage to self or property and the environment, also not failing to consider the people living in the vicinity of the companies. Identifying Risks and Hazards helps identify potential physical, chemical, biological, ergonomic, and psychological hazards that could harm workers. This

includes assessing workplace conditions and practices that could lead to injuries or illnesses. Developing preventive measures aims to develop and evaluate strategies, technologies, and practices to prevent accidents, injuries, and health issues. This encompasses the development of a safer workplace, tools, and operational procedures. Reducing workplace injuries and fatalities by understanding the root causes of accidents, research aims to reduce workplace injuries and fatalities.

1.4 Significance of the study

The necessity of a benchmark is ideally set to ascertain the compliance of occupational health, safety, welfare, and social well-being of all employees in the respective occupations. Ensuring a safe work environment for employees is both a primary legal obligation and an ethical duty of an organization. The evolution and successive progression in technology and natural changes, along with the persistence of unsafe and environmentally coercive working conditions, have served to emphasize to establish a secure, healthy work environment, and to forge ahead a coherent safety culture within the workplace. Most of the accidents do get recorded, although some go unnoticed; these accidents have resulted in death and or damage to the property of the organization concerned. The study adds to the existing knowledge on OHS, providing new insights and perspectives. This also deepens the understanding of the complicated factors influencing the OHS outcomes.

The study findings can form strategies that could improve safety and reduce incidents at the workplace. By identifying those factors that could promote employee well-being, this can contribute to creating a better, improved work environment. Also, the study can be well informed policy and well predominant decisions which would lead to effective OHS management.

The construction workforce is composed of skilled, semi-skilled, and unskilled labourers working in teams, with varying experience levels and awareness of occupational health and safety issues(Hussain et al., 2024). By reducing workplace incidents, the organizations can minimize costs associated with workers' compensation and medical expenses, and loss of productivity. Organizations that prioritize OHS boost their reputation, appealing to investors with great talent. Cost-effectiveness and Productivity, effective safety programs, informed by research, can reduce absenteeism, medical costs, insurance premiums, and lost productivity due to workplace injuries. OHS research supports businesses in creating cost-effective safety programs that benefit both employers and employees. This can also promote improved public health and well-being by reducing workplace injuries. This will also support sustainable development through decent work and good economic growth.

1.5 Research Purpose and Questions

This study aims to investigate the importance of OHS management involvement and technology adoption in improving workplace safety and health outcomes. Research intends to help the effective implementation of optimized safety protocols at the workplace for the well-being of all the employees deployed for any tasks, irrespective of the tasks undertaken to accomplish the job. The importance of management's participation and commitment will directly influence the development and embrace the need to enforce OHSMS and achieve the goal of “zero harm.” Identify Workplace Hazards to systematically identify and assess potential risks and hazards in the workplace, including physical, chemical, ergonomic, biological, and psycho-social factors. To gain a deeper understanding of how these hazards can impact worker health and safety, and to pinpoint areas where interventions are needed. Develop preventive and protective strategies to

design and implement effective preventive measures and safety technologies to reduce or eliminate workplace risks. To reduce the incidence of work-related injuries, illnesses, and fatalities through the development of best practices, guidelines, and protective tools. This also facilitates a deeper exploration of the relationship between management commitment and the effectiveness of OHS performance.

Improve workplace safety regulations and standards to generate evidence that informs the development or improvement of regulations, standards, and safety protocols. To create policies and regulatory frameworks that are based on scientific evidence, ensuring they are effective in safeguarding worker health and safety. Enhance worker health and well-being by knowing the requirement that could be impacted of work-related stress, long hours, poor ergonomics, and exposure to harmful substances on workers' physical and mental health. To promote holistic health approaches and interventions that support workers' well-being, including physical, emotional, and psychological aspects.

Evaluate the effectiveness of safety programs to assess the effectiveness of existing safety programs, training, and initiatives in reducing accidents, injuries, and illnesses by identifying areas of improvement and creating more efficient safety interventions, ensuring the highest level of protection for workers. Promote occupational health education and training to create and evaluate educational resources and training programs that help workers and employers understand safety risks and best practices. By promoting awareness and knowledge of OHS, empower employees to make informed decisions and take active responsibility for their health and safety in the workplace. This could also help in investigating the employee perceptions of OHS practices, including their experiences, concerns, and suggestions for improvement.

Advocate for a safety culture to foster a culture of safety within organizations by promoting leadership, employee involvement, and continuous improvement in safety

practices. Encourage proactive safety behaviours, reduce complacency, and ensure that safety is prioritized at every organizational level. Minimize the economic and social impact of work-related injuries that could cause economic consequences of workplace injuries, illnesses, and fatalities, and explore strategies to mitigate these costs. This could reduce absenteeism, insurance costs, and healthcare expenditures while improving productivity and reducing financial losses for both employees and employers.

Investigate emerging risks and new technologies for exploring new and emerging risks associated with technological advancements, new industries, or changing work patterns. Knowing potential hazards introduced by new technology or work practices, and developing strategies to address them effectively. Address psychological and social aspects of work to understand psychological and social dimensions of work, such as stress, bullying, and work-life balance, through which strategies can be developed that improve the mental health and social well-being of workers and reduce the negative impacts of psycho-social hazards. Promote sustainable and healthy work environments by exploring the connection between workplace design, sustainability, and health. Thus, promoting environmentally friendly and sustainable work environments that also prioritize the health of workers.

To develop a suitable work environment in the organization, it is necessary to find an effective undertaking of the following:

- Organization/management engagement towards occupational health and safety of its employees and the general public.
- Requirement of proactive measures to avoid any accidents or any sort of emergencies that may lead to loss of life or property.

CHAPTER II: REVIEW OF LITERATURE

2.1 Theoretical Framework

A theoretical assessment of “Occupational health and safety management” in an industry/organization by its effective implementation of regulations, along with its engagement to understand its impact through analysis of applicable theories on the topic. In the event of technological advancements on a day-to-day basis, there is a need for improvement in the actions to be taken to consider the same on a regular basis. The research determines an individual’s behaviour that is driven based on intentions, attitude, and subjective norms. Here, attitude can be understood by employees’ beliefs about the privileges and importance of OHS practices, and subjective norms can be defined as organizational culture and management commitment to OHS. The framework is supported by the hypothesis that effective H&S management and practices will positively develop employee engagement and organizational interaction through the mediating role of intention and perceived norms.

Based on the lessons learnt from the incidents in the past, there is a continuous room for improvement and development. The understanding of the definitions below will provide sufficient knowledge to conceptualize the research based on the well-established theories and models. The literature review incorporates existing research to perceive the empirical findings in this study, focusing on the role of management in OHS and its influence on the overall workplace.

This chapter reviews the theoretical aims that frame OHS as a business strategy. Drawing on the theory of reasoned action, the technology acceptance model, and human society theory, the literature highlights how employee attitudes, managerial intent, and organizational norms influence health and safety practices. Key themes include the role of

leadership in shaping safety culture, the strategic value of OHSMS in achieving operational excellence, and the behavioural economics of safety compliance. Studies reviewed confirm that management's perceived commitment to safety, coupled with proactive communication and structured engagement, significantly impacts employee behaviour. Emerging technologies—such as wearable monitoring devices and smart audits—are transforming OHS into a data-driven function. However, the human factor remains central. The literature confirms that sustainable safety performance is a function of leadership integrity, organizational learning, and cultural adaptation.



Figure 2.1: Health and Safety Conceptual Model.

2.1.1 Organizational Intent

Occupational health and safety can also be considered the backbone of any industry or organization. Not only does it keep the employees safe, but it also keeps the business moving without loss in segments. Establishing a protocol in place will create a safe work environment, protecting employees and the business. The importance of management commitment and involvement in OHS is fundamental to an organization. The potential impact of OHS practices such as management commitment, workforce involvement, and empowerment in OHS is a fundamental driver of OHS performance (Agumba & Haupt, 2018). OHSMS practices significantly impact employees' knowledge, skills, motivation, decision-making abilities, attitudes, and perceptions.

The review shows that investing in OHS yields long term financial returns through decreased accident rates, lower insurance premiums and improved workforce stability. It is suggested that the effective implementation of the Occupational Health and Safety Management System (OHSMS) can have a significant impact on both human talent management and organizational performance (Navarro Claro et al., 2025). Most organizations offer an employee orientation training program coordinated by the human resource department that provides a fully developed formal training program for all new employees, regardless of whether they are new to the organization. The value of H&S induction training emanates from its ability to change workers behaviour, improve worker knowledge acquisition, H&S culture and accident rate (Rantsatsi, 2024).

2.1.2 Workplace and Employee Resources

Employers are legally and ethically obligated to ensure the provision of adequate welfare facilities, appropriate training, and a safe health work environment for all employees. There must be enough restrooms, a clean workplace with sufficient ventilation and well-maintained tools and equipment, and obstruction-free work floors, and protect the employees from extreme weather. It is learned that the problem experienced by the construction industry in OHS also affects the welfare of workers. Focusing on basic welfare facilities provided in construction sites which are temporary accommodation, sanitary facilities, kitchen, canteen, first aid and medical facilities, drinking water and washing facilities(Mohhar et al., 2024).

The need for upskilling/educating employees at the workplace through training is one of the key indicators of the performance of its employees at the workplace.

This can not only enable effective work results but also help reduce accidents.

This training can be effective as there will be technological advances in the execution of works, which might have been carried out over the years to follow.

Through training, it addresses employee weaknesses and creates a more knowledgeable workforce to work more independently and efficiently. A key issue is the lack of awareness among equipment operators regarding potential workplace hazards(Mayank Tiwari & P. S. Tathod, 2025). Therefore, trainings are the most important schemes to achieve developed employee skills, knowledge to perform their job, and make worker skills fit job needs.

2.1.3 Management Obligations

An occupational health and safety management system incorporates health and safety policies, systems, standards, maintains records, and implements health and safety activities. The identification of hazards and risks arising in or from the workplace and the assessment and control of the associated risks that could impair the health and well-being of any or all workers is the key principle. Employers are encouraged to make suitable arrangements for the establishment of OHS&MS.

Workplace inspections are found to prevent incidents, injuries, and illnesses through thorough examination. Inspections also help to identify and record corrective action. A duly appointed health and safety representative fulfils the requirement of worksite safety inspections. Although it is in the best interests of the company that there should be a system for the employees of the company to provide input on the safety inspections regarding their work execution. The important issue in a workplace inspection is to identify if the system is operational and receives suitable inputs and necessary results. When conducting workplace inspections, it is important to consider the advantages of implementing cross-inspections. This is where people swap around inspection duties between different areas of the workplace to provide a new set of eyes to identify possible hazards and accident causation factors that could be overlooked or underrated through familiarity or acceptance(Ayeabu et al., 2023).

Assessment of a company's system, procedures, and policies which are related to employee occupational health and safety well-being to ensure compliance with the laid-down regulations. Audits are primarily to check the effectiveness of the various programs; they do not take the regular facility of regular inspections. A safety audit examines and determines whether or not the company's daily activities

and processes confirm to their planned health and safety arrangements as well as the laws of the state/government(Emmanuel et al., 2021). For each apparent violation found during inspection the compliance officer is responsible to discuss it with the management regarding the nature of violation, possible measures the company can take to correct the violation condition, possible abatement dates the firm is required to meet and the penalties that could be issued(G. Mujtaba & A. Kaifi, 2023).

The organization must also establish and maintain a process to identify potential emergency scenarios. Response to any environmental or any triggering through human intervention. Trained competent personnel are to be available to act and participate in any case-specific emergency scenarios. Upon discovering a violation, may issue a prohibition notice instructing the undertaking stating that in the event there is a risk of injury to personnel and to cease giving rise to this risk until the corrective action outlined in the notice has been taken into consideration. Every organization has the obligation to provide training, supplies, and procedures for first aid in need.(Ebenezer et al., 2023).

2.1.4 Results And Performance Outcome

The analysis of safety processes and procedures determines the system's functionality. The identification of levels of risks, potential hazards evaluation of safety policies and regulations, and the conduct of incident/accident investigations. The performance result aims to reduce all or any sort of accident which may result in loss of life or property by improving the work environment, increasing efficiency and productivity with resources to provide solutions. The deprivation of a safe and healthy workplace results in illness or injuries to employees can subsequently be a

cause for property damage. A safe workplace is subject to lower illness/injuries, reduced absenteeism, increased productivity, and quality, and raised morale among the employees.

There is a legal obligation to record and report any incidents/accidents to ensure the safety and well-being of individuals, as well as to facilitate a suitable investigation and consider compensation claims. Anyone injured at work must inform the employer and record information on the register, with the information detailing the occurrence of the incident. The concerned authority/organization must conduct a thorough investigation into the incident to find the causes and effects of the same. It has also been observed that in the construction industry, major of the accidents are not reported and documented. Support is needed from the workers in the reporting of occupational incidents. A confidential reporting system (CRS) allows reporters to report concerns or problems in confidence without the fear of blame or reprisals(Han et al., 2024).

A program that can uphold the morals of the employees is through an incentive program that may include awards and or recognition for their performance or contribution in the field of safety. This not only applies to the organization but also to its employees. This system will definitely help in building a positive safety culture in the workplace. The performance benefits and incentives are to be carefully planned to support the organization's safety goals and objectives. Satisfied employees tend to be more committed, engaged, and productive, ultimately contributing to the overall success of their organizations. One of the pivotal elements influencing job satisfaction is employee recognition—an organizational practice that acknowledges and appreciates employees' contributions, efforts, and achievements(Vidushi, 2025). It is always the responsibility of the

contractor/organization to accomplish a job without any incidents. The regulations determine the standards of safety to ensure that the performance and targets are achieved. Due to awards and incentive schemes, it is found that the workers' enthusiasm and creativity have reduced incidents and unsafe behaviours(Feng et al., 2023).

2.2 Theory of Reasoned Action

A psychological model that would explain how individuals make decisions and behave based on attitude and subjective norms, and how employees' perception influence their safety behaviour. Workers across the construction sector are exposed to a wide range of health hazards and risks, which may include chemical, mechanical, physical, biological, and social hazards. Table 2.1 displays assumed statistics on the accident cases. The TRA can be applied to understand how employees' attitudes and perceptions influence the employee's safety behaviour in an organization.

The TRA can be interpreted as how an organization's intent shapes and establishes occupational health and safety among employees. An organization is subjected to the strategic commitment and value-driven purpose that a company conveys through its policies, leadership, and workplace culture.

2.2.1 Attitudes formed by the Organization

If an organization fails to demonstrate its commitment to H&S through structured policies, transparent communication, or leadership modelling, it will negatively impact employee attitude. E.g., regular safety training and mock drills conducted might convey a message that the organization is seriously concerned for

its employees, also, providing needful PPEs and availability of medical health schemes will ensure that the organization values safety among employees.

2.2.2 Subjective norms supported by Organizational culture

The organization also intends to set normative expectations in H&S for its employees at the workplace. Employees incorporate these norms when the higher management employees set a positive example or behave as a role model for safe behaviour, safety standards are acknowledged and rewarded, and violations in safety are consistently addressed. These norms will create an environment where H&S are morally expected and thus increase understanding to comply.

2.2.3 Behavioural intentions of organizational involvement

Strong organizational involvement refers to clear behavioural expectations. Employees are most likely to adopt practices not just based on an obligation towards safety but also out of alignment with organizational values. The intentions of organizations are reflected based on proactive reporting of hazards, voluntary participation in safety programs, and reduced resistance to inspections and audits.

Table 2.1: Accident statistics across India (Govt. Of India)

Accident Cases	Statistics %
Fall from height	42%
Fall of materials	13%
Electrocution	11%
Moving Equipment	9%
Soil Collapse	4%
Others	11%

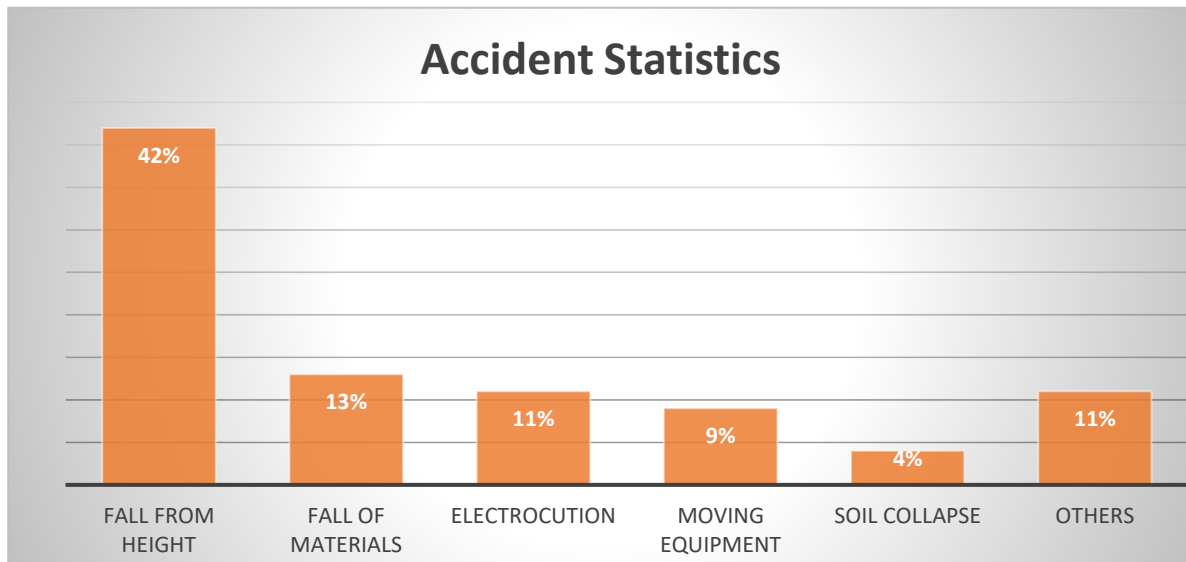


Figure 2.2: Accident statistics from the Government of India records.

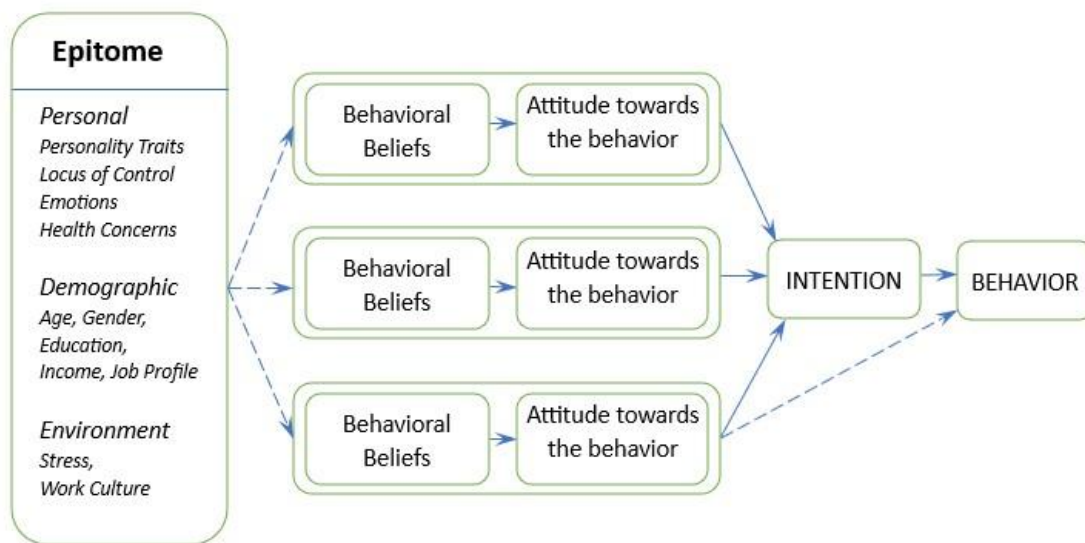


Figure 2.3: The theory of reasoned action in terms of the attitude and behavioural intentions.

The Theory of Reasoned Action (TRA) is usually applied to explore, describe, or identify individual intended actions towards safety at various workplaces. Occupational health and Safety behavioural factors are a critical factor that influences Work-related Health disorders (problems or injuries). It is important that health providers incorporate an understanding of the complexity of change into programs designed to encourage and promote healthy behaviour among workers. Safety management is the combination of organizational structures, accountability, policies, and procedures that allow for to reduction of the frequency of unexpected events(Nakhal Akel et al., 2023).

The emerging new risks have initiated a potential transformation in OHS, which has given rise to a modernized model in which innovation, digitization, and cultural change serve as key value performers within the evolving nature of work and its developmental context, aligning closely with contemporary industrial ideas. Technological advancement is often a double-edged sword in that it presents both risks and opportunities (Ramos et al., 2022). In terms of organizing responsibilities, some sources recommend one nominated person from the management to be put in charge of developing and monitoring OHS practices. A robust safety culture emerges when management defines a clear safety vision, enforces OHSMS policies, and embeds OHS across every level of the organization(Kart & Miser, 2025).

If people believe that following regulations at work will keep them safe and they value the outcome, they will have a positive attitude toward engaging in safe workplace behaviour. A process by which a partnership or understanding is developed between the management and employees that will continually focus on people's attention and actions that will influence their and others' daily safety

behaviour. This focuses on what people do, analyses why they do it, and then this research is applied to support intervention strategy and improve what people do. Built upon a hierarchy of risk control, the SMS incorporates behavioural practices to embed hazard avoidance behaviours. This process involves the use of effective administrative measures and thorough technological evaluations, including ensuring access to proper and sufficient PPE. The poorly organized workplace might create unsafe work conditions and hazards with the potential for near misses and/or minor incidents resulting in failure to provide efficient productivity. Safety investigations often default to blaming individuals rather than examining underlying systemic failings—a phenomenon termed the 'person approach'. This shortsightedness is criticized for inhibiting meaningful organizational learning and reinforcing unsafe conditions(Sherratt et al., 2023).

Influencing the behaviour in safety and reducing errors is the key document in understanding the OHS approach to human factors. Human factors refer to social, organizational, job factors, and individual characteristics, which influence behaviour at work in a way that determines the health and safety in an organization. The task must be allocated and considered by ergonomic concepts to consider both human limitations and strengths. Behavioural safety and actions influence culture through attitudes and perceptions to determine the performance of the system.

Furthermore, to provide a safe and healthy workplace, the commitment shall be initiated from the topmost employee of the company, i.e., the CEO of the company, to the last person in line of the company. To achieve the changes in behaviour, a change in policy, procedures, and/or system is most assuredly needs to be changed. This can happen only with support from all involved in the decision-making. Organizational strategies can be designed to influence workplace norms

and regulate behaviour, to enhance employees' ability to manage boundaries between personal and professional lives. Furthermore, making employees aware of the importance of their integration preference is a critical factor for actively managing the work-nonwork interface(Palm et al., 2020). The organization must consider working patterns, the culture of the workplace, resources, communication, and so on. Factors should not be overlooked during the assessment of jobs, nevertheless influence individual and group behaviour.

Wearable technologies facilitate continuous monitoring of both individual workers and their surroundings, while connected worker systems offer contextual insights and support decision-making. The multitude of workplaces comes with their inherent distraction, risks, and dangers.

By building a smart and connected workplace with the human-in-the-loop models, workers today are better equipped with situational awareness, field visibility, and remote supervision(Patel et al., 2022). In case of any accidents, the hours worked by the worker can be taken into consideration along with their behavioural pattern for the cause of the said incident. Currently, there is a growing realization that concentrating only on employee behaviour alone does not achieve the full benefits possible.

The theory would be that if there were a way to uncover habitual offenders regularly, then it would make potential offenders less likely to break safety codes in an organization with clear structures and clear reporting. Structures, safety issues receive better attention, and such organizations tend to have fewer incidents and occupational safety mishaps. By way of a hypothetical example, application of notions to specific workplace injury-control behaviour: wearing protective gear can possibly avoid workplace injuries. If the employee is committed to wearing

personal protective equipment and has ready access to the PPE's also has the skills needed to wear them, then there is a higher chance that they will perform through their behaviour. The probability that the individual wears the PPE daily will also predict to increase even more of workers employed along with him in the organization (Guerin & Sleet, 2021).

2.2.4 Technology Acceptance Model

The technology acceptance model (TAM) should be able to provide the basis for understanding why occupational health and safety must be adopted by the organization. The following model can be used to illustrate the support of increased acceptance of new informative technologies and associated applications. The TAM, first introduced by Fred D. Davis (1989), has been the most influential model of technology acceptance with two primary factors influencing an individual's/employee's intention to adopt and utilize new technology, such as:

1. Wearable Safety devices
2. Safety management software.
3. Virtual reality training

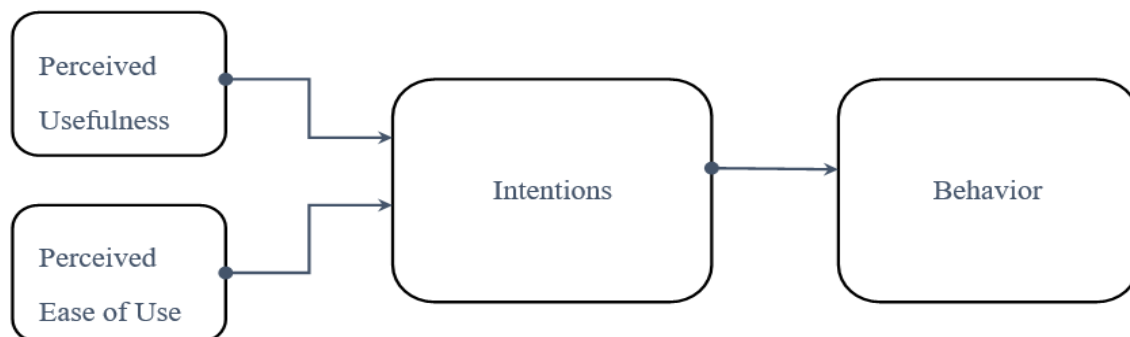


Figure 2.4: The TAM in terms of perceived usefulness and the perceived ease of use in the acceptance of technology.

Perceived usefulness depicts the degree as to how an employee assumes that his work performance can be raised by using the updated system, to complete the scheduled task more efficiently and swiftly. If an organization considers that by use of a suitable technical tool (Tools & Equipment's) that would positively impact the performance of the individual as well as the organization. With the said results the organization would consider to include it to their business operations. Simultaneously, an employee will also be motivated and interested to accept and implement the said technological resources to improve their work efficiently.

Perceived ease of use depicts the extent to which an employee must shape his mental and physical ability or effort to use of the said technology. On the other hand, if the same technological tools are complicated for use, then the employees would be less interested and demotivated for the use of same. This in turn will result in ineffective financial loss for the organization considering the training and other resources being provided.

The attitude towards the newly incorporated technology is very much associated with the individual's intent and behaviour towards the use or acceptance of the same. This might be considered based on his number of years of experience in the field. It is a common noted attitude that "a worker might have worked all long his life in an obsolete process without any incident, does not mean there can be scenarios of putting his as well as the life of other employees at risk.

2.3 Human Society Theory

This emphasizes that social structures, cultural norms, and institutional roles are essential in shaping individual and collective behaviour. The theory speculates society is a collection of shared beliefs, values, and organized roles, where individual interact within

defined social systems. This theory can effectively explain how organization hierarchies, leadership models and cultural expectations influence the perception and practice of OHS within this context of workplace.

In this research it bears the investigation into how roles such as those of managers, supervisors and technical staff are not merely defined by task by their embedded social expectations within the organization. For example, the consistent variation in safety perception across different designations and levels of experience suggest that safety behaviour is influenced by a personnel role within the occupational social structure.

Furthermore, this explains how norms around H&S are constructed and maintained or challenged within various industrial environments. Organizations with proactive safety cultures tend to set safety expectations into their social fabric, aligning individual behaviour with organizational safety goals. The research will try to identify particularly those showing higher safety compliance among different levels in the group with experience or higher management employees highlight how authority and duration of employment contribute to the reinforcement of these norms.

This also brings to attention to the role of collective responsibility in shaping safe workplaces. Through mutual influence and shared learning, employees participate in maintaining a safe work environment, guided by policies and expectations. This theoretical framework affirms that improving occupational safety is not only task but a social process established in the changing aspects of human interaction and organizational design.

2.4 Summary

To summarize the literature, it shows that the management of an organization should set objectives, performance indicators and employee welfare schemes which are affiliated to occupational health and safety. It is noted that OHS management approach should be to

have a proactive approach towards the risk mitigation. It should be made mandatory for all SMEs to conduct associated risk analysis and hazard identification program at workplaces. This should possibly involve employees working on a contractual basis and include the general public. Literature evidences a clear correlation between OHS maturity and organizational resilience, especially in high-risk industries. Adoption of best practices leads to competitive advantage and regulatory ease.

In the month of March 2021, the Indian Government stated that approximately 6500 people lost their lives during the previous tenure of 5 years while working at factories, ports, and construction sites. There are sure to be more accident cases which are truly unaccounted for. One of the prominent incidents which occurred was at a polymer factory located in Vishakhapatnam, India where there was leak in toxic gas which resulted to the loss of lives among both employees and members of surrounding community.

There is also a noted incident which occurred in 2nd December 1984 which had mass casualty and have its effects till day that i.e. Bhopal Gas Tragedy in India. The preliminary investigation reported it being the management negligence, a weak attitude towards safety and under trained workforce concluding in worker actions that inadvertently enabled the incident and in the absence of properly working safe guards. The point being the management may have had lack of interest in safety protocol and may be under-invested in safety which possibly allowed for the occurrence of work in a dangerous environment. By aligning the principles of the TRA for organizational involvement it is of an understanding that organizations statistic approach, values discussed and cultural norms play a significant role in shaping employee attitude and perceived expectations regarding H&S. this will lead to a stronger behavioural intention and actual compliance to safety behaviour and supporting a safety culture.

Thus, evaluating the literature review it states that management and employee engagement is a need for effective execution of OHSMS. Moreover, when any incidents have been investigated the employee engagement has been considered. The management intervention may not have been evaluated which may be associated throughout most construction and industrial sectors. There is aspect which may drive the attitude and aptitude of employees through aspects such as job satisfaction, motivational factors, and pressure to deliver productivity and efficiency which consider or drive the employee's behaviour in the execution of tasks at workplaces.

CHAPTER III: METHODOLOGY

3.1 Overview of the Research Problem

Workplaces face several challenges when it comes to safety, which can directly impact workers both physically and mentally. The highest percentage of health problems are problems with musculoskeletal disorders(Arif Rahmat Abdullah & Indri Hapsari Susilowati, 2024). Identifying and mitigating workplace hazards/risks that tend to cause physical and mental harm to the employees of the organization. The fast change in advancement in technology and use of machines, improved workplace conditions all play a significant role. Organizations should ensure their workers know how to practice safe ergonomic hygiene, along with maintaining workplace environments. The construction industry is widely recognized as one of the most labour-intensive industries, and protecting its workers from injuries resulting from exposure to occupational hazards is a primary concern(Almaskati et al., 2024).

It has been noted that high tendering costs worsens the plight of SMEs in that several criteria must be met. Additional data from Indonesia highlights how working capital and liquidity constraints among building construction companies correlated with declines in performance(Rahmawati et al., 2023). Poor OHS practices with inadequate implementation of policies, procedures, and protocols. Developing effective metrics to measure and assess OHS performances and identify areas of improvement. OHS performance can be measured through results achieved through achievements or any damage causing incidents. Methodological rigor reflects the organizations commitment to evidence-based management. Using surveys and quantitative analysis demonstrates the value placed on data driven decision making in HR and operations. This will also prove the management's commitment and potential approach towards the organized

implementation of OHSMS protocols. The research aims to explore these challenges and identify strategies to improve OHS practices that could reduce workplace risks and promote employee well-being.

3.2 Operationalization of Theoretical Constructs

A strong foundation is formed through theoretical constructs that could allow for understanding the theoretical information associated with determinants that can lead to good occupational health and a safe workplace environment. This will ease to understand management involvement at the workplace, which may bring about sufficient improvement in the motivation for the use of safe operating procedures by employees.

The theoretical constructs for this research have been operationalized through measurable indicators using a structured survey questionnaire. Key construct being: -

- Health and safety management (RQ1) will be measured based on 13 variables such as the existence of policies, H&S committee, emergency preparedness, and reporting systems, etc.
- Health and safety practices (RQ2) will be measured based on 13 measuring variables like PPE availability, safety drills, etc.

Each variable will be measured on a 5-point Likert scale with quantifying the abstract of constructs into empirical data for analysis. Constructs will be validated through mean scores and tested for statistical significance across demographic variables like education, age group, and so on. Risk perception of employees to subjective assessment of the likelihood and potential consequences of workplace hazards. Safety behaviour of the actions and decisions that can affect their safety and the safety of others in the workplace. Safety leadership that the actions and behaviours of managers and supervisors that promote

a safe work environment. Employee engagement that can affect employees' emotional, cognitive, and behavioural investment in their work and organization. Safety training is provided through programs and activities designed to educate employees on safety procedures and best practices.

3.3 Research Purpose and Questions

The purpose of this research is to understand and aim towards the following concepts in the field:

- i) The organised implementation of occupational health and safety policy and procedure in safety in an organization/institution and the drawbacks/failure to implement the same for the better performance of the company.
- ii) The provision acquired by the employees is suitable and sufficient to execute their task in the worksite without putting their life at risk or causing any damage to self or property and the environment, also not failing to consider the people living in the vicinity of the companies.

