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Exploring How Supervisory Support Shapes Workers' Health and Safety Performance

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Abstract: ***This study investigates how supervisory support—emotional, informational, and instrumental—moderates workers' health and safety performance across industries. Drawing on survey data from 113 employees in manufacturing, healthcare, and construction, it reveals that emotional support strongly boosts safety compliance, while tangible support's impact varies by context, sometimes fostering complacency. Effective supervisory communication emerges as a linchpin for a robust safety culture. These findings highlight the need for tailored supervisory strategies to enhance worker well-being and regulatory adherence, offering actionable insights for organizations aiming to strengthen workplace safety.***

Keywords: Supervisory Support, Workplace safety, Safety Performance, Safety Culture, Employee Well-being

1. Introduction

Workplace safety is a fundamental concern for organizations, as it directly impacts employee health and productivity. A critical factor in fostering a strong safety culture is supervisory support. Supervisors not only oversee daily operations but also shape employees' attitudes and behaviors toward safety compliance. Given the increasing complexity of modern workplaces, understanding how supervisory support influences health and safety outcomes is essential. In today's work environment, safety precautions are not just regulatory requirements but also strategic business imperatives. The interplay between physical workplace conditions and social dynamics significantly affects safety culture, with supervisors serving as key agents in translating organizational policies into practical actions. Their dual role as managers and leaders extends beyond administrative responsibilities, encompassing emotional support, mentorship, and the reinforcement of safety norms. This study examines how different forms of supervisory support—emotional, informational, and instrumental—affect employees' perceptions of safety and compliance behavior [1].

Ensuring employee health and well-being is a cornerstone of organizational success. Research highlights the importance of supervisory support in promoting safe work practices. While previous studies have explored individual aspects of support—such as emotional encouragement, information sharing, and tangible resources—there remains a gap in understanding how these elements collectively influence workplace safety [26]. Supervisors play a pivotal role in fostering a positive safety culture by providing guidance, resources, and motivation. Emotional support enhances employees' psychological resilience, while clear communication of safety protocols empowers workers to identify risks and implement preventive measures. Moreover, direct investment in safety infrastructure, such as protective equipment and hazard mitigation, reinforces an organization's commitment to occupational health. Despite widespread acknowledgment of the importance of supervisory support, existing research lacks a comprehensive analysis of how different forms of support interact with industry-specific conditions to shape safety performance. Furthermore, most studies rely on cross-sectional designs and self-reported data, which may limit the accuracy and depth of insights. To address these limitations, this research employs a quantitative approach to examine the relationships between supervisory support, safety climate, and employees' adherence to safety protocols.

As workplaces continue to evolve, the role of management in promoting safety remains a central concern. This study underscores the significance of supportive leadership in fostering a culture of health and safety. Beyond its theoretical contributions, the research offers practical recommendations for improving workplace safety culture and enhancing employee well-being.

By employing a rigorous methodological framework, this study seeks to provide organizations with evidence-based insights into the supervisor-worker relationship and its implications for safety outcomes. The findings will help organizations refine their supervisory structures, implement effective safety interventions, and integrate employee well-being into their core operational strategies.

Ultimately, this research contributes to both academic knowledge and real-world practice by bridging the gap between theoretical safety models and practical management strategies. Understanding the evolving role of supervisors in workplace safety is crucial for improving organizational performance and ensuring sustainable worker protection.

2. Literature Review

Research on supervisory support and workplace safety underscores the crucial role of supervisors in shaping safety culture. Key themes in existing literature include supervisors' influence on workers' perceptions, the impact of supervisor-employee relationships on safety, and the role of communication in fostering a safe work environment. The complexity of supervisory support reflects the diverse interactions shaping workplace safety dynamics. This review synthesizes findings on the alignment of supervisory support, positive supervisor-worker relationships, and communication

strategies in cultivating a strong safety culture.

a) The Role of Supervisory Support in Workplace Safety

Supervisory support is a critical factor in enhancing workplace safety. Studies indicate that supervisors' attitudes and behaviors significantly influence employees' safety perceptions and compliance [11]. As enforcers of safety regulations, supervisors model safe behaviors, reinforcing organizational safety culture [2]. Beyond enforcement, they mold safety norms through daily interactions and leadership.

