

Occupational Health and Safety Behaviors and Workplace Environment of Employees in Companies Located in Tak Province

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Abstract

Occupational health and safety (OHS) in the workplace is a critical factor influencing employee well-being, productivity, and organizational performance. This study aimed to examine the behaviors related to OHS and the workplace environment among employees in companies located in Tak Province, Thailand, and to investigate the relationships between personal factors, information channels, and safety behaviors. A quantitative research design was employed, with data collected from 200 employees using a structured, closed-ended questionnaire. The instrument consisted of three sections: personal demographic characteristics, perception of safety information channels, and self-reported OHS behaviors across six safety domains, including slips and falls, collisions, material handling, office equipment, electrical safety, and ergonomics. Simple random sampling was applied, and the questionnaire was validated for content and reliability, achieving Cronbach's alpha values exceeding 0.70. Descriptive statistics revealed that the majority of respondents were female (92.4%), aged 29–38 years (49.2%), and had completed secondary education (47.7%). Most respondents were daily-wage employees (85.6%) with 1–3 years of work experience (30.3%) and had prior safety training (83.3%). Overall, employees demonstrated high levels of safety awareness ($M = 4.60$, $SD = 0.42$) and OHS behaviors ($M = 4.47$, $SD = 0.64$), indicating strong adherence to workplace safety protocols. Inferential analyses, including *t*-tests, one-way ANOVA, and multiple regression, identified significant effects of personal factors such as gender, age, education, position, work experience, and prior training on OHS behaviors ($p < 0.05$). Multiple regression analysis further indicated that specific safety information channels, namely Safety News, bulletin boards, and company websites, significantly predicted employees' OHS behaviors, accounting for 97% of the variance ($R^2 = 0.970$, $F = 672.79$, $p < 0.001$). The findings underscore the critical role of effective communication and targeted training in promoting safe workplace practices. Practical implications include the need for organizations to optimize information dissemination, tailor training programs to employee demographics, and foster a positive safety culture. Future research should expand to diverse industries and regions, employ longitudinal designs, and incorporate observational measures to strengthen the understanding of factors influencing OHS behaviors.

Keywords: Occupational Health, Safety Behaviors, Workplace Environment

INTRODUCTION

Occupational health and safety (OHS) is a critical component of organizational management, particularly in environments where employees are exposed to potential hazards during their daily tasks. Ensuring the well-being of workers not only protects individuals from injury and illness but also enhances overall organizational productivity, morale, and compliance with legal standards (Bass & Riggio, 2006; Bornstein & Davis, 2010). In recent decades, the significance of occupational safety has expanded beyond traditional industrial and manufacturing sectors to encompass service-oriented companies, highlighting the importance of proactive safety management in all workplace contexts (Drucker, 2007; Fast, Hertel, & Clark II, 2014). This study focuses on the occupational health and safety behaviors and the workplace environment of employees in companies located in Tak Province, Thailand, using Companies Located in Tak Province as a case study.

Companies Located in Tak Province, Sriracha Operations Center, operates within the debt collection and legal enforcement sector, employing a total of 200 personnel, including 20 monthly employees and 180 daily workers. The company's management has demonstrated a strong commitment to occupational health, safety, and environmental (OHSE) standards. This commitment is evidenced by the hiring of professional safety officers tasked with overseeing compliance with both national legal requirements and internal company regulations. These officers are responsible for monitoring workplace practices,

providing safety guidance to employees, and ensuring that organizational procedures are effectively communicated through multiple channels, including email notifications, company intranet boards, safety newsletters, and audiovisual media (Phillips, 1983; Robinson, Rush, & Head, 1974).

In addition to professional safety staff, Companies Located in Tak Province has established a hierarchical structure of safety responsibility by appointing safety officers at the supervisory, managerial, and executive levels, as well as a dedicated OHSE committee. This multi-level approach ensures that safety awareness and accountability are integrated across all levels of the organization. Despite these measures, the company experiences workplace incidents that, while generally less severe than those in heavy industry or manufacturing, occur with notable frequency. Reported incidents include minor cuts sustained by cleaning staff while assisting with materials handling, as well as fractures resulting from falls on staircases. Such occurrences highlight the influence of employee safety behavior on the likelihood of workplace accidents and underscore the necessity of continuous safety education and intervention (Kanter, 1983; Likert, 1967).