3.3.1 Research Questions

Research Question 1: How can the organization's management involvement be effective in occupational health and safety?

Research Question 2: How can occupational health and safety practices can result in maintaining a good work environment?

3.3.2 Hypothesis

H1: There is a significant relationship between organizational commitment and the effectiveness of health and safety management.

H2: Effective health and safety management significantly impacts the availability and quality of workplace and employee resources.

H3: Workplace and employee resources significantly influence the execution of management obligations regarding health and safety.

H4: Management obligation has a significant impact on health and safety performance and outcomes.

H4: Health and safety management directly affects the fulfilment of management obligations.

H6: Health and safety management directly influences organizational performance and outcomes.

3.4 Research Design

To understand the correlation between employees and management involvement in effectively implementing occupational health and safety (OH&S) regulations, the study adopted a structured and empirical approach. The research adopts a quantitative cross-sectional design to explore correlations between management involvement and OHS outcomes. A structured survey was administered to 250 professionals across varied industries and job roles. The survey instrument measured health and safety management (13 variables) and health and safety practices (13 variables) using a 5-point Likert scale.

Data analysis included descriptive statistics, ANOVA, and correlation testing using SPSS and Microsoft Excel to assess perception patterns based on demographic variables such as education level, job designation, and work experience. The methodology ensured construct validity through pilot testing and reliability through Cronbach's alpha. This design provides actionable insights into how organizational structures, management

behaviours, and safety systems interact to influence workplace well-being and performance outcomes.

Management's involvement was examined through variables reflecting policies on occupational health and safety, oversight of workplace and employee resources, responsibility for implementing procedural safeguards, and facilitation of recordkeeping and recognition mechanisms. The underlying causes and effects of these management-related variables were analysed using statistical methods. The study adopted an investigative research design to explore these dynamics. Each variable aligned with a continuous improvement strategy, drawing upon organizational and managerial resources. The commitment demonstrated through organizational policies, resource allocation, and adherence to legal and ethical responsibilities regarding employee health and safety offered insights into strategic practices at various levels. This, in turn, contributed to developing a positive employee attitude toward occupational health and safety.

3.5 Population and Sample

To begin with, the research aimed to explore the role of management in implementing occupational health and safety protocols within the workplace, alongside the extent of employee participation in supporting these efforts. Secondary data was obtained from relevant journal articles to complement the primary investigation. The research utilized a structured questionnaire comprising 26 items related to health and safety measures, which were categorized under two key domains of safety and health practices. A convenience sampling method was employed to select participants for the study. Accordingly, the survey was distributed to employees, employers, managers, engineers, supervisors, technicians, and other available individuals who voluntarily agreed to participate. The survey was administered online by sharing a digital link that directed

respondents to the questionnaire. Due to time constraints, the use of the convenience sampling technique was deemed appropriate and practical for data collection.

3.6 Participant Selection

This study adopted a quantitative descriptive research design to investigate the extent of management involvement and the implementation of occupational health and safety (OHS) practices across various industry sectors. The design was chosen to facilitate statistical analysis of employees' perceptions and experiences concerning workplace safety, using a structured survey instrument.

To ensure the survey data accurately reflected the realities of occupational health and safety (OHS) practices across different organizational levels, the researcher employed a stratified purposive sampling technique. Data was collected through a structured questionnaire, distributed both in physical format and via secure online forms (e.g., Google Forms). The target population comprised employees from five key industry sectors – engineering consulting, construction, human resources, manufacturing, and transport & logistics – each selected due to their inherent exposure to occupational risks. Within these sectors, 250 participants were surveyed, including managers, engineers, supervisors, technicians, and general staff. These roles were selected to capture a comprehensive perspective on OHS practices across operational and managerial hierarchies. Participation was voluntary and preceded by informed consent, with confidentiality assured. The rationale for this inclusive approach was to assess how perceptions and implementation of OHS measures vary by job role and organizational level.

3.7 Instrumentation

To collect data relevant to the research questions, a structured survey questionnaire was developed and administered. This instrument was specifically designed to generate data on the independent variables (OHS Management) and dependent variables (OHS Practices) within various industry settings. The survey was organized into seven sections, which included basic demographic information, and two core segments measuring Occupational Health and Safety (OHS) through management commitment and practical implementation of safety standards.

Table 3.1: Constructs and Items

Construct	Definition	Source/Developer
OH&S Policy & Procedures	Management commitment and implementation toward OHSMS supports best practices	Navarro Claro et al., 2025
Orientation & Induction	Training provides necessary workplace knowledge to new employees	Rantsatsi, 2024
Safety Facilities	Employers must provide legal/moral necessities under H&S regulations	Mohhar et al., 2024
Safety Practices	Priority given to implementing internal safety training and behaviour	Mayank Tiwari and P. S. Tathod, 2025
Inspections	Regular inspections ensure control over risks and unsafe practices	Waratimi et al., 2023
Safety Audits	OHS audits serve as indicators of organizational performance	Mujtaba & Kaifi, 2023
Emergency Preparedness	Strategies minimize accidents and improve emergency response	Ebenezer et al., 2023

Accident/Incident Records	Accurate reporting prevents recurrence and future harm	Memon et al., 2023; Han et al., 2024
Accomplishments / Awards	Recognition of employee safety efforts enhances morale and compliance	Feng et al., 2023; Vidushi, 2025

The items were constructed using a five-point Likert scale (from Strongly Disagree to Strongly Agree), allowing for quantitative measurement of perceptions and practices. The survey was based on established frameworks and tailored to suit the specific objectives of this study. Reliability was assessed producing a Cronbach's Alpha testing, indicating strong internal consistency. Validity was ensured through expert review and content validation by and academic advisors.

Scale: All Variables				Scale: All Variables			
Case Processing Summary				Case Processing Summary			
		N	%			N	%
Cases	Valid	30	100	Cases	Valid	30	100
	Excluded	0	0		Excluded	0	0
	Total	30	100		Total	30	100
Reliability Statistics				Reliability Statistics			
Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	No of Items		Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	No of Items	
0.92	0.92	30		0.89	0.89	30	

Figure 3.1: Cronbach's Alpha-based testing for both parameters RQ1 and RQ2.

The basic information part has been meticulously arranged to determine the nature of respondents arrayed according to their age group, job role, qualification, work

experience, and the organisation they are associated with. This research highlights to the researcher the critical importance of prioritizing OHS.

3.7.1 Health and Physiological Monitoring

Workers' health gets a checkup from these devices. They monitor how the job area might render into a complicated situation the health of the people working in the vicinity.

- Keeping an eye on personal protective equipment (PPE): Devices that check if personal protective equipment like masks and ear defenders are working effectively and operational.
- Technical wrist instruments (like Smartwatches): These instruments keep tabs on the body temperature of the person who might be performing a tedious activity. It is effective when the job gets vigorous or if things get too complicated.
- Monitors for blood pressure and blood glucose: Devices for checking the health of employees at risk from high-stress jobs, loads of work, or not having a well-ventilated working atmosphere, who most probably work in confined spaces.

3.7.2 Tools for Checking Up on the Workplace

These devices will help with effective monitoring equipment at work, which might create unsafe situations regarding how safe or healthy it is for employees working there.

- Monitors for air quality checking with the devices keep tabs on how much hazardous particles like fine particles, carbon monoxide, carbon dioxide, and other volatile organic compounds are floating around in the air.
- Dosimeter instruments that can be worn for noise to identify if the sound around is too loud. Thus, making sure it is not breaking any sound rules or creating a situation for hearing loss for the personnel

- To measure environmental conditions that might disrupt the working conditions, like extreme temperatures, hot or cold, people use temperature and humidity sensors.
- There is a need for identifying hazardous gases, like methane or hydrogen sulphide, in places like mines, factories, or big chemical plants, and there should be sufficient gas detectors.
- Vibration meters are devices that identify how much vibration a machine is creating. Too many vibrations can be hazardous to human health with regard to bones and muscles, or cause other health conditions that might be irreversible.

3.7.3 Reporting incidents in real time

A database for accidents and incidents must be made available. Those are important as they keep track of all the reports on injuries, sickness, or close calls that could have been serious at work. When using something like the 'Workplace Safety Incident Report Forms' or some online database, they are effective for spotting patterns.

Investigating incident origins tools can be an added advantage utilize such as failure mode and effects analysis or fault tree analysis, for having a detailed analysis into why accidents or incidents happen.

3.7.4 To audit safety and health

Standard safety audit sheets are like the regular kits for checking safety, and can be changed to fit different work areas, like construction sites or factories.

Devices for checking safety are used when looking at how safe a place is. There might need use things like tape measures that have the right calibration,

devices to measure heat, or devices that check how bright the lights are. These help to compare the conditions at work with what the rules need to comply.

3.8 Data Collection Procedures

The sample groups are chosen and perform statistical analysis that are engaged to conclude to achieve favourable results. It also includes details from the survey build-out, and the formation and administration of the survey. Data collection is done using structured questionnaires/surveys to gather data on safety practices, employee health, and safety knowledge. This research study relies on a key step to gather relevant information to answer the research questions. The researcher plans to use a structured method to collect primary data through surveys and questionnaires.

3.8.1 Primary Data Collection

The data collected using a survey to get information about safety practices, employee knowledge of health and safety, and how management gets involved in occupational health and safety (OHS). Online methods using secure platforms (e.g., Google Forms) were used for participants in construction, engineering, consulting, transport and logistics, and HR sectors with reliable internet access. The survey used structured questionnaires given to a sample group including employees, managers, engineers, supervisors, technicians, and other key stakeholders.

3.8.2 Survey Design

The survey questionnaire was systematically designed to collect data required to answer the research questions effectively. The items were developed based on an extensive review of relevant literature on occupational health and safety

practices and management frameworks. To ensure content validity, each question was aligned with the study's conceptual framework and hypotheses. Before full-scale distribution, a pilot test was conducted with a small representative sample to identify potential issues related to clarity, wording, and response options. Reliability was assessed using Cronbach's Alpha, which indicated excellent internal consistency for both sections: H&S Management ($\alpha = 0.982$) and H&S Practices ($\alpha = 0.975$). These results confirm that the questionnaire is a valid and reliable tool for data collection in this study.

3.8.3 Survey Administration

The researcher used an online platform for the survey, so people can fill it out when time suits them. The survey link was shared with the known group and/or people population to give them enough time to complete it.

3.9 Data Analysis

The collected data with basic information is analysed for respondents according to age group, gender, qualification, years of experience in their field of work, and their designation. This data helps acquire crucial information about the particulars of the workforce. The collected data undergoes analysis to provide insights into the workforce's characteristics. Descriptive statistics summarized demographic characteristics and response patterns. ANOVA tested differences in perceptions across demographic variables (e.g., age, education, experience). Assumptions of ANOVA, including independence, normality, and homogeneity of variances, were checked using appropriate statistical tests. This analysis aims to examine the following demographic variables:

3.9.1 Demographic Variables

Age Group: The researcher sorted respondents into different age groups. This helps spot any age-related trends or patterns in how they view occupational health and safety (OHS) practices.

Educational Qualification: The researcher examines respondents' educational backgrounds to determine whether their level of education influences their knowledge or practices related to OHS.

Years of Work Experience: The study explores how respondents' tenure in their respective fields shapes their perceptions of OHS practices.

Associated Organization: The researcher analyses respondents' job roles to identify differences in how they perceive or experience OHS based on their organizational responsibilities.

Designation: The study assesses respondents' organizational positions and their perspectives on the current status of OHS within their companies.

By examining these demographic factors, the research provides comprehensive insights into workforce characteristics and their influence on occupational health and safety practices.

3.9.2 Statistical Analysis

The researcher analyses the collected data using statistical methods to identify trends, patterns, and correlations. The analysis is conducted with the help of statistical software tools such as SPSS and Microsoft Excel to ensure the results are presented clearly and accurately.

3.9.3 Data Quality Assurance

To ensure high-quality data, the researcher takes several steps, including:

- Making the survey questions clear and concise
- Using a safe online tool to give out the survey
- Making sure those who answer stay unknown and their info stays private

By sticking to these steps, the researcher wants to gather direct info from the people being surveyed. This data provides valuable insights into occupational health and safety practices and the extent of managerial involvement in the workplace.

3.10 Research Design Limitations

The survey structure was preferred for data gathering. It may not be ascertained that the data obtained from surveys is highly accurate. The study, through research, aims to identify the implementation and actions of occupational safety and health in the workplace. When using the survey research, the researcher has used the method of convenience sampling. This study recognizes a few limitations that could affect how valid and reliable the results are.

3.10.1 Survey Structure Limitations

Self-reported data survey depends on information people provide about themselves, which might not always be accurate. Respondents answering the survey might not give honest or correct answers, which can make the findings less trustworthy.

Not enough detail, as surveys might not let researchers dig deep into complicated issues, which could lead to making complex topics too simple.

3.10.2 Data Accuracy Concerns

Respondent' own opinions, whose answers might not represent everyone, and their answers might be swayed by their own experiences or what they believe.

Social desirability bias may occur when respondents provide answers they believe are socially acceptable or favourable, rather than reflecting their true beliefs or behaviours.

3.10.3 Drawbacks of Convenience Sampling

Sampling bias may arise when using convenience sampling, as it can result in a sample that is not representative of the broader population.

Hard to apply the results as they might not work for other groups or situations, because the sampling was not random.

3.10.4 What This Means for the Study

Even with these drawbacks, the study aims to give useful insights into how workplaces put safety and health rules and regulations into action. The findings help enhance understanding of workplace safety practices and identify areas in need of improvement.

3.11 Conclusion

This research study set out to examine how companies put occupational health and safety (OHS) policies and procedures into action at work, zeroing in on the various organizational sectors. The findings from this study can help us grasp why good OHS management matters and how it affects worker well-being and company performance. While concluding the methodology section, the techniques and tools utilized by the

researcher for data collection and statistical analysis, but also the approach administered by the researcher throughout the study.

The research shed light on how crucial management involvement, risk awareness, safe behaviour, safety-focused leadership, worker participation, and safety training are in creating a safe workplace. The study's results can shape ways to boost OHS practices, cut down on workplace dangers, and improve employee health and safety. The research aims to understand the factors that can motivate organizations and employees to use suitable and be equipped with different applications for a safe workplace. Results derived from methods can guide strategic interventions, inform safety investments, and justify budget allocations. Transparent methodologies also enhance audit readiness and external stakeholder trust. When looking at the results, it is important to keep in mind the study's limitations. These include using convenience sampling and survey methods. Future studies can build on what we found here. They could explore other industries, use different methods, or take a deeper look at specific parts of OHS management. Furthermore, it investigates the impact of five independent variables of age group, educational qualification, years of experience, organization, and designation of the respondents on various dependent variables of occupational health and safety management and practices.

For the research question, the researcher adopts a quantitative approach for the data collection, and the data is collected from 250 respondent employees, such as managers, engineers, supervisors, and technicians, and various personnel, using an ordinary Likert scale format. This study recognizes several limits that could affect how valid and reliable the results are. The data is free from any sort of preconceived ideas or bias in the research. The quantitative data collected were subsequently analysed using statistical methods. By using IBM SPSS, the researcher conducted frequency testing, performed ANOVA tests, and correlation testing. The research knows the limitations of the research design. The

preconceived ideas or biased opinions of the respondents may affect the validity and the accuracy of the results. There may not be any possible way to determine the extent the biased opinions of the respondents may play any part in the derived results. Going forward, the constraint about being time-bound, the researcher could not fulfil a second sample test-retest correlation, which possibly may have been conducted. This research helps in the ongoing work to make workplaces safer and healthier. The end goal is to boost employee well-being and help organizations perform better.

CHAPTER IV:

RESULTS

4.1 Frequency Testing

An analysis of the information and data has been collected from 250 respondents from different sectors of industry and business organizations. The majority of respondents (Table 1) belonged to the age group of 27 – 35 years, with 34.4%, and 36 – 44 years, with 24.8%, respectively. The other age groups of 18 – 26 years had 13.2%, and the age group of 45 – 55 years had 17.6%, respectively. A considerably small percentage of only 10% were above the age of 55 years. The highest educational qualification with a huge majority of respondents was undergraduate with 79.2%, followed by 20% of respondents having a postgraduate degree, and with only 0.8% of respondents available were having a PhD for their credit. A significant number of respondents had a high level of expertise with respect to their years of work experience (Table 3) with 12.8% were amateurs, 30.4% of respondents were competent and large number of respondents with 56.8% were proficient with the years of experience. Moreover, the largest number of respondents (Table 4) surveyed were from the construction sector with 44%, followed by the manufacturing Industry with 27.2%. There was also a small number of respondents from the transport and logistics segment, with 18% followed by respondents from Oil and gas, up to 7.2%. Only a small margin of respondents was from the health care sector, with 2% and 0.8% from the engineering consulting firm and the human resource sector. Furthermore, the frequency of respondents concerning the job category (Table 5) having higher percentage of 42.4% engineer category followed by supervisors with 28.4% and managers with 24%, there was also a small respondent population with category technician 2.4%, administrative assistant 1.2% after follow with just marginal respondents as accountants, executive – human resources, medical Sector-nursing, and lab technician with 0.4%. To conclude, this

statistical analysis—based on frequency testing of respondent data—is discussed in detail to highlight its implications for real-world organizational practices.

Table 4.1: The frequency testing of the age group of the respondents

Age Group		Frequency	Percent
Valid	18-26	32	12.8
	27-35	86	34.4
	36-44	62	24.8
	45-55	45	18
	Above 55 Years	25	10
Total		250	100

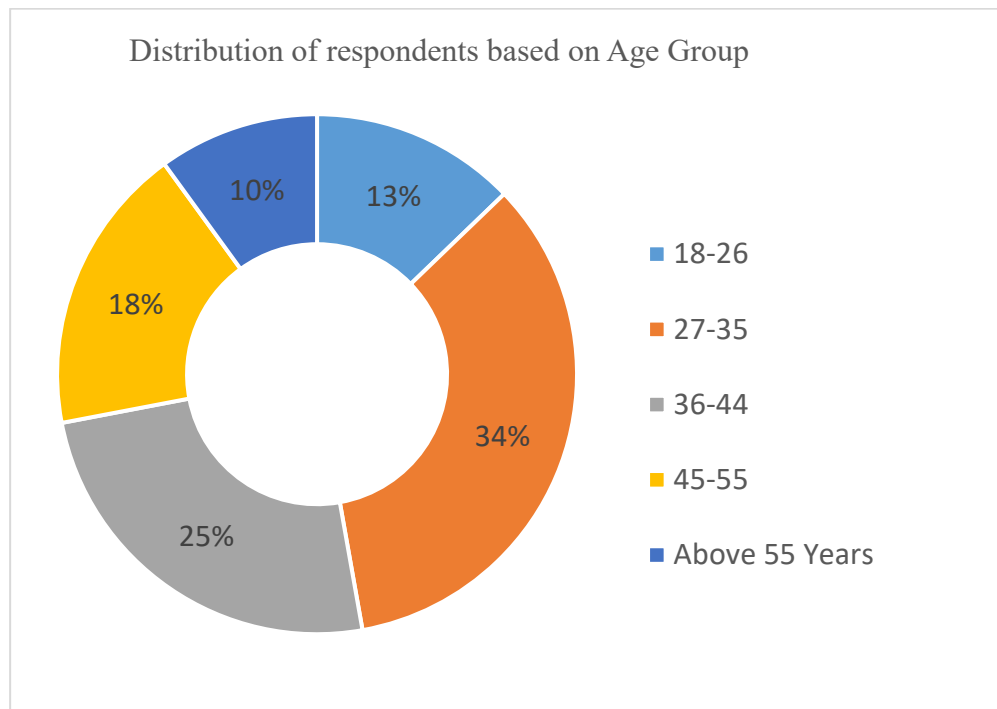


Figure 4.1: Distribution of respondents by Age Group

Table 4.2: The frequency of the Highest Educational qualification of Respondents

Educational Qualification	Frequency	Percent
Undergraduate or below	198	79.2
Post Graduate	50	20
PhD	2	0.8
Total	250	100

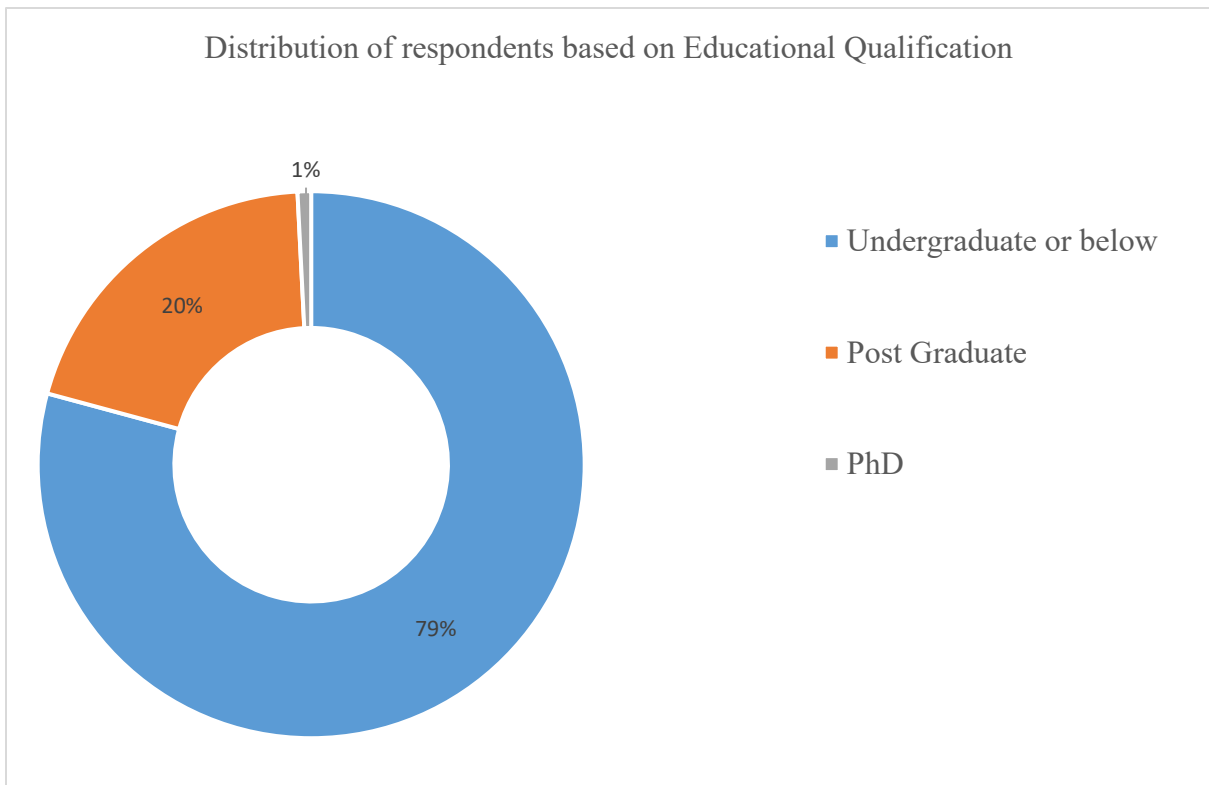


Figure 4.2: Distribution of respondents based on educational qualifications

Table 4.3: The frequency of the level of expertise by Respondents

Years of Experience	Frequency	Percent
Amateur (Up to 3 years' work Experience)	32	12.8
Competent (3 to 10 years work experience)	76	30.4
Proficient (Above 10 years of work experience)	142	56.8
Total	250	100

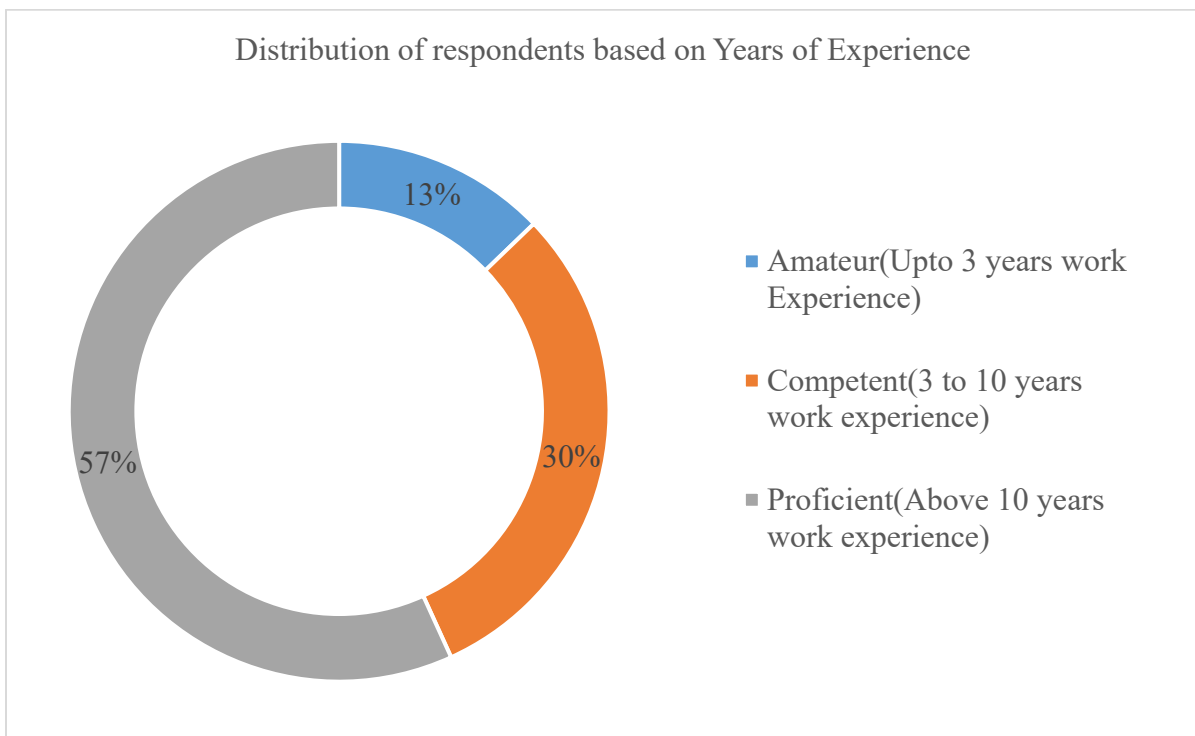


Figure 4.3: Distribution of respondents based on years of experience.

Table 4.4. The frequency is based on the type of Organization

Organizational Sector	Frequency	Percent
Construction	110	44
Manufacturing Industry	68	27.2
Oil and Gas	18	7.2
Health Care Sector	5	2
Transport & Logistics	45	18
Engineering Consulting Firm	2	0.8
Human Resources	2	0.8
Total	250	100

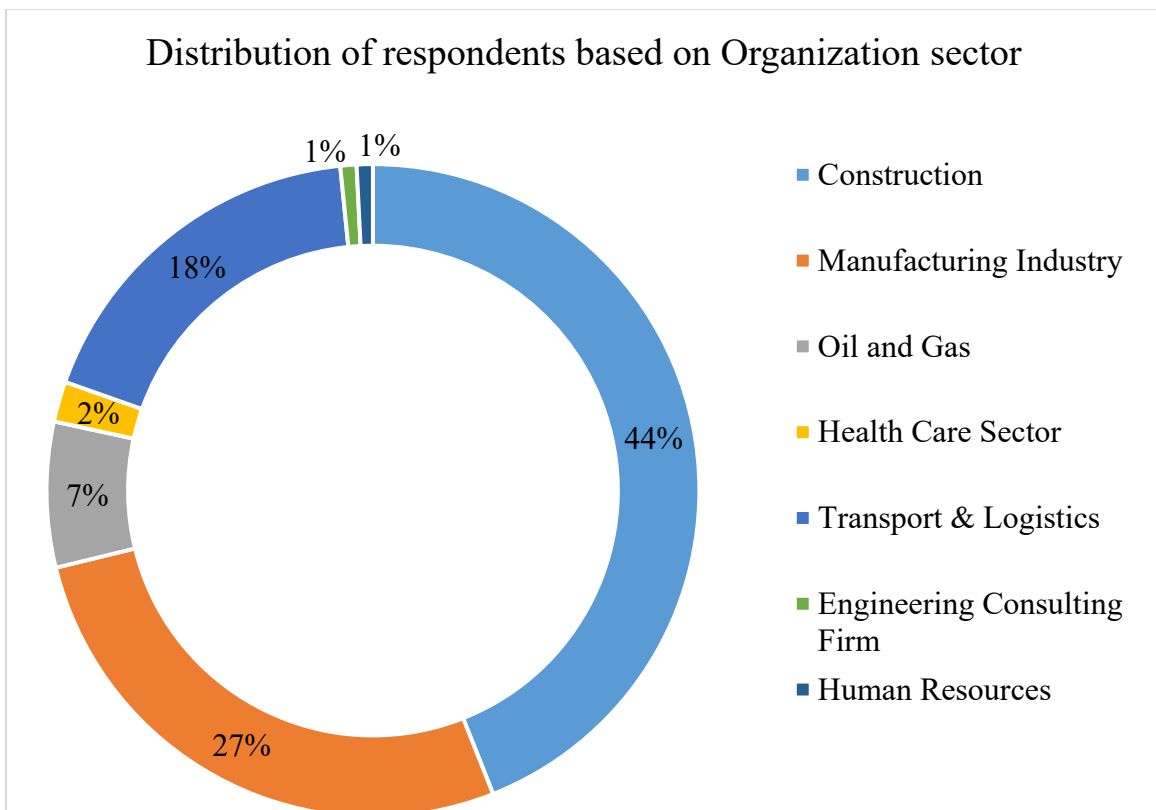


Figure 4.4: Distribution of respondents based on Organizational Sector

Table 4.5: The frequency based on the Job description of the respondents

Job Description	Frequency	Percent
Manager	60	24
Accountant	1	0.4
Administrative Assistant	3	1.2
Engineer	106	42.4
Executive - Human Resources	1	0.4
Nursing Officer	1	0.4
Snr. Lab Technician	1	0.4
Supervisor	71	28.4
Technician	6	2.4
Total	250	100

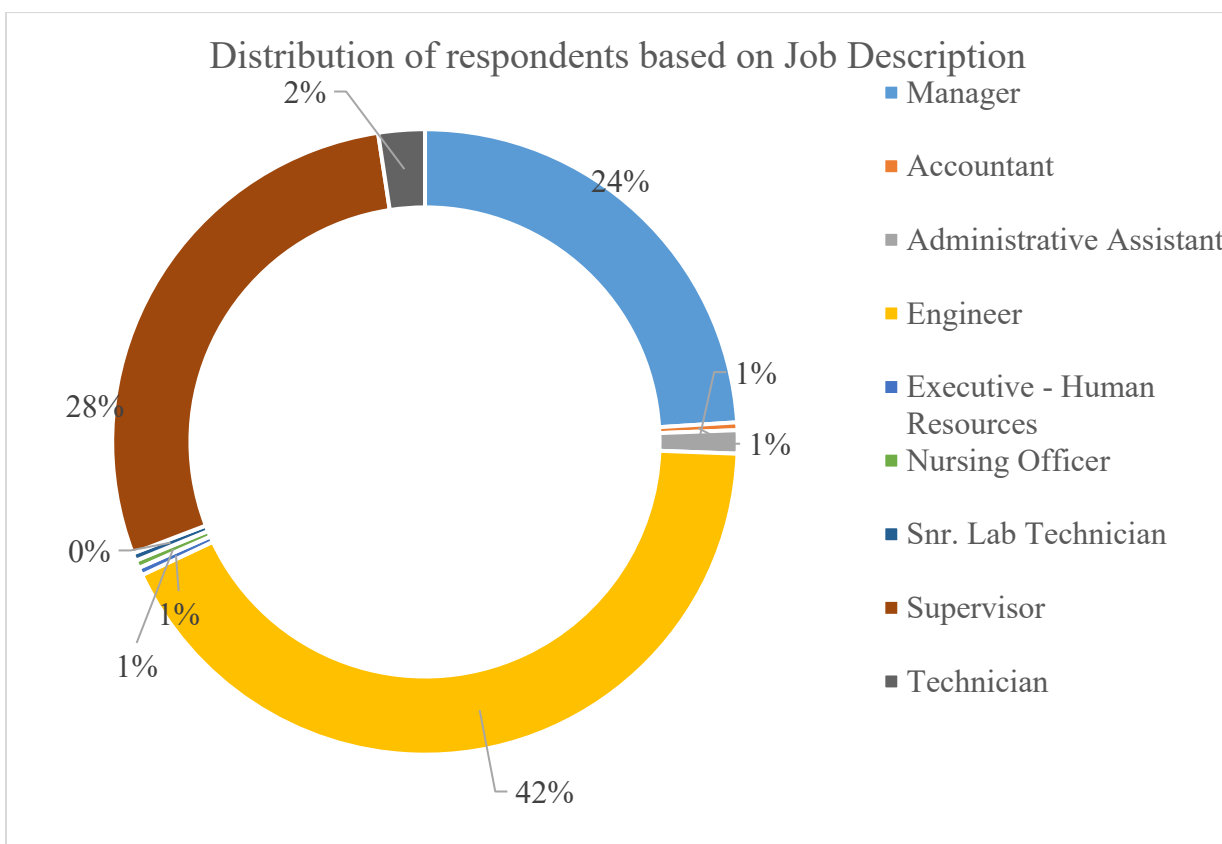


Figure 4.5: Distribution of respondents based on Job Description

Maintaining a good work environment through effective occupational health and safety (OHS) practices is essential for employees' well-being and success. Here are some key OHS practices that contribute to a positive work environment

Scoring Process

The questionnaire statements contain a range of 5 options. The selection of choice for each statement can be selected from strongly agree, agree, likely, disagree, and strongly disagree.

