UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

EFFECTS OF ORGANISATIONAL COMMUNICATION ON ADMINISTRATIVE PERFORMANCE OF STAFF IN THE UNIVERSITY OF EDUCATION, WINNEBA

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EFFECTS OF ORGANISATIONAL COMMUNICATION ON ADMINISTRATIVE PERFORMANCE OF STAFF IN THE UNIVERSITY OF EDUCATION, WINNEBA

BY

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THESIS SUBMITTED TO THE FACULTY OF AGRIBUSINESS AND COMMUNICATION SCIENCES, UNIVERSITY FOR DEVELOPMENT STUDIES, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DOCTOR OF PHILOSOPHY IN INNOVATION COMMUNICATION

APRIL, 2019
CANDIDATE’S DECLARATION

I hereby declare that this thesis entitled “Effects of Organisational Communication on Administrative Performance of staff in the University of Education, Winneba” is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere:

Candidate’s Signature : ……………………………….. Date:………………

Baba Charles Campion
SUPERVISORS’ DECLARATION

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University for Development Studies.

Principal Supervisor’s Signature: ……………………Date:…………………..
Dr. Francis. K. Obeng

Co-Supervisor’s Signature: …………..……………………………..Date:…………………..
Prof. Amin Alhassan
Communication in a multi-campus University is perceived to be riddled with delays, distortions, high cost or reduction in quality of information flow within and/or across campuses and consequently affect performance. The study examined the effects of organizational communication on administrative performance of staff in the University of Education, Winneba, Ghana with the application of the System theory and a developed conceptual framework. The mixed research design was used and a multistage sampling technique was applied with staff. Questionnaires were administered to over 400 staff out of which 309 (77.3%) questionnaires were returned. Descriptive and inferential statistics such as percentages, means, factor analysis, cluster analysis, chi-square, t-test, correlation and F-test were used to analyse the data with the use of SPSS software version 18.0 and Microsoft Excel. The results revealed that staff generally perceived the communication system in the University to agree with a grand mean value of 3.86 which is equivalent to “Agree” on the response scale. The two step cluster analysis revealed four groups of employee cohesion patterns, and the factor analysis also revealed four independent communication constructs; group cohesion. The rotated factors showed four major constraints: Human, Communication Systems, Administrative and Structural. The researcher concludes that significant differences do not exist in the patterns of communication among campuses of the University. This means that a congenial managerial communication system is likely to improve the organisational environment. It is recommended among others that standardisation and decentralisation in administration and management should be encouraged by management of the University and various campuses given some autonomy to enhance performance. For feedback, acknowledging good performance, periodic progressive conversations to enhance policy direction in communication, there is the need to upgrade the knowledge and skills of staff through appropriate training.
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DEDICATION

To the memory of my late parents (Mary and John) who I consider the first communicators and who instructed me; ‘Baba, go to school!’- My source of hope and inspiration.
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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

In any work setting and indeed among humans, effective communication flow could enhance administrative performance between staff members and management of the organisation. Communication allows organisations to exploit the value that information for proper functioning, effective and efficient performance, competitiveness and continued success. Communication in every organisation is a critical resource for performance. Effective communication takes place when there is a perfect convergence in meaning between the sender and the receiver. Wright (2005) stressed that communication in organisation is the development of a common understanding between the communicator and the manager or practitioner about the existence and utility of an innovation, leaving the same encounter with different perceptions of that encounter. Morrison (2014) also indicated that of all the life skills available to us, communication is perhaps the most empowering in work settings. It is therefore imperative to view organisational communication as process with the embodiment of social units formed by individuals with different views and knowledge aimed at a common goal through establishing links with external world with the information they gained from the environment.

According to Adereti, F. O., Fapajuwo, O. E. and Onasanya, A. S. (2006), it is when data has been put into a meaningful and useful context that one can say communication has taken place with another and a decision is made. Samuel (2001) indicated that information on the other hand is data for decision-making
collected as a resource and passed on as acquired and used to make an informed decision. Consequently, accessing communication is implicit across organisations, while disseminating information is explicit to staff. This implies that communication could constitute a great asset to organizations if the appropriate quantity and quality of information obtained is seriously considered. Shoveller (1987) posited several reasons for distortion in organisational communication resulting in communication dissatisfaction which includes: individuals failing to accept the responsibility to communicate and the lack of interest on the part of the receiver as well as non-convergent in meaning of what are being communicated. Cramton (2001) indicated that management of knowledge resources for knowledge workers in different locations is often difficult than management of centralised knowledge workers. For instance, in some organisations with dispersed centers or branches, members often face difficulty or inability to create and maintain mutual knowledge and understanding about work-related issues. This may thus cause misunderstanding, distrust or even frustration among staff of the organisation.

The perception of organisational communication is also considered as the way people view and feel about communication. According to Akinsorotan (2001), perception is a psychological reasoning or conclusion drawn from observing a given phenomenon following experience or prevailing conditions. It is an active cognitive process, a mechanistic system fixed by inherent structure of the nervous system. Poon (2002) stated that several factors, including strength and quality of stimuli, attention, cognitive style, arrangement of subject matter, the experience of the child, physical and emotional health, mood of individual and
other factors influence the perception of the individual at work. Furthermore, personal factors such as attitudinal needs, values, credit, situational factors (like work ambiguity, climate and financial factors) could also influence perception of the individual. Hinkson and Keith (2000) indicated that the individual’s current appraisal of an object is his perception. It is therefore recognised with social psychologist around the world that perceptions towards work activities including organisational communication affect responses on how people speak, think and view situations in general. Hence, the perception of organisational communication could facilitate or slow the flow of information in a given environment. The flow of information in organisations depends on the necessary tools available to ensure that staff who communicate adhere to the standards and regulations that are embraced by members in the organisation. In the University set up, the effectiveness of organisational communication on administrative performance could be complex most especially in a multi-campus institution like the University of Education, Winneba (UEW).

1.2 Nature of Multi Campus Institutions

Holland and Sullivan (2005) indicated that a multi-campus institution most often has a complex and challenging administrative perspective. A typical multi campus institution with its mission drives the policies, practices, services, and organisational structure at each campus. Campuses that are part of a large University system generally have diverse student populations, including those from senior secondary schools, moving through a four-year program, or matured students who are much older and employed. In addition, individual campuses and their schools/faculties, typically develop business processes at different
times using a variety of systems. For instance, different tuition and fee, academic year calendars, human resource policies and communication issues vary too. These differences could result in a large diverse constituency that takes into consideration uniformity in communication and general implementation of activities.

In a related study, Yingxian-Zou (2011) pointed out the disadvantages of multi-campus University in China to include: less exchange between teachers and students, the time wasted on the way for teachers, the additional traffic costs for the universities and the environmental pollution caused by additional traffic among campuses. In Xi’an Jiaotong University with four campuses at Xingqing, Qujiang, Yanta and Caotan, many lecturers move from one campus to another in long distances with traffic issues every day. Besides these distances, delays and time wasted are huge cost associated with claims from staff on fuel and hotel bills.

1.3 The Multi Campus University System in Ghana

One of the few multi-campus universities in Ghana is the University for Development Studies (UDS), Tamale in the Northern Region. UDS was established in 1992 as a multi-campus institution and as the fifth public University in Ghana. It was created within the four northern regions of the country in mind, which deviates from the usual practice of having universities with central campuses and administrations. The Brong Ahafo Region, Northern Region, Upper East Region and the Upper West Region were to accommodate UDS under decentralised administrative structures with the Deans forming
constituent campuses. This novel experiment brought along with-it certain challenges to educational administrators, teachers, learners and surrounding communities. Similarly, the NIIT in Ghana (now known as Blue Crest College) has also forged an alliance with other partner institutions like the UEW in Ghana for students to acquire degree in IT without leaving the country. With this, are large populations of students with Campuses spread throughout six regions of Ghana to train IT professionals.

1.3.1 UEW as a multi-campus University

The University of Education has four campuses in Ghana, namely: Winneba, Kumasi, Mampong and Ajumanko.

1.3.1.1 The Winneba Campus

The Winneba Campus which is the main campus of the University is spread over three sites (North, Central and South) within the Winneba Municipality. The Central Administration of the University is located at the South Campus. The Winneba Campus host the following Faculties, Schools, Institute, Centres and Offices: Faculty of Educational Studies, Faculty of Languages Education, Faculty of Science Education, School of Creative Arts, School of Research and Graduate Studies, Institute for Educational Development and Extension (IEDE), National Centre for Research into Basic Education (NCRIBE), Centre for School and Community Science and Technology Education (SACOST), Centre for Hearing and Speech Service (CHSS), Office for International Relations, Office for Institutional Advancement, Gender Directorate, Counseling Centre and Educational Resource Centre.
1.3.1.2 The Ajumako Campus
The Ajumako Campus currently hosts the first-year students of the Development of Akan-Nzema Education of the Faculty of Languages Education. Gradually the Faculty of Languages Education will move from Winneba Campus to the Ajumako Campus and will eventually become the College of Languages Education.

1.3.1.3 The Asante – Mampong Campus
The Asante – Mampong Campus hosts the College of Agriculture Education and is situated 51 kilometers north-east of Kumasi. The Asante – Mampong Campus is the home of the faculty of Agriculture Education Agriculture Education.

1.3.1.4 The Kumasi Campus
The Kumasi Campus which hosts the College of Technology Education of the University of Education, Winneba became part of the University of Education Winneba in 1996 following the Educational reforms carried out by the Ministry of Education in 1992 by the PNDC Law 322, 1992. The college hosts three Faculties: Faculty of Business Education, Faculty Technical Vocational Education and Faculty of Education and Communication Sciences. The College has a total of six departments, Teacher Training Unit and African Studies Unit, a main library, departmental and hall libraries and two halls of residence; namely, Opoku Ware II Hall and Atwima Hall.

The campuses of UEW are satellite in nature and their spatial nature has the potential of posing challenge to effective communication. These campuses rely
on means of communication with networks of technology available, staff support, laid down procedures and patterns, and even means of transport (vehicles). Considering the volume of teaching and learning activities and the growing numbers of student’s vis a vis the limited resources available, UEW current communication systems have a challenge.

1.4 Nature of Communication in UEW

University as a center of knowledge requires information generation and dissemination. It is a complex environment, yet academically structured system with strict regulations in communication. Some tertiary institutions in Ghana, whether public or private, run multi-campus satellite system. The University of Education, Winneba (UEW) in Ghana is one of such institutions with satellite campuses that maintain statutory functions of ensuring that information is well accessed and disseminated to both staff and students by instituting appropriate organisational communication system; notwithstanding the distance among campuses. At the UEW, communication involves the transfer of information and exchange of facts, ideas, opinions and emotions and obtaining feedback among and between staff and students. Hence, staff may transmit information and obtain feedback, indicating their understanding or lack of it and confirmation. Poor communication could result in interpersonal conflict and affect output. Staff within the University system usually spends time working and communicating by speaking, reading, writing and listening and through the hierarchy of structure as routine. Other systems of communication in the University are the upwards, downwards and horizontal communication. In the University for instance, communication takes place between the Deputy
Registrars, the Heads of Department and Management and among staff at all levels. Communication that flows ‘downwards’ from superior to subordinates is referred to as downwards communication; and ‘Upwards’ communication is when communication is passed on to members of the management team, from staff of a lower level. Upwards communication gives employees the opportunity to express their concerns, problems and anxieties and find solutions that may enhance job effectiveness and efficiency. Other forms of communication in the University include: face-to-face, on telephone, at meetings, the use of fax, campus radio and more recently, the electronic mail, teleconferences and voice mail. Some other internal means of communication include: memoranda, notices, circulars, minutes of meetings and the University journals. Keeping in view the importance of organisational communication, this study was conducted to examine the effects of organisational communication on administrative performance at UEW, Ghana which runs multi-campus system in Winneba (main campus), Kumasi, Mampong-Ashanti and Ajumako.

1.5 Statement of Problem

The multi-campus nature of UEW presupposes that regular, prompt and effective communication among staff of the University could be achieved to support the realisation of her mission (to train competent professional teachers for all levels of education as well as conduct research, disseminate knowledge and contribute to educational policy and development) and vision (to be an internationally reputable institution for teacher education and research). The result of such vision could encourage standardisation and effective processes in delivery, resulting in cost reduction and quality promotion. Apart from that,
University could employ other alternative channels of information flow, allowing for more open communication between individuals and group members in the University (Argenti, 2003). Despite the important roles’ communication play in the development of every institution, communication in a multi campus institution is perceived by staff as being poor resulting in a gulf in information flow and delay or distortion (Holland and Sullivan, 2005). One potential setback of such challenge is that the University could easily lose sight of its mandate (Adereti et al., 2006), and sometimes could create myriads of communication arc, for instance between the management (the sender) and staff (the receiver) and the vice versa (Yingxian-Zou, 2011). These communication problems could have adverse effect on administrative performance (office management skills, leadership and personal effectiveness, managing conflict, project management, planning events and utilizing office technology), causing frustration and erode good will (Holland and Sullivan, 2005). Since the establishment of the University, there has not been any known empirical study to ascertain the effect of organisational communication on administrative performance of staff in the University. It is against this backdrop that this study sought to determine the effects of organisational communication on administrative performance of staff at the University of Education, Winneba (UEW), Ghana.

1.6 Research Questions

1.6.1 Main Research Question

The main research question that guided this study was stated thus:
What are the effects of organisational communication on the administrative performance of staff of UEW?
1.6.2 Specific Research Questions

Specifically, the study sought to find answers to the following questions:

- What is the perception of staff on the nature of communication in the University?
- How does the present nature of communication in the University affect administrative performance?
- How does staff perception of organisational communication affect group cohesion of staff?
- What are the constraints militating against communication flow in this multi-campus University?
- How does the demographic characteristic of staff influence communication in the University?

1.7 Objectives of the Study

1.7.1 Main Objective

The main objective of the study was to assess the effects of organisational communication on administrative performance at the University of Education, Winneba, Ghana.

1.7.2 Specific objectives

The specific objectives are to:

- Ascertain staff perception of the nature of communication in the University;
- Examine the effect of organisational communication on staff administrative performances;
• Determine the effect of organisational communication on group cohesion;
• Ascertain the constraints militating against organisational communication in
  the University; and
• Determine the effect of staff demographic profile on organizational
  communication in the University.

1.8 Justification for the Study

Effective communication forms an integral part of enhancing administrative
performance in educational institution. Since the inception of UEW in 1993, the
tripodal mandate of teaching, research and community services seems to be
undertaken within the University catchment areas at Winneba, Kumasi,
Mampong and Ajumako. However, there had neither been empirical study on
the nature of communication within the University nor examination of the
administrative performance of staff in the system. This is without prejudice to
the fact that the campus-wide nature requires interplay of communication to
enhance and maintain academic milieu on the campuses; and how it affects
performance. To this end, it is imperative to document the effect of
organisational communication on administrative performance the UEW in terms
of perception of staff at this time, since it could have the potential to impact on
staff pattern of behaviour. The outcome of the study could create an institutional
framework for information flow and further engender a two-way communication
between management and staff, staff and management, or even among staff in
the University. Recommendations from the study could guide policy
formulation in the University as it relates to communication. Furthermore, the
study would contribute to knowledge in development communication.
1.9 Hypotheses for the Study

The following hypotheses for the study were tested in null forms as follows:

**H₀₁**: There is no significant difference in the effectiveness of organisational communication among various campuses.

**H₀₂**: There is no significant relationship between staff profile (location of campus, age, sex, ethno-linguistic, rank/title, marital status, tenure-years in office and educational qualification) and effectiveness of organisational communication.

**H₀₃**: There is no significant difference in effect of communication on group cohesion among various campuses.

1.10 Delimitation of the Study

The scope of this study was narrowed down to the University of Education, Winneba and limited to staff. Geographically, the study focused on the four campuses at Winneba in the Central Region, with six faculties, the Ajumako Campus with the Faculty of Languages and in the Central Region, the Kumasi Campus in Ashanti Region with three faculties which house the College of Technology Education and the Mampong-Ashanti Campus also in Ashanti Region with two faculties and house the College of Agriculture Education.

1.11 Operational Definition of Terms

- **Information**: This is processed data that have been verified and organised for a specific purpose and presented within a context that gives meaning and understanding.

- **Effective Communication**: This is the process of conveying more meaningful information from a sender to a receiver through a channel with a
view to arriving at a convergence in meaning for a feedback and feed forward.

- **Perception:** This is the way and manner staff feel about something or a situation. It is a psychological reasoning or conclusion drawn from observing a given phenomenon following experience or prevailing conditions.

- **Administrative performance:** A systematic approach to improving the efficiency and advance the potential of individual through step-by-step office management skills, demonstrating leadership and personal effectiveness, managing conflict and projects, planning events, and utilizing office technology.

- **Organisational communication:** This is the process of creating and exchanging opinions or information at the work settings by creating conducive atmosphere for information flow among staff of the organisation.

- **Staff:** This is an official designation to title of membership, belongingness, a social rank or a degree of social prestige supporting professional development goals and well-being of the work. Staff here will center on working colleagues (junior staff, senior staff and senior members) irrespective of the position or title one occupies.

- **Group cohesion:** This is the degree to which a number of people constantly work together in a given environment for the achievement of a common goal.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter extensively reviewed literature on communication and information theories, barriers to communication, staff communication needs, bureaucracy, organisational structure and more importantly, adopted both the theoretical framework (systems theory) and the conceptual framework of communication. Some empirical literature on communication models were evidence of what existed and those parts the researcher believed were particularly relevant to this study.

2.2 Concept of Communication
Communication is derived from a Latin word ‘Communicare’ which means to make common, to share, to impart or to transmit. Today, the idea of “sharing” is still the core of communication. Simply put, communication is the process of conveying message from one person to the other, with the recipient of the massage understanding the content and the meaning of the message (Rouse and Rouse, 2005). According to Barth (2003) communication touches every sphere of human activity and it is an important instrument of social interaction. Communication provides a means by which people in business, industry, politics and the professions act and interact; exchange information and ideas; develop policies, plans and proposals; make decisions and manage people and materials. Barth (2003) argued further that, in both public and private organisations, business and industry, communication helps to orient workers to one another.
and to the goals of an organisation, and it is the same means by which such goals can be pursued, attained, sustained and improved.

