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COLLEGE OF ART AND SOCIAL SCIENCES

SCHOOL OF BUSINESS, KNUST

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THE EFFECT OF TEAM DIVERSITY ON TEAM EFFECTIVENESS IN THE CONSTRUCTION INDUSTRY IN ASHANTI REGION

MAURA BOANSI DUFFOUR

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THE EFFECT OF TEAM DIVERSITY ON TEAM EFFECTIVENESS IN THE CONSTRUCTION INDUSTRY IN ASHANTI REGION

By

Maura Boansi Duffour, BBA, Management.

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DECLARATION

I hereby declare that this submission is as a result of my own work toward the Master of Business Administration (Management and Organizational Development Option) Degree and that to the best of my knowledge no part of it has been presented for another degree in the University or elsewhere, except where due acknowledgement has been made in the text.

Maura Boansi Duffour ………………………… ……………………….
PG7602512 Signature Date

Certified by:

Dr. (Mrs) Florence Ellis ………………………… ………………………..
Supervisor Signature Date

Certified by:

Mr. James Kennedy Turkson ………………………….. ……………………
Head of Department Signature Date

ABSTRACT

Diverse work groups and team management is one of the most difficult and pressing challenges organizations faces in these modern times (Tsui & Gutek, 1999). Companies however, recognize the need to leverage the diversity of their employees so as to sustain competitive advantages in a global workplace (Offerman & Gowing, 1990; Thomas & Ely, 1996; Yaprak, 2002). Studies have generally shown that diverse teams normally perform better, but diversity in teams can negatively affect team effectiveness. In view of the mixed findings, this study focused on assessing the effects of team diversity on team effectiveness in the construction industry in Ashanti Region. The study reviewed literature on the concepts of diversity and team effectiveness. Data was obtained via questionnaire and semi-structured interview from one hundred and sixty four (164) professionals from the construction industry. The mixed methodology was used to collect and analyze the data. One of the findings of the study indicated that the construction industry explores team diversity. Also diversity in gender, tribe and religion does not affect team output and final project negatively but rather improves cohesiveness or collaboration among team members. It is recommended that there should be a well- defined conflict management policy in the construction industry which will help track grievances so as to resolve them early. There is also the need to conduct additional research in other areas of team diversity.

DEDICATION

I dedicate this work to dad - Elder Daniel Kwaku Duffour (deceased), although you are not here, I know you were always proud of me. To mum -Mrs. Margaret Duffour and siblings - Mrs. Pearl Apata, Ruth A. Duffour, and Esther N. Duffour for their endless prayers, support and love throughout this study period. Throughout the years, I have grown to know that there is none like a family's love.

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CHAPTER ONE

INTRODUCTION

1.0 Background of the study

Diverse work groups and team management is one of the most difficult and pressing challenges organizations faces in these modern times (Tsui & Gutek, 1999). Companies however, recognize the need to leverage the diversity of their employees so as to sustain competitive advantages in a global workplace (Offerman & Gowing, 1990; Thomas & Ely, 1996; Yaprak, 2002). Leaders in organization normally presume that increase diversity will automatically lead to benefits while ignoring the complex issues of managing diverse teams (Kersten, 2000; Shaw & Barrett-Power, 1998). According, to Milliken and Martins (1996, p.403), 'diversity appears to be a double-edged sword, increasing the opportunity for creativity as well as the likelihood that group members will be dissatisfied and fail to be identify with the group'. Research lately, on diversity has proposed that effect of group diversity will take into consideration culture, business strategies and human resource practices (Chatman et al, 1998; Richard, 2000). Diversity is also traditionally conceptualized in terms of visible characteristics such as age, gender and race (Hick-Clarke & Illes, 2000) whereas less visible characteristics includes level of education or tenure with the a company (Thatcher & Jehn, 1998; Tsui, Egan, & O'Reilly, 1992; Williams & O'Reilly, 1998).

The Construction industry is characterized with activities that are multi-party operational in nature and are linked with series of contracts. The multi-party operational nature of the construction industry has guarantee the need for the efforts of individuals to be synchronized from within and outside organizations with various professions, skills and cultures to work together as a team (Perez 2002). The project based nature of the construction industry requires people of diverse background and profession and for that matter the industry has mostly dealt with relationship between team, leadership, individual and task (Adair, 1983). Members of a team are assigned and expected to perform roles essential to their special areas of expertise. Although each stakeholder may exhibit traces of similarity and diversity, they all contribute meaningfully toward the accomplishment of the target. The role an individual member plays may vary from one phase to another. The type, complexity of a project may determine the membership of a construction project team (Uher and Loosemore, 2004). The increasing member of stakeholders in the industry with diverse values, styles, goals, expectation, experience, frames of reference and situation may result in some degree of conflict (e.g. Bolman and Deal, 1997).

Uher and Loosemore (2004) highlighted the following as the participants of a construction project: client, project manager, financier, legal consultant, design leader (architect or structural engineer), other design consultant, main contractor, sub-constructor, cost consultant, other consultants (depending on the project need), end user of the completed project. These people have very different roles and responsibilities to fulfill. For instance the project manager's task normally remains the same throughout the construction phase. The designer would however be either be a consultant architect or

engineer or a team of both. Each project need specific people in accordance with their knowledge, professionalism and experience and requires them to work and coordinates with others from different companies. The construction industry has always dealt with relationship between team, task individual and leadership (Adair 1983). Alshawi and Faraj (2002) report that a real construction project is a collaborative venture that involves a number of different organizations brought together to form the construction project team.

The construction project team is made up of people from diverse and cultural background. Because construction project team is made up different division of the same organization or different organizations, members must learn to work together. However this diverse composition of construction project can result in some difficulties when problems are not resolved early. Problems arising in team should be resolved quickly to develop an effective, functioning team (Hendrickson and Au, 1988).

Cannon-Bowers and Salas (1998) pointed out that the effective performance of team members will be dependent on their ability to bring into bear certain team related skills. The survival and effective performance of team is based on an effective leadership, which makes it possible for team members to develop and bring to bear their potentials. Frequently, teams are described as effective once they are able to accomplish their goal to the neglect of other equally key factors that may affect it.

Rich literature in team diversity and team effectiveness as organizational phenomena has been identified by researchers working on team and workgroups (e.g. Jehn & Benzkorova, 2004; Harrison et al., 2002). Other researchers has also coined out studies

on team and organizational effectiveness (Veen, 2008; Ilmakunnas et al. 2004). Despite this rich literature available there remain areas which are still unexplored. Most of the research on team diversity and team effectiveness has been conducted on traditionally permanent organizations with some known management structures. However, there is still the question of whether teams existing in project-based organizations like the construction industry that experience factors like team diversity and team effectiveness are the same. Furthermore, quite a number of available publications on team diversity and team effectiveness have focused on developed economies (e.g. Jehn & Benzkorava, 2004; William & O'Reilly, 1998; Krager & Ford, 1985). Thus this study attempts to understand through empirical investigation on team diversity, team effectiveness and the effect of team diversity on team effectiveness in the construction industry in the Ashanti region, Ghana a developing economy.

1.1 Problem statement

The construction industry in Ghana contributes meaningfully, to the gross national product (GNP) (Tuuli et al., 2007). It was estimated by the World Bank (2003) in 2003 that the annual value of public procurement of goods, work and services was US$ 600 million representing about 10% of Ghana's gross national product (GNP). It was again observed that the bulk of the expenditure programmes in Ministries, Department and Agencies (MDAs) and District Assemblies involves capital construction procurement (World Bank, 2003). For example, the construction industry in the Ashanti region plays a crucial role in the economy of Ghana as so many skilled and unskilled labors are

employed daily. This sector has contributed tremendously to the development of the economy and the livelihood of people within the Ashanti region.

However, the construction management within the Ghanaian economy is still very inefficient so these inefficiencies are characterized by delays and poor project implementation (World Bank, 2003). This has negative consequences for project execution and leads to adverse relationship among project team members like the project managers, architects, surveyors, quantity surveyors, constructors, artisans and laborers.

It is known that managing diverse workgroup or team are one of the most difficult and pressing challenges in modern organization. This is because it may lead to team effectiveness (Byrne, 1971; Tajfel & Turner, 1986) and therefore the need to understand team diversity and team effectiveness.

1.2 Objective of the study

The objectives of the research were group into general and specific objectives.

1.2.1 General objective

The general purpose of the study was to assess the effects of team diversity on team effectiveness in the construction industry in the Ashanti Region.

1.2.2 Specific objective

Specifically, the study was designed to examine the following:

a. to determine the forms of diversity in the construction industry in the Ashanti Region.

b. to determine the influence of team diversity on team conflict in the construction industry in Ashanti Region.

c. to determine the factors influencing team effectiveness in the Construction industry in the Ashanti Region

d. to determine whether team diversity have effects on team effectiveness in the Construction Industry in Ashanti Region.

1.3 Research questions

The following are the research questions that the study seeks to explore:

a. What are the forms of diversity in the construction industry in Ashanti Region?

b. Does diversity in teams' cause conflict and does conflict in team affect team effectiveness in the construction industry in Ashanti region?

c. What are the factors influencing team effectiveness?

d. What are the effects of team diversity on team effectiveness and output in the construction industry in Ashanti Region?

1.4 Significance of the study

The study will tend to find ways of effectively managing team diversity to achieve cohesiveness. Diversity in team can make it possible for a company to gain competitive advantage as they are able to come out with very creative and innovative ideas of

accomplishing goals. The diverse expertise in teams presents an opportunity to examine how this will lead to team performance and subsequently team effectiveness. Construction projects bring on board so many individuals from different background and with different knowledge, attitude, experience and perspective to-working.

There is relatively little published information about the effect of team diversity on team effectiveness on construction project in a developing country like Ghana.   This study will also help contractor, architect, client, government, consultant and other stakeholders of construction project to understand the factors that contribute to help effective project team. The findings from this study will contribute to balancing the academic viewpoint by examining the team effectiveness and its role in contributing to team performance and its success.

1.5 Methodology

The mixed research design approach was used, thus the qualitative (interview) and quantitative (questionnaire). Questionnaires were administered to chosen individuals and professionals in the Construction industry. The researcher also collected data through semi-structured and focus group interviews. The researcher adopted the content analysis approach to qualitative data analysis. This involved the development of a "code" which related to "themes and issues in the data identified as important for interpretation" and reflected themes derived from the research conceptual framework and emphasizing the key issues that emerged from the literature review. Statistical Package for Social Scientist (SPSS) was also used to analyze the quantitative data collected.

1.6 Scope of the study

The research was conducted in the Kumasi metropolitan Ashanti region. It was aimed at project managers, team leaders, unskilled laborers, professional which include architects, engineer, surveyor/quantity surveyor and contractors within the construction industry. Due to financial and time challenges, a sample size of one hundred and sixty –four professionals were selected on merit for the research.

1.7 Limitations of the study

The study was limited to financial and time resources so the sample may be small in relation to the entire population. The researcher also faced the difficulty in reaching respondents, so several follow ups have to be made to collate questionnaires and also there was continuous assurance of confidentiality and anonymity because some of the respondents had the impression that the research was intended to disclose their confidential information.

1.8 Organization of the study

The study is organized into five chapters. The first chapter looked at the background of the study, problem statement, objectives of the study, research questions, significance of the study, methodology, scope of the study, limitations of the study and the organization of the study. Chapter two concentrated on the review of related literature that was linked to the objectives of the study and a conceptualized framework was drawn. Chapter three handled the approach, method and techniques used in data collection, analysis, interpretation of the research and the Organizational profile. Chapter four presents data

presentation, analysis, and discussion of findings from questionnaires distributed to respondents and interviews conducted. The concluding chapter which is Chapter five was on the summary of findings, conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Chapter one focused on the introduction to the research. It introduced the background and justification for the research into the diversity in team within the Ghanaian construction industry. This chapter seeks to review other relevant literature related to the study. The first section describes teams and diversity in team. This is followed by deliberation on variables of team effectiveness. The chapter concludes with a conceptual framework.

2.1 An overview of diversity

As organization secure more and more team-based projects, managing diversity forms are a major challenge for organizations. Folk wisdom has it that "birds of a feather flock together" but also that "opposite attracts". These two proverbs predict that similar people might work together, but also people predict that similar people also work with one another. This is an indication that diversity has beneficial component as well as ways that will impede team functioning (Byrne, 1971; Tajfel & Turner, 1986; Leonard & Levin, 2006).

Variety in behaviors and beliefs are a reality that every organization, teams and society as a whole have to deal with. Diversity in work force is characterized by people with different human qualities who belong to different cultural groups. Individuals perceive

diversity to include people who are different from oneself in age, ethnicity, gender or race (Vecchio & Appelbaum, 1995). Diversity in primary dimension include 'inborn differences, or difference that have an ongoing effect throughout one's life. Learning style, age, ethnicity, gender, physical abilities, types of intelligence, race and sexual orientation are forms of primary dimensions of diversity. These dimensions according to Vecchio & Appelbaum, (1995) help people to shape their self-image and how they view the world. The secondary dimension of diversity on the other hand can be acquired or change as one lives. These dimensions include religious beliefs, education, geographic location, income, work background and marital status (Vecchio & Appelbaum, 1995, p. 696). According Ilmakunnas & Ilmakunnas (2009 p.6), "Group diversity refers to the degree to which a work unit is heterogeneous with respect to demographic attributes". Jackson et al. (2003) made a distinction between two types of demographic attributes – task-related and relations-oriented attributes. According to Jackson et al. (2003) task-related diversity (e.g. education, tenure, functional background) are normally associated directly to the skills that one needs during his working life, whereas relation-oriented diversity (age, gender, race and ethnicity) usually have indirect effect on work performance because of their interpersonal relationship like trust and communication.

These characteristics indicate the number of ways diversity been defined. For instance Triandis, Kurowski and Gelfand (1994, p. 772) define diversity as "any attribute that humans are likely to tell themselves, that person is different from me".

Guzzo and Dickson (1996) also define diversity as heterogeneity in relation to personalities, gender, attitudes and background or experience in a group. Knippenberg

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and Shippers (2007, p. 516) refer to diversity as "a characteristic of social grouping that reflects the degree to which objective or subjective differences exist between group members"

In this research diversity is define as any attribute that people use to tell themselves that another person is different (Williams & O'Reilly, 1998, p.81). The adoption of this definition makes it possible to examine diversity in working groups and teams.

The concept of diversity and team diversity makes it possible to examine the different types of diversities which are discussed in section 2.2.

2.2 Types of Diversity

Some researchers (Jehn, Northcraft and Neale, 1999) categorized diversity into three types; information (e.g. knowledge, perspectives, educational background, experience, expertise), Social Category (e.g. race, gender, age) and value diversity (e.g. group goals, target or mission).   Other researchers like Harrison et al., (1998) also proposed two main types of diversity; surface-level and deep level. The Surface-level and deep-level dimensions is discussed in the next section.

2.2.1 Surface-level diversity

Harrison et al., (1998) defined surface-level diversity as the differences among team members in overt demographic characteristics (Milliken & Martins, 1996; Riordan 2000). According to Jackson, May and Whitney (1995), surface-level diversity are readily detectable attributes which can be determined with just a brief exposure to a specific

person. These characteristics which often reflect physical feature includes age, sex and race/ethnicity. Most often people can differentiate easily the similarities among themselves and others in relation to gender, age, racial background (Jackson et al., 1995).

According to Tajfel & Turner, (1986), members in a group differentiate themselves easily from observable differences in age, race and gender. People are more likely to be motivated and get along easily with others in the group who has the same overt features as they do (Tajfel & Turner, 1986). Well similarity-attraction paradigm is also a general theory of diversity by Barsade et al., (2000). This paradigm states that people are attracted to and prefer to be with similar others because they anticipate their own values, attitudes and beliefs will be reinforced or upheld. Members of a team are less likely to easily get along with people they perceive to be less like themselves. Tsui et al. (1992) observed that, age, sex and race are more accessible characteristic because they are easily observable than educational and tenure in the organization. These high visibility attributes are low in job-relatedness because they do not reflect task perspectives and technical skills as directly as organizational tenure similarity on communication frequency in work group.

2.2.2 Deep-level diversity

Deep-level diversity is the psychological characteristic differences among people in a team. This includes personalities, values and attitudes (Jackson et al., 1995; Harrison et al., 1998). These differences are realized after a period when members interact among themselves in a form of verbal and nonverbal communication, behavior patterns, and exchange of personal information.

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In relation to interaction, it is similar to surface-level diversity. That is people find it easy to interact with others who have similar psychological characteristics, because that interaction verifies and reinforces their own beliefs, affect, and expressed behaviors (Swann, et al., 1992). According to Locke & Horowitz, (1990), this form of attraction occurs even when attitudes are negative. Some researchers underlie deep-level diversity to be in a form of difference people's attitudes, values and personalities (Byrne, 1971; Newcomb, 1961). According to Harrison et al., (1998), attitude similarity in teams leads to higher team cohesiveness. Some researchers (e.g. O'Reilly, et al., 1991) suggest that, there is a negative association between value diversity and outcomes in team. For instance the research emphasized that employees who had different values than that of the team were not so satisfied and portrayed lower level of commitment in the organization. Also difference in values sometimes led to task conflict and lower levels of relationship conflict with time (Jehn & Mannix, 2001).