Supervisory support comprises three primary dimensions: emotional, informational, and tangible support. Each contributes uniquely to workplace safety culture and employee behavior.

i) Emotional Support:

Emotional support encompasses supervisors' expressions of care, encouragement, and recognition of employees' professional and personal needs [8]. Studies suggest that employees who receive emotional support report higher job satisfaction and lower stress levels, which contribute to fewer workplace accidents and greater safety compliance. This support fosters an environment where employees feel comfortable reporting hazards without fear of reprisal [19].

ii) Informational Support:

Informational support involves providing clear, relevant, and actionable safety guidance [15]. This includes safety training, real-time feedback, and ongoing communication about evolving workplace hazards. Supervisors who effectively convey the rationale behind safety procedures foster a proactive safety mindset, enhancing employee engagement in workplace safety initiatives [14].

iii) Tangible Support

Tangible support refers to the provision of physical resources necessary for workplace safety, such as personal protective equipment (PPE), well-maintained tools, and access to safety-enhancing technologies. The availability of these resources signals an organization's commitment to employee well-being, reinforcing safety compliance [25]. Ensuring employees have the appropriate tools reduces workplace accidents and enhances operational efficiency. Understanding these dimensions allows organizations to develop targeted supervisory strategies that effectively address workplace safety challenges.

b) Supervisory Communication and Safety Outcomes

Communication is central to supervisory support, facilitating both information dissemination and trust-building. Effective communication enhances employee engagement in safety practices, reinforcing a proactive safety culture. Studies show that supervisors who frequently discuss safety concerns and involve employees in safety dialogues contribute to stronger organizational safety climates [12].

The effectiveness of supervisory support varies by industry. In high-risk sectors such as construction and manufacturing, direct supervisory involvement in safety measures is especially critical [5]. However, in physically hazardous environments, the influence of emotional and informational support on safety perceptions may be less pronounced [22].

Several studies have explored the relationship between supervisory support and safety performance. Singh and Misra [23] examined the correlation between perceived supervisory support, accident rates, and safety compliance. Their findings indicate that higher levels of perceived supervisory support are positively associated with safety compliance and inversely related to accident rates. Similarly, Zamani et al. [27] highlighted the role of supervisory communication in shaping workplace safety behavior. Their study found that open communication modes significantly enhance adherence to safe work practices, reinforcing the importance of transparent and supportive supervisory interactions in promoting workplace safety.

c) Theoretical Framework

Social Exchange Theory (SET) posits that supervisor-employee relationships are based on resource exchange, fostering trust. From a safety perspective, extensive supervisory support enhances employees' confidence and responsibility, promoting adherence to safety standards. This reciprocity is especially evident in high-risk industries where safety consequences are significant.

The Job Demands-Resources (JD-R) model further explains supervisory support as a critical resource that mitigates job-related stressors such as workload, task complexity, and occupational hazards [17]. By alleviating stress and burnout, supervisory support improves safety engagement and morale. This model highlights how tangible support (e.g., equipment and training) reduces physical job demands, while emotional and informational support counteracts psychological stressors. Together, these frameworks provide a foundation for understanding the role of supervisory support in fostering a robust safety culture.

The broader organizational environment and employee behavior significantly influence safety climate and culture [24] . Auzoult and Ngueutsa [4] found that organizations with strong safety climates—where shared values and norms prioritize safety—experience lower accident rates and better safety outcomes. Similarly, Lee et al. [16] identified leadership support, safety policies, and training programs as key determinants of workers' safety behaviors.

Kalteh et al. [13] further emphasized the role of organizational climate in shaping safety performance. Their research underscored that companies fostering shared safety beliefs and norms achieve lower accident rates. Additionally, leadership support, well-defined safety policies, and comprehensive training were crucial in shaping employees' safety perceptions and behaviors.

3. Research Design

This study employs a explorative design to examine supervisory support and its impact on workplace safety and health across manufacturing, healthcare, and construction sectors [3]. This approach provides a snapshot of current practices, allowing for the identification of trends that can inform future longitudinal research [10]. A survey was administered electronically and in person, ensuring clear instructions and anonymity to encourage honest responses. This multi-modal distribution strategy, combining online and

offline methods, maximized participation while maintaining data integrity. The study sampled a diverse group of employees and supervisors from various industries, ensuring broader applicability of findings. Participants, representing different age groups, genders, and occupational levels, were recruited through industry organizations, online professional forums, and workplace collaborations, and through industry-specific professional forums and LinkedIn groups.