According to the Harvard Business Review’s (1999) the process of communication could be classified at the micro levels; formal and informal communications; and internal communication practices (memos, circulars, newsletters, presentations, strategic communications, work direction, performance reviews, and meetings) as well as externally directed communications (public, media, inter-organisational). Baker (2003) also pointed out that communication process could address issues such as innovation, organisational learning, knowledge management, conflict management, diversity, and communication technologies. Thill (2000), defined organisational communication as “exchanging knowledge and opinions in the organisation”, while Argenti (2003) defines it as “allowing the creation of a positive atmosphere for all employees of an organisation”. These definitions make organisational communication a wider dimensional concept rather than information traffic per se.

Effective communication in organisation should involve free a transfer of information from the executive to subordinate and the vice versa. However, as organisation becomes bigger and more complex, communication also becomes more difficult necessitating the need for quality institutional communication (Kalla, 2005). Barth (2003) added that the subject under review is the lubricant that keeps the machinery of bureaucratic organisations functioning; it is the means through which roles are identified and assigned; and, serves as the life-
blood of an organisation. The role of communication in modern organisations therefore emphasises its importance in human interaction, of which this research focuses on.

In many ways, organisations have evolved in the directions that make appropriate changes confronting organisations and the associated changes and forms (Von Krogh et al, 2000) and that have made communication in organisations increasingly important to the overall organisational functions. Anon (2012) quoting from Rogers and Rogers (1996) and Neher (1997) emphasised social and organisational functions of communication rather than focusing on areas of specific communication exchanges. They thus combined the functions of informing, directing, and regulating into the broader category of behavioural compliance and made the role of communication in managing threats to organisational order and control.

More literature indicated that communication is the most important variable for management and administrative performance process and it is the key to successful integration of two potentially clashing organisational cultures (Appelbaum et al., 2000). Shearer et al. (2001) opined that integrating different goals, values, beliefs, ideas, systems, leadership styles, management practices, and processes should all form part of communication. Indeed, the problems often arise from lack of understanding between working groups in merging companies, or between headquarters and subsidiaries that decrease the effectiveness of cooperation (Noerreklit and Schoenfeld, 2000). Thus, communication is necessary for forming a strong commitment to blending
business cultures and operations, required for achieving successful administrative performance (Henry, 2002).

Appelbaum et al., (2000) further argued that change in organisations requires not only that good decisions should be made about how the change will affect profits, productivity, or quality, but also that these points should be well communicated. Yazdifar (2005) added that effective communication will inform employees that it is not what is done (or is going to be done), but rather why and how it is done (or will be done) which really matters. Emphasising on the importance of communication, Cartwright and Cooper (2009) also suggested the need to avoid ambiguous language and jargon specific to organisations in the communication process. This is important both at the time of the announcement and throughout the integration period, in order to dispel rumours, reduces uncertainty and overcome the ‘fear-the-worst’ syndrome. Employees in public service organisations have the tendency to attend to information which reinforces their worst fears regardless of the validity of the source (Cartwright and Cooper, 2009). Cooper (2009) indicated that clearly communicating on a regular basis, even if the content of the message is only to reaffirm that at the current time, was important.

Appropriate communications, in addition to other requirements such as training, will equip employees with the knowledge and tools to help them deal productively with the concept of constant change, to develop new relationships and to engender the support of output (Appelbaum et al., 2000).
Hence, true business transformation means equipping employees with actionable knowledge and skills to achieve business results (Henry, 2002).

From the foregoing it should be noted that all forms of communication do not have the same effect, and true communication is difficult to achieve since the communication process faces numerous potential obstacles (Appelbaum et al., 2000) and may lead to “confusion or distortion”, “misunderstanding or different interpretations”. Furthermore, Henry (2002) emphasised that, appropriate communication was necessary for change in behaviours. Arguably, systems of measurement and accountability display the potential for improving intra organisation communication by infusing managers and ‘non-accountants’ with a common financial vocabulary for communication and ‘reading’ the state of the business affairs (Busco, 2001).

2.2.1 Diversity and Group Communication

According to Riedlinger et al., (2004), the increased diversity within organisations means that communication now occurs across many more boundaries, including cultural and professional ones. Nevertheless, Gardner et.al (2001) reported that organisational communication processes from an intergroup perspective is still very limited. Taylor et al. (2001) discussed the need for greater research attention to groups as mediating structures in organisational communication. More specifically, DeWine and Daniels (1993) opined that cross-cultural communication is among the least studied subjects in organisational contexts. The importance of intergroup communication was highlighted by other scholars who noted the gap in research at this level of
diversity and intergroup communication (Deetz and Putnam, 2001). Again, Scott and Lane (2000), stressed that complex organisations, individuals are likely to identify more strongly with salient groups within the organisation, like work units, than with the organisation. In studies over a decade taking an intergroup perspective organisational communication, researchers have explored how social identity influences communication.

2.2.2 Organisational Identity and Communication

Willemyns, Gallois and Callan (2004) analysed cross-functional barriers to change as an intergroup communication and change issues involving work unit identification. Social identities, particularly those related to work and professional contexts then become relatively stable parts of self-definition (Haslam, 2000). Willemyns et al., (2004) examined strategies for reactions to communication accommodation in supervisor-subordinate interactions. McCroskey and Richmond (2000) then theorised the role of accommodation in inter gender interactions in male-dominated workplaces; and Winsor (2000) also examined the difficulty in comprehension between white-collar and blue-collar workers. Haslam (2000) suggested that communication both reflects and creates social identities in organisations, noting that shared identity provides motivation to communicate and a shared cognitive framework on which productive communication can be based. Paulsen et al. (2004) called on researchers to integrate Social Identity Theory (SIT) with communication theories and methodologies, such as critical discourse analysis. Communication accommodation theory as espoused by Gallois et al. (2004) is well suited to exploring intergroup aspects of organisational communication.
2.2.3 Workplace Diversity and Communication

According Huff Post Life (2014) in a 2011 study from Forbes Insights, "diversity is considered no longer simply a matter of creating a heterogeneous workforce, but rather using that workforce to innovate and give it a competitive advantage in the marketplace." In the study of 321 companies, 85 percent of those surveyed agreed that diversity is key to driving innovation in the workplace. Oetzel et al (2001) believe that there is a parallel tradition of research on communication within and between culturally or professionally diverse work groups. The research highlights the difficulties in interpersonal communication and cohesion that arises in heterogeneous as opposed to more homogeneous groups. Duignan (2013) in explaining an integrated approach to workplace diversity through human resource again stressed on similar challenge on workplace diversity and communication as being very important process.

Green (2010) opined that, valuing diversity and having a diverse workforce are morally correct and that make economic sense as it could be a key component of effective people management to improve workplace productivity. Gaining some rising benefits, organizations need to tap into increasingly globalised and diverse markets. Thomas (2005) issues on diversity also border on the distribution of organisational members in terms of physical and psychological attributes. Physical attributes which promote workplace diversity are seen as easily detectable such as ethnicity, age, gender and skin colour (Berdahl and Moore, 2006) and usually more enduring as it may form the first basis of alignment among diverse workers (Bezrukova, Thatcher and Jehn, 2007).
According to Bagshaw (2004), Esen (2005) and Konrad (2006), diversity has been expanded to mean the collective differences brought to the workplace, based on individual and group characteristics, attributes, values, beliefs, skills and abilities, backgrounds, socialization, life experiences, and power dynamics. Notwithstanding the above, McGuire and Bagher (2010) have stated that diversity helps to promote greater understanding, communication and integration of different worldviews in decision-making and problem-solving situations. Many studies on diverse work groups now explicitly refer to application of Social Identity Theory (SIT) in organizations on attractive feature of his discussion of how areas of leadership, motivation, communication, power, decision-making, work performance and productivity and dispute and negotiation management are addressed within each paradigm (Haslam, 2000; Riedlinger et al., 2004), and the intergroup lens has great potential. Haslam (2004) citing Katz and Kahn (1966) emphasise how the overall design of his approach to organisational behaviour is shaped by the Michigan open systems model. Where SIT opens new possibilities in operational as well as strategic management is in its emphasis on using language to raise the salience of social identity of individuals and groups.

According to Haslam (2004) the pattern of power in communication at work may be expressed through a mix of impersonal grandiose proclamations of values and literally physically impossible safety aspirations. Tyler (2003) indicates how procedural justice contributes to the identity of sustainable leadership; and therefore, reparation of trust. Williams and Miller (2002) reported that assessment on the nature of audience is influenced by both reason and emotion,
but the weight given to each of the elements during the decision-making process can vary widely depending on the person. Lewin and Koza (2001) were rather concerned with complex processes of persuasive communication and strategic decision-making and pointed out that these processes operate across many different levels of analysis, including the actions of individual managers; interaction between powerful sub-groups within the organisation; and wider economic, social and cultural influences.

2.3 Communication and Information Theories

Communication theories refer to the work of past researchers account, drawn extensively to include Silverman (2001) and Norton (1978), who have influenced both the development of theoretical model and practical research. This background explains no framework can be recommended as the best in communication. According to Chapanis (1990), theoretical models clarify the structure of complex events by reducing complexity to simpler, more familiar terms, but rather to give it order and coherence. While the field of communication has changed considerably over the last thirty years, the models used were that of Foulger (2004) adopted in an introductory chapters of communication also cited in Adler, Rosenfeld, and Towne (1996); Barker and Barker, 1993; Becker and Roberts, 1992; Bittner, 1996; Burgoon, Hunsaker, and Dawson, 1994; DeFleur, Kearney, and Plax, 1993; DeVito, 1994; Gibson and Hanna, 1992; Ruggles (1998), were the same models that were used forty years ago and in some sense, a testament to their enduring value.
Theoretically, the internet can be conceptualised as a complex communication space in which distributed digital inscriptions proliferate in ways that build upon and differ from the distribution of other types of inscriptions (Schein, 1993; Wang, 2002). This social space mediates both practices of technology design and development, and knowledge practices. Epistemic objects are generators of questions and the creation of novel types, strongly related to technologically embedded paradigms or scientific styles Souitaris, (1999). Braun et al. (2000) argued that the most effective form of communication occurs when information is not only exchanged but acted on collaboratively. Ramirez and Quarry (2004) also hold the view that communication and participation are two sides of the same coin. Zahra (1993) on the other hand developed a level of knowledge about communication that managers need to succeed in today’s business environment on how to analyse audiences, organize ideas effectively, and choose appropriate media and how to sell products and ideas to a wide range of audiences.

### 2.3.2 Information theory

Nainby (2010), inspired by developments in systems theory and cybernetics, stressed the introduction of a new communication model called “information theory”, viewed as a measure of entropy or uncertainty in a system. In the information theory model of communication, a source produces a message; this message is passed along a channel, to a receiver that interprets the message. McGrath (2005) holds that a new Information Theory concept, known as “dialogic models” is when one understands that the speaker has used a metaphor, the rule holds, and the conversation makes sense.
Kelly (1999) indicate that “throwing the baby out with the bath water” might be a metaphorical example, as the origin of the phrase while “raining cats and dogs” may not actually be metaphor, but of mythological derivation. According to Silverman (2001), conversation analysis is a way of describing “people’s methods for producing orderly social interaction”. Just like Casmir, Waldman and Yang (2006) developed the concepts of turn-taking and other conversational rules and gave a series of lectures that prepared the foundations for conversation analysis today. Silverman (2001) indicated that one significant feature of conversation analysis is that it centers on talk as the data. Which Norton (2002) opined that the context of information theory is not excluded from dialogic models; the concept of “Institutional Talk” in conversation analysis explicitly seeks to connect communicators with their contexts. Anything that is created through human interaction could be studied from a communication perspective. Human endeavours such as architecture, clothing, and literature and so on are all expressions of people functioning and communicating in a social world. These different forms of expression also vary according to the social context in which they have been created (Norton, 2002).

A key feature of Peirce’s semiotic theory is his creation of three semiotic categories as firstness, secondness and thirdness. Since there were three categories, which were related to each other, they could be represented in a triangular fashion, as shown in Figure 2.2.
Concurrently, but independently of each other therefore, Saussure and Peirce developed a line of thinking that treats languages as sign systems, which are governed by rules.

### 2.4 Barriers to Communication

Bird (2002) discusses three communication-related barriers to ethical behavior in business organisations. These barriers were summarized in the following terms:

- Moral silence, which means failing to speak up about issues that are known to be wrong;
- Moral deafness, meaning a failure to hear or attend to moral concerns raised by others; and
- Moral blindness, which is the failure to recognize the moral implications of actions.
The quality and effectiveness of communication flowing through any channel therefore could depend ultimately on the communicative practices adopted by users.

‘Many people in business fail to speak up about their moral convictions. They fail to do so in a number of different ways. As a result, many of the ethical issues and concerns facing business are not addressed as fully, as clearly, and as well as they would be if people voiced their concerns. Moral silence is occasional and reinforced by the correlative phenomena of moral blindness and moral deafness as well as the quite contrary practice of giving voice to moralistic concerns’ (Bird, 2002).

Hofstede’s (2001) famous definition of culture highlights the differences that are measured across these dimensions. He treats culture as ‘the collective programming of the mind that distinguishes the members of one group or category of people from another’. His work, Tayeb (2000a) with other researchers, hold different perspective of culture, as an enduring source of difference in convergence in meaning in communication process debate. It is certainly the case that ‘culture clash’ remains an important barrier to communication, but there are increasing doubts about the continuing relevance of this perspective in the multi-cultural settings of many contemporary organisations (Holden, 2002). According to Luft (2000), research into the communication barriers experienced by deaf employees indicated that organisations need to address a much more complex set of social and cultural factors beyond those directly related to hearing loss.

Shahin and Wright (2004) has challenged parties in the communication process stating that even though managers spend most of their time communicating, one cannot assume that meaningful communication occurs in all exchanges. Once a memorandum, letter, fax, or e-mail has been sent, many are inclined to believe
that communication has taken place. Communication does however not occur until information and understanding have passed between the sender and the intended receiver. Okiy (2005) points out poor and inadequate telecommunication facilities; poor level of computer literacy, even within the academic community; poor level of computer facilities; poor level of awareness of internet facilities among policy makers, government officials and the ruling class in general; and minimum involvement of academic institutions in network building as challenges militating against communication.

One major drawback in communication, according to Cramton (2001), in dispersed collaboration is the organisation’s members’ difficulty or inability to create and maintain mutual knowledge and understanding about work-related issues. This situation could cause misunderstanding, distrust or even frustration among staff of the organisation. Communicating information, especially in any decentralised organisation is perceived to suffer from severe communication problems. According to Taylor (2004) barriers to communication in the workplace could include not thinking clearly, not listen intelligently, not selecting appropriate media, poor timing and place of communication, using in appropriate language, not obtaining feedback and if care is not taken could be disastrous, resulting in failure of communication all-together. Fleury (2005) also believed that one may also consciously or unconsciously engage in selective perception or be influenced by fear or jealousy.

Relating to effective decentralised organization, Maznevski and Chudoba, (2000) opined matching communication patterns with their on-going tasks and
activities. It is therefore important to know that there are benefits or something vital still to be known in managing communication in decentralised locations and virtual organisations (Barth, 2010). According to Chory and Hubbell (2008), hostility statements and interpersonal aggression acts like starting rumours about someone and putting down phone calls. These kinds of negations arise from unhealthy communication and it shows how communication is important for organisational success. In addition to this communication barrier that interrupts organisational activities, could commence from limited capacity building to provide required information due to lack of money and time. That is why Morreale, Shockley-Zalabak and Whitney (2007) have mentioned the scarcity of the formation of necessary relations between resource and receiver is another obstacle.

Effective communication is one of the most critical goals of organisations but challenges exist and cannot easily be avoided (Spillan, Mino, and Rowles, 2002). Sperry and Whiteman (2003) also argued in similar direction that, to plan strategic communication, managers must develop a methodology for thinking through and effectively communicating with their superiors, staff, and peers in five components as:

- **Outcome**; the specific result that an individual wants to achieve
- **Context**; the organisational importance of the communication
- **Messages**; the key information that staff need to know
- **Tactical reinforcement**; tactics or methods used to reinforce the message
- **Feedback**; the way the message is received and its impact on the individual, team, unit, or organisation.
McDonough et al., (2001) indicated that personal barriers could arise due to an individual’s frame of reference or beliefs and values. They are based on one’s socio-economic background and prior experiences and shapes how the messages are related. Macro barriers in communication, according to Ulmer (1998) include:

- Information overload,
- Lack of subject knowledge,
- Cultural differences,
- Organisational climate,
- Sender/receiver,
- Message competition and
- Project jargon and terminology.

Pearce (2002), intimated that it is common to mix up quotations from ancient classics, trying to describe what the ‘English’ are like by quoting Chaucer and mixing observations made. Holden (2002), however, said it was possible to take a more critical approach to communication practices and the principles that underpin them. Tayeb (2000b) also noted that confining behavior to a handful of dimensions presents a simplistic and picture of reality’ in organisations. Pearce, (2002) outlined an approach, as the authors argued that professional communication in international settings could not be standardised around the practices of a single social or cultural group. Culture jamming according to Klein (2000) suggests that jamming resulting from a combination of technological advances and an underlying popular resentment against the overpowering commercialism of the leading corporate brands. A more fundamental challenge
to culture jamming is demonstrated by the ease with which corporate advertising and branding has been able to appropriate jamming techniques for its own purposes (Klein, 2000). In some cases, lack of confidence in a person because of lack of prior experience and fear of being exposed to external criticism could result in barrier to communication (Ruderstam and Newton 2001). However, as many authors have commented, the activity of writing is itself a source of learning, as one engages with the subject and begins to think about the ways that information sources are connected to Phillips and Brown (2000). In that vein, Putnam (2004) advises that when writing to communicate effectively for audience, the writer needs to consider:

- Apparent cultural differences,
- Unspoken cultural differences and
- Unconscious cultural differences.

