

An Exploratory Study of Professional Conflicts and Disputes within the Construction Industry

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Abstract: *The construction sector is a vital part of any economy because of its size and the potential role it can play in the developmental efforts of the 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 Ghana is such that there is an inherent conflict between the major stakeholders. This study is aimed at determining the nature and causes of professional conflicts in the construction industry, their possible effects on the industry and developing ways of reducing or eradicating them.

The study begins with a look into previous works on the topic by various authors. Questionnaires were also given out to various stakeholders in the construction industry basically consultants and contractors with the aim of identifying construction disputes and conflicts and ways of preventing them in Ghana. Data gathered were quantitatively and qualitatively analyzed. The survey came out that conflicts exist at project sites and that among the causes included failure of clients to honour payments, unclear and incomplete description of items in the Bills of quantities and delays in time for project completion among others.

In order to reduce conflicts at project sites, the study makes some recommendations which include the employment of qualified personnel and adequate funding for projects.

The study concludes that conflicts do really exist and their resolution is associated with high financial costs. Special attention should therefore be paid to every detail of the construction process.

Keywords: *Construction industry, Professional conflicts, Disputes*

1. BACKGROUND

The construction sector is a vital part of any economy because of its size and the potential role it can play in the developmental efforts of the 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 Ghana is such that there is an inherent conflict between the major construction project participants, 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 conflicts and disputes.

N. Jaffar et. al. (2011) gave definition of conflict as a doubt or questioning, opposition, incompatible behavior, controversy or antagonistic interaction. Construction projects nowadays have become more complex and conflict seems to be synonymous with 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 *et al.* 1999). A research conducted by Kassab *et al.* (2010) showed that conflicts remain a challenge in the construction industry with the potential leading to project failures. Dada, M.O (2013) referred to other works to conclude 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 the construction industry in government's special discourses (Olatunji, 2007).

A study by Kumarawamy and Yogeswaran (2003) provided a good reference of the common sources of construction conflicts that are largely related to contractual matters including variation, extension of time, payment, quality of technical specification, availability of information, unrealistic client expectations and determinations.

Each project is unique and the participants often come together only for the purpose of that particular project. This brings together a group of specialists with different views, backgrounds, cultures and experiences. Dada, M. O. (2013) suggests in such a situation where you are bringing together such an assortment of individuals, that conflict will be inevitable. Whitfield (1994) cited in Awakul(2002) expressed his view that, in construction, conflict should be seen as something that should be reduced and eliminated if possible. According to Awakul (2002) this has been the main topic many Governments base papers on how to improve productivity of the construction industry by controlling professional conflicts and disputes during constructional works. This study is written to cover ways of preventing professional conflicts and disputes during construction project.

1.1. Statement of Problem

One of the main goals of the construction industry in Ghana is to contribute to national socio-economic development by providing the buildings which are used in the production of all goods and services in the economy. Moreover, the physical infrastructure, built through construction activity, is the nation's economic backbone as it forms the arteries for the facilitation of productive activity by enabling goods and services to be distributed within and outside the country. The items built also offer social and welfare benefits. For example, housing fulfills one of the most basic needs of people by providing shelter from the physical elements. Built items also offer people the opportunity to improve their living standards. The quality of the design and construction can affect productive activities and provision of services undertaken. Thus the construction industry can influence the competitiveness of enterprises within the economy. However, in an attempt to achieve its goals, the industry has suffered a setback from the rise of professional conflicts and disputes during construction projects. According to Verma (1998) Conflict is defined as a serious disagreement between two people or a number of people, which usually end up in a positive result if properly managed and conversely negative if not properly managed to the satisfaction of stakeholders. N Jaffar *et al* (2011) highlighted that conflict is doubt or questioning, opposition, incompatible behavior, controversy or antagonistic interaction and disputes is one of the range of events considered as conflict. With respect to the construction industry, Ng *et al* (2007) asserted that project conflicts can be described as a spiral between various parties in a design and construction project. The causes of conflict among the project team members as posited by Olalekan (2013) are difference in belief, orientation, demands, prospects, views, imagination and ego, which is not far from what most researchers have mentioned in respect of other areas of life. Olalekan (2013) looked at conflict as the internal discord that exists between project team, which usually arises from misaligned ambitions, communication breakdown not having the right players in key positions as the most prevalent causes of conflict in the construction industry.

Giving the impressions of problems includes increasing project cost, project delays, reducing productivity, loss of profit or damage in business relationships.

In response to this problem, this study proposes to investigate the nature of professional conflict and dispute and ways of eradicating it for effective and successful completion of construction projects.

1.2. Objectives

This study assessed the nature of professional conflicts and disputes in the Ghanaian Construction Industry, and this was achieved through the following objectives:

- To confirm the nature of conflict management in the construction industry
- To discover the primary causes of conflict in the construction industry
- To affirm the tactics for minimizing conflict in the Ghanaian Construction Industry

1.3. Research Questions

The following questions were considered in the light of this research.

- Do stakeholders in the construction industry agree on the existence of conflict and disputes within the industry?
- What are the possible causes of such conflicts and disputes?
- What are their perception about the possible effects of such conflicts and disputes on the industry if really they do exist?
- What are the attempts being made to eradicate these?

In the light of the above posed questions, the main aim of this research was to determine the nature and causes of conflicts in the construction industry, their possible effects on the industry and develop ways of reducing or eradicating them.

1.4. Scope

The scope of this study was to carry out a comprehensive research into the nature of professional conflicts and disputes within the construction industry. Since the whole of the industry in Ghana could not be studied, the study was limited to construction companies and professionals in the industry within the Kumasi Metropolis

1.5. Limitation

The study was done not without problems. The major problem which arose during the study was getting the expected number of respondents. Most of them initially refused to cooperate under the pretext that, they did not have enough time. In most cases however, they cooperated after some patient explanation and discussion.

Most of the professionals did not have time as they were always in the field and because of the limited time available, it took a lot of the researcher's time to make follow-ups of the completed questionnaire and this was also costly.

2. LITERATURE REVIEW

2.1. Overview of the Construction Industry in Ghana

The construction industry is one of the most important components in the economic development of a developing country, being a major contributor to the national economy of many such countries. This industry is largely responsible for the physical provision of housing and infrastructure and, as such, can be the backbone of prosperous economies, providing social development and employment.

Before and after Ghana's independence in 1957, the country's construction industry was in the hands of foreign companies such as the Taylor Woodrow Company, the A. Lang Company (Assibey Mensah, 2009). In 1961, Ghana established the State Construction Corporation (SCC) as a "public sector construction agency" and entrusted it with roads construction.

In 1981, the Provisional National Defence Council (PNDC) government took over power, by that time, the country was facing economic recession and the country lacked fundamental infrastructure like roads. The government initiated an Economic Recovery Programme (ERP) under the auspices of the International Monetary Fund (IMF). Following this, the World Bank's International Development Agency (IDA) and the Ghana government worked together in Road Rehabilitation and Maintenance Project (RRMP) to provide better roads throughout the country. However, SCC was not administered well and the government allowed foreign construction companies from Europe and Asia to help. In 1998-1999, SCC was 'divested' and it soon became clear that Ghanaian construction companies were unable to compete with "large, well-equipped, and well-managed foreign construction businesses".

Private and foreign construction companies emerged in Ghana in the period between 2000 and 2008 (Gyadu-Asiedu, 2009). Currently the bigger construction projects in Ghana are predominantly in the hands of foreign construction companies throughout the country. The degree of formality in construction activities at the time when the industry was mostly operated by the Ghana government is not well known in the literature. But what is clear is that the degree of formality was much higher.

In Ghana, there are construction activities which are entirely informal and their activities are not approved by the state. About 80 percent of houses in the country are probably built informally (Arku, 2009). According to Arku, the middle and upper class groups use the formal public and private construction sectors respectively whereas the low income group utilizes the informal economy. According to him, there are constructions activities carried out by members of families themselves where mud is used to construct houses and in most cases roofed with thatch. These are purely informal in Ghana and those engaged in this type of construction are called Self builder.

