# Identifying the Communication Competency Behaviors of Mass Housing Project Teams in Developing Countries: An Exploratory Study

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***Abstract***: Even though communication skills is argued as very essential to project team effectiveness, emerging globalization, increased virtuality, interdependence, collaborative and multi-disciplinary nature of project teams underscores for urging need for new strategies and desired communication behaviours that are crucial for organizing projects efficiently towards managerial effectiveness. However, matching communication behaviours of construction project teams to unique project typologies remains a grey area. The aim of this study was to identify the behavioural communication competencies that are very crucial to effective communication performance among mass housing project team. The study adopted a two stage methodological approach involving extensive exploratory review of related literature and qualitative interview. Through an exploratory qualitative enquiry, Task functional communication competencies and Psycho-social communication competencies were identified as essential communication behavioural competencies needed by mass housing project team towards effective communication performance. These behavioural communication competencies are thus very crucial to engender trust, cohesion and collaboration among project teams on mass housing projects. Hence it will be important for practitioners to embrace these skills towards improving communication effectiveness on mass housing projects. These identified factors must be explored further to establish their extent of impact on mass housing project team communication performance.

***Keywords*****:** Communication behavioural skills, communication performance, Mass housing.

## 1. Introduction

Project failures resulting from ineffective communication among the construction project teams continue to saturate current literature. Similarly, in several studies, there is the continuous acceptance and recognition of the importance of communication to the efficient management of construction projects (Knutson, 2001; Dainty, Moore, and Murray, 2006; Henderson, 2008). However, it is striking to note that not much attention has been given to the behavioural aspects of the communication competency (cies) of both the project manager (PM)

and the project team especially in the construction industry.

Communication skills exhibited in the communication process is crucial for project teams to successfully translate task information into understandable instructions necessary to perform project tasks (Reeta & Neerja, 2012). It is affirmed that effective communication behavioural skills remains among the critical generic skills among many professionals in workgroups (Ley & Albert, 2003). Studies by Gorse & Emmitt (2007) and Henderson (2004 and 2008) are the notable studies focusing on the communication behavioural skills of the project team on construction projects. However the shortcomings in these studies are that Gorse & Emmitt (2007) focus on the design phase of the project on 'one off' traditional projects. Similarly, the studies by Henderson (2004 & 2008) paid attention to only the project manager (PM). On the contrary, it is contended that the skills needed by project teams to perform on construction projects vary from one project phase to the other (Ahadzie, Proverbs, & Olomolaiye, 2007). Also, communication tends to be a two way approach involving a sender and a receiver and thus by focusing on only the PM may not engender the needed communication effectiveness across all the project participants. Consequently, it is further emphasised by Ahadzie, Proverbs, & Olomolaiye (2007) that mass housing projects are unique and requires unique managerial skills in its management approach. There is also the need for communication behavioural skills to be matched with projects of unique particularities and features (e.g. mass housing projects). In this regard, the studies by Gorse & Emmitt (2007) and Henderson (2004 & 2008) faces a limitation in its application to mass housing projects. It is also stated that construction communication lies in the human behavioural domain and thus the contextual nature of communication makes behavioural skills very crucial for effective communication performance among the project team (Dainty, Moore & Murray, 2006; Salleh, 2008; Morreale, 2012).

This study adopts an exploratory approach to identify the communication behavioural skills that are very essential towards effective communication performance among mass housing project teams in developing countries. The significance of this skill to the project team is premised on the fact that the communication behavioural competency skills relate to crucial outcomes in project teams (Gorse & Emmitt, 2007). This study forms part of an ongoing study to develop a project team communication performance model for MHPs in developing countries. The focus on MHPs is to make contribution to the sought after solution to the numerous

communication challenges on MHPs delivery in developing countries as captured by Enshassi (1997) and Enshassi, Mohamed & Abushaban (2009).

## 2. Mass Housing Project Delivery in Ghana

Mass Housing delivery in Ghana is currently undertaken by the private real estate organisations that are registered as members of the Ghana Real Estate Development Association (GREDA). A body that seeks to regulate the development of estate housing by the private sector. The delivery approaches by these individual private organizations are unique compared to traditional 'one-off' projects (Adinyira, Ahadzie & Kwofie, 2013). This is confirmed by Ahadzie, Proverbs & Olomolaiye (2007) that MHPs are unique and require unique skills and management approach in its delivery. The uniqueness is seen in its procurement, project teams, geographical extent, labour and artisan arrangements, contractual relationship and heavy involvement of identified prospective owner in the construction process in recent times.