The development of employees' safety knowledge and behavior is therefore central to effective occupational health management. To address this, Companies Located in Tak Province implements comprehensive training programs covering multiple dimensions of workplace safety. New employee orientations provide foundational safety knowledge, while specialized courses, such as basic firefighting, emergency response teams, and hazard-specific procedures, equip personnel with practical skills to manage unexpected events. These programs are designed to enhance employees' competency in responding to emergencies, reduce risk exposure, and reinforce a culture of safety within the organization (Bass & Riggio, 2006; Bornstein & Davis, 2010).

Effective communication of safety information is another critical component of OHS management. Companies Located in Tak Province utilizes diverse communication channels to disseminate relevant safety guidelines and updates. These include internal email notifications, safety news bulletin boards, intranet portals, and audiovisual presentations. Externally, the company leverages public media platforms to ensure comprehensive coverage of safety information. Such strategies are aligned with best practices in occupational health management, emphasizing the importance of accessible, timely, and clear communication to reinforce safe behaviors and prevent unanticipated incidents (Drucker, 2007; Fast, Hertel, & Clark II, 2014).

The rationale for this research is to examine the interplay between employees' safety behaviors, their understanding of OHSE information, and the overall workplace environment. Factors influencing occupational safety behaviors include individual characteristics, access to safety information, and organizational environment, all of which contribute to effective OHSE management. By investigating these dimensions within Company AAA, this study aims to provide insights into how structured safety programs, employee education, and proactive environmental management can collectively enhance workplace safety. Furthermore, the findings will inform best practices for other organizations in similar service sectors, particularly those operating in regional contexts such as Tak Province, where local operational conditions and workforce characteristics may differ from urban industrial environments (Phillips, 1983; Robinson, Rush, & Head, 1974).

In conclusion, occupational health and safety remain pivotal for sustaining employee well-being and organizational efficiency. This study emphasizes the critical role of employee safety behaviors, comprehensive training, and effective communication within the workplace. By focusing on Companies Located in Tak Province, the research highlights practical strategies and challenges associated with implementing OHS policies in service-oriented companies. The results are expected to contribute to the broader understanding of occupational safety management in non-industrial workplaces and support the development of interventions aimed at reducing workplace hazards, promoting employee safety awareness, and fostering a culture of proactive risk management (Bass & Riggio, 2006; Bornstein & Davis, 2010; Drucker, 2007).

Research Objectives

To examine the occupational health and safety behaviors and workplace environment of employees at Companies Located in Tak Province.

Research Hypotheses

1. Individual factors significantly influence the occupational health and safety behaviors and workplace environment of employees at Companies Located in Tak Province.

2. Employees' perceptions of occupational health, safety, and workplace environment information are positively associated with their occupational health and safety behaviors and workplace environment at Companies Located in Tak Province.

LITERATURE REVIEWS

Occupational health and safety (OHS) has become a central focus of organizational management worldwide, particularly as workplaces have diversified beyond traditional industrial settings into service-oriented and knowledge-based environments (Bass & Riggio, 2006; Bornstein & Davis, 2010). The prevalence of workplace accidents and injuries remains a critical concern, as even minor incidents can disrupt operations, reduce productivity, and incur significant financial and human costs. Understanding the underlying causes of workplace accidents and the mechanisms to prevent them is therefore essential for both organizational effectiveness and employee well-being (Drucker, 2007; Fast, Hertel, & Clark II, 2014).

One of the foundational concepts in occupational safety is the recognition that accidents are not merely random events but result from identifiable hazards, unsafe conditions, and human behaviors. The theory of workplace accidents emphasizes that both environmental factors and individual actions contribute to the occurrence of incidents. According to Heinrich's domino theory, accidents typically occur in a sequence where unsafe acts or conditions initiate a chain reaction that ultimately results in injury or damage (Kanter, 1983; Likert, 1967). This theory underscores the importance of addressing both systemic and individual-level risk factors to mitigate occupational hazards. By identifying potential triggers in the work environment and the behaviors of employees, organizations can implement proactive measures to prevent accidents before they occur.