Respondents completed online surveys after reviewing clear guidelines to minimize external influence. They provided insights based on personal experiences and perceptions of supervisory support. The participants were required to review and sign an informed consent form outlining the study's objectives, voluntary participation, anonymity assurances, and their right to withdraw at any time.

An online survey incorporating Likert-scale questions measured the frequency and perceived effectiveness of emotional, informational, and tangible supervisory support. Additionally, multiple-choice questions gathered demographic details and safety-related data. The survey remained open for eight weeks to maximize participation before data analysis and reporting.

Quantitative analysis, including descriptive statistics, correlation, and regression, was conducted using SPSS to examine relationships between supervisory support types and workplace safety outcomes.

4. Results

The relationship between supervisory support and workplace safety performance was examined using a combination of quantitative analysis, descriptive statistics, and thematic analysis. The study explores key factors such as supervisory support, communication styles, and their role in enhancing compliance with safety protocols. The section begins by outlining the research objectives and data analysis procedures, followed by a discussion of key findings and their significance. Finally, it presents practical implications and directions for future research.

Demographic analysis examines characteristics such as age, gender, income, education, and occupation. It plays a crucial role in workforce research by informing market strategies, public policy decisions, and organizational planning. In occupational health and safety, demographic insights help tailor interventions to diverse workforce needs, influencing policy development and resource allocation. As we see in Table 1 and Figure 1 • there were 11 females and 102 males participated in the study.

Table 1: Gender Distribution Analysis of Study Participants

Gender of the Respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	102	89.5	90.3	90.3
	Female	11	9.6	9.7	100.0
	Total	113	99.1	100.0	
Missing	System	1	.9		
Total		114	100.0		

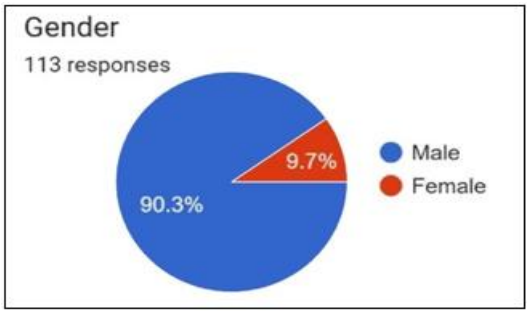

Figure 1: Participant Gender distribution

Table 2 and Figure 2 show a decent distribution across six major industry sectors, supporting the findings' generalizability.

Table 2: Industry Sector Distribution Analysis of Study Participant

Industry of the Respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Healthcare	18	15.8	15.9	15.9
	Manufacturing	18	15.8	15.9	31.9
	Technology	12	10.5	10.6	42.5
	Military	16	14.0	14.2	56.6
	Government	25	21.9	22.1	78.8
	Banking	10	8.8	8.8	87.6
	Others	14	12.3	12.4	100.0
	Total	113	99.1	100.0	
Missing System		1	.9		
Total		114	100.0		

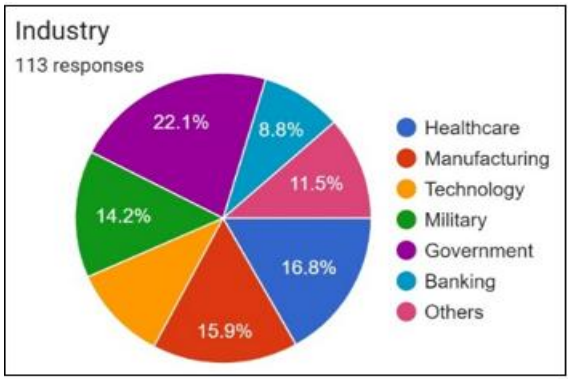

Figure 2: participating Industry distribution

The different level of experience was captured to reflect different expectation from practitioners in respond to different theme in the survey as illustrated in Table 3 and