Hofstede (2007) intimated that a culture that takes a collectivist approach to life, would welcome in the cover letter to a report, personal aspect of a relationship such as complementing a recent achievement, whereas this might be seen as unnecessary and distracting in a more individualist culture. Long introduction which illustrates the genesis of the issue to be examined and provides a retrospective analysis or historical overview of the issue is a must, regardless of the wording of the question Whitley, (2000). A British reader, however, would see this as lack of “convergence” to the point, or even “waffling”, engaging in a long and irrelevant discussion until the second page of the essay that concepts expressed are regarded as being pertinent, and aimed at answering the question (De Vita, 2001).
2.5 Information and Communication Technologies (ICTs)

According to Fiske (2006), Innovation systems are networks of interlinked actors, and an environment that encourages effective information and communication management (ICM) contributing directly to innovation, and to social and economic development. ICM and knowledge management (KM) are often characterised as having three components: People, Processes and Technology Hargie and Tourish (2002). ICT play very important role in every organisation to ensure effective communication. Jorgenson and Stiroh (2000) studies found that technological progress shows that investment in (ICT) is making an important contribution to economic growth and labour productivity growth. Jablin et al (2001), among others, argued that while there has been tremendous productivity growth in ICT in industries, there is only limited evidence of any incremental productivity growth in using ICT in industrial environment.

In reviewing literature, Brynjolfsson and Hitt (2000) provided evidence from ICT and performance studies which indicated mixed information. Johns (2001), however, linked technology surveys to longitudinal data on the performance of manufacturing plants. The result was that plants that use advanced technologies were more likely to experience productivity growth and that the superior productivity growth was then reflected in market share gains. In similar vein, OECD (2002) argued that ICT improves productivity by enabling “organisational innovation”.
According to Shelby (2001), ICT has become a main determinant of productivity growth in transport, wholesale and retail trade sectors. Previous studies at the aggregate level suggest that dynamic services are more innovative and require a higher share of knowledge workers. Omolayole (2002) points out three strong reasons that stand against the effective use of ICTs in Nigerian academic libraries to include: low level of computer culture, poor telecommunication infrastructure and the general lack of awareness. Chisenga (2004) surveyed the use of ICTs in public libraries in ten (10) Anglophone African countries and revealed that all libraries studied pointed out to lack/inadequate ICT personnel and lack of funds. Tully (2003) states that the environment where one grows up can determine his or her ability to fully use modern technologies. The digital divide is far from closed and in most parts of the world it is still widening.

Tourish and Hargie (2004a).

Ali et al, (2002) opined that invention, discovery and technological change are activities which increase the stock of intangible knowledge or ideas. ICTs have created a world that is more interconnected than ever before. Information Provision and Participation in Regulatory and Policy Processes according to Bollinger and Smith (2005), has been designed to address information provision practices and communication with a view to enhancing the participation of a wider range of stakeholders in the regulatory and policy making processes. Alternative models of ownership, management and financing can influence access and adoption of ICTs Coeling and Cukr (2000). Smidths et al (2001) also indicated that the breakdown of factor productivity aggregate into sectoral
contributions has helped to show attributions to ICT producing sectors and other sectors.

The dynamism of ICT is expected to come from several sources including the decline in the prices of information processing, convergence in communication and computing technologies and the rapid growth in network computing. Ali et al, (2002) also holds that the communication networks and interactive multimedia applications provide the foundation for transformation of existing social and economic relations into an information society. The role of ICT according to Ali et al, (2002) in economic development, is therefore expected to be manifested in productivity increase, enhancing the quality of life, reducing prices, creating new economic activities and new employment activities as well as generating wealth. Smidths et al (2001) also observed that the OECD countries that improved performance in the 1990s were generally able to draw more people into employment, increase investment and improve factor productivity through ICT. In his contribution, Porter (2000) added that the suppliers or subcontracted firms are likely to benefit from membership in the production networks through transfer of technology gains, access to specialized technical and marketing expertise; and that globalisation of production of ICT is likely to deter most developing countries from reaping the benefits of producing ICT. Whitney (2007) mentioned experience in other countries with major challenge here is in addressing the question of how ICT should be integrated and how classroom conduct could be changed to take full advantage of the new technology. Chisenga (2004) indicated that ICT plays a leading role in knowledge creation, codification and transmission and international R&D
spillovers have been shown to be significant whether in terms of social rates of return, elasticity of growth contributions. The main determinants of spillover appropriation are the acquisition of expertise through own R&D and education, the openness to international contacts and close collaboration with foreign researchers.

2.6 Staff Communication Needs

Meeting the communication needs of employees was one study done by Grunig (2007) who defined various internal publics and described their communication needs and habits, determined the probability of each group actively communicating within the Center, and made recommendations for enhancing the existing communication program. Daniels (2010) on the other hand, studied into why communicating with employees concluded that the mechanisms of two-way communications, and its potential benefits were important and involved management talking to employees, and listening to responses and acting in relation to those responses. Good two-way communication can help to build a psychological contract, in which employees feel valued by their employer, and the employer values their employees’ contributions (Daniels, 2010).

Communication is an important aspect of employee engagement. The two most important drivers of employee engagement identified by the Chartered Institute of Personnel Development (CIPD), 2000, researched into engagement levels emphasised the need for dialogue. They are:

- Having opportunities to feed upwards and
Harrison and Falvey (2009) also stated that:

“During the first half of my PR career, most corporate managers thought all employee communication required was for someone, usually a junior employee, to churn out the internal newsletter regularly. Slowly it dawned on them that employees wanted more than that. And what’s more, the employees wanted to see more face-to-face communication from their supervisor or manager rather than outpourings from the PR team.”

However, many communicators have continued to use the traditional arms-length channels of print and electronic media. Putnam (2004) indicated that employees use the wrong tools to communicate. Gray again found that the traditional tools of newsletters, senior executive road shows, emails and the intranet usually have little impact on overall employee satisfaction. Harrison and Falvey (2009) pointed out that the basic requirement for good internal communication is built around the needs of employees which generally include:

- General information about the organisation
- Specific information about their roles in the organisation
- Clarity about their duties and roles
- A clear understanding of organisational vision
- Information on work place practices
- Opportunities to be involved and consulted
- Feedback on performance
- Access to training and development
- Access to communication channels.
Communications may be working effectively at higher levels but fail dismally at the more local level. In their book developing your PR skills, Harrison and Falvey (2009) stressed that internal communication strategy that addresses the needs of workers effectively should produce and engage workforce who enjoy their work because they feel valued.

2.7 Bureaucracy in Communication

According to Bozeman (2000), bureaucracy, sometimes termed as “red tape”, is the rules, regulations and procedures that remain in force and entail a compliance burden but do not advance the legitimate purposes the rules were intended to serve. Other studies focused on factors that can cause and determine perceptions of red tape Brewer and Walker (2006); Pandey and Patrick (2000). Several other researchers have dealt with red tape as an independent variable that can influence various organisational issues, including motivation, satisfaction, work alienation, and innovation DeHart-Davis and Pandey, (2005), Pandey and Patrick (2000); Scott and Lane, (2000); Brewer and Walker (2006). Government is likely to have higher degrees of perceived red tape in general due to external control, the need for accountability, and the shift to inter organisational governance arrangements for the delivery of public service (Brewer and Walker, 2006). Scott and Lane (2000) have indicated that red tape has been considered as a barrier to improve benefits provided to clients. This study seeks to advance the research on organisational communication and assess the impact of red tape on communication in the University. The question remains whether the perceptions of red tape different according to persons with whom employees
communicate; and if so, the kinds of factors that mediate the relationship between communication types and red tape.

2.8 Organisational Structures

Goldhaber et al. (1984) defined organisational structure as “the network of relationships and roles existing throughout the organisation”. However, few studies have explored the antecedents of supply chain integration. Organisational structure experts agreed that it has influences communication and facilitates the flow and processing of information; while Koufteros et al., (2007) and Kalla (2003) provided empirical evidence about the relationship between organisational structure and internal communication. The resource-based view (RBV) on organizational structure has its roots back to Penrose (1959) as quoted by Vickery et al., (2003) who views organisations as bundles of resources that are managed, deployed, and reorganized in ways to provide unique form and value. The theoretical model of the relationship between organisational structure, internal communication, integration, and performance is based on the resource-based view assumption that; with previous studies showing that integration it’s related to product development performance. Koufteros et al., (2007) other theoretical model has three organisational structure constructs. First, centralization of decision-making process can be defined as the degree to and minimizes status differences. A flat organisation can reduce problems of information delays, distortion and corruption as information flows from one level to another. Third, specialization of departments and employees refer to the level of horizontal integration existent within an organisation.
Organisational structure is recognized by many authors to have effects on the level of internal communication (Grunig, 2002). According to Robbins (2009) organisational structure determines the pattern of communication as well as the formal lines of interaction between individuals within organisations. In a research conducted by Holtzhausen (2002), organisational structural changes results in information flow and face-to-face communication improvements. Grunig et al., (2007) showed that organic structures have symmetrical systems of internal communication while mechanical structures have asymmetrical systems of internal communication. Similar results were found in the study conducted by Kalla (2003), in which organic structure is positively correlated with symmetrical communication and negatively correlated with asymmetrical communication.

An organisational structure can stimulate or inhibit the flow of communication by developing mechanisms to encourage participation and information sharing; and this capability according to Galunic and Eisenhardt (2001); Symon (2000) are increasingly developed through intensely social and communicative processes, which may not be tied to physical resources or locations. Symon (2000) described the emergence of post bureaucratic forms of organisation that are flatter and leaner, and thus supposedly more flexible and responsive to change. Many new organisational structures have come about because of advances in technology, but Garud and Karnoe ((2001) made a critique of the implied link between networks and the networked organisation. McPhee and Poole (2001) argued that there is a stronger relationship between structure and communication in new organisational configurations than in traditional
organisational structures. Much of the work in this area has involved interpersonal, small-group, or team communication.

2.9 Multi-Campus Institutions

Dale (2012) examined, analysed and compared data collected by surveying all full-time employees using Organizational Culture Assessment Instrument (OCAI) and through personal interviews. The OCAI results indicated that employees perceived the overall culture type as predominantly Clan and Hierarchy, the preferred overall culture type as predominantly Clan and Hierarchy, with a significant increase in adhocracy. The Main Campus employees perceived dominant Clan culture type. Other Campus employees perceived dominant Hierarchy culture type. Both Main Campus and Other Campus employees preferred dominant Clan culture type. Administrators and Support stakeholder groups perceived dominant Clan culture; Professional and Faculty stakeholder groups perceived dominant Hierarchy culture. All four stakeholder groups, as in the above case, preferred dominant Clan culture. Conclusions were drawn that employees perceived dominant Clan and hierarchy cultures and preferred dominant clan and adhocracy cultures, enhancing flexibility, respect for one another and discretion for employees, internal integration and external differentiation.

Roth, et al (2006) indicated that although the presence of free communication reduces the complexity of multi-organisations, such organizations as Partially Observable Markov Decision Processes (POMDP) have emerged as popular decision-theoretic framework for modeling and generating policies for the
control of multi-organisation teams. The question of what to communicate in the above case were described using two paradigms for representing limitations on communication and present an algorithm that enabled multi-organisation teams to make execution-time decisions on how to effectively utilize available communication resources.

With multi-disciplinary, multi-national projects studied, Fox (2009) found that shared understanding could be better enabled through the application of information and communication design. Formidable inherent barriers to the understanding in multi-disciplinary multi-national projects were identified. Generic methods for communication of information; such as the use of gestures, speaking business English, and the application of standard process charting could be ineffective. Again, inherent challenges in establishing shared understanding; limitations of generic methods for the communication of information; issues underlying information and communication designed. Further, practical recommendations in reducing time and cost related to the challenges were done.

Munene (2004) indicated that the face of increasing social demand and cutbacks in state budgetary support for universities in African countries are now turning towards a multi-campus system strategy. In analysing the paradox surrounding the performance of multi-campus University systems, Munene (2004) argued on avenues of broadening University access and concluded that structural success may be qualitatively contested. Dispersed Institutions in Africa, according to Brown (2000), provides some useful reflective insights into the changing
dynamics between campuses at the University of Natal (now KwaZulu-Natal) in South Africa. Nickerson and Schaefer (2001) provide an extensive survey of educational branch campus administrators. Dengerink (2001) focuses on issues of institutional identity and organisational structure in relation to multi-campus arrangements, using the University of Washington and Washington State University as cases in points. Scott et al., (2007) provide a study of Australian multi-campus universities with a focus on comparison of the operational efficiency of multi-campus organisations as compared with single campus institutions. Smith (2009) examines the external factors that influence academics working in a campus of an Australian University in the United Arab Emirates. McBurnie and Ziguras (2007) and Heffernan and Poole (2004, 2005) provide further studies of transnational campus arrangements. Developing a definition of what ‘satellite campus’ could be, Scott et al., (2007) based it on key characteristics which included the existence of an identifiable main site for the institution, a minimum travelling time between main and satellite, and a critical mass of students at the satellite, both in absolute terms and percentage of institutional full-time equivalent student numbers.

2.9 Communication Models

One dynamic process in which a person strives at conveying meaning or making argument with another as a fundamental approach in gaining understanding of events, objects, and other people is done with the use of communication model (Foulger, 2004). Communication model also lays a sound foundation which may facilitate understanding of the process of communication; as this could be disrupted in many ways. Croft (2004) opined that the sender’s senses may
inaccurately be perceived as the object or event, by permanent or temporary
damage to the sensory organs, by psychological or emotional damage to the
decoding mechanism, or by spiritual forces which interfere with the sender’s
perception and interpretation. A case in point is a damage to the encoding
mechanism through sending device (by mouth, pencil, hand); or by spiritual
forces which interfere with his or her transmission of information regarding the
object or event. This model may be useful in our understanding of what it means
to communicate. While all the elements of communication are likely not to be
included in this process, it does provide insight into this intriguing process.

2.9.1 The Communication Orientation Model

The model attempts to explain the face-to-face contact that can hinder as well as
help the ability to craft and achieve mutually satisfactory negotiation agreements
and high-quality decision-making outcomes. Diverse effects of sight, sound, and
synchronicity on negotiation and group decision-making the literature is divided
regarding their impact on negotiations and group decision making although the
effects of communication channels have been widely studied by psychologists
and communication scholars. Some researchers, including McGinn and Keros
(2002); Tanis and Postmes (2008) and Wolbert (2002) support mixed results to
have been reported for the role of visual channels, vocal channels, and
synchronicity, such that their presence does not always have a positive impact
on social interactions. A case in point is how evidence provided inconsistency
and contradictory conclusions on how communication channels and the potential
presence of sight, sound, and communication synchronicity influence the quality
of negotiation and group decision-making processes. Valley, Moag and
Bazerman (1998) in their studies found that the presence of these communication channels increases the quality of outcomes. On the contrary however, Croson (1999) studied into similar face-to-face contact communication and concluded that the quality of outcomes decreases. The advantage of the model supports the meta-analyses and provides theoretical synthesis and practical guidelines to help negotiators and decision makers decide when to use versus avoid certain communication channels to achieve high-quality interaction outcomes. Again, this model resolves and synthesises contradictions and offer a new model that proposes the presence of visual, vocal, and synchronous communication channels to: (a) helps communicators with a neutral orientation achieve efficient and effective negotiation and group decision-making outcomes, (b) does not affect the achievement of high-quality outcomes for communicators with a cooperative orientation, but (c) hurts the outcomes of communicators with a non-cooperative orientation.

Dennis, Fuller and Valacich (2008) opined that the underlying reasoning in communication synchronicity facilitates the ease with which people can socially validate each other’s opinion, which then increases the exchange of information. Byron (2008) observed that a synchronous communication on the other hand, in which people are not able to provide direct feedback (with letter or email), makes it harder to communicate spontaneously and increases the likelihood that messages are misinterpreted. Loewenstern and Morris (2011) rather support instant messaging negotiators which is asynchronous communication.
2.9.2 The Social Identity Model

According to Postmeset al., (1998) this model focuses on the presence or absence of visual channels and suggests that anonymous computer mediated communication affects group processes such as polarisation, social attraction and conformity. The proposition is that the salience of social identities moderates the effects of communication channels on group processes. The model is presented in figure 2.2 below.

![Diagram](image)

**Figure 2.2:** Moderating Effects of Communication  
**Source:** Postmeset al., (1998)

The cognitive component of the model on intra group discussions describes how the salience of social identity moderates the effects of communication. Spears et al. (1990) pointed out that groups with a strong social identity display more group polarization when they could not see each other than when they could,
suggesting that the impact of the group norm was most pronounced in the absence of visual contact but in the presence of a shared social identity, and least pronounced in the presence of visual channels and personal identities. Lea and Spears (1991) on the other hand, argued that the absence of visual channels may either lead to depersonalized perceptions of self and others or strengthen the salience of social identities in which no shared identity exists from the outset. In addition to its cognitive component, Spears et al., 2002 describes how the absence or presence of individuating information enhances or diminishes influence in intergroup interactions. The conditions of anonymity can increase a low-power party’s strategic freedom and influence when the communication environment obscures and shrouds their lack of power.

The research of Moore, Kurtzberg, Thompson and Morris (1999) shows that quality is not negatively affected when negotiators share a common group membership in their online conversations and when members of virtual teams strongly identify with their team. Fiol (2005); Mortensen and Hinds (2001) also indicated that the model has the advantage of channels having fixed impact on communication. Both are built around the assumption that people’s behaviors in non-face-to-face interactions are driven by the interaction between technological and social cues that frame interpersonal relationships and shared social identities; and that a positive connection or a shared group membership can help to overcome the difficulties. It is generally accepted that no existing theory encompasses all communication channels and so communication orientation model is used to explain all the effects. Despite resolving certain empirical contradictions, a theoretical gap however, is identified by not addressing the
evidence supporting the richness approach in visual channels, vocal channels, or synchronicity to increase the ability to achieve high-quality outcomes.