The construction industry in Ghana was developed along lines similar to the pattern in Britain when bricklayers acted as master-builders in an organization. According to Ahadzie (2010) the early beginning of the formal construction in Ghana was a reflection of Ghana's historical link with British. Prior to that, construction in the country was limited mainly to the provision of village shelters made of mud and wood and it was a non-commercial family vocation. Construction form was very simple single story shelter either rectangular or circular in shape with the rectangular ones limited to the south and the circular ones to the north. In both cases designs were done by family heads, construction by family members and local materials were used. The nature of the construction industry in Ghana is such that there is an inherent conflict between the major construction project participants, owners, design professionals and contractors.

The construction industry in Ghana, as in other parts of the world, is huge and a crucial segment in economic development. No matter what one does, there is construction, as it cuts across all sectors. Being among the top drivers of the Ghanaian economy, its importance cannot be over emphasized.

There is no doubt that the Ghanaian Construction industry (GCI) (as in many other construction economies) holds the key to the development of the nation. Construction contributes to the national socio-economic development by providing significant employment opportunities at non- skilled and skilled levels. Beyond that, the industry provides the infrastructure and facilities required for other sectors of the economy to flourish such as; schools for education and training, factories and shops for commercial and business activities, housing for basic human needs, hospitals for health care, buildings for the national communications network and so on. It is the generation of these physical assets that many modern economies both developed and developing have successfully exploited towards achieving and sustaining the requisite socio-economic progress.

In addition, the construction industry plays a major role in the economy by contributing significantly to the gross domestic product, and interacts strongly with other sectors of the economy. The construction industry in Ghana accounted for 10% of the Ghana's GDP Bank of Ghana (2009) and remains as one of the major routes for generating or creating new wealth and value to meet other economic and social goals in Ghana. However, the industry is fraught with such problems as low productivity; lengthy pre arrears to contractors and consultants and even bankruptcy of some construction firms (World Bank, 2003; Sackey, 2008). The accumulated interest on late payments coupled with the volatile market make matters even worse, at least in terms of funding World Bank (2003) contract award procedures; land disputes; corruption extensive delays resulting in time and cost overruns and unsatisfactory quality of work. The procedures for honoring contractors' and suppliers' claims for payment is frustratingly long (Fugar *et al*, 2009).

Thus, a healthy construction industry is considered as both a result of, and prerequisite for, economic development. Adding to the importance of the construction industry is its pivotal role in infrastructure development. Infrastructure which is the base of both economic and social development can become instead a bottleneck to economic expansion in developing countries and fiscal constraints have led to insecurity of funding for construction projects, payment that the construction and housing industry plays a significant role in the national developmental agenda is an unarguable fact. What however appears to be debatable is whether the industry has the much expected driving force required to assert its vital contribution towards accelerated national growth in terms of infrastructural development. The challenges facing the industry especially relating to private sector development, growth and sustain-ability of professionalism are still enormous.

2.2. Definition of Conflict and Dispute

Review of the literatures revealed that "conflict", "claim" and "dispute" are synonymously used quite often. They are sometimes used separately or in pairs and frequently without clear indication of the

precise meaning of each. It is often not clear as to whether a claim or conflict or a dispute is being referred to by a researcher. In order to come out clearly the sources of construction conflicts, these three terms need to be properly clarified. Fenn *et al* (1997) affirm that, some authors do not differentiate conflicts from disputes. It is for this reason that, the term conflict can be defined in many ways.

The Free dictionary (8th Edition), defines conflict as a state of opposition, disagreement, or incompatibility between persons or a group of persons over ideas, interests, beliefs, feelings, behaviour or goals. Stanlous (2011), defines conflict as the process that begins when one party perceives that the other party has frustrated or is about to frustrate some concern of his. Brown and Marriot (1993) have a similar notion about conflicts. They contend that, conflict exists in the mind of an individual when he or she perceives a situation of incompatibility among objectives. They, on the other hand, define dispute as a conflict in which both parties are conscious of. It involves disagreement over issues capable of resolution by negotiation, mediation or third party adjudication.

Fenn *et al* (1997) advocates that, conflicts and disputes are two distinct notions. They underline that conflicts exist wherever there is incompatibility of interest, and therefore is pandemic. They argue that, conflicts can be managed, possibly to the point of preventing them from leading to disputes. They further contend that, conflicts can lead to disputes when the mechanisms for avoiding them are exhausted or inadequate and at that point in time, a conflict matures to a dispute for which techniques for resolving the disputes are required.

Nonetheless, Stanlous (2011) clearly distinguishes the terms; conflict, dispute, claim and lawsuit. Referring to the adversarial nature of construction industry they assert that, “project managers should focus on avoiding and preventing conflicts from escalating into claims and resolving claims to prevent them from becoming disputes and lawsuits”. In that context, Pena-Mora *et al* in Stanlous (2011) defined conflict as any action or circumstance resulting from incompatibility or opposing needs. Adopting the definition given by Stanlous (2011) they defined a claim as a request by a construction party to another party for compensation over and above the agreed- upon contract amount for additional work or damages that may have resulted from events that were not included in the initial contract. Further, they defined a dispute as a disagreement that requires a final determination, which is aided by the intervention of a third party. In defining a lawsuit they adopted a definition given by Stanlous (2011), as a legal action where a plaintiff files a complaint against a defendant within the public court system based on the defendant failing to perform a legal duty, resulting in harm to the plaintiff. The above clearly delineate the definitions of the four interrelated terms.

Yale and Hardcastel (2003) define conflict in the context of the spectrum by linking the terms; “claim”, “dispute” and “conflict”. First, they define claim as “an assertion of a right to money, property, or a remedy, and can be made under the contract itself; for breach of the contract, for breach of duty in common law, or on quasi – contractual basis”. They simply define dispute as unresolved claim. Then they define conflict by combining the definitions of claim and disputes with sociological definitions of conflicts given above by Brown and Marriot (1993) and Fenn *et al* (1997).

Lowe *et al.* (1997) suggests that “Conflict exist where there is an incompatibility of interest. When a conflict becomes irreconcilable and the mechanisms for avoiding it are exhausted or inadequate, techniques for resolving the disputes are required”. It is seen to be unavoidable fact of organizational life and can be managed possibly to the extent of preventing a dispute.

Combining these definitions with relevant terminology in standard forms of contract and recognized construction industry practice, it could be said that a conflict occurs at the same point in time as when a notice of claim is given and exist until the claim is resolved. It is, of course, theoretically possible that a claim submitted by the contractor and immediately accepted and agreed to, without amendment, by the Architect/Engineer would not necessarily give rise to conflict. Equally, it could be argued that a conflict comes into existence in the mind of the contractor at the point in time when he becomes aware that the relevant event has occurred and the potential claims situation exists, even though the Architect/Engineer may be unaware of it. Millicent (2009) defines conflict as any divergence of interest, objectives or priorities between individuals, groups or organizations.

The oxford dictionary also defines dispute as a misunderstanding between two parties, either contractual or non-contractual. On the basis of the various perceptions considered by different authors, in this study, conflict is perceived as any act or situation resulting from disagreement,

incompatibility or opposition between project participants within their contractual obligations, whereby such disagreements, incompatibility or opposition have not matured into a dispute requiring intervention of a third party. Further, in this study it is considered that, conflicts in building projects can lead to claim for extra money and or time, and unresolved claims result in disputes. However, it should be noted that, not all conflicts do necessary lead to claims, and as well as not all claims result in disputes.

2.3. Stages of Conflicts

Conflict can be more understood if is considered as a dynamic process comprising a sequence of conflict episodes. Pondy (1967) identified five stages of conflict episodes namely; latent conflict, perceived conflict, felt conflict, manifest conflict, and conflict aftermath. .

2.3.1. Latent conflict

Latent conflict is considered as the first stage of conflict episode. This stage is characterized by conditions or underlying four sources of conflict (Finch *et al.*, 2010). They are:

- Competition for scarce resources. (When the aggregated demands of participants for resources exceed the resources available in the project or the organization).
- Drive for autonomy (When one party either seeks to exercise control over some activity that another party regards as his own province or seeks to insulate himself from such control on which is deemed to exercise).
- Divergence of subunit goals. (When two parties who must cooperate on some joint activity are unable to reach a consensus on cooperation action).
- Role conflict. (This model treats the organization as a collection of role sets, each composed of the focal person receiving incompatible role demands or expectations from the persons in his role set).