Scale	Scores
Strongly Agree	: 5 Score
Agree	: 4 Score
Likely	: 3 Score
Disagree	: 2 Score
Strongly Disagree	: 1 Score

4.2 Research Question One

4.2.1 How can the organization's management involvement be effective in occupational health and safety?

Table 4.6: Perception of respondents on Health and Safety management at the workplace

Sl. No.	Factors	SA	A	L	D	SD	Total
	Scale Value (SV)	5	4	3	2	1	
1	There should be a Health and Safety Policy in the company.	115	104	31	0	0	250
		46%	41.6%	12.4%			100%
	Frequency x Scale Value	575	416	93			1084

2	There should be implementation of H&S Procedures	114	106	30	0	0	250
		45.6%	42.4%	12%			100%
	Frequency x Scale Value	570	424	90			1084
3	The company must have appointed a competent H&S Personnel	112	111	27	0	0	250
		44.8%	44.4%	10.8%			100%
	Frequency x Scale Value	560	444	81			1085
4	The organization must have provisions for First aid & medical health insurance schemes	131	99	20	0	0	250
		52.4%	39.6%	8%			100%
	Frequency x Scale Value	655	396	60			1111
5	The company should maintain the frequency of training programs, i.e., weekly, monthly, etc	110	108	32	0	0	250
		44%	43.2%	12.8%			100%
	Frequency x Scale Value	550	432	96			1078
6	The organization should have a safety committee	106	110	34	0	0	250
		42.4%	44%	13.6%			100%
	Frequency x Scale Value	530	440	102			1072
7	The company must perform a regular planned H&S Inspection Schedule	108	112	30	0	0	250
		43.2	44.8	12			100
	Frequency x Scale Value	540	448	90			1078
8	The company should have competent first-aid-trained personnel	123	102	25	0	0	250
		49.2	40.8	10			100
	Frequency x Scale Value	615	408	75			1098
9	The company should organize scheduled H&S Audits for compliance through Internal/External Auditing	107	108	35	0	0	250
		42.8	43.2	14			100
	Frequency x Scale Value	535	432	105			1072
10	There should be a plan for emergency preparedness available in the company	113	108	29	0	0	250
		45.2	43.2	11.6			100

	Frequency x Scale Value	565	432	87			1084
11	Should the company document the lessons learned from the respective mock drills	106	113	31	0	0	250
		42.4	45.2	12.4			100
	Frequency x Scale Value	530	452	93			1075
12	The company must have an accident reporting procedure	110	110	30	0	0	250
		44	44	12			100
	Frequency x Scale Value	550	440	90			1080
13	The company should maintain incident records.	112	109	29	0	0	250
		44.8	43.6	11.6			100
	Frequency x Scale Value	560	436	87			1083
	Total score						14084
	Maximum possible score	5(Maximum Score Points) x250(No. of Respondents) x13(No. of Statements)					16250
	Health and safety score percentage	Total Score x 100 / Maximum Possible score					86.67%

Source: Field Survey study

OHS serves as an essential foundation for an organization's ethical conduct and operational integrity at the workplace. Table 4.6 demonstrates employee perceptions regarding how favourably workplace safety and management responsibilities are established and maintained at the workplace. According to the table it states that overall 45.13 percent of the population has “STRONGLY AGREED” for the statements on management of organizations Safety and health of the employees, while 43.07 percent of the sample population have “AGREED” for the statements, which leaves only a small sample population who have observed the requirement towards safety management as “LIKELY” with merely 11.78 percentage.

The following detailed discussion reflects the depth of employee engagement and organizational liaison on each factor.

4.2.1.1 Health and safety policy in the company

A clear and thorough health and safety policy sets a pitch for all practices the management has within an organization. To begin with, the sample population the importance, 46 percent respondents have strongly agreed upon the requirement on Health and safety policies at workplace, with 41.6 percent agreeing to the requirement that such a policy need to exist. Only 12.4 percent were likely depicting minimal ambiguity. The high level of agreement of 87.6 percent highlights a strong need for policies that would serve as a strong foothold for an effective health and safety management system.

4.2.1.2 Implementation of H&S procedures.

Ineffectiveness in the implementation of policies proves failure in the management system. 45.6 percent of respondents have strongly agreed and 42.4 percent have agreed with the implementation of the procedures, while 12 percent of the respondents stayed neutral. This highlights the need for procedure implementation enforcement that reflects the awareness that all the policies and procedures must be functionalized through structured processes and mechanisms developed for effective implementation and enforcement.

4.2.1.3 Appointment of competent H&S personnel.

Trained and competent H&S personnel play a responsible role in the workplace and therefore must be adequately trained and must meet the requirements. The respondent sample populations show 44.8 percent strongly agreed, 44.4 percent agreed, and 10.8 percent of respondents were likely neutral. The nearly strong agreement of 89.2 percent depicts a thorough

understanding among the respondents of the need for importance of leadership and expertise to maintain a well-balanced workplace safety.

4.2.1.4 Provision of first aid and medical health insurance.

Availability of medical support and all health benefits is seen as a key component in employee welfare. This measurement was highly endorsed in the survey, depicting a necessity among the workforce. With 52.4 percent of respondents strongly agreeing and 39.6 percent of respondents agreeing to the survey shows that this was the most endorsed item in the survey by the respondents, with only 8 percent remaining likely neutral. The compelling 92 percent of agreement indicates that employees highly value medical assistance and protection in situations of emergencies.

4.2.1.5 Frequency of H&S training programs.

To ensure safe work practices and preparedness, it is needed to reinforce regular and structured training is needed on a regular basis. The respondent data shows 44 percent strongly agreed, 43.2 percent agreed, while 12.8 percent were likely neutral concerning the need for regular and consistent training. 87.2 percent agreement of respondents shows strong employee support for the need for frequent, well-communicated training.

4.2.1.6 Establishment of safety committee

Employee engagement fosters a safety committee in H&S decision-making. The respondents with 42.4 percent strongly agreed, 44 percent agreed, depicting a high level of agreement of 86.4 percent, indicating a favourable

impression. Although there were 13.6 percent of respondents who were neutral on the statement, which was a little higher compared to other statements may be due to the unfamiliarity with the H&S committee's purpose or its effectiveness in a workplace.

4.2.1.7 Regular planned inspection schedule

Inspections with a proactive approach can definitely prevent most of the incidents with a possible speak up culture, even before they tend to occur. The importance of inspection was understood by the respondents, with 43.2 percent strongly agreeing, 44.8 percent agreeing with the statement, while 12 percent of the respondents stayed likely neutral. With 88 percent of respondents agreeing, the finding signifies that the investors or partners value the routine checks, but still may become conscious of their consistency and precision.

4.2.1.8 Competent first aid trained personnel availability

Emergency preparedness personnel—specifically trained and competent in first aid—play a vital role in responding to medical emergencies. 49.2 percent of respondents strongly agreed and 40.8 percent agreed that first aid trained personnel need to be available at workplaces, with only 10 percent staying neutral in their approach. The high affirmation of 90 percent denotes the requirement of immediate care as the cornerstone of workplace safety.

4.2.1.9 Schedule H&S audits for compliance

Compliance with safety regulations and identifying areas of improvement can only be confirmed by periodic auditing of the system. 42.8

percent of respondents strongly agreed, 43.2 percent of respondents agreed on the auditing process, while 14 percent of respondents stayed neutral. But still, the agreement ratio is strong with 86 percent. The higher likely neutral respondents may be because some employees may be unaware of benefits of auditing and its processes or may be just do not want to be involved in the process as there will be possibility of failures to comply to the requirements in the organization and to avoid blame game in the organization due to failures. But we fail to understand that this is a signal for the need to have improved transparency at the workplace.

4.2.1.10 Availability of emergency plans

Emergency plan and preparedness are a vital component at all kinds of workplaces, as any sort of emergency can arise depending on the nature of the organization. 45.2 percent of respondents strongly agreed, 43.2 percent agreed with the statement, while 11.6 percent of respondents were likely neutral on the approach towards emergency preparedness plans. Based on 88.4 percent of the sample population agreeing to the statement, it suggests that emergency plans are valued by the employees as they will be beneficial for the organization's workforce and, in some cases, to the general public.

4.2.1.11 Documentation of lessons learned in Mock drills.

Learning obtained from mock drill exercises plays a significant role in maintaining employee preparedness and developing a culture of continuous safety improvement within an organization towards a positive atmosphere for safety and well-being in an organised manner during the situations at crisis or

emergency situations. 42.4 percent of respondents strongly agreed, 45.2 percent agreed, whereas 12.4 percent of the respondents from the sample population remained likely neutral. Some of the likely respondents may be finding possible communication gaps regarding what is done with the findings post mock drill exercises.

4.2.1.12 Accident reporting procedures

A key to accountability and preventing any accident or incident can be with having a transparent reporting system or with a good speak-up culture. 44 percent of respondents strongly agreed, with an equal percentage of respondents also agreeing for the same, i.e., 44 percent agreed, while 12 percent of respondents were neutral in their approach. This somewhat balanced response highlights the prevalent acknowledgement of the importance and need for reporting, even though it might reflect any inconsistencies in use or bring about awareness of the current procedures in the system.

4.2.1.13 Maintenance of incident records.

Maintaining the records allows for setting and generating an analysis of the trend, which will definitely help shape the future approach and can provide suitable recommendations to refine the policies or procedures. 44.8 percent strongly agreed, 43.6 percent agreed, while 11.6 percent of the respondents stayed neutral about the maintenance of records. The combined agreement of 88.4 percent depicts an understanding of the role of documentation plays in improving workplace safety as well as a key for legal requirements.

The findings display extensive support for both employees and stakeholders for the fundamental components of a stable and dependable OHSHMS. Factors like health insurance, the presence of trained personnel, emergency planning, and policy implementation received a paramount level of agreement, displaying a responsible safety culture in some aspects. However, discussions like mock drill documentation, safety committee effectiveness, and audit transparency will benefit from effective communication and engagement efforts. Above all, with this, an organization can be on terms most sustainable path in terms of safety preparedness, but there still can be room for premeditated improvements that could strengthen trust, consistency, and involvement across all levels of the organization.

Reasoned score difference among employees on health and safety at the workplace

The perceptions of the respondents on health and safety measures at the workplace are calculated by Likert's five-point scale, and the total scores of each measure are collated for comparison among different groups by respondents by their ethnic profile. In addition, the hypothesis was examined using F-tests and p-tests to assess statistical significance.

4.2.2 Perceptions based on age group

Table 4.7: Presumptive scores of different Age group employees on Health and safety measures at the workplace.

Statements	Age Group	N	Mean	Std. Dev	Std Error	VA F	p-value
There should be a Health and Safety Policy in the company.	18-26	32	3.656	0.602	0.106	23.812	0
	27-35	86	4.128	0.7	0.075		
	36-44	62	4.548	0.563	0.072		
	45-55	45	4.6	0.495	0.074		
	Above 55 Years	25	4.92	0.277	0.055		
	Total	250	4.371	0.527	0.077		
	18-26	32	3.656	0.602	0.106	26.112	0

There should be implementation of H&S Procedures	27-35	86	4.116	0.693	0.075		
	36-44	62	4.548	0.533	0.068		
	45-55	45	4.6	0.495	0.074		
	Above 55 Years	5	4.96	0.2	0.04		
	Total	250	4.376	0.505	0.073		
The company must have appointed competent H&S Personnel	18-26	32	3.688	0.592	0.105	26.689	0
	27-35	86	4.116	0.658	0.071		
	36-44	62	4.532	0.535	0.068		
	45-55	45	4.622	0.49	0.073		
	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.384	0.495	0.071		
The organization must have provisions for First aid & medical health insurance schemes	18-26	32	3.844	0.574	0.101	23.515	0
	27-35	86	4.244	0.685	0.074		
	36-44	62	4.581	0.497	0.063		
	45-55	45	4.756	0.435	0.065		
	Above 55 Years	25	5	0	0		
	Total	250	4.485	0.438	0.061		
The company should maintain the frequency of training programs, i.e., weekly, monthly, etc.	18-26	32	3.656	0.602	0.106	25.114	0
	27-35	86	4.093	0.68	0.073		
	36-44	62	4.468	0.593	0.075		
	45-55	45	4.622	0.49	0.073		
	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.36	0.513	0.074		
The organization should have a safety committee	18-26	32	3.656	0.602	0.106	24.002	0
	27-35	86	4.047	0.684	0.074		
	36-44	62	4.468	0.564	0.072		
	45-55	45	4.622	0.49	0.073		
	Above 55 Years	25	4.88	0.44	0.088		
	Total	250	4.335	0.556	0.083		
The company must perform a regular planned H&S Inspection Schedule	18-26	32	3.656	0.602	0.106	27.2	0
	27-35	86	4.093	0.68	0.073		
	36-44	62	4.468	0.535	0.068		
	45-55	45	4.6	0.495	0.074		
	Above 55 Years	25	5	0	0		
	Total	250	4.363	0.462	0.064		

The company should have competent first-aid-trained personnel	18-26	32	3.781	0.608	0.108	28.235	0
	27-35	86	4.14	0.671	0.072		
	36-44	62	4.532	0.535	0.068		
	45-55	45	4.778	0.42	0.063		
	Above 55 Years	25	5	0	0		
	Total	250	4.446	0.447	0.062		
The company should organize scheduled H&S Audits for compliance through Internal/External Auditing	18-26	32	3.688	0.592	0.105	20.633	0
	27-35	86	4.081	0.69	0.074		
	36-44	62	4.435	0.59	0.075		
	45-55	45	4.533	0.625	0.093		
	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.34	0.539	0.077		
There should be a plan for emergency preparedness available in the company	18-26	32	3.719	0.581	0.103	23.672	0
	27-35	86	4.116	0.693	0.075		
	36-44	62	4.484	0.535	0.068		
	45-55	45	4.644	0.529	0.079		
	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.385	0.508	0.073		
Should the company document the lessons learned from the respective mock drills	18-26	32	3.656	0.545	0.096	24.136	0
	27-35	86	4.093	0.68	0.073		
	36-44	62	4.435	0.562	0.071		
	45-55	45	4.622	0.535	0.08		
	Above 55 Years	25	4.92	0.277	0.055		
	Total	250	4.345	0.52	0.075		
The company must have an accident reporting procedure	18-26	32	3.688	0.592	0.105	23.663	0
	27-35	86	4.105	0.669	0.072		
	36-44	62	4.468	0.564	0.072		
	45-55	45	4.644	0.529	0.079		
	Above 55 Years	25	4.92	0.277	0.055		
	Total	250	4.365	0.526	0.077		
The company should maintain incident records.	18-26	32	3.688	0.592	0.105	25.101	0
	27-35	86	4.116	0.676	0.073		
	36-44	62	4.484	0.535	0.068		
	45-55	45	4.644	0.529	0.079		

	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.378	0.507	0.073		

Table 4.7 represents the reasoned score distinctiveness among the different categories between the age groups of employees on health and safety measures followed at the workplace by an organization. Key safety-related statements were evaluated on perceptions about various health and safety measures using ANOVA, focusing specifically on F-values and p-values for determining significance, which was set at 0.05. A p-value lower than 0.05 indicates a statistically significant difference in perceptions among the groups, whereas a higher p-value suggests the differences are not significant.

4.2.2.1 Health and Safety Policy in the Company

The perception regarding the existence of a Health and Safety Policy in the company varies considerably across age groups. Employees in the youngest group (18–26) reported the lowest mean score, 3.66, while the oldest group (above 55) reported the highest (4.92). The f-value of 23.81 and p-value lower than 0.05, indicate a statistically significant difference at the level. These results suggest that older employees are more aware of or satisfied with the company's safety policy, possibly due to longer exposure and better understanding of organizational protocols.

4.2.2.2 Implementation of Health and Safety Procedures

Across age groups, perceptions of the implementation of health and safety procedures also show significant variation. Again, the 18–26 group scored the lowest mean of 3.66, while employees above 55 rated this much higher mean of 4.96. The f-value of 26.11 and p-value lower than 0.05, indicate

statistical significance at the level. The result reflects a potential gap in experience or communication effectiveness for younger employees regarding policy implementation.

4.2.2.3 Appointment of Competent H&S Personnel

Significant differences also appear in perceptions regarding the appointment of competent H&S personnel. Younger employees (18–26) reported a lower mean of 3.69, while those above 55 showed the highest confidence with a mean of 4.96. With an f-value of 26.69 and p-value less than 0.05, the findings are highly significantly different, and suggest that trust in, and the visibility of, qualified safety personnel tend to increase with employees' age and potentially with extended tenure within the organization.

4.2.2.4 Provision of First Aid & Health Insurance

Older employees perceive the provision of first aid and health insurance more favourably than their younger counterparts. The age group above 55 years gave a mean score of 5.00, compared to 3.84 by the 18–26 age group. The f-value of 23.51 and p-value less than 0.05, highlight a highly significant difference, pointing toward a need to better communicate health benefits to younger staff.

4.2.2.5 Frequency of Health and Safety Training

The frequency of training programs is viewed progressively more positively with age. While younger employees (18–26) rated this lowest at 3.66, the score rose steadily across age groups to 4.96 among the oldest. A strong F-

value of 25.11 and a lower p-value(<0.05), support a statistically significant age-based difference, implying that older employees may have had more consistent access to training or value it more highly

4.2.2.6 Presence of a Safety Committee

Perceptions about the presence of a safety committee also differ significantly across age groups. The youngest group, 18-26, reported a low average score of 3.66, whereas those above 55 years had a mean of 4.88. The f-value of 24.00 and p-value less than 0.05, indicate that these differences are statistically significant, suggesting that awareness and recognition of safety governance structures increase with age.

4.2.2.7 Regular Health and Safety Inspections

A statistically significant age-based disparity exists regarding the perception of regular H&S inspections. The mean score for the youngest group was 3.66, whereas it reached the highest possible score of 5.00 for those above 55. With an f-value of 27.20 and a p-value less than 0.05, suggests a statistically significant difference, which highlights that older employees are either more exposed to these inspections or perceive their effectiveness more favourably.

4.2.2.8 Competent First Aid Trained Personnel

There is a substantial and statistically significant difference in perception of first aid-trained personnel across age groups. The 18–26 group reported a mean of 3.78, while the above-55 group scored 5.00. The f-value of 28.23 and p-value less than 0.05, shows a strong, significant difference,

highlighting that younger employees may lack visibility into safety support systems or underestimate their presence and quality.

4.2.2.9 Scheduled H&S Audits

Younger employees, 18–26, rated scheduled audits significantly lower, 3.69, than older employees above 55, of 4.96. The f-value of 20.63 and p-value less than 0.05, confirm a statistically significant difference. These findings indicate that either older employees are more involved in or more attentive to internal and external auditing practices, reflecting an experiential gap.

4.2.2.10 Emergency Preparedness Plans

Age groups differed notably in their assessment of emergency preparedness plans. The mean score ranged from 3.72 for 18–26 to 4.96 above 55. The high f-value of 23.67 and a low p-value(<0.05) suggest a statistically significant difference, pointing to the possibility that emergency protocols are better understood or appreciated by older employees due to their longer organizational exposure.

4.2.2.11 Documenting Lessons from Mock Drills

Employees' responses on the importance of documenting lessons from mock drills show significant age-related variation. The 18–26 group again recorded a mean of 3.66, while the oldest age group rated it at 4.92. The f-value of 24.14 and p-value less than 0.05, reinforce a significant difference, indicating a need for better inclusion and briefings for younger staff following drills.

4.2.2.12 Accident Reporting Procedures

Perceptions of accident reporting procedures varied by age, with the 18–26 group giving a mean of 3.69 and the above 55 group giving a strong 4.92. The f-value of 23.66 and p-value less than 0.05, confirm the difference is statistically significant. This underlines a potential communication issue or lack of confidence among younger employees in the company's incident reporting mechanisms.

4.2.2.13 Maintenance of Incident Records

Finally, the perception regarding the maintenance of incident records also displays statistically significant differences. The youngest employees, 18–26, gave the lowest mean of 3.69, while those above 55 years rated it highest 4.96. The f-value of 25.10 and p-value less than 0.05, display a significant difference. This highlights a consistent pattern across all statements—older employees perceive health and safety systems more positively, possibly due to their deeper involvement and accumulated experience.

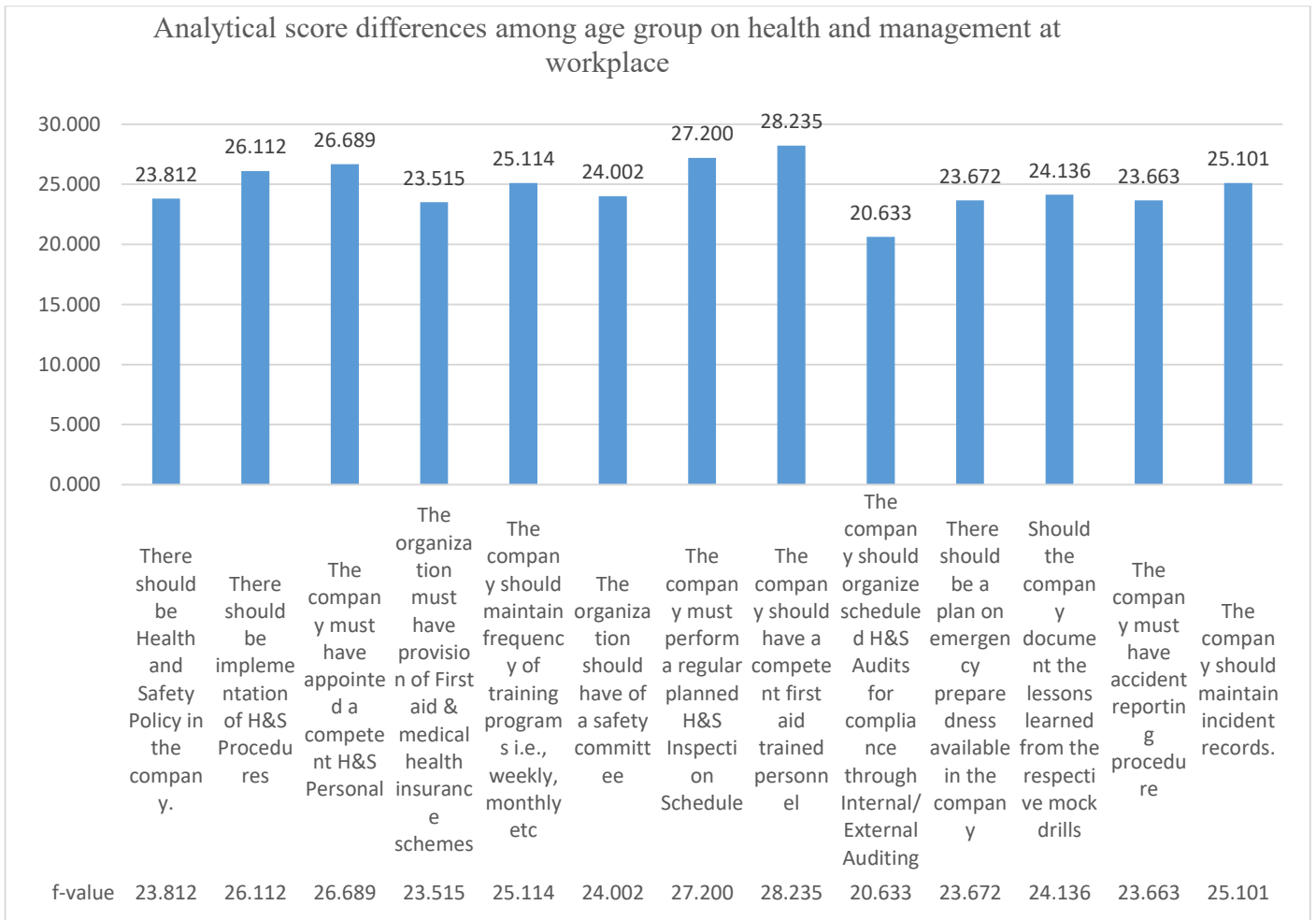


Figure 4.6: F-test results of analytical score differences among age groups on health and safety management at the workplace

A significant difference exists in perception based on age group. The older employees perceive health and safety systems. The findings emphasize the need for improved engagement and inclusion of health and safety protocols to close this perceptual gap.

4.2.3 Perceptions based on Educational Qualification

Table 4.8: Analytical score differences among different educational qualification groups by respondents on Health and Safety at the workplace.

Statements	Highest Qualification	N	Mean	Std. Dev	Std Error	VA F	p-value
There should be a Health and Safety Policy in the company.	Undergraduate or below	198	4.303	0.705	0.05	1.742	0.177
	Post Graduate	50	4.44	0.611	0.086		
	PhD	2	5	0	0		
	Total	250	4.581	0.439	0.046		
There should be implementation of H&S Procedures	Undergraduate or below	198	4.298	0.696	0.049	2.101	0.124
	Post Graduate	50	4.46	0.613	0.087		
	Ph.D.	2	5	0	0		
	Total	250	4.586	0.436	0.045		
The company must have appointed competent H&S Personnel	Undergraduate or below	198	4.318	0.679	0.048	1.298	0.275
	Post Graduate	50	4.4	0.606	0.086		
	Ph.D.	2	5	0	0		
	Total	250	4.573	0.429	0.045		
The organization must have provisions for First aid & medical health insurance schemes	Undergraduate or below	198	4.424	0.654	0.047	1.044	0.354
	Post Graduate	50	4.5	0.58	0.082		
	Ph.D.	2	5	0	0		
	Total	250	4.641	0.412	0.043		
The company should maintain the frequency of training programs, i.e., weekly, monthly, etc	Undergraduate or below	198	4.298	0.696	0.049	0.236	0.79
	Post Graduate	50	4.36	0.663	0.094		
	Ph.D.	2	4.5	0.707	0.5		
	Total	250	4.386	0.689	0.214		
The organization should have a safety committee	Undergraduate or below	198	4.278	0.697	0.05	1.088	0.338
	Post Graduate	50	4.3	0.678	0.096		
	Ph.D.	2	5	0	0		
	Total	250	4.526	0.458	0.048		
The company must perform a regular planned H&S Inspection Schedule	Undergraduate or below	198	4.298	0.689	0.049	1.124	0.327
	Post Graduate	50	4.34	0.626	0.089		
	Ph.D.	2	5	0	0		
	Total	250	4.546	0.438	0.046		
	Undergraduate or below	198	4.379	0.678	0.048	0.923	0.399

The company should have competent first-aid trained personnel	Post Graduate	50	4.42	0.609	0.086		
	Ph.D.	2	5	0	0		
	Total	250	4.6	0.429	0.045		
The company should organize scheduled H&S Audits for compliance through Internal/External Auditing	Undergraduate or below	198	4.268	0.701	0.05	1.266	0.284
	Post Graduate	50	4.34	0.688	0.097		
	Ph.D.	2	5	0	0		
	Total	250	4.536	0.463	0.049		
There should be a plan for emergency preparedness available in the company	Undergraduate or below	198	4.318	0.679	0.048	1.141	0.321
	Post Graduate	50	4.38	0.667	0.094		
	Ph.D.	2	5	0	0		
	Total	250	4.566	0.449	0.048		
Should the company document the lessons learned from the respective mock drills	Undergraduate or below	198	4.293	0.687	0.049	1.077	0.342
	Post Graduate	50	4.3	0.647	0.091		
	Ph.D.	2	5	0	0		
	Total	250	4.531	0.445	0.047		
The company must have an accident reporting procedure	Undergraduate or below	198	4.303	0.69	0.049	1.157	0.316
	Post Graduate	50	4.36	0.631	0.089		
	Ph.D.	2	5	0	0		
	Total	250	4.554	0.44	0.046		
The company should maintain incident records.	Undergraduate or below	198	4.313	0.686	0.049	1.185	0.307
	Post Graduate	50	4.38	0.635	0.09		
	Ph.D.	2	5	0	0		
	Total	250	4.564	0.44	0.046		

Table 4.8 indicates the reasoned score between different educational qualification levels of employees on health and safety management measures at the workplace.

4.2.3.1 There should be a health and safety policy in the company

Although there were modest differences in mean scores among qualification levels, PhD respondents rated this highest at 5.00, and

undergraduates or below slightly lower at 4.303. The f-value of 1.742 and p-value of 0.177 indicate these variations are slightly insignificant. This reflects a shared understanding across educational backgrounds regarding the necessity of a formal health and safety policy within the organization.

4.2.3.2 Implementation of H&S procedures

The mean values ranged from 4.298 for undergraduate or below to 5.00 for PhD holders. Despite this upward trend with higher qualifications, the f-value of 2.101 and p-value of 0.124 show no significant difference. This suggests that regardless of academic qualifications, respondents consistently supported the implementation of structured safety procedures.

4.2.3.3 The company must have appointed competent H&S personnel

Here, responses showed minimal variations across qualifications, with mean value increasing slightly from undergraduate (4.318) to PhD (5.00). The f-value of 1.298 and p-value of 0.275 confirm that these differences are not statistically significant, pointing to a uniform belief in the importance of employing competent safety professionals by the organization.

4.2.3.4 Provision for medical & health care

All respondent groups displayed high agreement, with means ranging from 4.424 to 5.00. The f-value of 1.044 and p-value of 0.354 demonstrate that these minor differences are not meaningful in a statistical sense. This indicates a broad agreement on the value of the first aid and medical provisions at the workplace by the organization.

4.2.3.5 The company should maintain the frequency of training programs

Mean responses showed little variation across educational categories, with mean values ranging from 4.298 to 4.500. The low f-value of 0.236 and a p-value of 0.790 confirm that these differences are insignificant, suggesting that all educational groups equally recognize the importance of continuous safety training.

4.2.3.6 Organization to have a safety committee

Although PhD respondents unanimously rated this as 5.00, the overall differences across groups, from 4.278 to 5.00, resulted in a non-significant f-value of 1.088 and p-value of 0.338. This implies a shared perception across educational levels on the relevance of having a dedicated safety committee.

4.2.3.7 The company must perform regular planned H&S Inspections

The mean value slightly varied from 4.298 to 5.00, yet the f-value (1.124) and p-value (0.327) suggest the differences are statistically negligible. All qualification groups appear to equally support the necessity of routine safety inspection by the company management.

4.2.3.8 The company should have competent first-aid-trained personnel

Even though the highest qualification group again rated at 5.00, the f-value of 0.923 and p-value of 0.399 indicate no statistically significant difference in opinion. This proves consistent agreement on the importance of having a trained first aid responder within the organization.

4.2.3.9 The company should have scheduled H&S Audits for compliance.

While mean values were found to have a mild increase with higher qualifications, ranging from 4.268 to 5.00, the resulting F-value of 1.266 and p-value of 0.284 fall short of statistical significance. This demonstrates a consistent valuation of regular safety audits regardless of educational background.

4.2.3.10 There should be a plan for emergency preparedness

Mean ratings were tightly grouped between 4.318 and 5.00, and the f-value of 1.141 with a p-value of 0.321 indicates that these slight differences are not statistically significant. Respondents uniformly agreed on the importance of emergency preparedness planning.

4.2.3.11 The company shall document lessons learned from the mock drill

The mean values, varying from 4.293 to 5.00, led to an F-value of 1.077 and a p-value of 0.342. These figures confirm that there are no significant disparities in responses, determining a general understanding of documenting outcomes from safety mock drills.

4.2.3.12 The company must have accident reporting procedures

Despite variation in mean value across educational levels from 4.303 to 5.00, the f-value of 1.157 and p-value of 0.316 confirm the lack of statistical significance. This highlights a shared acknowledgement of the need for a formal procedure to report accidents within an organization.

4.2.3.13 The company should maintain incident records

Ratings were high across all groups, with the lowest mean being 4.313 and the highest 5.0. With the f-value of 1.185 and the p-value of 0.307, there is no statistically significant difference. This suggests that maintaining incident records is overall perceived as a crucial health and safety measure.

