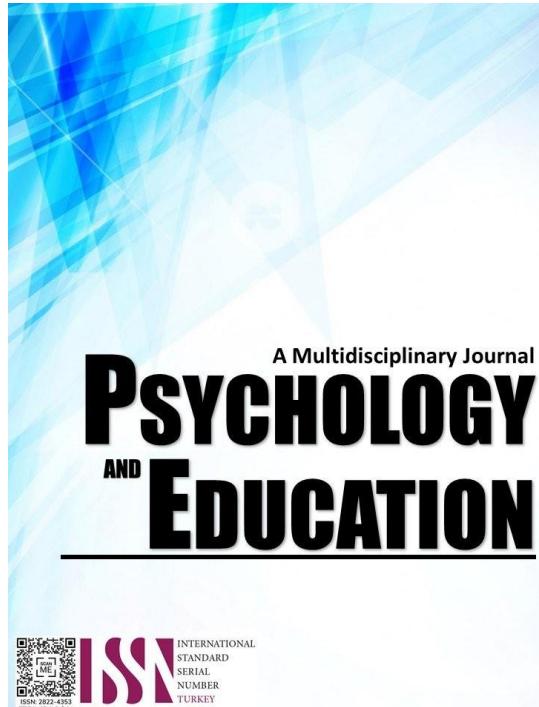


# **SAFETY AND HEALTH PRACTICES, ORGANIZATIONAL COMMITMENT, AND SOCIO-PSYCHOSOCIAL ATTRIBUTE: A STRUCTURAL MODEL ON EMPLOYEES' COMPLIANCE STANDARDS**



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## **Safety and Health Practices, Organizational Commitment, and Socio-Psychosocial Attribute: A Structural Model on Employees' Compliance Standards**

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### **Abstract**

The study focuses on understanding the structural model of safety and health practices, organizational commitment, and socio-psychosocial attributes in relation to compliance with safety standards in an academic institution. It emphasizes the importance of providing a secure environment for employees and students, given the risks associated with campus activities such as construction, lab work, and other hazardous operations. The study investigates how demographic factors such as gender, employment status, and educational background influence safety compliance, alongside organizational commitment and employee attitudes towards health and safety standards. Using a comprehensive survey methodology, data was collected from the teaching and non-teaching staff of Bukidnon State University. The study utilized Structural Equation Modeling (SEM) to analyze the relationships between variables, assessing factors like the physical environment, use of facilities and electrical equipment, and hazard control. Key findings suggest a strong commitment to safety standards, with high compliance rates attributed to effective safety training, management commitment, and employee responsibility. The research identifies the use of electrical equipment, physical environment, and management commitment as the most significant predictors of safety compliance, while employee commitment, educational background, and hazard control showed negative correlations. The study concludes by recommending the adoption of a holistic safety model, known as Miranda's Model, which integrates organizational commitment, safety practices, and socio-psychosocial factors to enhance compliance. The results underscore the need for continuous safety audits, effective communication of safety protocols, and the involvement of all organizational levels in fostering a safety-conscious culture.

**Keywords:** *safety and health practices, organizational commitment, and socio-psychosocial attribute*

### **Introduction**

Educational institutions develop specific policies and procedures to foster an ideal culture of occupational safety and health. They hold the obligation to maintain a safe and healthy environment for their staff, faculty, and students, especially for those with on-campus housing, where the responsibility for student safety is elevated.

Various risks, such as near-miss incidents, accidents, or inadvertent events, can occur, including hitting one's head during construction, vehicle-related mishaps, and exposure to dust or chemicals in laboratories and kitchens. Newer facilities, which often use electrical installations, pose additional hazards. With large numbers of students, faculty, and staff regularly moving around campus, it is crucial for institutions to implement innovative improvements when constructing buildings and developing campus infrastructure to minimize health and safety risks. Notable examples of such risks include students being injured by falling debris.

Given the high-stakes challenges academic institutions face in ensuring student and employee safety, especially in emergency situations, safety becomes a fundamental value. When actively practiced, it instills confidence and care in those involved in the institution's safety culture (Hill et al., 2012). This responsibility for safety and well-being cannot be neglected. Accordingly, the researcher believes there is a need to evaluate the effectiveness and sustainability of an institution's compliance with Occupational Safety and Health (OSH) Standards.

Safety encompasses the physical and ecological conditions under which employees work, as well as an institution's human capital and assets. Therefore, the work environment must be designed in accordance with the OSH Standards, as amended by the Department of Labor and Employment (DOLE). The amended law outlines penalties and sanctions for violations. A non-disruptive, healthy environment is a guaranteed expectation under these provisions. Grounded in this responsibility, this research aims to assess the current level of safety supervision and its challenges for students, faculty, staff, and management within an academic institution.

Republic Act 11058, passed by the Philippine Congress in 2017, enhances compliance with occupational health and safety standards. Signed into law by President Duterte in 2018, the Act emphasizes safeguarding workers from hazards in their workplace. An organization's commitment to safety is reflected in its adherence to OSH regulations. As this law is still relatively new, the researcher aims to assess institutions' compliance, evaluate the law's effectiveness and longevity, and establish internal protocols to promote adherence.

The research will examine safety conditions at different workstations within the respondent academic institution to assess compliance with OSH regulations. Understanding how compliance affects workforce behavior, particularly in relation to their duties and responsibilities amidst various hazards, is critical. The study will also explore potential lapses in safety and how these might impact academic performance and faculty productivity. The quality of services and support systems can be a measure of risk exposure while



working in academic settings.

To this end, the study will analyze risk factors and provide recommendations for improving the health and safety of employees and administrators. The findings will offer employees and students insights into safety and hazard risks, contributing to the creation of a safe and secure environment for all members of the academic community.

### Research Questions

This study developed a structural model on safety and health practices, organizational commitment, and socio-psychosocial attributes compliance on standards of an academic institution. Specifically, this study sought to answer the following questions:

1. What is the profile of respondents regarding:
  - 1.1 gender;
  - 1.2 civil status;
  - 1.3 employment status;
  - 1.4 length of service;
  - 1.5 educational background; and
  - 1.6 training/s attended?
2. What is the level of organizational commitment to their compliance on safety and health standards in the aspects of:
  - 2.1 employee commitment; and
  - 2.2 management commitment?
3. What is the level of participants' attitude towards the compliance on safety and health standards in terms of:
  - 3.1 motivation, and
  - 3.2 responsibility?
4. What is the level of safety and health practices of the institution in terms of:
  - 4.1 physical environment;
  - 4.2 use of facilities;
  - 4.3 use of electrical equipment;
  - 4.4 use of chemicals; and
  - 4.5 hazard control?
5. What is the level of institution on safety and health standards compliance?
6. Which of the variable/s, singly or in combination, predicts the compliance on Safety and Health Standards?

