

Effect of Conflict Management on Productivity of Labour in the Nigerian Construction Industry

A.A. Azeez¹, K.A. Shittu², U. Bello¹

¹ Department of Building, Lead City University, Ibadan, Oyo State, Nigeria

² Department of Building, Abiola Ajimobi Technical University, Ibadan, Oyo State, Nigeria

(adebolaz92@gmail.com, kamalshittu@yahoo.com,
generaluthman005@gmail.com)

Corresponding email: generaluthman005@gmail.com

Abstract. The Nigerian construction industry has been characterized by frequent conflicts that have resulted in low productivity levels. These conflicts often arise from different sources, such as disputes between contractors and subcontractors, workers, and management, among others. The impact of conflicts on the productivity of labor in the construction industry cannot be overlooked. Therefore, there is a need for effective conflict management strategies that can mitigate the effects of conflicts on productivity levels. This study examines the Effect of conflict management on the productivity of labour in the Nigerian construction industry with a view to reducing the impact of conflict on productivity among construction labourers. The sampling frame comprised professionals working in the built environments on the construction site. A well-structured questionnaire was designed and administered to the respondents. From the result of the analysis, it was indicated that Poor communication among workers and stakeholders, Interest of Different Stakeholders, Payment Disputes, Contractual Dispute and Dispute over Project Management Methodology with a mean score of 4.21, 3.77, 3.55, 3.52, and 3.32, respectively, are common causes of conflict in the Nigerian Construction Industry. Quality of work, Reduction in labour idle time, Increased number of completed tasks, Overall project success rate, and Reduced health and safety risk are the most significant effects of conflict management on the productivity of labour in the Nigerian construction Industry, with mean scores of 4.40, 4.21, 4.20, 4.11, and 4.05, respectively. It was concluded that relevant conflict management techniques effectively address conflict in the construction industry and have a dominant effect on the productivity of labour.

Keywords: Conflict, Conflict Management, Construction Industry, Labour, Productivity.

1. Introduction

The construction industry drives economic growth but faces challenges like low productivity, delays, and cost overruns due to stakeholder relationships (Stefanov & Dimitrova, 2024). Productivity depends on factors like scheduling, equipment, labor supervision, and external influences (Karimi & Khawaja, 2024). In Nigeria, conflicts arise from cultural differences, poor communication, and stakeholder disputes, affecting project success (Horsfall & Akoh, 2024). Common conflict management strategies include negotiation and compromise, influenced by leadership styles (Adunfe et al., 2022). Addressing conflicts improves productivity and industry stability (Adeyemi & Aigbavboa, 2022). Labor productivity is affected by worker relationships, health, incentives, weather, financial crises, and material shortages (Usman et al., 2024). Compliance with safety regulations is critical for improving work conditions (Ajaelu et al., 2024). The escalation of conflict in the construction industry, emphasizing that conflict should be prevented before it escalates into a dispute (Karming conflict). Mba (2013) describes conflict as struggles, opposition, or antagonism, though in construction, conflicts can arise from needs, desires, or disagreements. Wilmot & Hocker (2001) define conflict as a struggle between interdependent parties with perceived incompatible goals, scarce resources, or interference. Disagreements may result in grievances (Yiu & Cheung, 2006, cited in Abdullah, 2012), and conflicts have become integral to human organizations despite efforts to prevent them (Olu & Abosede, 2003). Totterdill (1997, cited in

