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**Assessing the Effectiveness of Communication in Construction Projects in Ghana:
A Case Study of the Affordable Housing Projects by Government in the Greater
Accra Region**

By

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**A Thesis Submitted to the Department of Construction Technology and
Management, College of Art and Built Environment
in Partial Fulfillment of the Requirement for the degree of**

MASTER OF SCIENCE

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DECLARATION

I hereby declare that this submission is my own work towards the Master of Science in Project Management, 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 acknowledgement has been made in the text.

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ABSTRACT

Various media reports and existing writings demonstrate that Ghanaian government ventures/projects have seen various disappointments – extending from several infrastructure projects to services projects because of the importance of communication in the administration of tasks/projects. The aim of the study was to determine the effectiveness of communication in construction projects in Ghana. This study has been executed using a quantitative research approach based on survey implemented by way of questionnaires. The population for the study included managers/professionals and other stakeholders within the construction industry such as contractors, subcontractors, suppliers etc. The study used a sample size of thirty (30). Convenience sampling was used as the sampling technique. Statistical analysis such as mean, standard deviation, rank score and frequency distribution tables were employed to analyze the data collected. It was found that the communication channels utilized by project managers/professionals in the execution of projects were e-mail tool and press release tool, periodic reports, budget spreadsheet, project status meetings, communication plan, project presentations and daily progress reports. The findings clearly revealed that strong presentation skills were essential for effective communication for project progress. The data revealed that emotional obstacles and prohibitions, poor audience engagement, variations in perception and standpoint, poor or absent communication with team members, bad interpersonal relationships, etc. were the problems related with effective communication on projects. It is recommended that holding consistent gatherings will dispense with some communication hindrances and help project supervisors to determine conceivable stresses.

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God richly bless you all.

DEDICATION

I dedicate this Research work to my beautiful Wife Khadijah for being very supportive
with my studies and showing me much love.

Also to our lovely Children and my wonderful mother Madam Hawa Abu. In fact, may
Allah continue to bless you with longer life.

Ameen.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Project Communication is the general term which encompasses the various parts of communication within a given task (Ramsing, 2009). They incorporate administering data to choices taken, approvals of work, transactions as well as reports on project (Kerzner, 2000). Additional improvement of the concept as in PMBOK (2013), recommends it as the procedure needed to guarantee opportune as well as suitable arrangement, accumulation, creation, appropriation, stockpiling, recovery, administration, control, checking, and a definitive mien of venture data. Besides, the function of project communication is expected to: speak with all the "outer" partners of the venture of the project and the conversation of data inside project team ("interior" partners). Series of construction projects data needs incorporate succeeding project's stages; tender management, contract and construction process management, ensure service management and construction administration. Krahn and Hartment (2006) demonstrate that listening and verbal communication are in the main 10 skills critical for project managers.

To further support the requirement for successful communication in the administration of projects, Reed and Knight (2009) highlight that, especially in substantial projects, communication is basic for effective coordination. Absence of communication can prompt individuals "not being in agreement" and "working experiencing some miscommunication". Absence of communication can prompt perplexity which could include further cost with additional hours. Engaging one's client with the group members in a great communication is so essential particularly when operating an undertaking/project. Falsehood begins with mistaken assumptions which were very

costly as far as time and assets, and they additionally make terrible inclination inside a group. Meeting over-burden is likewise a hazard; projects that meet excessively and work too little additionally experience the ill effects of poor confidence. Government's approaches are regularly converted into projects (Goodman & Love, 1980). As it were, they are the instruments whereupon government arrangements are accomplished and, in light of the fact that projects measure monetary development (Alzahrani & Emsley, 2013), government venture execution is vital to each administration, and Ghanaian government ventures are no special case. Noticeable activities lately incorporate the Affordable Housing Units projects (Klutse, 2009; Imani, 2010). Nonetheless, a portion of these projects neglected to accomplish their proposed aims (AfDB, 2006; World Bank, 2012). Various media reports and existing writing demonstrate that Ghanaian government ventures/projects have seen various disappointments – extending from several infrastructure projects to services projects because of importance of communication in the administration of tasks/projects.

Another perspective regarding the significance of project communication also maintains; viable communication is crucial in overseeing desires, confusions as well as uncertainties in venture groups or teams of project (Ochieng & Price, 2009). Likewise, El-Saboni et al. (2009) expressed, great communication, amid the periods of the lifecycle of a project, was imperative achievement feature which associates all the various components of project achievement. Diallo and Thuillier (2005) emphasized that the achievement of a venture/project was basically connected with communication as well as participation among partners. Along these lines, so as to enhance venture results, the communication procedure needs to start well before venture designs are drawn up and proceed for the duration of the life-cycle of the task (Khan & Gerrard, 2006) and must be successfully overseen (Daake & Anthony, 2000; Friedman & Miles, 2002; Juliano, 1995).

Aiyewalehinmi (2013) indicated that communication often identifies with the sum and nature of data that streams amongst administration and laborers. Communication shapes relationships, alters negative discernments, improves the self-confidence, and elevates the responsibility of the workforce, in this manner improving profitability. Project communication is a basic center competency to all organizations, which builds up an extension amongst the project team, different partners and project goals, policies and activities. Efficient project communication management is thought to be a key achievement factor and to accomplish this in any case, Kerzner (2006) said inter-personal connections as well as great communication should always exist among venture partners. The requirement for powerful communication in the administration of projects was additionally emphasized as Lester (2007) stated, data as well as communication are the basic drivers of project management. As announced by PMI's 2013 Pulse of the Profession, 55 percent of project executives concede that effective communication to all partners is the basic factor in project management (PMI, 2013).

1.2 PROBLEM STATEMENT

Sievert (2006) contends that, a high level of the resistances, dissatisfactions and wasteful aspects in working affiliations is recognizable to poor. This be that as it may, uncovered the significance of effective communication to the administration of projects and furthermore echoes the requirement for project management establishments to be always side by side with developing communication rehearses keeping in mind the end goal to upgrade the execution of their projects. Another spellbinding dispute to help the criticalness of compelling venture correspondence recommends that 95 for each penny of all task issues are caused by poor correspondence and that the centrality of having the ability to manage the aptitudes of correspondence while displaying confirmations,

purposes of intrigue, status, venture necessities, et cetera should be of high need in venture administration (Baker, 2007; Ramsing, 2009). This viewpoint had similarly been conveyed by Cleland and Ireland (2002) as they held that a high extent of protections, disappointments, and inefficient perspectives in our working relationship with different people is detectable to poor correspondence. Kerzner (2009) keeps up that correspondence issues in venture groups exist in four imperative zones. These comprise of: correspondence issues among associates, among venture director and partners, between top organization and undertaking gathering, and between the client and the assignment pioneers.

Communication, if inadequately overseen, could be a noteworthy hindrance to successful project group improvement. Kerzner (2009) in any case, points the reasonable reason for communication issues in project teams to colleagues' failure to keep others educated on indispensable undertaking improvements. This might be because of poor assurance, low inspiration levels, or colleagues' lack of regard. Ineffectual examples of communication between the group, bolster gatherings and the customer prompt genuine group building issues (Kerzner, 2009). Indistinct goals, poor coordination and project control, and additionally decreased work process are aftereffects of poor group communication (Reed & Knight, 2009; Kerzner, 2009).

Numerous projects regularly encounters changes on nonstop bases all through their lifecycle. This could result from changes in extension, targets and asset base by senior administration, and also administrative changes or customer requests. These progressions, if not appropriately and sufficiently conveyed by the undertaking supervisor, can definitely influence the inside tasks of a project team. In light of the statistics published by the third global PricewaterhouseCoopers LLC (PwC) overview on

the present state of project management which uncovered that, effective communications are related with a 17 percent expansion in completing ventures inside spending plan (PMIs, 2013). Correspondingly, the Towers Watson 2011-2012 “Change and Communication ROI Study Report” demonstrates that organizations that have profoundly powerful interchanges rehearses are 1.7 times more inclined to outflank their companions fiscally (PMI’s 2013). Obviously, organizations are exceptionally mindful of exactly how basic viable effective communications is to the accomplishment of vital projects and, eventually, authoritative achievement. However, the Pulse communications research finds that just a single in four associations can be portrayed as exceedingly successful communicators. This offers the dominant part of organizations have opportunities to distinguish issue territories and outline a course to enhance the viability of their project communications.

Projects disappointment rate in Ghanaian government ventures is high. One striking territory of this disappointment is in the housing sector. Studies and insights demonstrate that there are inadequate houses for Ghanaian residents and all things considered a large portion of these natives 'rest harsh' in stands, tents, compartments, shops, workplaces, and so on (vagrants) (Boamah, 2010). The houses that are accessible are generally claimed by private people and lodging home organizations, and they are excessively expensive for common Ghanaians (GSS, 2002; Boamah, 2010). Evaluations demonstrate that Ghana's housing shortfall is more than 1m houses (HFC Bank, 2002; GSS, 2005; Mahama & Antwi, 2006; Imani, 2009; Boamah, 2010). Because of the extent of the housing problem, different government administrations have endeavored to address the issue. For example, the NPP administration, which held office somewhere in the range of 2000 and 2008, planned 'reasonable lodging units' to take care of the lodging shortfall issue in the nation (Klutse, 2009).