### Literature Review

This section is a critical review of related studies and literature. It includes studies that deal with variables related to the demographic profile of the respondents as well as the variables covered by the rest of the research questions

#### Gender

After a thorough critical review of related studies, gender is important in this study to determine whether the participants, either Male or Female, merely or religiously comply with the safety and health standards. and to give delight in this study, and sought to answer the research objective.

Many study's findings show that gender is relevant in such compliance with safety and health standards. In fact, a study by Chen et al. (2023) finds out that Female participants showed a higher awareness of safety procedures and had more positive attitudes concerning safety. On the other hand, male workers demonstrated a higher level of perceived behavioral control over safety actions.

The same study Chen et al., (2023), findings suggest that gender plays a role in shaping attitudes and compliance behaviors related to safety and health. Organizations should consider gender-specific interventions in their safety training and communication efforts. Tailored programs addressing the distinct attitudes and perceptions of male and female employees could enhance overall compliance and contribute to a safer workplace.

While a study in an academic institution, Smith (2022), explores gender differences in compliance with safety and health regulations among faculty and staff members in an academic institution. Using a mixed-methods approach, data were collected through surveys and focus group discussions to assess the impact of gender on safety attitudes, perception of risks, knowledge of safety protocols, and adherence to safety guidelines.

The same study, Smith (2022), developing gender-sensitive safety training programs and communication strategies could enhance compliance efforts. Recognizing and addressing gender-specific perceptions of risks and attitudes toward safety can contribute to a safer and more inclusive academic environment.

Among industrial workers showed that gender was not a significant predictor of organizational commitment; hence there was no difference found in the overall commitment of males and females. Based on this theoretical background, this study proposes the first



hypothesis: that there will be evidence of significant relationship between gender and organizational commitment, (Wan et al., 2023).

Lee et al., (2023) on their study reveals that Female faculty and staff members demonstrate higher awareness of safety protocols and a greater commitment to compliance compared to their male counterparts. Positive safety attitudes are more pronounced among females, who emphasize the importance of adhering to safety measures. Male participants, however, express greater confidence in their control over safety actions.

Age is considerably equally important to this study as to distinguish the compliance of young and adult employees; it will figure out on which among the participant will more likely to comply, whether to compel or to conform with the study findings in the related studies presented. A study of Thompson et al., (2023) reveals that age-related differences in safety and health compliance behaviors. Older faculty and staff members demonstrated a greater awareness of safety protocols and reported higher levels of adherence to safety guidelines compared to younger counterparts.

On the same note, Thompson et al., (2023) positive attitudes toward safety were more prevalent among older participants, who emphasized the importance of complying with safety measures. Younger participants, however, exhibited higher levels of perceived behavioral control over their safety actions.

Another Study Smith (2024), The study finds out a refined differences in occupational safety and health compliance related to age. Older workers demonstrate a greater feeling of responsibility and compliance with safety procedures, highlighting their cumulative experience. However, younger staff members exhibit a larger propensity to query safety procedures and suggest creative safety measures. Age-related increases in safety-consciousness are generally accompanied by differences in perceived compliance difficulties.

### ***Educational background***

In this knowledge exploration, on the safety and health compliance, we delve into the nuanced ways in which academic pursuits or educational background is less or more to comply that is crucial in developing their understanding, strategy, and contributions to making sure safety and health requirements are met and maintained in this dynamic environment.

Hence a solid educational foundation is essential for professionals tasked with negotiating the various nuances of safety processes and compliance measures as industries become more complicated and regulations get stricter.

Subsequent sections of this exploration, we will unravel the intricate ways in which educational backgrounds influence safety and health compliance, shedding light on the symbiotic relationship between knowledge acquisition and the collective goal of safeguarding human well-being.

Thus, the study of Kanwetuu (2018), in Naja David Wood Industry find out the role of education and experience on compliance or non-compliance to occupational health and safety.

While a study of Navidian et al., (2015), findings indicated that although there was increased awareness and attitudes about safety among participants in both the intervention and control groups, the rates of awareness and positive changes in attitude were significantly greater in the intervention group compared with the control group, who received traditional training. This highlights the superiority of motivational interviewing over traditional education methods with respect to enhancing awareness and attitudes about workplace safety.

Mohammadi-Zeidi et al. (2013), Safety instruction based on health education models and behavioral change theories are more effective in changing behavior. On the same study showed that theory-based educational intervention leads to improved dimensions of the atmosphere of safety in work environments.

Kanwetuu (2018), presented that education and experience play significant role in ensuring compliance whereas sex does not play significant role in ensuring compliance to occupational health and safety.

Rozbehani et al., (2015), in their study finds out that demonstrated that traditional education only increases levels of awareness about safe behaviors and does not significantly influence safe behavior attitudes and performance. However, safety education that is based on motivational interviewing, specifically in a group format, affects not only safety knowledge levels but also enhances the attitudes about and performance of behaviors related to work safety.

Martek et al., (2022), study finds out the proper implementation of relevant education and training programs encompassing the proper usage of machinery and equipment, tailored hazard safety training appropriate to specific employee job requirements, effective dissemination of risk information and governance initiatives that enforce strict adherence to correct safety procedures.

A study of Quaigrain et al., (2022), reveals that most employees had both a high level of knowledge and positive attitude toward mitigating occupational health hazards, most employees complied with occupational health safety practices. However, the study also reveals that the effect of employees' knowledge and attitude toward occupational health hazards does not translate into deployment of comprehensive safety practices as a conduit through which individuals are equipped to mitigate potential hazards, prevent accidents, and respond adeptly to emergent situations. It interplays on the continual skills.

### ***Trainings Attended***



Training is equally important variable to that educational background in this exploration it stands as a cornerstone in the foundation of safety and health compliance, serving development delighted on the compliance status. Training refers to developing oneself or others in any skill and knowledge related to specific useful competencies. It is expected that every worker has ample amount of knowledge and skills related to specific abilities and competencies developed through drills, workshops and seminars. These specific objectives are to improve the capability and productivity in the organization impacting the employee's performance to create an effective workforce. Consequently, trainings develop creative thinking skills and techniques that can lead to successful results which are possibly useful in the future, (Crutchfield, 2014).

A study of Brown et al. (2020), results reveals that consistent with the proposition that as the method of safety and health training becomes more engaging, the effect of training is greater in terms of knowledge acquisition and reductions in negative outcomes. Our results concerning behavioral performance were more equivocal but nevertheless provided consistent support, in the case of both between-subjects and within-subject study designs, for the effectiveness of more engaging training methods.

