

EFFECTS OF CONFLICTS ON BUILDING CONSTRUCTION PROJECTS OF SINDH, PAKISTAN

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ABSTRACT

Objective: This paper aims to identify and rank the effects of conflict in the construction industry of Sindh, Pakistan according to its importance.

Research Method: A thorough analysis of the relevant literature was carried out to identify the effects of conflicts. Unstructured interviews were held to gain a deeper insight. Based on the identified effects from the literature review and interviews, a survey was carried out in Sindh, Pakistan's construction sector using a questionnaire. The data was reviewed and the effects were rated using IBM SPSS.

Findings: Results show that in the Sindh construction industry deterioration in work quality, time overrun, and cost overrun are the top most significant negative effect of conflict, while behavioral responses like smoking, alcohol consumption, and being hostile and the erosion of personal relationships are the least important causes of conflict

Originality: This paper's goal is to identify and rank the impacts of conflict on the construction sector in Sindh, Pakistan so that stakeholders in building projects can make more informed decisions. Insights into conflict management that come from this study are anticipated to be novel. In addition, the study sheds light on the most significant repercussions of conflicts in the construction industry, helping those involved in the industry make more informed decisions.

Keywords: Negative Effects, Conflicts, Construction Industry

1. INTRODUCTION

Rowlinson and McDermott (2005) define conflict as a disagreement between two or more opinions, concepts, or interests. The construction sector has seen several evolutionary changes in recent decades as a result of technological advancements. Despite considerable scientific research and improved management practices, building projects are still unable to tackle a wide range of challenges, including conflicts, productivity loss, poor performance, and many more (Tariq and Gardezi 2022). The conflict has a negative impact on morale and output because it erodes trust and undermines respect. Disputes may have a detrimental effect on a project, but the extent of this effect is dependent on the kind and severity of the dispute. According to Maiti and Choi (2021), a lack of trust and respect can have a substantial effect on the performance of the construction project team and the organization as a whole.

Organizational conflict can result in a range of undesirable effects, including but not limited to physical and mental health problems, blame and complaints, discontent and stress, insubordination, disengagement, and misunderstanding (Okuntade 2014). Moreover, according to Hussein and Hasan (2019) conflict can affect individual physiologically like disinterest in other things, disinterest in work, work dissatisfaction, work stress, and alienation from others, as well as affects individual behaviorally like Excessive smoking, Vandalism, theft, and destruction, alcohol use, hostility toward others, failure to communicate with others, and resistance to influence attempts.

2. LITERATURE REVIEW

A construction project brings together individuals who fulfill their contractual obligations as a team to achieve the project's goals. Individuals and organizations may encounter conflicts as they seek to attain their goals. In recent years, Pakistan's construction industry has experienced significant growth in both residential and commercial projects but the market's extreme volatility has a negative impact on the development projects. In addition, the complexity and resource-intensive nature of the construction sector have led to an increase in claims. Consequently, it has resulted in several conflicts among the stakeholders involved in the construction works (Bhngwar et al. 2021; Bhngwar et al. 2022). Conflict is a serious disagreement between two or more individuals on a range of subjects (Geraldine 2019). Conflicts can be exceedingly disruptive and costly, especially if permitted to grow and go to official court determination (Chapman 2006). Construction conflict has a significant effect on project delivery. Construction conflict causes delays, time and cost overruns, complete abandonment, additional expenses, loss of trust between relevant parties, deterioration of relationships and collaboration, poor quality work and criticism, and relocation of workers, equipment, and raw materials (Olamoju and Olagoke 2020).