2.3.2. Perceived conflict

This is a cognitive state when at least one of the parties to a conflict begins to perceive or become aware of a conflict situation but neither party is upset about it. Nonetheless, Finch *et al* (2010) argue that, conflict may, or may not stem from a latent conflict and latent conflict may be present in a relationship without any of the participants perceiving the conflict. This may happen when there are suppression mechanism and attention focus mechanisms which limit the perception of conflict. According to Finch *et al* (2010) the suppression mechanism mainly applies to conflicts related to personal values and the attention focus mechanisms are related to organizational behaviour values.

2.3.3. Felt conflict

This refers to the conflict stage where a person feels that he is in disagreement with another person but does not become tense or anxious. Here the conflict is there but it is not felt by any of the parties and it may not have any effect on their affection. The felt conflict according to Pondy (1967) is characterized by the personalization of conflict, which sometimes occurs in business- to-business relations. The personalization of conflict can be explained in two folds; first is from the perspective of inconsistent demands of efficient organisation and individual growth which create anxieties within the individual.

2.3.4. Manifest conflict

Manifest conflict refers to a situation when conflict behaviour becomes apparent. Such behaviour can be expressed in form of open aggression, sabotage, apathy, resistance to the rules, etc. However, the issue could be, how can one decide when a certain behaviour or pattern of behaviour is conflictful? One important factor according to Finch *et al* (2010) is that, the behaviour must be interpreted in the context in which it takes place. It is therefore, important to have the knowledge of the organisational requirements and of the expectations and motives of the participants in-order to characterize the behaviour as conflictful.

2.3.5. Conflict aftermath

Each conflict episode is one of a sequence of such episodes that constitute the relationships among organization participants. On one hand if the conflict is genuinely resolved to the satisfaction

of all participants, the basis for a more cooperative relationship may be laid; or the participants, in their drive for a more ordered relationship may focus on latent conflicts not previously perceived and dealt with. On the other hand if the conflict is merely suppressed but not resolved, the latent conditions of conflict may be aggravated and explode in more serious form until they are rectified or until the relationship dissolves.

However, according to Finch *et al* (2010), organizations in nature are not closed systems, the environment in which they are imbedded may become more benevolent and alleviate the conditions of latent conflict, but a more malevolent environment may precipitate new crises.

Latent conflict may exist in the organization due to environmental effect or as a result of conflict aftermath when the conflict is not resolved. The latent conflict if not attended could give rise to perceived conflict stage however, the conflict may not be perceived due to presence of suppression and attention focus mechanisms. The perceived conflict could give rise to felt conflict which would create tension among members in the organization. Both perceived and felt conflict when not attended to would manifest themselves into different forms such as sabotage, aggression, etc. The available conflict resolution mechanisms and strategies should be applied to prevent prolongation of the conflict. When the conflict is resolved the satisfaction of all parties, the aftermath of the conflict is more cooperation and strong relationship, while if the conflict is merely suppressed, the conditions and sources of conflicts will remain and hence the latent conflict will persist, leading to another circle of conflict episodes.

2.4. Types of Conflicts

Conflicts may be considered in three levels namely; intrapersonal conflict; interpersonal conflict and intra-group conflict.

2.4.1. Intrapersonal conflict

This is the conflict that takes place within the individual

2.4.2. Interpersonal conflict

The conflict experienced between individuals in the same group or unit for example coworkers, roommates, unit members and etc. Such conflicts exists whenever people interact or come together to accomplish a common goal or objective.

2.4.3. Intra-group conflict

The conflict between groups in the same organisation, team or command. The interpersonal and intra-group conflicts can further be categorized into three types: the relationship, task and process conflicts (Carmen *et al* 2013).

i. Relationship or emotional conflict is a perception of interpersonal incompatibility and typically includes tension, annoyance, and animosity among group members (Simmons and Peterson, 2000). A number of studies done by researchers such as Gladstein (1984), Wall and Noman (1986), Jehn (1995), Jahnssen *et al*, (1999) cited in Simmons and Peterson (2000), document the negative effects of relationship conflict on group and organisation satisfaction and commitment. Relationship conflict negatively affects group decision quality in three ways. First, it limits information processing ability of the group because the group members spend most of their time and energy focusing on each other rather than on the group problems. Second, it limits group members' cognitive functioning by increasing their stress and anxiety levels and third, it encourages antagonistic or sinister attributions for other group members' behaviour, which can create a self-fulfilling prophecy of mutual hostility and conflict escalation.

ii. Task or cognitive conflict is a perception of disagreements among group members about the content of their decisions and involves differences in viewpoints, ideas, and opinions. According to Jehn (1997) in Simmons and Peterson (2000), task conflict can improve decision – making outcomes and group productivity by increasing decision quality through incorporating devil's advocacy role and constructive criticism. Groups use members' capabilities and prior knowledge better when the conflict is task-focused, rather than when conflict is absent or relationship-focused. In Simmons and Peterson (2000), Jehn (1997) further contended that moderate levels of task conflict are constructive, since they stimulate discussion of ideas that help groups perform better. Groups with an absence of task conflict may miss new ways to enhance their performance, while very high levels of task conflict may interfere with task completion.

According to Simons and Peterson (2000), a number of researchers have found that task conflict can lead to increased satisfaction with the group decision and a desire of members to stay in the group, and also have shown a cross relationship between the two forms of conflict. Researchers have established that efforts to stimulate potentially beneficial task conflicts run a substantial risk of triggering detrimental relationship conflict. Simmon and Peterson suggest two possible explanations; first they contend that, task conflict leads to relationship conflict through a process of misattribution. Group members constantly interpret the behaviour of other group members – they infer intentions, appraise whether the source of the behavior they see is internal or external, and assess the completeness and accuracy of the arguments made by others. When this attribution process points toward personal attachment or hidden agenda, then task conflict triggers relationship conflict.

iii. Process Conflict: Jackson *et al* (2008) in Carmen *et al* (2013) define process conflict as an awareness of controversies about aspects of how task accomplishment will proceed. It pertains to issues of duty and resource allocation such as; who should do what or how much one should get. This may happen when for instance group members disagree about whose responsibility is to carry out and complete a specific duty. Jackson *et al* in their study of process conflict identified three sub-categories of process conflict which are; scheduling and timing; Contribution and workload and Work method and approach to issues.

2.5. Nature and Causes of Professional Conflicts in the Construction Industry in Perspective

Conflicts are a reality on every construction project (Peter Wallenstein, 2012). They may arise on a construction project for a number of reasons. They even arise on projects that have the best intentions. Construction disputes will typically revolve around time and cost overruns, quality of workmanship, payment, contract documentation, construction information and site supervision (Kwakye, 1997) .

Undoubtedly many construction disputes have their origin in the seeds sown by or in, the client's error (Hellard, 1987). This often happens when the client expects something unrealistic to be done such as the build ability of a complex design or the client taken possession of his building within a very short time not taking account unexpected delays and unforeseen setbacks.

Different authors have come up with different perceptions in different conditions about the nature and causes of conflicts. Hall (2002) indicated that, disputes do occur during the design and the construction phases of any project.

Verma, (1998; and Khanaki and Hassanzadeh (2010) were of the view that conflict is unavoidable especially in constructional works emphasizing in project management where project team members are to work together as a team for successful completion of works. However they claimed that it was understandably impossible for all team members with diverse skills, ideologies and difference in background to work together without conflict. They also came out with the evolution of three noticeably different views on conflicts in projects and organizations, which are the human relation views, traditional views and interactionism perspectives.

Verma (1998) attributed the most prevalent causes of conflicts in projects as breakdown in communication, lack of respect, defective listening skills and perception difference, and these can lead to serious communication problem. The following are the leading causes of conflict caused by communication breakdown in projects: Misinterpretation of design drawing, Failure to execute instructions. However, according to Chong (2011), the main cause of conflict between organizations is mistrust, and it is common because of divergent cultures and unrealistic expectation as the second potential cause of conflict.