Wameedh (2013), in his study emphasizes that safety and health field have accepted that safety training is important construct in safety management practices geared towards the improvement of employees' safety behavior and safety performance. This is essential because the employees remain updated with formal programmes and practices in their occupations.

Ruslan et al., (2021). Finds out that training benefits very well, particularly when it comes to the safety and health of workers, training must be the focus. on the other hand (Surienty et al., 2016), discovers that it demonstrates the role of safety training in developing worker's safety behavior.

An effective OSH training implies improve the favorable behaviors towards better safety practice and upgrade the level of safety behavior. Appropriately, this impacts the way in which workers perform their work, through obtaining knowledge and technical skills, which are useful to tackle hazards efficiently (Ricci et al, 2018).

Vijayan et al., (2021), finds out that training programs should be adapted directly to the training requirements of the business (as measured by health and safety evaluation methods); initiatives should be incorporated into the methods and practices of the organization; and OSH training should be part of the overall business approach and business goals.

In the subsequent sections of this exploration, we will traverse the terrain of training's influence on safety and health compliance, shedding light on its far-reaching impacts and the pivotal role it plays in shaping the contours of a secure and harmonious work environment.

### **Management Commitment**

The influence of management commitment on safety and health compliance extends beyond the confines of organizational walls. Stakeholders, clients, and partners alike recognize and respect an organization's dedication to the well-being of its workforce and the community at large. This commitment becomes a hallmark of organizational excellence, signifying a culture that values both human capital and societal impact.

A study's correlation analysis revealed a moderately positive association between organizational commitment and occupational health and safety management. (Albanchez et al., 2021), study finds out that in terms of regression analysis also revealed that management of workplace health and safety had a substantial effect on organizational commitment. Employees' emotional ties to and identification with the company are so strengthened as they have a favorable impression of and perception of the management of health and safety on the job (Albanchez et al., 2021).

Other author has referred to organizational commitment as the force that binds people to organizations, (Bentein et al., 2015).

On the other hand, Organizational commitment can be thought of as an extension of job satisfaction, as it deals with the positive attitude that an employee has, not toward her own job, but toward the organization. The emotions, however, are much stronger in the case of organizational commitment and it is characterized by the attachment of the employee to the organization and readiness to make sacrifices for the organization.

Job involvement influences Organizational commitment of employees, either in affective or continence or normative types of commitments, (Sundarapandian et al., 2015).

Soeling et al., (2021), presented that Organizational commitment is a predictor of organizational behavior as they contend, that due to the psychological bond that exists between an employee and a business, employees are less inclined to leave on their own desire. They claim that crucial workplace habits are associated with employee commitment, and as a multifaceted factor that influences organizational commitment interactions.

Psychol (2018) defines organizational commitment as the strength of an individual's identification with and involvement in a particular organization and commitment characterized by three factors (a) a belief in and acceptance of goals, values and in the policies or normative commitment, (b) a feeling of belongingness and willingness to exert effort or affective commitment, and (c) a strong desire to maintain membership or continuance commitment. Normative commitment involves the employee's feelings of obligation to abide



by the formal instruction and rules of the organization.

### ***Employee Commitment***

In this exploration of the role of employee commitment in safety and health compliance, delve into the profound impact that individual dedication has on shaping a resilient and secure workplace. Examining how employee commitment transcends routine tasks to foster a sense of shared ownership and camaraderie. Furthermore, we illuminate the interplay between employee commitment, organizational culture, and overall performance, highlighting the reciprocal benefits that emerge from a workforce that places safety at its core.

Employee commitment seems to be a crucial factor in achieving organizational success. Individuals with low levels of commitment will do only enough to work by. They do not put their hearts into the work and mission of the organization (Psychol, 2018). They seem to be more concerned with personal success than with the success of the organization as a whole. People who are less committed are also more likely to look at themselves as outsiders and not as long – team members of the organization. An attractive job offer elsewhere is very likely to result in their departure. By contrast, employees with high commitment to an organization see themselves as an integral part of the organization. Anything that threatens the organization is an imminent danger to them as well (Khan, 2014). Such employees become creatively involved in the organization's mission and values, and constantly think about ways to do their jobs better, committed employees work for the organization as if the organization belongs to them. The relationship between employee commitment and workers' performance has been studied under various guise (Khan, 2014). There are three distinct elements of organizational commitment so as to continue with membership in an organization: an obligation described by normative commitment, desire described by affective commitment, in addition, a need represented by continuance commitment is the perceived responsibility to be committed to the company (Meyer & Allen, 2013). All three dimensions of employee commitment rely on the opportunity the company offers to the employees. This is intended to make them feel more motivated in the direction of growth. They also realize some self-actualization. Usually, the motivation of an employee results from their commitment to their jobs.

(Brown et al., 2015), studied the relationship between employee's perceptions of their immediate supervisors' relations-oriented and task-oriented leadership behaviors and different types of organizational commitment. An Organizational Commitment Questionnaire was used to measure organizational commitment among employees who worked for the city of Charlottesville, Virginia. These employees were located in eight departments that varied in the area of technical functioning, size and academic levels. Authors found that relations-oriented leadership behaviors explained the greatest amount of variance in affective commitment, somewhat less variance in normative commitment and no variance in continuance commitment.

All in all, management service initiatives (e.g., training, empowerment, rewards, and perceived organizational support) are of great importance, especially in the service industry, due to the fact that they can improve employees' morale and job satisfaction and their overall performance.

The new way of working has radically transformed the perspective of health and safety policy that should have an organizational commitment and actions. Many people have come to see the interventions as an obstacle for innovation. However, a number of studies have pin point the presence of subcultures within an organization which recommend the absence of an organized safety culture. Subcultures are anticipated to develop even when workers within the same organization experience a hazard within the different working conditions as well as workgroups. Overall, the trend preferably leans towards the term culture at the expense of climate.

### ***Attitude in terms of Motivation***

In this exploration of the role of employee attitude in safety and health compliance, delve into the intricate interplay between perceptions, behaviors, and overall safety outcomes. Examining how attitudes are formed, influenced, and can be transformed, showcasing the profound impact that individual mindsets have on shaping a secure and nurturing work environment.

Furthermore, this exploration, navigated the realm of employees' attitude influence on safety and health compliance, shedding light on its profound implications and the transformative potential it holds for both individuals and organizations.

