

**KWAME NKRUMAH UNIVERISITY OF SCIENCE AND TECHNOLOGY,**

**KUMASI, GHANA**

**The Impact of Core Competencies on Skilled Labor Performance in the  
Ghanaian Construction**

by

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**MASTER OF SCIENCE**

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**DECLARATION**

I hereby declare that this submission is my own work towards the MSc. and that, to the best of my knowledge, it contains no material previously published by another person, nor material which has been accepted for the award of any other degree of the University, except where due acknowledgment has been made in the text.

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## **ABSTRACT**

In recent times, clients expect products and services to meet particular requirements. However, the construction industry has often by and large failed to meet clients' requirements. Often in developed economies, research on core competencies especially in the health and education sector has been well explored, the topic is not as well covered in the African setting particularly in the architectural, engineering and construction (AEC) industry. To address such issues as well as increase awareness, this study sought to explore the impact of core competencies on skilled labour performance in the Ghanaian construction industry. Utilizing snowball sampling techniques, a total of 150 questionnaires were sent to site managers, quantity surveyors, project managers, general contractors and architects in the construction industry within the Greater Accra region. 97 completed questionnaires gathered from the survey were analyzed using mean score ranking. The findings revealed achieving results competencies as the most significant cluster of core competencies. Also, improved worker satisfaction was regarded as the most significant impact of core competencies on skilled labour performance in the industry. The findings and recommendations of this study may be useful to construction professionals and policy makers who are seeking innovative ways to improve performance and productivity in their various organizations. It would be highly remarkable if future studies could consider exploring the constituents (key performance indices) of the labour performance so as to examine how each cluster of core competencies affect a specific labour performance index.

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## **DEDICATION**

To my wife Grace Ama Damali for her encouragement, patience and prayer support.

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## **CHAPTER ONE**

### **GENERAL INTRODUCTION**

#### **1.1 BACKGROUND TO THE STUDY**

The expression “core competency” came about by Prahalad and Hamel in a pioneering article of the Harvard Business Review in the year 1990. According to Prahalad and Hamel (1990), core competency is communications, inclusion and profound dedication to working within institutional edges. The Institute of Project Management (2002) explains competency as a component of connected know-how, behaviours, aptitudes and other personal features that impacts a massive sector of a person’s work, relates with job performance, and could be measured against properly recognized criterion, can be fostered through grooming and growth and can be dissipated into attributes of competencies.

According to Moore (2002) any skill can be core, provided it raises the stock price and everything else in the context. From Holmes and Joyce (1963) perspective, the main constructs of competence are abilities, attitudes, behaviour, knowledge, personality and skills. In Brinckmann 2007 study on competency in top management teams, he identified significant factors that impacts the competence gauge like the work experience, grooming pedagogy, scope of family and other man ecological variables. In recent times, the competition among the companies globally are on their core competencies. Consequently, these companies are required to have more focus on their key competencies and concurrently try to separate their commercial processes that do not add up to core competencies (Urban and Naidoo, 2012).

The construction industry is a key sector of every society, economy and culture (Knoepfel, 1992). According to Chronaki (2013), the management of construction

projects can be very complex sometimes, thus, it requires knowledge of modern management as well as comprehension of the design and construction process. Similarly, Xiao and Proverbs (2003) add that, the general attributes in the construction sector further demands an advancement in products, movements and the sustainable development of construction firms. According to Leonaviciute (2007), core competencies can be known by two main goals in mind:

- To bring the highest worth to the client
- To be sure of the degree of performance through the workers to the company.

In this present atmosphere of financial instability and doubtfulness, most construction firms are pushing to sustain productivity in order to survive and remain competitive (Opoku and Fortune, 2010). For instance, the construction industry in the UK is believed to have poor performance (ibid). Similarly, in Simon report of 1944 report revealed that, there is deploying ineffective performance of the construction firms with most projects not meeting clients' satisfaction (Ankrah, 2011). For this reason, performance improvement has remained a recurring theme in all the major reports (Egan, 1998), hence the need to foster this research.

The key to company survival and prosperity sprouts from core competencies (Chan et al., 2004) such as decision making, resource management, character development, and expertise. The performance of skilled labour and that of the construction industry are often impacted by a host of correlated variables most of which are usually mentioned as a vital cause of success in literature (Fortune and White, 2006). Some causes such as, good communication, expert and adequate staffs, capable project managers, previous knowledge, good interpersonal skills, and support from

senior management were identified as critical success factors (CFSs) in Fortune and White 2006 study.

## **1.2 PROBLEM STATEMENT**

There have been some studies focusing on core competencies and labour/workers in the architectural, engineering and construction (AEC) industry. These include an exploration of the professional core competencies (Kim and Kim, 2011; Lin et al., 2012; Omidvar, 2014; Baha et al., 2015); exploring the relationship between construction projects and core competencies (Zoiopoulos, 2011, Chronaki, 2013). All these studies contribute significantly to the increasing consideration of utilizing professional core competencies in an organization.

In the Ghanaian construction industry skilled labour performance adds to the general performance of projects under construction via obtaining, growing and organizing proper competencies. Though, the continuing professional growth strategies have been fostered in numerous nations to grow skilled ability and sustainability among professionals (Talukhaba, 2006) such as construction professionals. Only a few of these professionals are often paid attention to in terms of skilled labour performance research, which is the contractor and project manager (cf. Assaf et al., 1996; Baldry, 1996, Proverbs and Faniran, 2001, Kashiwagi and Byfield, 2002; Costa et al., 2004, Ahadzie, 2011).

Globally, clients expect products that meet clearly specified requirements. However, the construction industry has by and large failed to meet clients' requirements (Ankrah, 2011). This state of affairs has inspired a significant amount of research into the performance of the construction industry and factors influencing outcomes

with the emphasis being on the performance of the project (ibid). While in developed economies, research on core competencies and other skilled labors especially in the health and education sector has been well explored, the topic is not as well covered in the African setting particularly in the AEC industry. It is against this backdrop that this study was undertaken to bridge this knowledge gap and also improve the performance of workers, it is vital to examine the effects of core competencies on skilled labour performance in the construction industry. Such an empirical study between core competencies and skilled labour performance will offer an important yield to the body of knowledge on core competencies in the AEC industry.

### **1.3 RESEARCH AIM AND OBJECTIVES**

The aim of this study was to examine the impact of core competencies on the skilled labour performance in the construction industry in order to aid construction firms assess the possible outcomes of their overall productivity.

To achieve this, the study sought to:

1. Identify the core competencies of skilled labour influencing their performance in the Ghanaian construction industry; and
2. Establish the impacts of core competencies on skilled labour performance in the construction industry of Ghana.

### **1.4 SCOPE OF THE STUDY**

In pursuing this study, the angle of focus was on both construction and consultancy firms engaged to deliver construction projects. Thus the study covers AEC firms, hence the construction industry in conclusion was the unit of analysis. The research

centers on construction professionals within these firms in the Greater Accra region. Construction professionals such as the project manager, architect, quantity surveyor, site manager, and the general contractor was considered for responses.

### **1.5 RESEARCH PROCESS**

The research methodology for this investigation was quantitative (positivist), thus the research procedure was deductive. The study began with an in-depth review of literature centering on the areas of competence, core competencies, skilled labour, skilled labour performance, construction industry performance in Ghana. Commencing with basic observations and theoretical insights derived from literature, this would form the grounds for variable development. Data analysis was executed using descriptive statistics at the early stages to offer significant insights. In order to examine the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire, Cronbach alpha was used. Further analysis was done using and mean score ranking.

### **1.6 SIGNIFICANCE AND VALUE OF THE RESEARCH**

The influence of firm resources and abilities on performance in Ghanaian construction firms has been a focus of circumstantial rumor because of its relevant inferences for organizational researchers and industrialists (cf. Tan et al., 2006). According to Clardy (2007), core competencies result to determined loftier performance in diverse ways as they develop more efficient and effective performance that permit establishment to employ optimal altering situations by offering a stage for perpetual novelty in products and services.

According to Dada and Jagboro (2010), the significance of core skill and competency standardization for professionals in the construction industry cannot be overemphasized. Adding on to existing knowledge on core competencies, this study provided greater insight into the performance of skilled labour within the Ghanaian construction industry. It would also be evident that construction professionals (human resource) are the vital dimensions of an organization which have the most link with productivity in the industry.

Moreover, the findings can also be used as a basis for fostering further studies on core competencies and skilled on critical key performance indices in the construction industry. Apart from the direct yield of the study discussed afore, the study would also provide significant contribution to the field of construction worker psychology through the identification and nurturing of skills required for efficient worker and productive organization cohabitation.

## **1.7 DEFINITION OF TERMS**

### **Core Competencies**

According to Kogut (2001), core competencies are the attributes that enable the firm in making the outmost response to market responsibilities. In this study, core competencies are the unique skills and capabilities that sets a company apart from competitors.

### **Skilled Labor**

A skilled labour is an individual that is knowledgeable about a specific skill or trade. Foner (1987) exemplified skilled labour as people with various degrees of education and training. In this study, professions such as the project manager, architect,

quantity surveyor, site manager, and the general contractor was referred to as skilled labour.

### Performance

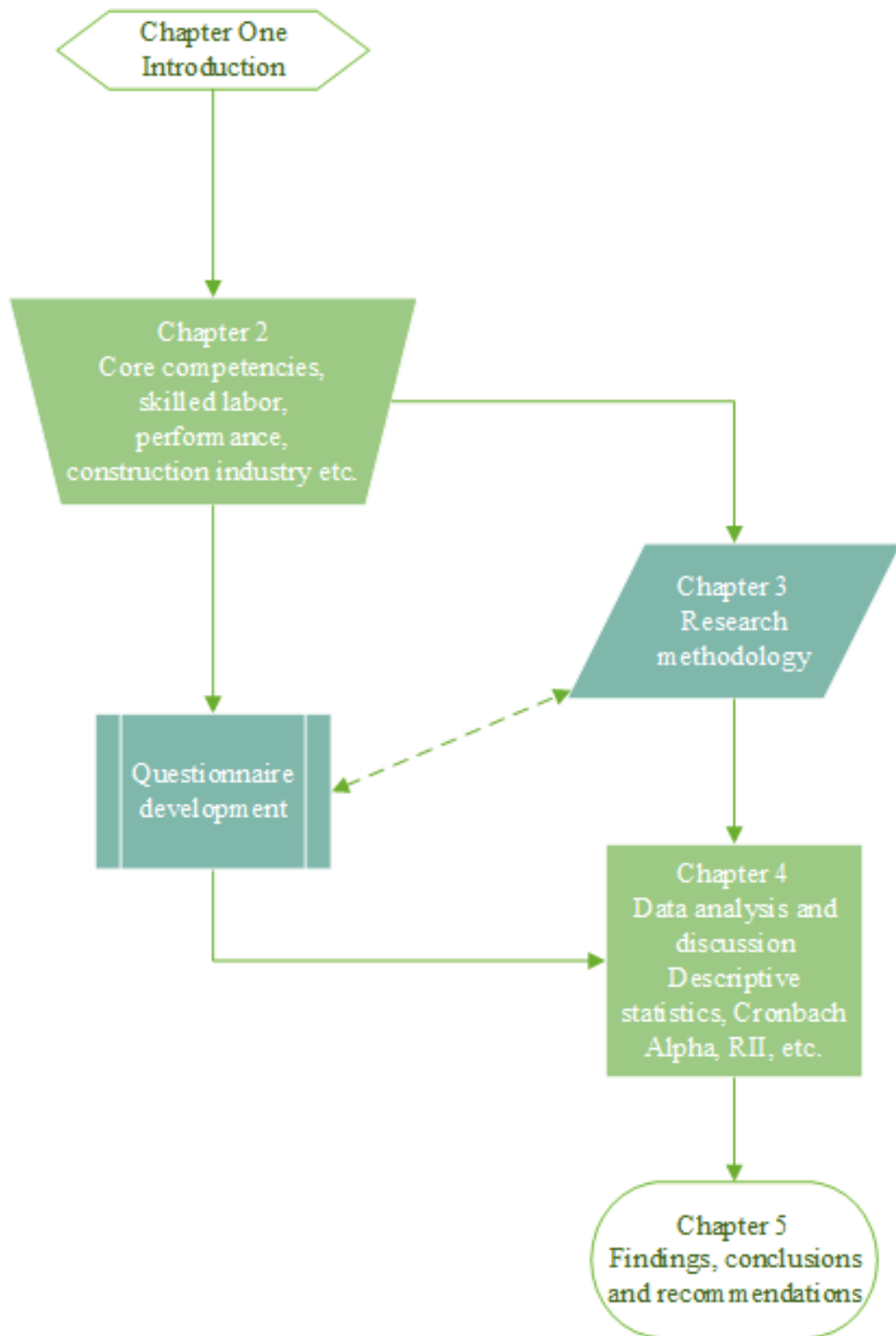
Ankrah and Proverbs (2005) define performance as the assessment of how best groups, individuals and organizations have achieved success with a particular goal. However, in this present study, performance is simply how well a person executes a task.

