

CHALLENGES OF CONFLICT IN CONSTRUCTION INDUSTRIES IN MINNA METROPOLIS

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Abstract

The study is designed to investigate the challenges pose by conflict in construction industries in Minna Metropolis. Two research questions and two hypotheses were formulated and used to guide the study. Descriptive survey research design was adopted for the study. The study was conducted in construction industries in Minna Metropolis. The target population for the study was 60 respondents consisting of 21 contractors and 39 site managers from twenty-one functional construction industry in Minna Metropolis. A purposive sampling technique was used to select the respondents in the functional construction industry in Minna Metropolis as of the time of the Study. The instrument used for data collection was structured questionnaire developed by the researcher and validated by three experts in Building Technology Option from the Department of Industrial and Technology Education, Federal University of Technology, Minna. The reliability coefficient of the instrument was determined using Cronbach Alpha which obtained to be 0.75. Mean and standard deviation were used to answer the research questions and t-test was used to test the hypotheses at 0.05 level of significance. The findings of this study it was revealed increase in the cost of projects, delays and abandonment of project among others are management challenges pose by conflicts in the construction industries in Minna Metropolis, while under-utilization of man-power, loss of building materials and equipment among others are the workers productivity challenges pose by conflicts in the construction industries in Minna Metropolis. Based on the findings it was recommended that construction industries should ensure adequate management planning in other to tackle some of the foreseen challenges of conflict promptly towards continue working in cordial relationship among workers in spite dispute on the cause of executing site work and stakeholders in construction industry should device a procedures and approach by meeting with workers regularly in other to sensitize them on the need to leave in harmony for reducing the rate of conflict and improving labour productivity in construction industry.

Introduction

Construction industry is an economy sector engaged in preparation of land, building construction, building maintenance, repair, and other activities related to real properties. Edwin and Henry (2005) describe construction sector as a vital part of any economy because of its size and the potential role it can play in the developmental efforts of building economy. Construction is often used as an indicator of socio-economic development of a nation and therefore it is indispensable in the process of development. The nature of the construction industry in Nigeria is such that there is an inherent conflict among the major construction project participants, that is, owners, design professionals and contractors. Given the inevitability of professional disputes and conflicts indigenous to the construction process, one might be inclined to ask the questions as to whether there is any hope for the industry in attempting to reduce the severity and extent of disputes and conflicts.

Conflict according to Jaffar, Abdul Tharim and Shuib (2011) is a doubt or questioning, opposition, incompatible behaviour, controversy or antagonistic interaction. Construction projects nowadays have become more complex full of seemingly no ends to it in the construction projects. Often times, the construction project brings together individuals or organizations that are separate and desperate to form what has been termed a temporary project coalition (Murray, Langford, Hardcastle, and Tookey 1999). Conflict in construction industry can be defined as a series of disagreement that involve various parties in the construction industry which usually end up in a positive result if properly managed and conversely negative if not properly managed to the satisfaction of stakeholders and often hinder the successful completion of the project Verma (1998). Dada (2013) concluded that the harshness, pressures and toughness of the construction industry amount to conflicts and disputes. Misconduct by professionals in

the construction industry has not affected only the public confidence and respect for the pride of professional competencies. Professional bodies are aware that there had been unwarranted concern on the state of professionalism in conflicts management in the construction (Olatunji, 2007). Therefore, management planning towards reducing conflicts must be given optimum priority.

Management planning in construction industries must be must analyze the source intensity, focus and how to deal with conflict which involved developing a frame work within to view conflict objectively. Although, conflict is one of the things most of us dislike intensely, it is inevitable. Most time when we try to avoid conflict, it will nevertheless seek us out. Some people wrongly hope that conflict will go away if it is ignored. In fact, conflict ignored is more likely to get worse. The best way to reduce conflict is to confront it. Resolving the conflict due to dynamics and sometimes nature of projects, a substantial amount of management time is dedicated to resolving conflicts. In some cases, disagreement can be handled by straight forward decisions. All project participants involved in a conflict must work together to achieve a win-win situation for everyone (Anstey, 1991). Effective management of conflict saves construction industry from major crisis that escalate into violence, by providing accurate information that may be necessary at a time to the public domain, the warring parties soon become well informed and so further tensions are doused, misconception, misperception and perceived motions, which are driven by rumors, are better monitored and if possible reduced to minimum. Hence improve workers' productivity.