A study of Hear et al. (2018) investigated the relationship between organizational climate, safety climate, and employee behavior in a manufacturing organization. In contrast to safety climate, which is more particularly concerned with attitudes, beliefs, and practices connected to safety, organizational climate refers to the total work environment. The researchers looked at how employees' opinions of the organizational climate in general affected their perceptions of the safety climate, and how these perceptions in turn affected their compliance with safety standards and personal safety practices.

Another study of Davis et al. (2020) found that positive attitudes towards safety and health were associated with higher levels of compliance among employees. Those who believed that safety was a top priority for the organization and perceived their managers as supportive of safety initiatives were more likely to follow safety protocols. Additionally, employees with a strong understanding of safety procedures were more likely to comply.

The same study of Davis et al. (2020), according to this, businesses can improve adherence to safety regulations by fostering a culture of safety, communicating openly about safety procedures, and making sure that staff members have the knowledge and tools they need to comprehend and follow safety regulations.



A study of Lee et al. (2022), the Theory of Planned Behavior TPB structures accurately predicted whether or not employees will follow safety and health regulations. Higher desire to comply was related to positive attitudes regarding safety, perceived social pressure from coworkers and superiors to comply, and a strong sense of control over safety behaviors. In addition, the study found that workers in the construction sector with greater experience displayed better levels of perceived behavioral control and were more likely to plan to follow safety regulations.

A study of Smith (2019), revealed that there is a strong correlation between optimistic employee attitudes and higher adherence to safety and health regulations. Employees are more inclined to follow safety regulations if they perceive higher risks associated with non-compliance and have a positive opinion of their company's safety culture. The study also emphasizes how attitudes about safety and health are shaped by job satisfaction.

### ***Attitude in Terms of Responsibility***

In this exploration of employee attitude towards responsibility in safety and health compliance, investigate into the intricate relationship between individual perspectives, behaviors, and the overall safety climate. We examine how attitudes of responsibility are cultivated, nurtured, and manifested in day-to-day actions. Furthermore, we illuminate the interconnectedness between responsible attitudes, organizational culture, and the broader impact on employee morale and well-being.

A study results highlight how crucial it is to establish a culture of safety and health at the organizational level. Increasing adherence to safety and health regulations can be accomplished through fostering a culture of safety, offering sufficient training, and addressing employees' job satisfaction. According to the study, targeted treatments should include raising employees' risk perception and encouraging a sense of accountability for their own safety as well as the safety of their coworkers (Smith, 2019).

While a study of Johnson et al. (2020), finds that having a strong safety culture, which is defined by transparent management commitment, frequent safety training, and open communication, positively affects employees' compliance with safety and health regulations. Employees are more inclined to follow safety procedures if they believe that breaking them could have serious implications for both them and their coworkers. Furthermore, encouraging leadership practices that stress safety and offer encouragement motivate staff to adhere to safety regulations.

Another research survey of William et al. (2021), presented that, there are differences in attitudes and compliance practices among the various workforce groups working for the academic institution. Comparatively to academic members, who displayed more neutral attitudes, administrative employees showed higher levels of concern for safety and health. The attitudes of the support staff were a combination of the good and the need for better communication. According to the study, these inequalities are brought about by a lack of thorough safety training and ineffective communication channels.

Further study conducted by Rodriguez et al. (2022) demonstrates a variety of perspectives among academic institution staff members. Despite the fact that most participants agreed on the significance of health and safety, there were differences in how much compliance was valued. Positive attitudes were frequently linked to successful training programs, transparent leadership support, and clear communication of safety protocols. Perceptions of time restraints and the need for more readily available safety resources were obstacles to compliance.

On the same study Rodriguez et al. (2022) noted the necessity for focused interventions to improve safety and health compliance attitudes inside academic institutions is made clear by the findings. Employee attitudes can be positively impacted by creating a culture of safety, enhancing communication channels for safety-related information, and providing regular training opportunities. One of the easiest ways to increase workplace safety is to balance and awareness of each worker to avoid physical injury and inadequate dangerous facilities interrelated to DOLE in the Philippines. Safety Practices

In this exploration of safety practices in the context of safety and health compliance, we delve into the multifaceted dimensions of their influence. We examine the intricacies of safety protocol design, implementation, and continuous improvement, showcasing their role in preventing incidents and fostering a secure work environment.

Training in the implementation of Rule 1010 ensures the adoption of the safety and health standards that involves the systematic procedures and standards under article 162 as mentioned under the Philippines Labor Laws. The main objective is to reduce occupational safety and health hazards in all workplace to ensure safe and healthy working conditions in different types of employment. Training invokes the provisions of law, which involve environmental techniques that optimize the resources and encourages to set guidelines and targets for safety and health conditions. Additionally, this ensures the safety perception which involves the physical environment, use of facilities, use of electrical equipment, use of chemicals and hazard control through the designs, formulation and taking on the finest environmental practices where both manager and workers are encouraged to participate on occupational safety and health standards. Lack of training may result in tremendous loss of life and property. The experiences and practices of unsafe management of footwear industry in Valenzuela, Philippines are documented. Seventy-two people died in a huge blaze at a footwear plant (DOLE, 2015). Sparks from using welding equipment are believed to cause fire they are exposed to flammable chemicals that are stored nearby. The workers are exposed to foul-smelling ch Meanwhile, The Philippine Government estimated around 2.2 million workers in medium and large enterprises enjoyed the occupational safety and health (OSH) protection and services. In other words, 17



of 18 persons in the nation's workforce of 38.8 million will not benefit from the acceptable working conditions. Studies validate that OSH's setting on micro-firms and the other informal sector pose the risks and hazards. Aside from that, ILO Country Office supports programs to promote and encourage a culture of safety and health services to those that need them the most. Both the government and non-government agencies are partners, which are beneficiaries that embrace the informal workers, trade unions and their members. Office works with components of governments, personnel and owners' organizations to stimulate agreement for Occupational Safety and Health Convention (2006 No.187). Furthermore, a national occupational safety and health culture is a single organization in which the right to work in safe and healthy environment is valued at all levels, where government, owners and workers actively participate acquiring a good and safe working physical environment through a system of definite rights, responsibilities, and where maximum priority is limited to the principle of hindrance and prevention (Macapanpan, 2016).

This study highlights the results that were conducted to examine the safety rules and the extent of their agreement as best practice by the Rule 1010 (safety rules) that accompany the work conditions by standards (1012) and hazardous workplaces (1013).

### **Physical Environment**

Herrity, (2023), the Physical Environment is a part of human environment that includes purely physical factors of the practical work area. It demonstrates the various factors may consider, such as technology, human resources and process interactionemicals which they are not aware of fire safety standards (DOLE, 2015).