It is agreed that to empirically determine the diversity attributes that are associated with team outcomes such as team effectiveness, there is the need to identify those attributes which are more relevant to the study area. Hence, in identifying these attributes, this study examines the diversity areas associated with gender, age, race/ethnicity, and educational background.

2.3 Gender diversity

Research on gender diversity prior to the 1990s focused largely on discrimination and bias resulting from being different from the majority. According to Tsui & O'Reilly, (1989), there was negative effect for women in terms of performance ratio and pay

discrimination. Tsui, Egan, & O'Reilly (1992), also observed that, there is more negative effect on men than women in regards to outcome as attachment to the organization.

Lee and Farh (2004) build on Bandura's (1977) social cognitive theory to predict that gender diversity would moderate the relationship between group efficacy and group outcome. It was realized from their research that group efficacy performance relationship was stronger in mixed gender groups than in same gender groups. An example of theoretical perspectives with positive prediction is person-organization fit (Kristof, 1996) was used to predict applicant attraction to the organization based on Equal Employment Opportunity statements in recruitment brochures (Rau & Hyland, 2003).

Wood (1987) meta-analysis of small group research observed that mixed gender groups performed better overall than same gender groups. Jackson et al. (2003) and Manniz & Neale (2005) also concluded that, there are generally inconsistent effects of gender on performance or group processes. There is evidence that women experience division and group-boundary tightening but no visibility or isolation (Hewstone et al., 2006). Effect of gender diversity on outcomes was found to be moderated by growth orientation, team identification and team orientation (Dwyer et al. 2003; Hobman & Bordia, 2006; Mohammed & Angell, 2004). Somech (2003) found differences between opposite-sex pairs and same-sex pairs with respect to participative leadership when the duration of the acquaintance was longer.

Dainty et al. (2004) established that few friends and family advised women to join the manual industry and women had poor understanding of it. Byrne et al. (2005) indicate that although considerably more women are trained in manual works, they are not

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employed as such in the industry. Researchers have also realized that, women tend to have higher level of formal qualification than their male counterparts but women may not succeed in gaining employment (Beck, 2005, Wall and Clarke, 1996).

In some manual industries, formalized education is solely not given priority but education with work-experience gives one a greater chance of being employed (Byrne et al., 2005). Women often face this problem because of the discriminatory practices in recruitment for work placement (Byrne et al., 2005). Women who are normally employed in the manual trades are likely to be employed where collective agreements determine employment and wage condition in local authority (Byrne et al., 2005). Again, Byrne et al. (2005) stated that, women are hardly engaged on price work.

Lingard & Francis, (2006); and Dainty & Bagilhole, (2006), observed that due to the domestic responsibilities, demand of childcare, amongst others result in greater work-into the industry their counterpart who are males are normally dominated in the work environment may be hostile to women and resistant to change. According to Dainty and Bagilhole (2006), female participants were treated poorly and felt isolated and unable to turn to senior colleagues for help.

The task completion of some industries is typically based on team work and cooperation but sexism which exist may make work difficult for women because of lack of support and good relationship that are very relevant or vital (Beck et al., 2003). Women who however, remain in some manual industry have to prove themselves to be very good at what they do and sometimes in the face of harassment (Clarke et al., 2004).

2.4 Ethnicity diversity

Theories have been used for studying race/ethnicity as a central variable of interest (Tajfel, 1981). Majority of these theories come from a micro-theoretical perspective and attempt to explain behavior from an individual or within work group perspective. Some of the assumptions made from these theories are that:

- Humans judge each other on surface-level characteristics such as race or gender in the absence of additional information;
- Group membership based on these characteristics implies true similarities or differences between people which then creates the formation of in-group and out-group distinction and;
- These judgments ultimately result in outcomes that may have negative effects for minority or out-group members (e.g. lack of mentors, stalled careers, lower performance evaluation or group productivity (Tajfel, 1981).

Positive predictions thus 'value in diversity' perspective argue that diversity creates value and benefit for team outcomes (Cox, 1993; Cox et al. 1991). These researchers assumed that increase in racial/ethnic diversity means the team will positively have outcomes like assess to increased information, enhanced problem solving ability, constructive conflict and debate, increased creativity, higher quality decision and increased understanding of different ethnicities/cultures.

Krager and Ford's (1985) meta-analysis, race/ethnicity explained 3.7 percent of the variance in job performance rating. Rates tended to receive higher ratings from raters of

the same race/ethnic. Other findings for race/ethnicity effects suggest that individuals who are different from the majority in an organization tend to be more likely to leave, to be less satisfied and less psychologically committed (Moch 1980; William & O'Reilly, 1998).

According to Milliken & Martins, (1996), two opposing views emerged from the study on diversity that focused on work teams or the business case for managing and utilizing an increasingly diverse workforce (Johnston et al., 2003; Mannix & Neale, 2005; Ragins & Gonzalez, 2003; Van Knipenberg, et al., 2004). These views are the Optimistic perspective and the Pessimistic perspective.

The optimistic perspective explains that there are benefits to the team by having increased diversity. Hoffman (1959) observed that group performance is thought to be enhanced by having broader resources and multiple perspectives. Ethnic diverse work teams make better decisions than homogeneous team (McLeord, Lobel & Cox, 1996; Watson et. al. 1993). The pessimistic perspective on the other hand observed that increased ethnic diversity typically has shown negative effects on social integration and communication and increased conflict (Williams & O'Reilly, 1998). In relation to performance, ethnicity diversity does not predominantly show either significant result (Jehn & Bezrukova, 2004) or negative effects (Kerkman, et al. 2004; Jockson, & Joshi, 2004).

Joshi and Roh (2007) also observed positive or negative effects for race/ethnicity diversity across performance, process and affect/attitude outcomes. Findings revealed that, there were more null results than positive and negative effects put together. Webber

and Donahue (2001) in their meta-analysis of 24 studies also found that demographic diversity (including race/ ethnicity) did not have any relationship with team cohesion or performance.

2.5 Age Diversity

There has been very little research on age diversity as compared to race or gender. The few research on age diversity concentrated on outcomes such as performance appraisal, selection process, training and development and career opportunities. Employers normally prefer to select younger applicant over older applicants (Finkelstein et al., 1995). There has been assumption that in the areas of performance rating or hiring decision for example, young employees are preferred over middle-age or older employees (Shore & Goldberg, 2004). Stereotypes plays a key role in age diversity literature, for instance it is perceived that older people are less productive, flexible, creative and very difficult to train (Ringenbach & Jacobs, 1994). Shore & Goldberg (2004) however concluded that, the decline in skills capacity as a result of age diversity did not occur during normal working ages. In the areas of training and development, older people are normally not given the chance especially when they are older than their workgroup or manager (Cleveland & Shore, 1992; Shore et al., 2003).

Zenger and Lawrence (1989) argued that, when discussing the effect of age and organizational tenure similarity on communication frequency in work group, while organizational tenure homogeneity (or heterogeneity) directly shapes work-related interact, the effect of age similarity on technical communication result primarily from basic social behaviors that occur independently of task characteristics.

2.6 Educational level diversity

Educational diversity relates to the different sets of task-relevant skills, knowledge and abilities team members possess as a function of their educational backgrounds (Kristian, et al., 2005. p 1108). The educational level like tenure and functional background can be grouped under the task-related attribute of diversity. The task-related attributes are normally directly related to skills needed in working (Jackson et al., 2003). The diversity of team members education background will determine how information will be used by the team (e.g. Pelled, Eisenhardt, & Xin, 1999; Bantel & Jackson, 1989).

Variety will be influenced by educational diversity in a sense that a team consisting of individual with the same educational background will be more likely to have considerable overlaps in their activities than will a team with individuals whose education differ (Gibson, 2001). For example, two fashion designers whose task is plan a fashion show for a special occasion will engage a narrower range of information than a team with the same task composed of a fashion designer and event organizer. Education contributes to the expertise knowledge of an individual. Expertise gives members of a team the basis on the type of information that will be useful to a team on task completion, which in turn enables team members to adopts or select the right information during decision making (Bunderson & Sutchliffe, 2002; Cohen & Levinthal, 1990). Educational diversity is important because teams who work on complex task in an organization is made up of people of different educational background (Bantel & Jackson, 1989).

Working in diverse teams, however can be challenging. Although more perspectives may be beneficial, the very nature of diverse team may make it difficult for team members to

coordinate their work and performance. If team diversity is not managed properly it could lead to team diversity conflict.

2.7 Diversity Conflict

Thomas (1976, p. 891) defined conflict as "a process which includes perceptions, emotions, behaviors and outcomes of two parties and begins when one party perceives that the other has frustrated or is about to frustrate, some concern of his". Rahim (2002, p. 207) conceptualizes conflict as "an interactive process manifested in incompatibility, disagreement, or dissonance within or between social entities (i.e., individual, group, organization, etc)"

According to Brown (1983), diversity conflict can be defined as exchanges of incompatible actions, behaviors, or practices among two or more interdependent individuals, groups, or organizations with conflicting interests resulting from group identity-based differences. Diversity conflict involves parties with social-group identities based in race, gender, sexual orientation, age, class, spiritual practice, ability and other human differences. Diversity conflict is also based in the actions, behaviors, and practices of oppression.

Murray (1989) claimed that the higher level of conflict associated with heterogeneous groups can enable them to better discern when adaptation is appropriate. Diversity conflict can be viewed as two dimensional constructs, one consisting of task disagreement and the other referring to socio-emotional or interpersonal argument (Ross, 1989; Wall & Nolan, 1986; Coser, 1956)

Guetzkow and Gyr (1954) conceptualized task-related conflict as substantive and emotion-based, non-task conflict as affective. Guetzko and Gyr (1954) describe substantive conflict as intellectual opposition among participants, deriving from the content of the agenda and affective conflict as tension generated by emotional clashes aroused during the interpersonal struggle involve in solving the group's agenda problem. Substantive/cognitive/task-related conflict is when members perceive that disagreement arise as a result of task issues including the nature and importance of task goals and key decision areas, procedure for task accomplishment and the appropriate choice for action (Jehn, 1995; Dimas, 2007; Miguez, 2005). Affective/relationship/emotional conflict is also when members perceive disagreement arise because of interpersonal clashes characterized by anger, distrust, fear, frustration and other form of negative affect (Eisenhardt & Bourgeois, 1994; Schermerhorn et al., 1991).

This distinguishing conflict types does not mean that, one cannot turn into the other if not adequately managed since they are highly correlated to each other and can be aroused by similar conditions. To better function well in the team, there is a need to develop the ability to manage both task and affective conflicts (Amason & Sapienza, 1997; Eruzun, 2004; Jehn, 1995; Pelled, 1996; Rahim, 2002; Simons & Peterson, 2000). William & O'Reilly (1998) realized that diversity can affect the satisfaction and commitment of members and the group processes in a form of communication among others.

Pelled (1996) proposed a model that distinguished demographic variables in terms of visibility and job-relatedness. She hypothesized that the more visible a demographic variable is, the more it is related to affective conflict and the more job-related it is, the

more associated with task conflict it is. Pelled (1996) also conceptualized that, those influences would be reduced in time as the group's longevity increases. In a study by Pelled et al., (1999), it observed that there was a positive relation between functional diversity and task conflict, as well as between race diversity and affective conflict. There was however, unexpectedly no significant relations neither between gender diversity and any kind of intragroup conflict, nor between tenure diversity and task conflict. Tenure diversity was positively associated with affective conflict, in contrast to age diversity, which unlike expectations, showed a negative association with this type of conflict. Positive relations among diversity variables and both types of conflict tended to weaken through time. In a meta-analysis by De Wit and Greer (2008), it was observed that both informational diversity (e.g. education background, functional background) and social category diversity (e.g. race, gender, age and nationality) were positively related to task conflict.

Although other researches (e.g. Jackson et al., 2003; Jehn et al. 1999; Manniz & Neale, 2005; Pelled et al., 1999) about diversity's influence on groups processes have observed a likely negative effect, recent studies in this field have found no significant results. This can be observe in the study by Passos, (2005) and Silvestre, (2008), which pointed no concluding results on diversity and conflict.

It can therefore be observed from the above that diversity conflict is an inevitable issue that happens in teams. It can either be beneficial as well as being destructive. Thus can enhance performance and be a barrier to performance.

2.8 Overview of teams

Many people have various definition of team, for instance some people associate team to sports, whereas others think it is a group of people working together. Irrespective of how people perceive team, it goes beyond individuals working alone or in an organization especially where good output requires various skills, judgment and experience. It is therefore very important to clarify the meaning of team.

According to Baker and Salas (1997), team can be considered as two or more individuals, who have specified role assignments, perform specified task and must interact and coordinates to achieve a common goal. In most situations, the size of the team may be determined by the kind of task or activities to be carried out and the expectations of the organization.

Katzenbach and Smith (2003, p.45) defined team as "a small number of people with complementary skills, who are committed to a common purpose, performed goals and approach for which they hold themselves mutually accountable. This definition focuses on relevant components that a real team is made up of- complementary skills, commitment, common purpose and goals, common approach or strategy and mutual accountability (Spatz 2000; Katzenbach & Smith, 2003).

Hackman (1987, 1990) defines team as two or more people with different task, who work actively together to achieve specified share goals.

Cleland and King (1988) rightly observed that effective and productive project teams are characterized by team spirit, trust, and quality of information exchange among team

members. These characteristics helps towards an effective decision making processes, enhancing commitment of team members, developing self-forcing and self-correcting project controls. Every team is expected to perform in order to meet the expectation of the organization and the main motive of any team is to satisfy customers.

2.9 Team Effectiveness

Team effectiveness is the hallmark of expectation of every good work which requires the input of a team. There are various definitions of team effectiveness. Some outstanding definitions of team effectiveness from various researchers are:

A team is effective if it meets (or even exceeds) the standards for the products and processes of interested stakeholders (Hackman, 1987).

Mohrman et al. (1995) define team effectiveness based on three aspects. First, team performance is the extent to which the groups' productive output meets the approval of its customers. Second, interdependent functioning is the extent to which the team is inter-reliant on one another. Thirdly, team satisfaction is the extent to which the team is satisfied with team membership.

Tannenbaum et al. (1996) define effectiveness as a combination of performance in team outputs, and the team's ability to grow and regenerate itself.

Cohen et al. (1996) also define team effectiveness in terms of both high performance and employee quality of work life. This idea draws from socio-technical theory, which states both social and technical systems must be maximized for optimally effective team.

2.10 Team Effectiveness Models

Team effectiveness models are normally used to assess team effectiveness. Some of the models emphasis on variables that are internal to the team while others emphasis on external factors. The team effectiveness model by Salas et al. (1992) explains that the context of the organization and group design affect the communication process of members, which also affect the quality of team performance. Salas et al. (1992) argue that team effectiveness depends on the effort put in by team members, how well team members apply knowledge and skills to task and the appropriateness of task performance strategies. Also, team effectiveness is influenced by the resources allocated to the team

and appropriate equipment among others are all factors that enhance team performance. Below are some proposed models;

2.10.1. Tannenbaun et al., (1992) Model

Tannenbaun et al., (1992) portrayed in figure 2.1 adopts the input, process (throughput) and output structure, while acknowledging the essence of organization and situational context throughout the process and incorporating feedback loops. The input variables consist of four high-level variables (Task, Individual Characteristics, Team Characteristics, and Work Structure) that directly or indirectly influence the team output through the team processes. The process (throughput) which the second phase of team effectiveness model proposed by Tannenbaum et al. (1992) incorporates the team processes and team interventions. Team performance is influenced by the processes

which refer to team members' interaction, conflict resolve, decision-making, problem solving and action co-ordination.

Fig 2.1 Team effectiveness model by Tannenbaum et al., (1992)
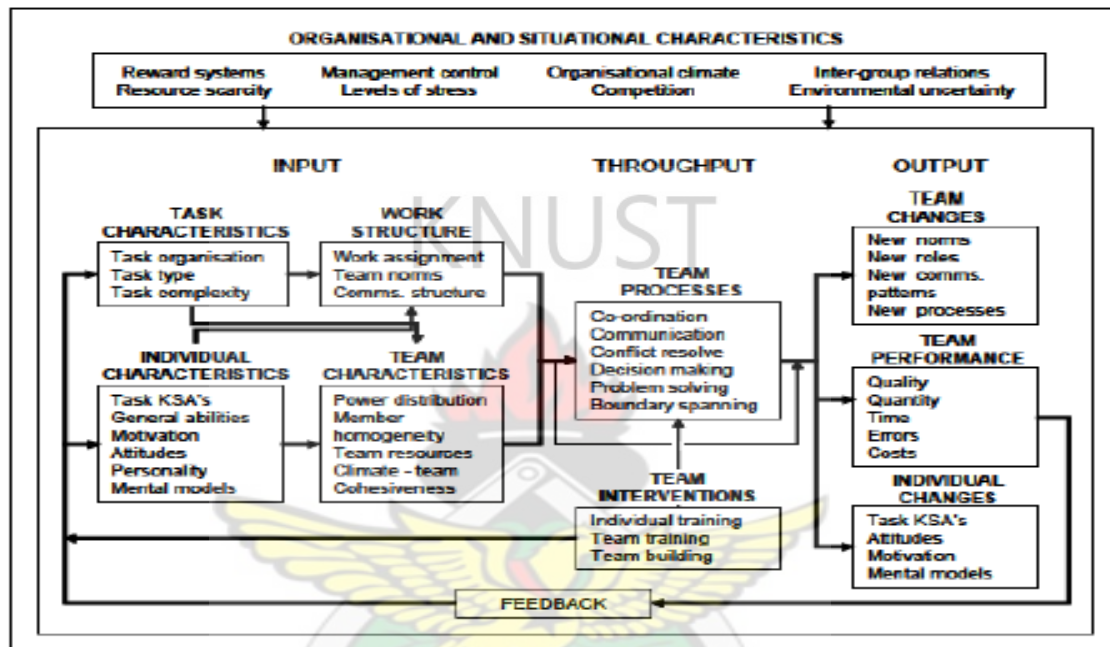
Source: Adopted from Tannenbaum et al., (1992)

The third phase proposed by Tannenbaum et al. (1992) is the output. The output consists of team changes (like new roles), team performance (like quantity and quality of product and services) and individual changes (enhanced skills, change in attitudes and motivation). The team's performance can be influenced by the team and individual changes whereas the team performance can serve as feedback on individual characteristics, work structure or other inputs and processes.