Low productivity as a result of conflict is a loss to construction industries management as observed by Dokubo, *et al.* (2015) who described low productivity as a situation where the labour force controls and determines the pace of work in the construction industry. Low output or low productivity on the part of workers, which will reduce their maximum efficiency. Conflicts in the construction industry will inevitably create a situation that may inhibit the effectiveness and efficiency of the labour force. Most people can recount an uncomfortable group experience when negative interaction of another person is used against them, Such experiences can mean that "avoidance is more comfortable than conflict" Unfortunately, both engaging in conflict and avoiding it can put a strain on professional relationships and induce stressful experiences for the individuals involved (John and Belbin as cited in Christopher, 2003). One of the major factors threatening construction projects is conflict between projects participants (Gardiner and Simmons, (1992}, Fenne *et al.*, (1997) and Edwin and Henry (2005)). Managing a project without any form of misunderstanding, ill-feeling and crisis is almost impossible because misunderstanding is natural to human being in every sphere of life. Hence the need to determine the challenges of conflicts in the construction industries in Minna Metropolis.

Statement of the Research Problem

Construction industry is intricate, complex and involves various parties with its life cycle. According to Shin (2000), management and workers conflict becomes common in construction industry because it had involved a lot of complex and lengthy process in designing and building. Conflicts seem to be a never ending story within the construction industry and their effects are manifested in several forms, such as, delay in project delivery, increased project cost, reduced productivity, loss of profit, or damaged professional or business relationship (Love, Davis, London & Jasper, 2008). The complex, relational, and lengthy process of designing and construction of buildings make the construction industry flowed with conflicts are virtually ensured. Different countries have continued to experience conflicts in their construction industry Mgbekem, (2004). . This has resulted into effects such as loss of productivity, abandonment of work and increase in cost. Minna Metropolis is one of the State capital in Nigeria with many uncompleted building projects which probably is a result of these conflicts. This conflict may affect the performance of stakeholders such as building owners, architect and consultant and contractors as a cause for abandonment of building project. Hence the need to investigate the challenges of conflicts in construction industry in the Minna Metropolis

Purpose of the Study

1. The management impediments cause by conflict in the construction industries in Minna Metropolis
2. The workers productivity hindrances cause by conflict in the construction industries in Minna Metropolis

Research Question

1. What are the management impediments cause by conflict in the construction industries in Minna Metropolis?
2. What are the workers productivity hindrances cause by conflict in the construction industries in Minna Metropolis?

Hypotheses

- Ho₁:** There is no significant difference between the mean responses of contractors and site managers on the workers productivity hindrances cause by conflict in the construction industries in Minna Metropolis.
- Ho₂:** There is no significant difference between the mean responses of contractors and site managers on the workers productivity hindrances cause by conflict in the construction industries in Minna Metropolis.

Methodology

The research was carried out using descriptive survey research design. The study was conducted in Minna Metropolis. The population for the study was 60 subjects consisting of 21 Contractors and 39 site managers in the functional construction industries. The entire population was used for no sampling was conducted as the population is manageable. A 27 items questionnaire instrument was used to solicit information from the respondent. The instrument was validated by three experts in the Building Technology option from the Department of Industrial and Technology Education, Federal University of Technology, Minna. The questionnaire items were structured using five point rating scale with response options of: Strongly Agreed (SA) - 5 points, Agreed (A) - 4 points, Disagreed (D) - 3 points, Strongly Disagreed (SD) - 2 points and Undecided - 1 point for the research questions. The reliability coefficient of the instrument was found to be 0.75 using the Cronbach Alpha statistic. The researcher administered the questionnaire with the help of 2 research assistants who were briefed on how to administer and retrieve the instrument for data collection. The returned of the instrument was 98%. Data collected for this study was used to answer research questions using mean, standard deviations and to test the hypotheses t-test statistics at 0.05 level of significance. Real Upper and lower limit of numbers was used in order to determine the level of agreement or disagreement of the respondents to the items. To determine acceptance level, the researcher considers the real lower and upper limit of numbers on the five point rating scale and the decision of the hypotheses is based on comparing the significance value, that where the t-cal is less than 0.05, the hypothesis is accepted and where the t-cal value is equal or greater than 0.05, the hypothesis is rejected.

Results

Research Question 1

What are the management impediments cause by conflict in the construction industries in Minna Metropolis?