Al- Sedairy (1994) in his estimation on conflict was of the view that conflict is inevitable in the aspect of project works, nevertheless its main causes are difference in perceptions, priorities and goals rather than difference in level of technical understanding or the management approach adopted.

According to Mohammed *et al* (2008), Nigeria being a multi ethnic grouping is prone to have causes of conflict that is being directly linked to the culture. Conflict Resolution and Project Management claimed that conflict originate mostly from poorly designed project plan process or organization.

Gyulay and Yates (2012) both agreed that, type of procurement method adopted usually lead to conflict in the construction industry, which include cost, delivery time and quality, sharing the activities and responsibilities and risks among stakeholders.

Johns (1979) came out with five primary sources of construction disputes which include existence of errors, defects or omissions in the contract documents, failure of someone to count the cost of an undertaking at the beginning, changed condition, consumer reaction and the people involved.

Williamson (1979) identified three root causes of conflicts namely; behavioural problems which include human interaction, personality, cultures and professional background among project team; contractual problems and technical problems due to ambiguity and low skill.

Diekmann and Girard (1995) identified the effect of different project characteristics, which included people, process and project aspects on the occurrence of contract disputes. The findings concluded that all the three issues played a role in influencing the likelihood of contract disputes, but the people issue held the key to avoiding contract disputes.

Thompson *et.al* (2000) mentioned disputes arising primarily due to lack of communication, distrust, misinterpretations of contracts, uncertainties of role and responsibilities. Hall (2002) also identified causes of construction disputes and conflicts caused by consultants that includes failure to understand its responsibilities under the design team contract, over design and underestimating the costs involved, late information delivery and cumbersome approach to request for information's, design and specification oversights and errors or omissions resulting from uncoordinated civil, structural, architectural, mechanical and electrical designs and incompleteness of drawing and specifications.

Study by Cheung *et al.* (2001) explains dispute in a construction project can be identified from the causes of dispute and the characteristics of the project. They identified six common causes of disputes that include budget overrun, outstanding payment, different percentage of claim submission and certification, number of days behind programmed, liquidated damages and percentage change from original design.

Another study by Kathleen (2003) describes that destructive conflicts develop as a result of limited resources, e.g. not enough time, money, labour, materials or equipment.

In a larger scope of study in Sino-Foreign Joint Venture construction projects, Edwin & Henry, (2005) identified 20 sources of disputes. These are: payment, variation, extension of time, quality of work, unfamiliar with local condition, project scope definition, risk allocation, difference in ways of doing things, technical specification, poor communication, administration/management, unrealistic client expectation, availability of information, adversarial approach in handling disputes, lack of knowledge of local legal system, conflict of laws, jurisdictional problems, unclear contractual terms, lack of team spirit and previous working relationships.

Cheung & Yiu (2007) conducted a study on mediation in resolving disputes came up with valuable variables on the causes of disputes and conflicts. They divided disputes sources in two different category that is construction related and human behavior related. Sources of conflict related to construction factors are acceleration cost, the assessment of liquidated and ascertained damages against main contractor, clients fail to pay for variation claims, late giving of possession from client, clients take over the site and deny access to main contractor, errors substantial changes in bills of quantities, argument on the prolongation costs, architect/engineer dissatisfies the work progress of main contractor, argument on the measurement and valuation of the contracted work, late instructions from the architect and engineer, main contractor fails to proceed in a competent manner, delay interim payment from client and late release of retention monies to main contractor. It also includes argument on the time extension costs claimed by sub- contractor, changes of scope due to extra work, inadequate site and site investigation report, delay works due to utility services organization, non-payment to sub-contractor by main contractor, main contractor ceases work on site, argument on the time extension costs claimed by main contractor, main contractor denies access of the site for the sub-contractor, subcontractor works delay due to main contractor, consequences of opening for inspection and sub-contractor ceases work on site.

According to Silver and Furlong (2004), the complex set of dependencies and interrelationships within a construction project, brings about delays and payment schedule problems which in their view are the two main sources of construction disputes.

Thamhain and Wilemon in Cheung and Chuah (1999) categorized causes of conflict over the life cycle of a project into seven major sources, namely, project priorities, administrative procedures, technical opinions and performance trade-offs, manpower resources, cost, schedules and personality.

Kezsbom (1992) presented a list of thirteen major conflict sources; these are scheduling, managerial and administrative personality and interpersonal relations, costs, technical opinion, politics, leadership, ambiguous roles/structure and unresolved prior conflict. Watts and Scrivener (1994) in Weddikara (2003) carried out an analysis and comparative study of sources of disputes from judgements in building disputes from the courts of Australia and the UK. They identified 290 sources from 60 cases in each country. In UK the most common cause was negligence, while in Australia it was determination of the agreement.

Grotons (1994), findings outline three reasons for disputes namely; fproject uncertainty, process problem; problems in the contracting process including incomplete scope definitions, unrealistic operations (with regard to cost or completion date) and poor performance in the execution of work. And third is peoples' issues; issues and problems that arise between people as a result of poor interpersonal skills, poor communications, lack of responsiveness and unethical or opportunist behaviour.

Colin *et al* (1999) were interested in identification of sources, causes and main effects of conflict. They considered the "source of conflict" to a person in the organization or initial action that stimulate or initiate the action resulting in a conflict. They considered "causes of conflict" as on how conflicts develop and the "effect" of conflict as the main effects of the conflict on the construction project. They identified the sources of conflict in the order of culpability as the contractor, architect, client and the subcontractor with the contention that organizations act through individuals as a result all conflicts events emanate from the key actors in the organization, and therefore the greater the involvement in the construction process the more the incidents of conflict. They also identified that, organizations exhibit identifiable modes of behaviour, such behaviour relates to the organizational culture, which is built from the corporate arms and professional background of the key actors within the firm.

Weddikara (2003) contend that conflict situations in construction projects arise due to various contractual relationships that exist in the construction industry and many conflicts evolve from unclarified assumptions, differing expectations or when inevitable shortfalls occur in the performance of the responsibilities outlined in the contract and where the resolution procedures are inadequate.

Hellard (1987) also suggested that, there are four sets of contractual relationships which are common in the construction program and thus when any of this relationship get strained; minor issues can fester and grow into disputes with crippling consequences for the projects participants. These relationships are as follows:

- i. The relationship of the client to the designer;
- ii. The relationship of the designer to another design specialist(s);
- iii. The relationship of the client to the prime contractor; and iv.
- iv. The relationship of the prime contractor to suppliers.

Osborn (1999) in his research in the Unites States of America found out the following as the ten most deadly sources of construction disputes.

- The lack of focus up front, failure to choose the most appropriate delivery method;
- Failure to assemble the right project team;
- Failure to coordinate the project team and scope of works;
- Lack of workable change order process;
- Failure to understand local conditions;
- Inaccurate or too elaborate schedules;
- No periodic job meeting minutes or failure to keep minutes;
- Inadequate financial strength on the part of the client, contractor or subcontract
- No vision on dispute resolution; and
- The failure to recognize that quality wins..

In a similar vein, Campbell (1997) also revealed that in the United Kingdom, construction disputes generally occur due to the following:

- Adversarial nature of contracts;
- Poor communication between the parties;
- Ineffective communication on site;
- The inability to understand terms of contract and expectations of the parties;
- Proliferation of subsidiary contracts and warranties including those with consultants;
- Fragmented nature of the industry;
- Improper contractual documentation;
- Tender systems and government policy on tendering encouraging low tenders followed by claims; the inability or reluctance to pay;
- Erosion of contract administrator's role as quasi-arbitrator in contracts; and

Yates (2003) revealed that contractual incompleteness and “post contract” adjustments, asset specificity in terms of client's investment in respect of purchase of land for the project and opportunistic behavior in particular on the part of the contractor are the root causes of conflicts, claims and disputes in Hong Kong. .

3. RESEARCH METHODOLOGY

3.1. Research Investigation

This research was designed to explore the professional conflict and dispute in the construction industry. This included finding out the causes, effects and ways of eliminating or minimizing such conflicts.