Conflicts occur almost in every organization. If neglected, it can have a negative impact on staff morale and performance. It may have a long-term effect on the company's reputation, which may result in revenue loss. Business owners and managers must understand the effect of workplace conflict and take the necessary actions to resolve it before it escalates (Andra 2019). Conflict leads to a lack of trust and respect, which has a negative impact on the organization. It can lead to decreased productivity, lower morale, and increased stress levels. It can also lead to absenteeism, turnover, and legal issues. Physical and mental health problems, blaming and complaining, dissatisfaction and stress, insubordination, disengagement, and misunderstanding are all effects of organizational conflict (Okuntade 2014). Another study finds that if disputes are not addressed appropriately, they may have a negative impact on the company in terms of bad performance, lack of collaboration, resource waste, and reduction in productivity (Hotepo et. al 2010). Loss of business viability and profitability, loss of reputation, breakdown in collaboration between parties, and time delays are detrimental effects of a conflict that can seriously harm a project (Sinha & Wayal 2008; Mashwama et al. 2016).

Since certain conflicts cannot be avoided, managing them effectively will lessen their impact on the construction process; however, the resolution should occur promptly. Conflicts in the construction industry have repercussions for all parties involved and can result in an inequitable method of project delivery, including lower profits, higher costs, and even diminished quality and service levels. Disputes are the primary contributors to delays, interruption of the project timeline, increased project costs, and negative effects on participant relationships. In addition, conflicts are the primary barriers to the successful completion of a building project (Cakmak & Cakmak 2013). In light of the fact that settling conflicts can be costly and time-consuming, it is necessary to manage them proactively to ensure an early resolution. In a building project, due to the competitive and complex environment, conflicts are inevitable, and the results are devastating if left unattended. The preliminary map was constructed which is shown in the form of the table shown below. The table shows the effects of conflicts and which author identified that effect.

Table 1: Effects of Conflicts Identified from Literature Review

| Effects of Conflict | Okuntade (2015) | Hotepo et.al (2010). | Hussein and Hasan (2019) | Mashwana et.al (2016) | Samuel (2021) | Karthikeyan & Manikandan (2017) | Olamaju, And Olagoke. (2020) | Andra (2021) | Miranda (2019) | Tahir (2022) | Ongori (2008) | Ahmed Adamu Isa (2015) |
|--|-----------------|----------------------|--------------------------|-----------------------|---------------|---------------------------------|------------------------------|--------------|----------------|--------------|---------------|------------------------|
| 1. Increased costs(time, money) | V | V | | | V | V | | V | | | | |
| 2. Costs overrun | V | | | V | V | V | V | | | | | |
| 3. Time overrun | V | | | | | V | V | | | | | |
| 4. Wasted resources/ Idling resources | V | V | V | | | V | | V | | | V | |
| 5. Lack of cooperation | | V | | V | V | | V | V | | | V | |
| 6. Decreased productivity/ Loss of productivity | V | V | V | V | | V | V | V | V | V | V | V |
| 7. Withdrawal and miscommunication | V | | V | | | V | | V | | V | | |
| 8. Decrease in quality of work | v | | | | | V | V | | | | | |
| 9. Complaints and blaming | V | | | | | V | | | | | | |
| 10. Backstabbing and gossiping | V | | | | | V | | | | | | |
| 11. Erosion to personal relationship | V | | V | | V | V | | | | | | |
| 12. Insubordination: Due to crisis workers will no longer obey their superiors, disregarding of orders given to them by a project leaders | V | | | | | V | | | | | | |
| 13. Dissatisfaction and stress | V | | | | V | V | | | | V | | |
| 14. Damaged emotional and psychological wellbeing: Absent mindedness to other things/Estrangements or alienations from others/ Disappointments | V | | V | | V | | | | V | V | | |

| | | | | | | | | | | | | |
|--|--|--|---|---|---|---|---|---|---|---|--|---|
| 15. Behavioral Responses: Conflict may compel a person to act in unexpected ways, such as excessive drinking or smoking, being antagonistic to others, cutting down on social interactions.. | | | V | | | | | | V | | | |
| 16. Employees quit the organization | | | V | | | | | | | V | | V |
| 17. Lack of job motivation or low motivation | | | V | | | | | V | | | | |
| 18. Health costs: Conflicts can cause – collective traumas. | | | V | | | | | | V | | | V |
| 19. Loss of company reputation | | | | V | V | | | | | | | |
| 20. Possibility of litigation cases | | | | | V | V | | | | | | |
| 21. Total abandonment (withdrawal of project) | | | | | | V | V | | | | | |

3. METHODOLOGY

Extensive literature was conducted to identify causes of conflict due to technical and contractual problems. To check the relevancy of identified causes with Sindh's construction industry as well as with their specific categorize semi-structured interviews were conducted. The identified factors were processed through a short pilot study. Experts' opinions during the pilot study are amended in the final set of questionnaires which was sent to numerous practitioners working in the construction industry via personal visits, emails, and whatsapp.