The same study of Herrity (2023), firmly applies safe work practices, effective design and planning of work environment. Consequently, there's a proper walkways, adequate facilities, acceptable storage and proper enactment of safety rules and regulation as well as physical environment must be clean, hygienic and the disposal of industrial waste.

A study of Tika et al. (2019), shows that the physical work environment has a positive and significant influence on the work productivity of employees in the technical field.

While SIGIT et al. (2019), in his study physical environment that can affect employees, both directly and indirectly. The ways that can be done include providing a complete range of work facilities for employees and lighting and lighting in the workplace. Factors such as working conditions are enough air circulation so that employees can breathe enough to support work implementation.

Another study of Zhenjing et al. (2022), finds out that a perception of academic staff has been documented in this study which is the contribution of the study. From the practical point of view, this study advocates that organizations should focus on the creation and provision of a positive workplace environment at the workplace to improve the task performance of the employees.

Similarly, a positive work environment promotes the achievement-striving ability of the employees, so organizations should also focus on improving the achievement-striving ability of the employees through a positive workplace environment.

### **Use of Facilities**

In this exploration will consider sustainable facility practices or the use of facility itself not only reduce accidents and incidents but also contribute to environmental stewardship,

The interconnectedness of facility usage with societal and ecological factors underscores the far-reaching implications of safety and health compliance in the context of operational activities, in contrary or consonance to the related review of literature.

Use of Facilities, on the use of facilities is known to be a science. It is a strategy, governments, educational, institutions, and businesses no longer compete against one another as cited by Barsalou, (2014).

The factors that may be considered, are the use of quality tools, proper facilities, machine guarding, use of PPE (personal protective equipment like gloves, mask, hard hat, etc), installation of technology in accordance with manufacturers' instructions, material's handling, orientation of facilities, consistency of industrial tools, technical knowledge of workers and maintenance as mentioned by Barsalou, (2014). Thus, these imperfect tool or improper uses of facilities are examples of hazards and exposures resulted to potential causes of accidents within and around the work environment.

Laksmana et al. (2019), in their study reveals that in order to achieve more optimal work efficiency, facility management incorporates the principles of science, business administration, and human behavior. An effective physical environment, technology, safety, comfort, and occupational health are all included as part of integrated process management, which takes into account people, processes, and locations in the context of the business.

The coordination and integration of the interface between people, places, processes, and technology are the goals of this study. Everything is done to simplify complex processes for identifying and scheduling tasks, documents, decision-makers, and more, as well as to better integrate current organizational aspects. This research was carried out in stages over a three-year period (including people, things, and processes) using a structured model. The integrated human resource system is the main focus of this year's study.

### **Use of Electrical Equipment**

Fostering a culture of knowledge and caution to driving innovation in safety practices, the responsible use of electrical equipment



becomes a conduit through which the complex interplay of human interaction, technology, and safety converge. Such exploration will determine the implication on the safety and health compliance.

The use of Electrical Equipment components comprises the safe and proper use of electrical equipment, generally in and around the workplace as cited by DOLE (2015). It has designed and manufactured for safe use of industrial operation. This gives guidance on the key essentials that needed to be considered when devising safe working practices for every employee who carry out work on or near electrical equipment and facilities. It includes advice that is significant to the immediate superiority of the organization who controls the design, specification, selection, installation, commissioning, operation of electrical equipment and maintenance to maintain the safe condition. Nonetheless, electrical codes, standards, recommended practices and regulations can be multifaceted subjects, nevertheless are vital in both electrical design and life safety issues.

A study of Smith (2023), finds out that results of the study shed light on how crucial it is for organizations to follow safety procedures while using electrical equipment. It emphasizes the importance of thorough training courses, frequent equipment inspections, and a committed safety culture.

The same study Smith, J. A. (2023). The study results offer suggestions for enhancing electrical safety protocols and minimizing accidents, highlighting the value of continual training and coordination between management, safety specialists, and personnel.

### **Use of Chemicals**

Another variable worth to consider is the Use of Chemicals, it said to be that Organizations that prioritize safety protocols during chemical handling demonstrate a commitment to harmonizing technological progress with the preservation of life and ecological equilibrium. As exploration is concern commitment resonates with stakeholders, clients, and the broader community, fostering a reputation of trust and reliability.

The use of chemicals indicates to the occupational workers normally use, collect, store, and dispose of toxic chemicals without knowing the potential consequences, both for the workstation and the environment. The improper use or misapplication of chemical substances can result in health fatalities, disorders or chemical disasters as mentioned by Dikshith, (2018). In general, it presents a practical guide to be safe use of chemicals quick and inclusive instruction to arrange the potentially dangerous substances, fire chemical explosion as well as material handling of chemical. Thus, basic principles of prevention and emergency control programmes may generally prepare to eliminate the scenario of chemical exposure at work.

### **Hazard Control**

Another variable that is worth to consider is Hazard Control, it is said that the influence of hazard control on safety and health compliance extends beyond immediate risk reduction. It shapes the very culture of an organization, fostering a mindset of vigilance, empowerment, and shared responsibility.

A comprehensive hazard control program empowers employees at all levels to actively engage in the identification and resolution of potential risks, transforming them into agents of change who actively contribute to a safer environment, as exploration tends to distinguish control measures appropriate to the potential risks. A study shows that hazard control as the method of minimizing injury, reducing contrary health effects and controlling damage to the equipment and properties (Manuele, 2014). Hazard control practices, frequently standardized and trained by the immediate superior to managed and control personnel. The hazard control procedures vary from organization to organization and job to job, but even some of the measures embraces generally in every job to protect the health conditions of the workers. Thus, a worker exposes to a number of hazards within and around the work surfaces. This can be eliminated by applying hazard control in the hierarchy such as elimination, engineering controls, administrative control and personal protective equipment (PPE), (Akyuz et al., 2020).

Summing up, the review of literature with regard the different variables adopted this research shed light on the various forms of organizational commitment, that could impact on the attitude and compliance of organization's constituents to policies and practices of the organization and the laws that government impose.

## **Methodology**

### **Research Design**

This study employed a descriptive-causal research design to identify worker characteristics and understand the factors influencing each respondent, in line with the descriptive analysis techniques used. Structural Equation Modeling (SEM) was also considered as a research design, particularly in terms of its ability to present evidence of the best model fit. While SEM can provide preliminary causal insights when applied to carefully defined and controlled designs, it is acknowledged that structural modeling alone cannot fully establish causal conditions. Recommendations are provided to guide researchers on how to potentially generate causal evidence using SEM, while recognizing that no statistical method can independently determine causality (Demirkesen, 2020).