- Specific questions that were raised included the following:
- Do stakeholders in the construction industry agree on the existence of conflict and disputes within the industry?
- What are the possible causes of such conflicts and disputes?
- What are their perception about the possible causes and effects of such conflicts and disputes on the industry if really they do exist?
- What are the attempts being made to eradicate these?

3.2. Research Design

3.2.1. Area of study

Kumasi which is an urban town in Ghana formed the area of the study. It is in the Ashanti region of Ghana and was chosen because it is the second largest city in the country. The city is growing fast with a lot of development projects and because of urbanization, new sites are being developed with construction projects going on. Most of the stakeholders could therefore be identified for the study.

3.2.2. Study Population

Collis and Hussey (2003) define population as “any precisely defined set of people or collection of items which is under consideration”. For this survey, the population was stakeholders in the construction industry notably consultants and building contractors in the Ashanti region.

3.2.3. Sample Size

In order to achieve the objectives of identifying major construction disputes associated with the Ghanaian construction industry, the study was focused on contractors and consultants in the industry. This was because these contact groups are those who are directly confronted with these issues as they occur in the industry. With respect to the contractors, only those classified as D1 and D2 were considered since they are the two (2) upper classes considered more organized and hence more stable taking on both bigger and smaller works. Attention was however given to contractors of D1 category. The choice of this class of building contractors was made on the basis that they are well established firms with their offices quite easily to be located and are exposed to disagreements, conflicts and disputes by virtue of the type and size of projects they handle.

After the sampling, participants were informed that they were being asked to participate in a research Study. They were provided an explanation of the purposes of the research and the expected duration of their participation.

For the survey, a total sample size of fifty (50) was used as detailed below:

Sample	No of Respondents
Consultants (Architects, Quantity Surveyors Structural Engineers etc.)	25
Building contractors (D1class)	25

3.2.4. Sampling Techniques Used

Purposive sampling which is an example of the non-probability sampling technique was used in identifying the key respondents namely Contractors for the study. This was because the researchers required certain categories of respondents who had been involved in a lot of construction projects and therefore had encountered some amount of disagreements on construction sites with other stakeholders to answer the questions asked. For the Consultants, the simple random sampling technique, as a means of selection, was used to obtain the sample size.

3.2.5. Data Collection

To obtain views on professional conflicts and disputes in the construction industry, both primary and secondary data sources were used.

Primary data: In gathering primary data the main research instrument used was the questionnaire. The survey questionnaire was distributed to selected consultants and building contractors operating in the Kumasi city by the researchers. The use of questionnaire was relied on because according to Leary (1995), there are distinct advantages in using it as it is less expensive and easier to administer than personal interview. To encourage participants to respond quickly, the survey was made as simple and clear as possible. Further, the survey was designed to enable respondents to add any further variables or suggestions that they may consider necessary for inclusion.

Secondary Data: The study also relied on secondary data to find out the conflicts and disputes within the construction industry. All possible accessible relevant books, journals, published and unpublished papers and documents relating to conflicts and disputes were consulted from all available sources including the internet.

3.3. Method of Analysis

The qualitative data from the survey conducted was analyzed manually by making summaries of the views of the respondents. This was supported by quantitative figures where appropriate. Tables were also employed where necessary.

The Relative Severity Index (RSI) was used to determine the most severe cause of conflicts. This is represented by the following formula:

$$RSI = \frac{\sum W}{B \times N} \times 100$$

(B×N)

W =the weighting given to each cause by respondents, ranging from 1 to 5

B = the highest weight (i.e. 5 in the study)

N =the total number of samples

4. RESULTS AND FINDINGS OF STUDY

4.1. Survey Results

4.1.1. Response rate

A total of fifty (50) questionnaires were distributed to stakeholders made up of consultants and building contractors and the response rate is detailed below in Table 4.1.

Table 4.1. Response rate

STAKEHOLDERS	NO OF QUESTIONNAIRE	RESPONDED QUESTIONNAIRE	RESPONSE RATE (%)
Consultants	25	23	92
Building Contractors	25	24	96
TOTAL	50	47	94

Source of Data: Field Survey

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From table 4.1, it could be seen that out of the fifty (50) questionnaires distributed, forty seven (47) were returned filled correctly giving a response rate of ninety four percent (94%). Out of the 25 given to consultants 23 were returned showing a response rate of 92 %. That of building contractors was 96 % that is 24 out of 25 questionnaires were returned.

4.1.2. Agreement on existence of conflicts

When asked whether conflicts exist at project sites, all the respondents agreed that, conflicts exist at project sites as depicted below in Table4.2 showing 100% by the respondents in the survey.

Table4.1.2. Agreement on existence of conflicts

STAKEHOLDERS	NO. OF RESPONDENTS	EXISTENCE OF CONFLICTS		PERCENTAGE %
		YES	NO	
Consultants	23	23	0	100
Building Contractors	24	24	0	100
TOTAL	47	47	0	100

Source of Data: Field Survey

4.1.3. Experience in the industry

From the survey, it was realized that the respondents have had considerable number of years' experience in the construction industry as shown in Table 4.3 below.

Table4.3. Industry Experience of Respondents

YEARS	0-5	6-10	11-15	16-20	TOTAL
NUMBER	5	14	17	11	47
%	11	30	36	23	100

Source of Data: Survey Results

From the table above, it can be seen that 11% of the respondents have between 0 to 5 years' experience. Those with between 6 to 10 years' experience constitute 30% whilst 36% have between 11 to 15 years' experience. 23% have between 16 to 20 years' experience. This shows that majority of the respondents constituting 59% have had between 11-20 years' experience in the construction industry.

4.1.4. Disputes and Conflicts on a project

Researchers in an attempt to find out the respondents who have experienced conflicts before on a project, it was realized that 85% of them have experienced disputes before on a project while 15% are yet to as shown in Table 4.4 below.. This shows that, conflicts do really occur at projects.

Table4.1.4. Dispute on a Project

	Contractors	Consultants	Total	%
YES	21	19	40	85
NO	3	4	7	15

Source of Data: Survey Results

4.2. Causes of conflicts

From the survey, it came out that, there are conflicts and disputes within the construction industry. These conflicts and disputes, according to the respondents, can be initiated by .any of the stakeholders and almost all the causes given by them were similar to some outlined in the literature review.

4.2.1. Causes of conflicts as identified by respondents

The respondents identified various causes of construction conflicts in Ghana. These include the failure of clients to honour payments, delays in time for project completion, type of procurement method adopted as well as breakdown in communication among stakeholders in the construction industry.

They also cited conflicting commitment of project managers, absence of qualified personnel in key positions, unclear and incomplete description of items in the Bills of Quantities, differences in views among stakeholders as well as errors, defects or omissions in contract documents as some of the causes.

Again, the respondents identified inaction on the part of contractors, deficiencies in designs, uncomplimentary behavior of clients, unrealistic expectations from clients and behavior of sub-contractors, dissatisfaction of work progress of main contractor by Architect/Engineer, Contract awards to incapable contractors and lack of team spirit among project team members were also mentioned as potential causes of conflicts in the construction industry.