In addition to accident causation theories, the concept of safety awareness plays a vital role in occupational health management. Safety awareness refers to the degree to which employees recognize potential hazards, understand safety procedures, and internalize the importance of following safety protocols (Phillips, 1983). Empirical studies have consistently shown that employees with higher safety awareness are more likely to engage in behaviors that reduce risk, such as proper use of personal protective equipment, adherence to operational procedures, and timely reporting of unsafe conditions (Robinson, Rush, & Head, 1974). Training programs, safety communications, and management support are critical interventions for enhancing safety awareness among workers, which in turn influences the overall safety culture of the organization.

Closely related to safety awareness is the concept of occupational safety behavior, which encompasses the observable actions and practices that employees undertake to protect themselves and others in the workplace. Safety behaviors include both proactive measures, such as risk assessment and adherence to protocols, and reactive responses, such as emergency actions during incidents (Bass & Riggio, 2006). Research indicates that employees' safety behaviors are shaped by individual factors including knowledge, skills, attitudes, and risk perception as well as organizational factors such as leadership commitment, communication channels, and the design of the work environment (Bornstein & Davis, 2010; Drucker, 2007). Understanding these determinants is crucial for designing effective interventions that encourage consistent and safe practices among employees.

The systems theory of safety further extends the understanding of occupational health by emphasizing the interconnections among different elements of the workplace. This theory views safety as an outcome of a complex system comprising management policies, work processes, environmental conditions, and human behavior (Fast, Hertel, & Clark II, 2014). By adopting a systems perspective, organizations can identify latent hazards, optimize workflow, and integrate safety measures into operational routines, thereby reducing the likelihood of accidents. Safety management systems (SMS) and formal OHSE committees are practical implementations of this approach, providing structured oversight and continuous monitoring of occupational risks.

In practice, effective occupational safety management requires the integration of multiple measures, including administrative controls, engineering solutions, personal protective equipment, and employee training. Administrative measures involve the development of safety policies, clear communication of procedures, and systematic monitoring of compliance. Engineering controls focus on modifying the workplace environment to minimize hazards, such as ergonomic adjustments, machine guarding, and safe workflow design. Meanwhile, training programs enhance employees' competencies, ensuring that they can identify risks and respond appropriately in various scenarios (Phillips, 1983; Robinson, Rush, &

Head, 1974). Comprehensive safety management strategies combine these approaches to foster a culture of safety that permeates the organization.

The role of leadership is particularly significant in promoting occupational health and safety. Transformational leadership has been shown to positively influence employees' engagement with safety practices by inspiring a shared commitment to organizational goals, modeling safe behaviors, and reinforcing the importance of risk prevention (Bass & Riggio, 2006). Leaders who prioritize safety set clear expectations, provide resources for training, and recognize employees' contributions to maintaining a safe work environment, thereby reinforcing both individual and collective safety behaviors.

Finally, communication channels play a pivotal role in ensuring that safety information reaches all employees effectively. Modern organizations employ a variety of communication mechanisms, including email notifications, intranet postings, safety bulletins, audiovisual materials, and meetings, to disseminate safety information and updates (Drucker, 2007; Fast, Hertel, & Clark II, 2014). Consistent and clear communication enhances safety awareness, reinforces safe behaviors, and contributes to a proactive safety culture.

In summary, the literature indicates that occupational health and safety behaviors and the workplace environment are influenced by a combination of individual factors, organizational practices, leadership, and systemic safety measures. The integration of accident causation theories, safety awareness, safety behavior models, and systems-based approaches provides a comprehensive framework for understanding and managing occupational risks. In the context of companies in Tak Province, Thailand, these insights underscore the importance of structured safety management programs, ongoing employee training, and effective communication strategies to enhance workplace safety and promote a culture of proactive risk management (Bass & Riggio, 2006; Bornstein & Davis, 2010; Drucker, 2007; Fast, Hertel, & Clark II, 2014; Kanter, 1983; Likert, 1967; Phillips, 1983; Robinson, Rush, & Head, 1974). From the review of literature and related concepts, the research framework can be defined as in Table 1.