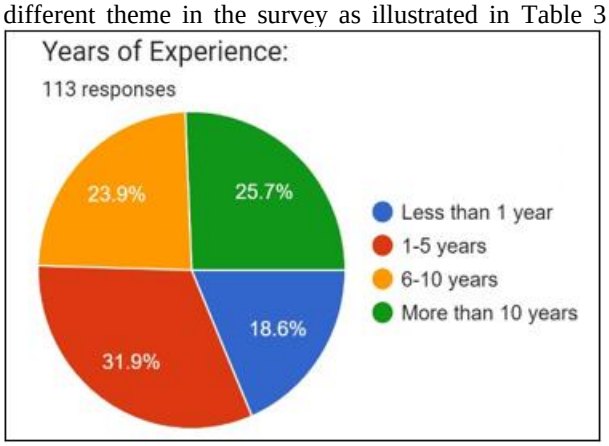

Figure **3** . hence there is only one missing data that do not affect the study results.

Table 3: Analysis of Years of Experience Distribution among Study Participants

Years of experience of the Respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	21	18.4	18.6	18.6
	1- 5 years	36	31.6	31.9	50.4
	6-10 years	27	23.7	23.9	74.3
	More than 10 years	29	25.4	25.7	100.0
	Total	113	99.1	100.0	
Missing System		1	.9		
Total		114	100.0		

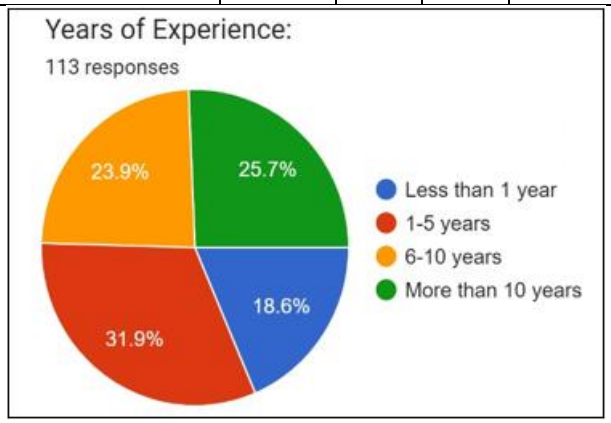

Figure 3: Year of experience percentage wise distribution

As the study aim to analyse supervisory support and workers health and safety, it was essential to target the worker mainly in the study, hence we see understandable proportional among the number of participant with supervisory role and worker role as in Figure 4 and Table 4.

Table 4: Distribution Analysis of Job Positions among Participants

Position of Respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Worker	104	91.2	92.2	92.0
	Supervisor	9	7.9	8.0	100.0
	Total	113	99.1	100.0	
Missing System		1	.9		
Total		114	100.0		

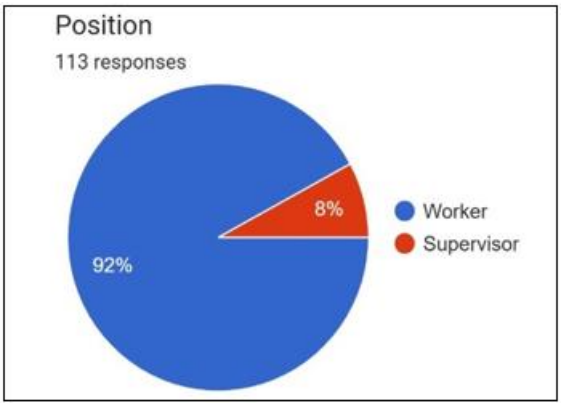

Figure 4: Worker's job Position division

The following section of the survey focuses on the extent to which the participants feel that their supervisors offer support for their emotional needs. It capture 5 levels of support, Table 5 provides a breakdown of the level of emotional support according to categories such as "Very Low," "Low," "Neutral," "High," and "Very High.", also Figure 5 visualise the summary of data.