In the Ghanaian context, there are practices where the project team managing the MHPs involves a mixture of persons hired from outside the real estate organization to partner 'in-house' construction professionals. In the labour arrangement, artisans and labourers may also be hired to join 'in-house' artisans in the construction process. These arrangements present different sets of management and delivery challenges. Similarly, in most situations, a MHPs schemes extend across large geographical areas which are under different metropolitan and municipal authority. Varying local authority bye-laws influence activities and management intuitions. In recent times, the delivery of housing units has also shifted from speculative approach to identifying prospective owners before commencing construction. This brings its attendant challenges of heavy involvement and influence of the prospective owners in the contractual arrangements. This uniqueness suggests that unique contextual communication skills are needed.

## 3. Literature Review

The theoretical underpinnings of communication competence lie within the fields of interpersonal and organizational communication within the context of in role functions, teams, organizational context and business and posits that communication behaviouors are the main tenets of communication competence (Salleh, 2008; O'Hair, Friedrich, Wiemann & Wiemann 1997; Spitzberg & Cupach, 1984; Wiemann, 1977). However, defining competent communication behaviors has gained attention in many researches, it still remains a fact that, it is difficult to define and identify the factors of

communication behavioural competencies towards effective communication in any given context. From body of literature, it is very clear to suggest that, several studies have defined attempted to define communication competence from a variety of broad grounded perspectives which includes goals, change, intentions, abilities and skills (see Salleh, 2008; O'Hair, Friedrich, Wiemann & Wiemann 1997; Spitzberg & Cupach, 1984; Wiemann, 1977). In the opinion of O'Hair, Friedrich, Wiemann & Wiemann (1997), the ability of an interactant to choose among available communication behaviors in order to successfully accomplish their own interpersonal goals during an encounter define the behavioural communication competence. Similarly, Spitzberg & Cupach (1984) and Morreale, Spitzberg & Barge (2001) revealed that, expressing knowledge, skills, and sensitivity about the particular and changeable context within which interpersonal communication occurs epitomizes communication competencies.

In emerging studies on construction communication competency behaviours, it is strongly asserted that, communicators must exhibit contextual behaviours that relate to their core task function and likewise those that demystify the social tensions among them (Henderson, 2004 & 2008; Reeta & Neerja, 2012). Against this, it is important for practitioners to continuously trace and identify the critical communication behaviours that enhance the contextual communication effectiveness required on construction projects in ensuring encoding and decoding of related information (Henderson, 2004).

### 3.1 Evolution of Communication Competency

Literature continues to support communication is as crucial and very central to organisational effectiveness and team performance (Gorse & Emmitt, 2007; Madlock, 2008; Henderson, 2008; Limpornpugdee, Janz & Richardson, 2009). It is also emphasized as very important in collaborative task, multi-disciplinary teams and coordination of functions in workgroups (Gorse & Emmitt, 2007; Burleson, 2007; Xiao & Chen, 2009). However, drawing from literature, wide and broad contextual application and definition of 'communication competency' poses a critical challenge in adopting acceptable generic contextual theory in communication competency (Chomsky, 1965; Hymes, 1972; Bagaric and Djinovic, 2007). From literature, two main perspectives seem to advance the development of theory in communication competency scholarships; that is cognitive and behavioural perspectives are the predominant themes in competency theories (McCroskey, 1984; Spitzberg & Capuch, 2002; Spitzberg, 2006;

Salleh, 2008). From the cognitive perspective, communication competency is conceived as being a mental phenomenon distinct and separated from behaviour, where 'knowledge' is seen as the driving and motivating factor towards competency (Chomsky, 1965; Spitzberg, 2006; Morreale, 2012). This approach is widely and extensively explored in linguistic, human communication and psychology (Chomsky, 1965; Spitzberg, 2006).

