



IMPROVING SAFETY PERFORMANCE IN CONSTRUCTION INDUSTRY

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ABSTRACT

Construction industry is considered one of the most significant industries in both developed and developing countries in terms of its impact on health and safety of the working population. Construction industry is very important economically and socially. The main objective of this research is to investigate the safety performance in construction industry data were collected by using questionnaire for evaluates safety performance in sites.

Keywords: Construction Safety, Construction Industry, Safety tools, Safety Management, Respondents.

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1. INTRODUCTION

Construction industry is considered to be one of the most significant industries in terms of its impact on health and safety of the working population. Causes of construction have been associated with management system pressures such as lack of commitment to safety financial restrictions policy, standards, knowledge and information, poor quality control systems and task selection.

Objective of the project

To increase the safety performance in construction sites the insurance companies and government should visit the sites periodically. The objectives of the research is to examine the safety performance by questionnaire method and evaluating the feedbacks from the respondents.

2. THE DEGREE OF THE INJURY, RECORDING ACCIDENTS AND THE MANAGEMENT PERSPECTIVE

Figure 3 show 50 % (10) of the respondents kept records and 50 % (10) of the respondents did not keep records. The respondents of survey believed that lack of safety training with the percentage 30% (6),



Figure 1 Types of injury among the respondents

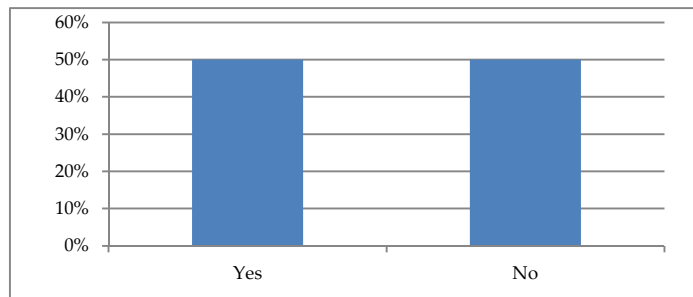


Figure 2 Health and Safety Records

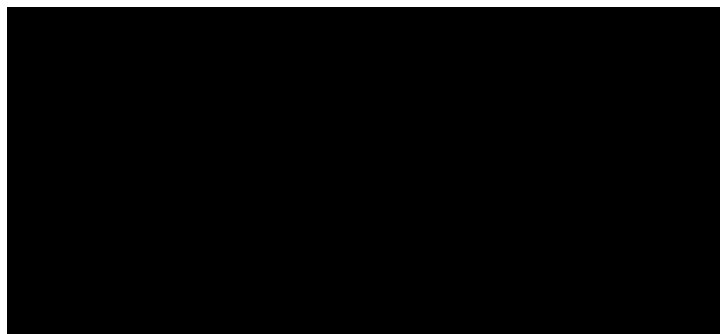


Figure 3 The shortage of management

3. THE COST OF CONSTRUCTION SAFETY

Careless worker attitude 75% (15), and lack of safety knowledge 5% (1) and carless of the consulting 5% (1) and all other reasons were about 15% (3) each simultaneously as shown in Figure 6. simultaneously lack of motivation 45%(9),lack of experience in using equipment15%(3),lack of training 25%(5) and other reasons 5%(1).The cost of construction safety (Figure 7) ,the respondents estimate 1-<2% of 45%(9).