4.2.2. Ranking of causes of construction conflicts from respondents

The **Relative Severity Index (RSI)**, was used for the ranking. After tallying the various weights given by the respondents to each of the causes and the application of the formula, the causes were ranked with the most severe factor having the highest relative index as shown in Table 4.5

Table 4.5. Ranking of causes of conflicts

NO	POTENTIAL CAUSES	*ΣW	B*N	RSI	RANK
1	Failure of clients to honour payments	177	235	75.32	1 st
2	Delays in time for project completion	156	235	66.38	6 th
3	Type of procurement method adopted	126	235	53.62	14 th
4	Breakdown in communication	164	235	69.79	4 th
5	Conflicting commitment of project managers	151	235	64.26	7 th
6	Absence of qualified personnel in key positions	128	235	54.47	12 th
7	Unclear and incomplete description of items in the Bills of Quantities	168	235	71.49	3 rd
8	Differences in views among stakeholders	135	235	57.45	10 th
9	Errors, defects or omission in contract document	142	235	60.43	8 th
10	Inaction on the part of contractors	162	235	68.94	5 th
11	Deficiencies in designs	131	235	55.74	11 th
12	Uncomplimentary behaviour of clients	127	235	54.04	13 th
13	Unrealistic expectations from clients	115	235	48.94	18 th
14	Behaviour of sub-contractors	118	235	50.21	17 th
15	Unforeseen site problems	121	235	51.49	16 th
16	Dissatisfaction of work progress of main contractor by Architect/Engineer	125	235	53.19	15 th
17	Contract awards to incapable contractors	172	235	73.19	2 nd
18	Lack of team spirit among project team members	138	235	58.72	9 th

4.2.3. Comments/Discussions

The following are comments on the important causes of construction conflicts and disputes from the respondents namely contractors and consultants.

i. Failure of clients to honour payments

Results from the survey showed that, the most severe cause of conflicts and disputes on Ghanaian construction projects can be attributed to the failure of clients to honour payments when due. This was ranked first by the respondents. According to them this at times, cause disaffection among stakeholders especially where no notice is served on the possible delay of payment and no reasonable excuse given. Meanwhile the project has been successfully executed to the required phase according to the specification.

ii. Contract awards to incapable contractors

From the answered questionnaires, it was found out that awarding contracts to incapable contractors can also create conflict and this is ranked second. It normally comes about because consultants may recommend a particular friend and close relations or the insistence of clients that the work should be given to a particular contractor. This situation is sometimes associated with shoddy work and delay in project completion which can cause conflicts.

iii. Unclear and incomplete description of items in the Bills of Quantities

This was cited as a source of disagreement leading to conflicts at project sites by the respondents and ranked third. According to them, when this situation arises contractors are not able to get the full understanding of what is written. The result is that, in some cases, they do what is not required of them and thereby bringing about disagreements which can lead to conflict situations.

iv. Breakdown in Communication

This was ranked as the fourth cause of conflict in projects by the respondents. It may result from inability to interpret well design drawings and failure to execute instructions. According to them ineffective communication can occur when one party fails to communicate effectively with one another concerning issues like designs, compensation and payments.

v. Contractors' Inaction

From the results of the survey, contractors' failure to plan adequately and to follow planned schedules can also lead to conflicts. There may be an unexpected increase in demand for materials due to poor planning and coordination between contractors and suppliers thereby causing disruptions and delays which can create deviation from initial programme of works. Also the contractor's failure to price properly for the works and read the contract documents well can result in disagreements and eventually lead to conflicts.

vi. Delays in Time for Project Completion

From the survey it came to light that not completing projects on schedule can also be a source of conflict and this was ranked sixth by the respondents. In some instances, clients would like to take possession of their project within a specified short period and always losing sight of the fact that there may be unexpected delays and challenges which might affect the completion time and prolong duration period. For example, weather could cause flooding in certain areas and subsequent lengthy delay in schedule. This condition may relate to poor layout of the project site and the poor system of drainage around the project site. In such instances a misunderstanding can ensue.

vii. Conflicting Commitment

Conflicting commitment, according to the respondents, can also bring about conflicts in projects. This can arise in a situation where the project manager of a particular project is also the project team member of another project or whereby the project manager is also a project manager of other projects at the same time.

viii. Contract documentation

Contract documents may contain errors, defects or omissions. This in effect can cause misunderstanding among stakeholders and thereby lead to conflict situations.

ix. Lack of team spirit among project team members

This was ranked as the ninth cause of conflicts at project sites by the respondents. This situation can at times bring about mistrust and suspicion which can affect the smooth implementation of the whole project.

x. Differences in views among stakeholder

From the results of the survey, it was realized that professionals on projects can have different proposals and approaches to solving a problem. Each proposal may have its merits or otherwise, but presentation, communication and acceptance from others may not be all that easy. Differences in views among stakeholders as a result of mismatch in perceptions or expectations and prevailing reality can lead to the possibility of conflicts on projects as identified by the respondents.

xi. Design deficiency

According to the respondents, over design and underestimating the costs involved in the project as well as design and specification oversights and errors or omissions by consultants can bring about conflict. This may result from uncoordinated civil, structural, architectural, mechanical and electrical designs. Also lack of either consultants' skills or contractors' skills in providing clear working drawings and detailed specification to be used on site can result in conflict.

xii. Absence of Qualified Personnel

The complexity in the construction industry from the design to construction and handing over of the project involve a lot of specialized knowledge that the project managers must use effectively, if he is tactical enough, to resolve conflicting issues on a project. According to the respondents, the absence

of the right persons in key positions can also trigger disagreements which if not properly handled, can eventually lead to conflict. In some situations some 'skilled' operatives are not really skillful, having only gained their experience on the job site and learning construction skills through trial and error. Such situation can bring about conflict as a result of poor execution of work.

xiii. Clients' Behaviour

Respondents have the opinions that, the change of mind on the part of the client during construction can lead to conflict. For instance, the changing of standard contract conditions for additional non-standard conditions can bring about conflict situations. Also clients taking over the project site and denying access to the main contractor as well as the failure of clients to pay for variation claims can be sources of dispute. At times design changes based on owners' demands or clients' requests for a change in design to meet changing requirements and preferences can lead to conflict situations

xiv. Type of Procurement Method Adopted

It was found out that the type of procurement method adopted usually lead to conflict in the construction industry. Lack of understanding and agreement in contract procurement can result in conflicts. This may include cost, delivery time and quality, sharing the activities and responsibilities and risks among stakeholders.

xv. Architect/Engineer dissatisfies the work progress of main contractor.

This can bring about disagreements and conflicts especially where there is the inability of the contractor and his personnel to plan and carry out each activity effectively and thereby causing unnecessary delays.

xvi. Site Problems

Inadequate site and/or site investigation report leading to unforeseen site conditions could rise to disputes between the various parties involved. Then again, in the event of the main contractor denying access of the site for the sub-contractor, a dispute can occur.

xvii. Behaviour of Sub-Contractors

According to the respondents, the behavior of a sub-contractor can be a source of conflict at project sites. He may misunderstand the actual requirements and may quote a lower price than other contractors may. In the event of realizing his mistakes, dispute can result. A sub-contractor can also stop work at project site leading to the delay in project completion which can result in disputes.

xviii. Unrealistic Expectations from Clients

From the results of the survey, it was found out that some expectations from clients are unrealistic in that they may want speedy completion and quality building at low price. The contractor may also want more time, a more reasonable quality and maximum price. In such situations, conflict can result.

4.3. Possible Effects of Conflicts on Stakeholders

From the survey, the respondents have the opinion that conflict is natural and inevitable, which may have positive or negative effect. Most interviewed acknowledged the fact that, conflict can lead to the following:

- 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
- A high conflict can lead to a feeling of frustration that manifests as aggressive behaviour.
- Mistrust and hatred among stakeholders which can bring about damage in continuing business relationship resulting in breaks in personal and professional relationship.
- Non completion of projects according to scheduled period or abandonment of projects at times affects the image of the construction company negatively.

Table4.3. *Effects of conflicts on stakeholders*

NO	EFFECTSOFCONFLICTS	CLIENT	CONTRACTOR	CONSULTANT
1	Abandonment of project leading to loss of valuable time and money.	*		
2	Increasing project cost	*		
3	Delays in project affecting completion	*	*	
4	Degeneration into unpleasant situation such as claims and lawsuits.		*	*
5	Stress in dealing with associated problems			*
6	Feel of frustration providing tension and distracting team members from performing the task.		*	*
7	Mistrust and hatred among stakeholders bringing about damage in continuing business relationship.	*	*	

- From table 4.6, it can be realized from the respondents that conflicts can affect either of the stakeholders. For instance clients suffer most in terms of increasing project cost and loss of valuable time and money when there is abandonment of project.
- Also delays working against project completion affect both the contractor and the client whilst the contractors and consultants suffer most when conflicts degenerate into claims and lawsuits.
- Lastly, mistrust and hatred among stakeholders bringing about damage in continuing business relationship affect mostly clients and contractors.