Abdullah, 2012) identifies a sequence in conflict escalation: an event occurs, someone suffers, a request for compensation is made, and denial of the request leads to conflict. Simons & Peterson (2000) classify types of conflict into task conflict (cognitive/substantive) and relationship conflict (emotional). While task conflict can enhance decision-making, relationship conflict negatively affects group performance (Yang & Mossholder, 2004). De Dreu & Weingart (2003) note that both types of conflict may reduce group performance and satisfaction. Perceived conflict arises when parties recognize opposition but may not be actively affected (Hagan, 2015). It involves subjective awareness of circumstances that create conflict (Boateng, 2014). Zakari et al. (2010) examined the relationship between nurses' perception of conflict and professionalism, highlighting the impact of perceived conflict on work environments. Ting-Toomey's (2005) facial negotiation theory explains how culture influences conflict resolution. Felt conflict involves internalization, leading to emotions such as frustration or tension (Pondy, 1967). Conflict becomes manifest when aggression or indifference appears, affecting relationships (Ebhoite & Osemeke, 2015). Levels of conflict include intra-personal (internal struggles), inter-personal (between individuals with opposing goals), intra-group (within a team), inter-group (between different groups), and intra-organizational (within an organization) (Hellriegel et al., 1986; cited in Abdullah, 2012). Organizational conflict arises from stakeholder competition for resources (Akiner, 2014). Some conflicts are functional and drive motivation, while others are non-functional and detrimental (Rauzana, 2016). Conflicts in Nigeria's construction sector are rooted in economic disparities, governance issues, and poor resource allocation (EA Ajayi, 2008; Mohiddin, 2000). Pondy (1967) outlines conflict stages: latent conflict, perceived conflict, felt conflict, manifest conflict, and post-conflict. These stages influence how conflict emerges, escalates, or resolves (Vaaland & Häkansson, 2003). The section further discusses causes of organizational conflict, including poor communication (Ugbada, 2002), conflicting policies (Darel, 2003), personal goals misalignment (Darel, 2003), task difficulty (Ankwoor, 2006), management style (Ankwoor, 2006), and ineffective reward systems (Belonwu, 2007). Internal and external conflict sources also include economic policies, labor laws, and national wealth distribution (Adei, 2007). Several models of organizational conflict are presented: the bargaining model (Mizuno & Okazawa, 2015) explains how conflict negotiation varies based on opposition heterogeneity. The bureaucratic model (Niskanen, 1971; Kusuma, 2017) highlights structural inefficiencies that contribute to conflict. The systems model (Yu & Leung, 2001) discusses conflict within organizational hierarchies, emphasizing coordination to reduce disputes (Vaaland, 2004). Conflict sources in construction projects stem from poor communication, excessive design changes, schedule delays, contract disputes, health and safety concerns, and stakeholder interest clashes (Qaisrani & Yoke, 2019; Riaz et al., 2020; Azmin et al., 2018). Effects of conflict on Nigeria's construction industry include project failures, legal disputes, and abandonment (Kassab et al., 2010). Walton & Dutton (1969) state that unresolved conflicts reduce trust, impacting performance. Techniques for minimizing conflict include trust-building (Sir Michael Latham, 1993, 1994), team collaboration (Chong, 2011), and effective management strategies (Yates, 2007-2010). Conflict management aids involve goal structuring (Okomba, 2005), reward systems (Osborne, 2001), trust-building (Osborne, 2001), communication (Inyang, 2004), and coordination (Inyang, 2004). Conflict management techniques in construction emphasize clear communication, collaborative problem-solving, defined roles, negotiation, and effective project management (Valos et al., 2016; Shen et al., 2019). Lastly, the effects of conflict management on labor productivity include improved work quality, reduced idle time, efficient material use, and overall project success (Oladapo & Odesola, 2013; Akinsiku et al., 2020). This study explores the impact of conflict management on labor productivity, identifying causes, strategies, and solutions.

1.1 Study Location

Oyo State covers area of 28,453 square kilometres. It lies within latitude 8°N and longitude 4°E with population of about 5,580,894 and a population density of 196. The state accounts for 3.9% of Nigeria's population (Oyo State Local Government Area of Oyo State as shown in Fig. 1).



Figure 1: Location map showing the access road and locations sampled in Ibadan Metropolis

Source: Google

2. Research Methodology

According to Saunders *et al.* (2009) population is a full set of cases from which a sample is taken. The survey covered built environment professionals working in the construction industry within the Ibadan metropolis. A total of hundred (100) professionals of the Built environment were sample. Purposive and convenient sampling techniques were used to obtain respondents. Data were collected directly from the field. According to Saunders *et al.* 2009, primary data is a new data collected for a special purpose. The data was collected from the sample population through survey questionnaires. Secondary data is data collected by someone other than the user. In this study secondary data for this study was collected from books, journals and organization reports. List of questions was prepared and distributed to different professionals in the built environment ranging from Builders, Architects, Engineers and others in the construction industry. Closed ended questions was employed so as to give respondent's chances to air their views regarding job satisfaction among workforce in the construction industry. Data analysis involved the examination, categorization, tabulation, and testing, before posting into the computer. The Statistical Package for Social Sciences was employed to analyse the response

from questionnaires submitted distributed to respondents and the data output was presented in different form and format.