The principal motivation behind this project was to help those destitute individuals living in an exceptionally despicable settlement, make the capital city and other significant urban communities attractive (Amponsah, 2010), and furthermore to make business, particularly for ladies (Klutse, 2009). Nonetheless, the project was relinquished not long after it began (Klutse, 2009). Communication limits, for instance, could result in conceivable disappointments. Adedapo (2009) uncovers that poor communication causes poor buildability, poor administration of assets, and low profitability. A Holmes Report (Grossman, 2011) elucidates how inability to pass on clear and justifiable systems and procedures that connect with representatives in shared objectives, for example, methodology and practices may result in cost vulnerabilities, heightened spending plans, and conceivable project cancellation. It was against this backdrop that this study seeks to assess the effectiveness of communication in construction projects in Ghana: a case study of affordable housing project by Government in the Greater Accra Region.

1.3 RESEARCH QUESTIONS

The following are the basic research questions:

- What are the variables of effective communication on the project?
- What are the types of communication channels utilized by project managers/professionals in the execution of the project?
- What are the problems associated with project communication?

1.4 AIM

The Aim of the study is to examine the effectiveness of communication in construction projects in Ghana using the affordable housing project as the case study.

1.5 RESEARCH OBJECTIVES

The specific objectives of the study are:

- To examine the variables of effective communication on projects.
- To identify the types of communication channels utilized by project managers/professionals in the execution of the project.
- To determine the problems associated with effective communication.

1.6 SIGNIFICANCE OF THE STUDY

In any significant project, what remains key is effective communication. Besides, Schwalbe (2013) said, a project manager's 90% time is expended in conveying information. In connection to the genuine execution of projects, there is a long-held presumption that both line and undertaking chiefs could enhance their execution on the off chance that they had a superior comprehension of what establishes project success and how viable communication influence results.

The discoveries of the examination will help project managers/professionals and other stakeholders within the construction industry to enable them to more readily comprehend the role effective communication strategies and the dangers peril of a multifaceted undertaking. All the more, to demonstrate the sources and the aftereffects of communication problems that are caused by the main participants (contractors, subcontractors, suppliers), and then to identify an effective communication tool that will maintain the functional balance that these kinds of project require, as well as give useful

instructions to both project managers/professionals and other stakeholders, with a specific end goal to accomplish a superior coordinated effort between them. The discoveries of the investigation will likewise add to communication-management practice amongst the construction-industry stakeholders, such as the professional team, contractors and clients for successful project delivery. The result of this study is expected to serve as reference material for further investigation by researchers who might want to explore project communication issues to the success of a project at construction site. The study will also serve as basis for further studies, as researchers can use the finding of this investigation.

1.7 SCOPE OF THE STUDY

The study was limited to assessing the effectiveness of communication in construction projects in Ghana: a case study of affordable housing project in Greater Accra Region. Notwithstanding the fact that the study did not cover the other regional projects due to limitations involving to funding and time, the basic concept of assessing the effectiveness of communication in construction projects in Ghana, case study of affordable housing project in Greater Accra are the same for several regional directorates. Thusly, it was foreseen that any generality founded on results would replicate the overall tendency in the added regions of Ghana.

1.8 LIMITATION OF THE STUDY

The analyst experienced a confinement with respect to accessibility of data. Nonetheless, it must be said that a portion of the respondents had greatly tight work routine joined with solitary individual obligations and this on occasion will offer ascent to postponed or hurried reactions. Yet again, on a couple of occasions, concurred time for information

accumulation with respondents should be re-planned to empower a respondent take care of authority task. Time and money related limitation can't be forgotten. Amid the investigation, a portion of the respondents will be unwilling to collaborate or react because of the secrecy of their reports. The scientist conquered this by disclosing to the respondents that the investigation will be for scholarly purposes and any data given would be dealt with outrageous privacy

1.9 OUTLINE OF RESEARCH METHODOLOGY

In this study, quantitative research strategy was used where the survey research design was applied by means of questionnaire. The population for the study comprises of project managers/professionals and other stakeholders within the construction such as contractors, subcontractors, suppliers etc. The study utilized the convenience sampling where primary data was questionnaire. In the design of the study, careful consideration was given to ethics. Data collected from the field was analyzed using descriptive statistics. Prior to the analyses, the data was edited and coded to ensure consistency. The Statistical Package for the Social Sciences (SPSS version 16.0) was employed to process and analyze the data.

1.10 ORGANIZATION OF THE STUDY

The investigation is in (five) distinctive chapters. Chapter one gives the introduction, problem statement, the study aims and objectives, significance of the study, scope and limitation of the study, outline of the research methodology and organization of the study. Chapter two discusses the relevant literature and outlines theoretical considerations that are used in discussing the empirical findings of this study. Chapter three highlights the research methodology and chapter four presents analysis of the data gathered and interpret it to reflect the situation examined. Chapter five summarizes the findings, conclusions, and propose recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The chapter highlights various articles, journals and publications from several researchers on effective communication on project. The basic purpose is to place the study in the appropriate theoretical and empirical context.

2.2 THEORETICAL REVIEW

2.2.1 Basic Communication Model

The most real packaging and a building sort of correspondence is data ex-change between two parts (Sanghera 2009). The essential correspondence shows the data sending between two social events – the sender and the gatherer (Project Management Institute 2008). The sender encodes a message by techniques for picked channel and the recipient translates the message (The Communication Process 2015). Figure 2.1 underneath presents a basic communication model.

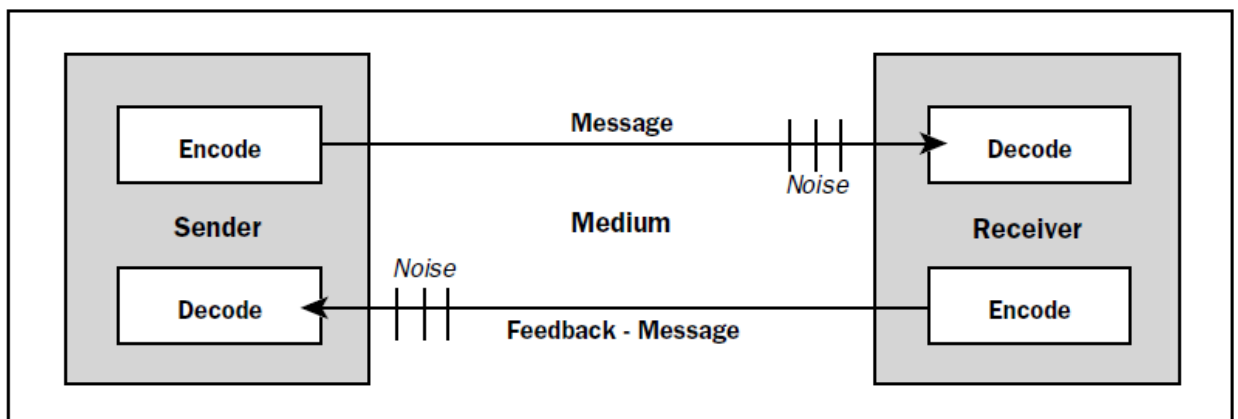


Figure 2.1: The Basic communication model

Exercises of changing data into messages are the bit of encoding. In correspondence these exercises are discussion and making. The exercises of translating - change of sensations into hugeness are tuning in and examining. In the midst of the time spent correspondence, it is the responsibility of a sender to send a sensible message and acknowledge that a recipient comprehends it. The commitment of a specialist is to see the message and handle it effectively. Parts that impact the encoding and decoding of messages are encounters, culture, word decisions, qualities and judgements. These are sets that affect the encoding and deciphering shapes. From the point of view of endeavor correspondences, these sections ought to be seen in light of the manner in which that a disappointment in this methodology can have a negative impact to the endeavor (Henderson, 2008; Project Management Institute, 2008; Campbell, 2009).

2.3 ORGANIZATIONS AND COMMUNICATION

Correspondence is critical for affiliations, and when controlled well it offers various central focuses. Workers are the key party of people for different leveled correspondence, and a relationship with other outside social events of observers. Setting clear needs and building solid relations between people in an affiliation and with outer assistants is finished with the assistance of persuading trades. Pros need to know how they are relied on to perform recalling a definitive target to get positive information. Likewise, client needs are directed by clear exchanges. Precisely when correspondence is spun around single needs and gives data and data, it reinforces trust and responsibility which are key portions of building solid affiliations (Richards, 2015).

Workers can find open gateways for progression if an affiliation gives an open channel to correspondence. Pros are essentially more on edge to express their contemplations on

the off chance that they comprehend that those thoughts are being seen and treated with an open point of view. The more the affiliation offers data about its things, associations, and culture, the better occupation. Workers does as spreading out positive data about their relationship to different social occasions of onlookers (Richards, 2015). Correspondence is in addition a persuading instrument for relationship to enhance their execution. As appeared by Martha et al, (2008) relationship with an open correspondence profile beat others in key execution requests of progression and preferred standpoint. Correspondence is an obvious driver for relationship to perform better. Most huge performing affiliations have an open stream of correspondence, and a mentality of "Visit with me, I'm tuning in". Relationship with a charge correspondence profile of data moving best down in tell-and react style play out the most discernibly awful. In this sort of affiliations workers are advised to perform, and they do not ask concerning for what good reason. In the event that these two sorts of affiliations are looked, trades have any kind of effect (Martha et al., 2008).