## **1.8 STRUCTURE OF THE THESIS**

In order to explore systematically this empirical correlation between the core competencies and performance of skilled labour, it is essential to have a conceptual framework that brings together in a logical manner all the vital aspects to be investigated [see Figure 1.1]. This thesis was organized into five chapters.

- Chapter one presents the introduction to the thesis.
- Chapter two outlines the literature review.
- Chapter three, this presents the general methodology for the study, the research style, the research design, information on data required, data collection and data analysis.
- Chapter four describes the data analysis and discussions from the field survey.
- Chapter five discusses the major findings, conclusions and recommendations in addition would provide a summary of the entire research outcome.





**Figure 1.1:** Framework for thesis

**Source:** Author generated

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This current chapter elaborates the literature review linked to the research framework and the prime concepts, namely, core competencies, labour performance and the construction industry. The critical review of literature equips the researcher to gather, plan, and synthesize the existing knowledge linked to the investigation probes. The prime study query under investigation is: ‘what are the impacts of core competencies on skilled labour performance in the construction industry?’

First this literature reviews the past research on core competencies relevant to the construction industry. Secondly, the area of performance and its associate literature is wide and deep, therefore, the literature that is more closely related to the study is reviewed, particularly the research on skilled labour performance. The concluding section looks at the study gaps existing in prior literature on core competencies and labour performance theories.

#### **2.2 CORE COMPETENCIES: A CONCEPTUAL PERSPECTIVE**

The term core competency is occasionally referred to as cooperate competencies and distinguished abilities, has broadly been investigated in modern times particularly after Prahalad and Hamel’s influential 1990 article publication “The Core Competence of the Corporation”. From that period, hypothetical investigation about this concept has sprouted diverse perspectives of what these competencies are and

how they can be used to create enhanced projects and services, (Edgar and Lockwood, 2011). Giesecke and McNeil (1999) suggest that, core competencies are the capabilities, know-how, and personal features that offer a person's prosperity in a specific stance.

Badger and Garvin (2007) defines core competencies as the knowledge, skills and capabilities determined within a particular establishment to safeguard successful performance of schemed goals. Core competence as put by Prahalad and Hamel (1990) has three qualities: it makes an influence to supposed client benefits; it is hard for rivals to emulate; and it can be supplemented to an extensive diversity of commercial establishments.

Mascarenhas et al. (1998) opine that, having knowledge on a firm's core competence is significant for developing scheme. That is, by focusing on their core competence, construction professionals can influence their firms' resources in four ways: they increase profits by concentrating on what they do best; via offering daunting constraints against the entrance of competitors; they completely use extrinsic sources that they would not be capable to replica; and they deduce investment and risk, and increase client awareness (Quinn and Hilmer, 1994).

### **2.3 PERFORMANCE: A CONCEPTUAL PERSPECTIVE**

Performance can be described as the assessment of how good individuals, groups of individuals and organizations have achieved in quest of a particular goal (Ankrah and Proverbs, 2005). These aims differ significantly, but from an organizational view, they commonly focus on the provision of satisfaction to key stakeholders, these include customers, suppliers, government and society in general (Ankrah, 2011). As put by Ahadzie (2007), performance is the 'behavioral competencies that

are significant in attaining the purposes of project-based organizations. Mullins (2007) termed performance as concerning factors as accumulating profits, enhanced service output or attainment of optimal outcomes in vital zones of organizational events.

Armstrong (2006) define performance as a perpetual and flexible process that comprises superiors and those whom they oversee performing as associates within a framework that sets out how they can best work together to realize the required outcomes. The variances in perceptions are often on changes in the benchmarks and standards employed in studying the performance, but irrespective of these changes, most of the researchers express the performance through the extent of success in which the establishment achieves its goals (Jabbouri and Zahari, 2014). In construction, due to the various stakeholders who contribute towards the attainment of the project goals, performance has been defined in one sense as a stakeholder's (client, architect, contractor, quantity surveyor, project manager etc.) involvement in the accomplishment of the task needed to finish the project (Soetanto, 2002).

#### **2.4 COMPETENCE OR COMPETENCY / COMPETENCIES: FAR FROM CONFUSING**

Globally, it occurs that there is no universal definition of competency (Ammons-Stephens et al., 2009). Though, there is a doubt and misperception regarding the description and characterization of competencies (Dole et al., 2005), yet different views pertain to the distinguishing line between competence and competency/competencies. However, it is measured more rewarding to pursue a more popular ones of these definitions (Stoof et al., 2002). The concepts competencies, competence and component pertain to a state or quality of being able

and fit (Vazirani, 2010). He is of the view that, the terms, competency and competence emerges from distinct streams of idea on the percept of ability at work.

As differentiated by Chan (2006) and Vazirani (2010), competencies are the wide behavioral qualities that are connected to successful outcomes. Competency thus expresses the aptitude to transmit skills and abilities from one sector to another as competencies are the features of managers that result to the illustration of skills and capabilities, and finally lead to effective performance (Sanghi, 2004). Smallwood and Emuze (2011) further argue that, Vazirani view of the terms suggest that, competency is a depiction of behavior and competence is a portrayal of work tasks. Meanwhile, Englemann and Roesch (1996), define competencies as critical work qualifications such as know-how, capabilities and aptitudes that persons should process if they are to progressively realize a worthy goal.

Bartram et al. (2002) describe competencies as arrays of conducts that are involved in the delivery of preferred results. Furthermore, competency is the ability to use a field of linked knowledge, skills, and abilities needed to successfully execute roles or responsibilities in a clear background (Albanese et al., 2008). The Project Management Institute (2000) defines competence as a group of connected know-how, behaviors, aptitudes and other personal features that impacts a huge segment of one's work, relates with work performance, can be evaluated against properly recognized criteria, can be enhanced through preparation and growth and can be dissipated into attributes of competencies. Summarizing, competency can be specified as a fundamental feature of an individual that results in grander and/or effective performance in a responsibility.

Kurz and Bartram (2002) are much concise in their attempt to differentiate among competence and competency (Ammons-Stephens et al., 2009). Competences is about mastery in connection to particular goals (Kurz and Bartram, 2002). The scaling of competence at work comprises the evaluation of performance in the workplace against some pre-defined array of occupational standards (Kurz and Bartram, 2002). Then again, competencies correlate with the behaviors supporting successful performance; what it is people do so as to tackle their aims; how they go about attaining the necessary outputs; what sparks their competent performance (ibid). Ammons-Stephens et al. (2009) adds that, it is essential to understand the distinction.

## **2.5 THE NEED FOR FOSTERING CORE COMPETENCIES IN CONSTRUCTION FIRMS**

Often, most construction projects are huge and so influential that no single person can have all the competencies needed to endure to a successful completion. For this reason, it is imperative for architectural, engineering and construction (AEC) establishments to determine, foster, and handle organizational core competencies that tend to drive large enterprise wide critical projects (Sanghi, 2004). This is view of core competency is founded on the hypothesis that workplace competencies seem to center on individuals in lieu of the organization, and they differ by job positions as opposed to enterprise efforts (Smallwood and Emuze, 2011). Subsequently, it can be debated that, core competencies are crucial to organizational, strategic, valuable to commercial entities and procedures, and universal in nature.

From a global perspective, management of core competencies is one the most severe strategic obstructions a firm encounters given their essential affiliation to loftier productivity (Winter, 1998). As put by Winter, after these competencies are

generated, it cannot be basically hoarded for application when demanded. Nevertheless, these core competencies in the construction industry needs perpetual utilization to sustain corporate performance (Teece, 1990). Winter further argue that, construction firms anywhere must focus on the management of these core competencies as a significant matter. The strategic management of core competencies not only needs investment in available competencies but also the achievement and growth of new ones (Rubin et al., 2016). Babalola (2009) suggest that, a competent construction skilled labour is a person who is required to have a variety of skills, knowledge in a range of situation and organization.

The application of competencies at the construction site means that the portion of actual work performance can be clearly separated and known.

(Theunissen and Melis, n.d.). Once established, competencies play a major role in the organizations to assess the educational and developmental needs of their personnel. (Garavan and McGuire, 2001). Nevertheless, determining of competencies is obstructed due to the lack of a global theoretical framework (Theunissen and Melis, n.d.). Core competence plays a vital part in the course of forming collaboration between the strategic business units (Jabbouri and Zahari, 2014).

## **2.6 CORE COMPETENCIES ASSOCIATED WITH SKILLED LABOR PERFORMANCE IN THE CONSTRUCTION INDUSTRY**

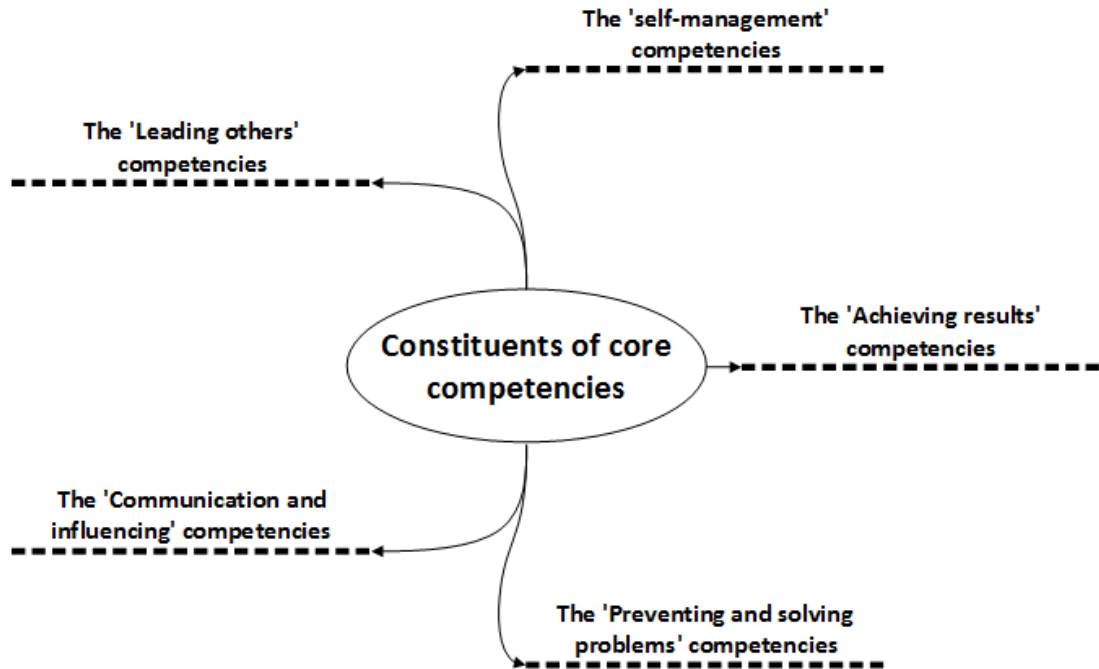
Construction professionals are optimally suitable to oversee either a technical, economic or general management role in the firm. Performing such roles needs the skilled labour to develop prerequisite core competencies which comprises a balance

of the technical skills with interpersonal and conceptual skills; expert technical knowledge by itself does not ensure success in the skilled labor's performance (El-Baz and El-Sayegh, 2007). In this present era, construction professionals' must manage the inner activities of the firm as well as the outside the firm (Chang, 2005). Professionals such as the architect, quantity surveyor and project manager offer to general construction project performance by obtaining, growing and organizing proper competencies (Nkado and Meyer, 2001). During the assessment of the preparation requirements of construction professionals, Odusami et al. (2007) revealed that, the overall belief nowadays is that construction skilled labour are challenged with capability dearth. Dada and Jagboro (2012) is of the view that, how some construction skilled labour have been managing with the dynamism of the altering society of construction technology, novelty in materials, organizing methods, know-how abundance and client requirement without effective core competencies remains a matter of perpetual investigation. Nguyen et al. (2004) suggest that, it is quite unfortunate that, the complexity, difficulty and dynamics of most construction projects create difficulties for even the best project managers. According to El-Baz and El-Sayegh (2007), core competencies for construction professionals may be alienated into four wide categories, leadership competencies, managerial competencies, financial competencies, and technical competencies. Nevertheless, upon extensive current review of literature this study developed five fundamental constituents of core competencies for skilled labour performance in the construction industry. The constituents are;

- a. Leading Others Competencies,
- b. Communication and Influencing Competencies,
- c. Preventing and Solving Problems Competencies,



- d. Achieving Results Competencies,
- e. Self-Management Competencies (See figure 2.1).



In a study conducted by Karns and Mena (1998) on “Sharpening the Performance Management Focus using Core Competencies”, twenty-two (22) competencies were identified. Also, Grobbelaar et al. (2004) identified nineteen individual key competencies in his survey on “Critical Competencies to boost a Customer Service Core Capability”. However, looking at the span of studies conducted from 1998 (thus from Karns and Mena’s article) to 2016 (present study), thirty-one (31) competencies were identified from the rigorous review of literature and preliminary study in this current investigation which were further placed under principal components. These placements were based on theoretical similarities among identified constructs.