2.9.3 The Communication Orientation Model

This model explains the main orientation with which people approach their interaction that holds the key to theoretical and empirical parsimony, proposing that sharing and integrating information is a critical process by which these orientations interact with communication channels to affect negotiation and group decision-making outcomes. Krauss and Fussell (1990) stressed that the model formulated draws contributions on awareness of what the addressee does and does not know. The assumption here is that information sharing, and integration is critical for effective social interactions because it increases the likelihood of comprehension, problem solving. De Dreu and Carnevale (2003); De Dreu et al., (2008) opined that information sharing and integration are strongly influenced by the orientation that people hold toward their negotiation or group discussion partners. As a result of limited knowledge about their counterpart’s interdependent decision making and social settings some communicators adopt a cooperative approach whereas others have a less cooperative approach while others are unsure of what approach to take.

The above model also stresses on the fact that a non-cooperative orientation refers to where communicators strive to maximize only their own outcomes, typically results in withholding information that could benefit others as well as a reluctance to accept and trust information from others; hence quality is compromised. Individuals often come to the bargaining table with a social value
orientation geared toward cooperation or noncooperation, and these social motives influence the extent to which groups disseminate information and reach settlements, especially when both negotiators share similar orientation. According to Postmes, Haslam and Swaab (2005), communication orientations are rooted in social categorization processes when people interact with others who belong to similar social categories and understanding; hence high quality of information.

There are also positive effects of communication channels for communicators with unknown orientations and will look for information to determine what orientation to embrace. The presence of non-semantic information such as head nods, smiles, and brief verbalizations such as “yeah” and “m-hmmm” helps to determine whether the other side is cooperative or not. This means also that the presence of para-verbal and nonverbal cues such as tone of voice, facial expression, and gesture allows communicators with unknown orientations to learn more about the other side and potentially trust them enough to share and integrate information. Again, the absence of communication channels can decrease the ability to develop rapport and trust and thus reduce their tendency to share and integrate information (Thompson and Nadler, 2002).

Similarly, there limited or no effect of communication channels for cooperatively oriented communicators. They are more likely to value joint welfare, share information about priorities and preferences, and interpret others’ actions as efforts to coordinate, which, in turn, increases the quality of their interaction outcomes. As a result, the paucity of pre-verbal and non-verbal cues
presents when the partners cannot see or hear each other no longer poses a threat to trust and rapport; the communication between the partners is still interpreted with the best of intentions. McGinn and Keros (2002) demonstrated that people have greater difficulty developing a shared logic of exchange and coordination when they communicate through email but only when they interact with strangers and not when they interact with others with whom they have strong social ties. Similarly, online negotiations, according to Moore et al., (1999), are less likely to result in an impasse when they take place between people who are interpersonally acquainted or share common group membership.

2.9.4 Homogeneous Platforms Communication Models

This model explains point-to-point parameters of traditional communication performance model’s estimation for homogeneous platforms. There are two ways to obtain a statistically reliable estimation of the Hockney model parameters (Hockney, 1994):

- To perform two series of roundtrips: with empty messages (to get the latency parameter from the average execution time), and with non-empty ones (to get the bandwidth).
- To perform a series of roundtrips with messages of different sizes and use results in a linear regression which fits the execution time into a linear combination of the Hockney parameters and a message size.

Thakur, Rabenseifner, and Gropp (2005) used the Hockney model to estimate the communication performance of different algorithms of collective operations. For a particular collective operation, they suggested switching between
algorithms to choose the fastest one for each given message size and number of processors. One application of communication performance models is the optimisation of collective operations. The goal is to find the optimal algorithm for each particular network configuration with respect to the prediction provided by the communication performance model. The design of their algorithms of collective operations is based on intra- and inter-cluster graphs of processors; they switch between different shapes of graphs for different message sizes to get the best prediction of execution time. All these approaches were applied to homogeneous platforms. They considered a fixed set of commonly used algorithms for each collective with a predetermined form of communication trees. The heterogeneous communication performance models can provide another approach to the model-based optimization: the building of optimal communication trees by using the prediction of the execution time for each link.

Bhat, Prasanna, and Raghavendra (2003) and Hatta and Shibusawa (2000) used a heterogeneous Hockney model to build the optimal communication trees for broadcast and gather. They applied different heuristics based on the Hockney prediction on either the whole or some of its parameters. The authors of these works used the heterogeneous Hockney extension just for relative estimation of the point-to-point communications but did not build models of collective operations. To the best of the authors’ knowledge, there are no publications on the modeling of collective operations on heterogeneous clusters.
2.9.5 Communication Performance Models for Heterogeneous Clusters

The model-based optimization can significantly improve the performance of collective operations on both homogeneous and heterogeneous platforms (Kielmann et al. 1999; Hatta and Shibusawa 2000; Bhat et al. 2003; Thakur et al. 2005; Pjesivac-Grbovic et al., 2007). Heterogeneous computational clusters with the principle programming system have become a popular platform for parallel computing. Unfortunately, many applications that were originally designed for homogeneous platforms do not demonstrate the same performance on heterogeneous ones and require optimization. The optimization of parallel applications is typically based on the performance models of heterogeneous clusters, which are used for prediction of the execution time of different configurations of the application, including its computation and communication costs. The optimisation of communications, in collective operations, is an important aspect of the optimisation of parallel applications.

There are two main approaches to modeling the performance of communication operations on heterogeneous clusters. The first is to apply traditional homogeneous communication performance models to heterogeneous clusters. In this case, the parameters of the models are estimated for each pair of processors and the average values for all pairs are then used in modeling. The second approach is to use dedicated heterogeneous models, where different pairs of heterogeneous processors are characterized by different parameters. These two approaches are in use; heterogeneous communication models are more accurate and outperform their homogeneous counterparts in the model-based optimization of communication operations on heterogeneous clusters. At the
same time, the cost of the estimation can be significantly reduced if the heterogeneous cluster can simultaneously execute several independent communications involving non-overlapping sets of processors without degradation of their performance. In this case, the parallel execution of the non-overlapping communication experiments does not affect the experimental results and can be used for acceleration of the estimation procedure.

2.9.6 Linear Model

The linear model views communication as a one-way or linear process in which the speaker speaks and the listener listens. Laswell’s (1948) model as used in Foulger (2004) was based on the five questions below, which effectively describe how communication works.

Wood (2009) quoting from Shannon and Weaver’s (1949) model includes noise or interference that distorts understanding between the speaker and the listener. Figure 2.3 shows a linear model of communication:

Figure 2.3: Linear Model on Communication
Source: Adapted from Wood (2009).
2.9.7 Interactive Model

The main flaw in the linear model is that it depicts communication as a one-way process where speakers only speak and never listen. It also implies that listeners listen and never speak or send messages. Schramm (1955) in Wood (2009) came out with a more interactive model that saw the receiver or listener providing feedback to the sender or speaker. The speaker or sender of the message also listens to the feedback given by the receiver or listener. Both the speaker and the listener take turns to speak and listen to each other. Feedback is given either verbally or non-verbally, or in both ways. This model also indicates that the speaker and listener communicate better if they have common fields of experience, or fields which overlap as in Figure 2.5

![Interactive Model Diagram](https://www.udsspace.uds.edu.gh)

**Figure 2.4**: Interactive Model 54  
**Source**: Adopted from Wood (2009).

2.9.8 Transactional Model

The main drawback in the interactive model is that it does not indicate that communicators can both send and receive messages simultaneously. This model also fails to show that communication is a dynamic process which changes over time. The transactional model shows that the elements in communication are
interdependent. Each person in the communication act is both a speaker and a listener and can be simultaneously sending and receiving messages.

There are three implications in the transactional model:

i. "**Transactional**" means that communication is an ongoing and continuously changing process. You are changing, the people with whom you are communicating are changing, and your environment is also continually changing as well.

ii. In any transactional process, each element exists in relation to all the other elements. There is this interdependence where there can be no source without a receiver and no message without a source.

iii. Each person in the communication process reacts depending on factors such as their background, prior experiences, attitudes, cultural beliefs and self-esteem.

Figure 2.6 shows a transactional model of communication that takes into account "noise" or interference in communication as well as the time factor. The outer lines of the model indicate that communication happens within systems that both communicators share (e.g., a common campus, hometown, and culture) or personal systems (e.g., family, religion, friends, etc). It also takes into account changes that happen in the communicators’ fields of personal and common experiences. The model also labels each communicator as both sender as well as receiver simultaneously.
Most Internet media grant everyone symmetrical creation and consumption interfaces. Anyone with internet access can create a web site and participate as an equal partner in e-mail, instant messaging (text and whatsapp), chat rooms, computer conferences, collaborative composition sites, blogs, interactive games and other media. It remains however that users have very different preferences in their message consumption and creation. Some people are very comfortable creating messages for others online. Adding comments to a computer conference is rarely more difficult than sending an e-mail, but most internet discussion groups have many more lurkers than they have contributors. It is strange enough to say that here, according to Baym (2000), that the lurkers sometimes feel more integrated with the community than the contributors themselves do.
The next historical phase resulted in a new model of public relations that Grunig and Hunt (1984) termed public information. The one-way models are not based on social scientific research but on a simple dissemination of information. Pieczka’s criticisms (1996) are addressed in Grunig (2001). The two-way models are based on research, which is what makes them the two-way management model. In order of their development, the models are as follows:

- **Press agentry**: One-way (information) dissemination focusing on publicity for persuasion/attention.
- **Public information**: One-way (information) dissemination providing information.
- **Two-way asymmetrical**: Two-way (research), which is imbalanced in favour of persuading the public to support the organizations’ interests.
- **Two-way symmetrical**: Two-way (research), which is more balanced in terms of creating mutual understanding, moving equilibrium.

Due to the mixed-motives inherent in the public relations process, public relations professionals will most likely use a combination of these models in public relations management. These models suggest an overall philosophy of public relations, while situations require different approaches. Therefore, it is also useful to have public relations strategies that reflect a contingency of varying approaches.

### 2.9.9 Derivative Models of the Communication Process

This model, which is frequently depicted in mass communication, focuses on the important role that intermediaries often play in the communication process. According to Fougler (2004), there are however, many intermediary roles...
associated with communication. Relating to this model, a postal delivery worker for instance, who act as intermediaries have the ability to act as gatekeepers but are generally restricted from doing so as a matter of ethics and/or law.

![Diagram of Derivative Model of Communication]

**Figure 2.6:** Derivative Model of Communication

The network diagrams often presume, or at least allow bi-directional arrows such that they are more consistent with the notion that communication is most often bidirectional.

### 2.9.10 Ecological Model of Communication Process

The ecological model of communication, shown in Figure 2.8, attempts to provide a platform on which these issues of communication can be explored. It asserts that communication occurs in the intersection of four fundamental constructs: communication between people (creators and consumers) is mediated by messages which are created using language within media and consumed from media and interpreted using language. This model is a more detailed elaboration of Lasswell’s (1948) used in Foulger (2013). It outlines the study of communication on: "Who ... says what ... in which channel ... to whom ... with what effect". In the ecological model, the "who" are the creators of messages, the "says what" are the messages, the "in which channel", is elaborated into languages and media, "to whom" are the consumers of messages; and the effects are found in various relationships between the primitives,
including relationships, perspectives, attributions, interpretations, and the continuing evolution of languages and media.

Figure 2.7: Ecological Model of Communication
Source: Foulger (2013)

The relationships described in the above model are:

- Messages are created and consumed using language,
- Language occurs within the context of the media,
- Messages are constructed and consumed within the context of the media,
- The roles of consumer and creator are reflexive,
- The roles of consumer and creator are introspective,
- The creators of messages construct are necessarily imperfect representations of the meaning they imagine,
- A consumer’s interpretation of messages necessarily attributes to meaning imperfectly,
- People learn language through the experience of encountering language used within the media,
People learn the media by using media people they communicate with,

People invent and evolve around languages. While some behavior expressions (a baby's cry) occur naturally and some aspects of language structure may mirror the ways in which the brain structures ideas, language does not occur naturally,

People invent and evolve around the media, while some of the modalities and channels associated with communication are naturally occurring; the media we use to communicate are not.

2.9.11 Berlor's Model

Berlo's Model of Communication

A Source encodes a message for a channel to a receiver who decodes the message:
S-M-C-R Model.

Figure 2.8: Berlo’s Model
The significance of Belo’s Model includes

- The idea of “source” was flexible enough to include oral, written, electronic (the principle of redundancy) or any other kind of “symbolic” generator-of-messages;
- The “Message” was made the central element, stressing the transmission of ideas;
- The model recognized that receivers were important to communication, for they were the targets;
- The notions of “encoding” and “decoding” emphasised the problems we all have (psycho-linguistically) in translating our own thoughts into words or other symbols and in deciphering the words or symbols of others into terms we ourselves can understand.

The Weaknesses in Berlo’s Model are that:

- It tends to stress the manipulation of the message that is in the encoding and decoding processes;
- It implies that human communication is like machine communication, like signal-sending in telephone, television, computer, and radar systems;
- The model seems to stress that most problems in human communication can be solved by technical accuracy, which are choosing the “right” symbols, preventing interference and sending efficient messages;
- It is further argued that even with the “right” symbols, people misunderstand each other. “Problems in “meaning” or “meaningfulness” often aren’t a matter of comprehension, but of reaction, agreement,
shared concepts, beliefs, attitudes and values. To put the model in the right perspective, we need a more meaning-centered theory of communication.”

2.9.12 Dance’s Helical Spiral

Dance (1967) stated that: “At all times, the helix gives geometrical testimony to the concept that communication while moving forward is at the same moment coming back upon itself and being affected by its past behavior, for the coming curve of the helix is fundamentally affected by the curve from which it emerges. Yet, even though slowly, the helix can gradually free itself from its lower-level distortions. The communication process, like the helix, is constantly moving forward and yet is always to some degree dependent upon the past, which informs the present and the future. The helical communication model offers a flexible communication process”.

The Strengths of this model are:

- Mortensen: “As a heuristic device, the helix is interesting not so much for what it says as for what it permits to be said. Hence, it exemplifies a point made earlier: It is important to approach models in a spirit of speculation and intellectual play”;
- Chapanis (1961) called “sophisticated play”;
- The helix implies that communication is continuous, unrepeatable, additive, and accumulative. That is, each phase of activity depends upon present forces at work as they are defined by all that has occurred before. All experience contributes to the shape of the unfolding moment; there is no break in the action, no fixed beginning, no pure redundancy, no closure.

The Weaknesses associated with this model are that:
• It may not be a model at all and have too few variables;
• Mortensen: It is believed that if judged against conventional scientific standards, the helix does not fare well as a model. Indeed, some would claim that it does not meet the requirements of a model at all. More specifically, it is not a systematic or formalized mode of representation. Neither does it formalise relationships or isolated key variables. It describes in the abstract but does not explicitly explain or make hypotheses testable;
• It also generates questions and leaves much unanswered;
• Mortensen: As case in point does not imply a false degree of continuity if countless questions are raised here. The model brings problems of abstraction into the open, artificial or unproductiveness. Countless other questions could be raised with the model and that brings problems of abstraction into the open.

2.9.13 Barnlund’s Transactional Model

It is perceived that by far the most systematic of the functional models is Barnlund (1970) transactional approach as reported by Croft (2004). The most striking feature is the absence of any simple directionality in the interplay between self and the physical world. The spiral lines connect the functions of encoding and decoding and give graphic representation to the continuous, unrepeatable, and irreversible assumptions mentioned earlier. Moreover, the directionality of the arrows seems deliberately to suggest that meaning is actively assigned or attributed rather than simply passively received. Any one of the three signs or cues may elicit a sense of meaning. Public cues derive from
the environment, are either natural, that is, part of the physical world, or artificial and man-made. Private objects of orientation are a second set of cues. Examples mentioned were cues gained from sunglasses, earphones, or the sensory cues of taste and touch. Both public and private cues may be verbal or nonverbal in nature. What is critical is that they are outside the direct and deliberate control of those interacting. The third set of cues is deliberate; they are the behavioral and nonverbal cues that a person initiates and controls himself.

The strengths of the transactional model are that, the assumptions posit a view of communication in which communicators attribute meaning to events in ways that are dynamic, continuous, circular, unrepeatable, irreversible and complex.

The weaknesses on the other hand are that: it is assumed that communication describes the evolution of meaning. In effect, the model presupposes that the terms of communication and meaning are synonymous and interchangeable. Nowhere does the model deal in even a rudimentary way with the difficult problem of meaning. The inclusion of decoding and encoding may be taken as only a rough approximation of the “evolution of meaning” but such dualistic categories are not particularly useful in explaining the contingencies of meaning.

2.10 Organisational Communication

Communication helps organisations to strengthen employees to reach organisational goals (Hindi et al., 2004). On the other hand, communication also makes provision for sharing organisational values and beliefs among employees (Klein, 2000). Information in an organisation should be transferred from an
executive person to another and from an employee to another. In the light of this, Kalla (2003) indicated that when organisations become bigger and more complex, organisational communication becomes harder and the necessity of quality increases. Bovee and Thill (2003) defined organisational communication as exchanging knowledge and opinions in the organisation, and Argenti and Forman (2002) defined it as the process of creating a positive atmosphere for all employees in organisation. These definitions make organisational communication a wider dimensional concept rather than information traffic perse.

Hartley (2008) also defined organisational communication as transmitting news about the work from organisation to employees and through employees. Chen and Hung (2006) opined that it is a social process that provides contact and information exchange between both departments and units of the organization. For the purpose of operation, administrative communication is an important dimension of organisational communication. It is regarded as the horizontal or vertical information exchange that transfers meaning through official and non-official channels to achieve the organisation’s objectives. Daniels (2010) holds that the process of communication at work place involves combining some functions to create and build together all types of relations among people, organisations and societies. When communication process is done effectively, employees will understand their roles and functions and the objective of organisation will be well understood. In his contribution, Ali and Warne (2002) stressed that organisational communication enable us to provide support in areas like making team work possible, supporting decision process and eliminating
the barriers among departments. Management can deliver information about the organisation via channels such as control group meetings, issuing of brochure and newsletters, mission declaration (Bird, 2002) and he use of company website (Ng et al., 2006).

