

THE MOST EFFECTIVE STRATEGIES FOR ENSURING SAFETY AND MINIMIZING ACCIDENTS IN CONSTRUCTION WORK.

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Integrating Projects – ACHA 4008

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TOPICS

Research question

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PRESENTATION TITLE



RESEARCH QUESTION

The most effective strategies for
ensuring safety and minimizing
accidents in construction work.

THE MOST EFFECTIVE STRATEGIES FOR ENSURING SAFETY
AND MINIMIZING ACCIDENTS IN CONSTRUCTION WORK.



PROBLEM DEFINITION

- Construction work is a dangerous and hazardous industry, with a high incidence of accidents and injuries. Despite the implementation of safety regulations and guidelines, accidents continue to occur at an alarming rate, resulting in injuries, fatalities, and financial losses. Therefore, it is important to investigate the most effective strategies for ensuring safety and minimizing accidents in construction work. By identifying and analyzing these strategies, it will be possible to develop practical recommendations that can help reduce the risk of accidents and injuries in the construction industry.

AIMS

The goal of this research is to determine the best methods for assuring safety and reducing accidents in the construction industry.

THE MOST EFFECTIVE STRATEGIES FOR ENSURING SAFETY
AND MINIMIZING ACCIDENTS IN CONSTRUCTION WORK.



OBJECTIVES

- To examine the material already in existence on safety measures and accident prevention in construction.
- To determine the typical reasons for construction site accidents and assess how well current safety measures are working.
- To examine how various construction industry players see safety measures and accident prevention.
- To assess how safety training and culture affect preventing accidents in construction.

METHODOLOGY

- Using the terms construction, safety, accidents, risk, and strategies, a thorough search was carried out in a number of databases, including Google Scholar, ScienceDirect, and PubMed

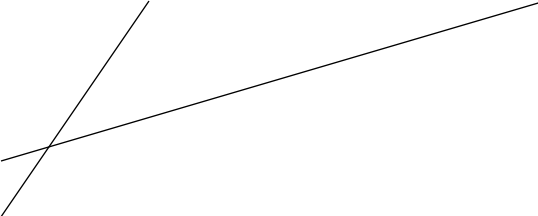
FINDINGS OF LITERATURE REVIEW

Training and Education: Huang et al. [1] discovered that training programs can assist employees in comprehending the dangers and risks connected to their jobs as well as the right usage of personal protective equipment (PPE).

Safety Culture: Lingard et al. [3] discovered that a number of elements, including managerial commitment, employee involvement, and communication, have an impact on a safety culture.

Risk Assessment: Gao et al. [6] stressed the significance of risk assessment in detecting possible risks and creating efficient risk management techniques in their study on risk management in the construction industry.

Use of Technology: . In accordance with the research done by Gao et al. [7], drones may be used to check locations and find potential threats while sensors can be utilized to monitor the environment and find potential hazards

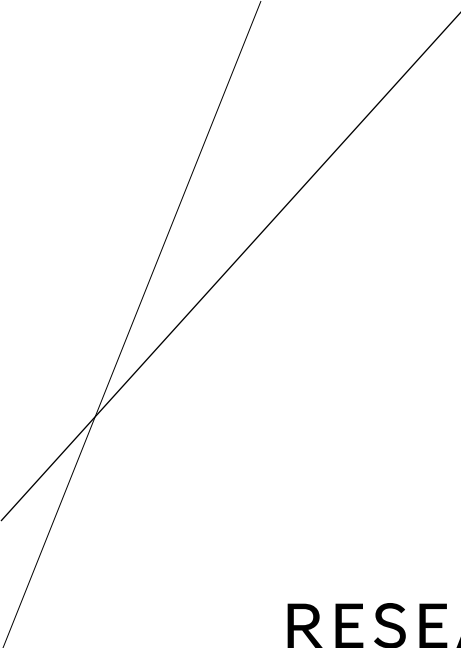


FINDINGS OF LITERATURE REVIEW

Regulations and Standards: Razzak et al. [10] suggested that regulatory compliance is crucial for raising safety performance in building projects in a study on occupational health and safety laws in the industry.

Safety Incentives: Lingard et al. [3] discovered that a number of elements, including managerial commitment, employee involvement, and communication, have an impact on a safety culture.

Client's Role in Safety: Zhang et al. [13] discovered that customer engagement was positively connected with safety performance in a study on the effect of client involvement on safety performance in the construction industry.