Figure 2.1: Constituents of core competencies associated with skilled labour performance

**Source:** Author generated

## **2.6.1 Leading Others Competencies**

### **Providing motivational support**

Diverse definitions of motivation exist. Herzberg (1987) once said that ‘it is only when one has a generator of one’s own that we can talk about motivation. According to Quiñones (1995), motivation is described as erraticism in conduct not ascribed to steady individual variances or strong situational coercion. That is construction professionals are expected to have a feature that is willing to disburse efforts to a specific set of conduct. Yet, Tabassi et al. (2011) suggest that, the basics of inspiring staffs is offering appropriate mediums to be content with their wants and needs. Tabassi and Bakar (2009) categorizes these needs into a few fundamentals for the construction workers such as worker involvement, team belonging and recognition

### **Fostering teamwork**

As explained by Greenberg and Baron (2003), teamwork is the gathering of few personnel with supporting skills which are dedicated to a particular aim, performance goals, and method with which they entrust each as communally answerable. Within the construction industry teamwork is vital. When management suitably harnesses it, it may offer, among others, employees’ commitment to a firm and their job performance.

The reputation of teams in establishments has augmented over the past era (Dhurup et al., 2016). Many organizations employ crews to integrate daily duties to aid them achieve success factors to bear with intricacy and rivalry particularly in addressing clients demands and prospects (ibid). The construction industry is a project-based

one where each project needs diverse personnel in relation to knowledge, expertise, competence and experience (Dhurup et al., 2016).

### **Empowering others**

The theory of empowerment has been recognized broadly in modern times and now is applied massively in the field of social work (Solomon, 1976; Lee, 2013). This is evident when workers often participate in management duties like decision making. Tabassi et al. (2011) reveal that, most workers are inspired when they realize that their contribution is relevant in success story their company. They further added that, when employees are empowered in such mediums, they work in ways that meet not only their needs and desires but also the achievement of the goals of the company as a whole. That encourages worker participation. Leaders and supervisors are advised to use a systems in place that rewards workers who excel in job (Buyens et al., 2001).

### **Managing change**

Construction project change according to Lazarus and Clifton (2010) is defined as “an alteration or a modification to the existing conditions, requirements or assumptions. Alterations that are not planned during the construction stage of projects are almost unavoidable with prospects of hostile consequences for project cost, time and quality (Fleming et al., 2004). Through managing these changes more efficiently, these disturbing impacts can be lowered or even prevented. In the UK construction project, Eghan study (1998) reveals that, one-third of big construction clients are dissatisfied with how their construction projects are being handed over. From the consultants’ view, areas of team co-ordination, design and innovation, timeliness, reliability and value for money.

Fleming et al. (2004) argue that, most construction projects suffer from delay and over expenses with quality defects. Change is a key donor to the challenges stated in the construction industry. Therefore, Fleming et al. (2004) suggest that, change management in construction is dominant to the project management process. For construction professionals to manage change, five principles are required;

- a. The anticipation of change, r
- b. Recognizing change,
- c. Evaluation of change,
- d. Resolving change,
- e. Learning from change (CII, 1994; Lazarus and Clifton, 2001).

## **2.6.2 Communication and Influencing Competencies**

### **Interpersonal communication**

According to Krishnaveni and Thamaraiselvi (2008), interpersonal communication is the principal basic to flourish in each single occupation. In this era, all establishments included construction firms anticipates its workers to center on instituting an effective interpersonal communication linkage amongst their supervisors, equals, juniors and supporting personal overtime, so as to attain organizational goals via a cooperative determination instead of individuals (Rajmohan, 2015). Acharya et al. (2006) suggest that, deficiency of interpersonal, communication, and negotiation skills decreases the ability of team members and their aptitude to solve problem jointly.

### **Attention to communication**

Misapprehensions can occur when improper words are employed, when pitch of the speech is not taken care of, when the flair of expression is unsuitable to the receiver, silence during conversations or when there is an application of non-vocal signals that have various understanding and levels of significance in diverse groupings (Brent, 2005). For this reason, consideration needs to be given to communication. Krishnaveni and Thamaraiselvi (2008) adds that, perceptual predispositions can lead people in an organization to misconstrue the messages and create a communication gap between them.

### **Oral communication**

Oral communication skills link to the capability to audibly and vocally relate with others for attaining good working relationships at the work place. Nevertheless, as a result of the influence of labour force variety, construction skilled workers suffer diverse barriers that create a noise in the interpersonal communication process, hence new challenges in communication emerge in their everyday lives. Consequently, construction labour may communicate with others daily but they may not be sustainable in making effective professional interactions.

### **Building collaborative relationships**

Acharya et al. (2006), collaborative relations are described as comparable or complementary coordinated actions taken by firms in interdependent relationship to achieve mutual or singular outcomes with expected reciprocation over time. This kind of cooperation signifies the readiness of parties to extend change beyond transactions towards building a relationship and is an antecedent for continued exchange. Shared goals and joint decision-making between partners undoubtedly leads to increased satisfaction and commitment (Acharya et al., 2006).

### **2.6.3 Self-Management Competencies**

#### **Self-confidence**

According to Abaci and Okyay (2013), self-confidence is seeing from subjective perspective and thinking about themselves abilities or failures. Kasatura (2000) argues that, self-confidence encompasses to remark on you and after these remarking, results of this comment and reflections of feelings about it. In individual who has self-confidence shows self with his capabilities and accomplishes (Abaci and Okyay, 2013). According to Yeager (2009), a professional can see his positive paths and when he attains something, they would know that these successes are outcomes of mindful to accept duty.

At times in some research works, self-confidence and leadership are together. Thus if construction professionals and employees treat a query under numerous heads, most of the managers are working better when the employees are contented and glad filled at international firms (Berry et al., 2010). In cases where there are complications and chaos on construction site, employees can need a leader/professional who is capable of addressing problems and maintaining calm.

#### **Stress management**

Assuming the significant roles skilled labour carry on to play in the construction process as they are necessary to grow, foster, and preserve project teams without losing their cool in a stressful surrounding (Smallwood and Emuze, 2011).

#### **Flexibility**

Usually, flexibility a faced quality in daily life which is of prime significance for biological survival, yet difficult to define due to its broad scope of use. Mandelbaum and Buzacott (1990) describe flexibility in terms of decision making appears satisfactory to the defined application in the industry; the figure of possible

substitutes available after one has made and preliminary choice. However, the complete definition relating to the features of the construction industry was offered by Stabryla (2005), flexibility as the contrary of rigidity is a quality or skill equipping proficient active of a system in terms of existing external conditions and with respect to internal operating ability, its focus relying on the level of initiative and system's self-management capability.

## **2.7 IMPACT OF CORE COMPETENCIES ON SKILLED LABOR PERFORMANCE IN THE CONSTRUCTION INDUSTRY**

The effect of firm resources and abilities on performance in Ghanaian construction firms has been a focus of circumstantial rumor because of its relevant inferences for organizational researchers and industrialists (cf. Tan et al., 2006). According to Clardy (2007), core competencies result to determined loftier performance in diverse ways as they develop more efficient and effective performance that permit establishment to employ optimal altering situations by offering a stage for perpetual novelty in products and services.

Mooney (2007) adds that, a core competence is crucial to a firm's value-generating undertakings, as it involves the ability of a firm somewhat than ordinary possession of assets while assisting the firm to attain its goals. In the same vein, Kavitha et al. (2010) opine that, competency that may take the vessel of knowledge, attitude, skill and other features of a person that includes intentions, standards, and self-concepts can truly support success at work. Sanghi (2004) adds that, core competencies in a firm directly affects the performance of its managers, and the competitive advantage the firm benefits in the marketplace.

### **2.7.1 Improvement in Productivity Through Collaborative Teamwork**

According to Castka et al. (2001), the involvement of construction firms employing teams has demonstrated that the proficient adaption of teams can lead to considerable productivity improvement, creativity, performance and efficiency along with the objective to satisfy the employee. In the same vein, Harvey et al. (2004) also added that, the survival of a construction company in a competitive worldwide society relies on its capabilities to take in active and adaptive teams.

As put by Alshawi and Faraj (2002), a construction project comprises a cooperation of personnel, who are gathered to permit interaction which makes sure that the project is successful. The interactions influence the relations and consequently shows a capability to work together (Dhurup et al., 2016). Teamwork is dominant in the traditional construction which guarantees the successful completion of projects (Azmy, 2012).

### **2.7.2 Optimal Organizational Commitment**

In recent times, organizational commitment has caught the interest from academics and researchers alike in distinct disciplines and have been an emphasis for many establishments. Dhurup et al. (2016) suggest that, this could basically be because of their impact on the firm's outcomes such as job involvement, employees' turnover mindset, performance, effectiveness and absenteeism. McKinnon et al. (2003) is of the view that, organizations that have a dedicated labour force with standards and esteem, which are reasonable to their employees, may cause best worker commitment to the organization.



### **2.7.3 Improved Worker Satisfaction**

Job satisfaction offers a significant role in the total productivity of an organization. Job satisfaction is the outcome of a person's opinion and assessment of the job. The view is affected by the person's exclusive situations such as necessities, morals, prospects as well as skills. Emerging from this view are an array of facets that may affect one's level of job satisfaction. Among these facets include the level of pay and benefits, working conditions, supervision, promotion, and interpersonal relationship, leadership and the work itself. That is, happy labour become productive employees (Saari and Judge, 2004).

### **2.7.4 Effective Communication**

Communication is a compound procedure of transferring and comprehending information among individuals (Krishnaveni and Thamaraiselvi, 2008). It is therefore a vital sector of establishments that support decision-making, work coordination, persuasion of people and enhance sustainable developments. There is a consensus among researchers that cooperation and aspects of cooperation such as open communications between the project participants have a direct positive influence upon project performance (Phua and Rowlinson, 2004). Leena (2004) adds that, effective communication happens only when the correspondent's opinions are transferred to and comprehended by the proposed recipient in the identical logic. However, Minter (2010) is of the view that, workers can be trained to become effective by refining their communication soft skills.

### **2.7.5 Effective Change Management**

Project changes are the add-ons, obliterations or amendments in the space of a project contract that adjust cost, duration or quality (CII, 1994). Unplanned alterations happening in the design and construction stages, may cause time, cost and quality nonconformities that directly obstruct project success (Lazarus and Clifton, 2001). For instance, when alteration leads to rework is usually a direct expense, which can sum up to 10 to 15% of a contract's value (Love and Li, 2000). An indirect indication of variation may lead to claims and disputes that interfere schedules, cash flow and lower team moral (Motawa, 2012). Also, Hanna et al. (1999) indicated that, as change orders upsurge, performance decreases. Construction professionals are therefore required to be proficient in managing such changes.

Application of a core competency like change management permits alteration to occur in an organized way so that feasible replacements are recognized, advanced and their effect evaluated before implementation (Fleming et al., 2004). Nevertheless, for change management to become effective, it should only rest on the project manager; other team players such as the architect, quantity surveyor, site manager and general contractor should be integrated in the process.

### **2.7.6 Sustainable Competitive Advantage**

According to Clardy (2007), effective use of core competencies founded on grand organizational procedures offer an optimal source for sustainable competitive advantage as studied core competencies are the skills that coordinate and drive performances of employees in a variety of tasks that are essential for project realization. Mooney (2007) reports that, construction firms maintain competitive

merits when their competencies in the system of either core competence or unique competence possess strong fundamental opacity since competitors are less probable to comprehend such competencies good enough to emulate them. Nevertheless, Robinson and Robinson (1995) argue that, to remain competitive in today's international corporate atmosphere, an economic return must be realized from an investment in training of an organization's human resources. Again, it is not an exaggeration to advocate that resource, as manifested through enhanced competencies is essential for a successful construction firm (Collins and Porras, 1997).

#### **2.7.7 Achievement of Ideal Flexibility Management**

Flexibility has become a new frontier of managing work and employment (Grenier et al., 1997; Cappelli and Neumark, 2004). The prime goal of flexibility approach need in construction process is the probability of assurance of production perpetuity regardless of a dynamically alteration environment in the process executing outcomes that solves the needs (Paslowski, 2008). According to Paslowski, the optimal flexibility management on construction phase lets likelihood of substantial hindrance of effect of these unfavorable event acknowledged to insolvency of problem at source.

#### **2.7.8 Overall Peak Performance Outcomes**

Far-sighted high performance construction firms show an increasing application of core competencies in their performance management plans (Karns and Mena, 1998). Performance management instrumentalities are usually founded on core competencies that differentiate great from typical performance for successful

managers (Espinoza et al., 2010). Thus most flourishing firms have become more efficient in core competencies such as team building, empowerment, benchmarking and stress management. Gradually, construction establishments that use core competency grounded systems are often referred to as visionary or high performance organizations (Collins and Porras, 1995).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

In this chapter, the research design and process on which this study was founded is set in motion. For this cause, the following segments offer an in-depth account of the research design, sample and procedures for data gathering. In conclusion, the scaling, relationships and the data analysis techniques employed in this study were elaborated upon.