The efficiency of every organisation is dependent on effective communication and its management (Klein, 2000). Recent studies on communication showed that, communication has positive correlation with many organisational outputs like: organisational commitment, job performance, organisational citizenship behaviours and job satisfaction. In contrast, communication failure may cause functionless results like stress, job dissatisfaction, low trust, decrease in organisational commitment, severance intention; and absence of these could affect organisational efficiency negatively (Zhang and Agarwal, 2009). Thus, commitment of the person who works in a good working condition could give rise in job satisfaction and this contribute to the increase in organisational success (Tosun, 2009). Effective communication in organisations can simplify successful organisation operation. In other organisational communication recruitment suggestions, Champoux (1996) opined that message sent by resource persons should be short, clear, plain and understandable with noise should be reduced as much as possible during communication and technologic developments.

Cheney et al., (2004) opined that organisational communication as an academic discipline, embraces the study of symbols, messages, media, interactions, relationships, networks, persuasive campaigns and broader discourses within an
organisation; be it a corporation, governmental agency, religious institution, social movement and the like. In international circles, organisational communication is a flourishing field of research. Its breadth and diversity makes it impossible to review as a whole (Johns, 2001). Organizational communication traditionally employed dividing lines between internal/external and formal/informal communication (Johansson 2003). Hindi et al (2004) argued that, organisational communication researchers study internal formal communication, while public relations researchers study external formal communication. Research focusing on informal communication is still largely non-existent.

According to McGrath (2005) public relations developed their own specialised journals, professional and scholarly associations, publishers, and network of collaborative relationships. Cheney and Christensen (2001) are certain that both arenas are to blame for lack of information, interaction, networking, and cross-fertilization of ideas. The theory on organisational communication evolved from the concept as a tool of management, designed to facilitate task completion and as such was to operate as one of many organisational variables (Shelby, 2001). As a tool for management, communication is the central means by which individual activity is coordinated and pursued the organisational goals (Gardner et al, 2001). Secondly, most communication departments are responsible for both internal and external communication, and practitioners work with communication in its entirety. Concepts like “total communication” and “integrated communication” surface in the popular literature (Gallois et al, 2004). There is growing awareness that activities of internal organisational
communication, often managed by managers, are important to public relations practitioners and scholars (Cheney and Christensen, 2001). In agreement with Foulger (2004), it is proposed that researchers in organisational communication and public relations regime cooperation for performance. In a case of Hindi et al (2004) communication between departmental managers and employees in meetings, managers were caught in information and communication roles but were not practicable. Instead, leadership in this organisation permeated with the transmission view of communication. One other conclusion made by Hindi was that conversations were the most important medium to people’s potential to learn (Henry, 2002). All mediation via technical and digital media involves information losses, which in turn affects the receivers’ possibilities to interpret and understand the senders’ intentions – and to convert information into knowledge. Winsor (2000) focused on communication in project teams, particularly how different ideas and notions were expressed, confronted and developed.

Busco (2001) also studied sense making in management control processes and the results showed that sense making processes integrates written documents, verbal communication and actions. It means that when co-workers interpret texts and documents, new conditions for action were created. Thus, management control is an ongoing process, where sense making is both an important element and a basis for meaningful actions. Callan and Paulsen (2004) employed a critical approach to communication during a meeting on reorganization to enhance understanding of power, dominance of subordinate and multiple interpretations. The resulting interpretations disclosed how communication both
functions as manifestation and source of common meanings and understandings of reality, power relations and communicative disorders.

2.10.1 Effectiveness of Organisational Communication

Mehralizadeh et al., (2008) developed a theoretical framework enumerating five factors directly affecting effectiveness of organisational communication to include: organisational structure, technology, the surrounding environment, personal character of employees and channels, procedures and methods of feedback. This frame work is detailed in figure 2.10

**Figure 2.9:** Communication Effectiveness
Source: Mehralizadeh, Shahi and Sharify (2008)
The theoretical framework developed appears as a social system in an Educational Institution, analysing the performance of the educational system to solving problems. Hindi (2004) on the other hand indicated that organisations coordinate the members’ activities and incorporate them with organisational goals. Mutual communications between subordinates and superiors also makes them more acquainted with each other and that could result in effective cooperation in any organisation. In their contribution, Gizir and Simsek, (2005) agreed that the last perspective is the system-interaction unlike the interpretive-symbolic perspective, concentrates on external behaviour as the fundamental units of analysis.

Luft (2000) also pointed out that the perceived quality of information communicated within organisations is significantly linked to organizational performance and employees of organisations. Organic organisations are opened, with a free flow of information throughout the organisations and their operational styles vary freely, with decisions-making based on expertise of the individual. McCollough et al (2004) emphasized that such organisations could have loose informal control with emphasis on a norm of cooperation. McShane and Von Glinow (2003) stated that organizations have a mechanism by which they divide and distribute tasks throughout. A decentralized organisational structure transfers authority and control for decision making from management throughout the organisation to many more members of the organisation (Luft, 2000; Kelly, 1999 and Robbins, 2000). It is important to realize the close relationship between the concept of vertical complexity and the span of control and organisational size (Zorn 2002).
Technology in the above framework refers to how an organisation's inputs into output or shortly, because how jobs get accomplished (Robbins, 2000). Forms of organisations are possible and are now emerging; with explanation for the inconsistency of the empirical evidence and the impact of IT on organisation. As Omolayole (2002) indicated, nondeterministic IT creates options for organisations, and the organisational choice among those options creates the variation in observed outcomes. To make matters more complicated, the same technology could lead to different results depending on the characteristics of the organisation and the characteristics of the processes employing the technology within the organisation (Omolayole, 2002). It is clear from the above literature framework that though the explanations on effective communication may not be conclusive, the theory offers ideas in communication policy direction for consideration by organisations.

2.10.2 Communication Process

Communication from the foregoing is a complex process to every individual, any human endeavor or institution. From the author’s viewpoint on the adopted personal communicating model it fits a decentralized organisation where many channels of information flow are utilised, allowing for more open communication between individuals and group members. Even though the model is more conducive to solving complex problems, it could easily lose sight of the organisation's common mission. Most information sources act as both sources and destinations. Transmitters, receivers, channels, signals and even messages have multiple signals, transmitted and received, when they are converted into a common signal stream and a common channel. It remains, however, that there
is useful abstraction that identifies the most important components of communication and their general relationship to one another.

Symon (2000) summarised such personal communication as the transmission of a message from a sender to a receiver in an understandable manner. The communication process is the guide toward realizing effective communication; made up of four key components. Those components include sender, message, channel, feedback and feed forward as appeared in Figure 2.11. There are also two other factors in the process, and those two factors are present in the form of the sender and the receiver. The communication process begins with the sender and ends with the receiver as appears in diagram.

Fig. 2.10: Personal Communication Model
Source: Oloruntoba (2012)

2.10.2.1 Sender

From the Personal Communication Model, it is assumed that the sender is an
individual, group, or organisation who initiates all communication processes. This source is initially responsible for the success of the message. The sender's experiences, attitudes, knowledge, skill, perceptions, and culture could influence the message. Burnett and Dollar (1989) indicated that the written words, spoken words, and nonverbal language selected are paramount in ensuring that the receiver interprets the message as intended by the sender. The first step the sender is faced with involves the encoding process. In order to convey meaning, the sender must begin translating information into a message in the form of symbols that represent ideas or concepts. This process translates the ideas or concepts into the coded message that will be communicated. The symbols can take on numerous forms such as, languages, words or gestures. These symbols are used to encode ideas into messages that others can understand.

2.10.2.2 Message

When encoding a message, the sender as in Figure 2.10, must begin by deciding what he wants to transmit. This decision by the sender is based on what he believes about the receiver’s knowledge and assumptions, along with what additional information he wants the receiver to have. It is important for the sender to use symbols that are familiar to the intended receiver. It is suggested that a good way for the sender to improve encoding their message is to mentally visualize the communication from the receiver's point of view.

2.10.2.3 Channel

To begin transmitting the message as appeared in Figure 2.10, the sender uses channel, (medium). The channel is the means used to convey the message. Most
channels are either oral or written, but currently visual channels are becoming more common as technology expands. Common channels include the telephone and a variety of written forms such as memos, letters, and reports. The effectiveness of the various channels fluctuates depending on the characteristics of the communication. For example, when immediate feedback is necessary, oral communication channels are more effective because any uncertainties can be cleared up on the spot. In a situation where the message must be delivered to more than a small group of people, written channels are often more effective. Although in many cases, both oral and written channels should be used because one supplements the other. If a sender relays a message through an inappropriate channel, its message may not reach the right receivers. That is why senders need to keep in mind that selecting the appropriate channel will greatly assist in the effectiveness of the receiver's understanding. The sender's decision to utilize either an oral or a written channel for communicating a message is influenced by several factors. The sender should ask different questions, so that they can select the appropriate channel. (Is the message urgent? Is immediate feedback needed? Is documentation or a permanent record required? Is the content complicated, controversial, or private?) Is the message going to someone inside or outside the organization. What oral and written communication skills does the receiver possess? Once the sender has answered all of these questions, they will be able to choose an effective channel.

2.10.2.4 Receiver

After the appropriate channel or channels are selected as shown in Figure 2.10, the message enters the decoding stage of the communication process. Decoding
is conducted by the receiver. Once the message is received and examined, the
stimulus is sent to the brain for interpreting, to assign some type of meaning to
it. It is this processing stage that constitutes decoding. The receiver begins to
interpret the symbols sent by the sender, translating the message to their own set
of experiences to make the symbols meaningful. Successful communication
takes place when the receiver correctly interprets the sender's message. The
receiver is the individual or individuals to whom the message is directed. The
extent to which this person comprehends the message will depend on several
factors, which include the following: how much the individual or individuals
know the subject, their receptivity to the message, and the relationship and trust
that exists between sender and receiver. All interpretations by the receiver are
influenced by their experiences, attitudes, knowledge, skills, perceptions, and
culture. It is similar to the sender's relationship with encoding.

2.10.2.5 Feedback

According to Gibson and Hanna (1992), “communication must be a dialogue,
not a monologue.” The next stage is the feedback, is a term from cybernetics,
the study of messages. It refers to an inquiry, response to experiment. Feedback
as appeared in Figure 2.10 can be positive (when the required result is achieved)
or negative; instantaneous (when the response is immediate) or delayed.
Feedback is used to gauge the effectiveness of a message put forth, or a situation
that has taken place. There are two kinds of feedback: action feedback and
person feedback. The first can normally be seen with a great amount of ease and
is simply watching the other person’s actions to judge whether or not you were
understood. A case in point of this was in the military, a simple order of “send
reinforcements we are going to attack” was misheard and interpreted as “send three or four pence, we are going to a dance”; as can imagine, this had disastrous consequences. Feedback is the final link in the chain of the communication process. After receiving a message, the receiver responds in some way and signals that response to the sender. The signal may take the form of a spoken comment, a long sigh, a written message, a smile, or some other action. Bovee and Thill (2003) have stated that even a lack of response, is in a sense, a form of response. Without feedback however, the sender cannot confirm that the receiver has interpreted the message correctly.

Feedback is therefore a key component in the communication process (as in the diagram) because it allows the sender to evaluate the effectiveness of the message. Feedback ultimately provides an opportunity for the sender to take corrective action to clarify a misunderstood message. Feedback, according to Bovee and Thill (2003) plays an important role by indicating significant communication barriers: differences in background, different interpretations of words, and differing emotional reactions.

2.10.2.6 Feed forward

Even though feedback is the final link in the chain of the communication process, as in Figure 2.10, a similar link; feed forward, allows the receiving to further respond, possibly the second time as a way of emphasising information from the feedback. Just like feedback, feed forward is a component in the communication process because it allows further push and evaluation to stress on the importance of the message. For senior executives the main concern is to
ensure their exposure to relevant streams of feedback from all parts of the organization. Clearly, Gibson and Hanna (1992) noted that those at the Centre of the organisation are not able to absorb all the incoming information in details. However, subject to appropriate filtering, their exposure to a diversity of feedback can enable senior executives to make important connections, informing their strategic decision-making. The communication process is the perfect guide toward achieving effective communication, and when followed properly, the process can ensure that the sender's message will be understood by the receiver. Although the communication process seems simple, it is not. Certain barriers present themselves throughout the process. Those barriers are factors that have a negative impact on the communication process. Some common barriers include the use of an inappropriate medium (channel), incorrect grammar, inflammatory words, words that conflict with body language, and technical jargon.

2.10.2.7 Noise

Noise essentially is anything that distorts a message by interfering with the communication process. Noise can take many forms, including a radio playing in the background, another person trying to enter your conversation, sending barriers, encoding barriers, transmission barriers, decoding barriers, response barriers and receiving barriers and any other distractions that prevent the receiver from paying attention. Noise as appeared in Figure 2.11, is a barrier to the communication process. Noise can occur during any stage of the communication process. When information is transferred from the transmitter to the receiver, not all of the information may be received by the receiver because
of holes called noise. Each of the noise may be affected by the amount of information transferred. Just as in a leaky bucket, more holes decrease the amount of water, more noise also decreases the amount of correct information received. Encoding a notion may be a simple case of putting an idea into words but there may also be language barriers or a simple ineffectiveness in using language. Can the message be made in simpler language or does it have to be in complicated terms; between the sender, the message and receiver, noise could get in the way and complicate the process. A noiseless communication however, may not exist. Physical noise, for example, is static or psychological, that is when culture, taboos or values come into play to disrupt the normal transmission process of communication. Misunderstanding of a message that is distortion of meaning is a form of noise, example, in a Chinese game, Whisper to a person starts off with a particular message, and then the original message is distorted by the time it comes to the final player.

Successful and effective communication within an organisation stems from the implementation of a well-developed communication process. All members within an organisation will improve their communication skills if they follow the communication process and stay away from the different barriers. It has been proven that individuals that understand the communication process will blossom into more effective communicators, and effective communicators have a greater opportunity to becoming successful.
2.10.3 Concept of Job Performance

Administrative performance could mean both behaviour and result which improve the productivity of the organisation. According to Armstrong (2004), behaviour emanates from the performer and transforms performance from abstraction to action. Administrative performance is the outcome of work that one thinks the society and the organisation expect. It is an important factor that contributes to improve the outcomes, behaviour and traits of employees in organisation. A more comprehensive view of performance is achieved if it is defined as embracing both behaviour and outcomes (Armstrong, 2004). There are theoretical explanations or arguments in respect of effects of leadership style, organisation structure, organisational culture and performance evaluation on perceived administrative performance (Lawson, 2000). According to Behn (2003), measures that are not directly connected to improving performance are measures that are means to achieving that ultimate purpose of the organisation. In the light of the above, Behn (2003) gives eight reasons for adopting performance measurements as:

- To evaluate how well a public agency is performing.
- To control how managers can ensure their subordinates are doing the right thing.
- To budget for tools in improving performance.
- To Motivate, giving people significant goals to achieve and then use performance measures- including interim targets.
- To celebrate, organisations need to commemorate their accomplishments- such ritual tie their people together, give them a sense of their individual and collective relevance. Moreover, by achieving
specific goals, people gain sense of personal accomplishment and self-worth (Landy, 2003).

- To promote how public managers can convince political superiors, legislators, stakeholders, journalists, and citizens that their agency is doing a good job.
- To learn, learning is involved with some process, of analysis information provided from evaluating corporate performance (identifying what works and what does not).
- To improve what exactly people or organisations should do, what should be done differently to improve performance.

Apart from the above action to adopting performance measurements, a Performance Reference Model (2005) was developed to assist in standards of measure in performance. An employee development programme is based on the premise that people need to be physically fit and mentally focused and energized if they are to give high performance. This programme included guidance in fitness, nutrition and self-awareness (Chan, 2004). In larger international organisations, presentations as part of performance were often relayed electronically, either as video recording or as ‘live’ webcasts, in order to reach staff located around the world (Collier 1998, Chan 2004).

2.10.3.1 Job Demands-Resources (JD-R) Model

The core assumption of the JD-R model is that every occupation has its own job characteristics, but nevertheless these characteristics can be categorized in two general overarching categories, namely, job demands and job resources (Bakker
and Demerouti, 2007). Job demands are associated with psychological and/or physical costs which include work pressure, emotionally demanding interactions with colleagues or client, and an unfavorable physical environment. According to Demerouti et al., (2001a), job resources reduce the impact of job demands and the associated costs which are functional in achieving work goals that stimulate growth, learning and development. In short, demands are related to stress, and resources have motivational potential.

The JD-R model as supported by Metzer et al (2007), states that two different processes play a role in the development of motivation and job strain. In the motivational process, job resources like opportunities for development, autonomy and social support satisfy employees’ basic needs, including the need for autonomy and the need to belong. Therefore, resources lead to high employee engagement and optimal organisational performance. Schaufeli et al (2009) in contrast, indicated that job demands that are too high or have a chronic character that may exhaust employees leading to a depletion of energy and accompanying health problems, including job burnout. Job demands, and resources also interact with each other and produce combined effects. Specifically, the JD-R model according to Bakker and Baker, (2005) and Xanthopoulou et al., (2006), job resources may buffer the impact of job demands on strain.

2.10.3.2 Determinants of Job Performance

which specific individual differences influence performance on specific dimensions were pointed out by Johnson (2004), who stressed that motivation was given inadequate attention by those models and proposed an expanded model of how individual differences influence job performance.

Mitchell and Daniels (2003) also identified two components of motivation: proactive cognitive processes, and on-line cognitive processes. Control theory, action theory, and self-regulation were on-line theories of motivation (Mitchell and Daniels, 2003). Johnson (2003) added psychological motives as a third component of motivation. A motive is a reason (value, interest, preference, and attitude) for choosing to exert effort in a particular direction. Brett and VandeWalle (1999) motive-based theories recognise that people may have very different purposes for exhibiting the same behavior. Job attitudes therefore tend to be more strongly related to citizenship performance than personality variables (Podsakoff et al., 2000); leading to Ryan and Deci, 2000) to conclude that the relationship between personality and citizenship performance is probably mediated by attitudes such as job satisfaction, organisational commitment, and fairness perceptions. Gade (2003) on the other hand opined that, organisational commitment is an important motive for the military context, its components have been shown to predict various types of job-related behaviors (Gade, Tiggle and Schumm, 2003; Karrasch, 2003).