3.0 Results and Discussion

Table 1: Causes of Conflict in the Nigeria Construction Industry

Causes of Conflict	No	Sum	Mean	S.D.	Rank
Poor communication among workers and stakeholders	66	278	4.21	0.886	1st
Interest of Different stakeholders	66	249	3.77	0.838	2nd
Payment disputes	66	234	3.55	0.931	3rd
Contractual dispute	66	232	3.52	0.881	4th
Dispute over project management methodology	66	219	3.32	0.897	5th
Excessive design changes	66	214	3.24	0.878	6th
Schedule delays	66	201	3.05	0.867	7th
Health and safety concerns	66	197	2.99	0.850	8th
Rigid project management style	66	183	2.77	0.908	9th
Environmental and regulatory compliance	66	170	2.58	0.946	10th
Cultural and ethnic differences	66	146	2.21	1.247	11th

Source: Field Survey, 2024

Table 1 examine the causes of conflict in the Nigeria construction industry. Eleven causes of conflict were identified from literature reviews with mean scores ranging from 2.21 to 4.21. These causes of conflict ranges from Poor communication among workers and stakeholders which ranked the highest to Cultural and ethnic differences which ranked the lowest. A 5 point Likert scale was employed for this analysis with a mean score threshold of 3.0. The analysis indicated that Seven of the causes of conflict have mean scores above the threshold of 3.0 which are: Poor communication among workers and stakeholders (Mean=4.21; SD=0.886), Interest of Different Stakeholders (Mean=3.77; SD=0.838), Payment Disputes (Mean=3.55; SD=0.931), Contractual Dispute (Mean=3.52; SD=0.881), Dispute over Project Management Methodology (Mean=3.32; SD=0.897), Excessive Design Changes (Mean=3.24; SD=0.878) and Schedule Delays (Mean=3.05; SD=0.867). This indicates that majority of the respondent agrees to the Seven causes of conflict in their various construction firms.

Table 2: Conflict Management Techniques and Their Relevance in the Nigerian Construction Industry

Conflict Management Techniques and Relevance	No	Sum	Mean	S.D.	Rank
Creating effective communication among stakeholders and workers	66	315	4.77	0.602	1 st
Ensuring clarity of roles and responsibilities	66	309	4.68	0.683	2 nd
Ensuring clarity in contract terms and conditions	66	305	4.62	0.718	3 rd
Engaging effective project management techniques	66	296	4.48	0.827	4 th
Engaging a collaborative way of solving problem	66	288	4.36	0.905	5 th
Ensuring health and safety measures are in place	66	285	4.32	0.914	6 th
Motivation levels in workplace	66	273	4.14	0.782	7 th
Resolving differences and conflict between disputing parties through negotiation	66	226	3.42	0.978	8 th
Modifying organization structure	66	203	3.08	0.966	9 th
Introducing competition among members as a means of resolving conflict	66	186	2.82	1.136	10 th

Source: Field Survey, 2024

Table 2 assess the conflict management techniques relevance to the Nigeria construction industry. Ten conflict management techniques were identified from literature reviews with mean scores ranging from 2.82 to 4.77. These conflict management techniques ranges from creating effective communication among stakeholders and workers which ranked the highest to Introducing competition among members as a means of resolving conflict which ranked the lowest. A 5 point Likert scale was employed for this analysis with a mean score threshold of 3.0. The analysis indicated that Nine of the relevance conflict management techniques have mean scores above the threshold of 3.0 which are: Creating effective communication among stakeholders and workers (Mean=4.77; SD=0.602), Ensuring clarity of roles and responsibilities (Mean=4.68; SD=0.683), Ensuring clarity in contract terms and conditions (Mean=4.62; SD=0.718), Engaging effective project management techniques (Mean=4.48; SD=0.827), Engaging a collaborative way of solving problem (Mean=4.36; SD=0.905), Ensuring health and safety measures are in place (Mean=4.32; SD=0.914), Motivation levels in workplace (Mean=4.14; SD=0.782), Resolving differences and conflict between disputing parties through negotiation (Mean=3.42; SD=0.978) and Modifying organization structure (Mean=3.08; SD=0.966). This indicates that majority of the respondent agrees to the above as relevant conflict management techniques in the Nigeria Construction Industry.