Table 5: Analysis of Emotional Support for the Employees at workplace

To what extend do you feel your supervisor provides emotional support when needed?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	11	9.6	9.7	9.7
	Low	18	15.8	15.9	25.7
	Neutral	35	30.7	31.0	56.6
	High	28	24.6	24.8	91.4
	Very High	13	11.4	11.5	92.9
	Very High	8	99.1	7.1	100.0
	Total	113	99.1	100.0	
Missing System		1	.9		
Total		114	100.0		

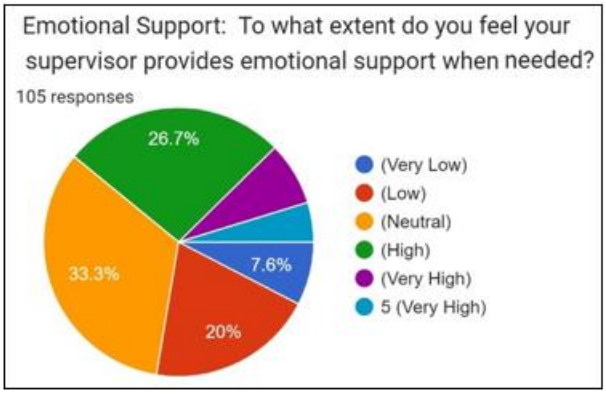

Figure 5: Pie Chart of Emotional Support of Workers

Table 6 and Figure 6 show the summary of the extent to which the communication was conducted, with categories including "Very Ineffective," "Ineffective," "Neutral," "Effective," and "Very Effective."

Table 6: Analysis of informational Support of the Respondents at workplace

How effectively does your supervisor Communicate safety information to you?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not effectively	6	5.3	5.7	5.7
	Slightly effectively	15	13.2	14.3	20.0
	Moderate effectively	31	27.2	29.5	49.5
	Effectively	36	31.6	34.3	83.8
	Very effectively	17	14.9	16.2	100.0
	Total	105	92.1	100.0	
Missing System		9	7.9		

Total	114	100.0		

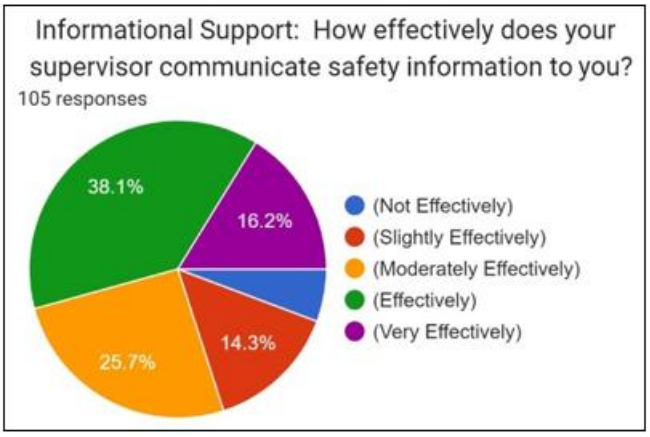

Figure 6: Pie Chart of Informational Support feel by respondent

For the section where the participants answered the question: How satisfied are you with the tangible support received from your supervisor incl. safety items and assets?" with options to select the level of satisfaction. These could be "Very Unsatisfied," "Unsatisfied," "Indifferent," "Satisfied," and "Very Satisfied." Table 7 and Figure 7 provide key descriptive statistics about this dimension.

Table 7: Analysis of Tangible Support

How satisfied are you with the tangible support provided by Your supervisor, including safety equipment & resources?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Dissatisfied	6	5.3	5.7	5.7
	Dissatisfied	20	17.5	19.0	24.8
	Neutral	31	27.2	29.5	54.3
	Satisfied	36	31.6	34.3	88.6
	Very Satisfied	12	10.5	11.4	100.0
	Total	105	92.1	100.0	
Missing System		9	7.9		
Total		114	100.0		

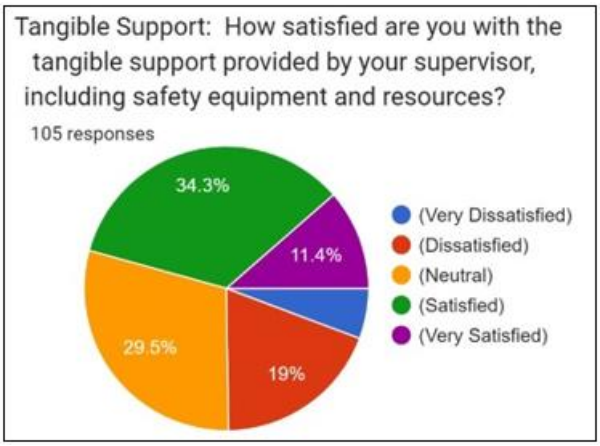

Figure 7: Pie Chart of Tangible Support

Respondents stated that they used safety measures while performing their activities. The categories may probably include everything from "Rarely" to "Always" and Table 8 and Figure 8 provide key summary of respondents' responses.