2.4 EFFECTIVENESS OF PROJECT COMMUNICATION

As indicated by the Project Management Institute (2013), reasonable correspondence fills in as the bedrock for business. Affiliations which are powerful in exchanges perform better by 80% of them achieving their objectives. They additionally pass on errands on time and inside spending plan.

Figure 2.2 demonstrates the authoritative contrasts amongst very and insignificantly powerful communicators and how they influence conveying projects (PMI, 2013).

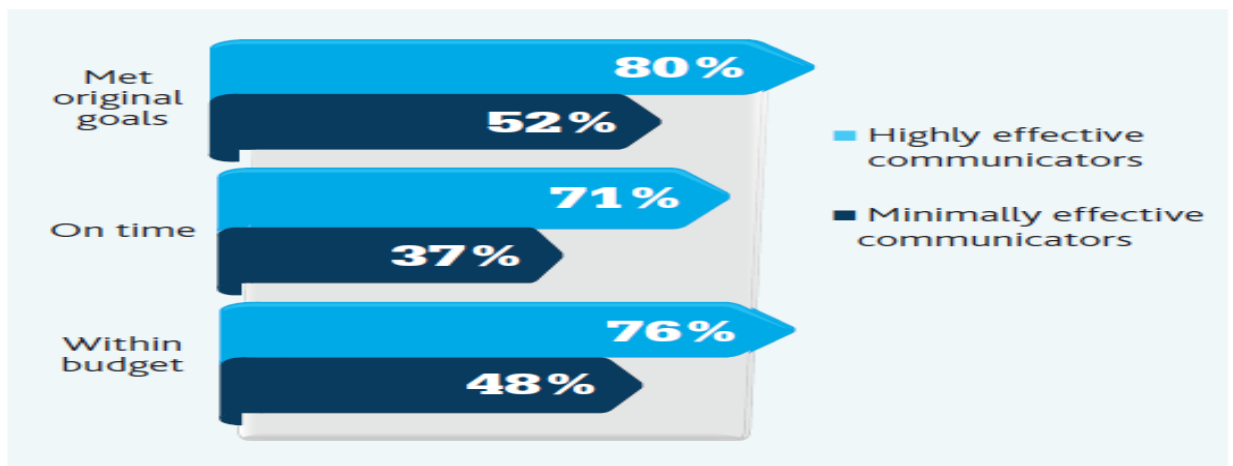


Figure 2.2: The effect of highly and minimally effective communicators on project delivery

Correspondence alone can't enhance affiliation's execution yet it is one of the execution drivers. Sharp pioneers, assets and industrious work are re-quired for good execution, and correspondence upgrades these. Correspondence impacts pros in the affiliation contribute their reasoning, and hence, enhances the framework and makes pioneers more awe inspiring as they have more data to construct choices in light of (Matha et al., 2008).

As appeared by Sanghera (2009), controlling endeavors is attempting. An endeavor chief is in charge of each bit of an errand, and this solidifies the running with:

- Initiating: Starting the arrangement of an errand by picking targets, necessities and objectives.
- Planning: Locating the endeavor on track by making plans to meet errand destinations and basics.
- Executing: Dealing with the endeavor execution as indicated by a meander plan.

- Monitoring and controlling: Guaranteeing that the endeavor remains on track by watching and controlling undertaking progress, dangers and changes.
- Closing: The endeavor is shut by the strategy, and the result is offered over to assistant social events.

A constant subject encountering the lifecycle of an errand, and an imperative segment to accomplishing all these effectively indicated duties of an endeavor boss is correspondence (Sanghera, 2009). Campbell (2009) gives a case in his book about the importance of trades in adventures and for adventure boss. His affiliation MCA Universal facilitated two or three workshops for adventure administrators for an oilfield association's affiliation that was engineered in a broad assortment of regions. 500 errand officials in the midst of the workshops were requested to contemplate what made an endeavor come up short and what made it to succeed. Correspondence was the basic achievement factor perceived by an alternate social event of endeavor manager tending to more than thirty unique nations. Poor correspondence was in like way perceived as a crucial factor when the errand was not a win. Amidst these workshops Campbell (2009) found that endeavors were about constantly suitable when trades were solid among adventure accomplices and between the endeavor social event and clients (Campbell, 2009).

Another case about the criticalness of correspondence in adventures was the aftereffects of an examination done by Norwegian oil affiliation Statoil Hydro in 2007 about the issues and difficulties experienced routinely inside their exercises. Correspondence outflanked the summary of the 1647 report researched. Time, cost and quality – the set up attributes related with adventures were arranged more expelled down in the once-over

(Sandberg, 2007 as referred to in Johannessen and Olsen, 2011). Right when the correspondence was working effectively it was the most fundamental factor for accomplishing results (Flyvberg 2007, as referred to in Johannessen and Olsen 2011).

Chan et al. (2004) explained that correspondence has been for the most part considered as fundamental to adventures. The examination opined that correspondence is an imperative relationship between individuals, thoughts and the data required by parties required all through an endeavor. Garbarran et al., (2004) comparably revealed that correspondence leads and joins individuals in taking choices to make an errand beneficial. As exhibited by Naqvi et al., (2011), the quality and abundancy of correspondence is a crucial that addresses the choice time an endeavor. Thusly, enhancing correspondence being created endeavors is fundamental; in light of the way that the productivity and sensibility of the headway method is stubbornly reliant on the possibility of correspondence (Reyman et al., 2006).

2.5 TYPES OF PROJECT COMMUNICATION CHANNELS UTILIZED

2.5.1 Upward channel

The upward direct is fixing in with giving to the senior executives and these messages highlight the issues, threats and unique cases (Charvat, 2002). From the various correspondence styles, peruser is apparently a champion among the most understood and can be seen in about each channel, anyway this one is underlined especially in the upward channel of task correspondence. Perusers need to get their messages fit as a fiddle and require frequently uncommonly clear information as opposed to brief blueprints. Gadgets to be used for perusers are different reports and email invigorates (Ghattas and McKee 2001). Another style all the time reflected in the upward channel is the group of onlookers. This style of individual wishes to hear the message him/herself and rather the short type of the pig picture. Typically related into possessed situation, where the message must be passed on snappy and concisely. Specific mechanical assemblies supported by the gathering of people individuals consolidate e.g. eye to eye reviews and telephone discourses (Ghattas and McKee 2001). The third style, exchanger, happens doubtlessly the smallest in this channel, yet respects be seen as well. The exchangers grasp the messages best through a talk, dealing with the got information and coming up with while in the meantime talking. Social occasions, phone calls and messaging are essential devices for exchangers (Ghattas and McKee 2001).

2.5.2 Downward channel

The descending channel conveys to the project group, giving a course. Focal issues here are pending errands, planned assignments, dates, and general group briefings. Communication going through descending direct requires designation aptitudes specifically (Charvat 2002.) Like expressed previously, the descending channel

comprises of the project groups and what's more, the end clients. This gathering of individuals regularly comprises of the styles of exchanger (introduced in past area), controllers and watchers. Obviously, the most widely recognized style of a peruser likewise exists in this channel. The controller is a kind of individual who requires a viable approach into the messages. He or she comprehends the data best when the message is in solid shape and furthermore lean toward conveying it forward as a physical issue, rather than verbally depicting it, or putting it down in words. (Ghattas and McKee 2001). In a way the controller is near the style of a watcher, who of course wishes to get the data as illustrations, recordings, outlines, models and charts. This gathering is the most far from the style of a peruser and requires a visual message to best get the proposed data. The specialized devices to be utilized for the descending channel group of onlookers incorporate e.g. minutes, verbal trade, project plan, introductions and briefs (Ghattas and McKee 2001).

2.5.3 Lateral channel

Last of the channels, lateral channel, is coordinated towards customers, sellers and practical supervisors. This communication arrangements of transactions for assets, spending plans, and time allotments, requiring discretion and consideration close by of the communication. Communication plan is one instrument to be specified in this unique situation, despite the fact that it likewise connects every one of the three diverts together in one arrangement (Charvat 2002). For this situation, one could entirety up the sidelong channel as outer interchanges. The parallel communication channel is focused to convey messages for customers, merchants and practical directors, so in many parts to outside gatherings. One could express that in view of the intended interest group, the most widely recognized styles spoke to here are the peruser and exchanger styles. For the idea of being

in the outer gathering of people, the type of the message is regularly either in composed shape or conveyed through gatherings (Charvat 2002). The instruments to convey messages in the horizontal channel are all the time articulations of work, contracts of various types, messages and communication plan (Charvat 2002).