3.1 Data Collection

Data was collected from construction industry professionals in Sindh, Pakistan. Ten semi-structured interviews were conducted. The interviews aimed to gather deep knowledge about the subject before the questionnaire survey and also to check the relevancy of conflict relative to their specific category and also with Sindh's construction industry. For the questionnaire survey sample size, the following equation was used. However, 157 responses were received

$$SS = \frac{Z^2 \times P(1-P)}{C^2} \quad SS = \frac{1.96^2 \times 0.5(1-0.5)}{0.08^2} = 150.06 \approx 150 \text{ (eq. 1)}$$

3.1 Data Analysis

Data was analyzed through SPSS. Causes of conflicts were ranked according to their mean. The Cronbach's alpha coefficient was calculated to gauge the internal consistency of survey items. Each component's standard deviation and mean score were analyzed through SPSS. Also, data was collected based on Likert scale and ranked accordingly.

4. RESULTS AND DISCUSSIONS

The following results were obtained after conducting a survey and data analysis. The following table shows the negative effects of ranked according to their importance.

4.1 Respondents' Personal Information

Participants were professionals with expertise in the construction industry. The results of the research show that 77% of participants were bachelor's degree holders while 14% were Master's degree holders, and only 9% were diploma holders. Moreover, majority of participants belong to Hyderabad and Karachi South, 22% and 16% respectively.

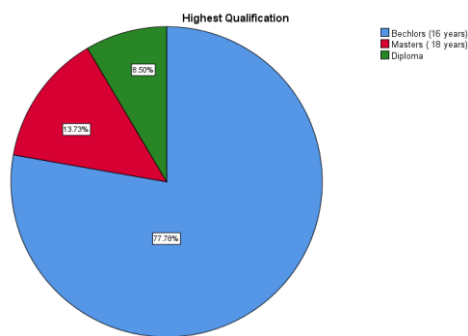


Figure 1. Highest qualification of Respondents.

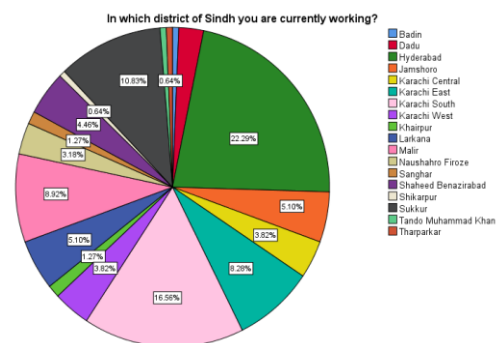


Figure.2 District in which participants are currently working

4.2 Negative Effects of Conflicts:

The following are the negative consequences of conflict. Following negative effects are determined by literature research and then ranked using qualitative and quantitative surveys. This study discovered twenty negative consequences of conflicts. According to the results, six conflict effects are extremely important, three are the most important negative effects, and only nine are moderately important effects. Furthermore, according to specialists in the Sindh construction sector, the top three repercussions of conflict are a deterioration in work quality, a time overrun, and a cost overrun, while behavioral responses like smoking, alcohol consumption, and being hostile and the erosion of personal relationships are the least important causes of conflict.