The behavioral perspective views the effective, appropriate behavioural attributes of the communicators to adapt to the communication tasks as the route to communication competence (Hymes, 1972; Burleson, 2007; Salleh, 2008; Morreale, 2012). It has however been argued that communication and communication competency is situated in the behavioural category and that the route to competency should encompass both cognition and behaviour (Hymes, 1972; Wiemann & Backlund 1980; Salleh, 2008; Morreale, 2012). However, in recent emerging scholarships on communication competency, it has been argued that communication competency is the demonstration of both knowledge and acceptable behavioural attributes appropriate to any communication situation (Salleh, 2008; Morreale, 2009). Alternatively, possession of communication competency or a judgment of the person's competency to communicate in any situation lies in his/her ability to use suitable and appropriate communication skills in the communication task successfully as well as being socially competent. Hence this has been the focus of emerging research in communication competency especially in the construction industry (Gorse & Emmitt, 2007; Henderson, 2004 & 2008). These trends are summarized in Figure 1.0 below:

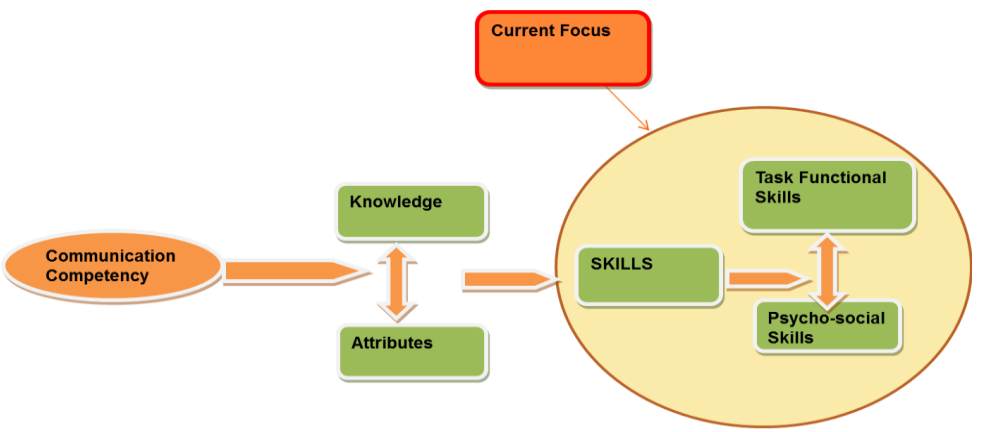

**Figure 1.0: Evolution of Components of Behavioural Communication Competency in the Construction Industry.**

It is strongly asserted that, it is crucial to identify the observable and distinct phenomena that will inform the basis of the choice of theory (Dubin, 1969). In the context of this study, it is clear to state that the key observable and distinct phenomenon is to identify the communication competency (skills) and how they influence communication performance. It is thus summarized as input to output effect. Against this background three main popular theories relating to communication competency were explored. They are 'relational theory', 'expectancy theory, and 'attribution theory' of communication. The relational theory posits that the efficiency of the communication and the communication system (network structure) will be determined by the positional configurations of the interactors in the groups. However, the focus of this theory is on the communication system and not the human communicators. Given that the communication in the construction industry lies in the domain of social interactional behaviours, it thus makes the theory not suitably applicable to the context.

The expectancy theory on the other hand contends that communication competency is always responsive to the expectation of the communicators and that the main driving force towards competency should be the cognitive ability (knowledge) of the expectations (Wilson & Sabee, 2003; Salleh, 2008; Pipsa, 2012). It is however asserted that communication competency lies in both the cognitive and behavioural perspectives and that the cognitive perspective only ignores the social dimensions of communication which is a common feature of construction communication (Salleh, 2008; Wiemann & Backlund 1980). It can be emphasised that, in the practical perspective of most construction environment, social skills are crucial to motivate an atmosphere suitable for the cognitive skills to be fully effective (Salleh, 2008; Reeta & Neerja, 2012).

The attribution theory on the other hand stipulates that the result, explanation or attribution to communication performance outcome can be given to both cognitive and behavioural inputs (skills) of the communication process (Zuckerman & Feldman, 1984; Salleh, 2008; Azemikhah, 2005; Morreale, 2009). That is to say, the cause to communicate effectively will depend on or can be attributed to the inputs behaviours (skills) in the communication process. Alternatively, the more effective a communication is can be drawn from the competency of the communicator (Bagaric & Djinovic, 2007; Salleh, 2008). Given that the

current focus of communication in the construction industry has been to focus on the main critical communication skills towards superior performance (Gorse & Emmitt, 2007; Dainty, Moore & Murray, 2006) and the foundation of the study is to measure communication effectiveness, the theory is most suitable to the research aim.