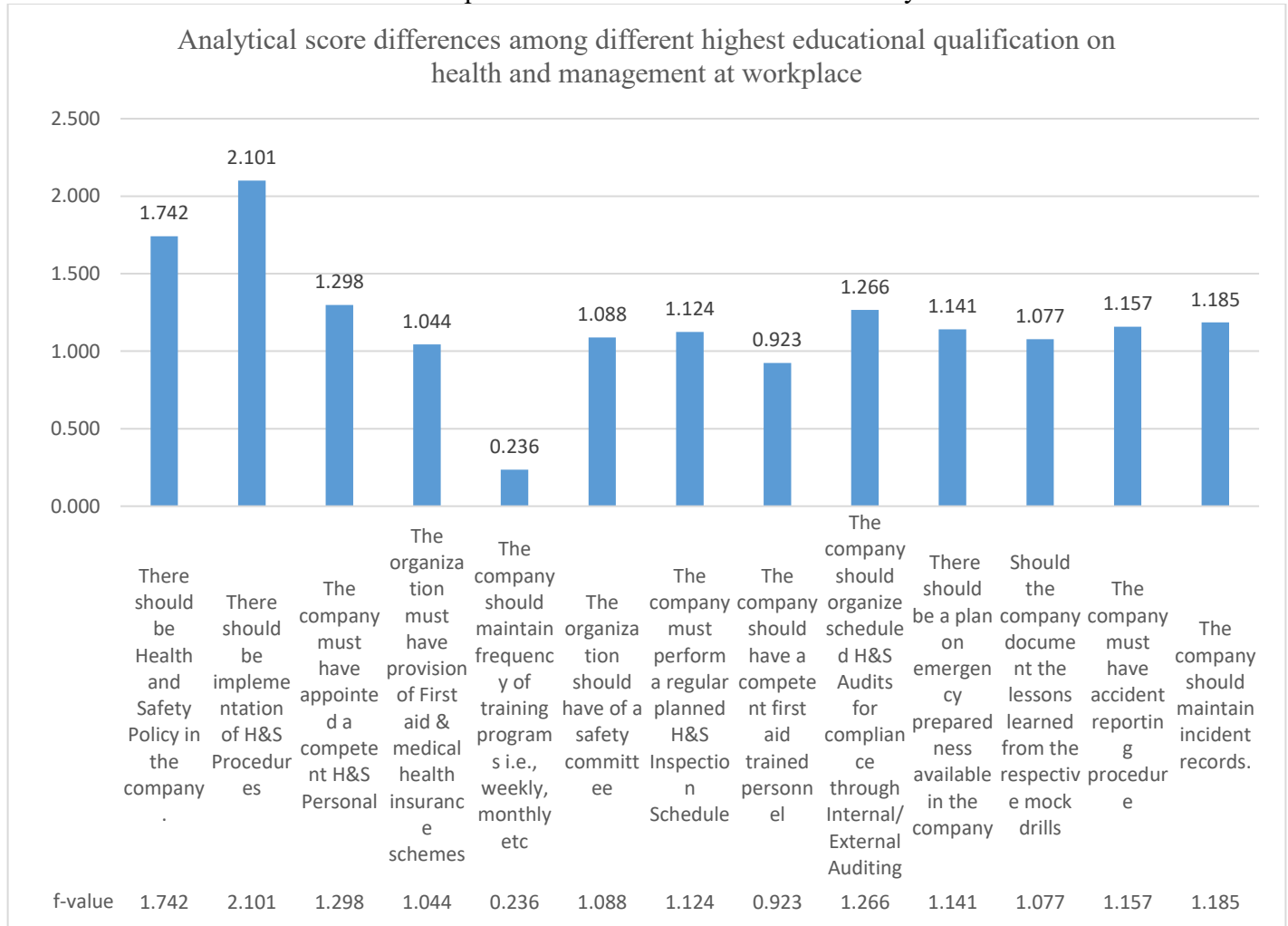


Figure 4.7: F-test results of analytical score differences among educational qualifications on health and safety management at the workplace

Through the group, it was found that it was not statistically significant in responses across educational levels. This indicates broad and unified agreement among employees regardless of educational qualifications and the critical importance of workplace requirements.

4.2.4 Perceptions based on work experience

Table 4.9: Perceptive differences among different groups of work experience respondents on Health and safety management at the workplace.

Statements	Work Experience	N	Mean	Std. Dev	Std Error	VA F	p-value
There should be a Health and Safety Policy in the company.	Beginner (Upto 3 years)	32	3.656	0.602	0.106	55.503	0
	Competent (3 to 10 years)	76	4.026	0.692	0.079		
	Proficient (Above 10 years)	142	4.655	0.492	0.041		
	Total	250	4.112	0.595	0.076		
There should be implementation of H&S Procedures	Beginner (Upto 3 years)	32	3.656	0.602	0.106	59.858	0
	Competent (3 to 10 years)	76	4.013	0.663	0.076		
	Proficient (Above 10 years)	142	4.662	0.489	0.041		
	Total	250	4.11	0.585	0.074		
The company must have appointed competent H&S Personnel	Beginner (Upto 3 years)	32	3.656	0.545	0.096	56.83	0
	Competent (3 to 10 years)	76	4.053	0.63	0.072		
	Proficient (Above 10 years)	142	4.648	0.508	0.043		
	Total	250	4.119	0.561	0.07		
The organization must have provisions for First aid & medical health insurance schemes	Beginner (Upto 3 years)	32	3.781	0.491	0.087	51.465	0
	Competent (3 to 10 years)	76	4.197	0.674	0.077		
	Proficient (Above 10 years)	142	4.725	0.463	0.039		
	Total	250	4.235	0.543	0.068		
The company should maintain the frequency of training programs, i.e., weekly, monthly, etc	Beginner (Upto 3 years)	32	3.625	0.554	0.098	51.764	0
	Competent (3 to 10 years)	76	4.026	0.653	0.075		
	Proficient (Above 10 years)	142	4.62	0.542	0.046		
	Total	250	4.09	0.583	0.073		
	Beginner (Upto 3 years)	32	3.625	0.554	0.098	45.853	0
	Competent (3 to 10 years)	76	4.013	0.663	0.076		

The organization should have a safety committee	Proficient (Above 10 years)	142	4.585	0.562	0.047		
	Total	250	4.074	0.593	0.074		
The company must perform a regular planned H&S Inspection Schedule	Beginner (Upto 3 years)	32	3.656	0.602	0.106	52.695	0
	Competent (3 to 10 years)	76	4.013	0.643	0.074		
	Proficient (Above 10 years)	142	4.62	0.515	0.043		
	Total	250	4.096	0.587	0.074		
The company should have competent first-aid trained personnel	Beginner (Upto 3 years)	32	3.75	0.568	0.1	51.073	0
	Competent (3 to 10 years)	76	4.105	0.665	0.076		
	Proficient (Above 10 years)	142	4.69	0.494	0.041		
	Total	250	4.182	0.576	0.073		
The company should organize scheduled H&S Audits for compliance through Internal/External Auditing	Beginner (Upto 3 years)	32	3.625	0.554	0.098	42.725	0
	Competent (3 to 10 years)	76	4.026	0.653	0.075		
	Proficient (Above 10 years)	142	4.577	0.587	0.049		
	Total	250	4.076	0.598	0.074		
There should be a plan for emergency preparedness available in the company	Beginner (Upto 3 years)	32	3.688	0.535	0.095	46.275	0
	Competent (3 to 10 years)	76	4.066	0.66	0.076		
	Proficient (Above 10 years)	142	4.627	0.541	0.045		
	Total	250	4.127	0.579	0.072		
Should the company document the lessons learned from the respective mock drills	Beginner (Upto 3 years)	32	3.625	0.492	0.087	45.294	0
	Competent (3 to 10 years)	76	4.053	0.651	0.075		
	Proficient (Above 10 years)	142	4.585	0.562	0.047		
	Total	250	4.087	0.568	0.07		
The company must have an accident reporting procedure	Beginner (Upto 3 years)	32	3.656	0.545	0.096	45.086	0
	Competent (3 to 10 years)	76	4.066	0.66	0.076		
	Proficient (Above 10 years)	142	4.606	0.545	0.046		
	Total	250	4.109	0.584	0.073		
The company should maintain incident records.	Beginner (Upto 3 years)	32	3.656	0.545	0.096	51.704	0
	Competent (3 to 10 years)	76	4.053	0.651	0.075		
	Proficient (Above 10 years)	142	4.634	0.526	0.044		
	Total	250	4.114	0.574	0.072		

Table 4.9 shows the perceptual score dissimilarity among various groups of experienced and non-experienced professionals' category for the health and safety management category at the workplace in an organization.

4.2.4.1 There should be a Health and Safety Policy in the company.

The average perceptual score of employees based on work experience shows that proficient employees (above 10 years) scored 4.655, competent employees (3–10 years) scored 4.026, and beginners (up to 3 years) scored 3.656. With an F-value of 55.503 and a lower p-value (<0.05), the difference is statistically significant. This indicates that more experienced employees are more strongly in favour of having a health and safety policy in the company.

4.2.4.2 There should be implementation of H&S Procedures.

Employees with over 10 years of experience had a high average score of 4.662, while competent and beginner groups had scores of 4.013 and 3.656, respectively. The f-value of 59.858 and a p-value less than 0.05, confirm statistically significant differences, showing that seasoned employees prioritize the implementation of H&S procedures more positively.

4.2.4.3 The company must have appointed competent H&S personnel.

Proficient employees rated this statement the highest at 4.648, compared to 4.053 by competent and 3.656 by beginners. With a highly significant f-value of 56.830 and with no statistically significant different p-value less than 0.05, the results suggest that experienced employees are more likely to agree on the necessity of appointing competent H&S personnel.

4.2.4.4 The organization must have provisions for First Aid & medical health insurance schemes.

Proficient employees averaged 4.725, followed by competent (4.197) and beginner (3.781). The f-value of 51.465 and p-value less than 0.05, imply statistically significant differences, indicating that more experienced employees strongly support provisions for first aid and health insurance.

4.2.4.5 The company should maintain the frequency of training programs (weekly, monthly, etc.)

Average scores ranged from 4.620 for proficient employees to 4.026 for competent and 3.625 for beginner employees. The f-value of 51.764 and p-value less than 0.05, highlighting significant variance in perceptions, with experienced workers valuing continuous training more.

4.2.4.6 The organization should have a safety committee

Proficient employees gave a mean rating of 4.585, compared to 4.013 by competent and 3.625 by beginners. A significant f-value of 45.853 and p-

value lower than 0.05 displays a statistically significant difference, which indicates that experienced employees view safety committees as more essential.

4.2.4.7 The company must perform a regular planned H&S inspection schedule.

Proficient employees scored highest at 4.620, followed by competent at 4.013, and beginners at 3.656. The significant f-value of 52.695 and p-value lower than 0.05, depicting statistically significant difference, indicate that work experience greatly influences positive perception of scheduled inspections.

4.2.4.8 The company should have competent first-aid trained personnel.

With average scores of 4.690 for Proficient, 4.105 for Competent, and 3.750 for beginner employees, the significant f-value of 51.073 and p-value much lower than 0.05, stating a statistically significant difference across the group, suggests that experienced employees are more strongly in favour of having trained personnel.

4.2.4.9 The company should organize scheduled H&S audits for compliance through internal/external auditing.

Proficient employees rated this 4.577, while competent and beginners rated it 4.026 and 3.625, respectively. The f-value of 42.725 and p-value which is lower than 0.05, indicates significant differences, highlighting that experienced workers see audits as a vital compliance tool.

4.2.4.10 There should be a plan on emergency preparedness available in the company.

Proficient employees scored highest at 4.627, followed by competent at 4.066, and beginners at 3.688. A significant f-value of 46.275 and p-value lower than 0.05 with a statistically significant difference shows experienced staff are more concerned with emergency preparedness planning.

4.2.4.11 Should the company document the lessons learned from respective mock drills?

Proficient employees rated this 4.585, competent 4.053, and beginners 3.625. With an f-value of 45.294 and a p-value lower than 0.05, with statistically significant difference. The data shows significantly higher support among experienced workers for documentation of mock drill learnings.

4.2.4.12 The company must have an accident reporting procedure.

Average scores were 4.606 by proficient, 4.066 by competent, and 3.656 by beginners. The f-value of 45.086 and p-value less than 0.05, confirm statistical significance, emphasizing that experienced employees are more supportive of formal accident reporting systems.

4.2.4.13 The company should maintain incident records.

The mean scores ranged from 4.634 proficient to 4.053 competent and 3.656 for beginners. The F-value of 51.704 with a p-value lower than 0.05 signifies significant perception differences, showing that experienced staff more strongly support maintaining incident records.

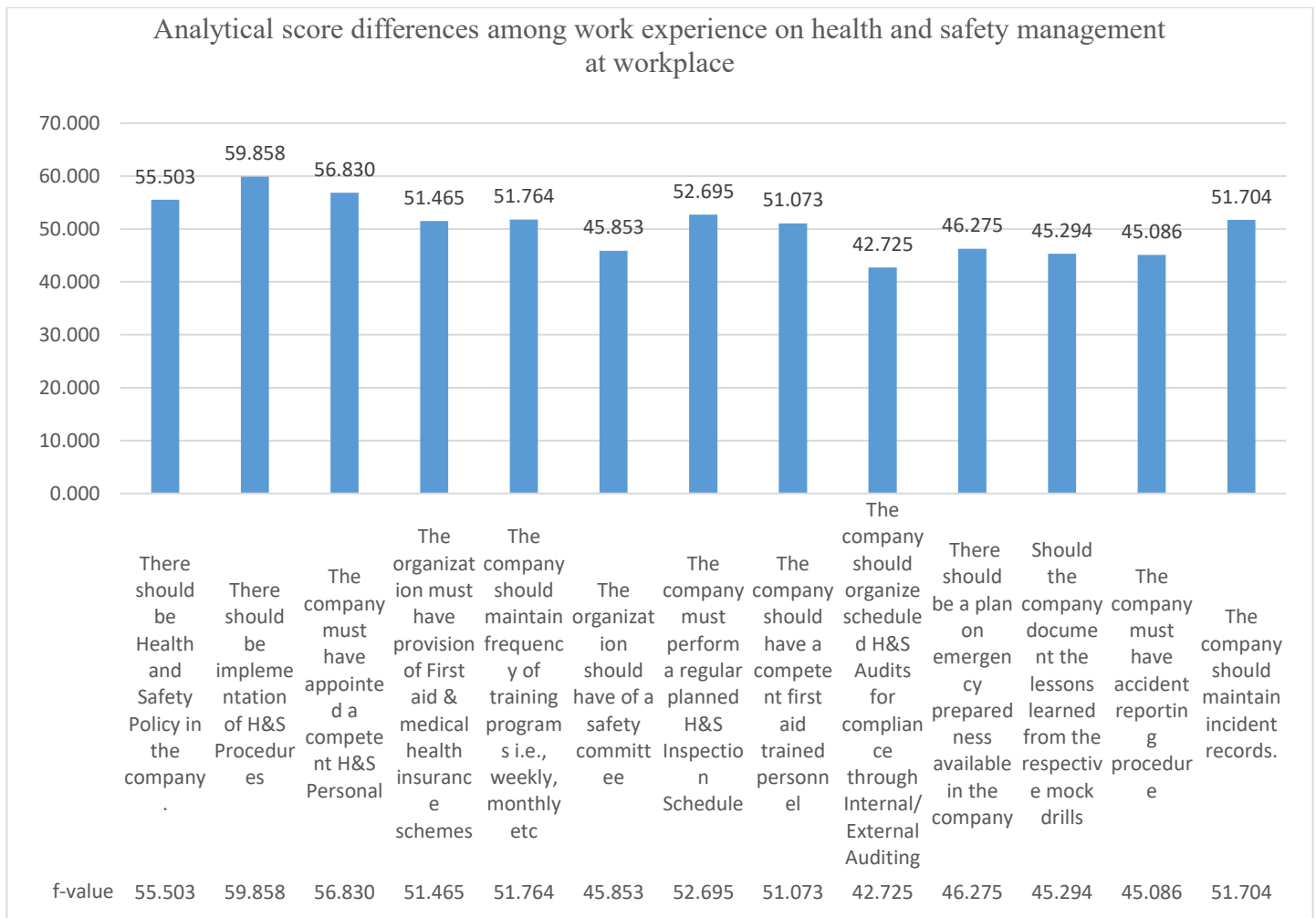


Figure 4.8: F-test results of analytical score differences among work experience on health and safety management at the workplace.

All statements display significant variance across experience levels highlighting the importance of H&S practices consistently higher and how experience shapes the perceptions of the workplace safety.

4.2.5 Perceptions based on organization

Table 4.10: Perceptive differences among different groups of work organizational respondents on Health and safety management at the workplace

Statements	Organization	N	Mean	Std. Dev	Std Error	VA F	p-value
There should be Health and Safety Policy in the company.	Construction	110	4.318	0.663	0.063	1.466	0.18
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	5				
	Institute	1	5				
	Manufacturing Industry	68	4.441	0.655	0.079		
	Oil and gas	18	4.444	0.705	0.166		
	Transport & Logistics	45	4.156	0.737	0.11		
	Total	250	4.545	0.627	0.144		
There should be implementation of H&S Procedures	Construction	110	4.327	0.651	0.062	1.432	0.193
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	5				
	Institute	1	5				
	Manufacturing Industry	68	4.441	0.655	0.079		
	Oil and Gas	18	4.389	0.698	0.164		
	Transport & Logistics	45	4.156	0.737	0.11		
	Total	250	4.539	0.624	0.144		
The company must have appointed a competent H&S Personal	Construction	110	4.355	0.644	0.061	1.832	0.082
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	5				
	Manufacturing Industry	68	4.471	0.61	0.074		
	Oil and Gas	18	4.333	0.686	0.162		
	Transport & Logistics	45	4.111	0.714	0.106		

	Total	250	4.409	0.609	0.142		
The organization must have provision of First aid & medical health insurance schemes	Construction	110	4.464	0.616	0.059	1.48	0.175
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	5				
	Institute	1	5				
	Manufacturing Industry	68	4.529	0.585	0.071		
	Oil and Gas	18	4.444	0.511	0.121		
	Transport & Logistics	45	4.267	0.751	0.112		
	Total	250	4.588	0.577	0.135		
The company should maintain the frequency of training programs, i.e., weekly, monthly, etc	Construction	110	4.3	0.657	0.063	1.821	0.084
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	3				
	Institute	1	5				
	Manufacturing Industry	68	4.441	0.655	0.079		
	Oil and Gas	18	4.333	0.686	0.162		
	Transport & Logistics	45	4.156	0.737	0.11		
	Total	250	4.279	0.623	0.143		
The organization should have a safety committee	Construction	110	4.255	0.67	0.064	1.894	0.071
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	5				
	Manufacturing Industry	68	4.471	0.634	0.077		
	Oil and Gas	18	4.278	0.669	0.158		
	Transport & Logistics	45	4.089	0.763	0.114		
	Total	250	4.386	0.623	0.143		
The company must perform a regular planned H&S Inspection Schedule	Construction	110	4.3	0.657	0.063	1.824	0.083
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	3.8	0.837	0.374		
	Human Resources	1	4				

	Institute	1	5				
	Manufacturing Industry	68	4.456	0.633	0.077		
	Oil and Gas	18	4.333	0.686	0.162		
	Transport & Logistics	45	4.133	0.726	0.108		
	Total	250	4.378	0.59	0.131		
The company should have competent first-aid trained personnel	Construction	110	4.4	0.652	0.062	1.302	0.25
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	5				
	Manufacturing Industry	68	4.485	0.611	0.074		
	Oil and Gas	18	4.444	0.616	0.145		
	Transport & Logistics	45	4.222	0.735	0.11		
	Total	250	4.444	0.602	0.14		
The company should organize scheduled H&S Audits for compliance through Internal/External Auditing	Construction	110	4.245	0.68	0.065	1.766	0.095
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	5				
	Manufacturing Industry	68	4.471	0.634	0.077		
	Oil and Gas	18	4.278	0.752	0.177		
	Transport & Logistics	45	4.111	0.745	0.111		
	Total	250	4.388	0.635	0.146		
There should be a plan for emergency preparedness available in the company	Construction	110	4.291	0.668	0.064	1.67	0.117
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	5				
	Institute	1	5				
	Manufacturing Industry	68	4.485	0.611	0.074		
	Oil and Gas	18	4.389	0.698	0.164		
	Transport & Logistics	45	4.178	0.716	0.107		
	Total	250	4.543	0.616	0.143		
	Construction	110	4.264	0.673	0.064	1.474	0.177

Should the company document the lessons learned from the respective mock drills	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	4				
	Manufacturing Industry	68	4.471	0.634	0.077		
	Oil and Gas	18	4.278	0.669	0.158		
	Transport & Logistics	45	4.156	0.706	0.105		
	Total	250	4.271	0.614	0.142		
The company must have an accident reporting procedure	Construction	110	4.291	0.668	0.064	1.314	0.244
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	4				
	Manufacturing Industry	68	4.471	0.634	0.077		
	Oil and Gas	18	4.333	0.686	0.162		
	Transport & Logistics	45	4.178	0.716	0.107		
The company should maintain incident records.	Total	250	4.284	0.617	0.143	1.406	0.203
	Construction	110	4.309	0.66	0.063		
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	5				
	Manufacturing Industry	68	4.471	0.634	0.077		
	Oil and Gas	18	4.333	0.686	0.162		
	Transport & Logistics	45	4.178	0.716	0.107		
	Total	250	4.411	0.616	0.143		

Table 4.10 represents the perceptual score differences among different categories of organizations on health and safety management followed at the workplace.

4.2.5.1 Existence of a Health and Safety Policy

A health and safety policy serves as a fundamental component of organizational safety management systems. The results showed high overall agreement on this statement, with engineering consulting firms, human resources, and institutes assigning the highest possible score mean (5.0). The healthcare sector rated it slightly lower mean (4.0), possibly reflecting stricter internal standards or more critical assessment practices. The p-value of 0.180 indicates no statistically significant difference among sectors.

4.2.5.2 Implementation of Health and Safety Procedures

The implementation of procedures is integral to operationalizing safety policies. Here, the consensus remained strong, with an overall mean score of 4.539. Like the first statement, engineering consulting firms have a mean of 5.0, while the healthcare sector has a lower mean (4.0). The p-value 0.193 suggests an almost uniformity in perceptions with no statistical significance across sectors.

4.2.5.3 Appointment of Competent Health and Safety Personnel

The appointment of qualified H&S personnel was rated highly across all sectors, with an overall mean of 4.409. Engineering consulting firms and institutes have the highest mean of 5.0, while transport and logistics have the lowest mean of 4.111. There was no indication of statistical significance with a p-value of 0.082; the relatively low p-value suggests a potential area for future investigation.

4.2.5.4 Provision of First Aid and Health Insurance Schemes

The inclusion of first aid facilities and health insurance had a mean value of 4.588. The healthcare sector again gave a lower mean value of 4.0, perhaps due to higher expectations in this area. The f-value of 1.480 and p-value of 0.175 indicated no significant difference across groups.

4.2.5.5 Frequency of Training Programs

Ongoing safety training initiatives are crucial for ensuring that employees remain knowledgeable and competent in workplace practices. The overall mean of 4.279, while engineering consulting and institute have a mean of 5.0, HR respondents notably lower mean value of 3.0. Despite the observed differences, the p-value of 0.084 indicated no statistical significance.

4.2.5.6 Formation of a Safety Committee

Safety committees play a vital role in promoting participatory approaches to safety management. The mean score was 4.386 across all respondents, with engineering consulting firms and institutes again assigning perfect scores. Transport and logistics had a lower mean value of 4.089. The p-value of 0.071 indicates that while differences exist, they are not statistically significant.

4.2.5.7 Regular Health and Safety Inspections

Planned safety inspections help ensure continuous compliance. The mean score of 4.378 was found across the group. Mean values were relatively

uniform across sectors, though healthcare had the lowest mean of 3.8. The p-value of 0.083 suggests minimal variation among sectors.

4.2.5.8 Availability of First Aid Trained Personnel

All sectors agreed on the necessity of having trained first aid personnel, with an overall mean of 4.444. Engineering consulting firms again rated this item highest. The lowest mean value, 4.0 was from healthcare and human resources. However, the p-value of 0.250 indicated no significant inter-sectoral differences.

4.2.5.9 Scheduled Internal/External Health and Safety Audits

Auditing ensures organizational accountability in health and safety compliance. Respondents expressed strong support with a mean value of 4.388. Transport and logistics had the lowest mean value 4.111. The p-value of 0.095 indicated no statistically significant differences.

4.2.5.10 Emergency Preparedness Planning

Emergency planning represents a forward-looking strategy within the broader framework of risk management. The high mean value of 4.543, with HR, institutes, and engineering consulting firms giving perfect scores. Healthcare respondents again provided a lower mean value 4.0. The p-value 0.117 suggested similarity in perceptions across sectors.

4.2.5.11 Documentation of Lessons from Mock Drills

Capturing and utilizing lessons from emergency drills is essential for continuous improvement. The overall mean score was 4.271. While some sectors gave high ratings, healthcare, HR, and institutes had lower mean value 4.0. The p-value of 0.177, indicating no significant sectoral differences.

4.2.5.12 Accident Reporting Procedure

The availability of accident reporting mechanisms was viewed as important, with a mean score of 4.284. High levels of agreement were seen across most groups, though some groups (e.g., healthcare) consistently slightly lower mean value 4.0. The p-value 0.244 confirmed statistical insignificance.

4.2.5.13 Maintenance of Incident Records

Accurate and systematic record keeping is essential for ensuring legal compliance and facilitating effective safety evaluations. The statement received a high mean value 4.411, with the highest scores from engineering and manufacturing sectors. HR and healthcare groups had lower mean value 4.0.

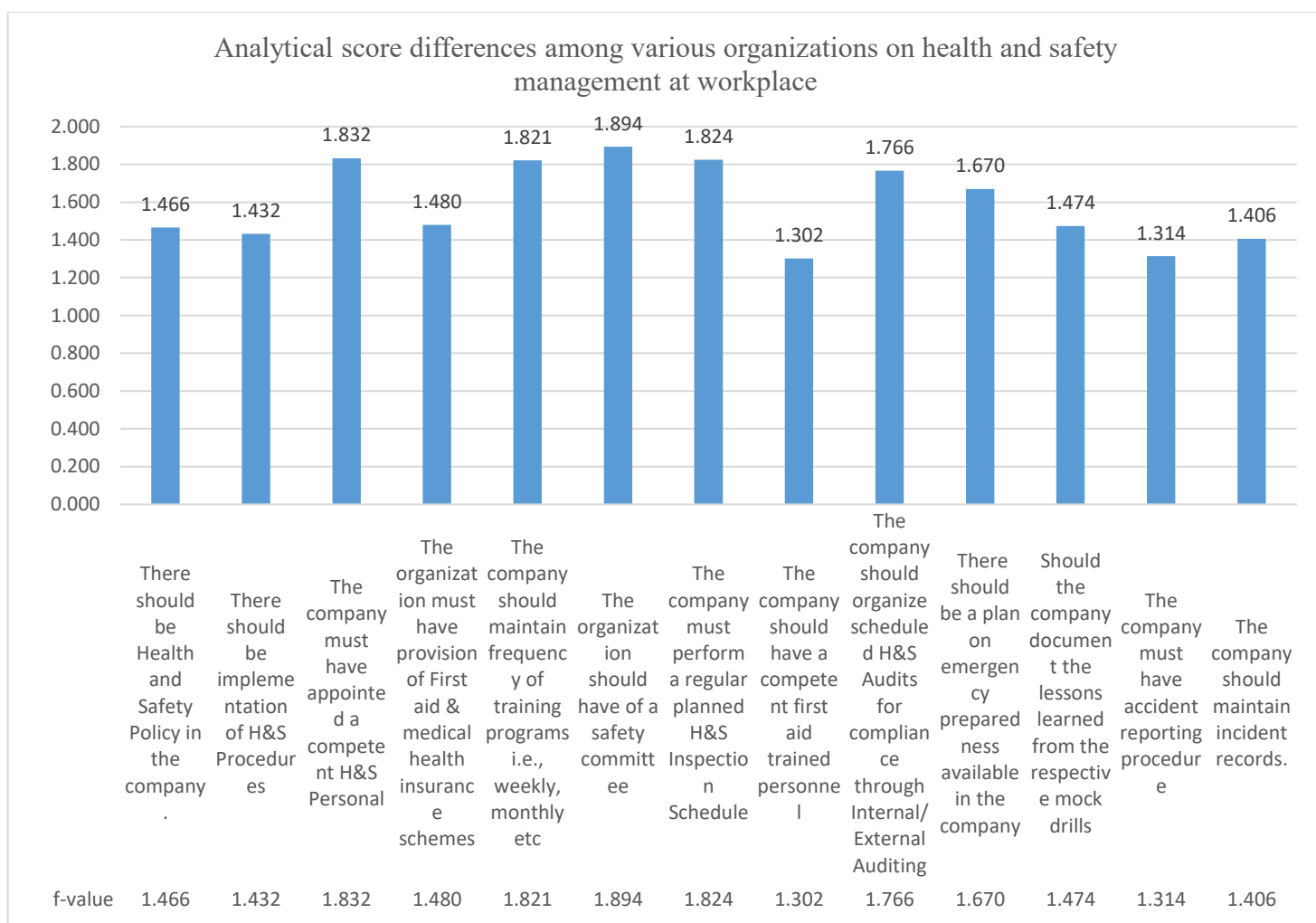


Figure 4.9: F-test results of analytical score differences among various organizations on health and safety management at workplace.

The analysis confirms statistically significant difference in perception of health and safety management based on job designation by respondents, the findings suggest that while many systems exist implementation visibility and exclusively vary and targeted communication, training and engagement are required.

4.2.6 Perceptions based on designation

Table 4.11: Perceptive differences among different groups of varied designation respondents on Health and safety management at the workplace

Statements	Designation	N	Mean	Std. Dev	Std Error	VA F	p-value
There should be Health and Safety Policy in the company.	Accountant	2	4			2.683	0.003
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.219	0.65	0.063		
	Executive - Human Resources	1	4				
	Manager	61	4.656	0.479	0.061		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.273	0.804	0.108		
	Technician	17	3.941	0.827	0.201		
	Total	250	4.517	0.662	0.136		
There should be implementation of H&S Procedures	Accountant	2	4			2.87	0.001
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.238	0.643	0.063		
	Executive - Human Resources	1	4				
	Manager	61	4.656	0.479	0.061		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.255	0.799	0.108		
	Technician	17	3.882	0.781	0.189		
	Total	250	4.512	0.65	0.133		
The company must have appointed a competent H&S Personal	Accountant	2	4			2.109	0.02
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.276	0.612	0.06		

	Executive - Human Resources	1	4				
	Manager	61	4.59	0.528	0.068		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.255	0.799	0.108		
	Technician	17	3.941	0.748	0.181		
	Total	250	4.515	0.647	0.132		
The organization must have provision of First aid & medical health insurance schemes	Accountant	2	4			1.89	0.041
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.371	0.593	0.058		
	Executive - Human Resources	1	4				
	Manager	61	4.689	0.467	0.06		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.382	0.782	0.105		
	Technician	17	4.118	0.781	0.189		
	Total	250	4.56	0.634	0.131		
The company should maintain frequency of training programs i.e., weekly, monthly etc	Accountant	2	4			2.193	0.015
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.229	0.639	0.062		
	Executive - Human Resources	1	4				
	Manager	61	4.574	0.59	0.076		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.255	0.775	0.105		
	Technician	17	3.882	0.781	0.189		
	Total	250	4.504	0.667	0.135		
	Accountant	2	4			2.086	0.022
	Administrative Assistant	5	4.4	0.894	0.4		

The organization should have of a safety committee	Crane operator	1	5				
	Engineer	105	4.219	0.62	0.06		
	Executive - Human Resources	1	4				
	Manager	61	4.557	0.592	0.076		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.2	0.803	0.108		
	Technician	17	3.882	0.781	0.189		
	Total	250	4.478	0.738	0.167		
The company must perform a regular planned H&S Inspection Schedule	Accountant	2	4			2.003	0.029
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.238	0.628	0.061		
	Executive - Human Resources	1	4				
	Manager	61	4.574	0.531	0.068		
	Nursing Officer	1	4				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.236	0.793	0.107		
	Technician	17	3.941	0.827	0.201		
	Total	250	4.417	0.665	0.136		
The company should have a competent first aid trained personnel	Accountant	2	4			2.183	0.016
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.295	0.619	0.06		
	Executive - Human Resources	1	4				
	Manager	61	4.672	0.507	0.065		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.327	0.771	0.104		
	Technician	17	4.059	0.827	0.201		
	Total	250	4.541	0.654	0.135		

The company should organize scheduled H&S Audits for compliance through Internal/External Auditing	Accountant	2	4			1.914	0.038
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.19	0.652	0.064		
	Executive - Human Resources	1	4				
	Manager	61	4.541	0.621	0.08		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.236	0.793	0.107		
	Technician	17	3.941	0.748	0.181		
	Total	250	4.501	0.672	0.135		
There should be a plan on emergency preparedness available in the company	Accountant	2	4			2.058	0.024
	Administrative Assistant	5	4.4	0.894	0.4		
	Crane operator	1	5				
	Engineer	105	4.229	0.609	0.059		
	Executive - Human Resources	1	4				
	Manager	61	4.623	0.553	0.071		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.273	0.781	0.105		
	Technician	17	4.059	0.827	0.201		
	Total	250	4.508	0.733	0.167		
Should the company document the lessons learned from the respective mock drills	Accountant	2	4			1.999	0.029
	Administrative Assistant	5	4.2	0.837	0.374		
	Crane operator	1	5				
	Engineer	105	4.19	0.606	0.059		
	Executive - Human Resources	1	4				
	Manager	61	4.574	0.562	0.072		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.273	0.804	0.108		

	Technician	17	4	0.791	0.192		
	Total	250	4.476	0.72	0.161		
The company must have accident reporting procedure	Accountant	2	4			2.000	0.029
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.21	0.615	0.06		
	Executive - Human Resources	1	4				
	Manager	61	4.59	0.559	0.072		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.255	0.799	0.108		
	Technician	17	4.059	0.827	0.201		
	Total	250	4.519	0.67	0.137		
The company should maintain incident records.	Accountant	2	4			2.179	0.016
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.219	0.62	0.06		
	Executive - Human Resources	1	4				
	Manager	61	4.607	0.556	0.071		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.291	0.786	0.106		
	Technician	17	4	0.791	0.192		
	Total	250	4.52	0.66	0.135		

The table 4.11 depicts the perceptive score differences among different category group of employees on health and safety management in organization at workplace.