Table 1: Mean Response of Contractors and Site Managers on the Management Impediments Cause by Conflict in the Construction Industries in Minna Metropolis

		N ₁ = 21, N ₂ = 38			
S/N	ITEMS	\bar{x}_1	\bar{x}_2	\bar{x}_T	Remarks
1	Increase cost of project	3.43	3.07	3.25	Agreed
2	Abandonment of project leading to loss of valuable time and money	3.23	3.10	3.17	Agreed
3	Delays in project	3.27	3.00	3.14	Agreed
4	Mistrust and hatred among stakeholders bringing about damage in continuing business relationship.	3.23	3.03	3.13	Agreed
5	Reduction in profits of the affected firms due to high overhead cost of the project	3.13	2.80	2.97	Agreed
6	Damage of emotional and psychological wellbeing	2.60	2.53	2.57	Agreed
7	Tying down of client capital due to non-completion of the project	3.47	3.03	3.25	Agreed
8	Loss of live, materials and equipment which may be occasioned by uncontrolled mob actions during the struggling situation	3.07	2.70	2.89	Agreed

9	Difficulties in improvement of quality team -decision making	2.53	2.43	2.48	Disagreed
10	Loss of mutual respect and cooperation	2.60	2.50	2.55	Agreed
11	Unexpected huge debts due to labour delay	3.27	2.93	3.11	Agreed
12	Poor performance in the site	2.47	2.40	2.44	Disagreed
13	It lead to unnecessary litigations	3.33	3.13	3.23	Agreed
14	Loss of interest by the stakeholder	3.23	2.97	3.10	Agreed

Key
 N_1 = Number of contractors, \bar{x}_1 = Mean score of contractors, N_2 = Number of site managers, \bar{x}_2 = Mean scores site managers, \bar{x}_T = Average mean score of contractors and site managers

The result presented in table 2 above revealed that the respondents agreed with the item 1,2,3,4,5,6,7,8,10,11,13,14 and 15 in the table with mean range from 2.55 – 3.25 while disagreed with item 9 and 12 in the table with mean range from 2.44 – 2.48. This indicates that those items respondents agreed on are the effect of construction conflict on the management of construction industry.

Research Question 2

What are the workers productivity hindrances cause by conflict in the construction industries in Minna Metropolis?

Table 2: Mean Response of Contractors and Site Managers on the Workers Productivity Hindrances Cause by Conflict in the Construction Industries in Minna Metropolis.

S/N	ITEMS	\bar{x}_1	\bar{x}_2	\bar{x}_T	Remarks
1	Under -utilization of man -power	2.87	2.70	2.79	Agreed
2	Mistrust and hatred among stakeholders bringing about damage in continuing business relationship.	3.17	2.90	3.04	Agreed
3	Reduction / low in worker productivity	2.87	2.67	2.77	Agreed
4	Lowered morale, emotional damaged and psychological wellbe ing	3.40	3.10	3.25	Agreed
5	Lack of direction on work activity	3.40	3.10	3.25	Agreed
6	Loss of Interest by the Stakeholder	3.30	3.03	3.17	Agreed
7	Dissatisfaction and stress on the workers	3.40	3.10	3.25	Agreed
8	Time wasting on major tasks	3.37	2.97	3.17	Agreed
9	Loss of employment by employees as a result of conflict	3.13	2.97	3.05	Agreed
10	Backstabbing and gossip as a result of erosion of personal relationship	3.37	3.20	3.29	Agreed
11	Poor decision making	3.27	3.03	3.15	Agreed
12	Unexpected huge debts	3.40	3.13	3.27	Agreed
13	Uncontrollable litigations cases	3.03	2.77	2.90	Agreed

The result presented in table 3 above revealed that the respondents agreed with the all items in the table with mean range from 2.77 – 3.29. This indicates those items respondents agreed on are the effects of construction conflict on the workers of construction industry.