2.10.2 Klimoski and Jones (1995) Model

Klimoski and Jones (1995) model shown in Figure 2.2 also adopts Input, Process, and Output approach. The input variables identified are Organization, Norms, Composition, Leadership and Size. The use of skills, strategies, effort level and co-ordination, potency and compatibility are process variables identified by Klimoski and Jones (1995).

The study emphasis that team effectiveness does not emerge from individual effort alone, instead, the interpersonal dynamics of the team, level of hostility or distrust in the team and levels of compatibility between team members are factors that can shape the effectiveness of a team.

The output variables identified by Klimoski and Jones (1995) are task accomplishment, quality of outcomes, satisfaction and emotional tone and turnover. The outcome variables listed are a separation between task-based and team/social-based. The turnover of a team can also be predisposed by team members' levels of satisfaction and emotional tones, such as pleasant environment and encouragement (O'Reilly et al., 1989).

Figure 2.2 Team Effectiveness Model by Klimoski and Jones

Input variables	Process variables	Outcome variables
Team organisation Norms Composition Leadership Size	Use of skills Strategies Effort level and co-ordination Potency Compatibility	Task accomplishment Quality Satisfaction and emotional tone Turnover

ENVIRONMENTAL DEMANDS AND RESOURCES
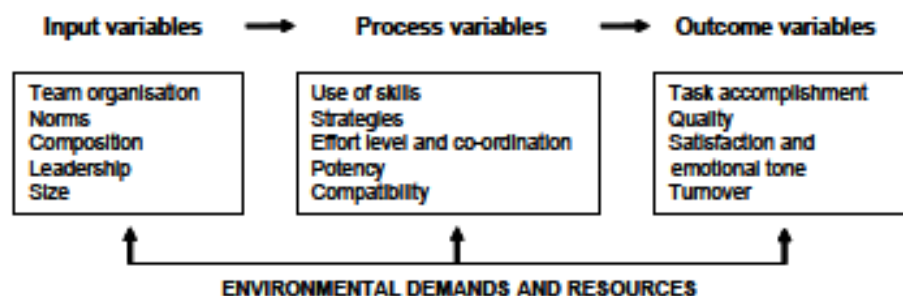
Source: Adopted from Klimoski and Jones (1995)

2.10.3 Shanahan (2001) Model

Shanahan (2001) model portrayed in Figure 2.3 has four main elements namely: process, inputs, outputs and structure. The activities that take place at the process element involve interaction between humans and machines. This process receives a dynamic set of demands and a set of resources as input which can be used in dealing with these demands. The process produces a set of outputs which collectively determine team performance and team effectiveness as mediated by mission objectives.

The process itself is divided into three parts: teamwork and leadership. It is the basic function of task work to turn input into output (team performance). Each member of the team has his or her particular task work responsibilities. Team work is influenced by how well the task work is carried out and how well the team is led. Leadership is considered as a function that must be performed.

Figure 2.3 Team effectiveness model by Shanahan (2001)
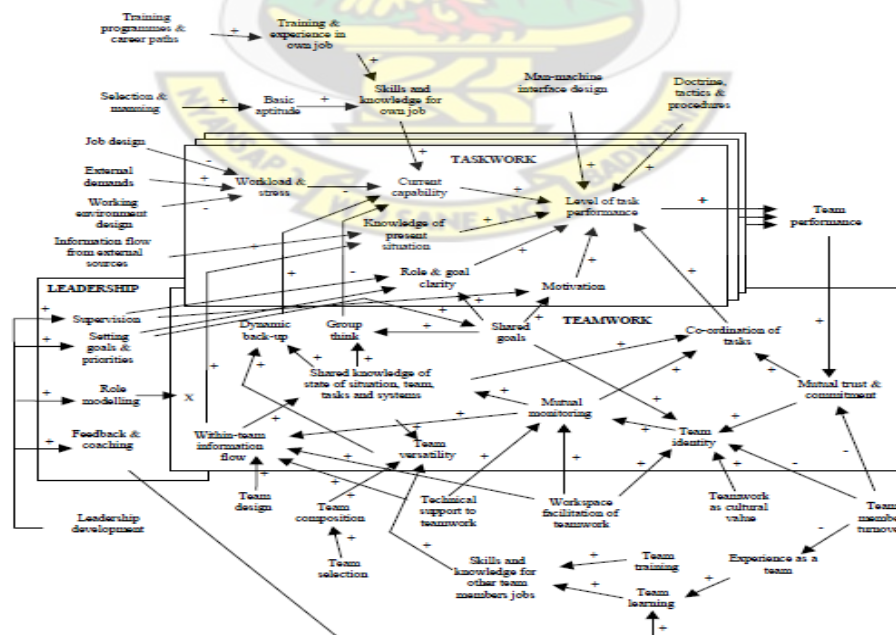
Detailed Model of Team Effectiveness
Source: Adopted from Shanahan (2001)

The entire process is further influenced by a variety of structural factors. These are largely given and may be physically resources (e.g. technical equipment, workspaces, buildings) or the results of prior organizational processes (e.g. selection, training, career planning). These factors can be usefully considered under the traditional task work – oriented heading of 'fitting the man to the job' and 'fitting the job to the man', suitably extended to cover the team work and leadership dimensions. Finally, in this framework team effectiveness is measured through a comparison of team performance with the mission objectives set for the team (Shanahan, 2001).

It can be deduced from the models explained in sections 2.10.1,2,3 that; the individual, leader, and the organization as a whole will one way or the other contribute to the effectiveness of a team.

In line with the above, this study focuses on the individual's characteristics specifically knowledge, skills; leader (knowledge, ability), processes (communication, service) and organization (wage, recognition)

2.11 Team diversity and team effectiveness

There has not been a definite result on the track of diversity and productivity (Alesina and La Ferrar, 2005). For instance diversity may have negative effect on productivity, if an employee's performance depends negatively on other team members who are different from him in a form of age, gender etc,. But the outcome may be different if the employees, considers diversity to benefits them. An effective team normally, realized their expectation, thus performance is achieved. Jackson et al., (2003) observed that,

people measure performance by using financial indicators or team effectiveness rating from team members. Some researchers have observed that a diversified workforce performs better than a homogeneous one, thus when workers of different skills or other attributes complement each other (e.g. Ilmakunnas et al., 2004; Veen, 2008). For instance, it has normally been observed that young workers in an organization learn from their counterparts who are older and have more experience. On the contrary, Kramer (1993), observed that people of similar skills work best together, so diversity does not necessarily benefit a firm or make a team to be effective. For instance, when there is pay difference due to diversity (e.g. gender, ethnicity) in a team, it can bring about confusion which can lead to an ineffective team. In wage distribution it is has been argued that pay inequality reduces unity which leads to negative productivity (Kramer, 1993).

A meta-analysis by Jehn & Benzkorova (2004) on group diversity, workgroup context and performance on 1528 work groups, found out that, there was moderating effects on workgroup contexts for group diversity in age, tenure, gender and race. In such groups the differences in age, race, gender and tenure may have become less relevant and important over time as group members cooperate with each other and spend a substantial amount of time performing together in specific contexts. For instance Harrison et al. (2006) have shown that as group members collaborate, the effect of surface-level diversity (e.g. gender, race) on group outcomes become much weaker than the effect of deep-level diversity (e.g. values, personalities). Negative effect of diversity can be attributed based on conflict that arises from negative stereotypes or biases and escalate as group members interact within their group (William & O'Reilly, 1998).

2.12 Conceptual framework

Diversity is an inevitable thing in any team, because everyone is different. Managing diverse work team is one of most difficult challenges in any modern organization (Tsui & Gutek, 1999) and as such need to examine this in the construction industry. The two main grouping of diversity are surface level and deep level. The surface-level (Jackson, May, & Whitney, 1995) or high-visibility (Pelled, 1996) are normally easily observed and measured. The surface-level includes gender, age, and ethnicity. The deep-level (Harrison, et al., 1998) or less readily apparent diversity (Riordan, 2000) on the other hand is based on psychological features which include difference of personality traits (Barsade, et al., 2000), values (Jehn et al., 1997), attitudes, preference, beliefs (Harrison et al., 1998) of team members. As every individual perceive to be different, the tendencies of conflicts in teams are likely to present. When diversity is managed well teams are like to be effective. Some of the variables that enhances team effectiveness are the individual, team members, the team leader and the organization.

Fig 2.4 Conceptual Framework to investigate diversity and team effectiveness
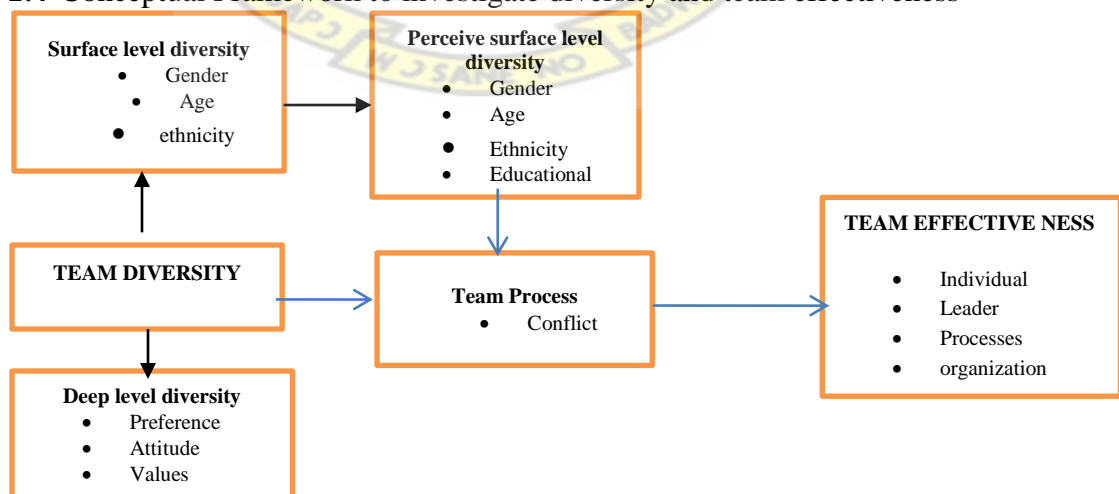
Conclusion

The chapter reviewed other literature on diversity, forms of diversity, models of team effectiveness, factors team effectiveness, diversity conflict. It also analyzed team diversity on team effectiveness. The next chapter looks at the methodology used for the study, geographical location of the study area and the organizational profile.

CHAPTER THREE

METHODOLOGY/ ORGANIZATIONAL PROFILE

3.0 Introduction

Chapter two reviewed literature on the team and models of team effectiveness as it determined the variables that make a team effective. The chapter then explored concepts and definition of diversity and conflict. The reviews led to the proposition of the key research questions, aim, and objectives, necessary to achieve the aim of the research.

This chapter portrays the procedure and techniques which were adopted in collecting data for the study. The chapter deliberated on research strategy, research design, sources of data, population, sampling techniques, data collection instruments, data analysis techniques and the background information of the industries is described.

3.1 Research methodology

Methodology is the theory of how research should be undertaken, including the theoretical and philosophical assumptions upon which research is based and the implication of these for the method or methods adopted (Saunders, et al. 2012. pp 674). Research methodology is the process used to collect information and data in order to arrive at a decision (online business dictionary, 2014). It is also a way to systematically solve the research problem.

3.2 Research design

The researcher's ability to answer the research questions and achieve the set objectives is dependent on the type of research design employed. Sauders, et. al. (2012) identified the following research designs- experiment; survey; archival research; case study; ethnography; action research; grounded theory; and narrative inquiry. Yin (2009) differentiate between four case study design based upon two discrete dimensions- single case versus multiple case; and holistic case versus embedded case. Yin (2009) proposes that a multiple case study strategy may combine a small number of cases chosen to predict literal replication and a second small number chosen to predict theoretical replication. Case study research is not limited to one source of data and thus can include both qualitative and quantitative date.

3.2.1 Research design adopted

The researcher adopted a case study strategy. A case study explores a research topic or phenomenon within its context, or within a number of real-life contexts. Case study helps the researcher to gain a rich understanding of the context of the research and the processes being enacted (Eisenhardt and Graebner, 2007).

The explorative nature of the research informed the researcher to use the case study strategy and as such used the mix methods to collect data – thus questionnaire and interview. A cross-sectional survey with questionnaire and semi-structured interview were used to provide answers to the research questions. The research was cross-sectional because it was meant for a particular phenomenon and at a particular time.

The research was conducted in different organizations as multiple cases (Yin, 2003) which include Ghanaian professionals such as architects, engineers, surveyors, quantity surveyors, contractor, artisans and laborers. The researcher focused on professionals who work in teams made of different professionals in the construction industry who had much knowledge in the research area.

3.3 Research strategy

A research strategy may be defined as a plan of how a researcher will go about answering her or his research question. It is the methodological link between your philosophy and subsequent choice of method to collect and analyze data (Denzin & Lincoln, 2005).

According to Vanderstoep & Johnston (2009), there are two main schools of research strategies: the qualitative and quantitative approaches. Although the two research strategies are distinct, they can be used together for the enhancement of a study. Saunders et al (2012), for instance advocated for researchers to adopt the mixed method as the two strategies (quantitative and qualitative) complement each other's strength and flaws. Critiques of the two research strategies are discussed in order to cement the researcher's choice of a mixed method.

3.3.1 Quantitative research

Vanderstop & Johnston (2009) and Gay (1996) explain that quantitative approach as a method that specifies numerical assignment to detailed, predict and/ or control the issue under research. Quantitative research method is illustrated by the gathering of

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information which can be analyzed numerically and the results usually presented using statistics, tables and graphs.

Gay (1996) identified four types of quantitative research: descriptive, correlation, casual-comparative and experimental. Descriptive research involves data collection for hypothesis testing, which answers research objectives and current status of the study. Correlational research also tries to describe whether relationships exist between two or more quantifiable variables. Causal-comparative on the other hand, explain causative relation between an independent variable and a dependent variable without the researcher manipulating the independent variable. Finally, the experimental research compares the cause-effect relationship, where the independent variable is in control, hence affect the dependent variable.

The common data collection techniques used in quantitative research are questionnaires, tests and existing databases. The analysis of quantitative data specify how many are affected, where the greatest area of impact is, and what the key sector needs are. Quantitative research plays much emphasis on scientific measurement and because quantitative data is numeric, representative sample is more commonly used in data collection and analysis. A representative sample is meaningless unless the data collection instruments used to collect quantitative data is suitable, well designed and clearly explained to end users of the data. Data collected using poorly designed questionnaires may solicit an enormous amount of data, but results in much of it being unusable as a result of being too difficult to measure and impossible to generalize for the total affected

areas. Bigger sample sizes tend to be used for collecting quantitative information, so as to gather as representative a picture as possible.

3.3.2 Qualitative research

Denzin and Lincoln (2000) emphasis that, qualitative research involves an interpretive and realistic approach relevant to understanding the meanings, which people attach to phenomena thus actions, decision, beliefs, values among others, contained by the social world.

According to Trochim (2005), qualitative research is typically used to achieve a deep understanding of certain issues, establish new theories, or evolve stories to describe a phenomenon. Qualitative data are collected through the use of unstructured interviews, case study, direct observation and participant observation. The unstructured interview is commonly used to collect qualitative data. Case study normally adopts the unstructured interviewing and direct observation as the method to gather more information that relates to the research area. The purposive sampling technique is commonly used in qualitative research (Teddlie & Yu, 2007).

3.3.3 Mixed Method

The method involves the integration of the qualitative and quantitative research in single particular study. Rossman and Wilson (1985) identified three benefits of the mixed method which includes corroboration, elaboration and initiation. It was explored that the initiation turn ideas around, elaboration presents richness and detail in the research study, and corroboration brings about convergence in the research findings.

3.3.4 Research strategy adopted for the study

Contemporary researchers have deviated from the usual process of solely using either the quantitative research strategy or the qualitative research strategy into combining the two (Sauder et al, 2009). So the researcher adopted the mixed strategy, thus qualitative and quantitative on the following grounds.

a) The explore-descriptive nature of the study allows the researcher to present responses collected from interview and questionnaire to be processed or analyzed quantitatively instead of relying solely on the qualitative technique of content analysis. The data was analyzed statistically to determine whether the diversity in terms of different employee groups to be compared for differences in gender, religion, age, profession, and tribe had any impact of output.

b) The approach was essential to appreciate and understand the causal factors, attitudes and behaviors of the members within industry and their effect on output. It also allows for a greater diversity of views to inform and be reflected in the study.

c) The mixed method also helped to observe the discrepancies that will arise from respondents in the data collection process.