4.2.6.1 Health and safety policy in the company

The perception of the presence of a health and safety policy varies significantly across different job designations. Managers and supervisory roles reported higher average scores of managers 4.66, supervisors 4.27, indicating strong agreement about the presence of such a policy. Technicians, however, rated it lower mean value 3.94, suggesting potential gaps in awareness or communication. With an f-value of 2.683 and a p-value of 0.0029 lower than 0.05, the difference in perception is statistically significant at the one percent level, implying varying levels of engagement or understanding across roles.

4.2.6.2 Implementation of Health and Safety Procedures

The implementation of health and safety procedures also shows perceptual differences. While management and HR-related designations express strong agreement managers 4.66, technicians again report a lower mean score 3.88, possibly pointing to inconsistencies in procedural enforcement at the ground level. The f-value of 2.870 and p-value of 0.0015 reflect a statistically significant difference at the one percent level, emphasizing the need for consistent implementation and communication across all levels of the organization.

4.2.6.3 Appointing Competent H&S Personnel

There is a significant difference in how employees across roles perceive the appointment of competent Health & Safety personnel. The mean scores indicate stronger agreement from senior and management positions of managers 4.59, while technicians again report comparatively lower agreement

mean 3.94. The calculated f-value is 2.109 and p-value is 0.0205, which is significant at the five percent level, suggesting a gap in visibility or trust in the competencies of H&S personnel, particularly among frontline workers.

4.2.6.4 Provision of First Aid and Health Insurance

Employees differ in their views on the availability of first aid and health insurance schemes. Management and specialized roles with a mean value that is managers 4.69 Sr. Engineers 5, rate this statement higher, while technicians 4.12 and engineers 4.37 rate it lower. The f-value of 1.890 with a p-value of 0.0413 shows a significant difference at the five percent level, indicating that health coverage awareness or satisfaction is not uniformly perceived across all designations.

4.2.6.5 Frequency of Training Programs

Responses regarding the frequency of H&S training programs indicate that higher-level roles perceive training to be more regular and effective. Managers reported a higher mean 4.57, whereas Technicians gave a lower average score of 3.88. The f-value of 2.193 and p-value of 0.0155 denote a significant variation at the five percent level. This suggests the need for better inclusion and scheduling of training sessions for technical staff and frontline workers.

4.2.6.6 Presence of a Safety Committee

The idea of having a safety committee is supported more strongly by managerial positions 4.56, while technicians 3.88 and engineers 4.21 perceive

its existence less strongly 3.88). The F-value of 2.086 with a p-value of 0.0220 indicates significant differences at the five percent level. This points to the potential invisibility or underrepresentation of lower-level roles in safety governance bodies.

4.2.6.7 Regular Health & Safety Inspections

Regular inspections for health and safety compliance are perceived differently across roles. Managers 4.57 and specialized employees rated the highest, while Technicians provided a lower score 3.94. The f-value is 2.003 and p-value is 0.0289, indicating a significant difference at the five percent level. This underlines a perception gap in how frequently safety audits are experienced or communicated.

4.2.6.8 Competent First Aid Trained Personnel

A statistically significant difference f-value: 2.183 and p-value: 0.016 exists in perceptions regarding the presence of first aid-trained personnel. While most job roles expressed high agreement, Technicians again scored lower mean 4.06, contrasting with high scores from managers 4.67. This suggests that while systems may be in place, visibility and interaction with trained personnel may vary across departments.

4.2.6.9 Scheduled health and safety audits

Scheduled audits for H&S compliance show differing perceptions, with engineers mean 4.19 and Technicians 3.94 reporting lower awareness or involvement compared to managers 4.54. The f-value of 1.914 and p-value of

0.038 reflect statistical significance at the five percent level. These findings call for greater involvement and communication regarding audit processes across all job designations.

4.2.6.10 Emergency Preparedness Plans

Perceptions of emergency preparedness plans again differ significantly by designation. While management and medical staff strongly affirm the existence of such plans with managers: 4.62, nursing officer 5, Technicians and Engineers give comparatively lower ratings technicians 4.06. The f-value of 2.058 with a p-value of 0.024 shows a statistically significant difference, highlighting a need for inclusive emergency planning drills and briefings.

4.2.6.11 Documenting Lessons from Mock Drills

Documenting learnings from mock drills is supported more by those in leadership positions from managers 4.57) while administrative assistants and technicians, show more varied responses. With an f-value of 1.999 and p-value of 0.0293, this dimension is significantly different across roles. It indicates a potential lack of communication or feedback sharing from such drills, especially with technical and support staff.

4.2.6.12 Accident Reporting Procedures

Accident reporting protocols are perceived more positively by those in supervisory or managerial roles 4.59, while lower ratings are seen from Technicians 4.06 and engineers 4.21. The f-value of 2.000 and p-value of 0.029

confirm the presence of statistically significant differences, suggesting unequal access to or awareness of the reporting process among various designations.

4.2.6.13 Maintenance of Incident Records

Maintaining incident records is perceived positively overall, but inconsistency is evident. Management positions, such as Managers 4.61 report higher satisfaction, whereas Technicians mean 4.0 and engineers 4.22 lag slightly. The f-value is 2.179 and the p-value is 0.0162, denoting a significant difference. This could reflect differences in exposure to documentation practices and communication regarding safety incident records.

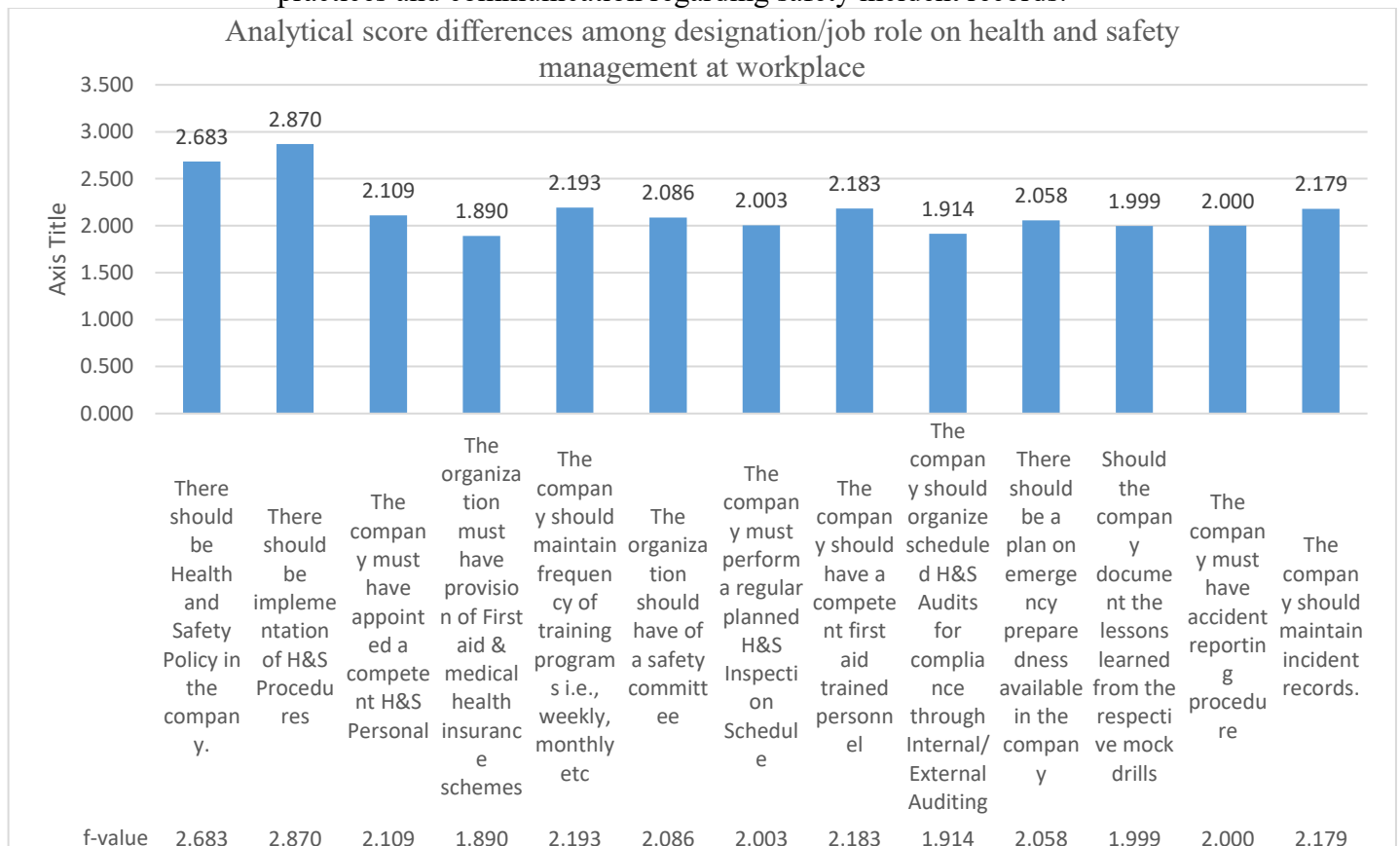


Figure 4.10: F-test results of analytical score differences among designation/job role on health and safety management at workplace.

The general agreement statistically significant differences in responses between job designations indicating p-values less than 0.05 highlight critical insight with safety measures vary depending on role in the organization. The survey results show overall strong support for the health and safety practices across the job.

4.2.7 Correlation Coefficient Analysis

Table 4.12: Correlation measures between Health and safety management and appreciation of the respondents.

Variables	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13
A1	1.000												
A2	0.983	1.000											
A3	0.908	0.925	1.000										
A4	0.829	0.836	0.872	1.000									
A5	0.890	0.906	0.909	0.844	1.000								
A6	0.867	0.875	0.903	0.808	0.925	1.000							
A7	0.914	0.931	0.934	0.840	0.940	0.941	1.000						
A8	0.846	0.853	0.880	0.904	0.902	0.864	0.909	1.000					
A9	0.894	0.910	0.913	0.811	0.909	0.892	0.933	0.866	1.000				
A10	0.896	0.904	0.906	0.852	0.897	0.891	0.930	0.914	0.943	1.000			
A11	0.868	0.875	0.877	0.831	0.901	0.902	0.926	0.898	0.928	0.953	1.000		
A12	0.871	0.879	0.889	0.839	0.914	0.899	0.930	0.917	0.934	0.965	0.970	1.000	
A13	0.892	0.908	0.920	0.858	0.927	0.895	0.943	0.919	0.956	0.978	0.966	0.978	1.000

A1 - There should be Health and Safety Policy in the company.

A2 - There should be implementation of H&S Procedures

A3 - The company must have appointed a competent H&S Personal

A4 - The organization must have provision of First aid & medical health insurance schemes

A5 - The company should maintain frequency of training programs i.e., weekly, monthly

etc

- A6 - The organization should have of a safety committee
- A7 - The company must perform a regular planned H&S Inspection Schedule
- A8 - The company should have a competent first aid trained personnel
- A9 - The company should organize scheduled H&S Audits for compliance through Internal/External Auditing
- A10 - There should be a plan on emergency preparedness available in the company
- A11 - Should the company document the lessons learned from the respective mock drills
- A12 - The company must have accident reporting procedure
- A13 - The company should maintain incident records.

The table 4.12 analyses the correlation between health and safety management and the appreciation of the respondents at the workplace. It is understood that there is a strong requirement by organizations towards health and safety management with compliance to standards, a suitable work environment, training, medical health care benefits, auditing, reporting and communication response towards Health and safety management. With the correlation coefficient ranging from 0.808 to 0.983 the results confirm that employee value an integrated, systematic, and proactive approach towards H&S management. The results provide an approach as to how an organization can develop strategically and enhance its health and safety management systems. Thus, there is a need for management of an organization to look out for safety and health of its employees.

4.2.7.1 Developing a comprehensive health and safety policy

The correlation between presence of H&S Policy(A1) and implementation H&S procedures(A2) at $r = 0.983$ indicated that a defined

policy was supported by consistent procedural fulfilment and was appreciated by employees. Thus, the organization should have a definite clearly defined H&S policy aligned to regulatory requirements and best practices (e.g. ISO 45001). Ensure the policy has been clearly communicated and accessible to all staff also a translated script into standard operating procedures (SOPs) to ensure safe operating and responsible decision making.

4.2.7.2 Appointment of competent personnel and established committees

The presence of qualified H&S personnel(A3) and the formation of a safety committee(A6) showed a strong correlation with other practices, highlighting their role in maintaining good safety culture. Therefore, the organization must appoint competent H&S personnel with authority to implement, monitor, and enforce safety measures and create across functional safety committee with employee representation to encourage participation, communication, and accountability in H&S concerns.

4.2.7.3 Regular training implementation and first aid personnel

The positively linked measurements training frequency(A5) and First Aid Personnel(A8) variable were the key safety management functions emphasizing the importance of continual learning. The organizations must periodically schedule role specific training. They must cover needful topics such as emergency response procedures equipment safety PPE usage, first aid and legal obligations. Additionally, the effectiveness of training should be assessed through pre- and post- training evaluations, followed by continuous feedback mechanisms.

4.2.7.4 Develop and monitor a structured inspection and an audit system

Strong correlation found between inspection schedules(A7), H&S audits(A9) and incident records(A13) depict the value of consistent oversight and documentations. Following this the organization must establish a regular inspection system for both internal and third-party audits. Maintain detailed audit reports and risk registers, ensuring that identified hazards are tracked and closed also the audit outcomes should be provided with a corrective action plan and addressed in a stipulated period for ongoing efforts to improvement in safety.

4.2.7.5 Emergency preparedness and response mechanism

Variables like emergency plans(A10) and Mock drills(A11) are strongly correlated with other management practices $r \geq 0.85$, highlighting that employees value well planned and periodically practiced emergency systems. The organization need to develop a site-specific emergency response plan respective to the hazards and risks assumed on site. They also need to conduct mock drills at regular intervals, by simulating a real-life scenario for possible emergencies. Also, ensure the drills are followed by lessons learned and documented and reviewed for continual improvement.

4.2.7.6 Standardized reporting, investigation and maintaining records

Accident and incident management system, accident investigation(A12) and maintaining incident records(A13) are highly correlated with all other practices, specifically with emergency planning(A10) and mock drills

documentation(A11), considering their role in encouraging accountability and continuous improvement. Therefore, the organization must implement transparent accident and near miss reporting procedure ensuring no blame culture being developed. Investigate accidents and incidents by using structure systems like root cause analysis. Also maintain an established incident record keeping to track patterns, monitor trends and uniform preventative measures.

4.3 Research Question Two

4.3.1 How occupational health and safety practices can result in maintaining a good work environment?

Table 4.13: Perceptions of the respondents on Health and Safety Practices on Occupational safety and health at the workplace.

Sl. No.	Factors	SA	A	N	D	SD	Total
	Scale Value	5	4	3	2	1	
1	The organization must provide for H&S Orientation and Induction to new employees	115	107	28	0	0	250
		46	42.8	11.2			100
	Frequency x Scale Value	575	428	84			1087
2	There should be suitable rest rooms for its employees	119	106	25	0	0	250
		47.6	42.4	10			100
	Frequency x Scale Value	595	424	75			1094
3	The company must provide pure/clean drinking water	123	105	22	0	0	250
		49.2	42	8.8			100
	Frequency x Scale Value	615	420	66			1101
4	The organization must provide a reasonable temperature working environment	118	108	24	0	0	250
		47.2	43.2	9.6			100
	Frequency x Scale Value	590	432	72			1094
5	The company should provide efficient illumination & ventilation at workspaces	123	103	24	0	0	250
		49.2	41.2	9.6			100
	Frequency x Scale Value	615	412	72			1099

6	There should be provision of recreational facilities in the company	121	99	30	0	0	250
		48.4	39.6	12			100
	Frequency x Scale Value	605	396	90			1091
7	The company should provide job specific training programs	123	100	27	0	0	250
		49.2	40	10.8			100
	Frequency x Scale Value	615	400	81			1096
8	The company should provide Health and safety training for employees	124	101	25	0	0	250
		49.6	40.4	10			100
	Frequency x Scale Value	620	404	75			1099
9	The company must provide of suitable & sufficient PPE's and should have sufficient stock available	126	98	26	0	0	250
		50.4	39.2	10.4			100
	Frequency x Scale Value	630	392	78			1100
10	The company must perform regular inspections of Tools and equipment's	123	102	25	0	0	250
		49.2	40.8	10			100
	Frequency x Scale Value	615	408	75			1098
11	Should the company conduct mock-drills at regular intervals	119	104	27	0	0	250
		47.6	41.6	10.8			100
	Frequency x Scale Value	595	416	81			1092
12	Does the company provide safety awards to employees.	122	102	26	0	0	250
		48.8	40.8	10.4			100
	Frequency x Scale Value	610	408	78			1096
13	The company must do regular inspections at workplace/housekeeping	121	103	26	0	0	250
		48.4	41.2	10.4			100
	Frequency x Scale Value	605	412	78			1095
	Total score						12261
	Maximum possible score	5(Maximum Score Points) x 250(No. of Respondents) x13(No. of Statements)					16250
	Health and safety score percentage	Total Score x 100 / Maximum Possible score					75.45

Source: Filed Survey

The table 4.13 represents the perceptions of sample respondents about health and safety practices at workplace. Based on survey data from 250 respondents, a detailed

analysis reveals both strengths and areas of improvement. Each factor is assessed using Likert scale and the mean scores provide insights into the organizational performance.

4.3.1.1 H&S orientation and induction for new employees

This factor reflects the organizations on-boarding process for new employees. Although the mean score 4.348 still shows overall agreement, the slightly lower rating suggest room for improvement in how the organization introduces safety culture to new joiners. Structured comprehensive induction sessions may be inconsistently delivered or lacking in process.

4.3.1.2 Provision of suitable restrooms.

A mean of 4.376 may indicate that employees are largely satisfied with the restroom facilities provided. This suggests good attention to hygiene and comfort, which is essential for health and privacy. However, maintaining cleanliness and accessibility should remain a continual priority to sustain this level of satisfaction.

4.3.1.3 Provision of clean drinking water.

The mean score of 4.404 suggest that it has strong satisfaction along with a strong requirement among employees regarding access to clean and safe drinking water. This basic yet critical facility appears to be consistently and adequately provided, showing the organizations commitment to essential needs.

4.3.1.4 Reasonable temperature working environment.

Employees generally perceive the workplace temperature as comfortable and conducive to maintaining productivity. The mean score of 4.376 implies efficient control measure or natural ventilation systems that can help in maintaining a stable indoor environment across the seasons.

4.3.1.5 Efficient illumination and lighting.

With the respondent population mean score of 4.396 the employees feel that lighting and airflow in their workspaces are appropriate. Proper illumination reduces eye strain and fatigue while good ventilation ensures air quality, reducing the risk of respiratory issues. This means there should be a well-maintained infrastructure.

4.3.1.6 Provision of recreational facilities.

Although still high, this is among the lowest-rated statements. A mean of 4.364 suggests that recreational facilities, such as break rooms or fitness areas, may exist but could be expanded or modernized. Enhancing such amenities can support mental health, reduce stress, and improve employee morale.

4.3.1.7 Job-Specific Training Programs

With a mean score of 4.384, it depicts that the company need invests in employee skill development. Job-specific training ensures that workers are knowledgeable, competent, and capable of handling their tasks safely.

Continued improvement through refresher courses can further enhance safety awareness.

4.3.1.8 Health and Safety Training

The need is that H&S training is both valued and well-executed. A mean of 4.396 suggests that employees need to be regularly trained in safety practices, which is crucial for minimizing workplace accidents and complying with legal standards.

4.3.1.9 Provision of Suitable and Sufficient PPEs

With one of the highest ratings, this score highlights the need for effective and stockpiling of Personal Protective Equipment. The score of 4.400 shows that employees trust the availability and quality of safety gear, a cornerstone of any H&S program.

4.3.1.10 Regular Inspection of Tools and Equipment.

This high score indicates proactive need for maintenance of machinery and tools. Regular inspections prevent malfunctions and accidents, demonstrating a culture of preventive safety. With a mean score of 4.392, employees recognize the organization's attention to this critical detail.

4.3.1.11 Conducting Mock Drills Regularly.

The mean score reveals a possible gap in emergency preparedness. A mean of 4.368 suggests that mock drills may not occur frequently enough or

lack realism. Improving this area could help employees feel more prepared during actual emergencies.

4.3.1.12 Provision of Safety Awards.

Recognition of safety-conscious behaviour is rated positively, with a score of 4.384. This suggests that the organization must encourage safe practices through reward systems. Such incentives can encourage a stronger safety culture, motivating employees to remain vigilant and be responsible.

4.3.1.13 Regular Housekeeping and Workplace Inspection.

Regular workplace inspection and cleanliness efforts are appreciated by employees, as reflected in the mean score of 4.380. Housekeeping not only contributes to aesthetics but also reduces hazards such as slips, falls, or equipment malfunctions.

With an overall health and safety score of 75.45 percent indicates a requirement for strong foundation on workplace safety. By addressing the gaps, the organization can move closer to excellence in occupational health and safety standards at the workplace.

4.3.2 Perception based on Age groups

Table 4.14: Perceived scores differences among different age group respondents on health and safety practices at the workplace.

Statements	Age Group	N	Mean	Std. Dev	Std Error	VA F	p-value
The organization must provide for H&S Orientation and Induction to new employees	18-26	32	3.688	0.644	0.114	26.622	0
	27-35	86	4.128	0.665	0.072		
	36-44	62	4.5	0.536	0.068		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.393	0.503	0.073		
There should be suitable restrooms for its employees	18-26	32	3.813	0.644	0.114	20.344	0
	27-35	86	4.163	0.684	0.074		
	36-44	62	4.516	0.535	0.068		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.92	0.277	0.055		
	Total	250	4.42	0.522	0.076		
The company must provide pure/clean drinking water	18-26	32	3.813	0.644	0.114	23.264	0
	27-35	86	4.198	0.665	0.072		
	36-44	62	4.548	0.502	0.064		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	5	0	0		
	Total	250	4.449	0.456	0.064		
The organization must provide a reasonable temperature working environment	18-26	32	3.813	0.644	0.114	19.533	0
	27-35	86	4.186	0.678	0.073		
	36-44	62	4.484	0.535	0.068		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.92	0.277	0.055		
	Total	250	4.418	0.52	0.076		
The company should provide efficient illumination & ventilation at workspaces	18-26	32	3.813	0.644	0.114	20.713	0
	27-35	86	4.198	0.683	0.074		
	36-44	62	4.532	0.535	0.068		
	45-55	45	4.689	0.468	0.07		

	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.438	0.506	0.073		
There should be provision of recreational facilities in the company	18-26	32	3.844	0.677	0.12	16.969	0
	27-35	86	4.174	0.689	0.074		
	36-44	62	4.419	0.666	0.085		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.417	0.54	0.078		
The company should provide job-specific training programs	18-26	32	3.844	0.677	0.12	18.099	0
	27-35	86	4.186	0.695	0.075		
	36-44	62	4.484	0.593	0.075		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.433	0.527	0.076		
The company should provide Health and safety training for employees	18-26	32	3.844	0.677	0.12	17.479	0
	27-35	86	4.209	0.671	0.072		
	36-44	62	4.516	0.593	0.075		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.92	0.277	0.055		
	Total	250	4.436	0.537	0.079		
The company must provide suitable & sufficient PPE and should have sufficient stock available	18-26	32	3.813	0.644	0.114	18.735	0
	27-35	86	4.221	0.693	0.075		
	36-44	62	4.516	0.593	0.075		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.96	0.2	0.04		
	Total	250	4.44	0.52	0.075		
The company must perform regular inspections of Tools and equipment's	18-26	32	3.844	0.677	0.12	17.312	0
	27-35	86	4.209	0.671	0.072		
	36-44	62	4.5	0.594	0.075		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.92	0.277	0.055		
	Total	250	4.432	0.537	0.079		
	18-26	32	3.75	0.622	0.11	20.53	0
	27-35	86	4.186	0.678	0.073		

Should the company conduct mock drills at regular intervals	36-44	62	4.484	0.593	0.075		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.92	0.277	0.055		
	Total	250	4.406	0.528	0.077		
Does the company provide safety awards to employees?	18-26	32	3.813	0.644	0.114	17.832	0
	27-35	86	4.209	0.688	0.074		
	36-44	62	4.484	0.593	0.075		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.92	0.277	0.055		
	Total	250	4.423	0.534	0.078		
The company must do regular inspections of the workplace/housekeeping	18-26	32	3.781	0.659	0.117	17.698	0
	27-35	86	4.221	0.676	0.073		
	36-44	62	4.484	0.593	0.075		
	45-55	45	4.689	0.468	0.07		
	Above 55 Years	25	4.88	0.332	0.066		
	Total	250	4.411	0.546	0.08		

Table 4.14 displays the perceptual data differences among different age groups of respondents on health and safety practices followed by organizations at the workplace.

4.3.2.1 H&S Orientation and Induction for New Employees

The perceptive average score of employees across age groups on the necessity of H&S orientation and induction shows that employees above 55 years rated it highest at 4.96, followed by those aged 45–55 (4.69), 36–44 (4.50), 27–35 (4.13), and 18–26 (3.69). The f-value of 26.622 and the extremely low p-value(<0.05) indicate a statistically significant difference at the one percent level. This suggests that older employees are more appreciative of H&S induction programs compared to younger groups.

4.3.2.2 Provision of Suitable Rest Rooms

Regarding the availability of suitable restrooms, employees above 55 years had the highest perception score of 4.92, followed by 45–55 years (4.69), 36–44 years (4.52), 27–35 years (4.16), and 18–26 years (3.81). The f-value of 20.344 and p-value less than 0.05, confirm a highly significant difference. It is evident that older employees perceive rest room provisions more favourably than their younger counterparts.

4.3.2.3 Provision of Clean Drinking Water

The mean scores for clean drinking water provision steadily increase with age group from 3.81 in the 18–26 group to a perfect 5.00 in the above-55 age group. With an F-value of 23.264 and a p-value less than 0.05, the differences are highly significant. These results indicate that older employees tend to be more satisfied or perceive better provisions of drinking water facilities compared to younger age groups.

4.3.2.4 Reasonable Temperature Working Environment

The average score for this statement shows a gradual increase with age group from 3.81 (18–26 years) to 4.92 (above 55 years). The f-value of 19.533 and a p-value lower than 0.05, strongly signify statistical significance. This suggests that older employees feel more positively about temperature regulation in their work environment than younger employees.

4.3.2.5 Efficient Illumination & Ventilation

Perceptions of workspace illumination and ventilation increase progressively with age group, starting at 3.81 for the 18–26 age group and peaking at 4.96 for those above 55. An F-value of 20.713 and a much lower p-value(<0.05), highlight significant perceptual differences. Older employees are more likely to view workplace lighting and ventilation as adequate.

4.3.2.6 Provision of Recreational Facilities

Employee perceptions of recreational facilities also follow the upward trend by age group from 3.84 (18–26) to 4.96 (above 55). The f-value of 16.969 and a p-value(<0.05), confirm these differences are significant. Hence, older workers appear to either value or recognize the presence of recreational amenities more than younger employees.

4.3.2.7 Job-Specific Training Programs

The average scores for job-specific training programs range from 3.84 (18–26) to 4.96 (above 55), with a clear incremental pattern across age groups. The f-value of 18.099 and a p-value less than 0.05, reveal that the difference is statistically significant. Older employees thus seem more positive or satisfied with the provision of such training.

4.3.2.8 Health and Safety Training

Similarly, in evaluating health and safety training provisions, older age groups again report higher mean scores, from 3.84 in the youngest group of 18–26 to 4.92 in the oldest of above 55 years. The f-value is 17.479 with a p-value

less than 0.05 showing strong statistical significance. The data imply that perceptions regarding health and safety training improve with age.

4.3.2.9 Provision of PPE and Sufficient Stock

Scores range from 3.81 for the 18–26 group to 4.96 for employees above 55 years. The f-value of 18.735 and a low p-value(<0.05), signify meaningful differences. Older employees perceive the availability and adequacy of PPE more favourably than their younger peers.

4.3.2.10 Regular Inspections of Tools and Equipment

The perception of tool and equipment inspections increases with age group from 3.84 (18–26) to 4.92 for those above 55. A f-value of 17.312 and a p-value less than 0.05, indicate significant differences. This demonstrates that older employees are more likely to recognize or value the importance and implementation of regular inspections.

4.3.2.11 Conducting Regular Mock-Drills

Perceptual scores on regular mock drills start at 3.75 for the youngest employees and rise to 4.92 for the oldest. The f-value of 20.530 and a p-value less than 0.05, highlight statistically significant variation. It shows that older employees are more likely to perceive mock drills as being effectively conducted or necessary.

4.3.2.12 Safety Awards for Employees

Perceptions of safety award provisions follow the same pattern: 3.81 (18–26) to 4.92 (above 55). The f-value of 17.832 and a low p-value(<0.05), indicate these age differences are significant. Older employees tend to have greater appreciation for, or recognition of, safety award programs compared to their younger counterparts.

4.3.2.13 Regular Inspections at Workplace/Housekeeping

Lastly, regarding regular housekeeping inspections, the scores range from 3.78 (18–26) to 4.88 (above 55). The f-value of 17.698 and p-value lower than 0.05, confirm statistical significance. It is clear that older employees are more confident or aware of workplace inspection practices.

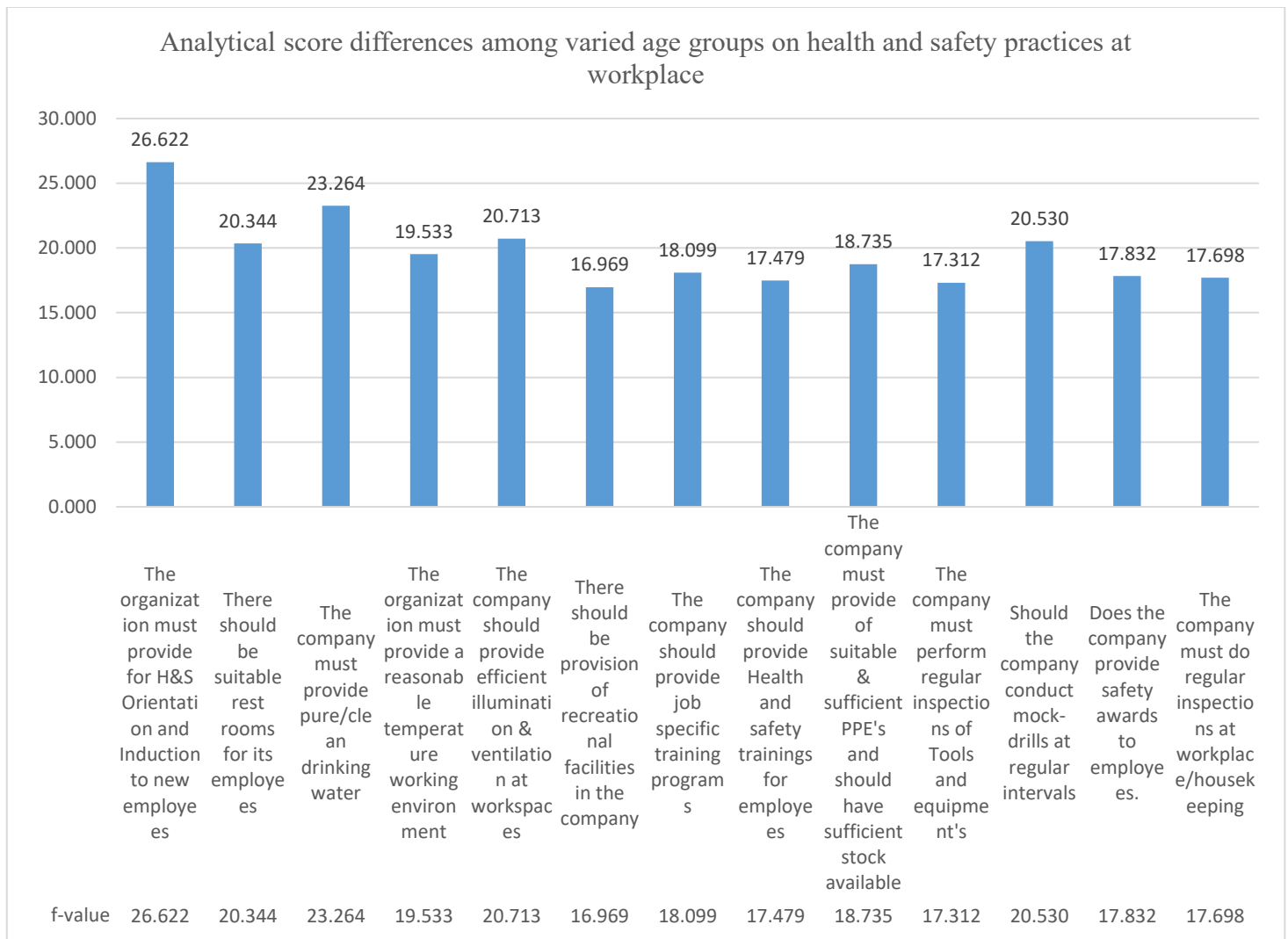


Figure 4.11: F-test results of analytical score differences among varied age groups on health and safety practices at the workplace

Employee perception of health and safety compliance improves with age. Older age groups, particularly those above 45 years, exhibit significantly more favourable assessments of workplace health and safety standards. The consistently low p-values and high f-values across statements strongly support the conclusion that age is a significant factor in shaping perceptions of safety and welfare practices in the organization.