Table 3: Effect of Conflict Management on Productivity of Labour in the Nigerian Construction Industry

Effect Of Conflict Management On Productivity Of Labour In The Nigerian Construction Industry	No	Sum	Mean	SD	Rank
Quality work delivered	66	290	4.40	0.762	1 st
Reduction in labour idle time and wastage	66	278	4.21	0.755	2 nd
Increase number of completed task or project	66	277	4.20	0.713	3 rd
Overall project success rate	66	271	4.11	0.747	4 th
Reduce health and safety risk, hazard or accident	66	267	4.05	0.711	5 th
Increase labour moral	66	265	4.02	0.690	6 th
Efficiency in materials utilization	66	263	3.98	0.794	7 th
Efficient utilization of plant and equipment	66	255	3.86	0.821	8 th
Achieving cost effectiveness in task completion and overall project	66	241	3.65	0.774	9 th
Reduction in workers absenteeism	66	215	3.26	0.810	10 th

Source: Field Survey, 2024

Table 3 examine the effect of conflict management on productivity of labour in the Nigeria construction industry. Ten variables were identified from literature reviews with mean scores ranging from 3.26 to 4.40 and they ranges from Quality work delivered which ranked the highest to Reduction in workers absenteeism which ranked the lowest. A 5 point Likert scale was employed for this analysis with a mean score threshold of 3.0. The analysis indicated that all ten of the variables have mean scores above the threshold of 3.0 which are: Quality work delivered (Mean=4.40; SD=0.762), Reduction in labour idle time and wastage (Mean=4.21; SD=0.755), Increase number of completed task or project (Mean=4.20; SD=0.713), Overall project success rate (Mean=4.11; SD=0.747), Reduce health and safety risk, hazard or accident (Mean=4.05; SD=0.711), Increase labour moral (Mean=4.02; SD=0.690), Efficiency in materials utilization (Mean=3.98; SD=0.794), Efficient utilization of plant and equipment (Mean=3.86; SD=0.821), Achieving cost effectiveness in task completion and overall project (Mean=3.65; SD=0.774) and Reduction in workers absenteeism (Mean=3.26; SD=0.810). This indicates that majority of the respondent agrees to the above as the effect of conflict management on productivity of labour in the Nigeria Construction Industry.

4. Conclusion

Based on the findings, the following conclusions were arrived at. The Nigerian Construction is prone to some levels of conflict due to the large number of workforce involved. The commonly causes of conflicts are Poor communication among workers and stakeholders, Interest of Different Stakeholders, Payment Disputes, Contractual Dispute, Dispute over Project

Management Methodology, Excessive Design Changes and Schedule Delays. The findings also indicated that Creating effective communication among stakeholders and workers, Ensuring clarity of roles and responsibilities, Ensuring clarity in contract terms and conditions, Engaging effective project management techniques and engaging a collaborative way of solving problem are some of the relevant conflict management techniques in the Nigerian Construction Industry. The findings also agrees that productivity is improved when conflict management is employed in the Nigeria Construction Industry through Quality work being delivered, Reduction in labour idle time and wastage, Increased number of completed task or project, Overall project success rate, Reduced health and safety risk, hazard or accident, Increase labour moral, Efficiency in materials utilization, Efficient utilization of plant and equipment, Achieving cost effectiveness in task completion and overall project and Reduction in workers absenteeism. In line with the findings of this study, stakeholders in construction industries should engage from time to time effective communication by fostering open lines of communication which will enable workers can share valuable information, provide feedback, and resolve issues promptly. Project managers and stake holders in the construction industry should ensure clarity of roles and responsibilities. When workers are aware of their assigned tasks and responsibilities, they can plan and execute their work more efficiently.

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