4.4. Prevention of Conflicts

Table4.7. *Respondents’ responses on the methods of preventing conflicts*

NO	METHODS OF PREVENTING CONFLICTS	*ΣW	B*N	RII	RANK
1	Training of project managers to acquire essential skills in developing strategies and operating styles	108	235	45.96	10 th
2	Improvement in communication channels	133	235	56.60	7 th
3	Positive attitude of Project Managers to all issues	119	235	50.64	9 th
4	Effective Teamwork/ Teambuilding	124	235	52.77	8 th
5	Adequate Contract documentation devoid of errors and omissions.	173	235	73.62	1 st
6	Decisions at design stage should ensure proper planning and review of project plans & specifications	137	235	58.30	6 th
7	Establishment of Appropriate Mechanisms for early identification of potential conflict issues	155	235	65.96	4 th
8	Education of stakeholders on their rights and obligations	148	235	62.98	5 th
9	Employment of Qualified Personnel with specialized knowledge to handle key positions	167	235	71.06	3 rd
10	Adequate funding for Projects	170	235	72.34	2 nd

- From Table 4.7 it can be seen from the respondents’ point of view that, the most important ways in which conflicts can be prevented are as follows: adequate contract documentation devoid of errors and omissions, adequate funding for projects, as well as employment of qualified personnel with specialized knowledge to handle key positions
- Establishment of appropriate mechanisms for early identification of potential conflict areas as well as education of stakeholders on their rights and obligations are other means of preventing conflicts.
- In addition to the above, other means of preventing conflict includes: improvement in communication channels, effective teamwork/teambuilding, positive attitude of project managers to all issues and training of project managers to acquire essential skills in developing strategies and operating styles.

5. CONCLUSION

The study was aimed at exploring the nature of professional conflicts within the construction industry of Ghana and making recommendations with respect to ways of minimizing or eliminating them as

such conflicts in most cases affect completion of projects and to a large extent destroy the relationship among stakeholders. At times, it is also costly and time wasting and there is no significant positive contribution to the construction industry.

The principal stakeholders involved in the study included professional consultants and building contractors. Previous works on the research topic were reviewed and appropriate questionnaire designed with the view to obtaining an in depth knowledge about conflicts within the construction industry. The questionnaires were distributed mainly to the principal stakeholders selected for the study.

From the results of the survey, it became evident that conflicts do really exist and the nature of such conflicts is such that, it is natural and inevitable. It could be initiated by any of the stakeholders because of communication problems, human nature not being perfect which can bring about disagreements which if not resolved timely can lead to conflicts.

The relative importance of the causes of conflicts at project sites has been identified clearly in this study. The identification of the important causes of conflict from this research can focus the attention of construction managers to plan preventive actions to forestall any conflict at construction sites.

The survey showed that among the various causes of conflicts in the construction industry of Ghana are the following:

- Failure of clients to honor payments
- Delays in time for project completion
- Type of procurement method adopted
- Breakdown in communication
- Conflicting commitment of project managers
- Absence of qualified personnel in key positions
- Unclear and incomplete description of items in the Bills of Quantities
- Differences in views among stakeholders
- Errors, defects or omissions in contract documents
- Inaction on the part of contractors
- Deficiencies in designs
- Uncomplimentary behavior of clients
- Unrealistic expectations from clients
- Behavior of sub-contractors
- Unforeseen site problems
- Dissatisfaction of work progress of main contractor by Architect/Engineer
- Limited Resources
- Contract awards to incapable contractors
- Lack of team spirit among project team members

It can be said that the construction industry is one that comprises a diversity of interests, professions and procedures which interact to create a completed project and that conflict is unavoidable on projects. The high financial costs and other costs associated with resolving conflicts or attending to the consequences of conflicts warrant that project participants should know these conflict areas on projects and prepare to manage them to prevent the conflicts from being harmful to project objectives.

In conclusion, the construction industry in Ghana covers a complex and comprehensive field of activities involving many operative skills and conditions, which vary considerably from one project

to another and as such dispute might arise at any point during the construction process. Generally, there is a low standard of contract formation and of contract administration in the construction industry, which lead frequently to unnecessary problems and disputes. The parties usually enter into a dispute as a result of differing expectations or misinterpretations of the contract document. It therefore becomes imperative that, special attention is paid to every detail of the construction process from the design stage to completion to avoid conflicting situations.

5.1. Recommendations

There is the belief that conflict is destructive and its impact is always negative as it usually leads to gradual loss of performance, and as such it is good to avoid it. In the light of this, the following recommendations are made for the minimization or elimination of conflicts in project areas.

- **Training/ Education**

It is recommended that, project managers should be exposed to extensive training for them to acquire skills essential to working effectively in any environment. The training will help them to develop appropriate strategies and operating styles to avoid conflict situations which may lead to claims and consequently to dispute and lawsuits. Furthermore conflict management should be introduced as part of Project managers training within and outside the projects. Project Management regulatory Body should be established to monitor and regulate activities of Project Management as this will enhance project management practice training and retraining of Project Managers. It is also recommended that all stakeholders should be educated on their rights and obligations. With this, delays in project completion, conflicting commitment, Unrealistic clients' expectation and the behavior of both contractors and sub-contractors should be addressed which can go a long way to reduce or avoid such conflicting situations:

- **Improvement in communication channels**

It is also recommended that, project managers should improve communication channels; build a sense of trust amongst project team members, establish collective responsibilities and advance their knowledge in human relation in order to reduce conflicts in projects logically to improve on project success.

- **Attitude of Project Managers**

It is understandably impossible for all stakeholders from different background, diverse ideologies and skills to work together without any conflict, so the project managers having all the authority and power must make sure that all conflicts that arose are properly managed to the benefit of the project. They should give timely praise and recognition to team members, develop tolerance for failure to encourage creativity and clarify his expectations from the team members. They should also be able to discover the professional and personal goals of team members to avoid conflicting situations

- **Effective Teamwork/ Teambuilding**

It is recommended that project team members have to work together to start and complete the project to the expected quality standard within cost, the predetermined duration and to the satisfaction of all stakeholders. With this, conflicts can be reduced to barest minimum or avoided. Also teambuilding can be instituted at the initial stage of a construction project. This in effect will bring about better cooperation and co-ordination among team members.

- **Adequate Contract Documentation**

Contract documents should be clear, complete and precise. The documentation should be carefully, adequately and accurately prepared and consistent through. There should be no ambiguities which can result in conflict.

- **Decisions at design stage**

In taking decisions at the design stage, it is recommended that, clients and architects/engineers must ensure proper planning and review of project plans and specifications to avoid future disagreements.

- **Establishment of Appropriate Mechanisms**

There is the need to put in place some form of appropriate mechanisms so that potential conflict issues can be identified right from the onset and action taken to prevent the emergence of conflicts at project sites.

- Employment of Qualified Personnel

Qualified personnel who have specialized knowledge in their areas of study should be employed to handle key positions to avoid disagreements which can result in conflict.

- Adequate funding for Projects

It is recommended that, before any project is commenced, stakeholders should ensure that there is adequate funding for the project involved. This will ensure that everyone is paid on time for good work done to prevent conflicts.

- Appropriate Construction Method

In choosing an appropriate construction method, there is the need for project managers to consider the condition of the project such as the level of the difficulty of the project, the site layout, the time available, and the possibility in using certain equipment and the skills of the personnel to avoid delays and possible conflicts.