3.4 Sources of data

The sources of data used comprise, primary and secondary data. This made it feasible for the researcher to collect a wide range of data for the study.

3.4.1 Primary data

Primary data was acquired from the management and staff of construction projects through questionnaire and interview. The researcher employed closed-ended questions to obtain data pertaining to the effect of diversity on team effectiveness on construction projects in the Ashanti region, specifically Kumasi metro. Semi structured interviews were also conducted to elicit information on the effect of team diversity on team output, the relationship between conflict and team effectiveness, and the contribution of project leaders in ensuring team effectiveness. The interview allowed interviewers to express themselves freely on the subject area under discussion.

3.4.2 Secondary data

Secondary data are data that have already been collected for a certain purpose. This includes both raw data and published summaries. Secondary data once obtained can further be analyzed to provide additional or different knowledge, interpretations or conclusions (Bulmer et al. 2009). The researcher relied on published journals on diversity in teams, team effectiveness, and related publications for the secondary data. This created the framework upon which the research survey was conducted.

3.5 Population and sample

The population of the study was the employees of construction projects within the Kumasi metro in the Ashanti region. The researcher took into consideration various categories of employees within the construction industry. The sample size of the study was 164 employees which consist of architects, contractor/subcontractors, engineers, and

artisans of the construction projects. Questionnaires were given to one hundred and eight professionals whereas fifty-six respondents were also interviewed. The Table 3.1 indicates the number of selected employees from the various construction professionals using questionnaire and interview. These levels were project managers, engineers, architect, subcontractor, contractor, valuer and Artisans.

Table 3.1:
Sample size by the level of the employees

Level of employee	Total number of employees chosen	
	Questionnaires sample	Interview sample
Project manager	4	4
Engineer	43	11
Architect	13	3
Surveyor/ Quantity surveyor	39	6
Contractor and subcontractor	1	2
Artisans (mason, carpenter, steelbender)	3	30
Others (valuer)	1	-
Total	108	56

Source: Field survey (2014)

3.6 Sampling techniques

Sampling techniques provide a range of methods that allow for a reduction in the amount of data that needs to be collected, limiting it to a subgroup. The sampling techniques available are probability or representative sampling or random and non-probability or non-random or judgmental sampling.

Probability/random sampling involve using a random selection so that each unit of the population has a known chance of being selected, with the aim of keeping sampling error

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to a minimum. Random sampling or probability sampling is when each member in a sampling frame has an equal chance of being chosen to take part in a study. The random sampling is divided into four types: simple random sampling, stratified random sampling, systematic sampling and cluster sampling (Vanderstoep & Johnston, 2009).

A non-probability sampling is where a sample has not been selected using a random selection method, with the implication that some units of the population are more likely to be selected than others. According to Vanderstop & Johnston (2009), non- random sampling is used where each member of the sampling frame does not have an equal chance of being selected as participant in the study. The participants are selected, based on the uniqueness they possess or their accessibility to participate. The non-random sampling techniques are quota, purposive (extreme case, heterogeneous, homogeneous, critical case, typical case, theoretical) and volunteer (snowball, self-selection) and haphazard- convenience.

3.6.1 Sampling techniques adopted for the study

The study adopted the purposive and quota sampling techniques due to the reasons below:

The purposive sampling was selected to enable particular person, purposely selected for the important information they can give for the research area.

The heterogeneous sampling was also used for the qualitative technique. This allowed for data collected from the different professionals to be used in describing and explaining

the key themes that were observed. The homogeneous sampling was also used to focus on one particular subgroup in which all the sample members were similar.

3.7 Data collection instruments

Questionnaire and interview were employed by the researcher to collect data from employees for the study. These instruments better equipped the researcher with rich data as the two complemented each other very well considering the high level of literacy of management and the high illiteracy level of some construction employee or laborers.

3.7.1 Questionnaire

A questionnaire is a technique of data collection in which each person is asked to respond to the same set of questions in a predetermined order (Devaus, 2002). There are two main types of questionnaires: self-administered and interviewer-administered. The self-administered questionnaire takes the forms of internet mediated questionnaire, postal questionnaire and delivery and collection questionnaire. Interviewer-administrated questionnaire involves telephone questionnaire and structured interview. The researcher adopted the self-administered type of questionnaire where the questionnaires were delivered and collected later.

The closed-ended formats of questionnaire were employed to extract appropriate responses from the employees. Questionnaire was mainly used to target the literate employees within the construction industry and also because it was easy to administer besides its ability to draw out significant responses from respondents. The nature of the questionnaire enhanced respondent ability to produce specific responses.

The content of the questionnaire was largely determined by the objectives of the study. The questionnaire was divided into two main sections; thus section A and section B. The section A reflected the main objectives of the report while the section B reflected the demographic profile of the respondents.

To achieve the objectives, the study (Sections A1, A2, A3, A4) used five point Likert scale thus strongly agree, agree, neutral, disagree, strongly disagree to solicit the views of the respondents.

3.7.1.1 Evaluation Standards

For the basis of decision, the evaluation required some standards in the form of 'benchmarking' or criteria. The quality of what was observed within each quality indicator was decided as used by (Gadzekpo, 2007) which were When "Strongly Agree" is chosen it means "very good", which signifies major strengths with slight or no weaknesses, "Agree" means "good", which shows that strengths prevail over weaknesses even though both exist. A response stressing on "Not Sure" indicates respondent's inability to make a decision in favor of strengths or weaknesses of that question being evaluated. A choice of "Disagree" means that the respondent is stressing on "fair" which emphasizes weaknesses outweighing strengths even though both exist; but when "Strongly Disagree" is selected; it means "bad" indicating major weaknesses with slight or no strengths.

3.7.2 Interview

Saunders et al. (2012: pp 372) define research interview as a purposeful conversation between two or more people, requiring the interviewer to establish rapport, to ask concise and unambiguous questions, to which the interviewee is willing to respond, and to listen attentively. There are many types of interviews, noted among them are: structured interviews, semi-structured interview and unstructured interview. Structured interview is highly formalized and structured, where the interviewer has a list of standardized questions for respondents or interviewees. Semi-structured interview is a type of interview where the researcher rely on a list of questions as a guide but the researcher is not restricted to these questions as this may vary from interview to interview. The unstructured type of interview takes the form of an informal discussion where the interviewer determines the direction of the conversation or discussion (Saunders et al., 2009). The researcher employed semi-structured interview to gather information from the management staff of the various different construction projects in the Ashanti region. This made available information that was not covered by the questionnaire.

Semi-structured interview (non- standardized) was selected as a data collection technique due to its flexibility process, its responsive interaction which allows meanings to be probed and topics to be covered from a variety of angles and questions made clear (Sykes, 1991). It also allows room to pursue issues that are viewed as important and understanding events, patterns and behaviors. The interview guide approach was used. This involved a list of questions on fairly specific issues to be covered, along with initial questions and probes that is used to follow up responses to obtain greater detail (King,

2004). The semi-structured interview (one-to one and one-to-many) carried out in this research was to explore opinions and knowledge of employee groups, employees' leaders in the construction industry, as well as selected management teams and construction consultants with experience in construction in the private and the public sectors. The interview covered a range of topics to determine the forms of diversity in the construction industry in the Ashanti Region and the effect of diversity in the construction industry in the Ashanti Region. To enable check on accuracy, the data was transcribed verbatim.

3.8 Data analysis techniques

The cross-case analysis method involves the process of analyzing data from multiple sources selected to inform particular research questions of interest. Thus, data analysis was done using quantitative and qualitative methods of analysis. In analyzing the qualitative data, an initial inductive approach was used. This involved familiarization with data and conceptualization and ordering of data to bring out emerging themes (Easterby-Smith et al., 2008; Miles &Huberman, 1994). The process continued with the adoption of   deductive approach to qualitative data analysis. This involved the development of a "code" which related to "themes and issues in the data identified as important for interpretation" and reflected themes derived from the research conceptual framework and emphasizing the key issues that emerged from the literature review.

Then the cut and paste approach was used. This involved continuous re-grouping "chucks" of verbatim text.

The quantitative data collected were analyzed using the descriptive tool of Statistical Package for Social Scientist (SPSS). The analyses in a form of charts and statistics

provided the researcher with a more flexible means of interpreting the data collected. It also made it feasible for the research objectives and research questions to be answered.

3.9 STUDY AREA AND PROFILE OF CONSTRUCTION INDUSTRY

3.9.1 Geographic Location

Ashanti Region is one of the ten regions in Ghana. It is located in the southern part of Ghana and it's the third largest administrative region in Ghana. Its total land surface is about 24, 389 Km2 (9,417 sq mi) or 10.2 per cent of the total land area of Ghana. It has a a total population of about 3,994,145 according to the 2000 census carried out in the whole country, accounting for 19.1 percent of Ghana's total population. The Ashanti Region is centrally located in the middle belt of the country. It lies between longitudes 0.15W and 2.25W, and latitudes 5.50N and 7.46N. The region shares boundaries with four of the ten political regions, Brong-Ahafo in the North, Eastern region in the East, Central region in the South and Western region in the South West. The capital of the region is Kumasi. The study focused on the Kumasi Metropolitan district of Ashanti Region and specifically, Kumasi. Its population is about 1,171,1311 (Wikipedia, 2014). Figure 3.1 indicates the map of Ghana depicting Ashanti Region and Kumasi Metropolitan.

Figure 3.1 Map of Ghana depicting Ashanti Region and Kumasi Metropolitan
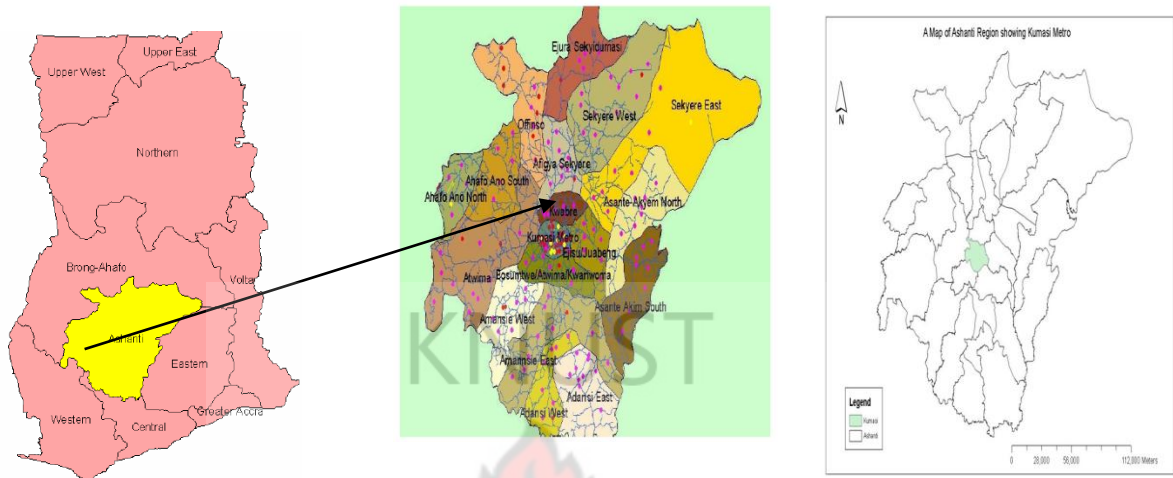
Source: (Owiredu, Korang, 2005)

3.9.2 Overview of the construction industry in Ghana

Construction is a key sector of the economy of every country (HIllebradt, 2000). It contributes to national socio-economic development by providing buildings which are used in the production of all goods in the economy.

The early beginning of the formal Ghanaian Construction Industry (GCI) is reflection of Ghana's historical link with Britain. The construction industry in this country was non-commercial family vocation restricted largely to the provision of village shelter of mud and wood. The European influence, especially, British adventure introduced what could be argued as a more scientific and professional approach to the provision of houses and other related infrastructure in the ensuing years.

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The Kumasi Metropolis of Ashanti region, construction industry is made of up of government, private companies and private individuals. The categorization of contractor of the industry by Ministry of Works and Housing (MOWH) and Ministry of Road and Transport (MRT) is dependent on the available fund- thus the financial ability of a firm to fund a project. For instance if the contractor's categorization is 'DK', it means D stands for General building work and K for Civil work. D1K1 is in the highest class contractor, D2K2 is in the second class group, D3K3 also falls in the third group whereas D4K4 falls in the fourth group of classification of contractor. In the road and the highway, construction projects are also named AB: thus A1B1, A2B2, A3B3 and A4B4.

The industry is involved in general construction, construction and repair of building; civil engineering; installation of fixtures and fittings; and building completion such as painting, glazing and plastering. Construction projects undertaken includes private, public and semi-public project which includes mining project, educational projects, health project, sports facilities, religious projects, office projects, bank projects and residential projects. Companies that fall in this industry include, Consar, Berrok, SRC engineers, Nazi construction, Kory construction, among others.

Conclusion

This chapter explains the methods used to collect data from it population. The geographical location of the study area was also explored. In addition the chapter examined the profile of the construction industry in the Ashanti Region. The following chapter presents data, analysis and discussion of results.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS

4.0 Introduction

This chapter presents results, analysis and discussion of the findings from the survey conducted to explore diversity and its effect on team effectiveness. Details of the findings through the use of questionnaire and individual and group interviews conducted among some professionals in the construction industry are then presented. The chapter begins quantitative analysis (questionnaires) and followed by the qualitative analysis (interview).

4.1 Quantitative analysis

The statistical procedures used in the quantitative analysis were the basic descriptive statistics percentage and frequencies. The analysis begins with the description of sample population; followed by the team composition in the construction industry of the Ashanti region (team composition by size, gender, tribe, nationality); effect of team diversity on team effectiveness; team diversity and conflict; effect of conflicts on team effectiveness; and finally the factors that influences team effectiveness.

4.1.1 Description of Sample Population

The table 4.1 shows the distribution of the sample population in the study area.

The distribution is in terms of gender, religion, educational qualification and designation in the construction industry:

Table 4.1:
Distribution of respondents in the study area

Gender:	Frequency	Percent
Male	101	93.5
Female	7	6.5
Total	108	100
Religion:	Frequency	Percent
Christian	88	81.5
Islam	19	17.6
Traditional Worship	1	0.9
Total	108	100
Educational Qualification:	Frequency	Percent
Second Degree	44	40.7
First Degree	38	35.2
Higher National Diploma	23	21.3
O & A Level	3	2.8
Total	108	100
Designation:	Frequency	Percent
Project Manager	4	3.7
Surveyor/Quantity Surveyor	39	36.1
Architect	14	13.0
Engineer	46	42.6
Contractor/Subcontractor	1	0.9
Artisans	3	2.8
Others	1	0.9
Total	108	100

Source: Field survey (2014)

A summary of the demographic characteristics of respondents as revealed in Table 4.1 shows that 101 (93.5%) were males while 7(6.5%) were females. The demographic characteristics of respondents in terms of gender affirms Byrne et al., (2005) study that revealed that, construction industry did not really employ more women. Christians were 88 (81.5%), 19(17.6%) were Islam and 1(0.9%) were traditional worshippers. The

educational qualification with the highest distribution was second degree 44(40.7%), followed by first degree 38(35.2), higher diploma 23(21.3&), O and A level 3 (2.8%).

Sampling was also done to cover all the relevant designation in the construction industry with Engineers 46(42.6%) commanding the highest distribution, followed by the Surveyor/Quantity Surveyor, 39(36.1%). The rest in terms of descending order of distribution were Architects 14(13.0%), Project managers 4(3.7%), Artisans 3(2.8) and valuers 1(0.9%). Thus, all the categories above helped the study to meet its objectives from their point of view. In other words, the position of each category provided a balanced view for the entire study.

4.1.2 Team Composition in the Construction Industry

The study sought to determine from respondents the kind of team composition that exist in the construction industry. The table below gives the details of the team composition respondents are exposed to in the study area:

Table 4.2
Team Composition by size

Team size	Frequency	Percentage
Up to 5	36	33.3
6 to 10	59	54.6
11 to 15	7	6.5
16-20	3	2.8
Above 20	3	2.8
Total	108	100

Source: Field survey (2014)

From Table 4.2, it could be observed that 36(33.3%) respondents normally worked in a team size of about 1 -5 members, 59(54.6%) worked in a team size from 6-10, 7(6.5%)

worked in a team size from 11 – 15, 3(2.8%) worked in a team size from 16 – 20 and

3(2.8%) also worked in a team size above 20.

Table 4.3
Team Composition by Gender

Gender	Frequency	Percentage
Men only	19	17.6
Women only	2	1.9
Men and Women	87	80.6
Total	108	100

Source: Field survey (2014)

The Table above indicates the team composition by gender. From the table it could be

observed that 19(17.6%) respondents worked with only males, 2(1.9%) worked with only

females and 87(80.6%) respondents worked with both males and females.

Table 4.4
Team Composition by Tribe

Gender	Frequency	Percentage
Same tribe	2	1.9
Different tribes	106	98.1
Total	108	100

Source: Field survey (2014)

Table 4.4 above is a clear indication that construction industry teams are not dominated

with only one single tribe. A majority of the respondents, 106(98.1%) were made up of

different tribes while 2(1.9%) were of the same tribe. Gender, and Tribe diversity as

revealed in the tables 4.3 and 4.4 above adds credence to the fact that, team diversity is

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significantly explored in the study area, bringing all sides together to work in the spirit of meeting the specified goals.