#### **3.2 RESEARCH PARADIGMS**

Guba & Lincoln (2004) groups research paradigms into four: positivism; post positivism constructivism and critical theory. Placing this study within its theoretical tradition would require thoughts on the variety of available philosophical range as a framework in this investigation. A paradigm is a basic set of knowledge that guide an act (Guba, 1990). According to Collis & Hussey (2003), there are four elements of paradigm; ontology, epistemology, axiology and methodology. Thurairajah et al. (2006) stated that, ontological, epistemological and axiological assumptions are concerned with linguistics and route of the research. Ontological stance equips the researcher to choose whether the reality is unbiased and external of the researcher, or socially constructed and only understood by examining the perceptions the human actors (Thurairajah et al., 2006). Epistemology also regulates the frame and processes by which social research is conducted (Sarantakos, 2005). According to Campana (2010), epistemology guides the procedures as to the nature of knowing what amounts as a fact and where knowledge is to be pursued.

While axiological positioning is concerned with standards, Axiology looks at the philosophy surrounding the reality, as to whether the research philosophy is ‘value free’ or value determined. In the present study, the research adopts positivist tradition for the epistemology. Thus, the investigation is of the belief that the impact of core competencies on skilled labour performance is explored through systematic but simplified steady approach. Also, at the ontological level, this research adopts a realist stance. Since, variables that explain the impacts of core competencies are available in interest. While taking the view of realist in ontological supposition, it maintains a positivist position in epistemological belief with value free axiological stance.

### **3.3 RESEARCH DESIGN: QUANTITATIVE RESEARCH METHODS**

According to Kerlinger (1978), research design is the strategy, configuration and approach of exploration seeming to answer research questions and regulate variance. Available are distinct kinds of research design such as case study, experimental and longitudinal (Chan, 2005). With these varieties in the research process, there are numerous explanations for selecting a specific kind of research design. As put by Scandura & Williams (2000), the prime aim when selecting a kind to adopt is the idea to safeguard the outcomes that can be universal to a greater population, control of the variables, exactness in measurement, and practicality of setting. This present study adopts the quantitative approach.

According to Wadsworth (1997), Quantitative research approach is the systematic investigation of quantitative properties and their relationships. It follows a deductive method in linkage to philosophy and is concerned with the design measurement and sampling. Wadsworth (1997), declared that quantitative research is about how much

aspect, to what extent, how much aspect or how many, which encompasses counting and other data analysis. Quantitative research employs the use of questionnaires, surveys and experiments to collect data that is reviewed and tabulated in figures, which permits to be featured by the application of statistical analysis (Hittleman & Simon, 1997). Quantitative researchers measure variables on a sample of subjects and express the relationship between variables using effect statistics such as correlations, frequencies, or differences between mean.

### **3.4 CHOICE OF RESEARCH DESIGN**

In research dissemination, subject to the goal of the study, variance research and process research are the two main methods (Subramanian & Nilakanta, 1996). Variance investigation includes data collection and analysis that consists of determining the covariance among a set of variables while process research pursues to establish the order of a set of events over time (Rogers, 2003). Subsequently, variance research encompasses quantitative methods which measure variables by assigning numerical values to conduct and process research involves qualitative methods.

By embracing positivism as the research paradigm supporting this study, the epistemological, ontological and axiological assumptions dictated that either; case studies, surveys and experiments would most ideal as the research process. Nevertheless, experiments would not be a suitable selection since they are carried out often in a research laboratory set (Yin, 2003). For this study, surveys are adopted. Thus, samples are examined via queries. According to Yin (2009), the foremost consideration for using surveys is; queries that the empirical portion of the

research focused on “what” questions are centered on the incidence frequencies, or prevalence of the phenomenon other than the need for functioning links that needed to be drawn over time, hence surveys and archival examination were likely picks.

### **3.5 SURVEY PROCESS**

Researchers who embrace positivist view use a choice of customary preferences such as surveys and questionnaires (Cohen et al., 2013). According to Kraemer (1991), the survey research is applied to quantitatively defined features of a known populace which consist of connection among variables. He continued that, other features of survey research are by asserting that the data required for the survey research are gathered from people by using certain portion of the populace from which outcomes can later be universal back to the populace.

The idea to consider the survey process for this research was enclosed in the philosophy of the researcher that the survey process enables data to be collected from large number of respondents such that the outcomes of the investigation can be generalized.

#### **3.5.1 Study Scope and Target Respondents**

The target respondents in this study included both construction and consultancy firms engaged to deliver construction projects and its associated professionals participating in cost, design, construction, supervision and management. The investigation is piloted in the Greater Accra Region. As agreed by most indigenous researchers, Accra remains industrial heart of Ghana, thus being home to every aspect of the economy of Ghana, ranging from mining to tertiary services like



consultancy. As construction activities prosper in the region, it suggests therefore that most skilled labour including the project manager, architect, quantity surveyor, site manager, and the general contractor will gravitate towards the region.

### **3.5.2 Sampling Technique and Sample Size Determination**

The prime goal of any sampling technique is to acquire a sample that is symbolic of the target populace. During selection of sampling techniques, we require at least marginal erstwhile knowledge of the target population. In addition, some sound assumptions are required to compute a sample size needed to accomplish a logical approximation of population features. According to Polit & Hungler (1999), a sample comprises of a theme of the elements that constitute the population and usually applied in large-scale survey investigation as a result of economy and accuracy (Weisberg & Bowen, 1977). Nevertheless, the main danger of using a chosen sample is that it might not effectively point out the conducts, characters, or views of the populace.

The method of sampling for the effort grounded on its goal, strategy, and practical inferences of the study topic is snowball sampling. Plainly placed, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Tongco, 2007). In the setting of this study, this approach comprised the construction professionals concerned with cost, design, construction, supervision and management route.

Before the study was set in motion, it was realized that there was difficulty in estimation the population size the class, hence the snowball sampling was adopted. As put by Atkinson & Flint (2001), snowball sampling is a method for discovering

study focus. This strategy perceived as an answer to overcome the obstructions connected with hidden populace. The procedure founded on the assumption that a connection occurs among the initial sample and others in the same target population, allows series of referrals made within a circle of consociate (Berg 1988). Therefore, the snowball sample method was used to establish the respondents with valuable information that are significant to the research. This procedure continued until a representative sample size of one hundred and fifty (150) respondents was realized.

### **3.6 RESEARCH PROCESS**

In the earlier section of this study, the research queries tackled are extracted from an empirical and exhaustive literature appraisal. These reviews offered the significant theoretic setting and agenda to pursue the study. Having established the theoretical perspective, research strategy and design, the process of the research employed to addresses the research questions are drawn. The study objectives were settled to attain the goal of the investigation specified. The investigation intended comprises of three basic phases: literature review; questionnaire survey; and discussion and conclusions.

First Phase: The review of literature is executed on the foundation of the existing literature encompassing postgraduate dissertations, conference as well as journal materials. The exploration of the literature is in distinct parts with specific headings addressing the objectives. Conceptual definitions to keywords are elaborated. These collected studies are grounded fundamentally on secondary data was assessed for constructing the statistical variables as impacts.

Second Phase: The goal of this phase was gathering of data, then computation and analysis of the data observed.

Third Phase: This stage pondered on the agreement of the analysis output with previous literature. Similar works are cited and significant discussions. Conclusions are drawn and recommendations made.

### **3.7 DATA GATHERING TECHNIQUES**

This section of the study methodology covers the tools used in the gathering of data, techniques and processes. It offers thorough enlightenments to every technique adopted in tackling the aims and objectives. Collection of data is vital in investigation since the data adds to an optimum understanding of a philosophical setting (Bernard and Bernard, 2012). It became adjutory that choosing the kind the data acquisition and respondents will be executed with rigorous decision.

#### **3.7.1 Questionnaires Development**

The queries were intended to tackle the goal and objectives of this investigation. It was vital to determine the information to collect for significant questions to be asked (Oppenheim, 1996). Survey questionnaires are embraced to popularize the outcomes gathered from a small population to a large one (Campana, 2010). According to Creswell (2005), survey queries bear plentiful merits including the capability to get to a vast number and geographic scattered populace; collection of data by medium of freewill involvement; minimum researcher preference; and deduction of time required for the respondent and the researcher. Therefore, a good questionnaire should encompass queries which solicit diverse kinds of valuable information from respondents (Gall et al., 2003). As put by Fowler (1995), a question is said to be

good and reasonable when it yields solutions that are consistent and valid scale of something that we want to define. Phrasing of the enquiries should avoid equivocalness or lacking sentences that would allow misapprehension (Dillman, 1944).

### **3.7.2 Layout of Questionnaire**

As agreement with extant literatures (Oppenheim, 2000; Saunders & Lewis, 2000; Polgar & Thomas, 2005), the ideal stretch of questionnaire extends from one side of A4 sheet to eight pages of A4 sheet. Nevertheless, this study constructed a questionnaire of three pages.

### **3.7.3 Substance in Questionnaires**

Wahab (1996) is of the view that, the manner in which survey questions are illustrated influences the quality of the responses and hence it is essential to safeguard that the exact queries are placed, sound comprehended and specified in the optimum approach. The queries comprise of eight to ten questions predominantly scaled-response and close-ended type. The questions were typewritten on typical A4, white color papers with a cover page at the forefront. The questions would be distinct in three sections, primarily, A, B and C. A elicits information concerning the demographics of respondents and associated organizations. B solicits views on the core competencies of skilled labour influencing their performance in the construction industry of Ghana, while C concludes the section with evaluating the perspectives of the respondents on the impacts of the identified core competencies on skilled labour performance in the construction industry of Ghana. The complete aspect of the questionnaire was attached as an appendix.

### **3.8 TECHNIQUES FOR ANALYSIS OF DATA**

The gathered questionnaire was ciphered and analyzed using statistical tools such as the IBM SPSS (International Business Machines Statistical Package for Social Sciences) statistics version 23. The results of the study would be consistently evaluated with the study objectives. Successively, the outcomes were analyzed using reliability statistics such as the Cronbach Alpha, descriptive statistics like the mean score ranking.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND DISCUSSION OF RESULTS**

#### **4.1 INTRODUCTION**

The analysis of primary data gathered from one hundred and fifty (150) respondents within the Greater Accra region are documented in this chapter. Respondents involving site managers, quantity surveyors, project managers, general contractors, and architects were inferentially selected for the research. The study directed attention on examining the impact of core competencies on skilled labour performance in the construction industry of Ghana. The analysis was thoroughly done using descriptive statistics in terms of percentiles and frequencies. The Mean Score ranking was also employed. Data analysis was carried out and the results presented in line with the objectives of the study, namely: to identify the core competencies of skilled labour influencing their performance in the construction industry of Ghana, and determine the impacts of core competencies on skilled labour performance in the construction industry of Ghana. As part of the data analysis a reliability statistics was performed to test the validity and reliability of the survey instrument. 150 survey questionnaires were administered but the Researcher was able to retrieve 97 completed questionnaires which were all deemed valid for analysis after data screening. This implies a response rate of 64.7%.

#### **4.2 RESPONDENT PROFILE**

Demographic data of respondents were examined by using descriptive statistics with the aid of the IBM SPSS v23. Table 4.1 illustrates the demographic profile of respondents. Regards respondents' occupation in the construction industry, site

managers comprised 32.0% of the study, followed by quantity surveyors occupying 26.8%. 20.6% were project managers with 10.3% being general contractors. Architects (10.3%) were in the study. Thus site managers dominated the study. Concerning respondents' highest academic qualification, just 2.1% were city and guilds certified with 20.6% being HND holders. More than half (57.7%) of the respondents are BSc holders. 17.5% of the respondents hold an MSc degree. Both respondents with M. Arch and MBA occupied 1% of the study respectively. None of the respondents held a PhD degree. As seen in Table 4.1, few (4.1%) of the respondents have just 0-1-year experience in the construction industry. 18.6% of the respondents hold 2-5 years of work experience. 33% of the respondents have worked in the industry between 6-10 years, whilst 26.8% of the respondents have 11-15 years of work experience in the industry. And 17.5% of the respondents have over 15 years of site working experience in the construction industry. On the respondents' number of projects involved in, 1% indicated they have been involved in no projects, while 5.2% indicated they have been part of just 1 project only. 2-5 projects were involved in by 20.6% of the respondents. 24.7% of the respondents suggested they have been involved in 6-10 projects. 20.6% of the respondents also indicated they have been involved in 11-15 projects. 27.8% of the respondents have been involved in over 15 projects.

The demographic profile of the respondents shown in Table 4.1 signifies that the respondents involved in the survey are primarily site managers with BSc degree certification having 6-10 years of work experience in the construction industry in Ghana involved in over 15 construction projects.