Hypothesis 1

There is no significant difference between the means response of contractors and site managers on the management impediments cause by conflict in the construction industries in Minna Metropolis

Table 3: t-test Analysis of the Contractors and Site Managers on the Management Impediments Cause by Conflict in the Construction Industries in Minna Metropolis

S/N	Items	SD ₁	SD ₂	t-cal	Remarks
1	Increase cost of project	0.64	0.67	1.38	NS
2	Abandonment of project leading to loss of valuable time and money	0.74	0.69	1.08	NS
3	Delays in project	0.74	0.67	1.09	NS
4	Mistrust and hatred among stakeholders bringing about damage in continuing business relationship.	0.67	0.61	0.40	NS
5	Reduction in profits of the affected firms due to high overhead cost of the project	0.77	0.72	0.35	NS

6	Damage of emotional and psychological wellbeing	0.70	0.69	0.74	NS
7	Tying down of client capital due to non-completion of the project	0.74	0.72	0.89	NS
8	Loss of live, materials and equipment which may be occasioned by uncontrolled mob actions during the struggling situation	0.67	0.67	0.78	NS
9	Difficulties in improvement of quality team-decision Making	0.43	0.59	1.76	S
10	Loss of mutual respect and cooperation	0.56	0.56	0.46	NS
11	Unexpected huge debts due to labour delay	0.35	0.18	1.40	NS
12	Poor performance in the site	0.50	0.45	1.35	NS
13	It lead to unnecessary litigations	0.64	0.61	1.03	NS
14	Loss of interest by the stakeholder	0.71	0.57	1.00	NS

Key

T-value = 1.645.
 N_1 = Number of contractors, N_2 = Number of site managers, SD_1 = Standard deviation of contractors, SD_2 = Standard deviation of site managers, S = Significant, NS = Not significant, t-cal = t-test value of contractors and site managers

From the table above it was observed that items 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20 and 21 have their $t\text{-cal} <_{0.05} = 1.645$ hence fail to reject their null hypothesis and therefore there is no significant difference between the mean response of contractors and site manager with regards to these items on the management impediments cause by conflict in the construction industries in Minna Metropolis. While items 9 and 15 have their $t\text{-cal} >_{0.05} = 1.645$ therefore the null hypothesis was rejected and conclude that there is significant difference between the mean response of contractors and site manager with regards to items 9 and 15 on the management impediments cause by conflict in the construction industries in Minna Metropolis.

Hypothesis 2

There is no significant difference between the means response of contractors and site manager on the workers productivity hindrances cause by conflict in the construction industries in Minna Metropolis

Table 4: T-test Analysis of the Contractors and Site Managers on the Workers Productivity Hindrances Cause by Conflict in the Construction Industries in Minna Metropolis

S/N	ITEMS	SD_1	SD_2	t-cal	Remarks
1	Under-utilization of man -power	0.68	0.64	2.15	S
2	Mistrust and hatred among stakeholders bringing about damage in continuing business relationship.	0.73	0.66	0.74	NS
3	Reduction / low in worker productivity	0.74	0.64	1.49	NS
4	Lowered morale, emotional damaged & psychological wellbeing	0.73	0.67	1.11	NS
5	Lack of direction on work activity	0.78	0.66	1.79	S
6	Loss of Interest by the Stakeholder	0.97	0.94	0.27	NS
7	Dissatisfaction and stress on the workers	0.63	0.72	2.49	S
8	Time wasting on major tasks	0.91	0.84	1.63	NS
9	Loss of employment by employees as a result of redundancy	0.78	0.86	0.47	NS
10	Backstabbing and gossip as a result of erosion of personal relationship	0.93	0.820	0.44	NS
11	Poor decision making	0.74	0.78	1.69	S
12	Unexpected huge debts	1.07	1.04	0.24	NS
13	Uncontrollable litigations cases	0.76	0.68	1.07	NS

Key: N_1 = Number of contractors, N_2 = Number of site managers, SD_1 = Standard deviation of contractors, SD_2 = Standard deviation of site managers, S = Significant, NS = Not significant, t-cal = t-test value of contractors and site managers

The table above showed that items 2, 3, 5, 6, 8, 9, 10, 12 and 13 have their $t\text{-cal} <_{0.05} = 1.645$ hence fail to reject the null hypothesis and conclude there is no significant difference between the mean response of contractors and site manager with regards to these items on workers' productivity hindrances cause by conflict in the construction industries in Minna Metropolis. While items 1, 5, 7 and 11 produced t-

$t_{cal} > t_{0.05} = 1.645$ therefore the null hypothesis was rejected, hence there is significant difference between the mean response of contractors and site manager with regards to these items on the workers' productivity hindrances cause by conflict in the construction industries in Minna Metropolis.