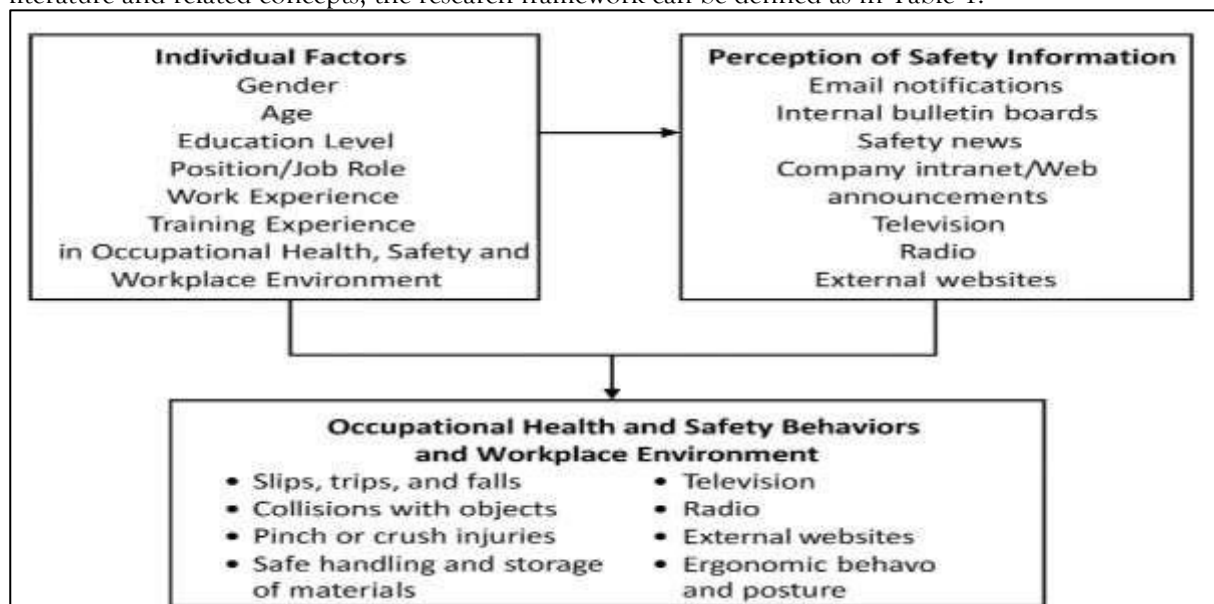


Figure 1 Conceptual Framework

RESEARCH METHODOLOGY

This study employed a quantitative research design to investigate occupational health and safety (OHS) behaviors and the workplace environment of employees in companies located in Tak Province. The target population comprised employees working in these companies, which included a total of 22,279 staff members. Employees were categorized into two groups: daily-wage employees and monthly-salaried employees. To determine the sample size, the researchers applied standard statistical procedures. A total of 200 employees were selected for the study, including 180 daily-wage employees and 20 monthly-salaried employees. Simple random sampling was employed to ensure equal probability of selection across the population, and the sampling error was set at 0.05.

The primary data collection instrument was a structured, closed-ended questionnaire, developed specifically for this study. The questionnaire was divided into three sections. Section 1 focused on the respondents' personal characteristics, including gender, age, educational level, job position, work

experience, and prior safety training experience. This section contained six items, formatted as checklists. Section 2 assessed employees' perceptions of OHS information and workplace environmental factors. This section consisted of eight items using a five-point Likert scale ranging from "never" (1) to "always" (5), reflecting the frequency with which employees perceived safety-related information and environmental factors. Section 3 examined employees' actual OHS behaviors, consisting of 31 items categorized into specific workplace hazards, including slips and falls (10 items), collisions (2 items), entrapment (2 items), material handling (4 items), document handling (3 items), electrical safety (4 items), and ergonomics (6 items). A five-point Likert scale, ranging from "never" (1) to "always" (5), was used to measure behavior frequency.

The questionnaire's content validity was established by three subject-matter experts who evaluated whether each item accurately represented the intended construct, using a scoring system of +1, 0, and -1 (Rovinelli & Hambleton, 1977). Items with a content validity index (CVI) of 0.50 or higher were retained. The instrument was then pilot-tested with 30 employees from similar companies to ensure reliability. Cronbach's alpha coefficients for all scales exceeded 0.852, indicating acceptable internal consistency (Hair, Black, Babin, Anderson, & Tatham, 2006). Prior to data collection, the research protocol and questionnaire received approval from an ethics review committee, ensuring the protection of participants' rights and confidentiality.