RESEARCH APPROACH AND METHODS

RESEARCH APPROACH

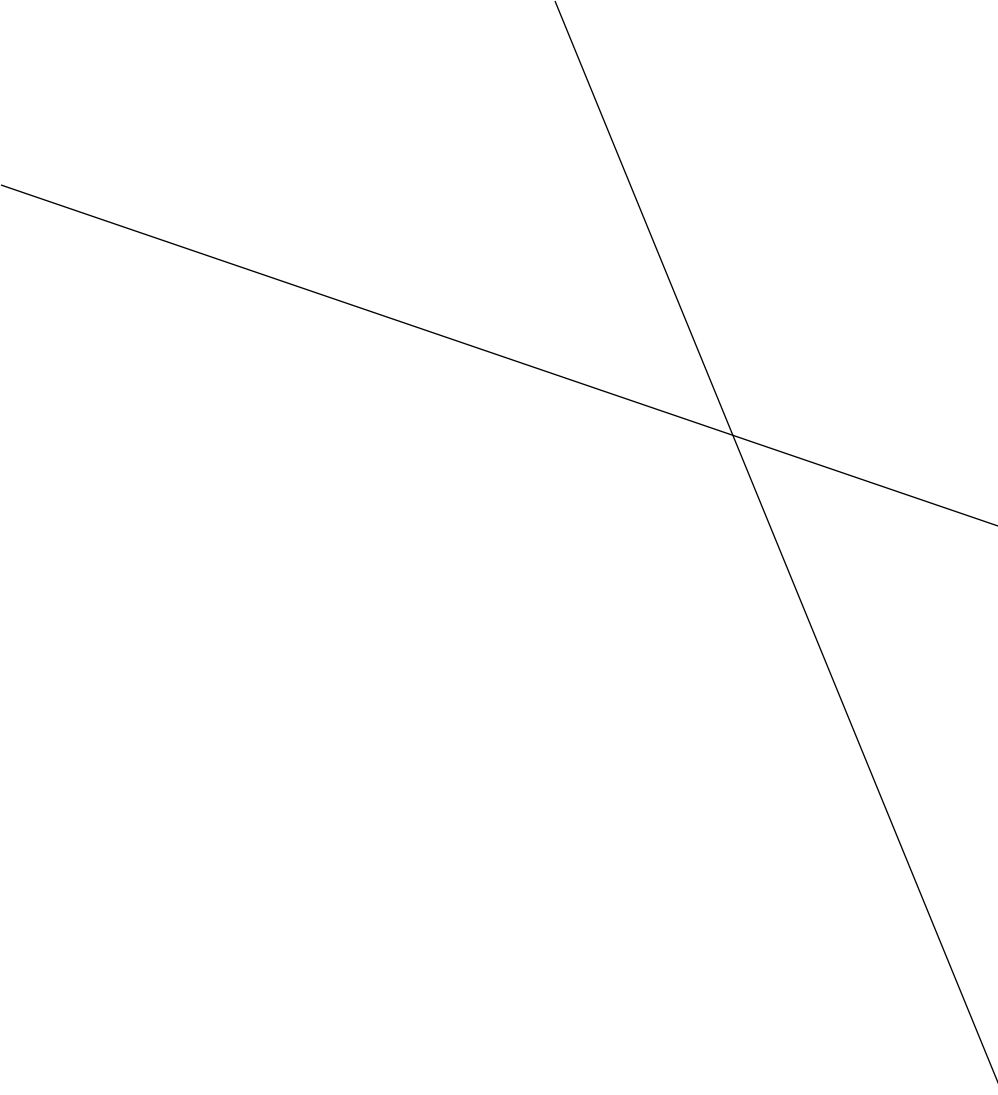
A mixed method approach
Pragmatism approach

Research Methods

Review of the
literature
Surveys
Observations
Interviews

ACTION
PLAN OF
THE
RESEARCH

Task	Timeline (weeks)
Define research question and objectives	1-3
Conduct literature review of existing research	4-8
Identify specific construction projects	9-11
Develop research methodology	12-13
Obtain necessary approvals and permissions	14-16
Collect data through surveys, interviews, and observations	17-22
Analyze data and identify effective safety strategies	23-26
Develop report and recommendations	27-30
Prepare a final report for publication	31-33



SUMMARY

In conclusion, the literature analysis makes it clear that some of the most often employed methods for ensuring safety in the construction sector are safety management systems, safety training, safety culture, and safety incentives. It is crucial to remember that the success of these tactics will rely on the particular project and circumstance. Thus, a detailed grasp of the unique project needs and contextual elements is necessary for the identification and implementation of the most effective techniques

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 - [12] I. Lingard et al., "The client's role in construction health and safety," Construction Management and Economics, vol. 30, no. 4, pp. 247-258, 2012.
 - [13] Y. Zhang et al., "Client involvement and safety performance in construction projects: The mediating role of trust," Journal of Construction Engineering and Management, vol. 142, no. 5, 2016.
- of PPE can protect workers from potential hazards, such as head injuries, falls, and respiratory hazards.

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THANK YOU

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