### **Participants**



The participants of the study were the teaching and non-teaching staff of the Higher Education Institution. Using total enumeration among faculty, non-teaching staff representative including the secondary level and primary level served as the participants from Bukidnon State University Main Campus. The entire population was 496 but only 441 around (88.91%) gave their interest and responded to the scientific exploration.

*Table 1. Distribution of the Respondents of the Study*

Stratum Size (ns)	Number of Population in Strata (N)	Strata Sample Size (n)
Faculty	308	275
Staff	187	166
Total	496	411

## Instruments

The research instrument used in this study was a researcher-made questionnaire. The designed instrument was associated with the problem of the research study using the 5-point-Likert scale. As Monet (2013), point out that Likert scale captures the responses of every participant, auxiliary to the data information and interpretation to distinguish the assigned values and rank.

In this study the researcher-crafted survey questionnaire design into 4 fundamental domains. The initial segment captured the participants' demographic profile, while the subsequent parts II, III, and IV employed a 5-point Likert scale to gauge organizational commitment, employees' attitude, and safety practices accordingly.

## Validity and Reliability of the Instruments

The researcher-made questionnaire was tested for its validity by submitting the instruments to at least 3 experts after which the reliability of statistical tools using Cronbach's Alpha was established after the instruments were piloted among 30 respondents. This is to justify and measure the internal consistency, that is, how closely related to a set of items are as a group considered to be a measure of scale, consonant to scientific exploration.

## Procedure

To collect data for the study, the researcher first obtained permission from the Dean of the School of Graduate Studies and submitted it to the Vice President of Research, Publication, and Extension for approval. Additionally, a formal letter was sent to the President of Bukidnon State University through the Vice President of Human Resource Development to request permission to conduct the study. Once approved, the researcher distributed questionnaires to both teaching and non-teaching staff. After collecting the completed questionnaires, the data was forwarded to a statistician for analysis and interpretation.

The manuscript underwent content validation by experts in the field to ensure quality. It complied with research ethics protocols and received approval from the Research Ethics Review Committee, ensuring that the data collection process followed ethical guidelines. Participants were fully informed about the study's objectives and were given instructions on how to respond appropriately. To protect participants, the researcher committed to maintaining the confidentiality and security of all data gathered during the survey.

The data for this study was collected through written surveys, which were developed and revised based on related research. After validation and confirmation by an instructor, the questionnaires were distributed to the relevant respondents. The researcher, with approval from the institution's management, distributed the questionnaires to employees within a single day. The collected data was processed and analyzed using SPSS software.

## Statistical Techniques

The results will be statistically treated as highly reliable and consistent, henceforth, the survey question was made to suit the research objectives. The tool (Questionnaire) interpretation was simplified using these instruments:

Frequency and percentage distribution were used to describe the profile of the participants. These refer to the number of times a particular value or category occurs in a dataset, often used to analyze and summarize categorical data, where data is divided into distinct categories or groups, (Iuliano et al., 2019). Mean and standard deviation were used to establish the parameters of the study in Problem numbers 2, 3 and 4. This measures the dispersion of a dataset relative to its mean and is calculated as the square root of the variance, (Iuliano et al., 2019). Multiple Linear Regression was used to determine the best predictors on the compliance of safety and health standards, and lastly to determine the best model fit, Structural Equation Modeling was utilized. Structural equation modeling (SEM) is useful in inferential data analysis and hypothesis testing. SEM is a multivariate statistical analysis technique that is used to analyze structural relationships. This technique is the combination of factor analysis and multiple regression analysis, and it is used to analyze the structural relationship between measured variables and latent constructs (Gao et al., 2020).

## Results and Discussion

This section presents the findings after the previous chapter's discussion of the researcher's research methodology for collecting and evaluating the data. It analyzed the study's provided result and examined the study's stated outcome. Multiple regression analysis,



correlation statistics, and descriptive statistics were presented, the Structural Modeling were discussed. The research findings were also discussed in the concluding section of this chapter.

Four Hundred fifty questionnaires were distributed to the employees of the Bukidnon State University including those sent online. The total number of completed questionnaires was 441 (98% response rate). Despite the samples not being used, the total response and response rate were still significant.

### Profile of the Respondents

Table 2 presents the frequency and percentage distribution for the profile of respondents. As seen in the table, 60 % were females and 40% were males. As to their age, 37.0% falls under the age category 26 to 35, 24.0% falls under 46 and above, 22.0% falls under 18 to 25, and 17.0% under 0 36 to 45. In terms of civil status, 70.0% were married and 33.0% were single. With respect to their employment status, 59.0% were regular, 26.0% were probationary, and 15.0% were under COS. As length of service, 57.0% have served 4 to 5 years, 36.0% have served 3 to 4 years, and 26.0% have served 1 to 2 years. Describing their educational background, 76.0% were college graduates, 12% were post graduate graduates, 11.0% were high school graduates, and 1.0 % were elementary graduates. As to their training attended, 39.0% attended emergency preparedness, 34.0% attended health and wellness, 20.0% attended BOSH, 2.0% No training attended, and 1.0% attended fire safety. The data revealed that the respondents of the study were statistically distributed in terms of their demographic profile.

**Table 2. Frequency and Percentage Distribution for the Profile of Respondents**

	Profile	Frequency	Percent
Gender	Female	266	60
	Male	175	40
	Total	441	100
Age	18-25	95	22
	26-35	164	37
	36-45	75	17
	46-above	107	24
Civil Status	Total	441	100
	Single	146	33
	Married	295	67
Employment Status	Total	441	100
	Regular	262	59
	Probationary	115	26
	COS	64	15
Length of Service	Total	441	100
	Less than a year	71	16
	1-2 Years	82	26
	3-4 years	111	36
	4 - 5 Year Above	177	57
Educational Background	Total	441	100.0
	Elementary	3	1
	High school	50	11
	College Graduate	336	76
	Postgraduate	52	12
Training Attended	Total	441	100
	No training	10	2
	Bosh	88	20
	Fire Safety	4	1
	Health & Wellness	149	34
	Emergency preparedness	171	39
	Others	19	4
	Total	441	100

### The Level of Organizational Commitment to their Compliance on Safety and Health Standard

Table 3 presents the summary of the levels of respondents' organizational commitment to their compliance on Safety and Health Standard. As shown in the table, respondents scored the highest mean score of  $M=3.96$ ,  $SD=.568$  for employee commitment and a mean score of  $M=3.90$ ,  $SD=.632$  for management commitment. The overall mean score is  $M=3.93$ ,  $SD=.578$  described as agree and interpreted as committed. The data revealed that the respondents were committed to the organization on their compliance to Safety and Health Standard. This finding supports the claim of Khan (2022) who said that employees become creatively involved in the organizations' mission and values, and constantly think about ways to do their jobs better. Committed employees work for the organization as if the organization belongs to them. The relationship between employees' commitment and workers' performance has



been strengthened. The new way of working has radically transformed the perspective of health and safety policy that should have an organizational commitment and actions.