As shown by Campbell (2009) paying little heed to the sort of correspondence (formed or verbal) there are three segments of correspondence that an undertaking executive uses in the midst of a task. Those are (1) separating the proposed intrigue gathering, (2) engineering the methodology and (3) passing on the message. The basic demand to address while picking the motivation behind any correspondence is who will get the message. In an endeavor condition, an associate examination which sees fundamental assistants is driven. (Campbell 2009). Messages ought to be revolved around those as a best need and comprehend what is the clarification behind correspondence (Campbell, 2009). The second step is to plot the methodology that influences an endeavor executive to get to the motivation driving correspondence. The data can be appeared to assistants by utilizing indisputable techniques, for example, an issue/plan approach portraying the exercises assorted issues and reacts in due request in regards to them or utilizing a significant picture/little picture approach that clarifies how the information and data gathered by an endeavor supervisor is related with meet conclusive targets. The best strategy is the one that suits the correspondence reason. Thirdly the message is passed on to the get-together of observers by scrutinizing assortment of instruments and systems (Campbell, 2009).

2.6 PROJECT SUCCESS

Continuously these days associations are venture based, inferring that the work they do is part into activities of tasks proposed to pass on the association's strategies and

incorporate regard. Incredible organization of these undertakings is fundamental if the association will succeed. So also, basic to solitary undertaking accomplishment is ensuring that the right tasks are finished. Jugdev and Muller (2005) in their article said that remembering the true objective to describe what accomplishment suggests in a venture setting takes after getting accord from a social affair of people on the importance of "good workmanship." Project accomplishment is a point that is sometimes discussed yet then now and again settled upon (Baccarini, 1999). Generally, the points of view on venture accomplishment have progressed during the time from essential definitions that were limited to the execution time of the undertaking life cycle to definitions that mirror a valuation for advance over the entire task and thing life cycle (Jugdev and Muller, 2005). Associations have changing levels of ability in the task organization work. A critical number of these associations comprehend that to be successful a better route than manage venture organization is imperative. Venture Administration Development Lattice can empower associations to upgrade the advancement of their undertaking organization frames, similarly as a transformative path from uniquely delegated, convoluted systems to create, prepared task organization shapes (Jugdev and Muller, 2005). The cross section delineates four levels of advancement in venture organization:

Level 1

Activities are every now and again passed on through the individual heroics and effort of the undertaking manager and his/her gathering. They have a tendency to be passed on paying little heed to the association rather than because of it.

Level 2

Anybody can pass on here not just holy people, in light of the way that there is an agreed strategy to be taken after that helps repeat earlier triumphs from near tasks. Courses and getting ready can help at this level.

Level 3

This isn't just about passing on ventures yet what's more recognizing benefits. This incorporates acknowledging what benefits are typical and when the venture has passed on them.

Level 4

Is stressed over whether we are doing the right tasks and how by methods for those ventures we can pass on the business philosophy and incorporate regard.

As indicated by Sanghera (2009) to lead a dare to propel an endeavor boss needs to examine through undertaking condition containing substances in-side and outside of affiliation. Culture, style, conclusive structure and change of the affiliation influence how widens are performed. From an endeavor point of view two sorts of affiliations exist: adventure based and non-adventure based. Assignment based affiliation have devices and structures for supporting endeavor association. They are isolated into subcategories of (1) widens whose pay begins from performing undertaking to other individuals, and (2) in house adventures passing on things and associations to clients (Sanghera, 2009). Adventure director supervises following three basic real parts which ought to be comprehended recollecting the genuine target to examine one's own specific method to deal with an assignment to progress:

- Organizational culture: Organization's way of life makes over the scope of time by means of getting ready and ordinary use. It impacts how extends are started, planned and executed, and picks essential organization authorities. Fundamental encounters that shape the conclusive culture are e.g. vision,

mission, attributes and sentiments, courses of action and frameworks, view or development and association, and comprehended principles.

- **Organizational exchanges:** The achievement of endeavor association in affiliations depends enormously on affiliation's correspondence profile. Trades breaking points of an affiliation extremely impact expands and can invigorate adventure boss' correspondence and basic activity with suitable associates.
- **Structure of the Organization:** It is essential for the errand boss to comprehend the structure of the affiliation he is working in. Three conclusive classes are useful, projectized, and organize affiliations which are portrayed next in more detail (Sanghera, 2009; Project Management Institute, 2013).

2.7 THE PROCESS OF COMMUNICATIONS MANAGEMENT

The procedures of interchanges administration portrayed in PMBOK (2013) are arranging, man-maturing, and controlling communications.

2.7.1 Planning

Comprehending what data associates require and depicting a correspondence approach is the course toward arranging adventure trades (Project Management Institute, 2008).

To react to the necessities of endeavor accessories, one must consider the running with; what data individuals require, when will they require it, what is the best medium for passing on it, who should pass on the data, what may hamper the surge of data, and how should "I" (as embraced manager) pass on the message (Martin, 2006; Project

Management Institute, 2008; Campbell, 2009). To guarantee that proper data contacts the general open who require it, the flood of data should be sorted out. There are squares to earth shattering correspondence in adventures at any rate they can be evaded if correspondence is sorted out precisely (Martin, 2006). Fitting correspondence can redesign capacity to contribute to the endeavor, and choices made about correspondence frameworks and correspondence condition of social events pick the errand result (Phillips, 2014). Hence, correspondence planning is essential to grow achievement.

2.7.1.1 Organization and project natural components

Organizational structure and undertaking normal factors are unequivocally related to the technique of correspondences masterminding and will influence correspondence necessities of the task. Past exercises and information snatched from them can be utilized as a guide for organizing correspondences of a pooch lease adventure. Particularly essential are hones instructed and recorded information. Choices made in the past in equivalent activities can give an appreciation to the crucial activity process with respect to correspondence issues right now (Project Management Institute, 2008). Correspondence plan as a rule outlines what ought to be gave and to whom, the amount of the time and with what engineer. Regardless of these portions, the correspondence plan ought to be changed to suit the affiliation. Correspondence parts, commitments and association ought to be a touch of the assignment plan itself. Vital exercises could have a formal correspondence plan including checkpoints; push revives with controlling cautioning get-togethers, chance association audits, total get-togethers and correspondence with end-clients (PMI, 2013).

2.7.2 Communication administration plan

Correspondence association plan is the eventual outcome of the engineering procedure of endeavor trades. It depicts the limits for how the correspondence ought to happen, sets needs, and adds more control and quality to pass on adventures (Phillips, 2011). It may be formal or agreeable, isolated or broadly confined and ought to be set up on the essentials of the endeavor (PM1, 2008). As indicated by Dinsmore and Cabanis-Brewin (2014) the running with parts ought to be combined:

- Audience: Decide the social event of people for each dispatch through examination adventure reports (meander embrace, meander scope, work breakdown structure and so on.).
- Message: What correspondence does the meander need to pass on to the social event of people?
- Intent: What is the motivation driving correspondence? What is required to accomplish by correspondence?
- Media: Picking the media or a mix of media relies on the endeavor arrange, social event of people and different segments.
- When: To pick a specific methodology and timing, the development clarification, adventure plan, and heading from adventure pioneers and key assistants ought to be considered.
- Frequency: Setting up a timetable for correspondence and pick how reliably it ought to happen.

- Responsibilities: The responsibility of setting up a message, building up a media, dealing with a development, and passing on something specific ought to be as-separate for each message in the correspondence plan.

Officially communicated are the base to join into the exchanges association plan (Dinsmore and Cabanis-Brewin, 2014) Figure 2.3 is an instance of a dispatch plan organize

PROJECT COMMUNICATIONS PLAN TEMPLATE					
Attachments to each communication should include:			■ List of recipients	■ Media requirements	
			■ Message text	■ Delivery schedule and who delivers	
AUDIENCE	MESSAGE (WHAT)	INTENT (WHY)	MEDIA (HOW)	WHEN	RESPONSIBILITIES

Figure 2.3: Project communication plan template

As demonstrated by Project Management Institute (2013), despite the already specified parts, the interchanges organization plan similarly consolidates following:

- Method for reviving the correspondences organization plan as an undertaking is advancing;
- Explanations of essential stating;
- Assets allocated for correspondence works out, for instance, time and spending plan:
- Communication objectives due to authorization or control, advancement and various leveled courses of action. (Task Management Institute 2013.)

As per Schibi (2013) communication strategy ought to cover every parts of a venture and incorporate something other than detailing lines and conveyance of formal data. Furthermore, the arrangement should direct how colleagues and partners cooperate with each other, give conduct rules, characterize rehearses how to oversee desires and encourage data trade among partners, and issues in regards to communications dangers. (Schibi, 2013).

2.7.2.1 Communication systems

Techniques to exchange data among the project group (and partners) can fluctuate significantly. Strategies from short discussions to arranged gatherings or from straightforward composed records to online material are utilized (Project Management Institute, 2008). Colleagues and partners are locked in by utilizing various communication exercises. They can be legitimate or easygoing, and some can be either official or spontaneous. These communications exercises are recorded in the figure 2.4.

Formal Communication	Informal Communication
Meetings*	Conversations
Reports*	Phone calls
Presentation*	E-mails*
Plans*	One-on-one chats
Information gathering*	Conflict management*
Training*	Estimating*
Status updates*	Negotiations*
Changes	Assumption/issue/risk management*
	Escalation*
	Discussions related to motivation, buy-in, fact checking, clarifications

*Can be either formal or informal.