4.3.3 Perceptions based on educational qualification

Table 4.15: Perceived score difference among different educational qualification group

respondents on health and safety practices.

Statements	Highest Qualification	N	Mean	Std. Dev	Std Error	VA F	p-value
The organization must provide for H&S Orientation and Induction to new employees	PhD	2	5	0	0	1.175	0.311
	Post Graduate	50	4.4	0.639	0.09		
	Undergraduate or below	198	4.33	0.682	0.048		
	Total	250	4.58	0.44	0.046		
There should be suitable restrooms for its employees	PhD	2	5	0	0	1.244	0.29
	Post Graduate	50	4.44	0.611	0.086		
	Undergraduate or below	198	4.35	0.673	0.048		
	Total	250	4.6	0.428	0.045		
The company must provide pure/clean drinking water	PhD	2	5	0	0	1.134	0.324
	Post Graduate	50	4.46	0.579	0.082		
	Undergraduate or below	198	4.38	0.664	0.047		
	Total	250	4.62	0.414	0.043		
The organization must provide a reasonable temperature working environment	PhD	2	5	0	0	0.978	0.378
	Post Graduate	50	4.4	0.606	0.086		
	Undergraduate or below	198	4.36	0.668	0.047		
	Total	250	4.59	0.425	0.044		
The company should provide efficient illumination & ventilation at workspaces	PhD	2	5	0	0	1.022	0.361
	Post Graduate	50	4.44	0.611	0.086		
	Undergraduate or below	198	4.38	0.671	0.048		
	Total	250	4.61	0.427	0.045		
There should be provision of recreational facilities in the company	PhD	2	5	0	0	0.89	0.412
	Post Graduate	50	4.38	0.635	0.09		
	Undergraduate or below	198	4.35	0.703	0.05		
	Total	250	4.58	0.446	0.047		
The company should provide job-specific training programs	PhD	2	5	0	0	0.841	0.433
	Post Graduate	50	4.38	0.667	0.094		
	Undergraduate or below	198	4.38	0.678	0.048		
	Total	250	4.59	0.448	0.047		
	PhD	2	5	0	0	1.004	0.368

The company should provide Health and safety training for employees	Post Graduate	50	4.44	0.611	0.086		
	Undergraduate or below	198	4.38	0.678	0.048		
	Total	250	4.61	0.43	0.045		
The company must provide suitable & sufficient PPE and should have sufficient stock available	PhD	2	5	0	0	0.822	0.441
	Post Graduate	50	4.38	0.635	0.09		
	Undergraduate or below	198	4.4	0.681	0.048		
	Total	250	4.59	0.439	0.046		
The company must perform regular inspections of Tools and equipment's	PhD	2	5	0	0	0.923	0.399
	Post Graduate	50	4.42	0.609	0.086		
	Undergraduate or below	198	4.38	0.678	0.048		
	Total	250	4.6	0.429	0.045		
Should the company conduct mock drills at regular intervals	PhD	2	5	0	0	1.022	0.361
	Post Graduate	50	4.32	0.653	0.092		
	Undergraduate or below	198	4.37	0.677	0.048		
	Total	250	4.57	0.443	0.047		
Does the company provide safety awards to employees?	PhD	2	5	0	0	0.856	0.426
	Post Graduate	50	4.38	0.635	0.09		
	Undergraduate or below	198	4.38	0.678	0.048		
	Total	250	4.59	0.438	0.046		
The company must do regular inspections of the workplace/housekeeping	PhD	2	5	0	0	0.913	0.403
	Post Graduate	50	4.4	0.639	0.09		
	Undergraduate or below	198	4.37	0.676	0.048		
	Total	250	4.59	0.438	0.046		

The above table 4.15 indicates the perception scores of different educational qualification groups of respondents on health and safety practices at the workplace.

4.3.3.1 The organization must provide for H&S Orientation and Induction to new employees

The average perceptive score for PhD holders (5.000) regarding the importance of health and safety orientation and induction for new employees is higher than that of Post Graduates (4.400) and Undergraduates or below

(4.328). However, the tested F-value is 1.175, and the associated p-value is 0.311, which is greater than 0.05. This indicates that the observed differences in perception among the qualification groups are not statistically significant, suggesting a relatively uniform belief across educational levels about the necessity of orientation and induction programs in H&S.

4.3.3.2 There should be suitable restrooms for employees

PhD-qualified employees again rated this requirement at the highest average score of 5.000, while Post Graduates scored 4.440, and Undergraduates or below rated it slightly lower at 4.354. The f-value is 1.244, and the p-value is 0.290, which is above the 0.05 significance level. Though there are minor variations, they are not statistically significant, implying consistent appreciation for rest room facilities across educational qualifications.

4.3.3.3 The company must provide pure/clean drinking water

Employees with a PhD rated this highest at 5.000, followed by Post Graduates (4.460) and Undergraduates or below (4.384). Despite this trend, the f-value of 1.134 and p-value of 0.324 indicate no significant difference. Thus, across educational levels, employees largely agree on the essential nature of clean drinking water provisions in the workplace.

4.3.3.4 The organization must provide a reasonable temperature working environment

PhD holders again scored the statement at 5.000, higher than Post Graduates (4.400) and Undergraduates or below (4.364). However, the f-value

of 0.978 and p-value of 0.378 show no statistically significant difference, indicating a broadly shared perception of the importance of thermal comfort at work, regardless of educational background.

4.3.3.5 The company should provide efficient illumination & ventilation at workspaces

With PhD-qualified respondents rating this at 5.000, and Post Graduates and Undergraduates or below at 4.440 and 4.379 respectively, the overall impression remains high. The f-value is 1.022 and the p-value is 0.361, meaning there is no significant variation in perception by qualification level, and the standard is widely recognized as important.

4.3.3.6 There should be provision of recreational facilities in the company

PhD holders rated this highest at 5.000, with lower scores by Post Graduates (4.380) and Undergraduates or below (4.354). Although a trend is observable, the f-value of 0.890 and p-value 0.412 indicate that the result is not statistically significant. This implies employees at all educational levels similarly acknowledge the value of recreational facilities, albeit to varying degrees.

4.3.3.7 The company should provide job specific training programs

This statement received a full 5.000 rating from PhD holders, while Post Graduates and Undergraduates or below rated it at 4.380 and 4.379 respectively. Despite the apparent difference, the f-value of 0.841 and p-value of 0.433 reveal

no significant difference, suggesting a near-universal endorsement of job-specific training programs.

4.3.3.8 The company should provide health and safety training for employees

PhD-qualified employees rated this statement highest at 5.000, followed by Post Graduates (4.440) and Undergraduates or below (4.379). The statistical analysis shows an f-value of 1.004 and p-value of 0.368, indicating the perception is not significantly different across education levels, highlighting a common understanding of the need for ongoing H&S training.

4.3.3.9 The company must provide suitable & sufficient PPE and stock availability

PhDs once again scored this at 5.000, while Post Graduates and Undergraduates or below provided closely aligned scores of 4.380 and 4.399 respectively. The f-value is 0.822 with a p-value of 0.441, suggesting no statistically significant difference in perception, despite a general agreement on the importance of PPE.

4.3.3.10 The company must perform regular inspections of tools and equipment

The perception was highest among PhD holders (5.000), with Post Graduates and Undergraduates or below rating it 4.420 and 4.379 respectively. However, the f-value of 0.923 and p-value of 0.399 indicate these differences

are not statistically significant, affirming a shared understanding of the importance of equipment inspections.

4.3.3.11 The company should conduct mock-drills at regular intervals

PhD respondents again rated this at 5.000, with Post Graduates at 4.320 and Undergraduates or below at 4.374. Although the f-value of 1.022 might imply some variation, the p-value of 0.361 indicates that the difference is not statistically significant, implying widespread recognition of the need for emergency preparedness across all educational backgrounds.

4.3.3.12 Does the company provide safety awards to employees

Once more, PhD-qualified employees rated this at 5.000, and other groups at 4.380 (Post Graduates) and 4.379 (Undergraduates or below). The f-value is 0.856 and the p-value is 0.426, signifying no significant difference in perception across qualification levels, though all groups value safety incentives positively.

4.3.3.13 The company must do regular inspections at workplace/housekeeping

PhD employees provided the highest rating (5.000), followed by Post Graduates (4.400) and Undergraduates or below (4.369). With an f-value of 0.913 and a p-value of 0.403, the differences are not statistically significant, suggesting a common appreciation of cleanliness and regular inspections irrespective of educational qualification.

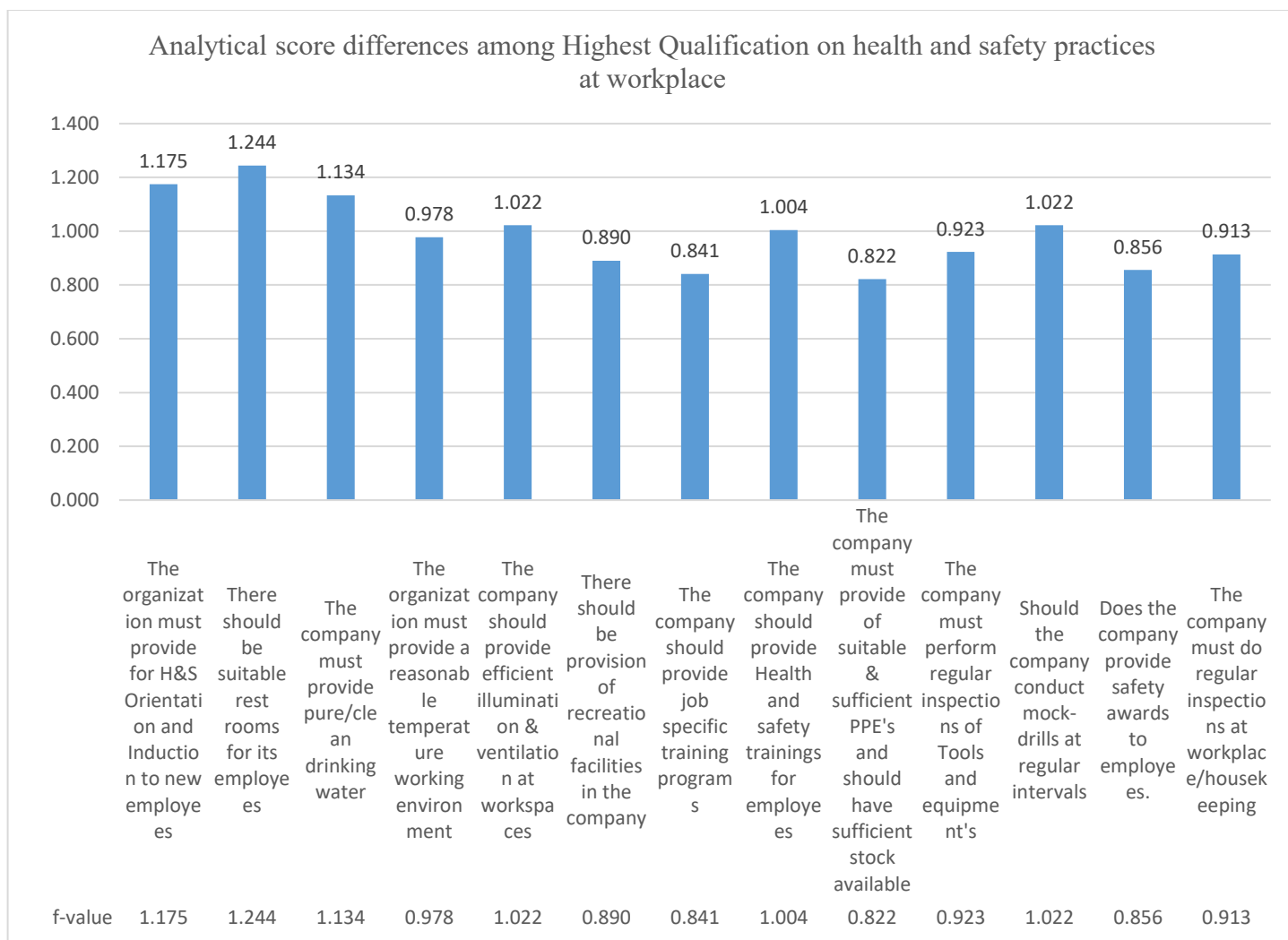


Figure 4.12: F-test results of analytical score differences among Highest Qualification on health and safety practices at workplace.

None of the differences in mean scores across qualifications groups reached statistical significance p-values greater than 0.05. this means that perceptions regarding the importance of workplace health and safety are uniformly high across all levels from all educational levels.

4.3.4 Perception based on work experience

Table 4.16: Perceptive scores differences among the respondent group of varied Work experience category on health and safety practices at workplace.

Statements	Highest Qualification	N	Mean	Std. Dev	Std Error	VA F	p-value
The organization must provide for H&S Orientation and Induction to new employees	Beginner (Upto 3 years)	32	3.656	0.602	0.106	55.022	0
	Competent (3 to 10 years)	76	4.066	0.639	0.073		
	Proficient (Above 10 years)	142	4.655	0.506	0.042		
	Total	250	4.126	0.582	0.074		
There should be suitable rest rooms for its employees	Beginner (Upto 3 years)	32	3.75	0.568	0.1	36.26	0
	Competent (3 to 10 years)	76	4.171	0.681	0.078		
	Proficient (Above 10 years)	142	4.627	0.527	0.044		
	Total	250	4.183	0.592	0.074		
The company must provide pure/clean drinking water	Beginner (Upto 3 years)	32	3.75	0.568	0.1	39.962	0
	Competent (3 to 10 years)	76	4.211	0.68	0.078		
	Proficient (Above 10 years)	142	4.655	0.492	0.041		
	Total	250	4.205	0.58	0.073		
The organization must provide a reasonable temperature working environment	Beginner (Upto 3 years)	32	3.75	0.568	0.1	35.418	0
	Competent (3 to 10 years)	76	4.184	0.668	0.077		
	Proficient (Above 10 years)	142	4.62	0.529	0.044		
	Total	250	4.185	0.588	0.074		
The company should provide efficient illumination & ventilation at workspaces	Beginner (Upto 3 years)	32	3.75	0.568	0.1	34.694	0
	Competent (3 to 10 years)	76	4.224	0.685	0.079		
	Proficient (Above 10 years)	142	4.634	0.526	0.044		
	Total	250	4.202	0.593	0.074		
There should be provision of recreational facilities in the company	Beginner (Upto 3 years)	32	3.75	0.622	0.11	28.871	0
	Competent (3 to 10 years)	76	4.184	0.668	0.077		
	Proficient (Above 10 years)	142	4.599	0.596	0.05		
	Total	250	4.178	0.629	0.079		
The company should provide job specific training programs	Beginner (Upto 3 years)	32	3.781	0.608	0.108	31.561	0
	Competent (3 to 10 years)	76	4.184	0.687	0.079		
	Proficient (Above 10 years)	142	4.627	0.554	0.046		
	Total	250	4.197	0.616	0.078		
	Beginner (Upto 3 years)	32	3.813	0.644	0.114	29.33	0

The company should provide Health and safety training for employees	Competent (3 to 10 years)	76	4.211	0.68	0.078		
	Proficient (Above 10 years)	142	4.627	0.541	0.045		
	Total	250	4.217	0.622	0.079		
The company must provide of suitable & sufficient PPE's and should have sufficient stock available	Beginner (Upto 3 years)	32	3.781	0.608	0.108	29.468	0
	Competent (3 to 10 years)	76	4.237	0.69	0.079		
	Proficient (Above 10 years)	142	4.627	0.554	0.046		
	Total	250	4.215	0.617	0.078		
The company must perform regular inspections of Tools and equipment's	Beginner (Upto 3 years)	32	3.813	0.644	0.114	28.612	0
	Competent (3 to 10 years)	76	4.211	0.68	0.078		
	Proficient (Above 10 years)	142	4.62	0.542	0.046		
	Total	250	4.214	0.622	0.079		
Should the company conduct mock-drills at regular intervals	Beginner (Upto 3 years)	32	3.688	0.535	0.095	36.407	0
	Competent (3 to 10 years)	76	4.197	0.674	0.077		
	Proficient (Above 10 years)	142	4.613	0.557	0.047		
	Total	250	4.166	0.588	0.073		
Does the company provide safety awards to employees.	Beginner (Upto 3 years)	32	3.75	0.568	0.1	33.796	0
	Competent (3 to 10 years)	76	4.197	0.674	0.077		
	Proficient (Above 10 years)	142	4.627	0.554	0.046		
	Total	250	4.191	0.598	0.075		
The company must do regular inspections at workplace/housekeeping	Beginner (Upto 3 years)	32	3.719	0.581	0.103	37.921	0
	Competent (3 to 10 years)	76	4.184	0.668	0.077		
	Proficient (Above 10 years)	142	4.634	0.539	0.045		
	Total	250	4.179	0.596	0.075		

The above table 4.16 with perceptive scores from respondent with varied group of work experience on health and safety practices at workplace is noticed.

4.3.4.1 H&S Orientation and Induction to New Employees

The perceptive score among different qualification levels of employees toward the dimension 'H&S Orientation and Induction to New Employees' indicates that the average score value of 4.655 for proficient employees is found higher than that of competent (4.005) and Beginner employees (3.656). The

calculated f-value of 55.022 is found to be significant at the one percent level since the p-value less than 0.05, indicating that proficient employees are more positively inclined toward the importance of orientation and induction programs.

4.3.4.2 Suitable Rest Rooms

The perceptive average score for the dimension ‘Suitable Rest Rooms’ shows that proficient employees report a higher score (4.627) compared to competent (3.938) and beginner employees (3.750). The calculated F-value is 36.260 and the p-value(<0.05), confirming statistical significance at the one percent level. This reflects that employees with greater proficiency and experience are more positively inclined toward the adequacy of rest room facilities.

4.3.4.3 Provision of Pure/Clean Drinking Water

The average perceptive score for the dimension ‘Provision of Pure/Clean Drinking Water’ is highest among proficient employees (4.655), followed by competent (3.950) and beginner (3.750). The f-value of 39.962 is significant with a p-value less than 0.05, signifying a strong positive perception among the more qualified employees regarding access to clean drinking water.

4.3.4.4 Reasonable Temperature Working Environment

Employees with Proficient qualifications rated the dimension ‘Reasonable Temperature Working Environment’ higher (4.634) than competent (3.927) and beginner (3.719). The calculated f-value of 35.418 is

statistically significant due to the much lower p-value(<0.05), indicating that more qualified employees are more sensitive and positive toward optimal temperature conditions in the workplace.

4.3.4.5 Efficient Illumination & Ventilation

The perceptive score for ‘Efficient Illumination & Ventilation’ increases with employee qualification, with proficient employees scoring the highest (4.634), followed by competent (3.958) and beginner (3.750). The f-value of 34.694 and a low p-value(<0.05), signify statistically significant difference, indicating that experienced employees place greater emphasis on proper lighting and ventilation for health and safety.

4.3.4.6 Provision of Recreational Facilities

The average perceptive score for ‘Provision of Recreational Facilities’ is 4.613 for Proficient, 3.927 for competent, and 3.719 for beginner employees. The calculated f-value of 28.871 with a p-value less than 0.05, indicates statistical significance, suggesting that employees with more years of service value recreational facilities more highly as part of workplace health and well-being.

4.3.4.7 Job-Specific Training Programs

The perceptive score toward ‘Job-Specific Training Programs’ is highest among Proficient employees (4.627), compared to Competent (3.969) and Beginner (3.781). With a significant f-value of 31.561 and a p-value less

than 0.05, the results suggest that more qualified employees recognize the importance of specialized training for safety and skill development.

4.3.4.8 H&S Training for Employees

Regarding 'H&S Training for Employees,' the average perceptive score is 4.613 for proficient, followed by competent (3.938) and beginner (3.781). The f-value of 29.330 and p-value less than 0.05, demonstrate statistical significance at the one percent level. This indicates that highly experienced employees are more positive toward continuous H&S training initiatives.

4.3.4.9 Provision of Sufficient PPE and Stock Availability

The perceptive average score for the dimension 'Provision of Sufficient PPE and Stock Availability' is higher among proficient employees (4.627) as compared to competent (3.938) and beginner (3.781). The calculated f-value of 29.468 and p-value lower than 0.05, confirm significant difference, suggesting experienced employees value the adequacy of protective equipment more highly.

4.3.4.10 Regular Inspections of Tools and Equipment

In terms of 'Regular Inspections of Tools and Equipment,' proficient employees scored the highest (4.620), followed by competent (3.969) and beginner (3.813). The f-value of 28.612 and a p-value less than 0.05, indicate significant variation, affirming that seasoned workers recognize the critical role of inspection in workplace safety.

4.3.4.11 Conducting Regular Mock-Drills

The dimension ‘Conducting Regular Mock-Drills’ shows a higher perceptive score among proficient employees (4.613) compared to competent (3.938) and beginner (3.688). The f-value of 36.407 and a p-value less than 0.05, indicate significant differences, with experienced employees viewing mock-drills as an essential safety preparedness strategy.

4.3.4.12 Safety Awards to Employees

Perception toward ‘Safety Awards to Employees’ improves with qualification, with proficient employees scoring 4.598, competent (3.938), and beginner (3.781). The f-value of 33.796 and p-value less than 0.05, confirm statistical significance, indicating that seasoned employees believe recognition positively impacts safety culture.

4.3.4.13 Regular Housekeeping Inspections

Finally, for the dimension ‘Regular Housekeeping Inspections,’ the perceptive score is highest among proficient employees (4.634) followed by competent (3.927) and beginner (3.719). The f-value of 37.921 and a low p-value(<0.05), support a significant difference, showing that more qualified employees associate cleanliness and orderliness closely with workplace safety.

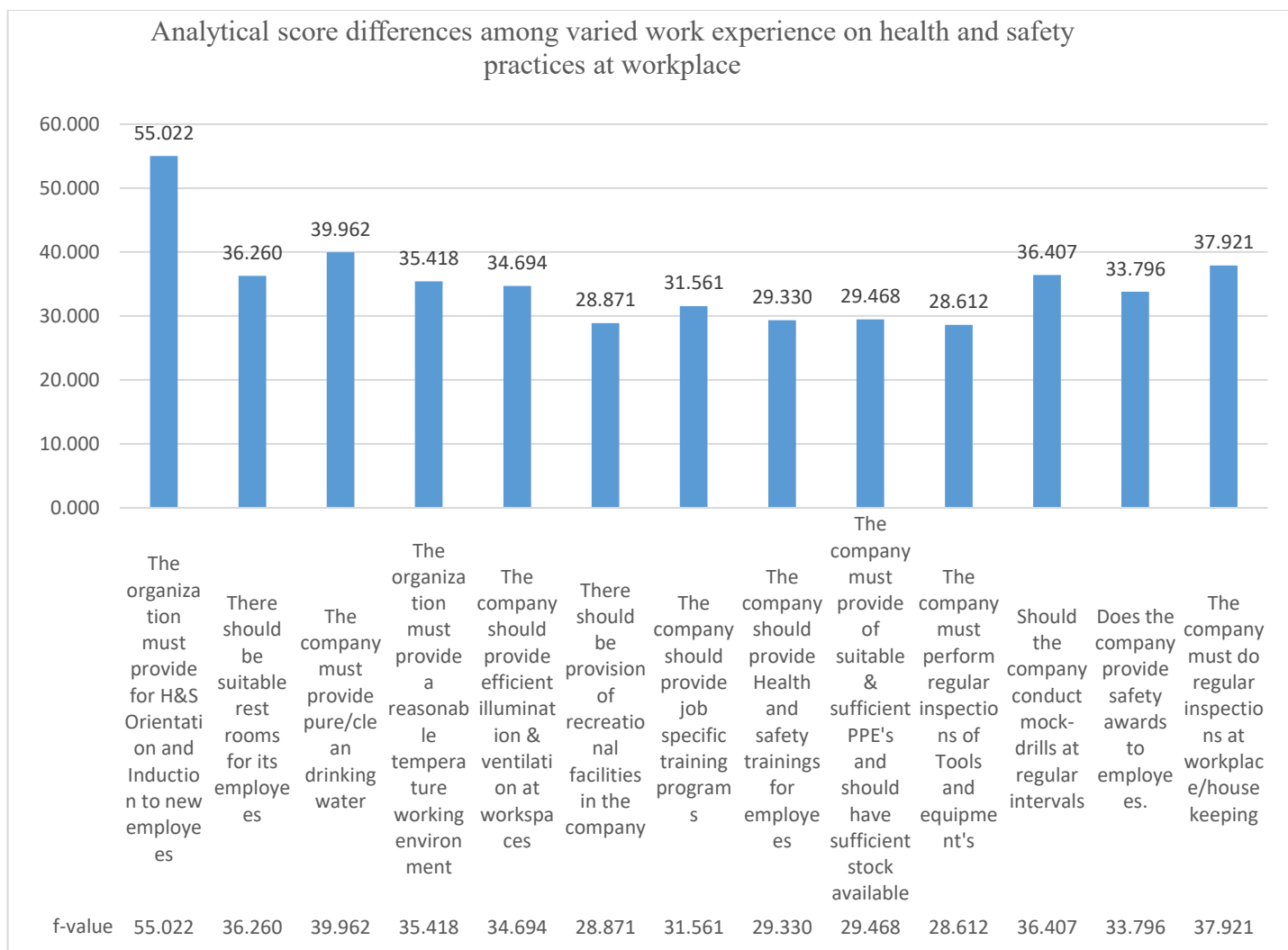


Figure 4.13: F-test results of analytical score differences among varied work experience on health and safety management at workplace.

The Analysis reveals statistically significant difference in the perceptions of health and safety practices among respondents with varying levels of experience. The consistent low p-values across all the statements confirm that experience level significantly influences employees' perceptions regarding workplace health and safety.

4.3.5 Perceptions based on organization

Table 4.17: Perspective score difference among respondents from varied organizations on health and safety practices at the workplace.

Statements	Organization	N	Mean	Std. Dev	Std Error	VA F	p-value
The organization must provide for H&S Orientation and Induction to new employees	Construction	110	4.355	0.629	0.06	1.504	0.167
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	5				
	Institute	1	4				
	Manufacturing Industry	68	4.471	0.634	0.077		
	Oil and gas	18	4.333	0.767	0.181		
	Transport & Logistics	45	4.156	0.737	0.11		
	Total	250	4.414	0.628	0.146		
There should be suitable rest rooms for its employees	Construction	110	4.409	0.61	0.058	2.601	0.013
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	3				
	Institute	1	4				
	Manufacturing Industry	68	4.515	0.658	0.08		
	Oil and gas	18	4.389	0.502	0.118		
	Transport & Logistics	45	4.133	0.726	0.108		
	Total	250	4.181	0.583	0.135		
The company must provide pure/clean drinking water	Construction	110	4.418	0.612	0.058	1.895	0.071
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	4				
	Manufacturing Industry	68	4.529	0.634	0.077		
	Oil and Gas	18	4.5	0.514	0.121		
	Transport & Logistics	45	4.178	0.716	0.107		
	Total	250	4.328	0.579	0.135		
	Construction	110	4.382	0.62	0.059	2.019	0.053

The organization must provide a reasonable temperature working environment	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	3.8	0.837	0.374		
	Human Resources	1	4				
	Institute	1	4				
	Manufacturing Industry	68	4.515	0.658	0.08		
	Oil and Gas	18	4.444	0.511	0.121		
	Transport & Logistics	45	4.178	0.716	0.107		
	Total	250	4.29	0.557	0.123		
The company should provide efficient illumination & ventilation at workspaces	Construction	110	4.4	0.624	0.059	1.58	0.142
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	4				
	Manufacturing Industry	68	4.515	0.658	0.08		
	Oil and Gas	18	4.5	0.514	0.121		
	Transport & Logistics	45	4.2	0.726	0.108		
	Total	250	4.327	0.587	0.136		
There should be provision of recreational facilities in the company	Construction	110	4.373	0.662	0.063	2.594	0.013
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	3.8	0.837	0.374		
	Human Resources	1	3				
	Institute	1	4				
	Manufacturing Industry	68	4.529	0.657	0.08		
	Oil and Gas	18	4.389	0.608	0.143		
	Transport & Logistics	45	4.156	0.737	0.11		
	Total	250	4.156	0.583	0.128		
The company should provide job specific training programs	Construction	110	4.4	0.652	0.062	2.155	0.039
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	3.8	0.837	0.374		
	Human Resources	1	4				
	Institute	1	4				
	Manufacturing Industry	68	4.529	0.657	0.08		
	Oil and Gas	18	4.444	0.511	0.121		
	Transport & Logistics	45	4.156	0.737	0.11		

	Total	250	4.291	0.566	0.124		
The company should provide Health and safety training for employees	Construction	110	4.391	0.637	0.061	1.873	0.075
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	4				
	Manufacturing Industry	68	4.529	0.657	0.08		
	Oil and Gas	18	4.556	0.511	0.121		
	Transport & Logistics	45	4.178	0.716	0.107		
	Total	250	4.332	0.587	0.136		
The company must provide of suitable & sufficient PPE's and should have sufficient stock available	Construction	110	4.391	0.651	0.062	1.961	0.061
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	4				
	Manufacturing Industry	68	4.529	0.657	0.08		
	Oil and Gas	18	4.611	0.502	0.118		
	Transport & Logistics	45	4.178	0.716	0.107		
	Total	250	4.339	0.588	0.136		
The company must perform regular inspections of Tools and equipment's	Construction	110	4.409	0.64	0.061	1.721	0.105
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	4	1	0.447		
	Human Resources	1	4				
	Institute	1	4				
	Manufacturing Industry	68	4.529	0.657	0.08		
	Oil and Gas	18	4.389	0.502	0.118		
	Transport & Logistics	45	4.178	0.716	0.107		
	Total	250	4.313	0.586	0.135		
Should the company conduct mock-drills at regular intervals	Construction	110	4.364	0.631	0.06	3.128	0.004
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	3.8	0.837	0.374		
	Human Resources	1	3				
	Institute	1	4				
	Manufacturing Industry	68	4.529	0.657	0.08		

	Oil and Gas	18	4.556	0.511	0.121		
	Transport & Logistics	45	4.133	0.726	0.108		
	Total	250	4.173	0.56	0.124		
Does the company provide safety awards to employees.	Construction	110	4.409	0.64	0.061	2.663	0.011
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	3.8	0.837	0.374		
	Human Resources	1	3				
	Institute	1	4				
	Manufacturing Industry	68	4.529	0.657	0.08		
	Oil and Gas	18	4.389	0.502	0.118		
	Transport & Logistics	45	4.178	0.716	0.107		
	Total	250	4.163	0.559	0.123		
The company must do regular inspections at workplace/housekeeping	Construction	110	4.4	0.638	0.061	2.429	0.02
	Engineering Consulting Firm	2	5	0	0		
	Health Care Sector	5	3.8	0.837	0.374		
	Human Resources	1	5				
	Institute	1	4				
	Manufacturing Industry	68	4.529	0.657	0.08		
	Oil and Gas	18	4.389	0.502	0.118		
	Transport & Logistics	45	4.133	0.726	0.108		
	Total	250	4.406	0.56	0.124		

The table 4.17 represents the perceptive scores calculated at different organizational level on health and safety practices at workplace.

4.3.5.1 H&S Orientation and Induction

For the statement "The organization must provide for H&S Orientation and Induction to new employees," the mean values across sectors show slight variation: engineering consulting firm and human resources reported the highest mean of 5.00, while transport & logistics reported the lowest at 4.156. The calculated f-value of 1.504 and a p-value of 0.167 indicate that these differences are not statistically significant. This suggests that all sectors share

similar levels of agreement on the importance of providing orientation and induction regarding health and safety to new employees.

4.3.5.2 Provision of Suitable Rest Rooms

The statement "There should be suitable rest rooms for its employees" had the highest mean value of 5.00 from the engineering consulting firm sector and the lowest of 3.00 from human resources. The f-value of 2.601 and a p-value of 0.013 indicate statistically significant differences among sectors. This shows that different industries have varying levels of satisfaction or focus when it comes to providing appropriate rest room facilities.

4.3.5.3 Provision of Clean Drinking Water

In response to "The company must provide pure/clean drinking water," the mean value ranged from 5.00 in the engineering consulting firm to 4.00 in health care, human resources, and institute. The f-value is 1.895 with a p-value of 0.071, which is greater than 0.05 and therefore not statistically significant. Thus, it can be inferred that most organizations are similarly aligned in their perception of the need for clean drinking water in the workplace.

4.3.5.4 Reasonable Temperature Working Environment

For the item "The organization must provide a reasonable temperature working environment," mean values vary from 5.00 to 3.80. The f-value of 2.019 and p-value of 0.053 suggest marginal non-significance. This indicates that while some variation exists in opinions across industries, the differences

are not strong enough to conclude statistically significant differences in this aspect of workplace safety.