**Table 4.1: Demographic profile of the respondents (N=97)**

Characteristic	Frequency	Percentage
<b>Occupation</b>		
Site Manager	31	32.0
Quantity Surveyor	26	26.8
Project Manager	20	20.6
General Contractor	10	10.3
Architect	10	10.3
<b>Highest academic qualification</b>		
City and Guilds	2	2.1
HND	20	20.6
BSc	56	57.7
MSc	17	17.5
M.Arch	1	1.0
MBA	1	1.0
PhD	0	0.0
<b>Number of years worked in the construction industry</b>		
0-1 year	4	4.1
2-5 years	18	18.6
6-10 years	32	33.0
11-15 years	26	26.8
Over 15 years	17	17.5
<b>Number of construction projects involved in</b>		
None	1	1.0
1 project only	5	5.2
2-5 projects	20	20.6
6-10 projects	24	24.7
11-15 projects	20	20.6
Over 15 projects	27	27.8

Source: Researcher's survey (2016)



### **4.3 RELIABILITY ANALYSIS**

In order to examine the reliability of the scale variables, a reliability analysis was performed. Reliability centers on the degree to which scores on a scale can be duplicated. Thus, internal consistency reliability measures the reciprocal correlation of a dataset. Cronbach Alpha coefficient was used in this study to determine the reliability of the survey mechanism. According to Hair et al. (2002), an alpha value of .70 or higher has massively been regarded by researchers as indicating a reliable measurement.

**Table 4.2: Reliability statistics**

Cronbach's Alpha	Number of Items
.914	49

As illustrated in Table 4.2, reliability coefficients of the study variables under study was 0.914, this suggests that the internal consistency of the measurements was satisfactory.

### **4.4 CORE COMPETENCIES OF SKILLED LABOR INFLUENCING THEIR PERFORMANCE IN THE CONSTRUCTION INDUSTRY OF GHANA**

The survey conducted sought to identify the core competencies of skilled labour influencing their performance in the construction industry of Ghana based on respondents' opinion. The respondents were therefore asked to indicate their level agreement or disagreement on each of the identified core competencies by rating variables on a Likert scale of 1 to 7, where 1=Strongly disagree, 2=Disagree,

3=Somewhat disagree, 4=Neutral, 5=Somewhat agree, 6=Agree, and 7=Strongly agree.

The results were then analyzed and illustrated in order of significance in Table 4.3. In establishing the relevance of the variables on the seven-point Likert scale rating, a success criterion was deemed significant if it obtained a mean value of equal to or greater than 4.0. When two or more variables have the same mean, the one with lowest deviation is assigned the highest significance ranking (Ahadzie, 2007). Also, the significance level was set at 95% in accordance with orthodox risk levels (ibid). The element of standard deviation measures consistency in responses by acquiring the distinction between the highest value of the standard and the lowest value of standard deviation. If the distinction between them is low, i.e. being close to zero, the consistency is high as far as the responses are concerned and vice versa.

**Table 4.3: Core Competencies of Skilled Labor Influencing Their Performance in The Construction Industry of Ghana (N=97)**

Core competencies	Individual mean	Individual ranking	Average mean	Standard deviation	Overall ranking
<b>Achieving Results Competencies</b>			<b>5.66495</b>		<b>1<sup>ST</sup></b>
Initiative	5.6392	4		.90353	17
Entrepreneurial orientation	5.6186	5		.88321	18
Fostering innovation	5.7629	1		.78758	4
Results orientation	5.7216	2		.78717	8
Thoroughness	5.6495	3		.89024	16

**Table 4.3: Core Competencies of Skilled Labor Influencing Their Performance in The Construction Industry of Ghana (N=97)**

Decisiveness	5.5979	6	.82487	28
<b>Preventing and Solving Problems Competencies</b>				
			<b>5.6632</b>	<b>2<sup>ND</sup></b>
Diagnostic information gathering	5.6082	5	.88455	22
Analytical thinking	5.6082	4	.86068	21
Forward thinking	5.6082	3	.88455	20
Conceptual thinking	5.5979	6	.90898	27
Strategic thinking	5.7835	1	.78032	2
Technical expertise	5.7732	2	.83548	3
<b>Leading Others Competencies</b>				
			<b>5.63919</b>	<b>3<sup>RD</sup></b>
Establishing focus	5.6598	4	.90008	15
Providing motivational support	5.8041	1	.82461	1
Fostering teamwork	5.7010	3	.84366	10
Empowering others	5.6186	5	.88321	19
Managing change	5.5567	6	.81610	29
Developing others	5.4021	7	.87393	31
Managing performance	5.7320	2	.79733	7

**Table 4.3: Core Competencies of Skilled Labor Influencing Their Performance in The Construction Industry of Ghana (N=97)**

<b>Communication and Influencing Competencies</b>				
			<b>5.63916</b>	<b>4<sup>TH</sup></b>
Interpersonal communication	5.6598	5	.88843	14
Attention to communication	5.7423	2	.79423	6
Oral communication	5.3814	9	.89493	32
Written communication	5.7010	3	.84366	11
Persuasive communication	5.6082	8	.86068	25
Interpersonal awareness	5.6082	7	.89625	24
Influencing others	5.6082	6	.89625	23
Building collaborative relationships	5.7526	1	.80404	5
Customer orientation	5.6907	4	.79531	12
<b>Self-Management Competencies</b>				
			<b>5.60565</b>	<b>5<sup>TH</sup></b>
Self-confidence	5.4227	4	.86404	30
Stress management	5.7216	1	.77382	9
Personal credibility	5.5979	3	.90898	26
Flexibility	5.6804	2	.87257	13

As illustrated in Table 4.3, the results from the survey revealed that the following are the five (5) significant core competencies of skilled labour influencing their performance in the construction industry of Ghana: Preventing and Solving Problems Competencies, Achieving Results Competencies, Leading Others Competencies, Communication and Influencing Competencies, and Self-Management Competencies.

From the Table 4.3, Preventing and solving problems competencies ranked second with a mean score of 5.6632. Achieving results competencies ranked first with a mean of 5.66495. Leading others competencies ranked third with a mean value of 5.63919. According to Quiñones (1995), motivation is defined as erraticism in behavior not attributable to stable individual differences or strong situational coercion. That is construction professionals are expected to have a feature that is willing to disburse efforts to a specific set of conduct. Yet, Tabassi et al. (2011) suggest that, the basics for ensuring motivating for employees is finding proper ways to satisfy their needs and desires.

Tabassi and Bakar (2009) categorizes these needs into a few fundamentals for construction workers such as workers' participation, recognition and team belonging. Within the construction industry teamwork is vital. Should management properly harness it, it may contribute to, among others, employees' commitment to an organization and their job performance. The reputation of teams in establishments has augmented over the past era (Dhurup et al., 2016). Many organizations employ teams to implement day-to-day duties to aid them achieve success factors to bear with complexity and competition particularly in addressing clients demands and prospects (ibid). Tabassi et al. (2011) reveal that, most workers are motivated when they are empowered and sense that their participation is relevant in making the

company prosperous. They further add that, when employees find themselves empowered in such mediums, they will work in ways that meet not just their self needs and desires but also the needs and wants of the company as a whole.

According to Krishnaveni and Thamaraiselvi (2008), interpersonal communication is the principal basic to success in every single occupation. In this era, all establishments included construction firms anticipates its workers to center on instituting an effective interpersonal communication linkage amongst their supervisors, equals, juniors and supporting personal overtime, so as to attain organizational goals via a cooperative determination instead of individuals (Rajmohan, 2015). Acharya et al. (2006), collaborative relations are described as comparable or complementary coordinated actions taken by firms in interdependent relationship to achieve mutual or singular outcomes with expected reciprocation over time. This kind of cooperation signifies the readiness of parties to extend change beyond transactions towards building a relationship and is an antecedent for continued exchange.

Communication and influencing competencies ranked fourth. According to Krishnaveni and Thamaraiselvi (2008), interpersonal communication is the principal basic to success in every single occupation. In this era, all establishments included construction firms anticipates its workers to center on instituting an effective interpersonal communication linkage amongst their supervisors, equals, juniors and supporting personal overtime, so as to attain organizational goals via a cooperative determination instead of individuals (Rajmohan, 2015). Misapprehensions can occur when improper words are employed, speech pitch is not taken care of, the flair of expression is unsuitable to the receiver, silence during conversations or when there is an application of non-vocal signals that have various meanings and levels of

significance in diverse cultures (Brent, 2005). For this reason, consideration needs to be given to communication. According to Acharya et al. (2006), collaborative relations are described as comparable or complementary coordinated actions taken by firms in interdependent relationship to achieve mutual or singular outcomes with expected reciprocation over time.

Self-management ranked fifth with mean value of 5.60565. According to Abaci and Okyay (2013), self-confidence is seeing from subjective perspective and thinking about themselves abilities or failures. Kasatura (2000) argues that, self-confidence encompasses to remark on you and after these remarking, results of this comment and reflections of feelings about it.

#### **4.5 IMPACT OF CORE COMPETENCIES ON SKILLED LABOR PERFORMANCE IN THE CONSTRUCTION INDUSTRY OF GHANA**

Descriptive statistics were conducted to assess the mean statistics and standard deviations of all impact variables. In determining the relevance of the items on the seven-point Likert scale of 1 to 7, where 1=Strongly disagree, 2=Disagree, 3=Somewhat disagree, 4=Neutral, 5=Somewhat agree, 6=Agree, and 7=Strongly agree. The thirteen items in descending order are Improved worker satisfaction, Growth in entrepreneurial initiatives, Encouragement of progressive labour outputs, Achievement of ideal flexibility management, Optimal organizational commitment, Strategic resolutions to complex work problems, Overall peak performance outcomes, Effective communication, Development of collaborative professionalism, Effective change management, Promotion of ideal stakeholder management,

Sustainable competitive advantage, and Improvement in productivity through collaborative teamwork displayed mean scores over 4.0.

According to Stevens (1996), standard deviation values of less than 1.0 indicates consistency in agreement among the respondents of the reported level of results. In the standard deviation column, all the standard values are less than 1.0 except promotion of ideal stakeholder management with 1.00021 standard deviation.

**Table 4.4: Descriptive Statistics of impact of core competencies on skilled labour performance (N=97)**

Impacts	Mean	Std. Deviation	Ranking
Improved worker satisfaction	5.7938	.88903	1
Growth in entrepreneurial initiatives	5.7629	.85114	2
Encouragement of progressive labour outputs	5.7526	.81689	3
Achievement of ideal flexibility management	5.7216	.81320	4
Optimal organizational commitment	5.7216	.77382	5
Strategic resolutions to complex work problems	5.6289	.89349	6
Overall peak performance outcomes	5.6186	.91792	7
Effective communication	5.6082	.90780	8
Development of collaborative professionalism	5.5670	.96725	9
Effective change management	5.5464	.81676	10
Promotion of ideal stakeholder management	5.4536	1.00021	11
Sustainable competitive advantage	5.4124	.87503	12



**Table 4.4: Descriptive Statistics of impact of core competencies on skilled labour performance (N=97)**

Impacts	Mean	Std. Deviation	Ranking
Improvement in productivity through collaborative teamwork	5.3814	.92919	13

As seen in Table 4.4, improved worker satisfaction ranked first with a mean value of 5.7938. Job satisfaction offers a significant part in the total productivity of any industry. The level of one's job satisfaction is affected by a variety of acts, these include the level of pay and benefits, supervision promotion, working conditions, leadership and interpersonal relationships, and the work itself. That is, happy labour become productive employees (Saari and Judge, 2004).

Achievement of ideal flexibility management emerged fourth with 5.7216. Flexibility has become a new frontier of managing work and employment (Grenier et al., 1997; Cappelli and Neumark, 2004). According to Paslawski, the optimal flexibility management on construction phase lets likelihood of substantial hindrance of effect of these unfavorable event acknowledged to insolvency of problem at source.