Figure 2.4: Formal and informal communication channels

2.7.3 Managing and Controlling the Stream of Communication

After undertaking data is assembled as plans, it must be shared and coordinated in a way that individuals who require that data can welcome it. All together for the data to be in amazing it must be material, clear, correct, finish, promising and proper (Martin, 2006). The course toward overseeing correspondences isn't only dispersal of data. It is the way toward making, gathering, passing on, anchoring, recovering, and an entire nature of undertaking data done in appreciation to the assignment association plan (Project Management Institute, 2013). Fit and reasonable stream of being produced between assistants is the key favored viewpoint of this methodology. Data offered to accessories ought to be suitably conveyed, gotten and comprehended, and this is the reason for the strategy for trades association (Project Management Institute, 2013).

2.7.3.1 Revealing execution

Accessories, especially agents and clients, are enthused about knowing how the endeavor is performing. Adventure supervisor's errand is to chat with these associate get-togethers, and report execution and undertaking advance. Data ought to be amassed from key work intensity of the endeavor, for example, accomplices and merchants. The undertaking gather is responsible for contributing precise data about work execution, and sellers need to give data about their work status, development and movement. (Heldman, 2003; Phillips, 2011).

As indicated by the Project Management Institute (2013) execution proclaiming is the accumulation and dissipating of execution data. Recollecting a definitive target to understand and pass on adventure movement and execution, and in addition figure results, one

ought to aggregate and investigate the fundamental level and real information now and again. The data about execution ought to be given a genuine relationship for various get-togethers of people. The strategy can change from a central status answer to a sorted out alteration (Project Management Institute, 2013.) Data about the assignment movement can be aggregated from accomplices. Recalling a definitive goal to do that, a place for anchoring adventure documentation ought to be given. This ought to be a focal place for entering data on adventure points of view and wants, due activities, issues and hazard things. Another crucial wellspring of data is get-togethers. Social affairs enable partners to express their anxieties, acknowledge chance examination, and arrange activities of various accomplices (Binder, 2008).

2.7.3.2 Status reports

Execution reports or status reports are standard and formal, made reports. Subordinate upon the undertaking, they are usually made quarterly, month to month or even week after week. Information about endeavor status ought to be right and open dependably. By ideals of data being yielded for a huge time length, there is no acceptability for taking restorative activities. (Heldman, 2003; Martin, 2006; Heagney, 2011). Heldman (2003) endorses that an endeavor head ought to require status gives bits of knowledge with respect to seven days after week initiate from partners. Hence, the undertaking manager can pack and process the data for assistant get-togethers and pass on all things considered movement to the social occasion. Unmistakable endeavor head programming capable grams have worked in highlights for status-separating. Following could be intertwined to a status report:

- General data
- Progress made since last announcing period

- Schedule and finishing dates
- Expected advance amidst this period that has not been finished
- Expected advance for the going with announcing period
- Issues (Heldman, 2003)

2.7.3.3 Forecasting

Anticipating is to decide the conceivable result of the project inside the terms of an project spending plan (Saladis & Kerzner, 2011). Figures are made in view of past execution and incorporate appraisals of aggregate expenses happened amid the project finishing and how much costs jump out at finish the rest of the project. Conjectures are refreshed as new execution data is accessible (Sanghera, 2009).

2.7.3.4 Meetings

To control interchanges a talk and trade is required with the venture gathering and accomplices. Gatherings encourage refreshing and conveying project execution and reacting to partner necessities about accepting data. (Project Administration Foundation, 2013). Gatherings are basic for the project group building and gathering exercises, for example, taking care of issues, settling on choices and accomplishing accord. Administration of gatherings is a critical aptitude for a project supervisor. Holding a fruitful social occasion requires availability and masterminding in order to make it a powerful use of time of everyone going to. It is a get-together for talk, and for sorting out and upgrading interchanges among individuals and workplaces (Richman, 2002; Kerzner & Belack, 2010).

Contingent upon the gathering arrangement, recurrence and crowd a reasonable communication mean is picked. Gatherings can be held eye to eye or by means of sound, video or web-conferencing. A motivation for a gathering ought to be formal and correct as the project develops in estimate and in multifaceted nature. For a casual gathering with colleagues the plan can be composed in a straightforward shape. Conveying the motivation, a couple of days preceding the gathering empowers partners to get ready for recognized issues previously going to the gathering (Richman, 2002; Cover, 2008; Kerzner & Belack, 2010).

2.8 UNDERLYING ISSUES RELATED WITH PROJECT COMMUNICATION

Normally there are a few deterrents and difficulties identified with communication exercises. As per Awati (2008), the political impediment of project communication shows up as a result of personal stakes and power diversions, which can hinder communication. This exists particularly at the more elevated amounts of the organization, normally simply over the one where the project itself is being arranged and executed. In expansive organizations it is vital to contemplate the distinctive progressive levels and their delegates, keeping in mind the end goal to guarantee that the message moves toward becoming modeled and taken care of in the right way. Venturing on one's toes or becoming mixed up to one's greatest advantage may hurt the element or even bend the result. Once in a while it is just unrealistic to satisfy each gathering and bargains are required. Awati (2008) prescribes as an answer for perceive the primary political players well ahead of time and to see some uncommon exertion so as to pick up their trust and to inspire them to work for the project. He likewise addresses the significance of managing the emerging issues in the specific level they produce, rather than taking the

dangerous issues up in the chain of importance immediately. Along these lines you advance collaboration at all levels and abstain from venturing on anybody's toes.

As per Awati (2008), the social obstruction emerges from both hierarchical social contrasts and contrasts in topographically disseminated project groups. It is expressed in the article by Awati (2008), that the organization esteems and societies, which both have their very own effect to communication, can enormously shift starting with one then onto the next between and even inside organizations. Autonomously working divisions can have diverse desires and traditions what it comes to communication and collaboration. On another side, we may have an extremely open, level various leveled communication where anybody can express their sentiment, and on the opposite side we may have exceptionally moderate, position related pecking request, where you need to know the traditions so as to impart "accurately".

In such cases Awati (2008) prescribes the project directors playing the part of a middle of the road, encouraging communication between parties. This requires a specific level of understanding the divergences inside the organization all together the project administrators can adequately work as a middle of the road and certification smooth cooperation and trade of communication. When issuing the phonetic snag, Awati (2008) article underlines particularly the specific phrasing which is utilized by various offices within an organization. Distinctive terms can differ incredibly relying upon which office is utilizing them, e.g. from the Promoting office to IT et cetera. Terms utilized in such reports that are appropriated comprehensively around organization and notwithstanding for outside administrators, ought to be join in significance or if nothing else each time clarified in the setting where they are utilized in. Totally new terms may be conceived along the project, which at that point should later be inserted into the working network.

In such cases the new term ought to be well ahead of time characterized and recorded, and later effectively utilized in the correct setting (Awati, 2008).

Obviously, all the past said angles have their very own effect with regards to communication challenges, yet notwithstanding those we can't ignore the difficulties we are looking at the plain close to home level of communication. All past experience, presumptions and desires influence how the expected message converts into an impression of a solitary individual (Horine 2005). This fundamentally implies whatever the learning styles and channels (culture, state of mind, qualities and advantages) of a man are, they change the past experience and presumptions to how the message will be gotten and how well it will be comprehended by the individual. Likewise, the relational abilities and even the present state, regardless of whether physical, passionate, self-idea or clamor, affect coming about view of the proposed message. The individual being in charge of the project communication must know about and ready to control these distinctive difficulties with a specific end goal to convey powerful communications forward to the gatherings being referred to.

2.9 EMPIRICAL REVIEW

All around, the investigation of communication administration effect on the achievement of projects is expanding. An examination in Malaysia energizes all the more understanding and more routine with regards to great communication in the development business (Perumal, 2011). The Dutch business looked at the impact of communication on development projects, concentrating on issues of communication (Hoezen, 2012). Aiyewalehinmi (2013) also shows an examination of communication by the development business of Australia.

Communication viability is reliant on the key partners in charge of the project. Osman (2011) uncovers how communication is basic to extend achievement – particularly among the partners; since it regularly depends upon cross-group correspondence. Communication limits, for instance, might lead to conceivable disappointments. In 2009, Adedapo uncovers bad exchange of information leads to bad buildability, bad administration of assets as well as very bad efficiency. A Holmes report Grossman (2011) illustrates how inability to pass on vivid and reasonable methodologies or procedures draw Workers in combined objectives, for example, methodology and practices may result in cost vulnerabilities, heightened spending plans, and conceivable project crossing out. As indicated by Naqvi et al., (2011), the quality and adequacy of communication is a fundamental essential that represents the moment of truth a project. In this manner, enhancing communication in development projects is essential; on the grounds that the productivity and viability of the development procedure is emphatically reliant on the nature of communication (Reyman et al., 2006).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter gives details regarding the procedures to be used to conduct this study. Pertinent issues discussed in this section include the research design, population, sample design and data collection methods and data analysis.