Table 4.5
Team Composition by Nationality

Nationality	Frequency	Percentage
Only Ghanaians	83	76.9
Mixed Nationals	25	23.1
Total	108	100

Source: Field of study (2014)

From Table 4.5 above, a majority of the respondents 83(76.9) answered that their team were normally made up of only Ghanaians whereas 25(23.1%) teams had both Ghanaian and other people from different countries. Finally, diversity in terms of nationality has not been strong in the study area. This could be due to a high level of preference given to nationals with the requisite expertise than non-nationals who price themselves expensively in the construction industry. Tables 4.3, 4.4, and 4.5 affirms to the claim that team diversity is significantly explored in the in the construction industry.

4.1.3 Effects of Team Diversity on Team Effectiveness

The Table 4.6 seeks to explore the effects of team diversity on team effectiveness and output in the study area.

Table 4.6
Team Diversity and Team effectiveness

Does Team Diversity affect Team Effectiveness & Output?	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Interpretation on
	F	%	F	%	F	%	f	%	F	%	
My team usually explores diversity	14	13	94	87	0	0	0	0	0	0	Strength outweigh weakness (agreed)
I find it difficult taking instructions from the opposite gender	1	0.9	7	6.5	9	8.3	55	50.9	36	33.3	Weakness outweigh strength, though both exist (disagreed)
I find it difficult taking instructions from someone, who is younger than me	6	5.6	6	5.6	16	14.8	41	38	39	36.1	Weakness outweigh strength, though both exist (disagreed)
It is difficult for me to take instructions from someone of a different tribe	1	0.9	5	4.6	2	1.9	43	39.8	57	52.8	Major weakness (disagree)
Because of the difference in gender, it affect the output of the team	2	1.9	2	1.9	11	10.2	44	40.7	49	45.4	Weakness outweigh strength, though both exist (disagreed)
The differences in tribe, have negative influence on the final project	1	0.9	5	4.6	13	12.0	39	36.1	50	46.3	Weakness outweigh strength, though both exist (disagreed)
Because of the difference in my educational background, task completion is difficult	1	0.9	14	13	18	16.7	44	40.7	31	28.7	Weakness outweigh strength, though both exist (disagreed)
Difference in gender, affect team's goal	1	0.9	4	3.7	9	8.3	51	47.2	43	39.8	Weakness outweigh strength, though both exist (disagreed)
Difference in religion affects teams output	0	0	6	5.6	10	9.3	56	51.9	36	33.3	Weakness outweigh strength, though both exist (disagreed)
Difference in cultures negatively affect output	0	0	6	5.6	21	19.4	52	48.1	29	26.9	Weakness outweigh strength, though both exist (disagreed)
Overall response	27	3	146	13	109	10	435	40	370	34	Weakness outweighs strength (fair)

F= Frequency; %= Percent; Source Field Survey (2014)

It is observed from Table 4.6 that 14(13%) strongly agree that they explore diversity, whiles 94(87%) also agreed that they explore team diversity. This means that the construction industry team is a diverse one. From the table above, all respondents in the study area agreed that their construction projects explore on team diversity. This confirms Alshwn and Faraj (2002) report that real construction project is a collaborative venture that involves a number of different people to form a team.

The table again shows that 1(9%) strongly agreed that they find it difficult taking instruction from the opposite gender, 7(6.5%) agreed that they find it difficult taking instructions from the opposite gender, 9(8.3%) respondents were not sure if they find it difficult taking instructions from the opposite gender, 55(50.9%) disagreed to the assertion that they find it difficult taking instruction from the opposite gender and finally 36(33.3%) strongly disagreed that that they find it difficult taking instruction from the opposite gender. From the table, the row four sorted to find out if respondents had any difficulty in taking instructions from someone who is younger than themselves. The responses are as follows; 6(5.6%) strongly agreed, 6(5.6) agreed, 16(14.8%) neutral, 41(38%) disagreed and 39(36.1%) strong disagreed. Row five also required respondents to give their opinions on whether they found it difficult taking instructions from someone of a different tribe. Their responses are 1(0.9%) strongly agreed, 5(4.6%) agreed, 2(1.9%) neutral, 43(39.8%) disagreed and 57(52.8%) strongly disagreed. The sixth row

also gives out the responses that "because of the difference in gender, it affect the output of the team: 2(1.9%) strongly agreed, 2(1.9%) agreed, 11(10.2%) neutral, 44(40.7%) disagreed, 49(45.4%) strongly disagreed. Row seven also sorted to find out whether the difference in tribe had any negative influence on the final project of construction works: 1(0.9%) strongly agreed, 5(4.6%) agreed, 13(12%) neutral, 39(36.1%) disagreed, and 50(46.3%) strongly disagreed. Row eight sorted to know if the difference in educational background, task completion is difficult: 1(0.9%) strongly agreed, 14(13%) agreed, 18(16.7%) neutral, 44(40.7%) disagreed and 31(28.7) strongly disagreed. The ninth row sorted from respondent if the differences in gender affect team goal: 1(0.9%) strongly agreed, 4(3.7%) agreed, 9(8.3%) neutral, 51(47.2%) disagreed and 43(39.8%) agreed. The tenth row also sorted from respondent using the likert scale to find out if difference in religion affects team's goal: 6(5.6%) agreed, 10(9.3%) neutral, 56(51.9%) disagreed, 36(33.3%) strongly disagreed. The last column of the table 4.6, sorted from respondents if the difference in culture negatively affect output: 6(5.6%) agreed, 21(19.4%) neutral, 52(48.1%) disagreed, 29(26.9%) strongly disagreed.

Table 4.6 clearly shows that, over 80 percent of the respondents agreed that they neither find it difficult taking instruction from the opposite gender nor do they find it difficult taking instruction from someone of different tribe. Over 70 percent also confirmed that they do not find difficult taking instructions from someone, who is younger than them. It is also revealed from table 4.6 that, differences in gender, tribe, religion, culture and educational background do not affect team effectiveness and output. The reason is that, over 80 percent of respondents objected to the claim that team diversity in terms of gender, tribe, religion among others affect team output and final project negatively. The

totality, weakness of agreement outweighs strength and respondents generally disagree that surface-level diversity have effect on effectiveness. This confirms Jehn & Benzkorora (2004) meta-analysis that differences in demographic and social economic characteristics become less relevant and important on team effectiveness and output as group members cooperate with each other in specific contexts over period of time.

4.1.4 Team Diversity and Conflicts

Table 4.7 below seeks to explore whether conflict in team arises as a result of diversity in the construction team.

Table 4.7: Team Diversity and Conflicts

Conflict in teams comes about as a result of:	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Interpretation on
	f	%	F	%	f	%	f	%	f	%	
Differences in age	10	9.3	37	34.3	22	20.4	32	29.6	7	6.5	Not in position to be judged
Difference in gender	3	2.8	28	25.9	20	18.5	51	47.2	6	5.5	Weakness outweigh strength(disagree)
Difference in religion	2	1.9	24	22.2	19	17.6	52	48.1	11	10.2	Weakness outweigh strength (disagree)
Difference in educational background	13	12	50	46.3	20	18.5	23	21.3	2	1.9	Strength outweigh weakness (agrees)
Difference in cultures	2	1.9	29	26.9	34	31.5	35	32.4	8	7.4	Not in position to be judged
Difference in tribe	6	5.6	26	24.1	30	27.8	28	25.9	18	16.7	Weakness outweigh strength(disagree)
Overall response	36	6	194	30	145	22	221	34	52	8	Weakness outweigh strength

F = Frequency; % = Percent;   Source: Field survey (2014)

From table 4.7: row 2, asked respondents whether difference in age cause conflict in the construction industry. 10(9.3%) respondents strongly agreed to the statement. 37(34.3%) agreed, 22(20.4) were not certain, 32(29.6%) disagreed and 7(6.5%) strongly disagreed. In totality, this question is not in the position to be judged.

Table 4.7: row 3, asked respondents whether difference in gender cause conflict in the construction industry. 3(2.8%) respondents strongly agreed to the statement, 28(25.9%) agreed, 20(18.5%) neutral, 51(47.2%) strongly disagreed and 6(5.5%) disagreed. In totality, weakness outweigh strength, meaning respondents disagreed that differences in gender causes conflict.

Table 4.7: row 4, asked respondents whether differences in religion cause conflict. 2(1.9%) respondents strongly agreed, 24(22.2%) agreed, 19(17.6%) neutral, 52(48.1) disagreed, 11(10.2) strongly disagreed. In totality, weakness outweighs strength, meaning respondents disagree that difference in religion causes conflict.

Table 4.7: row 5, asked respondents whether differences in educational background cause conflict. 13(12%) strongly agree, 50(46.3%) agree, 20(18.5%) neutral, 2(21.3%) disagree and 2(1.9) strongly disagreed. In all, strength outweighs weakness, meaning educational background can one way or the other cause conflict. This finding affirms a meta-analysis

by De Wit and Greer (2008) where it was observed that diversity in educational background was positively related to task conflict.

Table 4.7: row 6, asked respondents whether difference in culture can cause conflict. 2(19%) respondent strongly agreed, 29(26.9%) agreed, 34(31.5%) neutral, 35(32.4%) disagreed, 8(7.4%) strongly disagreed. In totality, it does not favor strength or weakness so the decision is not in a position to be judge.

Table 4.8: row 7, asked respondents whether differences in tribe can cause conflict. 6(5.6%) respondent strongly agreed, 26(24.1%) agreed, 30(27.8%) neutral, 28(25.9%) disagreed, 18(16.7%) strongly disagreed. In totality, weakness outweighs strength meaning difference in tribe does not necessarily cause conflict in the construction industry.

The overall responses of agreement outweigh strength and respondents disagreed to the fact that generally diversity in the surface-level triggers conflict. This affirms the study from Passos (2005) and Silvestre (2008) which pointed no significant result between diversity and conflict. There was also no relationship between diversity in tribe and conflict.

4.1.5 Effects of Conflicts in Team Diversity

Table 4.8, depicts the outcome of unresolved conflict on diverse team. Likert scale was again used to assess the effects of unresolved conflict on team effectiveness and individual performance in the team. Also to determine if projects are poorly done or projects are abandoned in conflicts are not resolved in teams.

Table 4.8:
Effects of Conflicts on Team Diversity

When conflicts are not resolved in the team:	Strongly Agree		Agree		Neutral		Disgrace		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Team effectiveness is affected	67	62	27	25	7	6.5	7	6.5	0	0
Individual performance in the team is affected	40	37	50	46.3	6	5.6	12	11.1	0	0

F = Frequency; % = Percent;   Source: Field survey (2014)

From table 4.8 67(62%) strongly agreed that unresolved conflict will affect team effectiveness. The table also clearly depict that 50 (46.3%) agreed that unresolved conflict can have negative effects on individual performance. This observation confirms William & O'Reilly (1998) assertion that diversity can affect the satisfaction and commitment of member and group processes.

4.1.5.1 Individual's and Team Members Contribution to Team Effectiveness

The table below (Table 4.9) seeks to determine how the individual and team members contribute to the effectiveness of a team.

Table 4.9:
Individual and Team members' contribution to team effectiveness

Individual's and Team members Contribution to Team Effectiveness:	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Individual input have influence on the overall project output	43	39.8	60	55.6	3	2.8	2	1.9	1	0.9
Project completed met the quality standard specified by the client	19	17.6	80	74.1	8	7.4	1	0.9	0	0
Team members demonstrated a good sense of expertise	13	12.0	77	71.3	17	15.7	1	0.9	0	0

F = Frequency; % = Percent;   Source: Field of survey (2014)

Table 4.9 shows responses on how the individual and team members as a variable enhance team effectiveness. It is observed that 60(55.6%) respondents agreed that individual input have influence on overall project output, and also 77(71.3%) respondents agreed that team members demonstrated a good sense of expertise during the team work. Majority of respondent 80(74.1%) agreed that project team successfully achieved the project objectives. From the literature reviewed, the findings affirms Klimoski and Jones (1995) model of team effectiveness, which emphasis that team effectiveness does not emerge from only individual effort, instead interpersonal dynamic of the team and level of compatibility between team members. Also Tannenbaum et al (1992) observed that

team with better individual task proficiency; abilities and skills will perform better. So the finding which depict a 60% agreeing to the fact that individual input have influence on overall project output led to the realization of the team achieving it objectives.

4.1.5.2 Team Leader's and Working Processes' Contribution to Team Effectiveness

Table 4.10 and 4.11 shows the team leader's and team working processes contribution to team effectiveness.

Table 4.10
Team Leader Contribution to Team Effectiveness

Team Leader's Contribution to Team Effectiveness:	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Good service of the team leader is demonstrated during a project	21	19.4	68	63	18	16.7	1	0.9	0	0
The team leader demonstrates good technical ability on a project	19	17.6	77	71.3	11	10.2	1	0.9	0	0
Team leader makes sure that professional and skilled people are hired for a project	17	15.7	72	66.7	10	9.3	9	8.3	0	0
Project leader's contributions enables the team to be effective	15	13.9	75	69.4	18	16.7	0	0	0	0

F = Frequency; % = Percent;   Source: Field survey (2014)

Table 4.10, depicts that 68(63%) respondents which represent majority agreed that, the team leader demonstrated good service, 77(71.3%) respondents agreed that the team leader demonstrated a good technical ability on a project, 72(66.7%) of the respondent also agreed that the team leader made sure that professionals and skilled people were hired during the implementation of the project, 75(69.4%) of the respondents also agreed

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that the project leaders' contribution enables the team to be effective. This shows that leadership is considered as a function that must be performed (Shanahan, 2001). Also the team leader making sure that the right people are employed help the team to achieve its goals. From the respondent's responses, it affirms Gladstein, (1984) and Tannenbaum et al. (1992), report that, teams with better individual task proficiency, abilities and skills will perform better when they are employed.

4.1.5.3 Team Working Process Contribution to Team Effectiveness

Table 4.11 shows the team working process contribution to team effectiveness.

Table 4.11
Team working processes' contribution to team effectiveness

Team Working Processes' Contribution to Team Effectiveness	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Good service among team members during project implementation	11	10.2	86	79.6	8	7.4	3	2.8	0	0
The required equipment and tools need for the project was available and it enhance output	10	9.3	52	48.1	20	18.5	26	24.1	0	0
Members of a team communicate among themselves well	25	23.1	59	54.6	21	19.4	3	2.8	0	0
Project completed met the quality standard specified by the client	10	9.3	90	83.3	6	5.6	2	1.9	0	0

F = Frequency; % = Percent;   Source: Field survey (2014)

From table 4.11, 86(79.6%) which is the majority of Respondents agreed that team members demonstrated a good service during project implementation. Also the majority

of respondent 52(48.%) agreed that the required equipment and tools needed for the project were available and it enhanced output, also majority of the respondents 59(54.6%) agreed that, members in the team communicated well among themselves. All these variables are the processes or throughput phase of Tannenbaum (1992) which when portrayed in a team, will enhance team effectiveness. The table 4.11 again depicts that 90(83.3%) agreed that project completed met the quality standard specified by the client. This assertion affirms Salas et al.'s (1992), explanation that the context of the organization and group design affect the communication process of members which also affect the quality of team performance.

It can therefore be deduced from the sample evidence that, individuals, team members, leader, and team working processes which are variables of team effectiveness enable teams to be effective. It also affirms Adair, (1983) deduction that construction industry always deal with relationship between team, task individual and leadership.

4.1.5.4 Organizations' Contribution to Team Effectiveness

Table 4.12 shows the organizations' contribution to team effectiveness. The table depicts that 32(29.6%) strongly agreed that increase in wages positively affect team members contribution to work well, 42(38.9%) agreed that wages affect team members, 27(25%) were neutral, 5(4.6%) disagreed and 2(1.9%) strongly disagreed that wages affect the contribution of team members.

The second row of table 4.12, sorted to find if team members are motivated to work well when treated fairly by employers. It revealed that 40(37%) strongly agreed 62(57.4%)

agreed, 1(0.9%) strongly disagree and 5(4.6%) respondents were neutral on assertion that being treated fairly by employers motivates workers to work well.

Table 4.12
Organization's contribution to team effectiveness

Organization contribution to Team Effectiveness	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Increase in wages positively affect my contribution to work well	32	29.6	42	38.9	27	25	5	4.6	2	1.9
I am motivated to work well when treated fairly by my employer	40	37	62	57.4	5	4.6	0	0	1	0.9

F = Frequency; % = Percent; Source: Field survey (2014)

From table 4.12, it is observed majority 42(38.9%) respondent agreed that increase in wages positively affect individual's contribution to work well. It implies that wage as a motivation enables people to put in their best. However, the second row depict that most people 62(57.4%) are more motivated to work well when treated fairly by their employers. This implies the construction team members normally get motivated with recognition and respect.