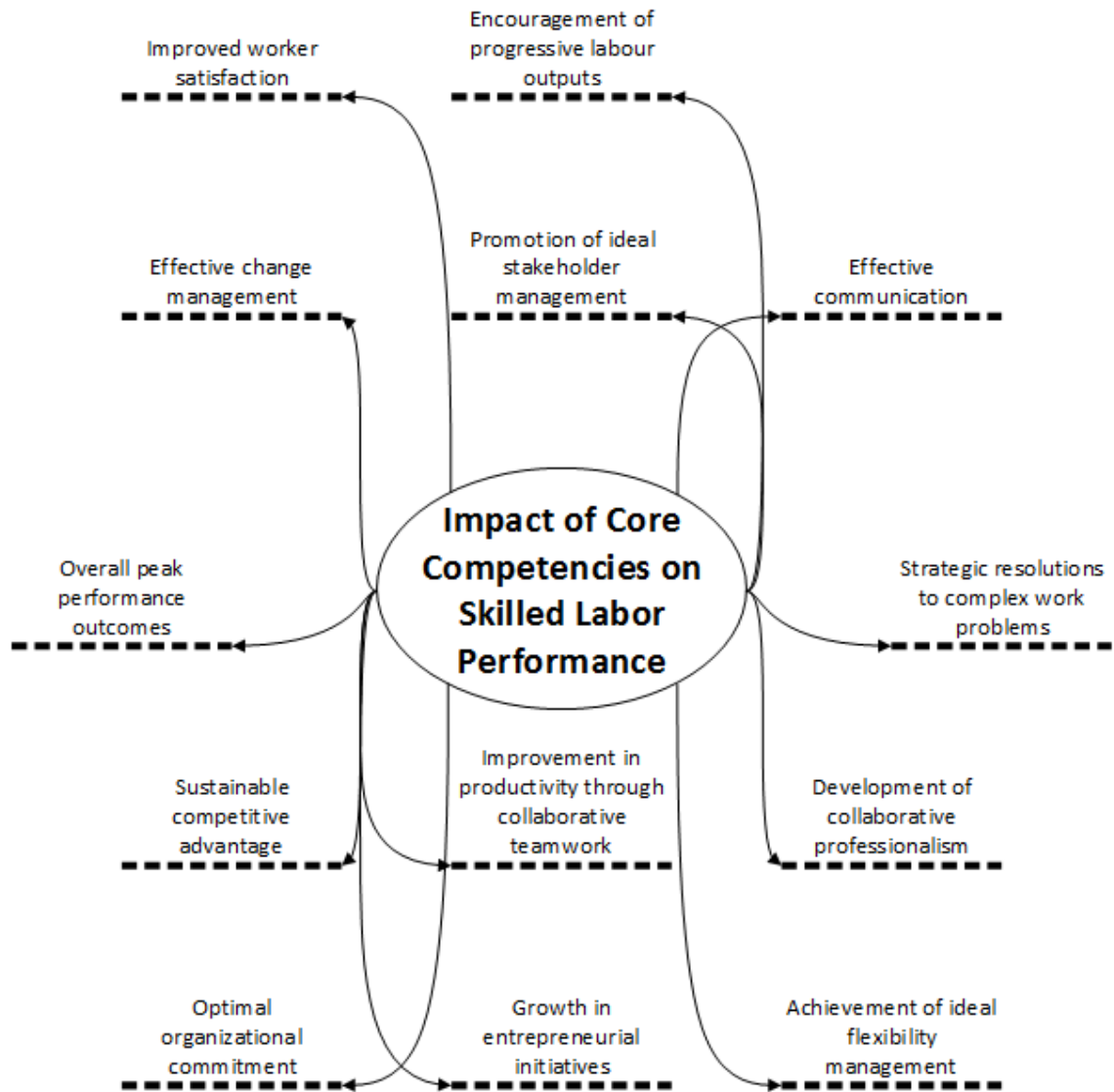


Figure 4.1: The 13-key impact matrix of core competencies on skilled labour performance in the construction industry of Ghana.

**Source:** Author generated 2016

Optimal organizational commitment ranked fifth with 5.7216. In recent times, organizational commitment has caught the interest from academics and researchers alike in distinct disciplines and have been an emphasis for many establishments. McKinnon et al. (2003) is of the view that, organizations that have a dedicated labour force with standards and esteem, which are reasonable to their employees, may cause best worker commitment to the organization.

Overall peak performance outcomes emerged seventh with 5.6186 mean. Far-sighted high performance construction firms show an increasing application of core competencies in their performance management plans (Karns and Mena, 1998). Gradually, construction establishments that use core competency grounded systems are often referred to as visionary or high performance organizations (Collins and Porras, 1995).

Effective communication emerged eighth with mean value of 5.6082. There is a consensus among researchers that cooperation and aspects of cooperation such as open communications between the project participants have a direct positive influence upon project performance (Phua and Rowlinson, 2004). Leena (2004) adds that, effective communication happens only when the correspondent's opinions are transferred to and comprehended by the proposed recipient in the identical logic.

Effective change management ranked tenth with mean value of 5.5464. Unplanned alterations happening in the design and construction stages, may cause time, cost and quality nonconformities that directly obstruct project success (Lazarus and Clifton, 2001). Application of a core competency like change management permits alteration to occur in an organized way so that feasible replacements are recognized, advanced and their effect evaluated before implementation (Fleming et al., 2004).

Sustainable competitive advantage ranked twelve yet with significant mean value of 5.4124. According to Clardy (2007), effective use of core competencies founded on grand organizational procedures offer an optimal source for sustainable competitive advantage as studied core competencies are the skills that coordinate and drive performances of employees in a variety of tasks that are essential for project realization.

Though improvement in productivity through collaborative teamwork ranked thirteenth with mean value 5.3814. According to Castka et al. (2001), the involvement of construction firms employing teamwork has demonstrated that the proficient adaption of teams can lead to a considerable productivity improvement, efficiency, creativity and performance, along with employee satisfaction.

#### **4.6 CHAPTER SUMMARY**

This chapter is devoted to the analysis and discussions of the results obtained from the field survey. The analysis began with a brief discussion of the survey questionnaires and descriptive statistics of the results obtained from the field. The chapter included Mean Score rankings for specific of the research. In conclusion, the reliability statistics revealed that the sample can be considered has reliable for the analysis.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 INTRODUCTION

This chapter concludes the study. First, the achievement of the objectives, and contributions of this research are presented. Recommendations are made and suggestions for further studies are outlined. Finally, the conclusion is given.

#### 5.2 ACHIEVEMENT OF RESEARCH OBJECTIVES

The findings obtained from the research are summarized in this section.

**To identify the core competencies of skilled labour influencing their performance in the construction industry of Ghana.** In addressing this objective, numerous parameters were employed in the survey questionnaire to identify the core competencies of skilled labour influencing their performance in the industry. A review of extant literature on core competencies were conducted which enabled the researcher to identify thirty-two (32) core competencies worldwide. These 32 variables were formulated into questions on the survey questionnaire requesting respondent to indicate their level of agreement of the core competencies. Analyzing respondents' responses, it was found that all the 32 identified variables are significant to the construction industry. These 32 core competencies were grouped under five components. In order of significance, they are Achieving Results Competencies, Preventing and Solving Problems Competencies, Leading Others Competencies, Communication and Influencing Competencies, and Self-Management Competencies.

**To determine the impacts of core competencies on skilled labour performance in the construction industry of Ghana.** A review of extant literature on the impacts of core competencies on skilled labour performance in the construction industry of Ghana. Thirteen impacts of core competencies on skilled labour were formulated into queries on the survey questionnaire enquiring respondents to indicate the degree of agreement of the impacts. In order of significance, the impacts are Improved worker satisfaction, Growth in entrepreneurial initiatives, Encouragement of progressive labour outputs, Achievement of ideal flexibility management, Optimal organizational commitment, Strategic resolutions to complex work problems, Overall peak performance outcomes, Effective communication, Development of collaborative professionalism, Effective change management, Promotion of ideal stakeholder management, Sustainable competitive advantage, and Improvement in productivity through collaborative teamwork.

### **5.3 CONCLUSIONS TO THE STUDY**

The effect of firm resources and abilities on performance in Ghanaian construction firms has been a focus of circumstantial rumor because of its relevant inferences for organizational researchers and industrialists (cf. Tan et al., 2006). After conducting this study on the various impacts of core competencies on skilled labour performance in the construction industry of Ghana, the research would like to make these conclusions:

- The study agrees with the views of other construction researchers that the core competencies are crucial to a firm's value generating undertakings, as it involves the ability of a firm somewhat than ordinary possession of assets while assisting the firm to attain its goals.

- Like other developing countries, Ghana sees the need to foster more efficient and effective performance that allows organizations to adopt ideal changing circumstances for continuous innovation in products and services.
- Also, considering the number of respondents and scope of the study adopted, the findings of the study cannot be generalized to other cities.

#### **5.4 RECOMMENDATIONS**

Grounded on the findings of this research, the following recommendations are forwarded to concerned bodies, stakeholders, and practitioners in the construction industry to aid improve productivity and performance in the construction industry:

- Construction company management must organize and take the initiative to educate workers in their company on identified core competencies in this study.
- Construction stakeholders are expected to establish support decision-making, work coordination, persuasion of people and foster sustainable developments.
- In order for construction firms to achieve or remain competitive in today's international corporate environment, an economic return must be realized from an investment in training of an organization's human resources.
- It is imperative for AEC firms to aid foster the 32 identified core competencies within their departments so as to reach a successful project performance.
- As revealed by the study, management of core competencies is one of the most severe strategic obstructions a firm encounters given their essential affiliation to loftier productivity, hence the impacts identified by the study is supposed to champion the need of the identified core competencies.

## **5.5 AVENUES FOR FUTURE RESEARCH**

Opportunities for further research exists in line with this research, taking into consideration its limitations. The study centered focus on the impact of core competencies on skilled labour performance particularly in the construction industry within the Greater Accra region; therefore, further research can be conducted in the following areas:

- Further research on the impact of core competencies on skilled labour performance can be extended to the other nine regions in order to generalize the outcomes.
- The constituents (key performance indices) of the labour performance could be further explored to examine how each core competency affect a specific performance index.
- A model could further be developed to aid facilitating the successful fostering of core competencies in various construction firms.
- Further research can look into the pedagogy of teaching particular core competencies in graduate curriculums.



## REFERENCES

- Abaci, R., & Okyay, B. (2013). A Comparison of Self Confidence Levels and Personal Growth Initiative Skills between Managers and Employees. *Procedia-Social and Behavioral Sciences*, 106, 39-44.
- Acharya, N. K., Lee, Y. D., Kim, S. Y., & Kim, J. K. (2006, July). Teamwork and job satisfaction in construction projects. In *Technology Management for the Global Future, 2006. PICMET 2006 IEEE*, 3, 1147-1156.
- Ahadzie, D. K. (2007). A model for predicting the performance of project managers in mass house building projects in Ghana (Doctoral dissertation, University of Wolverhampton).
- Ahadzie, D. K. (2011). A Model for Predicting the Performance of Project Managers in Mass House Building Projects in Ghana. *Journal of International Real Estate and Construction Studies*, 1(1), 95.
- Albanese, M.A., Mejicano, G., Mullan, P., Kokotailo, P., & Gruppen, L. (2008). Defining characteristics of educational competencies. *Medical Education*, 42, 248-255.
- Aldry, D. (1996). Client benchmarking of contractor performance, In Langford, D. A. & Retik, A. (Eds.), *Managing the construction project and managing risk*, 2, 72-81.
- Ali, Z. (2012). Small Medium Contractor Enterprises (SMCES). In Malaysia: Investigating The Impact of Core Competencies and Financial Support On Project Success (Doctoral dissertation, USM).

- Alshawi, M., and Faraj, I., (2002). Integrated construction environments: Technology and Implementation. *Construction Innovation* 2(1), 33-51.
- Ammons-Stephens, S., Cole, H. J., Riehle, C. F., & Weare, W. H. (2009). Developing core leadership competencies for the library profession. *Library leadership & management*, 23(2), 63-74.
- Ankrah, N. A. (2011). An Investigation into the impact of culture on construction project performance. *Journal of International Real Estate and Construction Studies*, 1(1), 99.
- Ankrah, N. A., & Proverbs, D. (2005, September). A framework for measuring construction project performance: overcoming key challenges of performance measurement. In 21st Annual ARCOM Conference, 7-9.
- Anushan, S. S. S., & Timothy, C. F. C. (2014). A Study on the Functional Impact of Operational Core Competencies of Ammarun Foundries, Coimbatore. *International Research Journal of Business and Management – IRJBM*.
- Armstrong, M. (2006). *Strategic human resource management: a guide to action*.
- Assaf, S., Al-Hammad, A. M., & Al-Shihah, M. (1996). Effects of faulty design and construction on building maintenance. *Journal of performance of constructed Facilities*, 10(4), 171-174.
- Atkinson, R., & Flint, J. (2001). Accessing hidden and hard-to-reach populations: Snowball research strategies. *Social research update*, 33(1), 1-4.
- Azmy, N., (2012). The role of team effectiveness in construction project teams and project performance. PhD. Thesis. Iowa State University. Iowa State.

- Babalola, O. (2009). A study of the core competencies of quantity surveyors in managing electrical and engineering services sub-contract. *Journal of Environmental Design and Management*, 2(1), 55-64.
- Badger, W. W., & Garvin, M. J. (2007). *Facilities Asset Management: Challenges and Opportunities*. Scientific Committee, 301.
- Baha, Z., Hubbard, B., & Zukley, D. (n.d.). *Technical Core Competencies Assessment for the Global Construction Professional*. *Education in the Built Environment*, 88.
- Baldry, D. (1996) Client benchmarking of contractor performance, In Langford, D. A. & Retik, A. (Eds.); *Managing the construction project and managing risk*, 2, 72-81.
- Bartram, D., Robertson, I. T., & Callinan, M. (2002). Introduction: A framework for examining organizational effectiveness. *Organizational effectiveness: The role of psychology*, 1-10.
- Berg, S. (1988). Snowball Sampling-I. *Encyclopedia of statistical sciences*.
- Bernard, H. R., & Bernard, H. R. (2012). *Social research methods: Qualitative and quantitative approaches*. Sage.
- Berry, K. A., Kowalski, K. C., Ferguson, L. J., & McHugh, T. L. F. (2010). An empirical phenomenology of young adult women exercisers' body self-compassion. *Qualitative research in sport and exercise*, 2(3), 293-312.
- Brent, O. C. (2005). *Interpersonal communication, an introduction to human interaction*. Jaico publishing house, 1<sup>st</sup> edition.