4.3.5.5 Efficient Illumination and Ventilation

Regarding "The company should provide efficient illumination & ventilation at workspaces," all sectors reported high mean values, with the lowest being 4.00 and the highest 5.00. The f-value of 1.580 and p-value of 0.142 indicate that the differences are not statistically significant. This implies a general consensus across industries on the importance of providing proper lighting and air circulation.

4.3.5.6 Provision of Recreational Facilities

For the statement "There should be provision of recreational facilities in the company," the highest average was again in the engineering consulting firm (5.00), while human resources recorded a low of 3.00. The f-value of 2.594 and p-value of 0.013 denote statistically significant differences among sectors. This reflects varying degrees of importance or implementation of recreational facilities depending on organizational type.

4.3.5.7 Job Specific Training programs

With respect to "The company should provide job specific training programs," mean values were highest in the engineering consulting firm (5.00) and lowest in health care (3.80). The f-value of 2.155 and p-value of 0.039 indicate statistically significant differences. Therefore, the level of provision or perceived importance of such training programs differs among organizations.

4.3.5.8 Health and Safety Training

In the case of "The company should provide Health and safety training for employees," the mean ranged from 5.00 to 4.00. The f-value of 1.873 and p-value of 0.075 are not statistically significant, suggesting that all organizations value H&S training to a similar extent.

4.3.5.9 Provision and stock of PPE

For the statement "The company must provide suitable & sufficient PPE's and should have sufficient stock available," the f-value was 1.961 and p-value 0.061. This suggests a near-significant difference, but still above the 0.05 threshold. Thus, it may be concluded that most organizations have a common view about the necessity of PPE provision.

4.3.5.10 Regular Inspection of Tools and Equipment

Regarding "The company must perform regular inspections of tools and equipment," mean values showed limited variation. The f-value of 1.721 and p-value of 0.105 suggest the differences are statistically non-significant. Therefore, the importance of equipment inspections is widely accepted across all sectors.

4.3.5.11 Conducting regular Mock Drills

The statement "Should the company conduct mock-drills at regular intervals" yielded significant results, with an f-value of 3.128 and a p-value of 0.004. The mean was highest in engineering consulting firm and lowest in human resources. The significance suggests that different sectors prioritize

emergency preparedness drills differently, with some being more proactive than others.

4.3.5.12 Safety Awards to Employees

For "Does the company provide safety awards to employees," the f-value of 2.663 and p-value of 0.011 indicate statistically significant differences between organizations. While some sectors strongly support safety awards, others appear less inclined. This implies varying strategies in employee motivation and recognition.

4.3.5.13 Regular Workplace Inspections / Housekeeping

The statement "The company must do regular inspections at workplace/housekeeping" had a significant f-value of 2.429 with a p-value of 0.020. This implies that while some sectors conduct such inspections diligently, others may not give it the same level of importance, resulting in notable differences in safety maintenance practices across organizations.

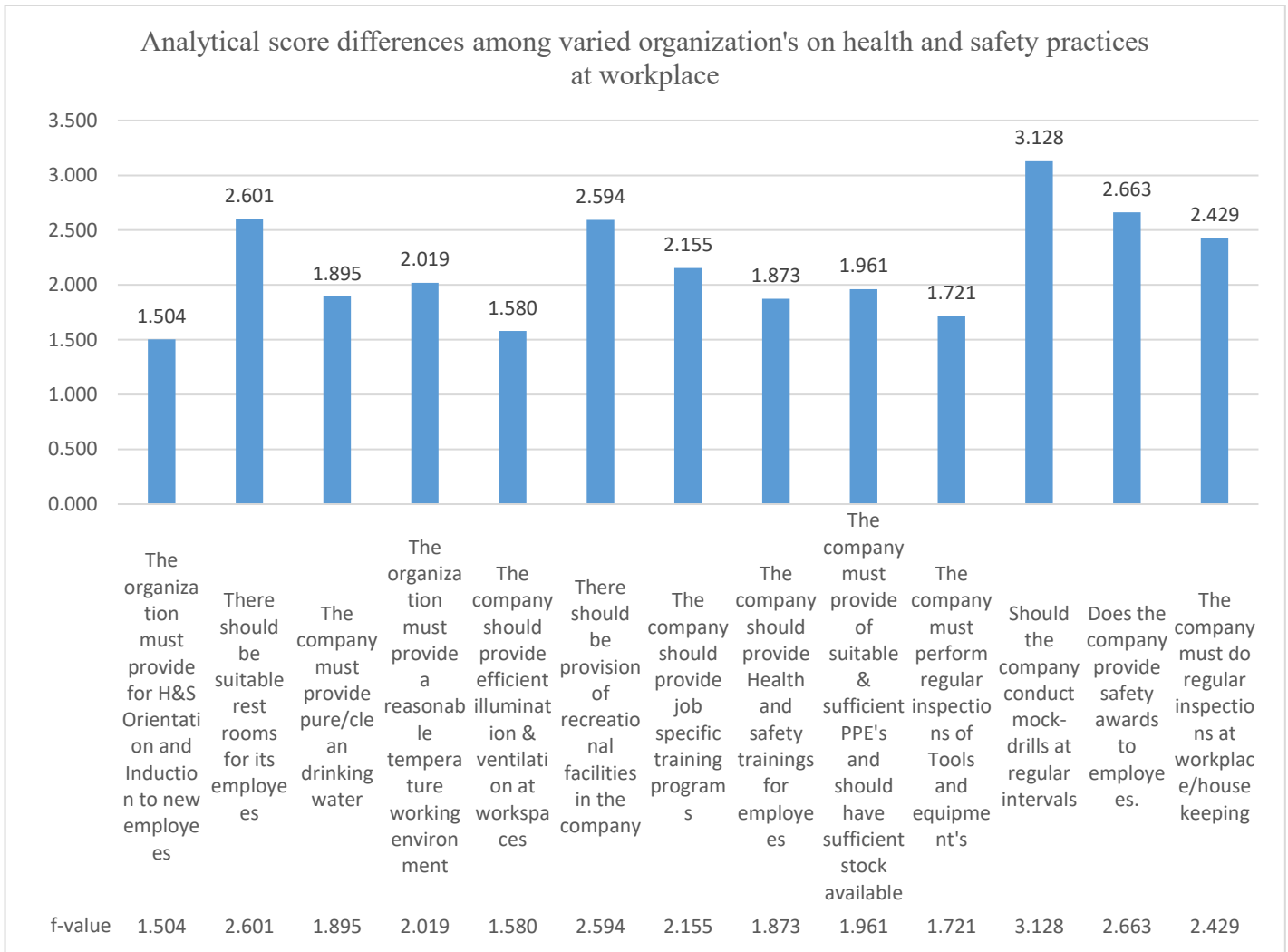


Figure 4.14: F-test results of analytical score differences among various organizations on health and safety practices at workplace

The analysis of health and safety practices across various organizational sectors reveals both shared values and distinct differences. While most sectors consistently emphasize the importance of core safety measures such as orientation, clean drinking water, PPE provision, and equipment inspections, statistically significant differences emerge in areas like rest facilities, recreational amenities, mock drills, and employee safety awards. Although, most sectors highlight a basic awareness of health and safety requirements, the priority is on safety measures vary

enormously depending on the type of organization. Tailored strategies may therefore be necessary to ensure consistent safety standards across all sectors.

4.3.6 Perception based on designation

Table 4.18: Perceptive scores among groups of different designation of respondents across organization on health and safety practices at the workplace.

Statements	Designation	N	Mean	Std. Dev	Std Error	VA F	p-value
The organization must provide for H&S Orientation and Induction to new employees	Accountant	2	5			2.004	0.029
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.248	0.632	0.062		
	Executive - Human Resources	1	4				
	Manager	61	4.607	0.525	0.067		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.273	0.804	0.108		
	Technician	17	4.059	0.748	0.181		
	Total	250	4.617	0.651	0.133		
There should be suitable rest rooms for its employees	Accountant	2	5			1.242	0.26
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.343	0.618	0.06		
	Executive - Human Resources	1	4				
	Manager	61	4.525	0.566	0.072		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.309	0.791	0.107		
	Technician	17	4.059	0.748	0.181		
	Total	250	4.621	0.654	0.133		

The company must provide pure/clean drinking water	Accountant	2	5			1.214	0.278
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.352	0.62	0.06		
	Executive - Human Resources	1	4				
	Manager	61	4.574	0.499	0.064		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.327	0.771	0.104		
	Technician	17	4.176	0.809	0.196		
	Total	250	4.639	0.649	0.134		
The organization must provide a reasonable temperature working environment	Accountant	2	5			1.191	0.294
	Administrative Assistant	5	4.4	0.894	0.4		
	Crane operator	1	5				
	Engineer	105	4.333	0.615	0.06		
	Executive - Human Resources	1	4				
	Manager	61	4.557	0.533	0.068		
	Nursing Officer	1	4				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.309	0.767	0.103		
	Technician	17	4.118	0.781	0.189		
	Total	250	4.52	0.718	0.164		
The company should provide efficient illumination & ventilation at workspaces	Accountant	2	5			1.15	0.323
	Administrative Assistant	5	4.4	0.894	0.4		
	Crane operator	1	5				
	Engineer	105	4.343	0.618	0.06		
	Executive - Human Resources	1	4				
	Manager	61	4.574	0.531	0.068		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.327	0.771	0.104		

	Technician	17	4.176	0.809	0.196		
	Total	250	4.62	0.725	0.166		
There should be provision of recreational facilities in the company	Accountant	2	5			0.876	0.565
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.333	0.645	0.063		
	Executive - Human Resources	1	4				
	Manager	61	4.492	0.649	0.083		
	Nursing Officer	1	4				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.309	0.791	0.107		
	Technician	17	4.118	0.781	0.189		
	Total	250	4.532	0.683	0.137		
The company should provide job specific training programs	Accountant	2	5			0.804	0.636
	Administrative Assistant	5	4.4	0.894	0.4		
	Crane operator	1	5				
	Engineer	105	4.381	0.626	0.061		
	Executive - Human Resources	1	4				
	Manager	61	4.492	0.622	0.08		
	Nursing Officer	1	4				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.327	0.771	0.104		
	Technician	17	4.118	0.781	0.189		
	Total	250	4.52	0.739	0.167		
The company should provide Health and safety training for employees	Accountant	2	5			0.897	0.544
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.381	0.626	0.061		
	Executive - Human Resources	1	4				
	Manager	61	4.508	0.595	0.076		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				

	Sr. Engineer	1	5				
	Supervisor	55	4.309	0.767	0.103		
	Technician	17	4.176	0.809	0.196		
	Total	250	4.634	0.669	0.136		
The company must provide of suitable & sufficient PPE's and should have sufficient stock available	Accountant	2	4			0.784	0.656
	Administrative Assistant	5	4.4	0.894	0.4		
	Crane operator	1	5				
	Engineer	105	4.381	0.626	0.061		
	Executive - Human Resources	1	4				
	Manager	61	4.525	0.595	0.076		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.345	0.775	0.105		
	Technician	17	4.176	0.809	0.196		
	Total	250	4.53	0.74	0.168		
The company must perform regular inspections of Tools and equipment's	Accountant	2	4			0.967	0.477
	Administrative Assistant	5	4.6	0.548	0.245		
	Crane operator	1	5				
	Engineer	105	4.362	0.622	0.061		
	Executive - Human Resources	1	4				
	Manager	61	4.508	0.595	0.076		
	Nursing Officer	1	5				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.345	0.775	0.105		
	Technician	17	4.118	0.781	0.189		
	Total	250	4.539	0.664	0.135		
Should the company conduct mock-drills at regular intervals	Accountant	2	4			0.784	0.656
	Administrative Assistant	5	4.2	0.837	0.374		
	Crane operator	1	5				
	Engineer	105	4.352	0.62	0.06		
	Executive - Human Resources	1	4				
	Manager	61	4.508	0.622	0.08		

	Nursing Officer	1	4				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.309	0.767	0.103		
	Technician	17	4.176	0.809	0.196		
	Total	250	4.413	0.731	0.163		
Does the company provide safety awards to employees.	Accountant	2	4			0.943	0.5
	Administrative Assistant	5	4.8	0.447	0.2		
	Crane operator	1	5				
	Engineer	105	4.362	0.622	0.061		
	Executive - Human Resources	1	4				
	Manager	61	4.492	0.622	0.08		
	Nursing Officer	1	4				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.345	0.775	0.105		
	Technician	17	4.118	0.781	0.189		
	Total	250	4.465	0.65	0.127		
The company must do regular inspections at workplace/housekeeping	Accountant	2	5			0.964	0.48
	Administrative Assistant	5	4.4	0.894	0.4		
	Crane operator	1	5				
	Engineer	105	4.362	0.622	0.061		
	Executive - Human Resources	1	4				
	Manager	61	4.525	0.595	0.076		
	Nursing Officer	1	4				
	Snr. Lab Technician	1	5				
	Sr. Engineer	1	5				
	Supervisor	55	4.309	0.767	0.103		
	Technician	17	4.118	0.781	0.189		
	Total	250	4.519	0.732	0.166		

The table 4.18 represents the perceptive scores differences among designations from respondents for health and safety practices followed by various organizations.

4.3.6.1 The organization must provide for H&S Orientation and Induction to new employees

The perception of employees across different designations on the statement regarding H&S orientation and induction shows a statistically significant difference with an f-value of 2.004 and a p-value of 0.029, which is less than 0.05. This indicates that employees in different roles perceive the importance or adequacy of H&S orientation differently. Notably, technicians (mean = 4.059) rated it lower than managers (mean = 4.607), while engineers also had slightly lower scores (mean = 4.248), suggesting a possible gap in implementation or expectations.

4.3.6.2 There should be suitable rest rooms for its employees

The mean scores for all designations reflect high agreement on the need for suitable restrooms, with minimal variation. The f-value (1.242) and p-value (0.260) indicate no statistically significant difference among designations. This implies a shared and satisfied perception across all job roles regarding restroom facilities.

4.3.6.3 The company must provide pure/clean drinking water

Designation-wise responses show a consistent agreement on the provision of clean drinking water, with mean scores ranging from 4.0 to 5.0. The calculated f-value is 1.214 and the p-value is 0.278, which indicates no significant difference. Hence, it can be inferred that employees across all designations are satisfied with the availability of clean drinking water.

4.3.6.4 The organization must provide a reasonable temperature working environment

Employees of different designations show a similar perception toward maintaining a reasonable working temperature, as reflected by an insignificant f-value of 1.191 and a p-value of 0.294. This indicates that the provision of temperature-controlled comfort or effective air ventilation in the workplace is considered sufficient and acceptable across roles.

4.3.6.5 The company should provide efficient illumination & ventilation at workspaces

There is no significant difference among designations in their views on workplace lighting and ventilation (f-value = 1.150; p-value = 0.323). With high average scores, it is evident that this aspect of safety and comfort is adequately managed and generally appreciated by all categories of employees.

4.3.6.6 There should be provision of recreational facilities in the company

With an f-value of 0.876 and p-value of 0.565, the analysis shows no statistically significant difference in responses. This indicates that the perception of recreational facility provision is consistent among all designations, suggesting uniform satisfaction or expectations in this area.

4.3.6.7 The company should provide job specific training programs

The responses show an insignificant difference across employee roles (f-value = 0.804; p-value = 0.636). This implies that the perception of adequacy

in job-specific training programs is equally shared among accountants, engineers, technicians, supervisors, and other roles.

4.3.6.8 The company should provide Health and safety training for employees

The f-value of 0.897 and a p-value of 0.544 signify no significant difference in perception regarding health and safety training. Employees across various designations seem to equally value and likely receive adequate safety training, leading to a uniform level of satisfaction.

4.3.6.9 The company must provide suitable & sufficient PPEs and should have sufficient stock available

The average scores indicate strong agreement on the availability of personal protective equipment (PPEs). The p-value of 0.656 confirms there is no significant variation across designations, which suggests that PPE provision is perceived as satisfactory by all employee categories.

4.3.6.10 The company must perform regular inspections of Tools and equipment

No significant difference in perception is observed with a p-value of 0.477. This indicates a consistent understanding and agreement across all roles that regular inspections are conducted and valued as part of the company's safety measures.

4.3.6.11 Should the company conduct mock-drills at regular intervals

The perception towards conducting mock-drills at regular intervals is generally high across all designations, with no statistically significant differences (f-value = 0.784, p-value = 0.656). This indicates employees from all designations agree on the importance and presence of mock-drill activities.

4.3.6.12 Does the company provide safety awards to employees

Employees have similar views regarding the provision of safety awards, reflected by the f-value of 0.943 and p-value of 0.500. This suggests that the recognition of safe behaviour through awards is either uniformly applied or uniformly understood among all designations.

4.3.6.13 The company must do regular inspections at workplace/housekeeping

The statement regarding regular inspections and housekeeping shows consistent agreement among designations (f-value = 0.964; p-value = 0.480). Thus, it can be inferred that employees of all roles recognize and are satisfied with the frequency and quality of such inspections.

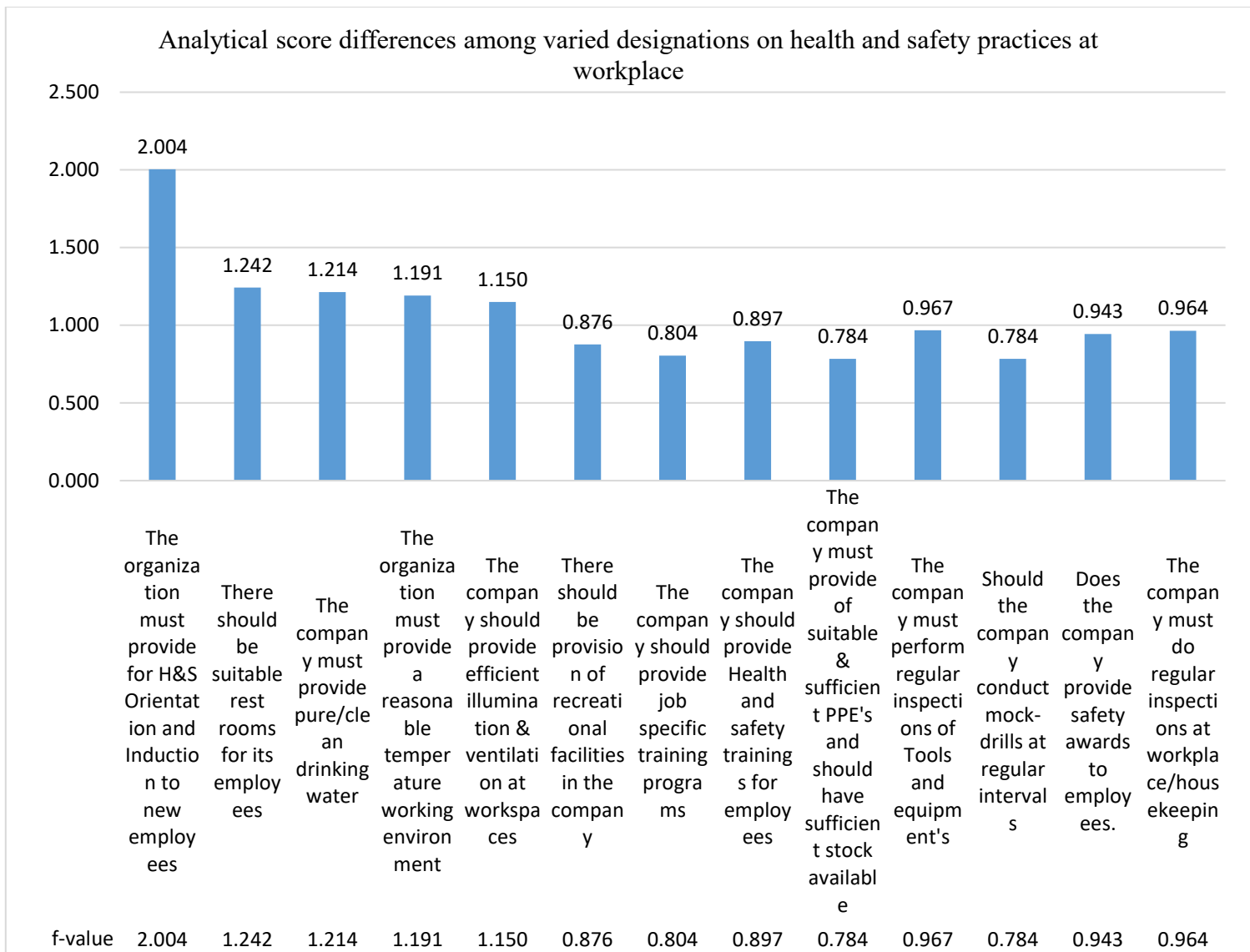


Figure 4.15: F-test results of analytical score differences among various designations on health and safety practices at workplace.

4.3.7 Correlation coefficient Analysis

*Table 4.19: Correlation measures between health and safety practices and appreciation
of the respondents*

Variables	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13
A1	1.000												
A2	0.852	1.000											
A3	0.866	0.968	1.000										
A4	0.833	0.954	0.968	1.000									
A5	0.858	0.959	0.981	0.977	1.000								
A6	0.801	0.944	0.950	0.952	0.949	1.000							
A7	0.838	0.946	0.951	0.955	0.942	0.953	1.000						
A8	0.850	0.941	0.954	0.941	0.945	0.931	0.969	1.000					
A9	0.847	0.928	0.950	0.946	0.959	0.936	0.965	0.969	1.000				
A10	0.836	0.945	0.949	0.945	0.949	0.944	0.964	0.968	0.973	1.000			
A11	0.809	0.910	0.924	0.936	0.924	0.935	0.938	0.951	0.948	0.929	1.000		
A12	0.818	0.946	0.941	0.936	0.932	0.962	0.955	0.950	0.955	0.973	0.947	1.000	
A13	0.822	0.914	0.927	0.931	0.918	0.931	0.942	0.946	0.924	0.950	0.951	0.950	1.000

A1 - The organization must provide for H&S Orientation and Induction to new employees

A2 - There should be suitable rest rooms for its employees

A3 - The company must provide pure/clean drinking water

A4 - The organization must provide a reasonable temperature working environment

A5 - The company should provide efficient illumination & ventilation at workspaces

A6 - There should be provision of recreational facilities in the company

A7 - The company should provide job specific training programs

A8 - The company should provide Health and safety training for employees

A9 - The company must provide of suitable & sufficient PPE's and should have sufficient stock available

A10 - The company must perform regular inspections of Tools and equipment's

A11 - Should the company conduct mock-drills at regular intervals

A12 - Does the company provide safety awards to employees.

A13 - The company must do regular inspections at workplace/housekeeping

The table 20 analyses the correlation between health and safety practices and appreciation of the respondents. The analysis is based on Pearson correlation coefficient among 13 measurements. It is noticed that there is statistically significant relationship between the measurements on practices at workplaces with requirements or provisions to suitable rest rooms, pure clean drinking water, suitable PPE's, tools, and equipment which are job specific towards safety and health at the workplace. Thus, it is understood that there is a requirement for the employers at the organizational level to ensure to provide and maintain with reference to health and safety practices. The research observed that the analysis reveals that strong positive correlation coefficients among the measurements indicate that employees perceive H&S as interdependent, subjected to improvement in any segment may lead to higher appreciation for others. The organization can focus on the following areas.

4.3.7.1 Establish a comprehensive health and safety framework

The high correlations among job specific training(A7), H&S training(A8), personal protective equipment(A9), tools inspection(A10) and housekeeping(A11) indicate a closed linked system. The organization should implement a safety policy that integrates the training, PPE management, routine inspections and create SOP's (Standard Operating Procedures) that ensure all departments adhere to consistent safety standards also appoint a dedicated safety personal to monitor evaluate and update safety practices.

4.3.7.2 Support training and awareness programs

With health & safety training(A8) and job-specific training(A7) correlating high with almost all other measurements the organization need to conduct regular job specific training programs to enhance employee roles and ensure risk control measures at the workplace. Schedule health and safety workshops periodically to cover emergency preparedness equipment handling and risk reduction. Develop use of e-learning modes for continuous learning and compliance tracking.

4.3.7.3 Improve physical work environment and welfare facilities

The strong correlation among restroom(A2), clean drinking water(A3), temperate working conditions(A4) and ventilation and lighting(A5) highlight the need for environmental comfort. The organization need to perform a facility audit to assess compliance with ergonomic and environmental standards. Invest in cleanliness, hygiene, and temperature control mechanisms to maintain optimal working conditions, also need to ensure all welfare facilities are adequately maintained and accessible.

4.3.7.4 Systematize regular inspections and audits

Through the high correlation between equipment inspections(A10) and workplace inspection(A13) the organizations must develop a chart for routine inspections periodic with documented checklist and follow up reporting. Introduce digital inspection system for monitoring with reporting and resolution tracking on real time basis, also should provide the inspection outcomes transparently to employees for building trust and participation.

4.3.7.5 Recognize and reward safe behaviour

Safety Awards(A12) is positively correlated with most of the measurements, describing the value of recognition. Establishing an organized recognition system that will acknowledge employees or teams those consistently follow safety protocols can encourage a healthier culture of safety compliance and motivation towards safe H&S practices at the workplace. Also, incorporate periodic awards, peer nomination and spot recognitions to encourage safety consciousness.

4.3.7.6 Culture of participation and feedback encouragement

Although not particularly described in the table the understanding may that an employee appreciation develops when they feel involved by conducting safety perceptions surveys to gather employee feedback. Create H&S committees with employee representation to drive initiatives by themselves. Also need to encourage open reporting of all incidents or hazards without fear of being charged.

The analysis of health and safety practices across different employee designations reveals a generally high level of agreement on the importance of key practices. This suggests strong agreement among employees, regardless of roles, on the need for comprehensive health and safety measures. The findings imply that while specific job roles may influence how certain safety elements are valued. There is an overall consistency in recognizing the importance of a safe working environment across all levels of employment.

4.3.8 Hypothesis confirmation

This section evaluates the research hypothesis based on the analysis of the survey responses from 250 respondents across various organizations, job roles, experience levels, etc.

H1: There is a significant relationship between organizational commitment and the effectiveness of health and safety management.

The hypothesis examines whether the top management's commitment influences the implementation of OHS policies and induction programs are justified. The responses indicate high agreement with statements such as the need for H&S policies(mean-4.336), implementation of procedures (4.336), and appointment of competent personnel (4.34). the F-tests across the age and work experience groups yielded significant results (p-value<0.001 in various cases), demonstrating variation in perception but overall support for these elements. The data suggests that organizational commitment is significantly associated with the effectiveness of H&S management. Thus, supporting the hypothesis.

H2: Effective health and safety management significantly impacts the availability and quality of workplace and employee resources.

This hypothesis explores the relationship between well-implemented health and safety systems and the provision of safety facilities, welfare measures, and employee support systems. High mean scores were recorded for the statements such as provision of first aid and medical insurance(mean-4.444), emergency planning (4.336), and safety trained personnel (4.392). Respondents with more experience showed significantly higher ratings for these resources, with p-values below 0.05,

indicating experience influences perception of resource adequacy. Effective H&S management is positively linked to better workplace resources; the hypothesis is thus supported.

H3: Workplace and employee resources significantly influence the execution of management obligations regarding H&S.

This assesses whether adequate training facilities enable stronger inspection, audit, and emergency practices. Elements like regular inspections(mean-4.312), scheduled audits (4.288), and the availability of emergency preparedness plans (4.336) all received high support. ANOVA testing across work experience showed statistically significant variation($p\text{-value}<0.001$), suggesting that better resources correlate with stronger execution of management responsibilities. The provision of workplace and employee resources significantly facilitates the fulfilment of H&S management obligations supporting the hypothesis.

H4: Management obligations have a significant impact on health and safety performance outcomes.

This hypothesis links actions such as inspections, audits, and drills to outcomes like incident reduction or safety rewards. High means and strong significance were observed in perceptions of audits, inspections, and mock drills across all demographic segments. Furthermore, the provision of safety awards was rated favourably, especially by experienced employees($p\text{-value}<0.001$). Therefore, there is a significant link between management obligations and improved safety performance indicators supporting the hypothesis.

H5: Health and safety management directly affects the fulfilment of management obligations.

The hypothesis assesses whether the strategic H&S plans result in active implementation of inspections, drills, and audits. Consistent high agreement (means between 4.3-4.5) for both policy level items and execution level items (e.g., audits and inspections) indicate a functional relationship. Experienced employees particularly recognize this link (validated by significant F-test results). The findings validate a direct relationship between H&S management planning and the execution of management duties.

H6: Health and safety management directly influences organizational performance/outcomes.

This evaluates whether OHS policies contribute to improved organizational outcomes, like reduced incidents and increased recognition. The strong agreement with statements on H&S orientation, record maintenance, and documentation of lessons learned (means > 4.3) supports this hypothesis. However, the perception of these practices did not vary significantly by educational qualification (p-value > 0.05), implying a uniform acknowledgement of their importance. The H&S management significantly influences broader organizational safety outcomes, which is supporting the hypothesis.

4.4 Summary of Findings

The researcher has focused on two prime research questions for answers. The summary derived from the findings obtained from results and discussion on data in the

prevailing situations could further improve the drawbacks observed in the research for occupational safety and health at the workplace. Despite the study being empirical in nature, the collected data from the respondents was based on a quantitative study. The filled survey questionnaire was acquired from the online portal and scrutinized for final observations and recording. In this process, 250 respondent samples were collected and considered for the study. With the completion of data collection through the survey questionnaire, the entire data was computed and processed for further analysis. Statistical tests like f-test are applied to analyse the data to find out the difference in perceptions of respondent between the groups.

4.4.1 H&S Management at Workplace

A significant percentage of 87.6 respondents had either agreed or strongly agreed on the necessity of well-defined health and safety policy with a mean score of 4.336. Older and experienced employees reported higher awareness and appreciation of policies which could be beneficial for all employees at workplace.

With a consistent mean score same as health and safety policy, this statement revealed a gap in younger employees' perception, as they might be less educated about the enforcement of policies or procedures in an organization. Thus, indicating the need for better communication among the employees and including them in any safety committee meetings and introducing training sessions to they are aware of the policy implementation.

Approximately 89.2 percent of the respondents preferred having a competent health and safety personnel at workplace. The findings suggest that experience may enhance the recognition of such roles. With mean value 4.34 it is

of opinion that proficient employees more likely to understand the need of a health and safety personnel at workplace.

The most endorsed measurement was first aid and emergency preparedness with 92 percent of respondents agreeing to the measurement on provision of first aid medical provisions to be made available at workplaces. Employers need to include suitably stocked first aid kit as per the requirement of site and work conditions of employees.

Training with aspects of safety at workplace received 87.2 percent agreement with maximum support from experienced employees. With a mean of 4.312 it is of opinion that the respondents identify the need for job specific and suitable training at workplace so that it would enhance their job skills and have a safe work environment for the employees.

From the study it is found that safety committee was also well supported by 86.4 percent with 4.288 mean value. It is observed that there was relatively low score among less experienced and younger staff than experience employees. This also symbolizes that there is a need for the employers to assign a safety committee at workplace.

It is observed from the study that health and safety inspections at workplace almost 88 percent of respondents agreed for the measurement with mean value 4.312 which depicts the need that the organization must have an inspection of workplace system must be ensured for identifying any unsafe situations which would become hazardous for the employees at workplace.

From the study it was found that respondents measured trained first aid personnel a requirement at any organizational level where in any sort of high-risk works are executed. With 90 percent of agreement by the respondents it states that

the employees are more inclined towards the need of the trained competent personnel at work places.

The study revealed that perceptions on health and safety audits at workplace indicates that periodical audits need to commence on a planned schedule and by competent authority given that 86 percent and a mean value 4.288 of the respondents agreed to the audit at workplace.

From the study it was found that emergency preparedness at workplace was measured with mean value 4.336 with 88.4 percent of respondents agreeing for the measurement scale. This proves that employees have an understanding towards the need for emergency planning at workplaces which would be helpful at the times of crisis.

The documentation of lessons learned in respective mock drills was found to be agreed by 87.6 percent of the respondents with mean value 4.3 shows that the organization have a need to maintain the documentation for understanding any failures which may have occurred in the process and that could provide a support for learning from the failures of incidents.

From the study it can be found that respondents on accident reporting at workplace indicate that the reporting system play a vital role in the organization with mean value 4.32 and 88 percent of respondents agreeing the measurement and that the employees should come forward in report any sort of accidents.

It is observed from the study that respondents on maintaining the records 88.4 percent of respondents agreed to the measurement with a mean of 4.332 derives that organization need to maintain all incident records which can be for the requirement of learnings or training or legal requirements.

Overall, for the segment of health and safety management among 250 participants;

- 45.13 percent strongly agreed
- 43.07 percent agreed
- Only 11.78 percent were neutral (LIKELY)

This reflects a positive agreement on the importance of health and safety management measurements across various dimensions.

4.4.1.1 Age based analysis (ANOVA Test)

Across the dimensions, the F-value were significantly high and p-values well below 0.05 depicting statistically significant differences across age groups:

- Older employees consistently rated a higher score with mean of 4.8 which is near perfect score.
- Younger employees showed a lower agreement on the dimensions likely due to limited exposure to workplaces which may also make us believe that the younger employees need to be nurtured for safety protocols at workplaces.

Age correlates positively with awareness, valuation and satisfaction regarding the workplace safety measures.