Table 8: Analysis of Health and Safety Performance

How frequently do you adhere to safety protocols in your daily tasks?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rarely	5	4.4	48	4.8
	Occasionally	20	17.5	19.0	23.8
	Sometimes	30	26.3	28.6	52.4
	Frequently	41	36.0	39.0	91.4
	Always	9	7.9	8.6	100.0
	Total	105	92.1	100.0	
Missing System		9	7.9		
Total		114	100.0		

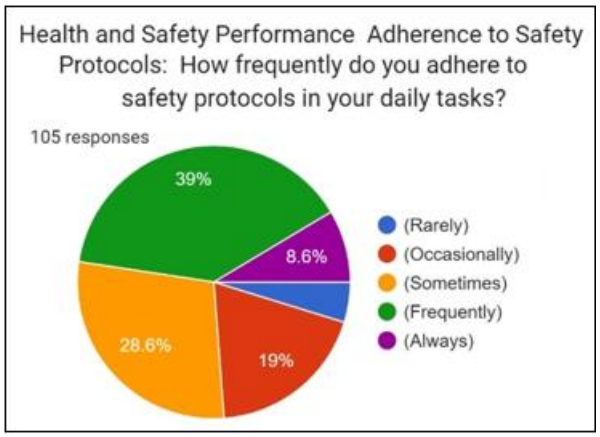

Figure 8: Pie Chart of Health and safety Performance for employees

Another question addressing the perception of the safety climate and appropriate response, the result is summarised in Table 9 and Figure 9.

Table 9: Analysis of Safety Climate perception for Employees

Please indicate your perception of the safety climate in your workplace by selecting the most appropriate response					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	17	14.9	16.3	16.3
	Disagree	33	28.9	31.7	48.1
	Neutral	22	19.3	21.2	69.2
	Agree	25	21.9	24.0	93.3
	Strongly Agree	7	6.1	6.7	100.0
	Total	104	91.2	100.0	
Missing System		10	8.8		
Total		114	100.0		

Figure 9: Pie Chart for Analysis of Safety Climate perception for Employees

Also the survey captured the agreement level if safety climate is conducive in workplace, the responses are summaries in Table 10 and Figure 10

Table 10: Analysis of Safety Climate conducive in Workplace

I feel that the safety climate in my workplace is conducive to a Safe and healthy environment					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	4.4	4.8	4.8
	Disagree	17	14.9	16.2	21.0
	Neutral	27	23.7	25.7	46.7
	Agree	37	32.5	35.2	81.9
	Strongly Agree	19	16.7	18.1	100.0
	Total	105	92.1	100.0	
Missing System		9	7.9		
Total		114	100.0		

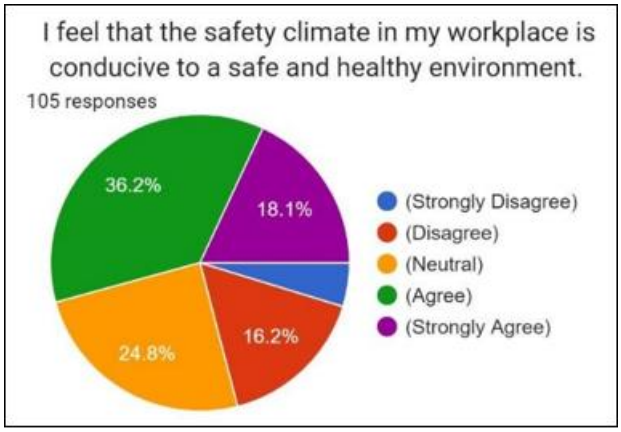

Figure 10 Pie chart of Analysis of Safety Climate conducive in Workplace

In Table 11 and Figure 11 the data summary help in determining how much employees in various workplaces are dedicated towards ensuring a safe working environment.