4.2 Qualitative analysis

Fundamentally, the interviews were to capture a sense of what team diversity and team effectiveness is from a practitioner's point of view. Thus, as can be observed from the research questions, the interview was employed to draw or "what" has a sufficient impact of team diversity on team effectiveness on construction project teams. All interviews

were transcribed and the quotes taken at the interview were also analyzed as part of the interview evidence. The transcribed data was then sorted into broad themes as sub-themes in line with the research questions and the interview guide. Key results are present below:

4.2.1 Forms of diversity in the construction industry

Respondents were asked the types of diversity they experienced and whether their teams were made up of different composition thus either from different gender, different tribes, and different educational background. Some of the responses are captured in figure 4.1 below:

Figure 4.1
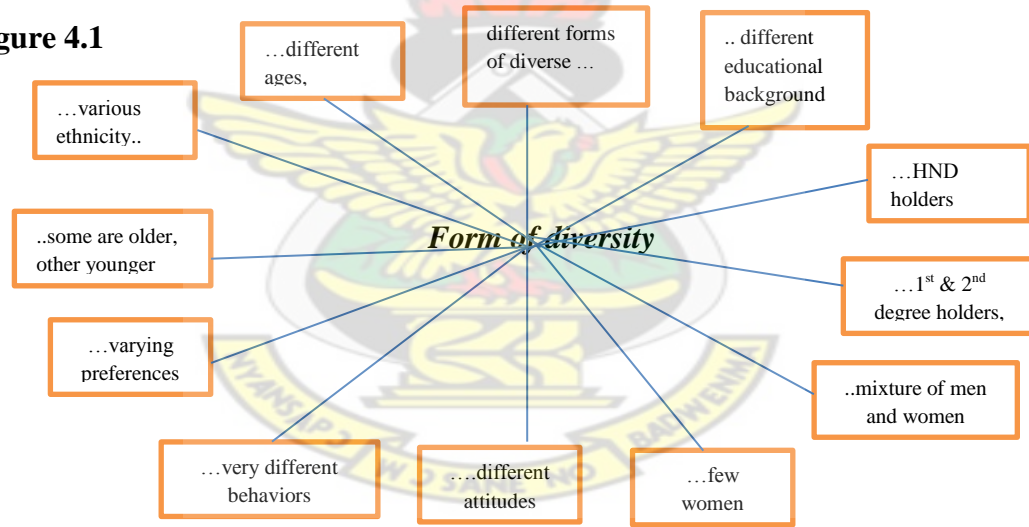
Respondents view on forms of diversity
Source: Field survey (2014)

The above responses from group interview provide clear evidence of team diversity in the construction industry. Thus the construction industries experience the surface level and the deep level diversity, this also affirms Alshwn and Farj (2002) report that emphasis

that real construction project is a collaborative venture that involves a number of different people to form a team. Some statements also affirm Wall, (2004) finding that the few women who remain in the construction industry prove themselves to be very good at what they do.

4.2.2 Team Diversity on Team Effectiveness

In terms of responses given by interviewees to illustrate the effect of team diversity on team effectiveness, some of the insightful responses are:

"In-fact diversity enhances the team effectiveness, especially when there is collaboration. One professional cannot do the work. We need an architect, a surveyor, an engineer and all those who matter to help realize the project goal in the construction field. Also, especially, the few women who are normally part of the team enrich the team with their knowledge" (**Architect**).

"In the construction team, the differences in gender, age, ethnicity does really have any impact on project…………". (**Project manager**)

"………for the sake of the profession, people normally complement each other so that output will be perfect, so we ignore any differences and focus on getting the work done". (**Architect and Surveyor**).

"All that we need is the wages, so just give us work and pay us after we are done. We don't really care if you are a woman, from the north, south, east or the west". (**Laborers**)

The responses in section 4.2.2 confirm an observation that a diversified workforce performed better than a homogeneous one (Ilmakunnas et al. 2004, Veen, 2008). Also the emphasis on women composition affirms, Lee and Farh (2004) report which build on Bandura's (1977) social cognitive theory to predict that gender diversity would moderate the relationship between group efficacy and group outcome.

The last paragraph confirms Jehn & Benzkorora (2004) report that differences in demographic become less relevant and important on team effectiveness and output as group members cooperate with each other in specific contexts over period of time.

4.2.3 Diversity in teams and conflict

Conflict is an inevitable aspect of team work and can be both beneficial and detrimental to teamwork. When asked if diversity in age, gender, religion, educational background, culture and tribe cause conflict. Respondents gave different opinions from various angles. One of the artisans noted that:

> "*we don't care about the religion or whether the project leader is a man or woman, all that we need is give us work to do and pay us our wage after we have completed our schedule*" ....

These findings affirm the study from Passos (2005) and Silvestre (2008) which pointed out that no significant result between gender and religion diversity and conflict. There was also no relationship between diversity in tribe and conflict in the study.

In contrast, some respondents said conflicts arise as a result of differences in gender and age. Another artisan asserted that:

"I will not like to take instruction from a woman, you know in Ghanaian

society women don't give command but they rather follow instructions.

Why should I obey someone who is younger than me.

This statement affirms Jehn, Nothcraft and Neale (1999) report that related diversity in gender and age to affective conflict which could be very detrimental to group performance.

Similarly, some respondents were of the view that:

"Conflict sometimes happens when one tribe insults the other. Also

difference in educational background can result in conflict. For instance,

imagine that I have been on the job for a number of years, with my

maximum work experience I can perform better than the so called

graduates. So do you expect me to follow wrong instructions? Never. I

won't do that. Those graduates when they get out from school, they

presume they know everything………………".

The statement affirms a meta-analysis report on conflict and performance by De Wit and Greer (2008) that found negative relation with task conflict and diversity.

Conclusion

This chapter analyzed and discussed findings from the survey. This includes discussion on the types of diversity explored in the construction industry, diversity conflict and it influence on team effectiveness, and the factors that contributes to team effectiveness. The next chapter summaries the findings, concludes and make some recommendations.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The study was carried out to ascertain the effects of team diversity on team effectiveness in the construction industry in Ashanti region. This chapter therefore presents the major findings from the data analysis and the overall conclusion of the study after which recommendations are made.

5.1 Summary of major findings

The summary of major findings is divided into four sections according to the specific objectives of the study. They are the findings from the types of diversity, effect of team diversity on team effectiveness and team output, team diversity and its relationship with conflicts and finally, stakeholders' contributions towards team effectiveness.

5.1.1 Types of Diversity

The sample results revealed that, the Construction industry teams are made up different types of diversity which include, surface-level diversity and deep-level diversity. The surface level diversity includes, differences in age, gender, educational background among others, whereas the deep level diversity includes psychological differences, differences in values among others. This is because the industry consists of a lot of different people from diverse background.

5.1.2 Team Diversity and Conflicts

The sample results revealed that team diversity in terms of educational background could lead to conflicts. This is because most old experienced artisans with lower educational background found it difficult taking instruction from the younger graduates, on reasons that the younger graduates were not experienced enough in the industry to issue commands and instructions. However, the sample evidence could not support the position that team diversity in terms of gender, tribe, religion and culture could lead to conflicts. The study further discovered that, unresolved conflict can negatively affect team effectiveness and individual performance. This makes the issue of team diversity and conflict management very sensitive in a construction industry and calls for regular monitoring and evaluation by top management for the benefit of the industry.

5.1.3 Factors influencing team effectiveness

The study has found that the major stakeholders in the construction industry made up of individuals, team members, working processes and organizational management contribute significantly to team effectiveness in Ashanti region. In other words, over 60 percent of respondents agreed that the contribution of each stakeholder has had tremendous impact on the growth prospect of the construction industry in the study area. It was observed that, individuals and team members were highly motivated by incentive packages organizational management and team leaders give them in the form of remuneration. This according to the respondents, drive and dominate their responses to work and life.

5.1.4 Effect of Team Diversity on Team Effectiveness and Output

In the first place, sample evidence from the study area supported the claim that team diversity is explored in the construction industry of Ashanti region. This is because all respondents in the study area agreed that their construction projects explore on team diversity in one way or the other.

Also the study revealed that, team diversity in terms of gender, tribe, and religion among others do not affect team output and final project negatively. Instead, sample evidence supported the claim that team diversity rather improves cohesiveness or collaboration among team members.

5.2 Conclusion

It can be concluded from the above findings that, team diversity which is so much explored in the study area has not had any negative effect on team effectiveness in the construction industry. However, the issue of team diversity remains very sensitive in the construction industry and calls for regular assessment to ensure harmonious working environment for all stakeholders. This will instill confidence among stakeholders and improve the growth prospects of the construction industry in Kumasi metropolitan of Ashanti region and beyond.

5.3 Recommendations

From the study, it was revealed that the construction industry is male biased, however the few women who join the industry normally enhance the output of the team. The study therefore recommends that more women should be encouraged by professional bodies

like Ghana Institute of Engineer, among other bodies to take job roles in the construction industry.

It was again revealed that conflict cannot be avoided in diverse teams. It is recommended that there should be a well-defined conflict management policy in the construction industry which will help track grievances so as to resolve them early. Problems arising in teams should be resolved quickly to develop effective functioning teams.

In addition, the study recommends the organization of fresher courses for the artisans in the construction industry so that they could adjust to the changing trends of the construction industry.

Furthermore, the study was cross-sectional in nature, so it is recommended that because construction project spans within a longer number of years, future studies could be done using longitudinal research design.

Finally, future research will be needed to investigate diversity in the areas of the deep-level diversity aspect in the construction industry.

REFERENCE

Adair, J. (1983). Effective Leadership. Pan, London

Alesina, A. and La Ferrara, E., (2005). Ethnic diversity and economic performance, *Journal of Economic Literature* 43, 762-800

Alshawi, M., and Faraj, I. (2002). "Integrated construction environments: technology and implementation." *Construction Innovation,* 2(1), 31-51

Amason, A. C.; Sapienza, H. J.(1997) The effects of top management team size and interaction norms on cognitive and affective conflict. *Journal of Management*, Briarcliff, NY, v. 23, p. 496-516

Bagilhole, B. (2006). Not a glass ceiling more a lead roof. Experiences of pioneer women priests in the Church of England. *Equal Opportunities International, 25*(2), 109–125. http://dx.doi.org/10.1108/02610150610679538

Baker, D., and Salas, E. (1997). "Team performance and assessment measurement: Theory, methods, and applications. " M.Brannick, E. Salas, and C. Prince, Erlbaum, Mahwa, NJ, 331-355

Bandura , A(1977). *Social learning theory.* Engle wood Cliffs, NJ: Prentice-Hall

Bantel, K., & Jackson (1989). Top management and banking: Does the composition of the top team make a difference? *Strategic Management Journal,* 10107-124

Bantel, K.A and S.E. Jackson (1989), "Top Managemnt and Innovations in Banking: Does the Composition of the Top Team Make a Difference?" *Strategic Management Journal,* 10, 107-124

Barsade, S. G., Ward, A. J., Turner, J. D. F. & Sonnenfeld, J. 2000. To your heart's content: A model of affective diversity in top management teams. *Administrative Science Quarterly, 45:802-836*

Beck, J. S. (2005). *Cognitive therapy for challenging problems: What to do when the basics don't work.* New York: Guilford.

Beck, U and Beck- Gernsheim, E (2003) *Individualization: institutionalized individualism and its social and political consequences,* London: Sage.

Blendell, C., Henderson, S., Molloy, J., and Pascual, R. (2001). "Team performance shaping factors in IPME (Integrated Performance Modeling Environment). "Fort Halstead, UK

Bolman, L.G. & Deal, T.E. (1997). Reframing organization: Artistry, choice and leadership. San Francisco, CA: Jossey-Bass Inc., Publishers.

Brown, C. L (1998). Sexual orientation and labor economics. *Feminist Economic, 4,* 89-95

Brown, L.D. (1983). Managing Conflict at organizational interfaces. Reading, MA: Addison-Wesley Publishing Company

Bulmer, M., Sturgis, P.J. and Allum, N. (2009) "Editors' introduction, in M. Bulmer, P.J.

Bunderson, J.S., & Sutcliffe, K.M. (2002) . Comparing alternative conceptualizations of functional diversity in management teams: Process and performance effects. *Academy of Management Journal,* 45:875-893

Byrne, D. E. (1971). *The attraction paradigm.* New York: Academic Press

Byrne, J., Clarke, L. and Van Der Meer, M. (2005). Gender and ethnic minority exclusion from skilled occupation in construction: a Western European comparison Construction management and economics 23(10), 1025-1034

Byrne, Z., Kacmar, C., Stoner, J. and Hochwarter, W. (2005). "*The relationship between perceptions of politics and depressed mood at work: unique moderators across three levels*", *Journal of Occupational Health Psychology*, Vol. 10, pp. 330-43.

Cannon-Bowers, J., and Salas, E. (1988). " Team performance and training in complex environment: Recent findings from applied research" Current Directions in Psychological Science, JSTOR, 7(3), 83-87

Cannon-Bowers, J., Jannenbaum, S., Salas, E., and Volpe, C. (1995). " Defining competencies and establishing team training requirements." Team effectiveness and decision making in organizations, R. Guzzo and E. Salas Associates, Jossey-Bass Publishers, San Francisco

Chan, J. W. (2002), Book Review. Ann Neurol., 51: 536. doi: 10.1002/ana.1311

Chatman , J. A., Polzer, J., Barsade, S., & Neale, M. (1998). Being different yet feeling similar: the influence of demographic composition and organizational culture on work processes and outcomes. Administrative Science Quarterly, 43, 749-780

Clarke, L., Pedersen, E., Michielsens, E., Susman, B. & Wall, C. (2004). Women in Construction, Brussels: CLR Studies/Reed International

Cleland, D. I. (1996). Strategic Management of Teams. Wiley-IEEE, 292

Cleveland, J. N., & Shore, L. M. (1992). Self-and supervisory perspectives on age and work attitudes and performance. *Journal of Applied Psychology, 77,* 469–484.

Cohen, S. G., & Bailey, D. E. (1997). " What Makes Team Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. " Journal of Management, 23(3), 239-290

Cohen, S. G., Ledford, G. & Spreitzer, G. (1996). "A predictive model of self-managing work team effectiveness". Human Relations, 49(5), 643-66

Cohrn, W., & Levinthal, D. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly, 35:128-152*

Coser, L. (1956), The Functions of Social Conflict, Glencoe, IL: Free Press

Cox , T. (1993). *Cultural diversity in organizations: Theory, research & practice.* San Francisco: Berrett-Koehler Publishers

Cox, T., Lobel, S. A., & McLeod, P. L. (1991). Effects of ethnic group cultural difference on cooperative and competitive behavior on a group task. *Academy of Management Journal, 4,* 827-847

Dahlin, K, B, Weingart, L. R. & Hinds, P.(2005). *Team diversity and information use".* Academy of Management Journal, Vol 48, No6, 1107-1123

Dainty A & Bagilhole B (2006) 'Women's and men's careers in the UK construction industry: a comparative analysis' in AW Gale & MJ Davidson (eds) Managing diversity and equality in construction, Taylor & Francis, London and New York, 98-112

Dainty A., Bagilhole B. M., Ansari, K. H. & Jackson J. (2004) 'Creating Equality in the Construction Industry: An Agenda for Change for Women and Ethnic Minorities' Journal of Construction Research, Vol. 5, No. 1, pp.75-85

Dainty & Bagihole (2006). Women and men's careers in the UK construction industry: a comparative analysis' in Gale A. W. and Davidson, M. J. (eds) *Managing Diversity and Equality in Construction.* London: Taylor and Francis.

De Dreu,, C. K. W., Vianen, A. E. & Van, M.(2001). Managing relationship conflict and the effectiveness of organizational teams. *Journal of Organizational Behavior*, Hoboken, NJ, v. 22, n. 3, p. 309-328,

De Wit, F., & Greer, L. (2008,). The black box deciphered: a meta-analysis of team-diversity, conflict and team performance. *Proceedings of the Annual Meeting Academy of Management*, Anaheim, CA, USA, 68.

Denzin, N.K. and Lincoln, Y.S. (2005) *The Sage Handbook of Qualitative Research (3*rd Edn). London Sage

deVaus, D.A. (2002) *Survey in Social Research* (5 Ed). London: Routledge

Dimas, I. C. D. (2007) *(Re)pensar o conflito intragrupal*: níveis de desenvolvimento e eficácia.. Dissertação (Mestrado em Psicologia Organizacional e do Trabalho)–Faculdade de Psicologia e Ciências da Educação, Universidade de Coimbra, Coimbra

Dimas, I. D., Loirenco, P. R., & Miguez, J. (2007). (Re)pensar os conflitos intragrupais: desempenho e níveis de desenvolvimento. *Psicologia*, Lisboa, v. XXI, n. 2, p. 183-205,

Driskell, J., Hogan, R, & Salas, E. (1987). " Group Processes and Intergroup Relations." Sage Publication, Newbury Park, CA, 91-112.

Druker, P. F. (1989). The new realities: in government and politics, in economics and business, in society and world view (1st ed). New York: Harper & Row

Dunnette, M. D *and* Hough, *L. M. 769–827. Palo Alto, CA: Consulting Psychologists Press.*

Dwyer, S., Richard, O. C. & Chadwick, K.. (2003). Gender diversity in management and firm performance: the influence of growth orientation and organizational culture. *Journal of Business Research,* 58, *1009-1019*

Easterby-Smith, M., Thorpe, R. & Jackson, P. (2008) *Management Research: An Introduction (3rd Ed)* London: Sage

Eisenhardt, K. M. and Bourgeois L.J III (1994), " Conflict and Strategic Choice in High-Velocity Environments," Working Paper, Standford University, Stanford, CA

Eisenhardt, K.M. and Graebner, M.E. (2007) 'Theory building from cases: Opportunities and challenges' *Academy of Management Journal*, Vol. 50, No. 1 pp. 25-32

Eruzun, A. (2004). *Affective and substantive conflicts and interpersonal conflict management styles in the Turkish organizational context.* Sabanci University Research Database, Turkey.