3.2 RESEARCH DESIGN

In this study, quantitative research strategy was used where the survey research design was applied by means of questionnaire. The survey method sits well with this study due to the cross-sectional nature of data collection. This method utilizes different groups of people of who differ in the variable of interest, but share other characteristics such as socioeconomic status, educational background and vocation (Cherry, 2015). Survey design involved the usage of identical questionnaires to amass data around individuals and their penchants, thoughts, and behaviors in a systematic manner. Survey research has several importance as its well-matched for remotely accumulating facts about a population who are that is too huge to perceive unswervingly, most of time questionnaire surveys are preferred by some respondent, its inexpensive in relations to researcher time, determination and cost than most of research design (Cherry, 2015). The survey research was found appropriate as it required the collection of quantifiable information from the sample. It was also the best method for collecting original data and for describing and exploring existing phenomena.

3.3 POPULATION OF THE STUDY

Neuman (2003) stipulates, a population of any study was a particular group of individuals the investigator intends to study in order to find out if the problem detected was the same for all the group members. For this study, the target population was the key and relevant officials who were undertaking the construction of the affordable housing project in Greater Accra Region such as project managers, project supervisors, project team members and other important individuals deemed to possess information relevant for the study. The total population is estimated at 56.

3.4 SAMPLE SIZE

A demonstrative example is critical to quantitative research and should replicate the population precisely in order that interpretations can be represented. The total size of the target population was thirty (30) respondents representing project managers, project supervisors, project team members etc. of the affordable housing project in Greater Accra Region. The study selected this sample size of 30 respondents in order to effectively manage the responses owing to time and resource restrictions and likewise to ensure a critical analysis of the phenomenon under study.

3.5 SAMPLING TECHNIQUE

The purposive sampling technique was deemed the appropriate means of getting respondents who are knowledgeable and well abreast with the subject matter of interest. This technique is a non-random sampling where the researcher establishes a criterion devoid of randomness for selecting the sample. The choice of respondents was based on the fact that the characteristics of the potential respondents from the sample size have

been identified to be relevant to the study. This sampling technique provided answers needed to achieve the research questions.

3.6 SOURCES OF DATA

In this study, both secondary as well as primary data were used with the primary data being dominant. The Primary data gathering would be done with questionnaires due to the study being a survey and quantitative research that requires data collection at the field. On the other hand, internet, text books, journals as well as researches done previously which are relevant to the subject matter of this research also constitute the Secondary data. The secondary data collected would provides information from other researches which is essential to this study.

3.7 DATA COLLECTION INSTRUMENT

Innumerable tools are expended in data assembly, particularly in the social sciences and business which consist of questionnaires, interviews, focus group discussions and observation of participants. In the present study a survey questionnaire was used to collect data for the reason that of its many returns and its capability to produce the most acceptable series of dependable facts. Since this is quantitative research, the researcher made use of questionnaires to collect data from the respondents as they are most suitable in a quantitative study such as the present one. Again, questionnaire was preferred since they are effective data collection instruments that will allow respondents to give much of their opinions pertaining to the researched problem. Questionnaires were a choice among the methods of data collection because they carry an element of convenience and respondents could feed in the data at their own time of convenience.

3.8 DATA COLLECTION PROCEDURES

To guarantee smooth collaboration and accumulation of information, the researcher first sought permission from the respondents. Duplicates of the questionnaires was then adequately made based on the computed sample size. The questionnaires were administered in person to the sampled participants who are the respondents selected. Usage of questionnaires were predictable to alleviate the procedure of data collection, as all the particular respondents were contacted in time. Throughout the implementation of the instruments, the aim of the research was clarified to the respondents. The respondents were also given assurance that the information they provided would be treated with utmost confidentiality. Importantly, the researcher spelt out the instructions that included: accuracy and keenness as essential attributes.

3.9 DATA ANALYSIS

The findings of this study were analyzed and presented using descriptive statistics. Statistical Package for Social Sciences (SPSS) software aided in analyzing the data collected from the field. Descriptive statistics like frequency distribution tables and percentages as well as rank score was employed in analyzing the data. The data congregated from the survey was expended to offer validations and rejection of some of the theoretic conclusions in the literature.

3.10 ETHICAL CONSIDERATION

Participants were well-versed about the aim and purpose of the study and told exactly what involved and what would happen to the data gathered from them. Data obtained from the participants was kept confidential. Data is and was not released to other people or be published unless agreement has been obtained from the source or disguised.

CHAPTER FOUR

DATA PRESENTATION AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

This chapter seeks to analyze and discuss the findings that have been collected. It presents the results of data collection and analysis pertaining to the research questions that guided the study. In this study, 30 questionnaires were distributed and 30 participants responded fully. In any research, a return of more than 50% is acceptable (Mugenda, 2003). A return of fifty (100%) for this study was considered acceptable for analysis. The characteristics of respondents are discussed as preliminary data followed by the results for research questions. The program that was used to analyze the data was Statistical Package for Social Sciences such as mean, standard deviation, rank score and frequency distribution tables.

4.1.1 Demographic information of project personnel

The first section of the questionnaire gathered data on the background of the respondents. The demographic data of the respondent include respondents' current role, years of service, and academic qualification. The data obtained are presented below:

Table 4.1: Current Roles

Current Role	Frequency	Percent
Project Coordinator	11	36.7
Project Scheduler	6	20.0
Assistant Project Manager	2	6.7
Project Manager	4	13.3
Senior Project Manager	1	3.3
PM Consultant	6	20.0
TOTAL	30	100.0

The study sought to establish the current designation of the respondents. From the findings shown in the Table 4.1 above, majority of the respondents (11, 36.7%) were Project Coordinators, (6, 20%) were Project Schedulers and PM Consultants respectively. Other job categories were (4, 13.3%) Project Managers, (2, 6.7%) Assistant Project Managers and (1, 3.3%) Senior Project Manager. Deductions can be made that most of the respondents were Project Coordinators and hence understood the information sought by this study.

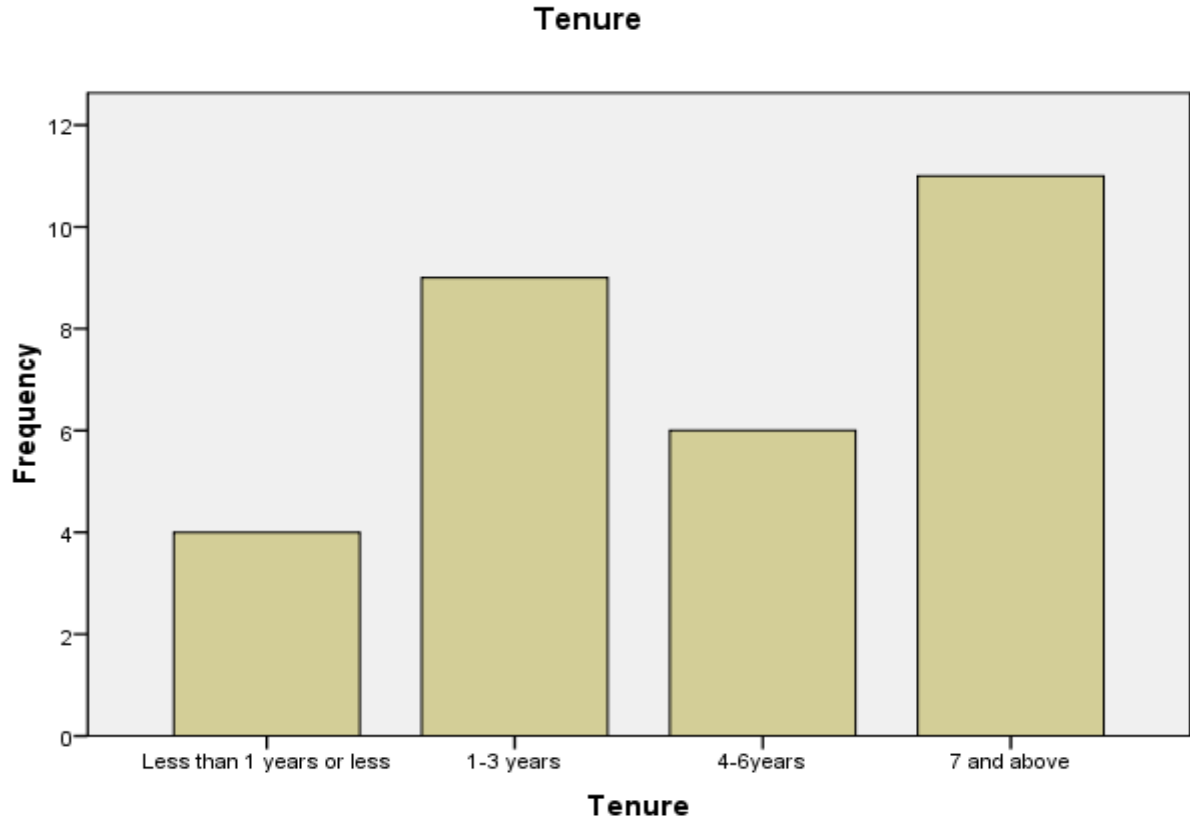


Figure 4.1: Tenure of respondents

The respondents were required to state the number of years they have worked in their respective fields. The results are presented in the Figure 4.1, most (11, 36.7%) of project personnel had been in the construction industry for more than 7 years, (9, 30%) between 1-3 years, (6, 20%) between 4-6 years while 4 (13.3%) of project personnel for less than

one year. This implies that the project personnel had been in the construction industry for considerable number of years. The duration that employees are in an industry may have an impact on affordable housing project. This is because they are endowed with experience that is necessary for the effectiveness of communication in construction projects in Ghana.