Table 11: Analysis of Safe Work Environment

Employees in my workplace are committed to maintaining a safe Working environment					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	3.5	3.8	3.8
	Disagree	10	8.8	9.5	13.3
	Neutral	19	16.7	18.1	31.4
	Agree	49	43.0	46.7	78.1
	Strongly Agree	23	20.2	21.9	100.0
	Total	105	92.1	100.0	
Missing System		9	7.9		
Total		114	100.0		

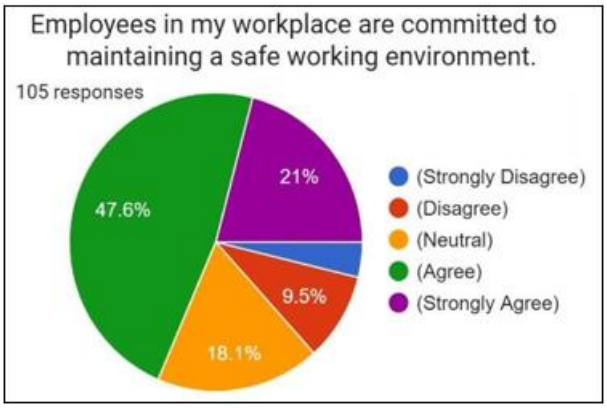

Figure 11 Analysis of Safe Work Environment

Table 12 and Figure 12 provides the details of the safety measures and indicate how often the measures are implemented.

Table 12: Analysis of Safety measures as a priority at work place

Management actively promotes and supports safety measures In the workplace					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	3.5	3.9	3.9
	Disagree	9	7.9	8.7	12.6
	Neutral	7	6.1	6.8	19.4
	Agree	44	38.6	42.7	62.1
	Strongly Agree	39	34.2	37.9	100.0
	Total	103	90.4	100.0	
Missing System		11	9.6		
Total		114	100.0		

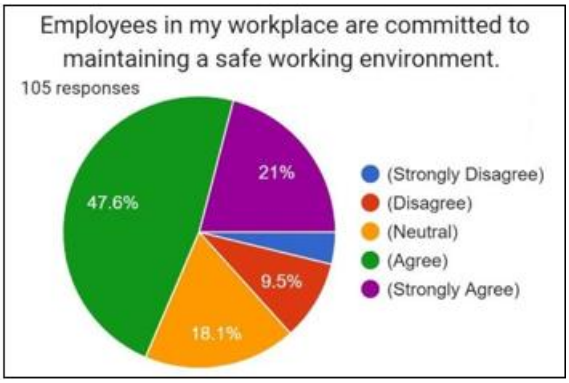

Figure 12 Analysis of Safety measures as a priority at work place

Supervisor engagement in Safety as Priority at Workplace was captured in the question summarised in

Table 13 which indicates the level of endorsement of each respondent to the statement about the various factors related to the supervisors as being committed to positive safety climate.

Table 13: Analysis of supervisor engagement in Safety as Priority at Workplace

The supervisor's participation with workers in matters related To occupational safety and health					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	7	6.1	6.7	6.7
	Slightly	27	23.7	25.7	32.4
	Moderately	44	38.6	41.9	74.3
	Very	20	17.5	19.0	93.3
	Extremely	7	6.1	6.7	100.0
	Total	105	92.1	100.0	
Missing System		9	7.9		
Total		114	100.0		

Based on the tables data, most respondents believe the listed factors contribute to a positive safety climate. However, approximately 20% expressed neutrality, indicating variability in perceptions. Investigating specific safety programs or activities in these workplaces could provide deeper insight into this variation. The subsequent section discusses these findings in greater detail.

5. Analysis and Discussion

Employee health and safety are critical concerns across industries, with supervisory support playing a vital role in fostering a strong safety culture [7]. Supervisors act as frontline leaders, ensuring policy implementation, guiding teams, and fostering a work environment that prioritizes well-being. The following themes were explored in the result analysis:

Emotional Support: A significant positive correlation was found between emotional support and adherence to safety protocols ($\beta = 0.551$, $p < 0.001$). Employees demonstrated greater compliance when supervisors provided empathy and encouragement [6]. This highlights the necessity for management to cultivate strong employee-supervisor relationships to enhance overall safety [18].