- Brinckmann, J. (2008). Competence of Top Management Teams and Success of New Technology-Based Firms: A Theoretical and Empirical Analysis Concerning Competencies of Entrepreneurial Teams and the Development of Their Ventures.
- Busenhardt, C. A. (2014). Leveling" Core Competencies for Interprofessional Collaborative Practice" for Learners.
- Buyens, D., Wouters, K., and Dewettinck, K. (2001). Future challenges for human resource development professionals in European learning oriented organizations. *J. Eur. Ind. Train.*, 25(9): 442-453.
- Campana, J., (2010). The soft Skills of Project Management: A view from Diploma Graduates. Master Thesis, Faculty of Education, Queensland University of Technology.
- Cappelli, P., & Neumark, D. (2004). External churning and internal flexibility: evidence on the functional flexibility and core-periphery hypotheses. *Industrial Relations: A Journal of Economy and Society*, 43(1), 148-182.
- Castka, P., Bamber, C.F., Sharp, F.M., Belohoubek, P., 2001. Factors affecting successful implementation of high performance teams. *Team Performance Management: An International Journal* 7(7/8):123-134.
- Chan, D. C. (2006). Core competencies and performance management in Canadian public libraries. *Library Management*, 27(3), 144-53.
- Chan, P, Cooper, R, Carmichael, S, Tzortzopoulos, P, McDermott, P & Khalfam, M. M. A. (2004) Does Organizational Learning creates a Learning Organization? Conceptual Challenges from a project perspective. In: Khosrowshahi, F (Ed.)

- “20th Annual ARCOM conference”, 1-3 September 2004, Herriot Watt University. Association of Researchers in construction Management, 2, 759-766.
- Chan, T. S. A. (2005). The impact of subordinates' professionalism on leadership effectiveness in the construction industry (Doctoral dissertation, The Hong Kong Polytechnic University).
- Chang, C.M. (2005). Engineering management: Challenges in the New Millennium. Pearson Prentice Hall, Upper Saddle River, NJ.
- Chronaki, A. P. (2013). Establishing core competencies for implementing successful construction projects in trading companies.
- CII, C. (1994). Pre-Project Planning: Beginning a Project the Right Way. Construction Industry Institute, The Univ. of Texas at Austin, Austin, TX.
- Clardy, A. (2007). Strategy, core competencies and human resource development. Human Resource Development International, 10(3), 339-349.
- Clardy, A. (2007). Strategy, core competencies and human resource development. Human Resource Development International, 10(3), 339-349.
- Cohen, L., Manion, L., & Morrison, K. (2013). Research methods in education. Routledge.
- Collins, J. C., & Porras, J. I. (1996). Building your company's vision. Harvard business review, 74(5), 65.
- Collins, J. C., & Porras, J. I. (2005). Built to last: Successful habits of visionary companies. Random House.

- Collis, J., & Hussey, R., (2003). *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*. 2nd Ed, New York: Palgrave Macmillan.
- Costa, D. B., Lima, H., & Formoso, C. T. (2004, November). Performance measurement systems for benchmarking in the Brazilian construction industry. In *Performance measuring system for benchmarking Conference*. Rotterdam, Netherlands, 1029-1040.
- Creswell, J. W. (2005). *Educational Research: Planning, Conducting, and Evaluating Quantitative and qualitative research*. 2nd edition, Upper Saddle River, NJ: Prentice Hall.
- Dada, J. O. & Jagboro, G. O. (2010). An assessment of core skill and competencies of quantity surveyors in Nigeria. In: Laryea, S., Leiringer, R. and Hughes, W. (Eds) *Procs West Africa Built Environment Research (WABER) Conference*, 27-28 July 2010, Accra, Ghana, 73-9.
- Dada, J. O., & Jagboro, G. O. (2012). Core skills requirement and competencies expected of quantity surveyors: perspectives from quantity surveyors, allied professionals and clients in Nigeria. *Construction Economics and Building*, 12(4), 78-90.
- Denzin, N. K., & Lincoln, Y.S., (1994). *Handbook of Qualitative Research*. 2nd edition, Thousand Oaks Publications, CA: Sage Publication.
- Dhurup, M., Surujlal, J., & Kabongo, D. M. (2016). Finding Synergic Relationships in Teamwork, Organizational Commitment and Job Satisfaction: A Case Study of a Construction Organization in a Developing Country. *Procedia Economics and Finance*, 35, 485-492.

- Dillman, D. A. (1994). *How to conduct your own survey*. John Wiley & Sons Inc.
- Ding, Z., Zuo, J., Wu, J., & Wang, J. Y. (2015). Key factors for the BIM adoption by architects: A China study. *Engineering, Construction and Architectural Management*, 22(6), 732-748.
- Dole, W. V., Murych, J. M., & Liebst, A. (2005). Assessment: A core competency for library leaders. *Library Leadership & Management*, 19(3), 125-132.
- Edgar, W. B., & Lockwood, C. A. (2011). Understanding, finding, and applying core competencies: A framework, guide, and description for corporate managers and research professionals. *Academy of Strategic Management Journal*, 10(2), 61.
- Egan, J. (1998). *Rethinking construction, The Report of the Construction Task Force on the Scope for Improving Quality and Efficiency in UK Construction*, Department of the Environment, Transport and the Regions, London.
- El-Baz, H., and El-Sayegh, S. M. (2007). Developing engineering management core competencies. 5<sup>th</sup> Latin American and Caribbean Conference for Engineering and Technology, Tampico-Mexico, 1-9.
- Engelmann, C. H., & Roesch, C. H. (1996). *Managing Individual Performance*. Scottsdale, AZ: American Compensation Association.
- Espinoza, C., Ukleja, M., & Rusch, C. (2010). *Managing the Millennials: Discover the core competencies for managing today's workforce*. John Wiley and Sons.
- Fleming, A., Senaratne, S., Sexton, M., Sun, M., & Aouad, G. (2004). *Managing Project Change in Construction: The Dependency Framework*.

- Foner, P. S. (1987). *History of the Labor Movement in the United States: Postwar Struggles, 1918-1920* (Vol. 8). International Publishers Co.
- Fortune, J., & White, D. (2006). Framing of project critical success factors by a systems model. *International Journal of Project Management*, 24(1), 53-65.
- Fowler, F. J. (1995). *Improving survey questions: Design and evaluation* (Vol. 38). Sage.
- Garavan, T. N., & McGuire, D. (2001). Competencies and workplace learning: some reflections on the rhetoric and the reality. *Journal of Workplace learning*, 13(4), 144-164.
- Giesecke, J., & McNeil, B. (1999). Core Competencies and the Learning Organization. *Library Administration & Management*, 13(3), 158-166.
- Greenberg, J., & Baron, R. A. (2003). *Organizational Culture, Creativity, and Innovation Behavior in Organizations: Understanding and Managing the Human side of Work*, 513-546.
- Grenier, Jean-Noel, Anthony Giles, and Jacques Belanger. 1997. Internal versus External Labor Flexibility: A Two Plant Comparison in Canadian Manufacturing," *Relations Industrielles*, 52(4), 683-711.
- Grobbelaar, R. L., Roodt, G., & Venter, A. (2004). Critical competencies to promote a customer service core capability in a human resources call center. *SA Journal of Human Resource Management*, 2(3).
- Guba, E., & Lincoln, Y., (2004). *Approaches to qualitative research design: a reader on theory and practice*. New York: Oxford University Press.
- Guba, E.G., (1990). *The Paradigm Dialog*. Sage Publications Inc., USA, Chapter 1.



- Hair, J. F., Tatham, R. L., Anderson, R. E. & Black, W. (2002). *Multivariate data analysis*. 6<sup>th</sup> edition, Upper Saddle River, N. J.: Prentice Hall.
- Hanna, A. S., Russell, J. S., Nordheim, E. V., & Bruggink, M. J. (1999). Impact of change orders on labour efficiency for electrical construction. *Journal of Construction Engineering and Management*, 125(4), 224-232.
- Harvey, M., Novicevic, M., Garrison, G., (2004). Challenges to staffing global virtual teams. *Human Resource Management Review* 14(3), 275-294.
- Herzberg, F. (1987). One more time: how do you motivate employees? *Harvard business review*, 65(5).
- Hittleman, D. R., & Simon, A. J. (1997). *Interpreting educational research: An introduction for consumers of research*. Prentice-Hall, Inc., One Lake St., Upper Saddle River, NJ 07458.
- Jabbouri, N. I., & Zahari, I. (2014). The role of core competencies on organizational performance: an empirical Study in the Iraqi Private Banking Sector. *European Scientific Journal*, 130-139.
- Karns, L. A., & Mena, M. A. (1998). Sharpening the performance management focus using core competencies: a pilot study. In *Academy of Business and Administrative Sciences, Emerging Economic International Conference*, Budapest, Hungary.
- Kashiwagi, D., & Byfield, R. E. (2002). Selecting the best contractor to get performance: On time, on budget, meeting quality expectations. *Journal of Facilities Management*, 1(2), 103-116.

- Kavitha, S. F., Vasugi, S. P. M. and Murugadoss, S. (2010). An empirical study on employee core competencies: a proven tool for an organization's success. *Interdisciplinary Journal of Contemporary Research in Business*, 2(8), 120-32.
- Kerlinger, F. N. (1978). *Foundations of Behavioral Research*, Holt, Rinehart, and Winston, New York, 1986. Kling, R." Value Conflicts and Social Choices in Electronic Funds Transfer Systems Developments, *Communications of the ACM* (21: 8), 642-657.
- Kim, D. H., & Kim, H. S. (2011). Identification of Core Competencies of Construction Managers. *Korean Journal of Construction Engineering and Management*, 12(6), 93-100.
- Kogut, B., & Kulatilaka, N. (2001). Capabilities as real options. *Organization Science*, 12(6), 744-758.
- Kraemer, K. L. (1991). *The information systems research challenge (vol. III): survey research methods*. Harvard University Graduate School of Business Administration.
- Krishnaveni, R., & Thamaraiselvi, R. (2008). Interpersonal Skills of Professional Women: A Psychological Approach. *ICFAI Journal of Soft Skills*, 2(1).
- Kurz, R., & Bartram, D. (2002). Competency and individual performance: Modelling the world of work. *Organizational effectiveness: The role of psychology*, 227-255.
- Lazarus, D. & Clifton, R., (2001). *Managing project change; A best practice guide*. CIRIA C556, UK.

- Lee, J. A. (2013). *The empowerment approach to social work practice*. Columbia University Press.
- Leena, S. (2004). *Communication Skills*, Prentice Hall of India Pvt. Ltd., 1st Edition, New Delhi.
- Leonaviciute G. (2007). Comparison of outsourcing possibilities and common reasons of choice in the market. *International Scientific Conference Economics and management*.
- Lin, Z. J., Xu, Y. Q., & Feng, X. D. (2012). An exploration of the professional core competencies training viewed from curriculum construction perspective. *Journal of Beijing Institute of Economic Management*, 3, 015.
- Love, P. E. D. and Li, H., (2000). Quantifying the causes and costs of rework in construction. *Construction Management and Economics*, 18, 479-490.
- Mandelbaum, M.; Buzacott, J. (1990) Flexibility and decision making, *European Journal of Operational Research*, 44, 17-27.
- Mascarenhas, B., Baveja, A., & Jamil, M. (1998). Dynamics of core competencies in leading multinational companies. *California Management Review*, 40(4), 117-132.
- McNeil, B. Comp. (2002) *Core Competencies: A SPEC Kit*. SPEC Kit, 270. (Washington: Association of Research Libraries, 7.
- Minter, R. L. (2010). Organizational Communication Audits: Assessing Core Communication Competencies Within the Organization. *International Journal of Management & Information Systems (IJMIS)*, 14(5).