Johnson’s (2003) general model of the pathways by which individual differences in predictor variables influence performance on a given dimension is presented in Figure 2.12. Campbell (2004) also suggested that the determinants of
performance components should be based on individual differences on function of three main areas: declarative knowledge, procedural knowledge and skill, and motivation. Consistent with Campbell et al. (1993), performance is a function of knowledge, skill, and motivation. The model could be expanded to include other classes of individual organisation, indirect performance determinants and also recognise the numerous potential moderators that can influence the extent to which individual differences predict performance.

**Figure 2.11 Determinants of Job Performance**

Source: Johnson (2003)

The model describes the potential paths through which different classes of variables may operate to influence different levels of performance. The relative strength of each path from one construct to another depends on the specific
predictor variables included in the model and the specific performance dimension that is the criterion. For example, if achievement were used to predict the demonstrating effort dimension of citizenship performance, the strongest path would go through motivation (because motivation is highly relevant to demonstrating effort, and achievement is highly relevant to each component of motivation). If sociability were used to predict the maintenance of good working relationship dimension of citizenship performance, the stronger paths were likely to go through knowledge and skill.

2.10.3.3 Model on Administrative Performance presented in Figure 2.13.

Figure 2.12: Administrative Performance Model
Source: Author’s Typology Field Work (2012)

Administrative performance (jp), as in Figure 2.12, shows a function of effective communication (ec), opportunity on channels of communication available (occ), the sender/receivers of message observed (srm) and the willingness to act upon the message (wa). The concept above can be represented in a mathematical
equation as: \( \text{jp} = f(\text{ec, occ, srm, wa}) \). Paradoxically, the above shows a clear link between Administrative Performance and Effective Communication.

The model concept means that the factors indicated above affect performance and that is determined by the degree at which each component is affected in the communication process. For instance, the more efforts people in the communication process put in, the better the performance. Similarly, if one of the components of the above concept is missing, performance is likely to be poor.

Vigoda (2003) also indicated that the search for higher performance in public administrative systems draws on a continuous exploration of measurable output and outcome indicators. This doctrine as implemented in the public sector implies that if you can’t measure a public output/outcome, it probably isn’t worth considering. Many performance indicators (PIs) have been developed to evaluate administrative performance (Berman 2000; Nyhan 1995). Nonetheless, two of the most commonly used perceptual measures are (1) attitudes towards the general responsiveness of governments and public administration and, (2) detailed evaluations of citizens’ satisfaction with governmental services. Responsiveness to citizens as clients may be regarded as the Holy Grail of modern public administration. A responsive bureaucracy delivers services and goods to its destinations with optimal speed and accuracy (Chi 1999; Vigoda 2000). Thomas and Palfrey (1996) argued that responsiveness attests to the speed and accuracy with which a service provider replies to a request for action or for information. Speed can refer to the waiting time between citizens’ request for action and the reply of the public agency. Accuracy means the extent to
which the provider’s response is appropriate to the needs or wishes of the service
user (Rourke 1992; Stewart and Ranson 1994).

Beyond the idea of measuring the general responsiveness of public agencies
there is also a need to evaluate in greater detail the satisfaction from services
received. Administrative performance means a comprehensive, distinctive,
reliable and continuous managerial quality, administrative performance and trust
in governance assessment of citizens’ satisfaction from governmental operation
in various fields. In recent decades, satisfaction measures have become prevalent
in state and federal agencies. They were largely prompted by the client canon
and by the vision of ‘putting citizens first’ (Caiden and Caiden 2002). Hence,
public administration encourages the use of satisfaction measures as part of
performance evaluations both inside public agencies and around them (Poister
and Henry 1994; Swindell and Kelly 2000). It should also be noted that this
strategy has been adopted despite some limitations and criticism it needs to
address (Stipak, 1979, 1980).

From the foregoing literature, many variables including trust, transparency and
accountability, could result in performance. Similarly, effective communication
could result in administrative performance. This model is shown in Figure 2.13
This model follows a typology adopted by Citrin and Muste (1999) and Ruscio (1997). It represents the thesis that effective communication is a precondition for the emergence of better performance. From the above, effective communication leads to performance with government and University administration for instance, mediates the relationship between a set of variables representing quality of performance and stakeholder’s satisfaction (including staff).

2.10.4 Group cohesion

Group cohesion could be regarded as the degree to which a number of people constantly support each other in a given work environment for the achievement of a common goal. Yoo and Alavi (2001) found that in established groups, group cohesion had a larger influence than communication media for measures of task participation and social presence. Furthermore, they found that group cohesion influenced how group members perceived communication media in established
organisations. Yoo and Alavi (2001) again argued that group cohesion can
sometimes help to improve the richness of lean media. Cohesiveness is an
important component of every groups, and it contributes to the overall
effectiveness of the goals of the group. An effective way for a leader to increase
the cohesiveness of their group is to become competent in nonverbal
communication. Also, nonverbal competence is important to interaction within
the group in order to correct inadvertent messages, and if possible, to eliminate
them (Daniels 2002). Further, those groups that are cohesive tend to be happier
and more productive (Engleberg and Wynn, 2003). According to Kolb, Jin, and
Song (2008), most teamwork training effectively covers relationship
management, yet not much attention is directed toward communication and
conflict.

McBride (2006) writes that the more cohesive the group, the happier and more
productive the group is. When leading a small group, it is important to
understand the appropriate times to use nonverbal competence to avoiding
misunderstandings which pays a high reward by enhancing our self-esteem and
gaining the esteem of others (Caputo, Hazel, McMahon, and Dannels, 2002).
Engleberg and Wynn (2003) stated that when analyzing the effectiveness of a
group, it is important to consider that increased productivity and increased
cohesiveness have a reciprocal relationship in the group functionality. From
casual peer chatting to formal meetings, regular group discussions, and
presentations, small group interactions are governed by complex conscious and
subconscious rules (Gatica-Perez, 2009). In addition to the above, Kolb, Jin, and
Song (2008), indicated that organisations benefit greatly from effective
teamwork, unfortunately, (despite possessing the necessary members, tools, and resources) not all groups today have successful outcomes. However, effective ways to improve worker performance are sought more and more today, and group performance is one of the most important focal points (Robertson and Huang, 2005). Numerous scholars have studied the value and properties of group effectiveness and such studies have shown that the abilities of the leaders are important in terms of group effectiveness (Kolb, Jin and Song, 2008).

Nevertheless, close and collaborative relationships with customers may be an important factor in influencing cohesion and performance (Riggio, 2006), market performance (Swink and Song, 2007) and innovation (Koufteros et al., 2007). Stokes (1993) indicated that because of its strategic nature, supplier integration can be characterized by the collaborative and long-term relationship between buyer and supplier involving high levels of trust, commitment and information sharing; which could be no different from group cohesion.

2.10.5 Directions of Communication

According to Luneburg and Ornstein (2008), the structure of an organisation should provide for communication in three distinct directions: downward, upward, and horizontal. These three directions establish the framework within which communication in an organisation takes place. These communication directional flows are depicted in Figure 2.14, a typology of what was developed by Engleberg and Wynn, (2003). Building on Engleberg and his colleague’s work makes clear a fourth direction of communication – diagonal communication (as appeared) ‘a’ to ‘b’ and the vice versa in figure…). Here, a
superior at ‘b’ who requires information from a subordinate in a different
department ‘a’, may walk there directly for it; instead of going through a
colleague on the same level at the top (in ‘c’, ‘d’ or ‘e’). This approach is in
collecting information could be faster, quicker and avoids possible bureaucracy
in communication; and sometimes the mere absence of such colleague.

Figure 2.14: Downward, Upward, Horizontal and Diagonal directions of
Communication
Source: Author’s Field work, 2012

2.10.5.1 Downward Communication

In support of the directions of communication as in Figure 2.15, Downs and
Adrian (2004) noted that there is often a discrepancy in organisations between
management’s perception of what employees say they need and want to know.
Importance of openness and trust has been recognised by many theorists and is
echoed throughout the literature; including Gibb theory of “defensive” versus
“supportive” climates in communication. Maslow’s (1954) contribution to the
above as cited by Mullins (2002) classic hierarchy of needs model, postulate that workers must satisfy their basic needs before being motivated by higher level needs. Downs and Adrian (2004) noted that there is often a discrepancy in organisations between management’s perception of what employees say they need and want to know. Euster (1981) opined on open communication climate and indicated that upward, downward and lateral information flows were necessary for both formal and informal communication methods.

Traditional views of the communication process in school organisation have been dominated by downward communication flows. Such flows transmit information from higher position (teacher) to lower levels position (student) of the school organisation. School leaders, from central office administrators to building-level administrators, communicate downward to group members through speeches, instructional messages in school bulletins, school board policy manuals, and school procedure handbooks. Canary (2011) has identified five general purposes of downward communication:

- Implication of goals, strategies, and objectives.
- Job instructions and rationale.
- Procedures and practices.
- Performance feedback.
- Socialisation.

The downward flow of communication provides a channel for directives, instructions, and information to organisational members. However, much information gets lost as it is passed from one person to another. Moreover, the
message can be distorted if it travels a great distance from its sender to the ultimate receiver down through the formal school organisation hierarchy (Tourish, 2010).

2.10.5.2 Upward Communication

Upward communication as appeared in Figure 2.15, refers to information that flows from subordinates to supervisors and managers and may include suggestions for organisational improvement, employee concerns, and information about operational issues. This component of internal communication is often cited as being the most deficient given the critical or negative nature of upward feedback. Hall (2007) suggested filtering out “upward communication, out of a need for self-preservation related to their mobility aspirations and their desire to gain their managers’ trust. However, it is widely acknowledged that upward feedback, upward communication and open-door policies deliver significant organisational benefits” such as enhanced participation, better decision making, and an enhancement of organisational benefits (Tourish and Hargie, 2004). As with downward communication, poor upward communication can have a significant impact on employee satisfaction, productivity and overall organisational performance (Downs and Adrian, 2004).

Upward communication flow helps employees to meet their personal needs, by allowing those in positions of lesser authority to express opinions and perceptions to those in higher authority. To increase the effectiveness of upward communication, Luthans (1994) recommends the use of grievance procedures, open door policies, counseling, employee questionnaires, exit interviews,
participative decision-making techniques, and the use of an ombudsperson. In addition to above, McCelland (1988) found a number of employee-based reasons why upward communication tends to be poor include:

- Fears of reprisal – people are afraid to speak their minds.
- Filters – employees feel their ideas/concerns are modified as they get transmitted upward.
- Time – managers give the impression that they don’t have the time to listen to employees.

Grievance procedure isa clear case of upwards communication which allows employees to make an appeal (upward) beyond their immediate supervisor. It protects the individual from arbitrary action by their direct supervisor and encourages communication about complaints. To increase the effectiveness of upward communication, Luthans (1994) recommends the use of grievance procedures, open door policies, counseling, employee questionnaires, exit interviews, participative decision-making techniques, and the use of an ombudsperson.

The behaviourists have emphasised the establishment of upward communication flows. In a school organisation, this was referred to as communication that travels from staff member to leader. This is necessary not only to determine if staff members have understood the information sent downward, but also to meet the ego needs of staff. Five types of information communicated upwards, according to Canary (2011) in a school environment, could include:

- Problems and exceptions.
- Suggestions for improvement.
Ideally, organisational structure should provide for both upward and downward communication flows. Communication should travel in both directions through the formal school organisational hierarchy. Unfortunately, communication from the bottom does not flow as freely as communication from the top. Again Cheney (2011) opined some barriers to effective upward communication in a school set up to include:

- Administrators failing to respond when staff members bring up information or problems.
- Administrators tend to be defensive on less-than-perfect actions.
- The administrator’s attitude is concerned and hardly listens.
- Physical barriers can also inhibit upward communication flow.
- Time lags between the communication and the action can inhibit upward communication.

Keyton (2011) suggested some methods of improving the effectiveness of upward communication in a school environment to include:

- The open-door policy
- Counseling, attitude questionnaire and exit interview
- Participative techniques
- The ombudsperson
- The union contract
2.10.5.3 Horizontal (Lateral) Communication

Upward and downward communications are inadequate for effective organisational performance without the flow of lateral communication. The purpose of lateral or horizontal communication as shown in Figure 2.15 is the sharing of information among peers at similar levels to keep staff informed of all current practices, policies, and procedures (Spillan et al., 2002). Committees, task forces, and cross-functional project teams are all useful forms of horizontal communication. Fox (2001) also indicated that horizontal communication appears among people of the same status within a department or among different working units.

It should be noted that if an organisation has open communication, it will serve as an effective method to give their employees information with which to identify itself (Bartels, Peters, de Jong, Pruyn and Van der Molen, 2010). Executives and other managers communicate organisational goals and support their subordinates by horizontal means (Bartels et al., 2010). Horizontal communication also encourages identification within their department, branch, or sector of the company. Stevens (1983) argued that the most effective means of solving problems within organisation is to provide for a high degree of lateral communication among and between first-line supervisors and their staff, as they jointly deal with the many problems of coordinating work flow. Downs and Adrian (2004) assert that horizontal communication is usually informal in nature, is task-oriented or takes place for social reasons, often stimulating organisational commitment.
2.10.5.4 Diagonal Flow

Longest et al, (2000) opined that the least used channel of communication, as a case in point, in healthcare organisations is diagonal flow. While diagonal flow does not follow the typical hierarchical chain of command, it is especially useful to other especially in health care for efficient communication and coordination of patient care; whereas the diagonal communication appears among people of the different status who are not formally connected in the organisational communication system. According to Fox (2001), the diagonal communication occurs when, for example, the Director of Nursing asks the Data Analyst in the medical records department to generate a medical records report for the month on all patients in the intensive care unit. This case in point is further augmented in a typology shown in Figure 2.15 (b to a) above.

Wilson (1992) stressed that diagonal communication refers to communication between managers and workers located in different functional divisions. The concept of diagonal communication was introduced to capture the new communication challenges associated with new organisational forms, such as matrix and project-based organisations. Wilson also observed that with the rise of the network organisation communication flows can no longer be restricted to vertical, horizontal, and diagonal. Diagonal flow occurs between different levels of different departments. Longest et al., (2000) provides us with several forms of intra communication for public sector organisations.
2.10.6 Communication Networks

Communication networks represent a complex system of the flow of information, orders, wishes and references made from two partially complementary systems: formal communication network and informal - communication network (Fox, 2001). Formal communication is described as a systematic and formal process of information transmission in spoken and written form planned and adjusted with the needs of the organization while informal communication does not follow the line determined in advance, but there is an undisturbed communication between particular groups within the organisation (Fox, 2001).

2.10.6.1 Formal and informal small group networks

Formal small group communication takes place within the official channels approved by senior management. An example would be a marketing manager talking to the marketing director: his or her immediate boss. Within that channel any form of communication is regarded as formal. Communication channels, are established by the organisation and is accepted and recognised by employees and managers. Formal Network is split into two different areas in a central location as follows:
Informal group are used in complex problems situation especially in decentralised networks system and can be put into two categories as; the circle and all channels.

Figure 2.15 Small Group Networks  
**Source:** Robbins (2003)

Figure 2.16: Centralised and Decentralised Structure  
**Source:** Donald and Fisher (1981)
The wheel is an example of a centralized structure, while the circle is decentralized. Research has shown that centralized groups are better than decentralized groups in terms of speed and efficiency. “Informal communication in some cultural certain is known as grapevine. Grapevine is not a less important source of information, managers should however acknowledge also the informal communication systems in the organisation, and use them for the welfare of their organisation. Informal communication reflects the employees’ perception concerning the organisation.

It often carries or asks for information that the management, accidentally or deliberately, has not formally disclosed (Fox, 2001). Grapevine communication consists of three main features as; first, it is not controlled by the management; secondly, most of the employees consider it more feasible and more reliable than the official notifications provided by the top management; and thirdly, it is mostly used for the self-interest of the people within it (Robbins, 2003).

2.10.6.2: Verbal and Nonverbal Messages

Griffin (2009) stated that the process of interpersonal communication is mutual and ongoing and both verbal and nonverbal messages are used with another person to create and alter the images in both minds. According to Caputo, Hazel, McMahon and Dannels (2002), the process of nonverbal communication is: ongoing; can be intentional or unintentional; ambiguous; the foremost mode for expressing emotions; culture based; and nonverbal messages are more believable than verbal messages. One’s verbal and nonverbal messages are
either validated or discounted by other people’s perception of their character and competence (Griffin, 2009). Nonverbal communications, as suggested by researchers, have the most important role in interpersonal communications and account for a majority (about sixty-five to ninety percent) of the meaning within an interaction (Crane and Crane, 2010). However, the context of the interaction also plays a large part in the outcome of the interaction itself.

Caputo, et al., (2002) indicated further that the characterization of nonverbal communication differs in many ways from the ways verbal communication is characterized. Burgoon’s expectancy violations theory predicts the responses that the inappropriate actions of a communicator will elicited in nonverbal communication (Griffin, 2009). The lens of the expectancy violations theory allows for the examination of nonverbal competence. Another theory that lends itself to guiding the research of the use of nonverbal competence to increase group cohesiveness is Pearce (2009) coordinated management of meaning. The theory of coordinated management of meaning suggests that communication should be used by all to make sense of interaction, through the coordination of our actions and behavior of others. A third theory that provides an opportunity for guidance in the use of nonverbal competence to increase group cohesiveness is Mead’s symbolic interactions.

According to Griffin (2009), Mead’s focus was to understand the way we attach labels to people and their actions. Pearce’s theory of coordinated management of meaning states that the context in which people say things are not nearly as important as the way people communicate (Griffin, 2009). Nonverbal communication is an integral part of the way people communicate; form...
relationships from the dynamic dance over coordinated actions and meanings; but not limited to, eye contact, touch, and facial expression. Griffrin (2009) again pointed out that Mead’s theory of symbolic interactionism analyzes the way we look at the world and a closer examination of the effect of nonverbal communication on the effectiveness of small groups is one way to look at the world. Research shows that the nonverbal behavior of a group can be affected by the task assigned during that group’s interaction (Puccinelli and Rosenthal, 2003). The leader of that group can also affect the nonverbal behavior of a group and the leader’s ability to demonstrate their competence in nonverbal communication, and as a result increasing the group’s cohesiveness.