Table 2: Ranking of Negative Effects of Conflicts

| | N | Mean | Std. Deviation |
|--|-----|--------|----------------|
| 1. Decrease in quality of work | 156 | 4.6859 | .81758 |
| 2. Time overrun | 157 | 4.6561 | .83753 |
| 3. Costs overrun | 157 | 4.6497 | .85385 |
| 4. Decreased productivity/ Loss of productivity | 157 | 4.6433 | .85495 |
| 5. Employees quitting the organization | 156 | 4.5962 | .95565 |
| 6. Wasted resources/ Idling resources | 157 | 4.5860 | .89188 |
| 7. Health costs: Conflicts causing collective traumas | 157 | 3.9236 | .66546 |
| 8. Emotional and psychological instability: Absent mindedness to other things/Estrangements or alienation from others/ Disappointments | 157 | 3.8726 | .74873 |
| 9. Withdrawal and miscommunication | 157 | 3.1529 | .68093 |

| | | | |
|---|-----|--------|--------|
| 10. Lack of cooperation | 157 | 3.0255 | .65973 |
| 11. Job dissatisfaction and stress | 157 | 3.0064 | .59374 |
| 12. Lack of job motivation or low motivation | 157 | 2.9682 | .57088 |
| 13. Possibility of litigation cases | 157 | 2.9490 | .57508 |
| 14. Total abandonment (withdrawal of project) | 157 | 2.9427 | .55749 |
| 15. Complaints and blaming | 156 | 2.9359 | .59762 |
| 16. Insubordination: Disobedience of superiors by workers due to crisis, disregard of orders given to them by project leaders | 157 | 2.9172 | .60935 |
| 17. Backstabbing and gossiping | 157 | 2.8917 | .62614 |
| 18. Loss of company reputation | 156 | 2.8462 | .79639 |
| 19. Behavioral Responses: Conflicts enforcing the individual to behave in unusual manners such as smoking excessively, drinking alcohol, being hostile towards others, not communicating with others and resisting influence attempts | 157 | 2.8025 | .81994 |
| 20. Erosion due to personal relationships | 157 | 2.1083 | .75600 |

Data was also tested for the consistency based on a reliability test (Khahro et al. 2021). It was assessed with Cronbach Alpha whose value ranges from 0 (the lowest internal consistency) to 1 (the highest internal consistency). The reliability results are considered satisfactory if the Cronbach's alpha value is equal to or higher than 0.7 (Almarashda et al. 2022). The reliability results are presented in Table 3.

Table 3: Reliability Analysis

| Reliability Statistics | |
|------------------------|------------|
| Cronbach's Alpha | N of Items |
| .935 | 21 |

Table 3 shows that Cronbach's alpha value is 0.935 which means the collected data is consistent and reliable to draw the conclusion of the study.

5. CONCLUSIONS

Conflicts are part of human nature, and it is extremely important to study them not only for theoretical purposes but also for organizational practice. Conflicts are inevitable in the construction sector. These conflicts have a disastrous effect on the project. Construction managers and stakeholders need to know about the effects of conflicts on construction projects. To have a clear understanding of the effects of conflict on construction projects, this paper aims to identify and rank the effects of conflict in the building construction industry of Sindh, Pakistan.

An extensive literature review, preliminary mapping, interviews, and a questionnaire survey were conducted to rank the effects of conflict. The data were analyzed through SPSS. In this research, twenty negative effects of conflicts were determined and ranked accordingly. The study concludes that deterioration in work quality, a time overrun, and a cost overrun is the top three effects of conflicts, while the least important effect is the behavioral responses like smoking, alcohol consumption, being hostile, and the erosion of personal relationships. It is suggested to construction industry stakeholders to refer to Table 2 given by this study to have a clear understanding of the negative effects of conflicts on construction projects.

The research's results suggest that conflict have a variety of effects expanded over multiple areas in construction project some are more severe than other. Hence conflict should be mitigated properly to reduce its negative effects. This research study will help stakeholders of the construction industry in conflict management. Construction

industry professionals should review this study to have a clear knowledge of the effects of conflict. The significance of this study lies in the fact that its finding will enable construction managers and stakeholders in construction to have in-depth knowledge of the effects of conflict. The study aims to generate data that will enhance understanding of the conflict in the construction industry.

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