- Mooney, A. (2007). Core competence, distinctive competence, and competitive advantage: what is the difference? *Journal of Education for Business*, 83 (2), 110-115.
- Moore, G. (2002). *Living on the Fault Line*. New York, HarperCollins Publishers.
- Motawa, I. (2012). A systematic approach to modelling change processes in construction projects. *Construction Economics and Building*, 5(1), 23-31.
- Mullins, L. J. (2007). *Management and organisational behaviour*. Pearson education.
- Nguyen, L. D., Ogunlana, S. O., & Thi Xuan Lan, D. (2004). A study on project success factors in large construction projects in Vietnam. *Engineering, Construction and Architectural Management*, 11(6), 404-413.
- Nkado, R. & Meyer, T. (2001). Competencies of professional quantity surveyors: South African perspective. *Construction Management and Economics*, 19, 481-491.
- Nkado, R., & Meyer, T. (2001). Competencies of professional quantity surveyors: A South African perspective. *Construction Management and Economics*, 19(5), 481-491.
- Odusami, K. T., Oyediran, O. S., & Oseni, A. O. (2007). Training needs of construction site managers. *Emirates Journal for Engineering Research*, 12(1), 73-81.
- Omidvar, G. (2014). *Core Competencies for Construction Project Managers in Malaysia* (Doctoral Dissertation, University of Malaya Kuala Lumpur).
- Opoku, A. & Fortune, C. (2010). The role of organizational learning in achieving sustainable construction project delivery. In: Laryea, S., Leiringer, R. and

- Hughes, W. (Eds) Procs West Africa Built Environment Research (WABER) Conference, 27-28 July 2010, Accra, Ghana, 627-36.
- Oppenheim, A. (1996). Questionnaire design, interviewing and attitude measurement. Pinter Publishers.
- Oppenheim, A. N. (2000). Questionnaire design, interviewing and attitude measurement. Bloomsbury Publishing.
- Paslowski, J. (2008). Flexibility implementation in construction process engineering. Proceedings of the 25th ISARC, 610-615.
- Phua, F. T., & Rowlinson, S. (2004). How important is cooperation to construction project success? A grounded empirical quantification. *Engineering, Construction and Architectural Management*, 11(1), 45-54.
- PMI. (2000). Project Manager Competency Development Framework. Project Management Institute.
- Polgar, S., & Thomas, S. A. (2005). Qualitative field research. Introduction to research in the health sciences.
- Polit, D. H., & Hungler, P. B. (1999). Nursing research. Principals and methods. Sixth edition. Lippincott Williams & Wilkins, Philadelphia, USA.
- Prahalad, C. K., & Hamel, G. (1990). The Core competence of the Corporation. *Harvard Business Review* (May June), 79-90.
- Quinn, J. B., & Hilmer, F. G. (1994). Strategic outsourcing. *Sloan management review*, 35(4), 43.

- Quiñones, M. A. (1995). Pretraining context effects: training assignment as feedback. *J. Appl. Psychol.*, 80: 226-238.
- Rajmohan, T. (2015). Interpersonal Competencies of Executives in Service Organizations. *Parikalpana: KIIT Journal of Management*, 11(2).
- Robinson, D. G., & Robinson, J. C. (1995). *Performance consulting: Moving beyond training*. Berrett-Koehler Publishers.
- Rogers, E. M. (2003). Elements of diffusion. *Diffusion of innovations*, 5, 1-38.
- Rubin, Y., Lednev, M., & Matvienko, D. (2016, January). Entrepreneurial competencies in the field of competitive actions. In *United States Association for Small Business and Entrepreneurship. Conference Proceedings* (p. BJ1). United States Association for Small Business and Entrepreneurship.
- Saari, L. M., & Judge, T. A. (2004). Employee attitudes and job satisfaction. *Human resource management*, 43(4), 395-407.
- Sanghi, S. (2004). *The handbook of competency mapping*, Response Books, New Delhi, India.
- Sarantakos, S., (2005). *Social Research*. 3rd ed, Melbourne, Victoria: Palgrave Macmillan.
- Saunders, M. L., & Lewis, P. (2000). P. and Thornhill, A. (2009), *Research Methods for Business Students*. Financial Times Prentice Hall Inc., London.
- Scandura, T. A., & Williams, E. A. (2000). Research methodology in management: Current practices, trends, and implications for future research. *Academy of Management journal*, 43(6), 1248-1264.

- Smallwood, J. J. & Emuze, F. A. (2011). Core competencies and the practice of construction management: A pilot South African study. In: Egbu, C. and Lou, E.C.W. (Eds.) Procs 27th Annual ARCOM Conference, 5-7 September, 2011, Bristol, UK, Association of Researchers in Construction Management, 383-392.
- Smallwood, J. J. and Emuze, F A (2011). Core competencies and the practice of construction management: A pilot South African Study in: Egbu, C. and Lou, E.C.W. (Eds.) Procs 27th Annual ARCOM Conference, 5-7 September, 2011, Bristol, UK, Association of Researchers in Construction Management, 383-392.
- Soetanto, R. (2002). Modelling satisfaction for main participants of the construction project coalition: a study of mutual performance assessment. Ph.D. thesis, University of Wolverhampton, Wolverhampton.
- Solomon, B. B. (1976). Black empowerment: Social work in oppressed communities.
- Stabryla, A. (2005) System flexibility analysis as a tool for changes and development programming (Analiza elastyczności systemu jako instrument programowania zmian i rozwoju), w „Elastyczność organizacji” (Rokita J.; Grudzewski W. – red.), GWSH, Katowice [In Polish]
- Stoof, A., Martens, R. L., van Merriënboer, J. J., & Bastiaens, T. J. (2002). The boundary approach of competence: A constructivist aid for understanding and using the concept of competence. Human resource development review, 1(3), 345-365.

- Subramanian, A., & Nilakanta, S. (1996). Organizational innovativeness: exploring the relationship between organizational determinants of innovation, types of innovations, and measures of organizational performance. *Omega*, 24(6), 631-647.
- Tabassi, A. A, and Bakar, A. H. A. (2009). Training, motivation, and performance: The case of human resource management in construction projects in Mashhad, Iran. *Int. J. Proj. Manage.*, 27: 471-480.
- Tabassi, A. A., Ramli, M., & Bakar, A. H. A. (2011). Training, motivation and teamwork improvement: The case of construction firms. *African Journal of Business Management*, 5(14), 5627-5636.
- Talukhaba, A. A. (2006). CPD Policy for the built environment professionals. Unpublished research report for the Council for the Built Environment.
- Tan, J., Li, S., & Li, W. (2006). Building core competencies in a turbulent environment: an exploratory study of firm resources and capabilities in Chinese transitional economy. *Managing Global Transitions*, 4(3), 197.
- Teece, D. J. (1990). Contribution and impediments of economic analysis to the study of strategic management. In J. Fredrickson (Ed.), *Perspectives on Strategic Management*, New York: Harper, 39-80.
- Theunissen, N. C., & Melis, P. J. (n.d.). Identification of Core Competencies for Career Planning: A Case Study On Army Training Personnel.
- Thurairajah, N., Haigh, R., & Amaratunga, R.D.G., (2006). Leadership in Construction Partnering Projects: Research Methodological Perspectives. In



- Stephenson, P. and Akintoye, A. (eds), ARCOM Doctoral Workshop, Glasgow Caledonian University.
- Tongco, M. D. C. (2007). Purposive Sampling as a Tool for Informant Selection. *Ethnobotany Research and Applications*, 5, 147-158.
- Urban, B., & Naidoo, R. (2012). Business sustainability: empirical evidence on operational skills in SMEs in South Africa. *Journal of Small Business and Enterprise Development*, 19(1), 146-163.
- Vazirani, N. (2010). Competencies and competency model-a brief overview of its development and application. *SIES Journal of Management*, 7(1), 121-131.
- Wadsworth, Y. (2011). *Do it yourself social research*. Left Coast Press.
- Wahab, I. A. (1996). *Financing the growth of small manufacturing firms in developed and developing countries: a comparative study of the United Kingdom and Malaysia* (Doctoral dissertation, Ismail Abdul Wahab).
- Weisberg, H. F., & Bowen, B. D. (1977). *An Introduction to Survey Research and Data Analysis*. San Fran-cisco: WH Freeman.
- Winter, G. S. (1998). *Managing Core Competencies in a Volatile Exchange Rate Environment*.
- Xiao, H. & Proverbs, D. (2003). Factors influencing contractor performance: an international investigation. *Engineering Construction and Architectural Management*, 10(5), 322-332.
- Yeager, M. E. B. (2009). *A cross-validation study of the College Learning Effectiveness Inventory (CLEI)* (Doctoral dissertation, Kansas State University).

Yin, R. K. (2003). Case study research: Design and methods. Sage Publications, Inc., 5, 11.

Yin, R. K. (2009). Case study research: design and methods. 4 uppl. Thousand Oaks, CA.

Zoiopoulos, I. I. (2011). Exploring the relationship between the configurations of international construction majors and the effectiveness with which they develop their core competencies (Doctoral dissertation, UCL (University College London)).

## **APPENDIX**

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF ART AND BUILT ENVIRONMENT

**DEPARTMENT OF BUILDING TECHNOLOGY**

SURVEY QUESTIONNAIRE

**THE IMPACT OF CORE COMPETENCIES ON SKILLED LABOR  
PERFORMANCE IN THE CONSTRUCTION INDUSTRY: A GHANA  
STUDY**

**Dear Sir/Madam,**

**POSTGRADUATE RESEARCH PROJECT**

This study is being conducted as part of an academic requirement for the award of an MSc in Construction Management.

Your participation in this research will be greatly appreciated in order to examine the impact of core competencies on the skilled labour performance in the construction industry. Hence, your contribution to this survey will add up to knowledge and conversely aid construction firms assess the possible outcomes of their overall productivity.

The information obtained from this survey shall be kept anonymous and completely confidential. Only findings in aggregate form will be submitted to the relevant authorities.

Your participation in this survey is much needed and I will be grateful if you could answer these few questions.

Counting on your favorable consideration.

Project Student

Project

Supervisor

Mr. Christian Kwaku Damali

Mr. James Cofie Danku

Tel No: 0244584329/0240695158

[jmcdanku@yahoo.com](mailto:jmcdanku@yahoo.com)

Email: [chriskus2000@gmail.com](mailto:chriskus2000@gmail.com)

**SECTION A:**

**I. Background Information**

**Please tick [✓] the most appropriate answer or option for each question.**

1. Please indicate your occupation in the Ghanaian construction industry.

- Site Manager
- Quantity Surveyor
- Project Manager
- General Contractor
- Architect

2. Kindly indicate your highest academic qualification.

- City and Guilds
- HND
- BSc
- MSc
- PhD

Others..... (Please indicate)

3. Number of years you have worked in the Ghanaian Construction Industry

- 0-1year
- 2-5 years
- 6-10 years
- 11-15 years

[ ] Over 15 years

4. Please indicate the number of construction projects you have been involved in Ghana.

[ ] None

[ ] 1 project only

[ ] 2-5 projects

[ ] 6-10 projects

[ ] 11-15 projects

[ ] Over 15 projects

**SECTION B:**

**II. Core Competencies of Skilled Labor Influencing Their Performance in The Construction Industry of Ghana**

Please read the following and tick [√] the box that best represents your level of agreement or disagreement on each of the core competencies identified.

1	2	3	4	5	6	7
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

No.	Core Competencies of Skilled Labour	Rank						
		1	2	3	4	5	6	7
<b>Leading Others Competencies</b>								
1	Establishing focus							

No.	Core Competencies of Skilled Labour	Rank						
		1	2	3	4	5	6	7
2	Providing motivational support							
3	Fostering teamwork							
4	Empowering others							
5	Managing change							
6	Developing others							
7	Managing performance							
<b>Communication and Influencing Competencies</b>								
8	Interpersonal communication							
9	Attention to communication							
10	Oral communication							
11	Written communication							
12	Persuasive communication							
13	Interpersonal awareness							
14	Influencing others							
15	Building collaborative relationships							
16	Customer orientation							
<b>Preventing and Solving Problems Competencies</b>								
17	Diagnostic information gathering							
18	Analytical thinking							
19	Forward thinking							
20	Conceptual thinking							
21	Strategic thinking							



No.	Core Competencies of Skilled Labour	Rank						
		1	2	3	4	5	6	7
22	Technical expertise							
<b>Achieving Results Competencies</b>								
23	Initiative							
24	Entrepreneurial orientation							
25	Fostering innovation							
26	Results orientation							
27	Thoroughness							
28	Decisiveness							
<b>Self-Management Competencies</b>								
29	Self-confidence							
30	Stress management							
31	Personal credibility							
32	Flexibility							
<b>If others, please specify and rank</b>								
33								
34								
35								

### **III. Impact of Core Competencies On Skilled Labor Performance in The Construction Industry of Ghana**

Please read the following and tick [√] the box that best represents your level of agreement or disagreement on each of the impacts of core competencies identified.

1	2	3	4	5	6	7
Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree

No.	Impact of Core Competencies	Rank						
		1	2	3	4	5	6	7
1	Improvement in productivity through collaborative teamwork							
2	Optimal organizational commitment							
3	Improved worker satisfaction							
4	Effective communication							
5	Effective change management							
6	Sustainable competitive advantage							
7	Achievement of ideal flexibility management							
8	Overall peak performance outcomes							
9	Growth in entrepreneurial initiatives							
10	Development of collaborative professionalism							
11	Encouragement of progressive labour outputs							
12	Promotion of ideal stakeholder management							
13	Strategic resolutions to complex work problems							
<b>If others, please specify and rank</b>								
14								
15								
16								