Table 4.2: Educational Level

Educational Level	Frequency	Percent
Diploma	2	6.7
O’/A Level	1	3.3
HND	5	16.7
First Degree	13	43.3
MET-III	5	16.7
Master’s Degree	4	13.3
TOTAL	30	100.0

On the question of the educational level of respondents based on effectiveness of communication in construction projects in Ghana. The study findings as indicated in Table 4.2 shows that, most of respondents (13, 43.3%) had attained a first degree followed by HND and MET-III holders at (5, 16.7%) and (4, 13.3%) of respondents had master’s degree. It was therefore deduced from the findings that respondents, to a large extent, have good quality education that includes both bachelor’s degree and post graduate levels of education were first degree holders.

4.1.2 Variables of effective communication on projects

This section examines the variables of effective communication on projects. By means of the descriptive statistics and rank score, the following were revealed;

Table 4.3: Variables or factors of effective communication

Factors of Effective Communication	Mean	Std. Deviation	Ranks
Analysis likewise aids team members to study and advance their skills.	3.9000	1.09387	1 st
Strong presentation skills are essential for effective communication of project progress and status.	3.9000	1.21343	2 nd
Engaging stakeholders by preparing a plan to offer the fitting amount of data and prospects for involvement	3.8333	1.31525	3 rd
Good planning via keeping stakeholders aware of project progress.	3.7333	1.14269	4 th
Consistent appraisal permits difficulties to be recognized early in order that helpful action can be taken to keep the venture on path.	3.7333	1.31131	5 th
Listening to stakeholders and paying attention for project delivery	3.6333	1.24522	6 th
All stakeholders present within the project planning phase and often be in known of the direction the venture will take.	3.5667	1.16511	7 th
Keeping open communication within the team	3.5667	1.35655	8 th
Valid N (listwise)			

In regard to the variables or factors of effective communication on projects, the findings show that analysis likewise aids team members to study and advance their skills and strong presentation skills are essential for effective communication of project progress and status with a mean score of (M=3.90; SD=1.09) and (M=3.90; SD=1.21) as shown in Table 4.1. From the findings it was indicated that majority of the respondents agreed that engaging stakeholders by preparing a plan to deliver the suitable amount of data and

prospects for participation attained ($M=3.83$; $SD=1.31$). The Study also showed that good planning through keeping stakeholders aware of project progress ensures full participation with a mean score of ($M=3.73$; $SD=1.14$). Moreover, the results show that consistent analysis likewise aids team members to study and advance their skills so that helpful achievement can be taken to keep the project on track with a mean score of ($M=3.73$; $SD=1.1$). The mean score of ($M=3.73$; $SD=1.14$) was discovered to be respondents who agreed that there was good planning via keeping stakeholders aware of project progress. According to the study majority agreed that listening to stakeholders attained a higher mean of ($M=3.63$; $SD=1.24$), followed by the respondents who agreed that all stakeholders present within the project planning phase and often be in known of the direction the venture will take with a mean score of ($M=3.56$; $SD=1.65$). According to the findings, the respondents agreed that the factors of effective communication on projects was keeping open communication within the team which attained a mean of ($M=3.56$; $SD=1.35$).

4.1.3 Types of communication channels

This section looked at the types of communication channels utilized by project managers/professionals in the execution of the projects. By the descriptive statistics and rank score, the following were discovered;

Table 4.4: Types of communication channels

Communication Channels	Mean	Std. Deviation	Ranks
E-Mail tool	4.0000	.98261	1 st
Press Release tool	4.0000	1.00000	2 nd
Budget Spreadsheet	3.8667	1.16658	3 rd
Periodic Reports	3.8667	1.22428	4 th
Project Status Meetings	3.7667	1.16511	5 th
Communication Plan	3.7667	1.22287	6 th
Project Presentation	3.7333	1.22990	7 th
Daily Progress Reports	3.6667	1.26854	8 th
Valid N (listwise)			

The highest mean score of (M=4.00; SD=1.00) and (M=4.00; SD=1.22) was identified among respondents who agreed that press release tool and e-mail tool were the types of communication channels utilized by project managers/professionals in the execution of the project with the ranked score of (1st) and (2nd) as seen in the table above. According to the findings, the respondents agreed that budget spreadsheet (3rd) and periodic reports (4th) were also the types of communication channels utilized by project managers/professionals in the execution of the project. In addition, the respondents agreed that project status meetings (5th) and communication plan (6th) were the communication channels utilized by project managers/professionals in the execution of the project. A mean mark of (M=3.73; SD=1.22), and (M=3.66; 1.26) was computed for the elements “Project Presentations”, and “Daily Progress Reports” respectively. This finding showed that respondents agreed that the types of effective communication channels utilized by project managers/professionals in the execution of the project was project presentations and daily progress reports.

4.1.4 Problems associated with effective communication

This section determines the problems associated with effective communication. Through the descriptive statistics and rank score, the following were revealed;

Table 4.5: Problems associated with effective communication

Problems of Effective Communication	Mean	Std. Deviation	Ranks
Emotional obstacles and prohibitions	4.2000	.84690	1 st
Variations in perception and standpoint.	4.1000	.92289	2 nd
Poor audience engagement	4.1000	1.02889	3 rd
Physical barriers to non-verbal communication	4.0333	1.12903	4 th
Cultural differences	4.0000	1.23176	5 th
Poor Communication through team members and participants could convey a project uncompleted	3.9333	1.14269	6 th
Physical incapacities such as hearing difficulties or speech hitches	3.8333	1.01992	7 th
Bad Interpersonal Relationships	3.8333	1.11675	8 th
Failure to assess communication success to gather lessons learned	3.7333	1.11211	9 th
The practice of jargon, unaccustomed and/or practical terms.	3.6333	1.32570	10 th
Language changes and the trouble in understanding unfamiliar pronunciations.	3.4000	1.35443	11 th
Conferred interests and power games	3.0667	1.14269	12 th
Valid N (listwise)			

From the findings, the respondents agreed that emotional obstacles and prohibitions, variations in perception and stand point and poor audience engagement were the problems associated with effective communication as shown by a mean of (M=4.20; SD=.84). (M=4.10; SD=.92) and (M=4.10; SD=1.02). The findings were (1st, 2nd and 3rd) highest ranked amongst the items in this section. As attained in Table 4.5, majority of the respondents agreed (M=4.03; SD=1.12), and (M=4.00; SD=1.23), that physical barriers to non-verbal communication, and cultural differences were the problems associated with

effective communication. The findings were 4th and 5th highest ranked between the items in this segment. In the same way, the respondents strongly agreed (M=3.93; SD=1.14), (M=3.83; SD=1.02), and (M=3.83; SD=1.11), that poor communication through team members and participants could convey a project uncompleted, physical incapacities such as hearing difficulties or speech hitches and bad interpersonal relationships were much problems to effective communication. These fallouts were ranked 6th, 7th and 8th highest among the objects in this segment. Furthermore, the respondents agreed that the failure to assess communication success to gather lessons learned was the other problem associated with effective communication as shown by a mean of (M=3.73; SD=1.11) which ranked 9th amongst other difficulties drawn.

The respondents were further asked to respond whether the practice of jargon, unaccustomed and/or practical terms and language changes and the trouble in understanding unfamiliar pronunciations were associated with the problem of effective communication. Clearly and as anticipated, virtually all the respondents agreed as confirmed in the mean (M=3.63; SD=1.32) and (M=3.40; SD=1.35) respectively. The mean score of (M=3.07; SD=1.14) was attained for the element, “Conferred interests and power games” which respondents agreed that it was one of the problems associated with effective communication.

4.2 DISCUSSION OF THE RESULTS

The study was about assessing the effectiveness of communication in construction projects in Ghana: a case study of affordable housing project. This part of the study discusses the results along the following objectives; examine the variables of effective communication on projects; identify the types of communication channels utilized by project managers/professionals in the execution of the project; and finally determine the

problems associated with effective communication. The following is the discussion of the findings based on the three objectives that guided the study.

Research Objective One: Variables of effective communication on projects

Data analysis and interpretation revealed that analysis helped team members to learn and advance their abilities and that strong presentation skills were essential for effective communication of project progress and status. It was also revealed that engaging stakeholders by preparing a plan to deliver the suitable amount of data and prospects for participation was another identified variable or factor for effective communication. It was found that consistent analysis permits difficulties to be recognized primary so that remedial act can be engaged to preserve the project on pathway and listening to stakeholders and paying attention for project delivery. The results showed that the variables or factors of effective communication on projects were keeping all stakeholders present within the project planning phase and often be in known of the direction the venture will take and keeping open communication within the team.

The above discoveries concurred with discoveries of different researchers. As indicated by Campbell (2009) regardless of the sort of communication (composed or voiced) there were three components of correspondence which venture director utilizes amid a venture. They include (1) investigating intended interest group, (2) arranging the strategy as well as (3) conveying the information. The principal issue to look at while deciding the point of a correspondence was the one to get the information. In the domain of a venture, a partner examination that recognizes significant partners was led (Campbell 2009). Messages ought to be focused on those at the top of the priority list and figure out what is the reason for communication (Campbell, 2009).