### 3.2 The Attribution Theory of Communication

It can be said that effective communication behaviours (skills) will motivate effective communication performance (Salleh, 2008; Burleson, 2007; Gorse & Emmitt, 2007; Pipsa, 2012). Also, individual competencies are the fundamental building blocks of team or organisational competency (Succar, Sher & Williams, 2013) and that when individuals develop their competency in any context, it will motivate superior outcomes. Adopting the 'Attribution theory' as extensively applied to communication and other disciplines, the theory posit that communication performance lies in the 'causal locus' domain and that the efficiency of the communication outcome will always depend on the competency input in the communication task (Peacock, 2010; Weiner, 2006; Hsieh & Schallert, 2008). This explained further, the theory attributes communication performance outcome to the communication competency input as the casual locus for success or failure in a given context (Weiner, 2006). In the study by Dornyei & Murphey, (2003) and Hsieh & Schallert, (2008), in any communication context, the causal locus input precipitating the communication performance outcome can either be internal or external. The internal aspect deals with the ability possessed by the communicator whereas the external deals with the communication task environment and the nature of the task. Against this, it is strongly suggested that the internal causal locus are most critical and has the potential to moderate the impact of external factors if developed effectively (Weiner, 2006). The key concept of the attribution theory is operationalized in the framework below:

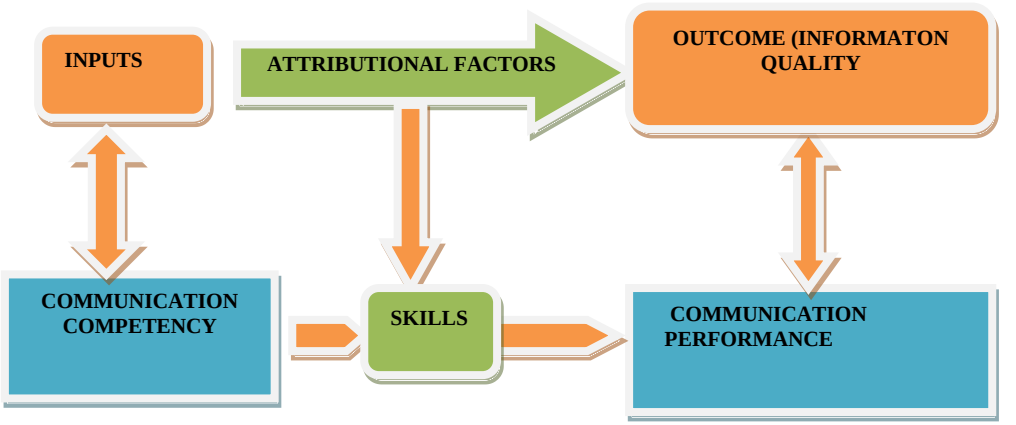


**Figure 2.0: Representation of the Attribution Theory for Communication Competency Source: Kwofie et al., (2014).**

Against this background, it can be said that individuals communication competency is the single crucial ability needed for superior communication performance in any context (Henderson, 2008; Weiner, 2006; Ong, 2006). Again, in normal domain of performance measures in human resource genre, training and development, the focus has shifted from knowledge to the identification of specific skills or abilities that are able to motivate superior results (Azemikhah, 2005; Henderson, 2004; Mirahmadi, Jalilzadeh & Nosratzadeh, 2011 ). This is supported by the 'Skill Acquisition Theory' that skills offer superior and quicker results as people adopt to skills faster than obtaining knowledge (Mirahmadi, Jalilzadeh & Nosratzadeh, 2011). The focus of communication competency on behavioural skills rather than knowledge makes the paradigm very contemporary and ties with communication being the absolute superior competency of executive officers in management function (Henderson, 2004).

Project team participants must possess two unique behavioural communication skills to be able to influence the needed performance on projects (Reeta & Neerja, 2012; Gorse & Emmit, 2007; Dainty et al., 2006; Salleh, 2008; Morreale, 2012; Abbasi, Siddiqi & Ain-Azim, 2011). Hence being competent to communicate in the construction industry context, one must possess the requisite and appropriate skills to communicate the project information related to his task or function as either project manager, architect, engineer etc (see Reeta & Neerja, 2012; Gorse & Emmit, 2007; Dainty, Moore & Murray, 2006; Salleh, 2008; Morreale, 2012). Similarly, by drawing on the background that construction communication lies in the social behavioural domain (Salleh, 2008) coupled with the multi-disciplinary

nature of construction projects and the growing virtuality of projects, social communication skills have also been identified as very critical to precipitate the needed atmosphere for the success of the functional task skills (Leban & Zulauf, 2004; Burleson, 2007; Pitts, Wright & Harkabus, 2012). From this, it can be summarized that, two main communication competency skills are identified in the study as critical towards communication performance. Hence for project teams to communicate competently, they must possess two main behavioural communication skills being functional task skills and psycho-social skills. This is illustrated in Figure 3.0.