Eruzun, A.(2002) *Affective and substantive conflicts and interpersonal conflict management styles in the Turkish organizational context.* 2004. Dissertation (Master of Arts in Conflict Analysis and Resolution)–Sabanci University, Istanbul, Turkey, 2004.

Finkelstein, L. M., Burke, M. J., & Raju, N. S. (1995). Age discrimination in simulated employment contexts: An integrative analysis. Journal of Applied Psychology, 80, 652-663

Gadzekpo, A. A., 2007. "Improving the Quality of Polytechnic Education in Ghana through Self-Evaluation of Course": The Case study of Kumasi Polytechnic. MSc. University of Twente Enschede- The Netherlands

Gay, L. R. (1996). *Educational research: Competencies for analysis and application.* Merill, Upper Saddle River, NJ

Gibson, C., (2001). Forms knowledge accumulation to accommodation: Cycles of collective cognition in work groups. *Journal of Organizational Behaviors,* 22:121-134

Gladstein, D. (1984). "Groups in context: A model of task group effectiveness." Administrative Science Quarterly, 29, 499-517

Guetzkow, H. and Gyr, J. (1954), "An Analysis of Conflict in Decision-making Groups" *Human Relations,* 7, 367-381

Guzzo, R. A. and Dickson, M. W. (1996). " Teams in organizations: research on performance and effectiveness". Annual Review of Psychology, 47, 307-338

Hackman, J. R. (1987). "Handbook of Organization Behavior" J. Lorsch, Prentice-Hall, Englewood Cliffs, NJ

Hackman, J. R. (1990). Groups that work (and those that don't): creating condiction for effective teamwork. Jossey-Bass, 512

Hackman, J.R. (1987). Group that work (and those that don't): creating conditions for effective teamwork. Jossey-Bass, 512

Harrison D, Prince, K., Gavin, J., & Florey, A. (2002). Time, teams and task performance: changing effects of surface and deep-level diversity on group functioning. *Academy of Management Journal, 45(*5)

Harrison, D.A., Kravitz, D.A., Mayer, D. M., & Lev-Arey, D. (2006). Understanding attitudes toward affirmative action programs in employment: summary and meta-analysis of 35 years of research. *Journal of Applied Psychology,* 91(5), 1013-1036

Harrison, D.A., Price, K.H., & Bell, M.P. (1998). Beyond relational demography: Time and the effects of surface-and deep-level diversity on work group cohesion. *Academy of Management Journal,* 41: 96-107

Henderson, S., & Walkinshaw, O. (2002). " Command team assessment: Principles, guidance and observations." QinetiQ, Fort Halstead.

Hendrickson, C. & Au, T. (1988). "Project Management for Construction Fundamental Concepts for Owners, Engineer, Architects and Builders. Prentice-Hall, Inc., Englewood Cliffs, New Jersey

Hewstone, M. Crisp, R.J., Contarello, A., Voci, AA., Conway, L., Marletta, G., & Willis, H. (2006). Tokens in the tower: perceptual processes and interaction dynamic in academic settings with skewed, titled, and balanced sex ratios. *Group Processes & Intergroup Relations,* 9(4), 509-532

Hewstone, Miles, Ed Cairns, Alberto Voci, Jurgen Hamberger, and Ulrike Niens. (2006). Intergroup Contact, Forgiveness and Experience of "The Troubles" in Northern Ireland. *Journal of Social Issues* 62:99–120.

Hicks-Clarke,D.& Iles, P. (2000), "Climate for diversity and its effects on career and Organizational attitudes and perceptions," *Personnel Review*, 29/3: 324-345.

Hobman, E. V. & Bordia, P. (2006). The role of team identification in the dissimilarity-conflict relationship. *Group Processes & Intergroup Relations*, 9(4), 483-507

Hoffman, L. (1959). Homogeneity and member personality and its effect on group problem solving. *Journal of Abnormal and Social Psychology*, 58,27-32

Ilmakunnas, P. & Ilmakunnas, S. (2009). "Diversity at the workplace: Whom does it benefit? Turku

Ilmakunnas, P. Shirbekk, V., van Ours, J., & Weiss, M. "Aging and productivity"' in P. Garibaldi, J.O. Martins and van Ours, eds., <u>Health, Longevity and Productivity,</u> forthcoming

Ilmakunnas, P., Maliranta., & Vainiomaki, J., (2004). The roles of employer and employee characteristics for plant productivity", Journal of Productivity Analysis

Industrial & Labor Relations Review, 59, 547-572

Jackson, E.E., Joshi, A., & Erhardt, N.L., (2003)"Recent research on team and organizational diversity: SWOT analysis and implications" Journal of Management 29, 801-830

Jackson, S. E., May, K.E. and Whitney, K. (1995). Understanding the dynamic of diversity in decision making team. In R.A. Guzzo & Salas (Eds) *Team decision-making effectiveness in organizations:* 204-261. San Francisco: Jossey-Bass

Jackson, S. E., Joshi, A., Erhardt, & N. L. (2003) Recent research on team and organizational diversity: Swot analysis and implications. *Journal of Management*, Briarcliff Manor, NY, v. 29, n. 6, p. 801-830,

Jackson, S.E. & Joshi A. 2004. Diversity in social context: A multi-attribute, multi-level analysis of team diversity and performance in a sales organization. *Journal of Organizational Behavior*, 25: 675-702.

Jackson, S.E. , May, K.E. , & Whitney, K. (1995). *Understanding the dynamics of diversity in decision-making teams. In R. A. Guzzo & E. Salas (Eds.), Team e fectiveness and decision making in organizations:* 204-261. San Francisco: Jossey-Bass .

Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly, 40: 256-282*

Jehn, K. A. and Bezrukova, K. (2004), A Field Study of Group Diversity, Workgroup Context, and Performance. John Wiley & Sons. *Journal of Organizational Behavior, Vol. 25, No6*

Jehn, K. A. (1994) Enhancing effectiveness: an investigation of advantages and disadvantages of value-based intragroup conflict. *International Journal of Conflict Management*, Bingley, UK, v. 11, n. 1, p. 56-73

Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal,* 44: 238-251

Jehn, K. and Bezrukova, K. (2004). A field study of group diversity, group context, and performance. *Journal of Organizational Behavior*, 25 (6): 703-729

Jehn, K.A. Northcraft, G.B. and Neale, M.A. (1999) Why differences make a difference: A field study of diversity, conflict and performance in workgroups. *Administrative Science Quarterly,* 44: 741-763

Jehn, K.A., Chadwick, C., and Thatcher, S. M. B. (1997). To agree or not to agree: The effects of value congruence, individual demographic dissimilarity, and conflict on workgroup outcomes. *International Journal of Conflict Management,* 8:287-305

Johnston , R.J., Poulsen, M.F. & Forrest, J.,(2003). And did the walls come tumbling down? Ethnic residential segregation in four U.S. metropolitan areas, 1980-2000. *Urban Geography, Vol. 24, 560-581*

Joshi, A. & Roh, H. (2007). Context matters: a multilevel framework for work team diversity research. In J. Martocchio (Ed), *Research in Personnel and Human Resource Management, Vol.* 26. (pp. 1-48). Greenwich, CT: JAI Press.

Katzenback, J. R., and Smith, D. K. (2003). The wisdom of teams. Harvard Business School Press, Boston. Harper Business Essentials, New York, 320

Kent, R. N. and J.E. McGrath (1969), "Task and Group Characteristics as Factors Influencing Group Performance," *Journal of Experimental Social Psychology,* 5, 429-440

Kerten, A. (2000) Diversity management. Dialogue, dialectics and diversion. Journal of Organizational Change Management, 13(3), 235-248.

Ketzenbach, J.R. and Smith, D.K. (1993). The Wisdom of Teams. Boston, MA: Harvard Business School Press

Kezsbom, D. S., Schillinag, D.L., and Edward, K. A. (1989). Dynamic Project Management: A Practical Guide for Managers and Engineers. Wiley, New York, 1989

King, N. (2004) " Using interviews in qualitative research' in C. Cassell and G. Symon (Ed) *Essential Guide to Qualitative Methods in Organizational Research.* Londong: Sage, pp. 11-12

Kirkman, B.L, Tesluk, P.E. & Rosen, B. (2004). The impact of demographic heterogeneity and team leader-team member demographic fit on team empowerment and effectiveness. *Group and Organization Management,* 29, 334-368 et al. (2004)

Klimoski, R. and Jones, R. (1995). " Staffing for effective group decision making: Key issues in matching people and teams. "*Team effectiveness and decision making in organizations,* R.A. Guzzo and E. Salas Associates, Jossey-Bass Publishers., San Francisco

Knippenberg, D.L. van and Schippers, M. (2007). Work Group Diversity. Annual Review of Psychology, Vol. 58.

Kozlowski, R, and Bell, B. (2003). "Handbook of psychology: Industrial and organizational psychology". W.Borman and D. Ilgen, New Wiley & Sons, Inc, New York, 333-375

Kraiger. K., & Ford, J. K., (1985). A meta-analysis of rate race effects in performance ratings. *Journal of Applied Psychology,* 70, 56-65

Kremer, M., (1993). "The O-ring theory of economic development", Quarterly Journal of Economics 108, 551-575

Kristof, A. L. (1996). Person-organization fit: an integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology, 49* 1-49

Lee, C. & Farh, J. (2004). Joint effects of group efficacy and gender diversity on group cohesion and performance. *Applied Psychology: An International Review,* 53(1), 136-154.

Leonard, J. & Levin, D. (2006). The effect of diversity in turnover: a large case study.

Lingard, H. and Francis, V. (2005) 'The decline of the 'traditional' family: work-life benefits as a means of promoting a diverse workforce in the construction industry of Australia', *Construction Management & Economics,* **23**, 1045-1057.

Locke, K. D.*, &* Horowitz, L. M. *(*1990*). Satisfaction in interpersonal interactions as a function of similarity in level of dysphoria. Journal of Personality and Social Psychology,* 58*, 823−831.*

Locke, K. D., & Horowitz, L., M. (1990). Satisfaction in interpersonal interactions as a function of similarity in level of dysphoria. Journal of Personality and Social Psychology, 58:832-831

Mannix, E.& Neale, M. A. (2005) What differences make a difference? The promise and reality of diverse teams in organizations. *Psychology Science*, Washington, DC, v. 6, n. 2, p. 31-56, .

McCain, B.E.C.A., O'Reilly III, and J. Pfeffer (1983), *"*The Effects of Departmental Demography on Turnover: The Case of a University." *Academy of Management Journal,* 26, 626-641

McLeord, P., Lobel, S. & Cox, T.H. (1996). Ethnic diversity and creativity in small groups. Smal Group Research, 27 *248-264*

Miguez, J.; Lourenco, P. R.(2001) Qual a contribuição da metáfora "equipa" para a abordagem da eficácia organizacional? In: Encontro Luso-Espanhol de Psicologia Social, 4. 2001, Porto. *Paper...* Porto, 9 nov.

Miguez, M and Curione, K. Aprendizaje de las Ciencias. Montevideo, Uruguay: Imp. Lapsus, 2005. ISBN 9974-0-0295-8.

Miles, M., and Huberman, M. (1994). *Qualitative Data Analysis.* Sage, Thousand Oaks, C.A.

Milliken, F., & Martins, L. (1996). Searching for common threads: understanding the multiple effects of diversity in organizational groups. *Academy of Management Review,* 21, 402-433

Minniz, E., & Neale, M.A.(2005). What differences make a difference? The promise and reality of diverse teams in organizations. *Psychological Science in the PublicInterest,* 6:31-55

Moch, M. (1980). Racial differences in job satisfaction: testing four common explanations. *Journal of Applied Psychology, 65* 299-306

Mohammed, S., & Angell, L. C. (2004). Surface-and deep-level diversity in workgroups: examining the moderating effects of team orientation and team process on relationship conflict. *Journal of Organizational Behavior,* 25, 1015-1039

Mohrman, S. A., Cohen, S. G. and Mohrman, A. M. (1995). Designing team-based organisations: new forms for knowledge work. Jossey-Bass, San Francisco, 389

Mohrman, S.A., Cohen, S.G. & Mohrman, A.M. (1995). *Designing team-based organizations: new forms for knowledge work.* Jossey-Bass, San Francisco, 389.

Murnighan, J. K. and D. E. Conlon (1991), "The Dynamics of Intense Work Groups: A Study of British String Quartets" *Administrative Science Quarterly, 36, 165-186*

Murray, A.I. (1989), "Top Managemnt Group Heterogeneity and Firm Performance," *Strategic Managemnt Journal,* 10, 125-141

Newcomb, T. M. (1961). *The acquaintance process.* New York: Holt, Rinehart & Winston

O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal,* 34: 487-516.

O'Reilly, C.A., Caldwell, D.F., and Barnette, W.P. (1989). Work group demography, social integration, and turnover. *Administrative Science Quarterly,* 34: 21-37

Offerman, L. R. and Gowing, M.K. (1990). Organizations of the future: Changes and challenges. American Psychologist, 45(2), 95-108

Parker, G. M. (2008). Team players and Teamwork – New Strategies for Developing Successful Collaboration. John Wiley & Sons, San Francisco, 221

Passos, A. M. S. L. (2005) *Contributos para a explicação do funcionamento das equipas de trabalho*: o papel da diversidade e do conflito intragrupal. Dissertação (Mestrado em

Pelled, L. H. (1996). Demographic diversity, conflict, and work group outcomes: An intervening process theory. *Organization Science,* 6: 207-229

Pelled, L. H.; Eisenhardt, K. M.; Xin, K. R.(1999) Exploring the black box: an analysis of work group diversity, conflict, and performance. *Administrative Science Quarterly*, Ithaca, NY, v. 44, p. 1-28,

Pelled, L. H.; Xin, K. R.; Weiss, A. M. (2001) No es como mi: relational demography and conflict in a Mexican production facility. *Journal of Occupational and Organisational Psychology*, Leicester, NY, v. 74, p. 63-84.

Pelz, D. C. (1956), "Some Social Factors Related to Performance in a Research Organization, "*Administrative Science Quarterly,* 1,, 310-325

Perez, E. (2002). A second shot: knowledge management challenge. *Online, 26:6/*Dec.

Psicologia Organizacionale Social)–Instituto Superior de Ciências do Trabalho e da Empresa, Lisboa,.

Ragins, B. R., & Gonzalez, J.A. (2003)., Understanding diversity in organization: getting a grip on slippery construct. In J. Greenberg (Ed), *Discrimination at work: The psychological and organizational bases (pp. 177-201). Mahwah, N.J: Lawrence Erlbaum Associates.*

Rahim, M. A (2002) Toward a theory of managing organizational conflict. *The International Journal of Conflict Management,* Bingley, UK, v. 13, n. 3, p. 206-235,

Rasker, P. van Vlet, T., van Den Broek, H., and Essens,. P. (2001). " Team effectiveness factors: A literature review. TNO Technical report No.: TM-01-B007." Soesterberg, The Netherlands

Rau, B. L. & Hyland, (2003). Corporate teamwork and diversity statement in college recruitment brochures: effect of attraction. Journal of Applied Psychology, 56, 234-240

Richard, O. C. (2000). Racial diversity, business strategy and firm performance: a resource –based view. *Academy of Management Journal, 43(2),* 164-177

Ringenbach, K. L., & Jacobs, R. R. (1994). Development of age stereotypes in the workplace scale. Nashville, TN: Society of Industrial and Organizational Psychology Conference.

Riordan, C. M. (2000). Relational demography within groups: Past development, contradictions and new directions. In G.R. Ferris (Ed), *Research in personnel and human resources management,* vol. 19: 131-173. Greenwich, CT: JAI Press.

Ross, R.S. (1989), Small Groups in Organizational Settings, Englewood Cliffs, NJ: Prentice Hall

Ross, R.S. (1989). Conflict. In R. S. Ross & J. R. Ross (Eds.), *Small Groups in Organizational Settings* (pp. 139-78). Englewood Cliffs, NJ: Prentice-Hall.

Rossman, G. B., & Wilson, B. L. (1985). Numbers and words: Combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation Review, 9*(5), 627-643.

Salas, E., Dickinson, T., Converse, S., and Tannenbaum, S. (1992). "Teams: Their training and performance." R. Swezey and E. Salas, Ablex, Norwood, NJ, 219-245

Saunders. M., Lewis P., & Thornhill, A. (2012) Research Methods for Business Students, 6th Ed. London: Pearson

Saunders. M., Lewis P., and Thornhill, A. (2009) Research Methods for Business Students, 6th Ed. London: Pearson

Schermerhorn, Jr., J.R., J. G. Hunt, and R. N. Osborn (1991), *Managing Organization Behaviour, New York:* John Wiley & Sons

Shanahan, P. (2001). Mapping team performance shaping factors. QinetiQ, Fort Halstead.

Shaw, J. B. A cognitive categorization approach to the study of inter-cultural management. A*cademy of Management Review, 1990, 15(4), 626-645.*

Shilston, A. and Hughes, A. (1997). "*SCL Council-International Aspects of Construction Law*", in Uff, J. (Ed.), *The Building of Construction Law*, 10th Annual Construction Conference, Centre of Construction Law and Management, Section 1, King' College, London, pp. 1-15.