REFERENCES

- Ahadzie, D. K..(2010), Feature Article: A Synthesis of the Historical Development of the Ghanaian Construction (Industry.<http://www.ghanaweb.com/GhanaHomePage/features/artikel.php?ID=174650>)
- Arku,G. (2009). Housing Policy Changes in Ghana in the 1990s. *Policy Review, Housing Studies*, 24 (2), 261–272.
- Assibey-Mensah, G.O. (2009). Ghana’s Construction Industry and Global Competition: A research Note, *Journal of Black Studies*, 39(6), 974-989.
- Awakul (2002). The effect of attitudinal differences on interface conflicts in large scale construction projects: a case study, *Construction Management and Economics*, 20 (4), 365-377. [http:// dx.doi.org/10.1080/01446190210133456](http://dx.doi.org/10.1080/01446190210133456)
- Bank of Ghana Annual Report (2009). [https://www.google.com.gh/search?q= The+construction+industry+in+Ghana+accounted+for+1025+of+the+Ghana%E2%80%99s+GDP+%28Bank+of+Ghana,+2009%29&ie=utf-8&oe=utf-8&rls=org.mozilla:en-U](https://www.google.com.gh/search?q=The+construction+industry+in+Ghana+accounted+for+1025+of+the+Ghana%E2%80%99s+GDP+%28Bank+of+Ghana,+2009%29&ie=utf-8&oe=utf-8&rls=org.mozilla:en-U).
- Brown, H.J. and Marriott, A.L. (1993). *ADR: Principles and Practice*. London, Sweet and Maxwell.
- Campbell, P. (1997). *Construction Dispute Avoidance and Resolution* (Latheronwheel: Whittles Publishing, at 51 Carmen *et al.*, (2013) Antecedents of relationship conflict in top management teams: <http://www.emeraldinsight.com/journals.htm?articleid=17104060>
- Cheung, S.O. Ng S.T. & Sin, W.S. (2001). A fuzzy sets model for construction dispute evaluation. *Construction Innovation*, 117-127.
- Cheung, S.O., Yiu, K.T.W. (2007). A Study of construction mediator tactics- Part I: Taxonomies of dispute sources, mediator tactics and mediation outcomes. *Building Environment*.
- Collis, J and Hussey, R. (2003). *Business Research: A Practical guide for understanding and post-graduate students*, Houndmills: Macmillan Palgrave.
- Colin, Michael, Warwick Frost (1999). [https://www.google.com.gh/?tbn= bks&hl= en&q= Colin+et+al+%281999%29+#hl=en&q=Colin+et+al+%281999%29+views+on++conflicts&tbn=bks](https://www.google.com.gh/?tbn=bks&hl=en&q=Colin+et+al+%281999%29+#hl=en&q=Colin+et+al+%281999%29+views+on++conflicts&tbn=bks)
- Dada. M.O. (2013). Conflicts in construction projects procured under traditional and integrated systems: A correlation analysis. *International Journal of Construction Supply Chain Management* Vol. 3, No. 1 (pp. 1-15).
- Diekmann, J.E. & Girard, M.J. (1995). Are contract disputes predictable? *Journal of Construction Engineering and Management*, 121(4), 355-363.
- Edwin, H.W.C & Henry, C.H.S. (2005). Disputes and disputes resolution systems in Sino-foreign joint venture construction projects in China. *Journal of Professional Issues in Engineering Education and Practice*, ASCE (April 2005), 141-148
- Fenn, P., Lowe, D., & Speck, C. (1997). Conflict and dispute in construction. *Construction Management and Economics*, 15, 513- 518.
- Finch et al (2010). Managing in Conflict: How Actors Distribute Conflict in an Industrial Network: <http://hdl.handle.net/10197/4947>.

- Fugar, D.K., Owusu-Manu, D. & Adinyira, E. (2009). Towards future activity phase and shift in dynamism of the Ghanaian construction Industry Kumasi: Kwame Nkrumah University of Science Technology, Ghana
- Gyadu-Asiedu, W. (2009). Assessing Construction Project Performance in Ghana: Modelling Practitioners' and Clients' Perspectives. Technische Universiteit Eindhoven
- Groton J.P.A (1994). New comprehensive approach to dispute avoidance and resolution. Dart Conference proceedings. Lexington, KY USA www.constructioninstitute.org/script_content/cpislides2005/cpi05_proc.pdf
- Hall, J.M. (2002). Ineffective Communication: Common causes of construction disputes. *Alliance's Advisory Council Legal Notes*, 13(2).
- Kassab, M., Hegazy, T., & Hipel, K. (2010). Computerised DSS for construction conflict resolution under uncertainty. *Journal of Construction Engineering and Management*, 136 (12), 1249-1257.
- Kathleen, M.J.H (2003). Conflicts between owner and contractors: Proposed Intervention Process. *Journal of Management in Engineering*, ASCE (July 2003), 121-124.
- Kumaraswamy, M. & Yogeswaran, K. (2003). Significant sources of construction claims. *International Construction Law Review*, 15 (1), 144-160.
- Kwakye, A. A. (1997) *Construction Project Administration in Practice*, Addison Wesley Longman pages 250-269.
- Leary, M.R (1995). Behavioral Research Methods. (2nd ed) Pacific Grove, Ca: Brooks/cole
- Lowe Fenn P. D. and SPEEK C. (1997). Conflict and dispute in construction, Contract Management Economics, *Journal of Management in Engineering*, ASCE, Vol. 18No.
- Millicent Asah-Kissiedu (2009). The Development of Appropriate Strategies for the Prevention of Construction Disputes in Ghana
- Murray, M., Langford, D., Hardcastle, C., & Tookey, J. (1999). Organisational design. In S. Rowlinson., & P. McDermott (Eds.) *Procurement systems: A guide to best practice in construction*, pp. 83-118.
- Ng, H., Pena-Mora, F., & Tamaki, T. (2007). Dynamic Conflict Management in Large- Scale Design and Construction Projects. *Journal of Management in Engineering*, 52-66. Ng, H.,
- N. Jaffar , A.H. Abdul Tharim, M. N . Shuib (2011). Procedure Engineering :Factors of Conflict in Construction Industry: A Literature Review).
- Olalekan Ogunbayo (2013). Conflict Management in Nigerian Construction Industry: Project Managers' View Olatunji Oluwole Alfred. *Conflict of Interest within Construction Practitioners: (Surveying and Built Environment Vol. 18 (1), 35-50 June 2007 ISSN 1816-9554)*
- Osborn, John, E. PC. (1999). *Metropolitan Corporate Counsel*, "The Ten Most Deadly Construction Sins.
- Peter Wallensteen (2012). Understanding Conflict Resolution: War, Peace and the Global System <http://books.google.com.gh/books?id=I9mZwBDucr8C&printsec=frontcover&dq=steen+2002>
- Pondy, L.R. (1967). Organisational Conflict: Concepts and Models: *Administrative Science* construction industry. Unpublished Master's thesis, Unpublished Thesis, Heriot Watt University, Edinburgh, UK
- Silver Robert and Furlong Gary (2004). *Complex construction disputes can be hammered out. The Lawyers Weekly* March 26, Brown, H. J. and A.L. Marriott, (1993), *ADR: Principles and Practice*. London: Sweet & Maxwell.
- Simmons and Peterson, (2000). Managing Conflict in Organizations: Fourth Edition: [http:// books.google.com.gh/books?id=qauUIGypkHEC&pg=PA50&lpg=PA50&dq=Simmons+and+Peterson,+2000%29.+on+conflicts](http://books.google.com.gh/books?id=qauUIGypkHEC&pg=PA50&lpg=PA50&dq=Simmons+and+Peterson,+2000%29.+on+conflicts).
- Stanslaus (2011) Conflicts in Building Projects in Tanzania: Analysis of Causes and Management Approaches.
- Thompson, R.M., Vorster, M.C. & Groton J.P. (2000). Innovations to manage disputes: DRB and NEC. *Journal of Management in Engineering*, ASCE, 51-59.
- Verma, V. K. (1998). Conflict Management. The Project Management Institute Project Management Handbook, Ed Jeffrey Pinto.

- Weddikara, C. (2003). *The impact of Professional Culture on Dispute Resolution in the Building Industries of Australia and Sri-Lanka: Doctoral Thesis, Murdoch University, Perth, Western Australia.*
- World Bank (2003). *Country Procurement Assessment Report. Washington DC: Ghana Country Department, The World Bank.*
- Yates David, (2003). *Can claim be avoided or reduced?* Department of Real Estate and Construction, University of Hong Kong
- Yale, D.J. and Hardcastle, C. (2003). *The causes of conflicts and Disputes in the Hong Kong Construction Industry – A Transactional Cost Economics Perspective, Research Papers, 1.4, No.22, RICS Foundation.*

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