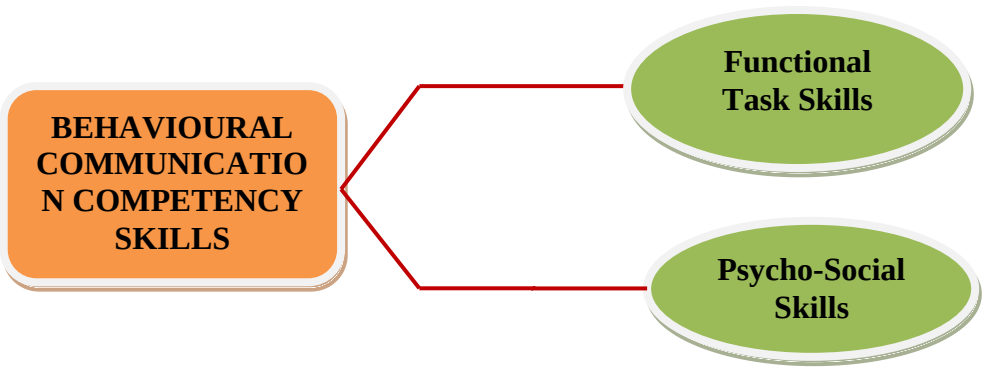


**Figure 3.0: Components of Project Team Behavioural Communication Competency**
**Source: Authors' Own Construct**

## 4. Methodology

A mainly an exploratory qualitative inquiry approach was adopted as this kind of inquiry is well noted for its appropriateness for exploring and understanding the meaning individuals or groups ascribe to a phenomenon (Creswell, 2009). It is also inductive related to theory and literature and thus additionally, it usually involves emerging questions and procedures, with data typically collected in the participant's setting, data analysis building from particular to general themes, and the researcher making interpretations of the meaning of the data (Creswell, 2009). The study adopted an exploratory approach is in congruence with similar approach in general body of literature (see Monge, Bachman, Dillard, & Eisenberg, 1982; Scudder & Guinan, 1989; Doumont, 2002; Madlock, 2008; Ley & Albert, 2013). The exploratory approach was conducted in two stages which entailed a thorough and critical review of related literature in the first stage. The second stage involved an interview of key expert in communication and mass housing management to aid

operationalizing and agreement on the key themes from literature as recommended by Ley & Albert (2013) and Creswell (2009) in mixed methods and exploratory studies.

In the first stage, thorough and critical reviews of literature identified two major communication behavioural competencies models as very relevant for the study and were thus adopted. These were the communication competence scale by Monge, Bachman, Dillard, & Eisenberg (1982) and the Workplace Communication Behaviors (Keyton, Caputo, Ford, Fu, Leibowitz, Liu, Polasik, Ghosh, & Wu, 2013). Monge, Bachman, Dillard, & Eisenberg (1982) developed a twelve (12) factor competence scale for measuring the communication competence at the workplace in business organizations. This model has seen wide and extensive adoption and usage in communication competency identification and measures (see Scudder & Guinan, 1989; Doumont, 2002; Madlock, 2008). Studies by Henderson, (2004) and Krahn & Hartment, (2006) applied the model in a project management environment and the result showed that it support team satisfaction and productivity among project teams. Karahn & Hartment, (2006) also determined that verbal and oral skills of the project manager are the most critical in enhancing his leadership skills.