Shore, L. M., & Goldberg, C. B. (2004). Age discrimination in the work place. In R. L. Dipboye & A. Colella (Eds.), The psychological and organizational bases of discrimination at work. Frontier Series, Society for Industrial and Organizational Psychology.

Silvestre, R. (2008). *Os efeitos da variedade de composição demográfica no conflito intragrupal*. Dissertação (Mestrado em Psicologia Organizacional e do Trabalho)– Faculdade de Psicologia e de Ciências da Educação, Universidade de Coimbra, Coimbra.

Silvestre, S. and Chouder, A. (2008). Effects of shadowing on photovoltaic module performance. Prog. Photovolt: Res. Appl., 16: 141–149.

Simons, T. L.; Peterson, R. S.(2000) Task conflict and relationship conflict in top management teams: the pivotal role of intragroup trust. *Journal of Applied Psychology*, Washington, DC, v. 85, p. 102-111,.

Somech, A. (2003). Relationship of participation leadership with relational demography variables: a multi-level perspective. *Journal of Organizational Behavior, 24(8),* 1003-1018

Spatz, D. (2000). " Team-building in construction." Practice Periodical on Structural Design and Construction, 5(3), 93-105

Spatz, D.M (1998). " Multidisciplinary teams aid minerals exploration: Mining engineering" Society of Mining, Metallurgy and Explortion, Littleton, Colo., 57-60

Sturgies and N. Allum (eds) *Secondary Analysis of Survey Data.* Los Angeles: Sage, pp. xviii-xxvi

Swann, W. B., Stein-Seroussi, A., & Giesler, B. R. (1992). Why people self-verify. *Journal of Personality and Social Psychology,* 62:392-401

Sykes, M. T. and Wilson, J. B. (1991), Vegetation of a coastal sand dune system in southern New Zealand. Journal of Vegetation Science, 2: 531–538.

Sykes, W. (1991). Taking stock: Issues from the literature on validity and reliability in qualitative research. *Journal of the Market Research Society* 33:3-12

Tajfel , H. (1981)., *Human groups and social categories: Studies in social psychology.* Cambridge, England: Cambridge University Press

Tajfel, H., and Turner, J.C. (1986) The social identity theory of intergroup behavior. In S.Worchel, & W.Austin (Eds), *Social psychology of intergroup relations (*2nd ed., pp. 7-24). Chicago, IL: Nelson Hall

Tannenbaum S., Beard, R, and Slas, E. (1992). "Teambuilding and its influence on team effectiveness: An examination of conceptual and empirical development" Issues theory and research I industrial/organization psychology, K. Kelley, Elsevier Science., New York, 117-153

Tannenbaum, S. I. (1997). Enhancing continuous learning: Diagnostic findings from multiple companies. Human Resource Management, 36(4), 437-452.

Tannenbaum, S. I., Salas, E., & Cannon-Bowers, J. A. (1996). Promoting team effectiveness. In M. A. West (Ed.), Handbook of work group psychology (pp. 503-529). Chichester: John Wiley.

Teddie, C., and Yu, F. (2007). "Mixed methods sampling: A typology with examples" *Journal of Mixed Methods Research,* 1(1), 77-100

Teddlie, C. and Tashakkori, A. (2009) *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioural Sciences.* Thousand Oaks. CA: Sage

Thatcher, S. M., & Jehn, K. A. (1998). A model of group diversity profiles and categorization processes in bicultural organizational teams. In D. H. Gruenfeld (Ed.), *Composition: research on managing groups and teams: Vol. 1* (11th ed., pp. 11–20). Stamford, CT: JAI Press, Inc.

Thomas, D.A. and Ely, R. (1996). Making differences matter a new paradigm in managing diversity. Harvard Business Review, 74, 79-91

Thomas, K.W. (1976). Conflict and conflict management. In M. D. Dunnette (Ed.) Hun rook of Industrial and Organizational Psychology: 889-935. Palo Alto, CA; Consulting Psychologists Press.

Triandis, H. C., Kurowski, L. L. *and* Gelfand, M. J. *(*1994*). "Workplace diversity.". In Handbook of industrial and organizational psychology, Vol.* 4*, Edited by: Triandis, H. C,*

Trochim, W.M. (2005). *Research Methods: The Concises Knowledge Based. Cengage* Learning Academic Resource Center, Mason, OH, 265

Tsui, A. & O'Reilly, C. A. (1989). Beyond simple demographic effects: the importance of relational demogrtaphy in superior –subordinate dyads. *Academy of Management Journal,* 32, 402-423

Tsui, A. S., Egan, T.D., & O'Reilly (1992). Being different: relational demography and organizational attachment. *Administrative Science Quarterly, 37, 549-579.*

Tsui, A.S. and Gutek, B.A. (1999). *Demographic differences in organizations: Current research and future directions,* Lanham, MD: Lexigton.

Turner, J.C (1985), " Social Categorization and the Self-Concept: A Social Cognitive Theory of Group Behavior". In Edward J. Lawler, ed., Advances in Group Processes: Theory and Research, Vol. 2. Greenwish, Conn.: Jai Press pp. 77-121

Tuuli, M. M., Baiden, B.K & Badu, E. (2007) Assessment and Enforcement of Liquidated Damages in Construction Contract in Ghana Structural Survey *Vol. 25(314),* 204-219

Uher, T. E., and Loosemore, M. (2004). Essentials of Construction Management. UNSW Press, Sydney, Australia, 408

Van Knippenberg, D., De Dreu, C., C.K.W., & Homan, A.C. (2004). Work group diversity and group performance: an integrative model and research agenda. Journal of Applied Psychology, 89, 1008-1022

Vanderstoep, S.W., & Johnston, D.D (2009). *Research Methods for Everyday Life: Blending Qualitative and Quantitative Approaches.* Jossy-Bass, San Francisco, CA, 351

Vanderstoep, S.W., and Johnston, D.D. (2009). *Research Methods for Everyday Life: Blending Qualitative and Quantitative Approaches.* Jossey-Bass, San Franciso, CA, 351

Vecchio, R. P. & Appelbaum, S. H. (1995)Managing organizational behavior: A Canadian Perspective, Dryden-Harcourt Brae & Co., Toronto, Ontario

Veen, S., Demographischer Wandel, alternde Belegschaften und Betriebsproduktivitat, (2008) Munchen: Rainer Hampp Verlag.

Wagner, W. G., J. Pfeffer, and C. A. O'Reilly III (1984), "Organizational Demography and Turnover in Top Management Groups" *Administrative Science Quarterly,* 29, 74-92

Wall, C. and Clarke, L. (1996) Staying Power: *Women in Direct Labour Building Teams,* London: London Women and Manual Trades

Wall, V.D. and Nolan, L.L (1986), "Perceptions of Inequity, Satisfaction, and Conflict in Task-oriented Groups," Human Relations, 39, 1033-1052

Watson, W., Kumar, K. & Michaelsen, L. (1993). Cultural diversity. *Annual Review of Psychology,* 58, 515-541

Webber, S. S. & Donahue, L. M. (2001). Impact of highly and less job-related diversity on work group cohesion and performance: a meta-analysis. Journal of Management, 27 *141-162*

Weick, K. E. (1993). The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster. *Administrative Science Quarterly 38(4): 628-652*

Wiersema, M.F. and A. Bird (1993), "Organizational Demography in Japanese Firms: Group Heterogeneity, Individual Dissimilarity, and Top Management Team Turnover," *Academy of Management Journal,* 36, 996-1025

Willaims, K., and O'Reilly, C.A (1998). Demography and diversity in organization: a review of 40 years of research, In B. M. Staw, & L. L. Cummings (Eds.), Research in organizational behavior (Vol. 20, pp. 70-140). Greenwich, CT: JAI Press.

William, K.Y., & O'Reilly, C.A. (1998). An attributional analysis of reactions to stigma. *Journal of Personality and Social Psychology, 55*

Wood, W. (1987), "Meta-analytical Review of Sex Differences in Group Performance," *Psychological Bulletin,* 102, 53-71

World Bank (2003) Ghana 2003 Country Assessment Report Washington, D.C. Ghana Country Department, The World Bank.

Yaprak, A. (2002). Globalization: strategies to build a great global firm in the new economy. Thunderbird International Business Review, 4, 297

Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: Sage.

Yin, R.K. (2009). *Case Study Research: Design and Method* (45th Ed). London: Sage. Very useful source for case study strategy

Zenger, T.R. & Lawrence, Lawrence, B.S. (1989). Organizational demography: the differential effects of age and tenure distributions on technical communication. *Academy of Management Journal,* 32, 253-376

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APPENDIX A

QUESTIONNAIRE FOR PROFESSIONALS IN CONSTRUCTION INDUSTRY

ASSESSING THE EFFECT OF TEAM DIVERSITY ON TEAM FFECTIVENESS IN THE CONSTRUCTION INDUSTRY OF ASHANTI REGION

This study is being conducted in partial fulfillment of the requirements for the award of a second degree in Business Administration. All information received would be used for academic purposes only and will be treated with the strictest of confidence.

The attached survey is being carried out to assess the effect of diversity on team effectiveness in construction projects in Ashanti Region. It is for preparation of a thesis report toward the award of Masters in Business Administration at Kwame Nkrumah University of Science and Technology.

I would therefore be grateful if you could provide answers to the questions to the best of your ability.

Thank you.

Researcher

M. B. Duffour
Contact Details:
Mobile – 0267031983
Email – mdyaa7@gmail.com
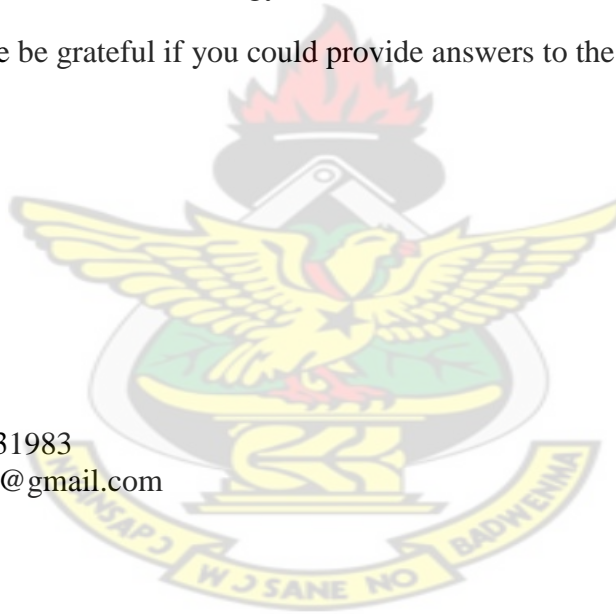
                                                          Supervisor

                                                  Dr. (Mrs) Florence Ellis

Kwame Nkrumah University of Science and Technology
College of Arts and Social Science
School of Business

Department of Managerial Science

June 2014

QUESTIONNAIRE FOR PROFESSIONALS IN CONSTRUCTION INDUSTRY

ASSESSING THE EFFECT OF DIVERSITY ON TEAM EFFECTIVENESS IN CONSTRUCTION PROJECTS IN ASHANTI REGION

SECTION A

A1. *Team can be define as two or more people who have been assigned to specific roles, perform specific task and must interact and coordinate to achieve a common goal.* **Base on this definition please tick where appropriate.**

   a. Do you usually work in a team? Yes [   ]   No [   ]

   b. How many people normally form your team?

      Up to 5 [ ]   6 -10 [ ]   11 -15 [ ]   16 - 20[   ]   Above 20[   ]

   c. What is normally the composition of your team? (***Tick as many as possible)***

      i.   Men only   [ ] Women only   [ ] Men and Women [   ]

      ii.   Same tribe   [ ]   Different tribes [ ]

      iii.   Only Ghanaians [ ]   Mixed Countries [   ]

A2. This section seeks to explore how diversity in team affect project. **Please tick the answer that best suit your opinion on team diversity.**

*Diversity can be defined as any characteristics that people use to tell themselves that another person is different. (**Example gender, age, religion, educational, ethnicity*)*

1-Strongly Agree; **2** – Agree; **3** – Neutral; **4** Disagree; **5** – Strongly Disagree

	1	2	3	4	5
a. My team usually explore diversity					
b. I find it difficult taking instruction from the opposite gender					
c. I find it difficult taking instructions from someone, who is younger than me					
d. It is difficult for me to take instruction from someone of different tribe					
e. Because of the difference in gender, it affect the output of the team					
f. The differences in tribe, have negative influence on the final project					
g. Because of the difference in my educational background, task completion is difficult					
h. Difference in gender, affect team's goal					
i. Difference in religion affects teams output					

A3. *Conflict can be defined as "process which begins when one party perceives that the other has frustrated, or is about to frustrate, some concern of his.*

1-Strongly Agree; **2** – Agree; **3** – Neutral; **4** Disagree; **5** – Strongly Disagree

Conflict in teams comes about as a result of:

	1	2	3	4	5
a. Differences in age					
b. Difference in gender					
c. Difference in religion					
d. Difference in educational background					
e. Difference in tribe					

When conflicts are not resolved in the team:

	1	2	3	4	5
a. Team effectiveness is affected					
b. Individual performance in the team is affected					

A4. Please check your overall satisfaction regarding how an individual, project leader, team working process and the impact of organization contribute to team effectiveness

A team is effective if it meets (or even exceeds) the standards for the products and processes of interested stakeholders.

Please tick the answer below which most closely matches your overall satisfaction.

1-Strongly Agree; **2** – Agree; **3** – Neutral; **4** Disagree; **5** – Strongly Disagree

	1	2	3	4	5
a. Individuals input have influence on overall project output					
b. Project completed met the quality standard specified by the client					
c. Team members demonstrated a good sense of expertise					
d. Good service of the team leader was demonstrated during the project					
e. The team leader demonstrated good technical ability on the project					
f. Team leader made sure that professional and skilled people were hired for the project					

g.	Team leader's contributions enabled the team to be effective				
h.	Good service of the team member was demonstrated during the project				
i.	The required equipment and tool needed for the project was readily available and it enhanced output				
j.	Members of the team communicated among themselves well				
k.	Project completed met the quality standard specified by the client				
l.	Increase in wages positively affect my contribution to work well				
m.	I am motivated to work well when treated fairly by my employer				

SECTION B

DEMOGRAPHIC INFORMATION

1. Please specify your gender.   Male [   ]   Female [   ]

2. What is your highest educational qualification, please?
   Phd [ ]   Second Degree [ ]   First Degree [ ]   HND [   ]
   WASSE/SSSCE [   ]
   Others (Please specify) ………………

3. What is your profession?
   Project Manager   [   ]   Surveyor /Quantity surveyor   [   ]
   Architect   [   ]   Engineer   [   ]
   Labourer   [   ]   Contractor/Subcontractor   [   ]
   Mason, carpenter, labourer, steel bender   [   ]
   Others (Specify) …………………………………..

4. How long have you been in the Construction industry?
   Below 5 years [   ]   5 – 10 years [   ]   10 -15 year [   ]   above 15 years [   ]

5. Religion: Christian [ ]   Islam [   ]   Traditional Worship [   ]
   Atheist [   ]   Other (*Please specify*) …………………………………

THANK YOU

APPENDIX B

INTERVIEW GUIDE

PROFESSIONALS IN CONSTRUCTION INDUSTRY

Interviewee: ABC
Project name: EFG
Company: IJK

Introduction by Interviewer
Personal background and explain the purpose for the interview.

Confidentiality policy
Interview content will be transcribed and reported in a manner that identity of participants will not be revealed. The work is strictly for academic purpose.

Questions:
A. Interviewee background
  1. What is your job title and responsibilities
  2. How many years have you been in the construction industry
  3. How many project have you been involved in the construction industry
  4. What are the types of project that you've engaged in.
B. Team
  1. Do you work in a team
  2. How many people normally constitute your team
  3. Which category of professionals constituted your team?
C. Diversity in Team
  1. What types people do you normally work with, in terms of sex, age, tribe, culture, educational background, attitude etc
  2. Does diversity have any influence on team effectiveness and how
  3. How does the differences in gender, age, religion, physical appearance, tribe, country, culture among team members affect the overall project
  4. How do you prevent the negative effect of diversity from affecting the overall project.
  5. Will you find it difficult taking instruction from some of different tribe, religion, gender, physical appearance and why
D. Conflict in Team
  1. Do you think you experience disagreement in your team
  2. How does it happen

3. Does disagreement happen in teams as a result of differences in age, gender, tribe, cultures, country, religion, educational background.
4. How does it happen
5. How does these disagreement affect the project
6. How is these disagreement solve

E. Team Effectiveness and Diversity
1. In your opinion, how will you define team effectiveness in teams
2. What do you consider to be the most important factor in being an effective team
3. What are some of the things your team do, to be effective
4. What are some of the things that hindered team effectiveness?
5. Is it true that team leader help in realizing the goal of the team?
6. How do they do that?
7. Does the provision of right equipment and tools affect the overall efficiency of the team? If yes how. If no why
8. Do you think, wages can affect individual's attitudes toward project? Either negatively or positively.
9. As an individual in the construction industry, how do you contribute to achieve team output?

Is there anything else you'd like to share with me on how diversity affects team effectiveness and how these things can be prevented?

Do you have any questions, please?

Closing Remarks

Thank you so much for your time and sharing your ideas with me. I am very grateful. Please, I will get back to you again if any questions pop up during the transcription process of the interview.

THANK YOU.