Informational Support: Effective communication of safety information significantly improves compliance [9]. Workers who receive clear, structured guidance from supervisors are more engaged in safety practices, reinforcing the need for transparent communication strategies.

Tangible Support: Tangible support was negatively correlated with safety adherence, suggesting that an overreliance on physical resources may lead to complacency. While providing equipment and assistance is beneficial, organizations must balance this with initiatives that reinforce individual responsibility and adherence to protocols. Training should emphasize that tangible support complements, rather than substitutes, safety commitment [28].

Supervisor Communication Styles: Directive Communication reinforces compliance through authoritative guidance. Also, Supportive Communication fosters a safety-conscious work environment [20]. Interpretation is when the supervisor uses both styles contribute to a culture of accountability, strengthening adherence to safety protocols [21].

6. Conclusion and Recommendations

This study underscores supervisory support as a cornerstone of workplace safety, revealing that emotional encouragement drives compliance, clear communication boosts awareness, and tangible resources, while vital, can sometimes dull personal accountability. Across industries, supervisors who blend directive and supportive styles foster a culture where safety thrives. Organizations should invest in training leaders to balance these elements, ensuring both worker well-being and regulatory adherence. This work not only refines safety models but also equips managers with practical tools to sustain healthier workplaces.

6.1 Main Recommendations

In order to strengthen supervisory support and enhance workers' health and safety performance, organizations should consider several measures. First, they can offer specialized training to supervisors, equipping them with the skills to identify and prevent risks, as well as respond effectively when such risks arise. Establishing clear and transparent communication channels encourages workers to report safety concerns freely and enables supervisors to address these issues promptly. Managers should also receive guidance on recognizing and managing employee stress and mental health challenges, fostering a supportive environment that prioritizes both physical and psychological well-being. Furthermore, organizations can benefit from cultivating a proactive culture in which supervisors display genuine interest in employees' conditions, thereby building trust and collaboration. Recognizing and rewarding leaders who actively champion safety and health measures can reinforce this culture. Providing sufficient resources to supervisors, such as protective equipment and adequate staffing [5], further strengthens the correlation between supervisory support and improved safety outcomes.

The findings of this study carry several practical implications for organizations striving to improve workplace safety. Training and development programs should be designed to equip supervisors with essential skills in emotional support, effective communication, and leadership. Communication strategies that promote the reliable dissemination of safety information can enhance employee engagement and clarify the precautions required to maintain a safe work environment. Leaders at all organizational levels should visibly promote a safety-first culture, thereby reinforcing supervisory support and fostering a comfortable workplace. Customized programs, rather than generic safety lessons, may prove especially effective in addressing industry-specific challenges and honing supervisors' leadership, emotional intelligence, and conflict-resolution skills. Integrating technology, including social media and mobile applications, could

streamline real-time communication of safety messages, remote inspections, and rapid feedback, which is especially beneficial for geographically dispersed teams. Since workplace safety demands ongoing effort, organizations need to regularly assess and refine their safety protocols, communication channels, and leadership development initiatives to adapt to changing employee needs and maintain a strong focus on safety.

6.2 Implications and Suggestions for Further Research

While this study offers valuable insights, certain limitations must be acknowledged. The reliance on self-reported data within a cross-sectional design restricts the ability to infer causality, and the use of Likert scales may introduce response bias. Future research should extend its scope to additional industries to determine whether these findings apply broadly and to tailor interventions accordingly through qualitative interviews in future iterations to extend causal claims and perceptions. Cross-cultural investigations may also illuminate how cultural dimensions, such as power distance and communication norms, affect the efficacy of supervisory support. Examining psychological factors, including job satisfaction, safety climate, and perceived organizational support, could further elucidate how supervisory support translates into safe behaviors. Longitudinal studies would help gauge the sustainability of interventions and identify long-term patterns in workplace safety and accident rates, providing a clearer picture of how improved supervisory practices evolve over time. Ultimately, recognizing supervisory support as a powerful lever for shaping safety culture can guide organizations in creating targeted strategies that foster both employee well-being and sustainable occupational health and safety outcomes.

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