Keyton, Caputo, Ford, Fu, Leibowitz, Liu, Polasik, Ghosh, & Wu (2013) also developed the work place Communication Behaviour. Their studies focused on verbal (written and spoken) communication competencies and identified 30 verbal workplace communication behaviours in team function in organizations. The findings affirmed that verbal (written and spoken) communication competencies are critical to organisational workplace team success and thus must be developed. This model is also very relevant and was adopted. The adoption of these models were underpinned by the theoretical fact that, in the practical and theoretical perspective of communication in the construction industry in developing countries, verbal communication forms a greater proportion of the communication among the project teams and thus teams must exhibit both task and social behaviours to ensure communication effectiveness. Additionally, in the Ghanaian context, verbal communication in the construction environment is culturally influenced and remains a source of conflict and friction among project teams. Drawing on the theoretical and practical perspective of the nature of communication in the construction industry and given that the focus of this study is situated on mass

housing projects, the adopted models by Monge, Bachman, Dillard & Eisenberg (1982) and Keyton, Caputo, Ford, Fu, Leibowitz, Liu, Polasik, Ghosh, & Wu (2013) were conceptualized and operationalized to reflect the mass housing project environment.

The second stage of the exploratory approach involved a thorough interview with 10 mass housing project consultants and communication experts selected by purposive sampling through who have been involved in major mass housing projects in Ghana from the late 1980s. The communication experts have also had extensive experience in teaching of communication at the tertiary level. Their suitability to contribute to the study stems from the fact that they have had extensive experience in MHPs in Ghana on schemes that have been regarded as very successful acting as consultants and teaching (see Ahadzie & Amoa-Mensah, 2010; Amoa-Mensah, 2003). The interview was to elicit their agreement on the communication skills identified as being peculiar to mass housing context and deemed as very crucial towards communication effectiveness among the project team. Additionally, they were to also suggest other communication behaviours they perceive as very important which the adopted models may have overlooked. This yielded twelve (12) suggested communication skills as asterixed (*) in Table 1.0. These skills were perceived as encoding and decoding based on the main functions of sending and receiving communication information in the communication process as espoused by Henderson (2004 & 2008).

## 5. Results

### 5.1 Demographic information

The interviewees (respondents) involved seven mass housing practitioners as being consultants (3) architects (2) and Quantity surveyors (2) and three communication experts as lecturers in a University in Ghana. Averagely, the respondents in mass housing development have had approximately 15 years of experience whereas those in teaching 5 years in teaching and practice. The respondents showed extensive understanding of the encoding and decoding tasks in communication and thus critically considered and evaluated the identified behaviours in their responses as well as in their suggested behavioural competencies.

### 5.2 Behavioural Communication Competencies

Following the encoding and decoding tasks functions in the communication process, the respondents generally agreed and affirm the task functional communication behaviours and psycho-social communication behaviours as being very crucial and relevant. From this perspective, they further agreed and identified

ten (10) task functional behavioural competencies that are very necessary to perform the encoding of project related information to aid understanding. Additionally, eight (8) competency behaviours were identified as decoding task functional skills. In the opinion of the respondents, they affirmed that, the psycho-social behaviours were very crucial towards team cohesion, respect and trust among the project team. However, the experts in communication expressed concern that though these are important, they are not integrated into the training of the construction professionals. In respect of the pyscho-social behaviours twenty one skills were identified for encoding and eleven for decoding pscho-social behaviours in mass housing team communication. This is summarized in table 1.0.

| FUNCTIONAL TASK BEHAVIOURAL SKILLS | PSYCHO-SOCIAL BEHAVIOURAL SKILLS |
|---|---|
| **Functional Task Communication Skills (Encoding)**<br>o Ability to use language accurately to communicate project related information very well<br>o typically gets right to the point precisely in communicating project related information<br>o Writes efficiently and a way that is easy to understand.<br>o Expresses his/her ideas clearly<br>o not difficult to understand when s/he speaks<br>o generally says the right thing at the right time<br>o Deliver accurate change request on time<br>o Ability to use specific technical vocabulary and genre conventions correctly<br>o Ability to communicate accurate and complete drawings*<br>o Technology-mediated skills*<br><br>**Functional Task Communication Skills (Decoding)**<br>o Ability to pay attention to detail of what is being communicated verbally, written and | **Psycho-Social Behavioural Skills (Encoding)**<br>o Being very sensitive to the needs of others' of the moment.<br>o Be able to deal with others effectively<br>o willingness to share required information<br>o Ability to agreeing with team in discussions<br>o Being very polite in communicating information<br>o Ability to share communicated information with honesty<br>o Problem solving and conflict resolution skills<br>o Show open-mindedness and non-judgmental attitude<br>o Motivation and willingness to communicate with the subordinates<br>o Being assertiveness in communication process<br>o Being Trustworthy in communicating with team<br>o Ability to effect goal and ethics-oriented motivation in the communication<br>o Planning and preparing well for meetings, discussions and writings<br>o Adjusting to changing situations |