*Table 3. Summary of the Levels of Organizational Commitment on their Compliance to Safety and Health Standard*

Indicators	Mean	SD	Description	Interpretation
Employee Commitment, and	3.96	.568	Agree	Committed
Management Commitment	3.90	.632	Agree	Committed
Over-all Mean	3.93	.578	Agree	Committed

### **The Participants' Attitude towards the Compliance on Safety and Health Standards**

*Table 4. Summary of the Levels of Participants' Attitude Towards the Compliance on Safety and Health Standards in Terms of Responsibility*

Indicators	Mean	SD	Description	Interpretation
Motivation	4.19	.725	Agree	High
Responsibility	4.05	.475	Agree	High
Over-all Mean	4.12	.455	Agree	High

Table 4 shows the summary of the levels of respondents' attitude towards the Compliance on Safety and Health Standards. As shown in the table, respondents scored the highest mean of  $M=4.19$ ,  $SD=.725$  for motivation followed by responsibility with a mean score of  $M=4.05$ ,  $SD=.475$ .

The overall mean score is  $M=4.12$ ,  $SD=.455$  described as agree and interpreted high. The data revealed that the respondents have a high level or have a positive attitude towards the Compliance on Safety and Health Standards. This finding supports the claim of Rodriguez et al. (2022) Employee attitudes positively impacted by creating a culture of safety, enhancing communication channels for safety-related information, and providing regular training opportunities linked to successful training programs, transparent leadership support, and clear communication of safety protocols.

William et al. (2021) also claims that differences in attitudes and compliance practices among the various workforce groups working for the academic institution. Comparatively to academic members, who displayed more neutral attitudes, administrative employees showed higher levels of concern for safety and health. The attitudes of the support staff were a combination of the good and the need for better communication.

Lastly Soeling et al. (2021) claims that organizational commitment is a predictor of organizational behavior as they contend, that due to the psychological bond that exists between an employee and a business, employees are less inclined to leave on their own desire. They claim that crucial workplace habits are associated with employee commitment and as a multifaceted factor that influences organizational commitment interactions.

### **The Level of Safety and Health Practices of the Institution**

*Table 5. Summary of the Levels of Safety and Health Practices of the Institution in Terms of Use of Chemicals*

Indicators	Mean	SD	Description	Interpretation
Physical Environment	3.95	.448	Agree	High
Use of Facilities	3.93	.523	Agree	High
Use of Electrical Equipment	3.93	.633	Agree	High
Use of Chemicals	3.99	.632	Agree	High
Hazard Control	3.95	.477	Agree	High
Over-all Mean	3.95	.464	Agree	High

Table 5 shows the summary of the levels of safety and health practices of the institution. As shown in the table, respondents obtained the highest mean score of  $M=3.99$ ,  $SD=.632$  for use of chemicals followed by a mean score of  $M=3.95$ ,  $SD=.448$  for physical environment,  $M=3.95$ ,  $SD=.477$  for hazard control,  $M=3.93$ ,  $SD=.523$  for use of facilities, and  $M=3.93$ ,  $SD=.633$  for use of electrical equipment. The overall mean score is  $M=3.95$ ,  $SD=.464$  described as agree and interpreted high. The data revealed that the respondents have a high level of Safety and Health Practices of the Institution. This finding supports the claim of Rodriguez et al. (2022) who demonstrated a variety of perspectives among academic institution staff members. significance of and safety and health practices and positive attitudes were frequently linked to successful training programs, transparent leadership support, and clear communication of safety and health protocols.

Laksman (2022) also claims that safety and health practices promote coordination and integration of the interface between people, places, processes, and technology, everything is done to simplify complex processes for identifying and scheduling tasks, documents, decision-makers, and more, as well as to better.



Macapanpan, (2016) cited that safety and health practices promote culture in organization which the right to work in safe and healthy environment is valued at all levels, where government, owners and workers actively participate acquiring a good and safe working physical environment through a system of definite rights, responsibilities.

### The Level of Occupational Safety and Health Compliance

Table 6. *Level of Occupational Safety and Health Compliance*

Indicators	Mean	SD	Description	Interpretation
1.The organization prioritizes the safety and well-being of its employees.	3.98	.904	Agree	High
2.Adequate safety training and resources are provided to employees.	3.90	.930	Agree	High
3.Employees are encouraged to report safety concerns or hazards they encounter.	3.98	.925	Agree	High
4.The organization regularly conducts safety audits and assessments.	4.19	.718	Agree	High
5.There is a strong awareness of potential health risks in the workplace.	3.94	.892	Agree	High
6.Employees feel empowered to stop work if they believe it's unsafe to proceed.	4.02	.702	Agree	High
7. Feedback from employees regarding safety improvements is actively sought and valued.	3.94	.934	Agree	High
Over-all Mean	3.98	.904	Agree	High

Table 6 shows the Level of Occupational Safety and Health Compliance. As shown in the table, respondents obtained the highest mean score of  $M=4.19$ ,  $SD=.718$  for item number 4 “The organization regularly conducts safety audits and assessments” and a lowest mean score of  $M=3.90$ ,  $SD=.930$  for item number 2 “Adequate safety training and resources are provided to employees.

The overall mean score is  $M=3.98$ ,  $SD=.904$  described as agree and interpreted high. The data revealed that the respondents have a high level of occupational safety and health compliance. Organization prioritizes the safety and well-being of its employees, adequate safety training provided by the institution and valued employee suggestions for safety and health improvements and employees are empowered to participate in safety and health engagements and activities.

This finding supports the claim of DOLE (2018). The foundational resources within firms that guide safety and health decision-making and implementation play a crucial role in shaping practices and compliance. Governments can influence these practices by conducting extensive awareness campaigns to alter social norms surrounding OSH, leading firms to internalize the importance of a safe work environment. Prevention services, whether internal or external, provide expert advice to enhance firms' safety and health standards capabilities. Additionally, state systems that compensate and rehabilitate ill or injured workers can impact economic motives by offering subsidies for workplace improvements and influencing insurance premiums.