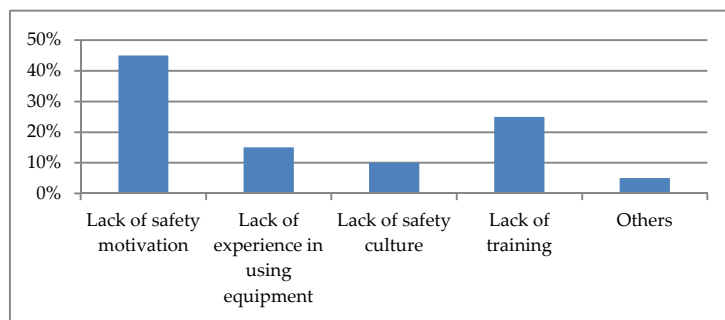


Figure 4 The role of workers

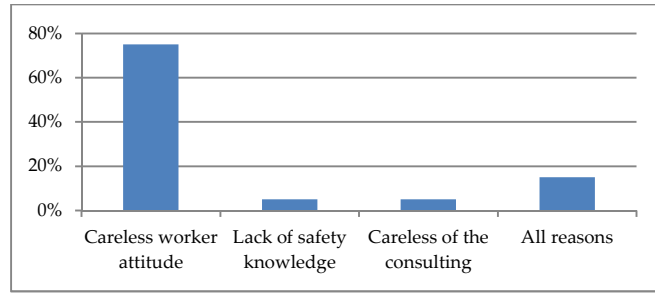


Figure 5 Reasons of the high accident rates in construction

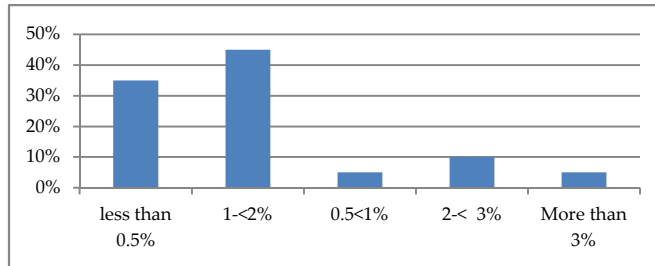


Figure 6 The cost of the construction safety

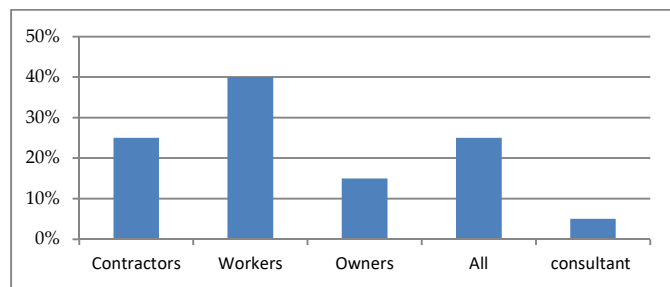


Figure 7 Construction safety responsibilities

3.1. Part A: Response Among the Officials

30 questionnaire were distributed and the respondent percentage was 67% i.e., 20 questionnaire were filled up by the respondents in various projects and various city.

3.2. Part B: Safety Problems and Danger

3.2.1. Accidents during the Last Five Years

100% of respondents faced accidents in various projects that they have undergone for the past five years.

3.2.2. Injuries degree level

Types of injuries among the respondent that 15 % (3) had death cases, simultaneously 5% (1) and 15% (3) of them had permanent inability& partially inability, and 65% (13) light injuries shown in figure (2).

3.2.3. Recording Accident

Figure 3 shows that 50% of the respondents have kept records and 50% remaining did not keep records, however recording accidents are not taken serious in construction sites. This lack of records may lead to lack in investigation which will increase the percentage of accidents if no penalties are introduced by the management and government.

4. ACCIDENT RATES IN SITES

The high percentage level of accident rates are due to are due to the careless worker attitude 75% (15), and lack of safety knowledge 5% (1) and carless of the consulting 5% (1) and all other reasons were about 15% (3) each simultaneously as shown in (Figure 6).

4.1. Safety Responsibility

Figure (8) 40% (8) of the respondents agreed that the workers are responsible for the accidents in site and all reasons with the 25% (5), owners15%(3) and contractors with 25% (5) and consultant were the least with 5%(1).

4.2. The Cost of the Construction Safety

The cost of construction safety (Figure 7), among the respondents 45% (9) estimate 1-<2, simultaneously the respondents estimation varies by different options in question 11 part c.

4.3 Accidents and Safety Violations

55 %(11) of respondents kept records of the injuries and 45 % (9) of the respondents did not keep records. The careless attitude was due to lack of recognizing the benefits of safety recording.

4.4 Penalties Against Contractors

85% of the respondents agreed there are strict measures taken against the contractors making violations in construction sites.

5. SAFETY TRAINING

30% of them got training in safety courses. The result should be improved compared with the other countries. Workers should involve in safety programs, safety audits and they should be properly trained to identify the solutions. There should be safety training and safety based policies and that should reach the knowledge of each and every worker and contractor.

5.1. Organizing Safety Training courses

Among the respondents 40% of them have training on safety practices to be followed in construction sites for their managers, engineers and supervisors and labors.

5.2. Improving Construction Safety - Training Workers

100% of respondents agreed that training the workers regarding safety practices is necessary to improve safety in construction sites.

5.3. Safety Policies

When asking the respondents if they are clear with safety policy in construction projects, 90% agreed they have written policy in their firms or projects, it shows awareness of significance policies in improving the construction safety. However the remaining 10% lack this awareness and should be rectified.

5.4. Safety Meetings

On asking the respondents of safety meetings in their sites (20) 100% agreed there is safety meeting during the execution of projects in construction sites.

6. CONCLUSION

- The results highlighted that there is consensus among the respondents. Implementation of safety rules and regulations among the contractors and workers improve the safety precautions and which helps in reducing the accidents rates. Based on the results “construction safety responsibility is not only for the persons working in the field and also for the person who ever is linked with the work area and extended to anyone who can affect the safety performance.
- Respondents agreed that training the workers regarding safety practices is necessary to improve safety in construction sites. However respondents agreed, but normally there are no regular inspections in the sites.
- This paper in deals with the safety steps involved in site industry and lack of safety regulations and safety schemes .Thus this research may be further done by increasing the respondents level and respondents criteria.

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