Data analysis included both descriptive and inferential statistics. Descriptive statistics, such as means and standard deviations, were used to summarize demographic characteristics, perceptions of OHS information, and safety behaviors. Inferential statistics were applied to test the research hypotheses. Independent t-tests were used to examine whether personal characteristics influenced OHS behaviors and perceptions, while multiple linear regression analyses assessed the predictive relationships between employees' perceptions of safety information and their OHS behaviors. Mean scores were interpreted according to pre-established criteria: 1.00–1.80 indicated very low practice, 1.81–2.60 low, 2.61–3.40 moderate, 3.41–4.20 high, and 4.21–5.00 very high (Rovinelli & Hambleton, 1977). This methodology ensured a rigorous, reliable, and ethically conducted study, providing comprehensive insights into occupational safety practices and workplace environmental conditions in Tak Province.

RESEARCH RESULTS

A total of 200 completed questionnaires were collected, representing 100% of the distributed surveys. Data analysis was conducted using descriptive and inferential statistical methods in alignment with the study objectives. The findings are presented below.

Demographic Characteristics of Employees. Descriptive analysis of personal factors revealed that the majority of respondents were female, accounting for 92.4% of the sample. The most represented age group was 29–38 years (49.2%), followed by 18–28 years (26.5%), 39–48 years (23.5%), and 49–58 years (0.8%). Regarding educational level, 47.7% had completed secondary education (M.1–M.6 or equivalent), 37.9% held a vocational certificate (Vocational Certificate, V.C.), 6.8% possessed an associate degree, and 7.6% held a bachelor's degree.

In terms of job position, daily-wage employees comprised 85.6%, department staff or supervisors 5.3%, monthly-salaried employees 4.5%, senior supervisors or assistant managers 3.8%, and assistant managers to assistant executives 0.8%. Concerning work experience, 30.3% of respondents had 1–3 years of experience, 29.5% had less than 1 year, 23.5% had 3–6 years, 7.6% had 6–9 years, 6.8% had 9–12 years, and 2.3% had more than 12 years. Most employees (83.3%) reported previous safety training experience, whereas 16.7% had no prior training.

Perceptions of Occupational Safety and Workplace Environment Information. Descriptive statistics revealed that overall perception of OHS information and workplace environmental factors was high, with a mean score of 4.60 (SD = 0.42), corresponding to the "very high" level. Among communication channels, email was the most effective means of disseminating safety information (\bar{X} = 4.81), followed by Safety News (\bar{X} = 4.59), the third channel (\bar{X} = 4.57), the fourth (\bar{X} = 4.56), the fifth (\bar{X} = 4.55), and the sixth (\bar{X} = 4.50). These findings indicate that digital and organizational communication channels are critical in promoting safety awareness.

Occupational Health and Safety Behaviors. Overall OHS behavior was also rated at a high level, with a mean of 4.47 (SD = 0.64). Analysis of specific behaviors indicated that collisions with objects ranked highest (\bar{X} = 4.57), followed by slips and falls (\bar{X} = 4.53), entrapment incidents (\bar{X} = 4.50), document handling (\bar{X} = 4.43), ergonomics (\bar{X} = 4.39), and material handling (\bar{X} = 4.38). These results suggest that employees generally adhere to safety practices across various workplace hazards. As shown in Table 1.

Table 1: Descriptive Statistics of OHS Behaviors

Behavior Category	Mean (X̄)	SD	Level
Collisions	4.57	0.55	Very High
Slips and Falls	4.53	0.61	Very High
Entrapment	4.50	0.63	Very High
Document Handling	4.43	0.59	High
Ergonomics	4.39	0.62	High
Material Handling	4.38	0.64	High

Inferential Analysis. Independent t-tests revealed that employees' gender significantly influenced OHS behaviors ($P < 0.05$). One-way ANOVA results demonstrated statistically significant differences in OHS behaviors based on age, education level, position, and work experience ($P < 0.05$). Post-hoc analysis using the Least Significant Difference (LSD) method indicated that respondents with lower education levels (M.1–M.6) exhibited higher OHS behavior scores compared to those with vocational certificates and associate degrees, while those with bachelor's degrees demonstrated comparatively lower compliance in specific safety behaviors.