Walters et al. (2021) noted that compliance on safety and health embrace are consistent with regulatory standards, as well as ensuring sufficient resources for this purpose and monitoring the effectiveness action plan in safe and efficient operation, support for compliance needs to recognize that the current burden of work-related harm in academic institution is not solely the result of exposures to physical, chemical and biological hazards that were associated with work. As the compliance is highly regarded to for these circumstances.

### The Variables, Singly or in Combination, Predicts Occupational Safety and Health Compliance

Table 7. *Multiple Regression Analysis of the Variables that Predict the Occupational Safety and Health Compliance*

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.646	.239		2.697	.007
Use of Electrical Equipment	.568	.042	.555	13.690	.000
Physical Environment	.284	.054	.196	5.285	.000
Hazard Control	-.194	.048	-.143	-4.061	.000
Management Commitment	.227	.050	.222	4.582	.000
Employee Commitment	-.108	.048	-.094	-2.226	.027
Responsibility	.203	.053	.149	3.798	.000
Educational Background	-.151	.032	-.118	-4.756	.000
Length of Service	.028	.013	.048	2.109	.035
	R=.894	R <sup>2</sup> =.799	F=214.75	Sig/P-value=.000	

Legend:  $p < .05$  is Significant and  $p > .05$  is not Significant



Table 8 presents the results of the computation of multiple regression analysis for the variables that predict the occupational safety and health compliance. As depicted in the table, the R value was .894 signify high positive correlation between the dependent and variables. The R<sup>2</sup> value of 0.799 implies that the predictor variables used in this study explained and predicted 79.9% of the variability of occupational safety and health compliance.

The probability value of 0.000 (F=214.75) indicates that there was a significant relationship between the occupational safety and health compliance and the predictor variables. Of the independent variables used, the best predictor of occupational safety and health compliance is the use of Electrical Equipment ( $\beta=.555$ ) followed by management commitment ( $\beta=.222$ ), physical environment ( $\beta=.196$ ), Responsibility ( $\beta=.149$ ), Length of Service ( $\beta=.048$ ), employee commitment (( $\beta=-.094$ ), Educational Background ( $\beta=-.118$ ), and Hazard Control (( $\beta=-.143$ ).

The regression equation model of this study was  $Y'=.646 + .568X1 + .284X2 + .227X3 + .203X4 + .028X5 -.108X6 -.151X7 -.194X8$

Where;

$Y'$ = Occupational Safety and Health Compliance

.646= is the B constant

X1=Use of Electrical Equipment

X2=Physical Environment

X3=Management Commitment

X4=Length of Service

X5=Employee Commitment

X7=Educational Background

X8=Hazard Control

The regression equation implied that the occupational safety and health compliance significantly and positively predicted by for factors namely use of electrical equipment, physical environment, management commitment, and length of service. On the contrary, employee commitment, educational background, and hazard control significantly negatively predicted the occupational safety and health compliance. significantly positively predicted by for factors namely use of electrical equipment.

Physical Environment and significantly negatively predicted by three variables namely employee commitment, educational background, and hazard control. As to the extent of the direct effect of said variables to occupational safety and health compliance, for every one-point increase of use of electrical equipment, occupational safety and health compliance will increase by .568. One point increase of physical environment, occupational safety and health compliance will increase by .284. One point increase of use of management commitment, occupational safety and health compliance will increase by .227. One point increase of management committee, occupational safety and health compliance will increase by .203-, and one-point increase of length of service, occupational safety and health compliance will increase by .028.

Meanwhile, one point increase of management commitment, occupational safety and health compliance will decrease by .108. One point increase of educational background, occupational safety and health compliance will decrease by .151, and a point increase of hazard control, occupational safety and health compliance will decrease by .194. These findings support the claim of Reason (2019) who said that workplace attitudes are a vital part of the safety and health management program. In other words, employees with positive employee attitude about the health and safety management program will accept responsibility for protecting themselves and will take the extra steps necessary to protect the health and safety of their co-workers as well.

Boles et al. (2018) noted that employees' attitudes are considered to have a critical role for the actualization of the ideas in the OSHA. These findings hence affirm the fact that, no matter what the OSHA suggests, it is the employee who makes the ultimate decisions about what is going on in its implementation according to Bedford (2013) safety and health practices will assist in creating a baseline in identifying the hazards and compliance among the faculty, staff, and students with good occupational health and safety practices. It will also help identify factors that determine their level of knowledge, attitude and compliance with safety standards. The assessment of safety characterizes the framework as a reliant variable in this research study. These features the capacity that's associated top physical environment, use of facilities, use of electrical equipment, use of chemicals and hazard control within and around the academic institution.

Boles et al. (2018) notes that evolution of an academic institution is created the need for occupational safety and health management procedures and safe site practices. The nature of the academic institution exposes to high sophisticated chemicals and environmental hazard, heavy metals generated from Laboratory experiments toxicity of chemicals, environmental health hazards and other injurious effects opens the workers and attendants to a high risk and work-related accidents, hence there is need to assess the staff's level of knowledge and ways of minimizing the risks associated with the hazards.

## Conclusion

Based on the findings, the study's analysis of Occupational Safety and Health (OSH) compliance at Bukidnon State University-Main



Campus revealed significant findings across various dimensions. Key socio-psychosocial factors of employees, such as their educational background, training, gender, attitudes, and organizational commitment, along with their safety and health practices—including the management of physical environments, facility use, electrical equipment, chemicals, and hazard control—were identified as crucial influences on OSH compliance. The positive and meaningful effects observed highlight the importance of organizational culture in promoting adherence to safety and health standards. Overall, the university demonstrated a strong commitment to OSH compliance, supported by high mean scores and substantial explained variability. This commitment was reflected in areas such as sufficient safety training, the value placed on employee contributions, and staff empowerment to actively engage in safety and health initiatives.

The study identified Structural Model 5, Miranda's Model on Occupational Safety and Health Compliance in a state university, as the best-fit model for OSH compliance. This model emphasized the significant impacts of organizational commitment, safety practices, and socio-psychosocial factors on compliance with OSH standards. As such, it provides a useful framework for guiding targeted interventions and policy enhancements at Bukidnon State University-Main Campus.

To enhance OSH compliance at Bukidnon State University, several recommendations are made. For management, it is advised to adopt Miranda's Model on Occupational Safety and Health Compliance, which emphasizes organizational commitment, safety practices, and socio-psychosocial factors to build a safety-oriented culture. Employees should be encouraged to engage in a supportive work environment, with the formation of a safety committee conducting regular audits and risk assessments. Future researchers are encouraged to apply Miranda's model to other industries to promote proactive safety cultures, while students should be taught safety and health skills to aid their overall development and well-being.

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