Controlling nonverbal messages, as the sender, is not possible one hundred percent of the time (Griffin, 2009). When the behavior in an interpersonal interaction appears to be naturally synchronous there is a likely chance that the interaction will reflect positively on the relationship (Stewart, 2009). Stewart (2009) discusses the idea that whether the nonverbal cues are intended or unintended, universal or culturally bound, they play an important part in our interactions with others. Behavioral synchrony refers to the degree that two people’s behaviors coordinate with each other, and behavioral synchrony also indicates the degree of intimacy and equality people have with one another (Stewart, 2009). Facial expressions, vocal qualities, body movements, distances between those we interact, and other associated voice elements are all included under the concept of nonverbal messages (Caputo, et al; 2002). These elements, among others, are those that are considered to fit into two categories of nonverbal communication. Rashotte (2002) stated that the elements of speech
rate, tone of voice, pauses, voice volume, pitch and self-interruptions (such as coughing or laughing) are considered paralinguistic, or verbal communication. Gatica-Perez (2009) added that in accordance with the spoken word, nonverbally there is a wealth of information conveyed during group conversations including nonverbal, and some of these nonverbal signals are intentional while others are as a result of automatic processes.

It is important to also consider that everyone has differing abilities in conveying and interpreting nonverbal communication, and they therefore vary in their abilities to monitor and control their nonverbal communication (Riggio, 2003). Yet, Riggio (2003) stressed that in order for someone to be skilled in nonverbal interpretation they must have a heightened sensitivity to the nonverbal messages of others, and also be able to interpret the nonverbal messages of others accurately. Caputo, et al (2002) opined that people can be trained to more accurately “read” nonverbal messages when it is not possible to seek or give feedback.

2.11 Conceptual Framework

Ideally effective organisational and communication should contribute to administrative performance. Some explanations have been made on organisational communication and administrative performance in the preceding pages. Longest et al., (2000) on the other hand provides us with several forms of intra organisational communication for public service organisations; some of which reflect the pages that follow. The Conceptual framework on this work on the other hand indicates organisational communication and administrative performance of staff at the University with interrelated variables: independent,
dependent and intervening variables. The independent variables of this framework consist of the organisational communication with components: as the systems of communication, means of communication and the personal characteristics of staff. The intervening variables are group cohesion, University policy and macro and micro barriers; while the dependent variable is administrative performance (improved job behaviour). All these variables are interrelated and depend on each other. Staff within the organisation with their personal characteristics such as age, sex, marital status, rank, ethnic-linguistic (tribe) years of experience and educational qualification could have direct influence on organisational communication and the perception of staff on administrative performance in the University. Again, the perception of organisational communication could determine how satisfied staff of the University is at the work place.

The intervening variables made of group cohesion, University policy and macro and micro barriers of communication could equally influence job performance. For instance, when group cohesion is weak, the relationship between perception of staff communication and administrative performance will be weak. On the other hand, when group cohesion is strong, the relationship between organisational communication and administrative performance will equally be strong. This however further perceived could happen or achieved with proper organisational policies and ameliorated communication barriers positively or negatively which either could strongly impact on job performance.
Figure 2.17: The conceptual framework of effectiveness on organisational communication and administrative performance of staff in UEW
2.3.1 Systems Theory (Theoretical Framework)

Systems theory treated human communication in the same manner as all other communicative processes, be they engineering systems, physical communication phenomena such as light or energy transfer processes, living biological systems, or entire social systems Scott (2000). Open Systems applications were also made by Katz and Kahn (1966), as self-renewing systems that ingest energy from the environment (input), transform that energy (throughput), and expend it back into the environment (output) for maintenance and production purposes in an organisation. For this reason, a system model and communication model are depicted to indicate ideal functioning of the organisation. Many other approaches to human communication have been developed after as systems theory which played a significant role in the development of communication theory (Cohen, 1996). Bertalanffy et al (1968) developed systems and cybernetics theories, and focused on human communication studies on language, linguistics and semiotics. Scott maintained that communication can be treated like any other system, containing features such as feedback processes and other aspects of control theory.

Again, in his contribution on the key lesson from systems theory on each subdivision of the organisation as affected by activity in other parts, Miller (2006) pointed out that the organisation itself is an ‘open system’, exposed to a wider environment in which it both experiences competitive threats and finds its collaborative partners. In short, he meant that organisations do not operate like thermostats, rather their actions are the result of countless human decisions, each of which is based on subjective perceptions of the world in which they are
operating and their preexisting values and experiences. Cheney and Christensen (2001) and Zorn (2002), however, indicated that there have been efforts to reintegrate internal and external communication issues, an approach that points to the increasingly ‘blurred’ boundaries of today’s organisations, and argue that there is an underlying continuity between what have previously been termed ‘internal’ and ‘external’ communication processes. Figure 2.1 is an illustration of the multiple dimensions of organizational communication as depicted by Blundel & Ippolito (2008).

**Figure 2.18:** Multiple dimensions of Organizational Communication

*Source:* Blundel & Ippolito (2008)

The diagram (fig. 2.1) illustrates a “modern-system” approach of inter-related part of an entity, which no separated aspect of an organisation in the communication process exists but depends on one another, a whole entity and is interdependent too. Organisation from the system theory, therefore changes from time to time. Yates and Orlikowski (2002) reflecting on the finding of the
concept of ‘genre systems’, also indicated that the patterns of communication and collaboration are shaped by established technologies. With this Cane (2007) predicts that by 2011, instant messaging will be the de facto tool for voice, video and text communications in businesses, replacing the relatively inaccessible e-mail (Cane 2007). Yates and Orlikowski’s (ibid) research work pointed out how communication practices developed into established norms, structuring the way that we interact with one another. Their more recent work, on ‘genre systems’ (focused on the ways that technologically-mediated communication shapes the way that people collaborate at work). Clark (2000), Dannels and Gaffney (2009) supporting the above, have encountered a similar range of perspectives elsewhere in organisation theory, management studies and other areas of social science.
CHAPTER THREE
METHODOLOGY

3.1 Introduction

This chapter discusses the profile of UEW, study area, the research design, the targeted population, sampling procedure and sample size, data collection, instruments used, measurement of variables, data analysis and testing the hypothesis.

3.2 Study Area

The study was conducted in the four campuses of the UEW (Winneba, Kumasi, Mampong and Ajumako) in Ghana. Specifically, these campuses are in two regions, the Central region (Winneba and Ajumako) and Ashanti region (Kumasi and Mampong); guided by the Ghana Statistical Service (2010) summary report of final results of the 2010 population and housing census. The Winneba campus is the main campus of the University and is in the Effutu Municipality of the Central Region of Ghana. The population of the Municipality is 60,331 and is on the south coast, 140 km east of Cape Coast. The second campus, the College of Technology Education is in the Kumasi Metropolis in the Ashanti Region. The third campus, the College of Agriculture Education is also in the Mampong Municipality of the Ashanti Region with a population of over 1.7 million people. Mampong Municipality has a population of 42,037 people. Ajumako campus is the fourth and hosts the Faculty of Languages Education, located in the Central Region of Ghana. Ajumako is a district capital in the region and is about 40 kilometers northeast of Cape Coast, the regional capital with a population over
35,000 people. The location of the four campuses of UEW in Ghana is indicated in figure 3.1.

Figure 3.1: Map of Ghana showing the location of the four campuses (Winneba, Adjumako, Mampong and Kumasi) of UEW

Source: Author’s Field Work (2012)

3.3 Research Design

The research design is planned to include the conditions for collection and analysing data collected in a manner that aims at combining relevance to the
research purpose and procedure. For this study the survey method was applied as a means of soliciting views from respondents through the administration of questionnaire (Cooper and Schneider, 2003).

3.4 The Targeted Population

The population for the study comprised all staff of the University. The total staff population of the University as at May 2012 was 1,739 for all categories of staff (UEW Planning Office, 2012). This total number of staff included 25 management members, 460 senior members, 356 senior staff and 898 junior staff from all the four campuses of the University. The distribution of the population by campuses is indicated in Table 3.1.

<table>
<thead>
<tr>
<th>Staff category/Campus</th>
<th>Management staff</th>
<th>Senior members</th>
<th>Senior staff</th>
<th>Junior staff</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winneba</td>
<td>7</td>
<td>336</td>
<td>262</td>
<td>575</td>
<td>1,180</td>
</tr>
<tr>
<td>Kumasi</td>
<td>7</td>
<td>82</td>
<td>59</td>
<td>172</td>
<td>320</td>
</tr>
<tr>
<td>Mampong</td>
<td>6</td>
<td>35</td>
<td>25</td>
<td>107</td>
<td>173</td>
</tr>
<tr>
<td>Ajumako</td>
<td>5</td>
<td>7</td>
<td>10</td>
<td>44</td>
<td>66</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>460</strong></td>
<td><strong>356</strong></td>
<td><strong>898</strong></td>
<td><strong>1,739</strong></td>
</tr>
</tbody>
</table>

Source: UEW Planning Office (2012)

According to Cooper (2002), even though it is usually not possible to show a fair representation from tens of thousands, an independent survey from a population with a few hundred will not show bias. However, the larger the sample size, the lower the error in generalising.
3.5 Sampling Techniques and Sample Size Determination

The multi-stage sampling technique was used in arriving at the sample for this study, as this enabled the researcher to elaborate, refine and deepen the initial analysis (Al-hassan, 2015). To begin with UEW was purposively selected because of the focus of the study. This was followed by stratifying the University into four strata based on the number of campuses (Winneba, Kumasi, Mampong and Ajumako). Stratified sampling technique was again used to categories the staff on each campus into four, namely, management staff (Vice Chancellor, Pro Vice Chancellor, Registrar, Finance Officer, Librarian, Development Officer and the various College Principals), senior members (Lecturers, Registrars, Medical staff, Finance staff and other Officers), senior staff (Administrators, Accountants and Research Assistants) and junior staff (Clerks and Labourers).

With a total staff population (sample frame) of 1,739, a sample size of 313 was determined using the Krejcie and Morgan (1970) table for sample size determination. This was used to help the researcher to arrive at a more statistically realistic sample size to work with. Proportional sampling procedure was used to determine the proportions of management staff, senior members, senior staff and junior staff of the total sample for the study. The number of respondents to be selected from each campus per staff category was also determined. Simple random sampling was then used to select the individual respondents on each campus. Table 3.2 is a summary of how the study sample (313) was arrived at.
Table 3.2: Sample Size Determination

<table>
<thead>
<tr>
<th>Staff category</th>
<th>Winneba</th>
<th>Kumasi</th>
<th>Mampong</th>
<th>Ajumanko</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>n*</td>
<td>N</td>
<td>n*</td>
<td>N</td>
</tr>
<tr>
<td>Management Staff</td>
<td>7</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Senior Members</td>
<td>336</td>
<td>70</td>
<td>82</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>Senior Staff</td>
<td>262</td>
<td>60</td>
<td>59</td>
<td>31</td>
<td>25</td>
</tr>
<tr>
<td>Junior Staff</td>
<td>575</td>
<td>30</td>
<td>172</td>
<td>15</td>
<td>107</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1180</td>
<td>164</td>
<td>320</td>
<td>90</td>
<td>173</td>
</tr>
</tbody>
</table>

Convenient and purposive sampling can be applied in non-probability sampling respondents where they do not have equal chance of being selected in a study; a judgment could be obtained according to the discretion of the researcher familiar with the relevant characteristics of the target population (Al-hassan, 2015). The researcher conveniently selected 60 junior staff members of the University because most of them are not active participants in the formal communication process in the University, as some cannot even read or writes. Besides, this category of staff communicates only through limited channels. Thus, the few who demonstrated their ability to read and write were conveniently selected for the study.

3.6 Instruments for Data Collection

A structured questionnaire was designed to reflect the objectives of the study. The questionnaire was categorized into five sections, numbering sections A to E. Section ‘A’ covered thirty (30) manifest variables measuring the perceptions of respondents about the nature of communication in the University. A five-point Likert scale was used in measuring the perceptions of respondents. The
scale ranged from Strongly Agree to Strongly Disagree and was indicated as follows: Strongly agreed = 5, Agreed = 4, Somewhat Agree = 3, Disagree = 2 and Strongly Disagree = 1.

Section ‘B’ also used a five-point Likert scale to measure respondents’ perceptions of organisational communication system and administrative performance. They were asked to indicate their levels of agreement with thirty (30) statements. The response categories were: Excellent = 5, Very Good = 4, Good = 3, Fair = 2 and Poor = 1.

Section ‘C’ contained thirty-two (32) statements on a 3-point Likert scale and was used to measure respondents’ perceptions of the impact of University communication on group cohesion. The scale ranged from high to low as: High = 3, Moderate = 2 and Low = 1.

Section ‘D’ covered thirty (30) statements measuring the constraints militating against effective communication in the University. A five-point Likert scale was used with the following response categories: Very serious = 5, Serious = 4, Somehow serious = 3, Not serious = 2 and No constraint = 1.

The last section, ‘E’ covered the demographic characteristics of respondents. There were eleven (11) variables consisting of the name of respondent, campus, sex, age, marital status, department/section, status/job title, rank, ethno linguistic, number of years in service (experience) and educational qualification. Interview schedules were also designed for the collection of qualitative data.
3.7 Validity and Reliability of Questionnaire

The questionnaire was validated (both construct and content) with the help of two experts in organizational communication to ensure that it measured what the researcher intended to measure, and pre-tested to ensure the reliability of the results. To pre-test the questionnaire, 30 were administered to 30 senior members who were randomly selected in a similar multi-campus institution (University for Development Studies, Tamale). Out of the 30, 23 were retrieved and an analysis of the data resulted in an overall Cronbach Alpha of 0.949. Corrections were made based on the comments and test results. After two weeks the researcher carried out a re-test of the corrected questionnaire, using the same respondents contacted during the pre-testing stage. Only 19 out of the 30 respondents returned their completed questionnaires to the researcher. An analysis of the data yielded a Cronbach’s Alpha of 0.942 using valid responses from 15 respondents. This implies that, if the survey is replicated, similar results are likely to be obtained. All the necessary corrections were made after the re-test before printing the final version. Table 3.3 presents a summary of the test, re-test and the main study statistical results obtained:

Table 3.3: Summary of responses from Test, Re-test and the Main Study

<table>
<thead>
<tr>
<th>Activity</th>
<th>Section</th>
<th>No. of items</th>
<th>Sample</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST</td>
<td>A</td>
<td>30</td>
<td>29</td>
<td>0.505</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>30</td>
<td>29</td>
<td>0.973</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>32</td>
<td>30</td>
<td>0.937</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>30</td>
<td>30</td>
<td>0.974</td>
</tr>
<tr>
<td>RE-TEST</td>
<td>A</td>
<td>30</td>
<td>19</td>
<td>0.465</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>30</td>
<td>18</td>
<td>0.979</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>32</td>
<td>19</td>
<td>0.952</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>30</td>
<td>19</td>
<td>0.982</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2012
3.8 Data Collection Strategy

For ethical reasons permission was sought from the University’s management concerning the participation of the staff and the use of relevant official University documents for the study. The purpose of the study was also explained to the individual respondents and their consent sought before the administration of the questionnaire. The researcher spent one week on each of the four campuses to collect data. After the four weeks, four Research Assistants, one for each campus, were appointed and trained to make follow-ups to retrieve the remaining questionnaire that could not be completed by the respondents during the one week stay of the researcher on each campus.

Considering the research questions that were to be addressed, this study employed a combination of quantitative and qualitative methods to collect data. Qualitative data were collected using interviews and observations, while questionnaires were used to collect quantitative data. Baker (1994) emphasized the importance of using multiple methods in data collection which allows for cross-checking the reality of certain phenomena by gathering data from many sources for purposes of comparing different versions to produce a balanced report. The use of multiple data collection methods assisted the researcher to confirm or disapprove other findings (Patton, 2002). This makes it possible to build on their strengths while minimizing the weakness of any single approach. Hogan (2007) asserted that, the limitations in one technique can be compensated for by the strengths of the other.
Four hundred (400) copies of the questionnaire were produced for administration to the respondents. Eighty-seven (87) out of the 400 were reserved for replacement; because fifty (50) respondents lost theirs and asked for replacement; and few other respondents requested for questionnaire twice or thrice. The questionnaires were personally distributed to all the selected categories of respondents (313) on all the campuses of the University. Out of the number administered, 309 were received from respondents after several follow ups. This gives a response rate of 98.7%. Out of the 309 received 304 (98.4%) were answered fully whilst 5 (1.6%) were incomplete. Data collection was done from 6th March to 2nd June 2012 on all the four campuses of the University.

The interview schedule was also used to gather qualitative information from some selected staff. The respondents were selected from all the four categories of staff (junior staff, senior staff, senior members and management staff) on all the campuses of the University using convenience and purposive sampling techniques. In all 28 respondents, comprising 13 females and 15 males were interviewed. Out of the 28 respondents, there were 6 junior staff, 10 senior staff, 12 senior members and 2 management members. Each interview lasted between 14 and 65 minutes and was conducted at locations convenient to the respondents. All 28 interviews involved individual meetings. To ensure that ethical considerations were followed, the researcher requested for respondents’ permission to take down notes to ensure that they understood their rights as respondents; and were also reminded that their identity would remain confidential in all stages of the study. Data was collected by using note-taking and tape-recording if interviewees were comfortable with any of them (Yates,
2004). This was intended to improve the outcome of the study and give confidence to the accuracy of the interview process and to ensure the reliability of the findings in general.

Equally, the researcher observed formal and informal forms of communications of system of staff at meetings, the use of memos and letters, committee reports, to mention but few areas to explore more complex situations. Those which have multiple answers and truths from another person’s point of view and provide a detailed understanding of how social realities were produced and maintained through every day practices (Baxter and Babbie, 2004). In this study, the researcher engaged in limited interaction, interviewing only when more clarification of both verbal and non-verbal actions was needed. The researcher visited all the four campuses of the University to acquaint himself with such findings. Similarly, those visits also enabled the researcher to observe how staff informally interacted with their peers, subordinates and superiors in the work setting. However, care was taken in other to respect desired ethical standards required in all these areas.

This research relied extensively on the use of notes taking to document descriptions of settings, people, activities, and sounds. Lofland and Lofland (1984) recommended that, writing down notes serve as a memory aid when full field notes are constructed.