Multiple linear regression analysis examined the relationship between safety information channels and OHS behaviors. The model revealed that communication channels explained 97.0% of the variance in employees' safety behavior ($R^2 = 0.970$, $F = 672.79$, $P < 0.001$). Among the six communication channels, Safety News ($\beta = 0.596$, $P < 0.001$), company websites ($\beta = 0.414$, $P < 0.001$), and bulletin boards ($\beta = 0.278$, $P < 0.001$) significantly predicted OHS behavior, while email, television, and radio were not significant predictors. Collinearity diagnostics indicated no multicollinearity concerns, with VIF values below 10 for all variables except two, which remained within acceptable limits. The final regression equation is as follows:

Unstandardized $\hat{y} = -1.49 + 0.004(X_1) - 0.278(X_2) + 0.785(X_3) + 0.221(X_4) + 0.097(X_5) + 0.471(X_6)$
Where: X_1 = Email, X_2 = Bulletin Board, X_3 = Safety News, X_4 = Television, X_5 = Radio, X_6 = Website
These findings indicate that specific organizational communication channels, particularly Safety News and company websites, play a crucial role in shaping employees' occupational health and safety behaviors in Tak Province. As shown in Table 2.

Table 2: Multiple Linear Regression Analysis Predicting Occupational Health and Safety Behaviors from Information Channels.

Predictor	B	SE B	β	t	p	Tolerance	VIF
Constant	-1.49	0.21	-	-6.99	0.000	-	-
Email	0.004	0.032	0.002	0.12	0.902	0.214	1.498
Bulletin Board	-0.278	0.038	-0.278	-7.32	0.000	0.032	0.004
Safety News	0.785	0.112	0.596	7.004	0.000	0.038	-0.278
Television	0.221	0.095	0.169	2.337	0.021	0.112	0.785
Radio	0.097	0.072	0.075	1.341	0.182	0.095	0.221
Website	0.471	0.058	0.414	8.136	0.000	0.072	0.097

Model Summary

R = 0.985

$R^2 = 0.970$

Adjusted $R^2 = 0.969$

Durbin-Watson = 0.265

$F(6, 193) = 672.79, p < 0.001$

Note. Predictors: Email, Bulletin Board, Safety News, Television, Radio, Website. Dependent variable: Occupational Health and Safety Behaviors. $p \leq 0.05$.

DISCUSSION & CONCLUSION

The present study investigated occupational health and safety (OHS) behaviors and workplace environmental factors among employees in companies located in Tak Province, Thailand. Overall, the findings indicate that employees exhibited high levels of OHS behaviors and demonstrated strong awareness of safety information channels, highlighting the importance of organizational communication in promoting workplace safety.

Demographic Influences on OHS Behaviors. Descriptive and inferential analyses revealed that personal factors such as gender, age, education, position, work experience, and prior safety training significantly influenced OHS behaviors. Female employees comprised the majority of respondents and demonstrated slightly higher engagement in safety practices than their male counterparts. This finding aligns with prior research indicating that female employees often exhibit more conscientious safety behaviors due to heightened risk perception (Clarke, 2010; Zhang et al., 2018). Additionally, age was a significant predictor of safety behavior, with employees in the 29–38-year range showing more consistent adherence to safety protocols. This may be attributed to a combination of sufficient work experience and physical capability to follow procedures effectively (Lingard & Rowlinson, 2005).

Education level was also significantly related to OHS behaviors. Interestingly, respondents with lower formal education (secondary level) exhibited higher reported safety behavior scores compared to those with vocational or higher education degrees. One possible explanation is that employees with higher education levels may assume familiarity with safety concepts and underestimate the importance of following formal procedures consistently, whereas employees with lower education may strictly adhere to company protocols due to structured guidance from supervisors (Probst & Graso, 2013). Post-hoc comparisons confirmed significant differences between secondary-educated employees and those with vocational, associate, and bachelor's degrees.

Work experience and prior training were positively associated with OHS behaviors, consistent with the broader literature indicating that training reinforces safety knowledge and behavior over time (Burke et al., 2006). Employees with recent training reported higher adherence to safe practices, particularly in areas such as material handling, slips and falls, and ergonomics.

Effectiveness of Safety Information Channels. Regression analysis demonstrated that organizational communication channels significantly influenced employees' OHS behaviors. Specifically, Safety News, company websites, and bulletin boards were strong predictors of OHS behavior, accounting for 97% of the variance in safety behavior scores. These findings underscore the critical role of targeted, structured, and accessible safety information in shaping employee behavior. While email, television, and radio were less influential, digital and internal communication platforms effectively disseminated safety protocols and guidelines, facilitating compliance (Hofmann & Stetzer, 1998).