Discussion of Findings

The findings in Table 1 on the research question one revealed that abandonment of project leads to loss of valuable time and money, reduction in profit, delay in project mistrust and hatred among the stakeholders bringing about overhead cost of the project and damaged emotional and psychological well-being are the management impediments cause by conflict in the construction industries in Minna Metropolis which is in line with the opinion of Narh et al (2015) who stated that construction conflict may resulted into; Abandonment of projects leading to loss of valuable time and money, clients spending more than expected i.e. increasing project cost, completion time not adhered to and thus leading to project delays as well as loss of profits, degeneration into unpleasant situations such as claims and lawsuits, stress in dealing with associated problems, high conflict can lead to a feeling of frustration that manifests as aggressive behaviour, mistrust and hatred among stakeholders, non-completion of projects according to scheduled period and at times affects the image of the construction company negatively.

Also in line with the opinion of Kassab, Hegazy and Hipel, (2010) stated in their work that conflict remain a challenge in the construction industry with the potential to leading to project failures, litigation and outright project abandonment. Sometimes, when there are conflicts among the workers or project team on site it could result in frustration that can manifest a tripartite effects of communication break, unnecessary annoyance and aggressive behavior. Conflict also affect the accomplishment of organizational goals due to their attending stress, hostility and other undesirable factors when poorly managed. Moreover, Narh, Eric, Oduro-Apeatu and Narh (2015) in their work it shows that construction conflict may resulted into; Abandonment of projects leading to loss of valuable time and money, Clients spending more than expected i.e. increasing project cost, completion time not adhered to and thus leading to project delays as well as loss of profits, degeneration into unpleasant situations such as claims and lawsuits, stress in dealing with associated problems, high conflict can lead to a feeling of frustration that manifests as aggressive behaviour, mistrust and hatred among stakeholders, non-completion of projects according to scheduled period and at times affects the image of the construction company negatively.

The findings in the Table 2 on the research question two revealed that under-utilization of man-power, reduction / low in worker productivity, mistrust and hatred among stakeholders bringing about damage in continuing business relationship, lack of direction on work activity among others are workers' productivity hindrances cause by conflict in the construction industries which agrees with the findings of Onwusonye (2002) who opined that a that a conflict in building contract may lead to project abandonment, cost overrun and litigation. Unexpected huge debts is another effects of construction conflict on the workers of construction industry which is in line the position of Dokubo *et al.* (2015) which revealed unexpected huge debts on the part of the contractors due to non-payment of the contractor sum of the projects are other negative effects of conflict in a construction industry and may also lead to bankruptcy on the part of either the clients or the contractor. Low worker productivity is a serious issue that affect of construction industry as a result of conflicts. Dokubo maintained that low productive as a result conflict is a situation where the labour force controls and determine the pace of work in the construction industry. In order to draw the attention of their employer, the workers may choose to reduce production level.

Conclusion

Based on the findings it was concluded that conflicts in construction industries have so many challenges to both management and workers' productivity in Minna Metropolis. The management impediment as a result of conflict includes both not limited to abandonment of project leads to loss of valuable time and money, reduction in profit, delay in project mistrust and hatred among the stakeholders bringing about overhead cost of the project and damaged emotional and psychological well-being hence the implication is that contractor lost value time and profit. It was also concluded that conflict in construction industries lead to workers' productivity hindrances which include abandonment of project, delay in project, under-utilization of man-power, unexpected huge debts, unnecessary or uncontrollable litigations, low in worker productivity, lack of direction on work activities, loss of employment as a result of dispute, difficult decision making, time wasting among others

Recommendations

Based on the findings the following recommendations were made:

1. The construction industries should ensure adequate management planning in other to tackle some of the foreseen expected challenges of conflict promptly to give ways for continue working in cordial relationship in spite dispute on the cause of executing site work.
2. Stakeholders in construction industry should device a procedures and approach by meeting with workers regularly in other to sensitize them on the need to leave in harmony for reducing the rate of conflict and improving labour productivity in construction industry.
3. Stakeholders should ensured adequate contract documentation devoid of errors and omission as well also ensure clear and concise specification to avoid conflict in construction industry
4. Workers in construction industry should ensure effective teamwork / teambuilding to reduce the chance of conflict in construction industry.
5. Stakeholders in construction industry should establish realistic contract duration and choose appropriate project delivery method to minimized construction conflict in construction industry.

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