4.4.1.2 Educational Qualification Analysis

- No statistically significant differences were found based on educational qualification, with all p-values greater than 0.05.
- This suggests a uniform understanding on the importance of occupational health and safety management regardless of any educational background.

The health and safety objectives are understood and supported across all educational levels, suggesting the effectiveness on awareness programs.

4.4.1.3 Work experience analysis

- Proficient employees had given higher scores on health and safety management aspects with statistically significant difference among the whole variable along with p-value having significant difference less than 0.05.
- Work experience has a significant impact on employees with more years of experience generally rate more positively

Experienced employees were more familiar with health and safety management in the organization. Organizations therefore, should enhance safety communication and involve all employees especially less experienced to bridge the perceptual gap.

4.4.1.4 Organizational Sector Analysis

The analysis across the sectors like construction, manufacturing, oil & gas etc, showed;

- Higher average mean scores 4.42.
- Significant difference among statements based on organizations type with p-value found to be greater than 0.05

Although there is agreement across most of the sectors in organizations, some of them could need improvement in the process.

4.4.1.5 Designation based analysis

- Respondents showed a statistically significant difference in response for the parameters on health and safety management measurements.
- The mean value 4.505 was observed across the segment.

Job designation impacts perceptions likely due to role specific responsibilities. The organization need to more effectively include personnel from all job roles for safety engagement.

4.4.2 Health and Safety Practices at Workplace

It is observed from the study that there should be H&S orientation and induction at workplace around 88.8 percent of employees agreed for the requirement of orientation for new joiners. By providing the orientation the organization can ensure to inform the new joiner the primary safety requirement with rules and regulation that must be followed by the employees at the workplace and they can also inform them of the company policies and procedures that need to adhered to.

It is found in the study from the respondents on having suitable rest rooms for employees at workplace having a high agreement of 90 percent which suggests that employees understand the need for hygienic environment. Organization should also understand the requirements on women's needs so that they feel comfortable at workplace during their menstruation cycle with suitable disposal of sanitary waste.

From the study of the need for clean and pure drinking water at workplace the respondent's agreement was high with 91.2 percent. Organization must understand that it is a moral obligation to make provision of clean and safe drinking water for its employees at work. It is every living being right for access for clean drinking water for which the organization is responsible for providing at the workplace.

In the study for a suitable work environment at the workplace the study finds that the respondents have agreed with 90.4 percent. People are often observed who tend to work in extreme conditions. The organization need to understand that such people who work in such inadequately maintained work environment will be prone to health conditions with adverse effects. Thus, it is the obligation of the organization to provide a suitable work environment.

It is found that respondents on efficient illumination and ventilation at the workplace there was 90.4 percent agreement across the group. Hence the organization need to provide lighting with required illumination and the place of work to be sufficiently ventilated for fresh air.

From the study it was found that respondents on recreational facilities had an agreement of 88 percent providing the employees to have a regenerative experience from all time at work.

In the study of job specific training at the workplace it was found 89.2 percent of respondents agreed. Organization needs to provide job specific training so as that employees develop skills those will ensure the safety of the employees and others.

Considering the health and safety training the study finds that the respondents agreed a maximum of 90 percent among the group. Thus, understanding that there is more variable training those might be effective for the organization's good functioning. This will also eliminate the hazardous environment which might exist or people will be more mature to identify the hazards by the provision of training.

In the study of provision suitable and sufficient personal protective equipment's and having sufficient stock at workplace the respondents rated 89.6

percent. It is often observed that employees are found using worn out PPE's or damaged. Organization must have an effective process to maintain the needful stock of PPEs for its employees at the organization.

It is found that 90.6 percent of respondents agreed to having regular inspections of tools and equipment's at the workplace. The organization must also understand there are legal requirements for having the tools and equipment's that should be inspected on said time basis as it also concerns the safety of the employees using the same at work.

From the study it can be found that respondents on conducting regular mock drills employees play a crucial part in the same. 89.2 percent of the employees agreed for the timely mock drills which will enhance their awareness towards the emergency preparedness skills. Organization should also believe that this will not be wasting time by conducting mock drills.

It is observed that respondents measure 89.6 percent for the provision of safety awards for best performers in safety. This will boost the morality of employees so that they will perform effectively by avoiding hazardous situations which might put the organization or the employee at fault. Organization must ensure sufficient budget is placed for the same.

It is found that having regular inspection at workplace for housekeeping the respondents agree with 89.6 percent for the requirement. By maintaining a good housekeeping, the surrounding area will be clean and having a hygienic environment which will be a positive impact on all the employees at the workplace.

Overall, the segment of health and safety practices among 250 respondents was as follows;

- 47.81 percent strongly agreed
- 42.12 percent agreed

- Only 10.06 percent were neutral (LIKELY)

This suggests a positive agreement on the importance of health and safety practices measurements across various dimensions.

4.4.2.1 Age based analysis (ANOVA Test)

The analysis revealed that with average f-value 18.924 and p-value much below than 0.05 highlighting a significant difference across all age groups.

- Older employees rated a high with a mean of 4.684 which is almost near to full score.
- Younger employees showed low understanding for the measurements possibly due to awareness or due to experience in the job.

The generational difference demarcate that experience and maturity correlate positively with the value on workplace safety. Subsequently the organizations should enhance safety communication and training for less experienced or young employees ensuring their active participation in the need for safety culture.

4.4.2.2 Educational Qualification Analysis

Educational qualification did not influence the perception of health and safety parameters significantly.

- Respondents with higher educational qualification ratings remained high consistently across the factors.
- P-value was found to be greater than 0.05.

Therefore, it is of an understanding that awareness and engagement of safety in workplace are not limited to formal education. Organizations must still be ensuring the company policies and leadership with practical experiences are understood to keep in priority

4.4.2.3 Work Experience Analysis

Experience also plays a major role in the perception of health and safety parameters.

- Proficient or experienced workers scored high significantly on all factors in comparison to less experienced employees.
- The p-value was significantly lower than 0.05, with f-values indicating robust variation across the groups

The findings establish the role on the job by learning and detection in shaping safety awareness. On the other hand, organizations must need to reinforce safety training, especially for new employees and ensure uniform adherence to safety standards.

4.4.2.4 Organization based Analysis

There were statistically significant variations across various organization sectors as the data presented.

- Employees in manufacturing sectors or industrial reported higher agreement scores compared to others, while some of the practices like drinking water and personal protective equipment's were scored high across the sectors.
- Except for the variables related to PPE and access to clean drinking water, all other items showed no statistically significant differences across the groups, as indicated by p-values greater than 0.05.

With the findings the organization uphold the OHS strategies that will address the risk profiles and operational factors in each sector, when resources and management allocation may be uneven.

4.4.2.5 Designation based analysis

Significant differences were noted across employee designation.

- Senior employees like managers, engineers reported higher levels of satisfaction in consideration to younger employees.
- The p-values were found significantly higher except for employee orientation (0.029) than 0.05 high depicts significant difference across the group.

Such patterns demand a more inclusive approach towards health and safety policy implementation. Through this the organizations must ensure employees at all levels are informed and equipped and be recognized for their safe behaviour at the site.

4.5 Conclusion

Occupational Safety and Health (OHS) is a critical aspect of any workplace, aiming to ensure the well-being of employees by preventing accidents, injuries, and diseases related to their work. A strong focus on OHS contributes not only to protecting the workforce but also improves productivity, reduces absenteeism, and enhances overall organizational performance. The study explored two critical parameters with 26 measurements on occupational safety and health, with the role of management involvement ensuring workplace safety, and the impact of occupational health and safety practices for maintaining an efficient, positive work environment. Illustrating upon responses received from 250 respondents, the research employed analysis based on a quantitative approach to

evaluate perceptions across age groups, educational background, work experience, type of organization, and designation of respondents at various levels.

The empirical evidence obtained from statistical analysis supports all six hypotheses proposed in the study. The data clearly illustrates the inter dependencies among organizational commitment, health and safety management, resource provision and safety performance. The findings emphasize the role that an organizational management has in forming a good safety culture. With an overall agreement score 86.67 percent on the first research parameter, it is understood that having clear specific safety policies, effective implementation of procedures, appointment of H&S personal and provisions emergency services and medical insurance schemes are extremely recognized as essential by the employees. Also continuously audit and document learnings to build trust and transparency. Management's visible commitment to health and safety will not only strengthen operational determination and motivate the employees for the trust and participation in safety programs. Strong correlations across H&S management functions determine that employees recognize and value systematic efforts that focuses on their well-being.

The analysis also identified that older employees with higher work experience rated the safety parameter more positively, this may be due to the exposure to a long tenure in their work experience which may lead to familiarity on the possibilities of workplace hazards and appreciation of the organization's measures on safety. Whereas the less experienced employees displayed more like a neutral approach or uncertain perceptions depicting a knowledge barrier or failure by the management in making efforts to encourage or engage to bond the perceptual gap.

In the study of health and safety practices the overall score of 75.45 percent reflected a general beneficial but a comparatively lower satisfaction level. Key highlighted

measurements include the availability of personal protective equipment's, clean drinking water, proper ventilation, and the provision for job specific and safety training. The parameters when put into practice not only ensures physical safety but also contribute to employee well-being and productivity. The study also identifies the areas of improvement for the requirement of induction programs for new employees, provision for recreational facilities and requirement for mock drills and its learnings.

The study also concludes that occupational safety and health is not merely a compliance requirement but a systemic facilitator to organizational trust, performance, and sustainability at workplace inclusive of employees and the organization by itself. Effective management involvement in policy training, auditing and emergency preparedness forms a backbone to safety performance and to its infrastructure. Workplace practices that prioritize preparedness will further increase morale in the employees that will enhance the safety culture in the organization.

To improve effective H&S practices the organization must adopt a comprehensive, employee based on systematic monitoring H&S systems. The high correlations among the surveyed measurements ascertain that safety excellence will not be achieved through isolated means. Organizations that develop and implement involved approaches are more likely to earn employee trust, reduce accidents and develop a good safety culture for a sustainable safety compliance.

With high level of satisfaction exists across the age, education and experience groups, the significant perceptual gaps among amateur employees suggest a need for designed safety orientation or induction programs for continuous engagement. The organizations need to be positioned well but also need to evolve from good practice to best by consolidating and supporting the company's occupational health and safety systems predominantly.

CHAPTER V:

DISCUSSION

5.1 Discussion of Results

The empirical study of occupational safety and health at the workplace by examining two aspects that is (1) the effectiveness health and safety management and (2) how health and safety practices are influence the workplace. By using the empirical data of 250 respondents, perceptions were evaluated across a range of demographic profiles like age group, educational level, years of experience, organization category and designation of employees. The findings reveal several implications on organizational safety management.

5.2 Discussion of Research Question One

- **Organization/management engagement towards OHS of its employees and general public.**

The findings revealed a high level of agreement among employees considering the essential role of management in developing a strong OHS culture. With safety score percentage of 86.67 percent for health and safety management at workplace, it considers a strong commitment of support to management led safety initiatives.

Factors like having a health and safety policy, implementation of procedures, appointment of H&S personnel, emergency preparedness plans and first aid readiness received extensive support. With measurements the employees identify the importance of management leadership, accuracy to protocol and organized support for maintaining standards in safety. Training and development are essential for employees to perform at their full potential. Studies across various contexts confirm that well-designed

training programs significantly improve job performance, efficiency, and organizational outcomes (Ms. Thatipamula Neelima et al., 2024).

The study also identified the perceptual differences among various age groups, wherein older employees especially 45 years and age above consistently rated the management's effort for needs more positively than younger employees with less experience. This may be understood that due to greater exposure to workplaces and varied experience through the systems over the time they have developed a vast organization knowledge and firm engagement with safety initiatives. A typically effective health and safety audit should encapsulate the actions managers at all levels take in order to create a safe work environment (Emmanuel et al., 2021). The results also suggest that younger employees or less experienced may be partly aware about organization's involvement in developing an effective safety framework indicating a need for more effective means of communication from the management. Belief is that in ensuring the implementation of emergency management in construction sites, it should start with clear governance of emergency management which is later supported with clear guidelines and best practices (Samsudin et al., 2023).

The revealed minimal statistically significant differences in perceptions across the various educational qualifications group. This symbolizes that regardless of any academic achievement the employees share an almost similar understanding to the value of management involvement in occupational safety and health at workplace confirming the unquestionable importance of leadership in promoting workplace safety.

5.3 Discussion of Research Question Two

➤ **Health and safety practices influencing good work environment in the organization**

Health and safety practices play a key role in building a positive and productive workplace in any company. When put into action the right way, these practices protect workers' physical and mental health and create a culture where people feel cared for and respected. Health and safety practices have an impact on creating a good work environment in many ways, from how delighted workers feel to how much they get done, to how people see the organization. The government motivates the management of safety during construction through rewards and punishments, and owners motivate contractors to ensure safety through proper remuneration(Feng et al., 2023).

The findings in research question 2 health and safety practices demonstrate the need of effectively significance to support to a positive and favourable work environment. The overall score for health and safety practices 75.45 percent reflects a typically beneficial perception although it still indicates improvement.

High scores were observed for the measurements of provision of clean drinking water, proper ventilation, sufficient PPE's, job specific and safety training program, and regular inspection. These elements are essential to employees for their well-being which will eventually contribute towards increased productivity, reduced absenteeism, and improved morale.

Although, certain areas like the provision of recreational facilities, induction programs for new employee and safety award system received relatively lower scores. The same results imply that while the preliminary safety measures are in place, some aspects of workplace well-being like mental health, recognition might require greater attention from the higher management from the organization. The lower ratings for

employee safety orientation or induction program suggest that new employees may not be formally introduced to the company's safety culture, which could obstruct the compliance and engagement on employees in a long-term basis. Understanding the role of H&S induction training to worker behaviour, H&S culture and outcomes will improve H&S practices and standards within the construction industry(Rantsatsi, 2024).

This chapter also explores the business implications of these findings, including reputational risk management, ESG alignment, and operational resilience. Organizations that embed OHS into their strategic narrative—through KPIs, transparent reporting, and executive accountability—gain a competitive edge and foster a high-trust, high-performance culture.

CHAPTER VI: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 Summary

Here in this segment the researcher summarizes the findings derived or achieved with the findings retrieved from the above sections with important aspects. A thorough review of the summary not only allows for a final assessment of the findings but also highlights the study's significance by demonstrating its contribution to existing health and safety literature and its practical relevance to modern workplace environments. There were 2 primary questions explored that is management involvement influencing occupational safety and health and how occupational health and safety practices come up with maintaining suitable work environment. Illustration of empirical data received from 250 respondents; the chapter incorporates quantitative results with qualitative insights to offer a structured understanding on the role of occupational health and safety upon organizational efficiency on performance.

Effective data use supports targeted training, resource optimization, and reduction in downtime due to injuries – each contributing to improved KPIs like retention, productivity, and cost efficiency. Conclusions provide a strategic road map for embedding OHS into core business functions. Recommendations often align with ISO certifications, ESG reporting and quality assurance frameworks.

6.1.1 Summary on research question 1

The responses highlight significant positioning between organizational management systems and employee prospects in terms of health and safety management. The cumulative health and safety management score for the section

at 86.67 percent suggests formidable agreement on foremost occupational health and safety elements.

Some observations in the research question 1 considering the response from the respondents. Policy and procedures observed high agreement considering the requirement of formal health and safety policy and structured implementation of the needful health and safety procedures. The mean score based on Likert scale was more than 4.3. Trained personnel and first aid provisions had extensive agreement for having appointed competent safety personnel and provisions of first aid and medical facilities to the employees with agreement levels reaching above 90 percent. Inspection, documentation, and auditing received a firm approval directing strong employee value in preventative safety mechanisms.

6.1.1.1 Insights on Demography

Age Difference – there were statistically significant differences in the hypothesis across different age groups. The older employees highlighted the safety practices higher. This impression indicates a correlation between age, experience, and awareness to safety

Educational qualification – there was no significant variation observed across educational qualification groups depicting an understanding and assessment of safety across qualifications.

Work experience – employees with more than 10 years of experience had measure significantly higher than less experienced respondents. This signifies that organizational responsibility of control provides understanding and recognition to safety systems.

6.1.2 Summary of Research Question 2

The second questionnaire of research focused on health and safety practices and implementation at workplace. The health and safety score percentage calculated for the segment was 75.45 percent. This indicates a relatively strong workplace which could have an improved safety culture or safe work environment.

Some of the key observations with basic foundational amenities with selected highly measured sections by the respondents were provision of clean drinking water, availability of personal protective equipment's and sufficient ventilation and lighting at the workplaces. This signifies a good and well-maintained basic infrastructure at the workplaces for the employees. With consideration, health and safety training and emergency preparedness inspections of tools and equipment's were also deeply valued. However, learnings from mock drills, safety awards were measured positively it expressed scope for improved frequency and engagement at the workplace. Simultaneously, sections like employee welfare facilities like restrooms and recreational facilities were measured lower.

6.1.2.1 Insights into demography summary

Considering the factor on age differences there was statistically significant factor that was observed with older experienced employees perceiving higher effectiveness in the safety practices at the workplace.

There was no statistically significant difference observed across the educational levels. Thus, affirming the universal value on the occupational health and safety. Employees with longer work experience at work measured safety provisions at high depicting the need by the organizations to provide and

be involved in the requirement that need to be provided to the employees due to their increased exposure to workplaces and familiarity to the organization.

6.2 Implications

Occupational Safety and Health (OHS) is critical not only for the protection and well-being of workers but also for the broader implications it has on businesses, communities, and society at large. The implications of OHS can be viewed from several perspectives: organizational, economic, legal, social, and even environmental. A strong OHS framework can lead to numerous benefits, while neglecting safety and health can result in serious consequences. The findings of this research provide several implications for organizational management and assessment in deriving policies for occupational safety and health

6.2.1 Strategic role of management in OHS Implementation

The researcher found that the study firmly indicates that active participation of management is necessary for eminent results. Over 86 percent of respondents supported the presence of structured health and safety policies, implementation structured systems, trained personnel, and regular inspections. This highlights that organizations must regulate health and safety not just as a compliance requirement but for the core strategic functioning. Leadership commitment from the top management, involvement in safety programs and integration of OHS into business objectives are essential for building a good safety culture.

6.2.2 Influence of Demographics on safety perceptions.

Statistical analysis showed significant differences across age groups with longer experienced employees consistently measured the parameters positively. This highlights the significance of practical experience and exposure in shaping hypothesis related to OHS. The implications for organizations are to develop age-specific safety involvements, specifically for younger and less experienced employees who may benefit from the direct interaction, mentoring and communication about the need importance and implementing the safety procedures.

6.2.3 Implications across educational levels

The study found no statistically significant difference in safety perceptions across educational qualifications, depicting that awareness and impact of safety practices are systematically distributed, regardless of academic background. This defines that uniform training can be effectively applied across the workforce reducing the requirement for distinguished educational strategies based on qualification levels.

6.2.4 Significance of environmental and welfare provisions

Measurements for the factors with agreement at high level for clean drinking water, rest room availability, suitable ventilation, and temperature control, it is understood that the environmental and welfare provisions directly influence employees' morale and his personal well-being. These elements should be necessary not only for health reasons but also motivate the employees to have workplace satisfaction and improved productivity.

6.2.5 Continuous development through training and mock drills

Although the training and mock drills are supported, it is observed that there were relatively low scores in some areas. This probable cause would be the potential inconsistency in frequency, quality, or failed communication about these activities. Organizations need to contribute to regular, practical, and well-structured training and emergency preparedness drills to enhance effective readiness and develop employee confidence during critical situations.

6.2.6 Motivational role on safety recognition

The positive response to safety awards implies that recognition to employees' systems serve as a valuable support for the safe behaviour. Introducing reward privileges public acknowledgement and incentives through the safety programs can encourage and develop a responsibility towards a good safety culture.

Some of the general implications are as below:

6.2.7 Implications for Employees

Physical health and well-being are the primary implication of OHS for employees in the protection of their health and safety. Effective safety protocols can prevent injuries, illnesses, and fatalities in the workplace. This ensures that workers are physically well and capable of performing their jobs without fear of harm. Inadequate safety measures can lead to serious physical harm, long-term health conditions, or even death, especially in high-risk industries like construction, mining, or manufacturing.

Occupational safety is not just about physical hazards; it also impacts mental health. Chronic stress, workplace bullying, burnout, and high-pressure work

environments can lead to mental health issues. Effective OHS practices that support mental health (such as stress management programs, counselling, and work-life balance initiatives) can reduce anxiety and increase overall worker satisfaction. Job satisfaction and morale of workers in safe environments is that they feel valued and respected by their employers. This leads to higher morale, better job satisfaction, and greater employee retention. On the other hand, unsafe working conditions can lead to frustration, low morale, and higher turnover rates.

6.2.8 Implications for Employers and Organizations

Workplaces that implement strong safety protocols typically experience reduced accident situations and injuries, leading to minimized downtime, fewer operational disruptions and overall enhanced productivity and efficiency. Employees can work with fewer concerns about their well-being, allowing them to focus more effectively on their tasks.

Legal and financial implications where employers are legally responsible for providing a safe working environment. Failing to comply with health and safety regulations can lead to costly fines, legal claims, and potential lawsuits. Legal penalties can arise from accidents, injuries, or failure to comply with safety standards set by regulatory bodies (e.g., BOCW Act, Major Accident and Hazard Control Rules 1997 - India, OSHA in the U.S., HSE in the UK). Moreover, legal costs, settlements, and insurance premiums may skyrocket if safety measures are ignored.

Reputation and corporate image in an organization that is known for prioritizing employee safety and health builds a positive public image. With the increase in customer loyalty and trust it will definitely impact on absorption of new

talent. Moreover, companies with poor safety records risk losing their reputation and face public scrutiny, which can affect brand perception and sales.

Cost savings while implementing comprehensive OHS programs may require upfront investment; these costs are often far outweighed by the savings achieved by reducing workplace injuries and illnesses. Fewer worker compensation claims, less absenteeism, and lower healthcare costs can significantly reduce long-term expenses.

Employee retention and recruitment is a commitment to safety makes a company more attractive to potential employees. Job seekers are increasingly prioritizing health and safety practices in their decision-making. An organization with a strong safety culture often has better employee retention because workers feel valued and are less likely to leave due to unsafe conditions.

6.2.9 Implications for the economy

National economic impact on a wide scale, widespread occupational injuries and diseases can impose significant costs on the national economy. These costs include lost productivity, increased healthcare costs, and higher welfare payments to those unable to work due to work-related injuries or illnesses. A national focus on improving workplace safety leads to overall economic growth by reducing these hidden costs.

Global competitiveness in countries that have strong occupational safety standards and regulations are often seen as more attractive places to do business, leading to a competitive advantage in global markets. Companies in such countries experience fewer work-related accidents, enabling them to maintain high productivity and a strong workforce. On the other hand, countries with poor OHS

standards may face long-term economic consequences such as lower productivity and a higher burden on public health systems.

6.2.10 Social Implications

Public health as visualized in some industries; workplace safety has broader implications for public health. For example, a failure to implement proper safety measures in industries dealing with hazardous materials, chemicals, or food production can lead to widespread contamination, health risks, and environmental damage. Ensuring the health and safety of workers can prevent harmful practices from affecting the surrounding community or the general public.

Social justice on effective implementation of OHS practices can address social differences. For instance, many low-wage workers in industries like construction, or manufacturing are at a higher risk for workplace injuries. By ensuring fair and equal treatment in terms of health and safety, organizations can promote social justice and reduce inequalities in worker protection.

Work life balance for considering the present scenario where businesses are requesting the government for an amendment for 10-hour work shift post COVID-19 will definitely deprive the social well-being. By addressing both physical and mental health, OHS practices contribute to better work-life balance for employees. This leads to improved family life, reduced social strain, and healthier communities overall. When workers feel safe and supported, they are more likely to lead fulfilling lives outside of work, reducing stress and societal strain.

6.2.11 Environmental Implications

Environmental protection by many industries, occupational safety is closely linked with environmental safety. Workers in industries such as oil and gas, mining, and chemical production may come into contact with toxic substances. Failing to ensure proper safety protocols can not only harm workers but also cause environmental disasters such as spills or air pollution. OHS practices that include environmental safety measures help minimize the risk of such incidents, safeguarding both the workers and the surrounding ecosystem.

Sustainability in an organization is one that integrates health and safety considerations into its environmental policies. An organization's commitment to environmental health is part of its overall OHS strategy. For example, reducing waste, managing hazardous substances safely, and minimizing pollution all have positive implications for both worker and public health, as well as for the planet.

6.2.12 Implications for Legal and Regulatory Compliance

Legal responsibility by the organizations where employers are legally required to comply with occupational health and safety laws. Failure to do so can result in serious legal consequences, including fines, penalties, and even imprisonment for negligent actions. Compliance with regulations such as the Factories Act 1948, OHSWC Code 2020, International labour organization (ILO) and other regulations pertaining to safety helps organizations avoid legal action and ensures a lawful, responsible business operation.

International standards are where multinational companies must comply with OHS standards in various countries. Aligning with international safety standards, such as ISO 45001, ensures that organizations meet global safety and

health expectations, which can lead to better international partnerships and trade agreements.

6.3 Recommendations for Future Research

The study on occupational safety and health at the workplace was not confined to a particular category of employees. Although, there were respondents belonging to the larger organizational sectors of the employment, there were very few responses received from the hospital and institutional sectors which was a partial data to understand their role in the safety and health at workplace. The data that was gathered was in the form of quantitative analysis. Through this type of analysis gathering it cannot be ascertained if the respondents may have really taken keen interest to understand the situation and the need for the measurements in the research possibly not responding to the questionnaire by truthful acknowledgement.

Since the research form was online-based the respondent might not get a clear understanding or clarification for any of their uncertainty or misinterpretations to the questions. Also, the survey questionnaire was based on Likert scale with five points the respondent could not have had an option to share personal view and not being biased to any of the measurements.

For further research studies it would be recommended that the researcher probably can perform case study research based on before implementation of health and safety protocols and after the implementation for the compliance of the same as this might show before and after data which could be step up for understanding the improvement towards positive development and failures in situations which can be avoided by organization moving ahead in time.

Also, there can be an introduction to artificial intelligence (AI) systems monitoring at the workplace which could possibly identify and predict unsafe situations at workplace which can be developed through data science

6.4 Conclusion

Occupational safety and health at the workplace are and will be a foundational pillar for sustainable workplace through continual improvement which can be directly impacting the employee well-being, organizational productivity, and compliance to legal requirements. The research has tried to explore multiple dimensions of OHS highlighting its importance in creating safe health and an adaptive work environment. The findings underscore that proactive safety management established by leadership commitment, employee involvement, continuous training and adherence to regulation will not only avoid or prevent accidents and occupational diseases but also enhance morale in employees resulting in improved operational efficiency.

This study extensively examined the study and the parameters that could influence management involvement in OHSMS and practices on workplace safety and their well-being. Based on the quantitative data of 250 respondents the findings suggests that there is significance of both strategic leadership and practical interventions in developing a safe work environment.

The overall health and safety management measurement score of 86.67 percent indicated a strong need for organizational compliance and support for foundational safety systems such as policy implementation, emergency planning and preparedness, training, and regular auditing. Other key dimensions like provision of medical and healthcare facilities, availability of competent personnel and first aid provisions received exceptionally high measured agreement scores.

Simultaneously, the analysis of workplace OHS practices derived a score of 75.45 percent highlighting positive employee perceptions for the basic provisions like clean pure drinking water, proper illumination and ventilation, provision of PPE, and training initiatives. Although some of the areas like mock drills and recreational facilities were measured low, suggesting that it has a scope for further development. Implementing OHS will lead to long term business sustainability, increased stakeholder value and stronger alignment with global safety standards – critical for partnership and expansion

Considerably, age and work experience significantly influenced perceptions. Experienced proficient employees consistently measured higher for safety management and safety practices as depicting by the p-values($p < 0.001$). Educational qualification although showed no significant impact on perception, defining to uniform understanding of safety needs across educational backgrounds. It cannot be denied that there are some expenses incurred in implementing a safety management system. However, the benefits derived from an effective safety management system generally outweigh the associated costs of risks.

Overall, the research concludes that an effective OHS management supported by systematic safety practice contributes to development of a safe workplace and operational efficiency. Organizations pursuing for excellence must address perceptual gaps between the employees must develop an inclusive effective communication and continuous engagement in health and safety programs. By implementing policies, personal training, auditing, emergency planning and incident tracking the organization can significantly improve its safety performance, legal compliance, and organizational culture.

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APPENDIX A
SURVEY COVER LETTER

Manoj Antony Sanctis

23-11-2023

Swiss School of Business and Management

Switzerland

manojsanctis@gmail.com

Dear Participant,

Subject: Request for participation in research survey

I Manoj Antony Sanctis, a Global Doctorate of Business Administration, student at Swiss School of Business and Management, conducting a research study titled “Occupational Health and Safety at Workplace” as a part of the requirements for the fulfilment of my doctorate programme. The purpose of the study is to assess employee perceptions on occupational safety and health practices in an organization. The insights and responses received will provide valuable input and contribute significantly to the findings of this research.

Participation in this survey is entirely voluntary, and all responses will be kept strictly confidential and used only for academic purposes. The survey will take approximately 5 minutes to complete. You may withdraw anytime without any consequences. If you wish to participate, please proceed to complete the questionnaire/survey through the attached link - <https://forms.gle/y3PzTelTcF3tyd2b7>

Your contribution to this research is highly appreciated. Compensation of any sort will not be provided in turn for answering the survey, also this survey does not pose any risk individually. The dissertation will be submitted to my mentor at Swiss School of Business and Management. Should you have any queries or need further clarification, feel free to contact me.

Thank you for your time and cooperation

Yours sincerely,

Mr. Manoj Antony Sanctis

manoj5@ssbm.ch

APPENDIX B

INFORMED CONSENT

I understand that I have been asked to take part in this survey that is used to collect data for the dissertation written by Mr. Manoj Antony Sanctis at Swiss School of Business and Management for the course of Global Doctorate of Business Administration. I understand that this research study aims to gather information on the Occupational Health and Safety at Workplace I have read and understood this consent form and I agree to participate in this study.

APPENDIX C
INTERVIEW GUIDE

Occupational Health and Safety review

1.Email ID. Required to answer. Single line text.

Enter your answer _____

2.What is your Age Group? Required to answer. Single choice.

18-26

☐

27-35

☐

35-44

☐

45-55

☐

Above 55 years

☐

3.What is your Highest Qualification? Required to answer. Single choice.

Undergraduate or below

☐

Post Graduate

☐

PhD

☐

4. What is your Work Experience? Required to answer. Single choice.

Beginner (Upto 3 years) ☐

Competent (3 to 10 years) ☐

Proficient (Above 10 years) ☐

5.What is your organization associated? Required to answer. Single choice.

Construction ☐

Manufacturing Industry ☐

Oil and Gas ☐

Health Care Sector ☐

Transport & Logistics ☐

Others ☐

6.What is your job designation? Required to answer. Single choice.

Manager ☐

Engineer ☐

Supervisor	☐
Technician	☐
Others	☐

7. H&S Management Review. Required to answer. Likert.

	Strongly Disagree	Disagree	Likely	Agree	Strongly Agree
There should be Health and Safety Policy in the company.	☐	☐	☐	☐	☐
There should be implementation of H&S Procedures	☐	☐	☐	☐	☐
The company must have appointed a competent H&S Personal	☐	☐	☐	☐	☐
The organization must have provision of First aid & medical health insurance schemes	☐	☐	☐	☐	☐
The company should maintain frequency of training programs i.e., weekly, monthly etc	☐	☐	☐	☐	☐
The organization should have of a safety committee	☐	☐	☐	☐	☐

The company must perform a regular planned H&S Inspection Schedule	☐	☐	☐	☐	☐
The company should have a competent first aid trained personnel	☐	☐	☐	☐	☐
The company should organize scheduled H&S Audits for compliance through Internal/External Auditing	☐	☐	☐	☐	☐
There should be a plan on emergency preparedness available in the company	☐	☐	☐	☐	☐
Should the company document the lessons learned from the respective mock drills	☐	☐	☐	☐	☐
The company must have accident reporting procedure	☐	☐	☐	☐	☐
The company should maintain incident records.	☐	☐	☐	☐	☐

8. H&S Practices Review. Required to answer. Likert.

	Strongly Disagree	Disagree	Likely	Agree	Strongly Agree
The organization must provide for H&S Orientation and Induction to new employees	☐	☐	☐	☐	☐
There should be suitable rest rooms for its employees	☐	☐	☐	☐	☐
The company must provide pure/clean drinking water	☐	☐	☐	☐	☐

The organization must provide a reasonable temperature working environment	☐	☐	☐	☐	☐
The company should provide efficient illumination & ventilation at workspaces	☐	☐	☐	☐	☐
There should be provision of recreational facilities in the company	☐	☐	☐	☐	☐
The company should provide job specific training programs	☐	☐	☐	☐	☐
The company should provide Health and safety training for employees	☐	☐	☐	☐	☐
The company must provide of suitable & sufficient PPE's and should have sufficient stock available	☐	☐	☐	☐	☐
The company must perform regular inspections of Tools and equipment's	☐	☐	☐	☐	☐
Should the company conduct mock-drills at regular intervals	☐	☐	☐	☐	☐
Does the company provide safety awards to employees.	☐	☐	☐	☐	☐
The company must do regular inspections at workplace/housekeeping	☐	☐	☐	☐	☐