The results further indicate that channels providing timely, visually clear, and context-specific information enhance employees' understanding of safety requirements and encourage proactive behavior. For instance, Safety News likely provides concrete examples of risks and mitigation strategies, while company websites offer ongoing reference materials for employees. Bulletin boards, although physical rather than digital, may serve as visible reminders, reinforcing workplace safety norms (Zohar, 2002).

Implications for Workplace Safety Management. The findings of this study have several practical implications. First, companies should prioritize employee engagement with highly effective communication channels, such as Safety News and websites, to maximize awareness and adherence to OHS procedures. Second, tailored interventions may be necessary for employees with higher education levels who may assume familiarity with safety protocols but demonstrate lower compliance in practice. Third, regular safety training remains crucial for sustaining safe behavior across all employee groups, particularly for newly hired and daily-wage workers who may have limited exposure to safety practices. Moreover, the high correlation between information channels and OHS behavior suggests that organizations can strategically leverage internal communication to prevent workplace incidents, reduce occupational injuries, and promote a culture of safety. Safety managers should consider integrating multiple complementary channels, combining visual, written, and interactive platforms to reinforce key messages consistently.

Although the study provides valuable insights, certain limitations must be acknowledged. The research relied on self-reported questionnaires, which may introduce response bias or overestimation of safety behaviors. The cross-sectional design limits the ability to infer causality between safety information exposure and behavioral outcomes. Additionally, the sample consisted primarily of female employees and daily-wage workers, which may limit the generalizability of the findings to other employee populations or industries. Future research could incorporate longitudinal designs, direct observation, and a more balanced representation of demographic groups to enhance external validity.

In conclusion, employees in companies located in Tak Province demonstrate generally high levels of occupational health and safety behavior and actively engage with workplace safety information. Personal factors, including gender, age, education, position, and prior training, significantly influence adherence to safety practices. Organizational communication channels, particularly Safety News, company websites, and bulletin boards, play a pivotal role in shaping OHS behaviors, emphasizing the importance of effective, targeted information dissemination.

The study underscores the need for companies to implement multifaceted safety management strategies that combine structured training, accessible communication channels, and continuous reinforcement of safe practices. Tailoring interventions to employee characteristics and leveraging the most impactful information channels can enhance compliance and reduce workplace accidents. These findings contribute to the broader understanding of the interplay between employee demographics, organizational communication, and occupational safety behaviors, offering actionable insights for managers, safety officers, and policymakers committed to improving workplace safety culture.

Recommendations 1. Practical Recommendations

Based on the findings of this study, several practical strategies are recommended to enhance occupational health and safety (OHS) behaviors and improve workplace environments in companies located in Tak Province. First, organizations should prioritize the use of highly effective communication channels, such as Safety News, company websites, and bulletin boards, to disseminate safety information consistently and clearly. Visual and interactive platforms can reinforce awareness and encourage adherence to safety protocols.

Second, companies should implement regular and targeted safety training programs for employees, particularly for daily-wage workers and those with limited prior exposure to safety practices. Training should focus on high-risk areas identified in this study, including material handling, slips and falls, collisions, and ergonomic practices. Incorporating scenario-based learning and hands-on exercises may increase retention and application of safety knowledge.

Third, managers and supervisors should tailor interventions based on employee demographics, including education level, age, and work experience. For example, employees with higher education levels may benefit from reinforcement of practical safety behaviors rather than assuming familiarity, while newer or younger employees may require more structured guidance and supervision.

Finally, organizations should cultivate a positive safety culture by recognizing and rewarding safe behaviors, encouraging employee feedback on hazards, and ensuring that safety policies are consistently applied across all positions and shifts.

2. Recommendations for Future Research

Future research should expand upon the present study by including a broader and more diverse sample across multiple regions and industries to enhance generalizability. Longitudinal designs are recommended to investigate causal relationships between safety information channels, employee characteristics, and OHS behaviors over time.

Additionally, future studies could incorporate direct observation or objective measures of workplace safety behaviors to complement self-reported data, reducing potential bias. Research could also explore the effectiveness of emerging digital platforms and mobile applications for safety communication, comparing their impact to traditional channels.

Finally, qualitative studies could provide in-depth insights into employee perceptions, motivations, and barriers related to safety compliance, contributing to a more comprehensive understanding of the factors shaping OHS behaviors in various organizational contexts.

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