Research Objective Two: Types of communication channels utilized

Data analysis and interpretation of results revealed that the types of communication channels utilized by project managers/professionals in the execution of the project were e-mail tool and press release tool, periodic reports, budget spreadsheet, project status meetings, communication plan, project presentations and daily progress reports.

The perspectives of Ghattas and McKee (2001) are additionally in concurrence with above discoveries. As per the specialists, perusers want to get their messages in printed frame and require regularly exceptionally point by point data rather than brief outlines. Apparatuses to be utilized for perusers are diverse reports and email refreshes. Specialized devices favored by the audience members incorporate e.g. up close and personal audits and phone discussions. (Ghattas and McKee 2001). The devices to convey messages in the parallel channel are all the time explanations of work, contracts of various types, messages and communication plan (Charvat 2002). Specialized instruments favored by the audience members incorporate e.g. up close and personal surveys and phone discussions. (Ghattas and McKee 2001).

Research Objective Three: Problems associated with project communication

The findings revealed that emotional obstacles and prohibitions, variations in perception and standpoint, poor audience engagement and physical barriers to non-verbal communication were the problems associated with effective communication on the project. Other problems identified were cultural differences, poor communication through team members and participants could convey a project uncompleted, physical incapacities such as hearing difficulties or speech hitches, bad interpersonal relationships, failure to assess communication success to gather lessons learned and the practice of jargon, unaccustomed and/or practical terms.

The discoveries above concurred with the discoveries of different researchers, for example, Adedapo (2009) who uncovered that poor communication causes poor buildability, poor administration of assets, and low efficiency. A Holmes Report (Grossman, 2011) illuminates how inability to pass on clear and justifiable systems and procedures that connect with workers in shared objectives, for example, methods and practices may result in cost vulnerabilities, heightened spending plans, and conceivable project retraction.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter summarizes the study to highlight the summary of findings, conclusions and make available recommendation to help shape policy in the construction industry.

5.2 SUMMARY OF FINDINGS

The study was conducted in order to assess the effectiveness of communication in construction projects in Ghana: a case study of affordable housing project by Government in Greater Accra Region. The population of this study composes of key and relevant officials who are undertaking the construction of the affordable housing project in Greater Accra Region such as project managers, project supervisors, project team members etc. The research design for the study was a survey design incorporating the quantitative research strategy. The data collected from respondents were analyzed with the help of data analysis software, Statistic Package for Social Science (SPSS) software. Descriptive statistics, mean, standard deviation, rank score and simple frequencies and percentages of responses were used to analyze the data.

The following key findings were obtained after a thorough analysis of the results:

- Regular analysis/review helped team members to study and advance their abilities just as strong presentation skills were also essential for effective communication of project progress and status.
- Engaging stakeholders by preparing a plan to offer the fitting amount of data and prospects for involvement.
- Consistent evaluation allowed difficulties to be recognized initially in order that remedial deed can be engaged to preserve the venture on pathway and that

keeping open communication within the team as well as listening to stakeholders and paying attention ensure project delivery.

- The types of communication channels utilized by project managers/professionals in the execution of the project were e-mail tool and press release tool, periodic reports, budget spreadsheet, project status meetings, communication plan, project presentations and daily progress reports.
- The problems related with effective communication on the project were: emotional obstacles and prohibitions, variations in perception and standpoint, poor audience engagement, physical barriers to non-verbal communication, cultural differences, poor or absent communication with team members, physical incapacities such as hearing difficulties or speech hitches, bad interpersonal relationships, failure to assess communication success to gather lessons learned and the practice of jargon, and/or practical terms.

5.3 CONCLUSION

The increasing kind of construction projects in Ghana has emphasized the significance of effective communication. With an increasing complexity of projects, communication becomes a critical factor for project management. Effective communication is commonly recognized as a key for execution of projects. Careful communications planning and development of profound project communications management plan are demanded to be necessary to ensure high quality of project communication. The research has established that communication is a significant factor in the successful completion of affordable housing project. It is imperative for project leaders to guarantee that the idea of the connections do not influence the quality of the connections between venture groups and their capacity to exchange learning and data required to finish project tasks effectively.

As substantiated from the discoveries, project leaders need to execute a reasonable and hearty technique of settling clashes that may emerge from the project.

5.4 RECOMMENDATIONS

The researcher through the study deems it fit to make the following recommendations to guide policy:

1. It was from the study that analysis will help team members to study and advance their skills. It is therefore recommended that Project facilitators should design time to lead eye to eye communications with each colleague, key client and different partners engaged with the project. These sessions must be propelled as ahead of schedule as could be allowed.
2. The study also found that strong presentation skills are important for effective communication of project progress and status. Therefore, it is recommended that holding consistent gatherings will dispense with some communication hindrances and help project supervisors to determine conceivable stresses. Vis-à-vis sessions will construct trust and compatibility, enhance individual and gathering communication.
3. The study further revealed that consistent appraisal will permit difficulties to be identified early in order for helpful actions to be taken to keep the project on track. Therefore, it is recommended that Project supervisors should give more consideration regarding the communications intending to guarantee successful communication for their projects; and project communications.

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APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI, GHANA INSTITUTE OF DISTANCE LEARNING

PROJECT TOPIC: Effectiveness of communication in construction projects in Ghana: a case study of affordable housing project

Dear Participant:

This study is being conducted on the above topic for academic purposes and the researchers would be grateful if you could provide answers to the questions below. Please note that the strictest confidentiality is assured with respect to answers given as facts are needed for academic purposes. You are assured that any information you provide is solely meant for the research and nothing else. Please tick where appropriate.

Section A: Demographic Data

1. What is your current role??
 - a. ☐ Project Coordinator
 - b. ☐ Project Scheduler
 - c. ☐ Assistant Project Manager
 - d. ☐ Project Manager
 - e. ☐ Senior Project Manager
 - f. ☐ PM Consultant
 - g. Others (please state).....
2. How many years of experience do you have in this or similar role?
 - a. ☐ Less than 1 years or less
 - b. ☐ 1-3 years
 - c. ☐ 4-6years
 - d. ☐ 7 and above
3. What is your academic qualification?
 - a. ☐ Diploma
 - b. ☐ O'/A Level

- c. () HND
- d. () First Degree
- e. () Professional Certificate
- f. () Master's Degree
- Others (please state).....

Section B: Variables or factors of effective communication on projects

Please indicate the extent to which you agree or disagree with the following statements which examine the variables or factors of effective communication on projects. Answer by ticking (✓) only one answer in each case. Use the scales below as a rank guide. **5 - SA=strongly agree, 4 - A=agree, 3 - U=undecided, 2 - D=disagree and 1 - SD=strongly disagree**

	Questions	SD	D	N	A	SA
1.	Keeping open communication within the team					
2.	Listening to stakeholders and paying attention for project delivery					
3.	All stakeholders on board during the project planning process and always know in which direction the project is going to go.					
4.	Engaging stakeholders by preparing a strategy to provide the appropriate amount of information and opportunities for involvement.					
5.	Good planning via keeping stakeholders aware of project progress.					
6.	Regular review allows problems to be identified early so that corrective action can be taken to keep the project on track.					
7.	Review also helps team members to learn and improve their skills.					
8.	Strong presentation skills are essential for effective communication of project progress and status.					

Section C: Types of effective communication channels

Please indicate the extent to which you agree or disagree with the following statements which examine the types of effective communication channels utilized by project managers/professionals in the execution of the project. Answer by ticking (✓) only one answer in each case. Use the scales below as a rank guide. **5 - SA=strongly agree, 4 - A=agree, 3 - U=undecided, 2 - D=disagree and 1 - SD=strongly disagree**

	Questions	SD	D	N	A	SA
1.	Budget Spread sheet					
2.	Communication Management Plan					
3.	Daily Progress Report					
4.	Dashboard Report					
5.	Email Tool					
6.	Earned Value Analysis					
7.	Gantt Chart					
8.	Instant Messaging					
9.	Periodic Report					
10.	Project Presentations					
11.	Team Lead's Report					
12.	Project Presentations					
13.	Project Status Meeting					
14.	Release of Press Tool					
15.	Project Calendar					
16.	Project Meeting Minutes					

Section D: Problems associated with effective communication.

Please indicate the extent to which you agree or disagree with the following statements which examine the problems associated with effective communication. Answer by ticking (✓) only one answer in each case. Use the scales below as a rank guide. **5 - SA=strongly agree, 4 - A=agree, 3 - U=undecided, 2 - D=disagree and 1 - SD=strongly disagree**

	Statements	SD	D	N	A	SA
1.	Bad interpersonal relationships					
2.	Failure to assess communication success to gather lessons learned					
3.	Poor audience engagement					
4.	Poor or absent communication with team members and stakeholders can bring a project undone					
5.	Conferred interests and power games					
6.	Variations in perception and standpoint.					
7.	The practice of jargon, unaccustomed and/or practical terms.					
8.	Emotional obstacles and prohibitions					
9.	Physical incapacities such as hearing difficulties or speech hitches					
10.	Physical barriers to non-verbal communication					
11.	Language changes and the trouble in understanding unfamiliar pronunciations.					
12.	Cultural differences					