| | |
|---|---|
| non-verbal<br>o Being a good and effective listener<br>o Ability to ask precise questions to aid understanding of communicated information<br>o Following directions and instructions correctly<br>o Evaluating information accurately to offer accurate feedbacks<br>o flexibility and tolerance towards others<br>o Technology-mediated skills to access communicated information**<br>o Ability to read and understand drawing information** | o Persuading and engaging team participants**<br>o Being cheerful in giving advice and information**<br>o Ability to control emotions in discussions and written information**<br>o Greeting others in team at meetings and discussions**<br>o Ability of showing respect to team members in sharing information**<br>o avoiding offensive language in sharing information**<br>o Ability to use non-verbal cues correctly and appropriately**<br>**Psycho-Social Behavioural Skills (Decoding)**<br>o is easy to talk to<br>o usually responds quickly to messages<br>o Cooperating effectively with team members<br>o Showing honesty in information received<br>o Open-mindedness and non-judgmental attitude<br>o Showing trusting ability<br>o Adjusting to changing situations<br>o avoiding offensive language in giving feedback<br>o Ability to read and understand non-verbal cues<br>o Ability to control emotions in discussions, giving and interpreting information** (emotional intelligence)<br>o Greeting others and responding to greetings** |

**Source: Adapted after Monge, Bachman, Dillard & Eisenberg (1982) & Keyton, Caputo, Ford, Fu, Leibowitz, Liu, Polasik, Ghosh, & Wu (2013) ** Twelve (12) Behavioural Communication Competency Skills suggested from the Interview conducted**

## 5.3 Discussion of Findings

Project teams must adapt and use enhanced communication skills to overcome myriads of challenges they encounter in collaborative, multi-disciplinary, cross-functional interdependent project based environment for effective

communication performance. The study has revealed and affirmed Functional Task Communication Skills and Psycho-Social Communication Skills as two main critical communication behavioural competencies necessary for the encoding and decoding communication towards effective communication among mass housing project teams. The qualitative interview further suggested twelve (12) behavioural competencies critical to mass housing project teams as 'ability to communicate accurate and complete drawings', 'technology-mediated skills to compose and access communicated information', 'ability to read and understand drawing information' that relate to their functional task skills and 'persuading and engaging team participants', 'being cheerful in giving advice and information', 'ability to control emotions in discussions and written information', 'greeting others and responding to greetings in team at meetings and discussions', 'ability of showing respect to team members in sharing information', 'avoiding offensive language in sharing information', 'ability to use non-verbal cues correctly and appropriately', 'ability to control emotions in discussions, giving and interpreting information', 'greeting others and responding to greetings' composing the psycho-social skills of the mass housing project team.

### 5.3.1 Functional Task Communication Skills

Mass Housing projects entails the development of schemes with repetitive designs and concurrent engineering elements (Ahadzie, 2007; Zairul & Rahinah, 2011) in their contract packaging undertaken by single contractor or several contractors on individual or sets of units. Consequently, these repetitive designs maybe designed by project team belonging to developing real estate organization or exclusively external professionals or a combination of internal and external professionals. A common difficulty often encountered in such arrangements is design information and decisions having to travel across a long communication chains and channels involving all these professionals (Enshassi, 1997; Zairul & Rahinah, 2011). This frequently results in incomplete designs, delays in completing designs for housing schemes as reported by El-Saboni, Aouad, & Sabouni, (2009). Subsequently, some housing units are begun with incomplete design documentations. Also variations in the design communication skills architecturally from outside the real estate organization also compound the problems in the interpretations of the design. This development makes the 'ability to communicate accurate and complete drawings' a critical skill among the MHPs project team. The revelation of this skill is in congruence with

suggestion by Mead (1999) as being very critical to communication effectiveness in construction project delivery. Indeed the importance of this skill is also seen in the ability of the recipient of the communicated documents to accurately interpret and use. Unfortunately, most of the masons and artisans engaged on MHPs in Ghana cannot read and write which results in wrong interpretation of drawings and Bill of Quantities (BOQs) leading to contractual disagreements and increased reworks.

The mass housing projects design and management make use of skill related softwares and technology that facilitates the sharing of project related information. It is emphasized that skills that are related to the use of these technology to send and receive information is very essential (Mead, 1999). Technology-mediated skills were identified as the encoding functional task skills whereas ability to read and understand drawing information as the decoding functional task skills. According to Mead (1999), the development of skills that facilitate the use of intranet and groupwares are critical to effective communication among project team. The emphasis as gathered from the practicing consultants is that this skill facilitates communication as well as improving documentation and record keeping in the Ghanaian industry.

### 5.3.2 Psycho-Social Communication Skills

Project teams must possess social skills that are able to motivate integration, satisfaction, respect, trust and effectiveness (Spitzberg & Cupach, 2002; Salleh, 2008; Henderson, 2008; Burleson, 2003). Adequate level of psycho-social skills is critical and thus precipitates satisfactory outcomes especially in cross-cultural, multi-disciplinary interdependent project environments as this tends to reduce barriers while communicating and collaborating across functions and task and across companies and organisations (Reeta & Neerja, 2012). According to Dulewicz & Higgs, (2000) and Leban & Zulauf, (2004), psycho-social communication skills are critical towards integration and team effectiveness in virtual project teams.

Indeed, the study revealed showing respect, being cheerful, control over emotions, being persuasive greeting, and correct use of non-verbal cues as key social skills amongst the project teams on MHPs. This findings indeed support and affirm the significance of certain behavioural skills such as trust, respect as very significant in team functions and organizations as revealed by Madlock (2012) and Krahn & Hartment (2006). The import of this revelation is that, traditionally in the Ghanaian

context, greetings, respect and verbal cues are elements that are culturally laden. In some areas, it is a taboo not to greet and worse not to greet an elderly. Mass Housing project teams in Ghana exhibit strong cultural influence fueled by age, tribe and status in society. Often, when one does not respond to greetings it is interpreted as there is conflict among them and are serious matters that need to be resolved. Arguments are also considered as a ground for fueling conflicts among teams by the words used, posture, gestures and body language. As argued through the practical experience of the consultants, wordings of letters written to contractors on housing scheme become a source of conflict as it is interpreted as being reported to the client. It is thus emphasized that, for project teams on mass housing to be effective and communicate efficiently, it is considered crucial for team members to develop their social skills by showing outmost respect and honour to each other especially the elderly, control emotions and be very polite in their request and instruction and finally, ensure friendly atmosphere at meetings.

## 6. Conclusions and Recommendations

Through an exploratory study, two main behavioural communication competencies have been identified as very important for effective communication performance on mass housing project delivery. These were 'Functional Task Communication Skills' which relate to the behavioural skills needed by project teams to effectively communicate information related to their domain tasks. The Psycho-Social Behavioural Skills was the second behavioural skills needed by mass housing project teams to engender the needed communication performance on mass housing. By the two main communication tasks in the communication process, the encoding and decoding skills under these broad behavioural factors have also been identified (see Table 1.0).

Furthermore, twelve (12) competency skills yielded from the qualitative interview. This confirms the fact that theoretically, social skills are crucial to the project setting in the Ghanaian context. Respect, trust, honour are key cultural values that plays critical roles in maintaining relationships in team based organization (Thuillier & Diallo, 2005; Henderson, 2004). Also the emergence of skills in the use of technology further cement that technology is important to communication effectiveness (Mead, 1999) and thus communication is human task and thus the technology used must accurately be put to function by the communicators. By contextually operationalizing the results from the exploratory study based on the practical, theoretical and cultural perspective of the construction

industry (mass housing), the main items of Functional Task Communication Skills and Psycho-Social Communication Skills are identified in Table 1.0.

Managerial inefficiencies and communication ineffectiveness remain the predominant challenges on mass housing projects in developing countries (Ahadzie & Amoa-Mensah, 2010; Enshassi, 1997). Against this background, it can be said that one such significant recommendation from this study is further research aimed at investigating and exploring the nature and extent of influence of these skills on communication performance among mass housing project teams. Indeed, it can be rigorously and empirically explored to identify the skill items that are the predictors of communication performance among the mass housing project teams. Secondly, by El-Saboni, Aouad & Sabouni (2009) emphasized that communication behaviours are good predictors of process success due to the inherent correlation between communication and project performance. Hence, construction project teams are also encouraged to yield themselves to continuous professional development to acquire and improve these skills in their project delivery. Additionally, given the seemingly lack of integration of communication skills in the training curriculum of construction professionals especially in developing countries, it is thus significant for curriculum review to embrace this aspects towards effective construction communication.

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