3.9 Measurement of Variables

Three main variables types were used in this study. These were the independent, dependent and intervening variables and were operationalised as follows:
3.9.1 Independent Variable

In Section A, perception of staff on the nature of Organisational Communication in the University, is the first objective, with Organisational Communication being the main independent variable measured. The nature of Organisational communication was measured using 30 perceptive statements as indicated in Section A of appendix I. Respondents were asked to rate their perceptions regarding organisational communication on a 5-point Likert type scale ranging from 1 to 5 as: Strongly Agree = 5, Agree = 4, Somewhat Agree = 3, Disagree = 2 and Strongly Disagree = 1.

3.9.2 Dependent Variable

Section B of the questionnaire sought to satisfy the requirements of the second objective: examining the effect of organisational communication on administrative performance of staff in UEW. Here, Administrative Performance was the subject of interest and considered as the dependent variable. Dependent variable is a measurable characteristic that shows the effect of manipulating the independent variables. It is the execution of tasks in line with the employee’s job description for the attainment of optimal standard of effectiveness and efficiency expected within the organisation. In this study, respondents were requested to respond to 30 statements by indicating their perceptions on a 5-point Likert type scale, ranging from 1 to 5 as: Excellent Performance = 5; Very Good Performance = 4; Good Performance = 3; Fair Performance = 2; Poor Performance = 1.
3.9.3 Intervening Variables

These are variables that help in explaining the relationship between the dependent and independent variables. This part of the instrument looked at the fourth objective of the study. The objective examined the constraints militating against organisational communication in the University. Constraints to organisational communication were measured using the Likert scale.

Group Cohesion (Section C)

Group cohesion refers to a situation in which individuals are bound to one another by common organisational, social and cultural commitments. Respondents were asked to rate their perceptions on a 3-point Likert type scale using 32 perceptive statements with the following response categories:

High = 3, Moderate = 2 and Low = 1.

Constraints to Organisational Communication (Section D)

This part featured 30 constraints militating against communication flow in the University which were derived from both literature and from personal experience. Respondents were requested to indicate their perceptions regarding the level of seriousness of each constraint on organisational communication on their campuses on a 5-point Likert scale and coded as:

Very Serious Constraint = 5, Serious Constraints = 4, Somewhat Serious Constraints = 3, Not Serious = 2 and No Constraint = 1
3.9.4. Independent Variables

Section E looked at the fifth objective of the study which formed part of the independent variables. In this study, the socio-demographic characteristics, apart from organisational communication, were the independent variables. The major socio-demographic characteristics were measured using appropriate codes as follows:

**Location of Campus:** This is a continuous categorical variable measured at nominal level. Respondents were asked to indicate their campus and were coded as: Winneba = 1, Kumasi = 2, Mampong = 3 and Ajumanko = 4

**Age:** This is an interval scale measurement. The respondents were asked to indicate the age range they belonged to and coded as: Less than 25years = 1, 26-30years = 2, 31-40years = 3, 41-50years = 4, 51-60 = 5 and above 60years = 6

**Sex:** This is a categorical variable measured at nominal level and coded as: Male = 1 and Female = 2

**Ethno-Linguistic Grouping:** This is a continuous categorical variable measured at nominal level. This relates to the language spoken and respondents were asked to indicate their ethno linguistic group as follows: Akan = 1, Fanti = 2, Ewe = 3, Ga = 4, Others = 5 and No response = 6

**Marital Status:** Is a continuous categorical variable measured at nominal level. Respondents were asked to indicate their marital status and were coded as: Single = 1, Married = 2, Divorce = 3, Widow(er) = 4, Separated = 5
Title/Rank: This was measured at ordinal level into six categories and coded as: Professor/Registrar = 1, Associate Professor/Deputy Registrar = 2, Senior Lecturer/Senior Assistant Registrar = 3, Lecturer/Assistant Registrar = 4, Senior Research Assistant/Senior Administrative Assistant = 5, Others (Clerks and Technicians) = 6

Status: This is a continuous categorical variable measured at nominal level and coded. Respondents were asked to indicate their status as: Junior staff = 1, Senior Staff = 2, Senior Member = 3, Management Member = 4

Number of years at post (Experience): This was the actual number of years spent on the job. Respondents were asked to specify the number of years spent on their job and was measured at interval level (1-20 years, since the area of study is only 20 years old) and coded as:
1-5 = 1, 6-10 = 2, 11-15 = 3 and 16-20 = 4

Educational qualification: Respondents were asked to indicate their educational qualification and was measured at nominal level and coded as:
PhD = 1, MPhil/MSc/MBA/MA = 2, BSc/BA/BEd/BBA = 3, Diploma = 4

3.9 Method of Data Analysis
Data collected from the survey was analysed using the Statistical Package for Social Sciences (SPSS) software version 20.0.

Objectives 1: Descriptive statistics in the form of frequencies, percentages and cross tabulations were used to analyse the demographic characteristics of respondents as assessed by participants. This was presented in a quantitative
summary to allow for simpler and quicker interpretation of the data. It provided understanding of the data in detail and helped put the findings in proper perspective.

**Objectives 2 and 3:** inferential statistics in the form of one sample t-test was used to analyse them. This study employed the means to determine respondents’ levels of agreement with the various perceptive statements and t-values and p-values to establish the levels of significance of the agreements with the statements.

**Objective 4:** Two step cluster analysis was used to analyse group cohesion among respondents and to identify the natural group. Though the variables were measured on a three point Likert scale (low, moderate, high), the two step cluster analysis was deemed appropriate to meet the four groups of employee cohesion patterns. A chi-square test of independence between the groups and employee ranks was also considered here, since employee rank could influence the interest group patterns. Again the chi-square test for employee membership of a cluster (group) was also used to check the influence level by campus of the employee. All these were carried out to check the consistency of communication practice in the University.

**Objective 5:** Kendall Coefficient of Concordance (W) was used to rank constraints to communication in the University. It is a tool that was used to assess agreement among raters. The researcher also used factor analysis with the Varimax rotation method to categorise the constraints.
Hypotheses testing

Hypothesis 1 (H₀₁): There are no significant differences in the effectiveness of organisational communication among various campuses. Analysis of variance (ANOVA) was used to test this hypothesis.

Hypothesis 2 (H₀₂): Staff profile (age, marital status, educational qualification, campus of staff, tenure in office, rank and ethno linguistic) does not influence the effectiveness of organisational communication. Chi-square was used to test this hypothesis.

Hypothesis 3 (H₀₃): There is no significant relationship among staff profile, perception of communication pattern, communication performance, group cohesion and constraints. PPMC correlation matrix was used to test this hypothesis.
CHAPTER FOUR
RESULTS AND DISCUSSION

Introduction

The presentation of the results and discussion in this chapter is summarised under the following headings:

4.1 Demographic profile of staff in the University;
4.2 Staff perception on the nature of communication in the University;
4.3 Organisational communication system and the perception of staff on job performance;
4.4 Staff perception of organisational communication on group cohesion;
4.5 Constraints militating against organisational communication in the University;
4.6 Significant differences in the effectiveness of organisational communication among various campuses.
4.7 Significant relationship between staff profile (age, marital status, educational qualification, campus of staff, tenure in office, rank and ethno linguistic) and effectiveness of organisational communication.
4.8 Significant relationship among staff profile, perception of communication pattern, communication performance, group cohesion and constraints.

4.1 Selected Demographic characteristics of staff

The results of selected demographic characteristics of staff; age, campuses, gender (sex), rank (title), status in the University, educational qualification, years at post (tenure) and marital status are presented in Table 4.1.
Table 4.1: Selected Demographic Characteristics of Staff

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<tr>
<th>Variable</th>
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<th></th>
<th>Kumasi</th>
<th></th>
<th>Mampong</th>
<th></th>
<th>Ajumako</th>
<th></th>
<th>Pooled</th>
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<tbody>
<tr>
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<td>Per cent</td>
<td>Freq</td>
<td>Per cent</td>
<td>Freq</td>
<td>Per cent</td>
<td>Freq</td>
<td>Per cent</td>
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Table 4.1: Selected Demographic Characteristics of Staff cont’d

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Source: Author’s Field Work, 2012
4.1.1 Age

The age of staff was an important variable since it could help establish the number of staff nearing retirement and their possible replacements. Table 4.1 indicates that more than half of the staff at the three campuses (61.3%) are in the age bracket of 26-40 years. The rest fall in the younger and older age groups with 7.4% and 1.6% respectively. The 1.6% represents staff who are either due for retirement or have retired already and therefore need to be replaced. There is the need for the human resource division of the University to plan towards replacement of this category of staff. The finding is similar to that of De Wet et al. (2008) who found out that most working staff in South Africa were between 40-49 years of age, with an average age of 42.3 years and the majority of respondents (80.8%) were in their active age. Grunig et al. (2001) also opined that age balance was required within the education profession to ensure the transfer of knowledge from older colleagues to younger ones. Age can also be related to the practitioners' time of working in the organisation, as well as their years of experience in the performance of their functions. However, Le Roux (2004) suggested that younger practitioners could be appointed to higher level positions if they demonstrated their ability to handle such positions effectively.
4.1.2 Sex

Respondents in this study were simply requested to indicate their sex, either male or female. Table 4.1a shows the sex distribution of the respondents. From the results, more males (58.3%) employed in the University participated in the study than females (41.7%). In Winneba Campus for instance, where the population reflects a larger size, 59.2% of the respondents were males while 40.2% were females; whiles at Ajumako, the lowest in number of staff, 66.7% of the respondents were males and 33.3% were females. The implication here is that gender discrepancies exist in the hiring of female staff in the University. This findings are similar to the findings of Oloruntoba and Ajayi (2006) who also found out in their research in three Nigerian Universities that male employees outnumbered their female counterparts. Again Grunig et al. (2001) studied extensively on the issue of gender and suggested the need to bridge the gap between male and female positions. They cautioned, however, that in seeking to bridge the gap care should be taken so that the situation would not lead to loss of credibility, indiscipline, less competence in the workplace and less seriousness at the work place when the females are compared to their male counterparts. Aldoory and Toth (2002) added that there are still gender discrepancies in hiring, promoting and renumerating female practitioners, which confirms the findings in this study. Niemann-Struweg and Meintjes (2008) on the contrary found in their study that 64% of their respondents were females as against 36% in public relations research.
4.1.3 Educational qualification

As an academic institution, it is obvious that educational qualification is considered as a very important variable. It is perceived that the higher the qualification of staff, the better they can communicate and consequently perform better. The respondents were asked to indicate their highest levels of educational qualification, starting from PhD (the highest qualification) to Certificate (the lowest qualification). From the distribution in Table 4.1, 2.8% of the respondents, being the lowest in number, hold PhD qualification compared to 44.3% who hold Masters Degree qualification and constitute the majority. Only 5.6% of respondents hold certificate qualification. 15.3% have diploma while 32.1% hold bachelors degree qualification.

The implication here is that, as an educational institution, higher academic qualifications are very important to its sustainable development. Regarding the targeted population of the study, it is not surprising that majority of the respondents of 47.1% hold higher qualifications (PhD, Masters Degrees) compared to very few staff (20.8%) having diploma and certificate qualifications. This is in line with the findings of Boynton (2006) and Plowman (2005) who found that higher education was necessary within the mixed-motive model (inherent in the public relations management which requires different approaches in communication) in equipping the practitioners to contribute better to organisational performance.

It should be noted that although educational qualification was important in administrative performance, it may not be enough to enable the practitioner contribute meaningfully to organisational performance. According to Le Roux
(2004) knowledge needs to be combined with creating shared expectations between management and working within a participative organisational culture, as well as by using networking and relationship building skills and gaining the appropriate corporate communication experience.

4.1.4 Marital Status

The variable was operationalised into four as married, single, divorced and widow(er) for respondent to choose. From the distribution in Table 4.1c, majority of respondents (62.6%) are married while very few (0.8%) are widows/ers. About a third (33.6%) of the respondents are single while 3% are divorced. Similarly, majority of the respondents on various campuses are married followed by those who are single. Very few are either divorced or widowed.

The implication here is that the majority of the staff are in relationships and could assume extra responsibilities at home that could affect output at the place of work. A significant percentage of staff are single and could also request for matrimonial and maternity leave in the near future and these could equally affect productivity of staff. Again working hours in the University could reduce when such category of staff are associated with matrimonial, outdooring and other ceremonies which adequate time to prepare. In a study on marital status by Jordan and Zitek (2012) they concluded that mere bias on employees’ marital status should not be a basis for assessing staff performance. Jordan and Zitek (ibid) conducted three studies on the effects of marital status on perceptions of employees and prospective employees. In the first of the three studies
participants rated a married female job applicant as less suitable for employment than her single female counterpart. In the second study, participants again perceived a female job applicant less favorably when she was married. In contrast, a male applicant was perceived to be more favorable when married. In the third experiment, participants predicted that a recently married woman’s administrative performance and dedication would decline, whereas a recently married man’s dedication was predicted to rise. This difference made participants more willing to lay off the women than the men.

4.1.5 Rank/Title

The rank or title of a staff, to a large extent, determines his/her influence in the University or the way people will receive the message communicated. Rank here can therefore influence the status of a staff in the University hierarchy. Rank or title in this study is operationalised as Professor, Senior Lecturer, Lecturer, Senior Research Assistant and other staff with their analogous positions (Registrars and Administrators) as in Table 4.1. It is perceived here that rank could determine the level of communication and performance in the University. For instance, it is likely for a Professor, Lecturer or the Registrar to communicate better and to be attended to more quickly than an office clerk or messenger. With this variable, only very few respondents (2.7%) hold Professorial positions or work at that analogous level (Deputy Registrar) and 7% are Senior Lecturers and their analogous positions (Senior Assistant Registrar). Again majority of the respondents (37%) were Lecturers with nearly the same number of respondents (27.2% and 26.1%) were Senior staff and Junior staff respectively.
The implication here is that a large number of Senior staff and Senior members constitute 73.9% as evidenced in Table 4.1, and are more capable of identifying communication challenges in the University. It could also be the reason why academic institutions will invest more in staff development and in academic qualification. Jansen, Liu and Simon (2012) researched into the effect of employee’s rank on performance and their findings showed that rank had significant effect on most of metrics such as advertising campaigns, clicks and sales, indicating a general compelling performance of top-ranked position and consequently generating about 80% of the total profits. The results therefore indicates that, staff of academic and research institutions place more priority on academic staff, hence more qualified and competent staff to meet their mandate and help solve communication challenges.

4.1.6 Tenure

Tenure represents the number of years staff has worked in the University in the last 20 years since its establishment. It could be argued that the longer a staff works in the University, the more experience he might have acquired. The result in Table 4.1 presents the distribution of respondents on the number of years in service. From the results, more than half of the respondents (56.2%) have served between 1-5 years, a little more than a quarter (26.4%) have served between 6-10 years. Very few people have served for 11-15 years (12.8%) and 16-20 years (4.5%). On campus basis, 53 (42.4%) of the respondents in Winneba have worked for 1-5 years, while in Ajumako 13 (86.7%) of respondents have spent between 1-5 years. The smaller size of staff with longer years of service could be explained by the fact that those above the age of 40 years who were in active
service at the commencement of the University (as pioneers) might have retired from active service.

The limitation of fewer staff with requisite experience could affect performance as a whole if mentors are absent. The above scenario cuts across the campuses and is an indication of the fact that there are many more staff with less years of work experience in the University and this could possibly affect performance and output as a whole. Some reasons offered for this situation was that the progressively younger institutions were now growing in population but that many could have had their experiences elsewhere long before the establishment of the University. On the contrary in a study by Watt (2008), it was observed that sometimes staff are employed directly from within the University without any experience. However, experience should not necessarily be measured using time (years) that the practitioner has spent in the profession or the organisation, but rather in their contribution to the organisation (Wolf, 2006).

4.1.7 Status of Staff

Staff have been categorised in the University as Junior Staff, Senior Staff, Senior Members and Management Members. These categorisations confer statuses on the staff of the University and could also influence communication and administrative performance in the University. This means that it is likely for a Senior Member or Management Member of staff to have more impact and influence in performance and in communication in general than a Senior and Junior staff of the University by virtue of the person’s status. Staff were asked to tick appropriately, from the questionnaire (Appendix 1E), their status. From table 4.1, majority of staff (44.6%) are Senior staff while only 3% are
in Management positions. Again 13.5% and 38.9% are Junior staff and Senior Members respectively.

The information above implies that fewer staff are in Management position while majority of the respondents serve under them as subordinates. With English as the main medium of communication, those in higher status brackets (senior members, management member and senior staff) are more likely to communicate better than those of lower rank (junior staff). Some literatures hold that when considering your communication style and strategy, your rank plays an important part. According to Barker (1994) some key elements that are involved in audience's evaluation of a person in the communication process include one’s title, perceived good will and common ground. For instance a Management member may communicate better than an office clerk, just as a Senior Administrative Assistant may communicate better than a conservancy labourer.

Writing on the influence of social status on communication predispositions of staff, Tasaki, Kim, and Lee (2007) indicated that individuals show greater level of argumentativeness in their conversation with a low status communicator (classmate or roommate) than in the conversation with a high status communicator (professor). On the other hand, individuals showed greater level of communication apprehension in the conversation with high status communicator (professor) than in the conversation with low status communicator too.
A cross tabulation between status and sex (Table 4.1.1) shows that majority (58%) of the respondents were males out of which a larger percentage of 87.8% constituted senior staff and senior members. The females were 42% out of which a larger percentage 78.2% were senior staff and senior members. The implication here is that fewer females were at senior level positions compared to their male counterparts. On the contrary, the statistics for managerial position indicate 1.1% for males and 2.1% for females. This is contrary to the assertion that male dominance in an institution means they occupy higher positions in that institution. See Oloruntoba and Ajayi (2006).

Results of a cross tabulation between rank and gender of respondents show majority (61.3%) were males, with 28.3% occupying senior members position.
(from lecturer/assistant registrar to associate professor/deputy registrar positions), senior staff is 16.5% (SRA/SAA positions) and junior staff (others) is 16.5%. Fewer staff (38%) in total were females, out of which 18% were senior members, 9.5% being senior staff and junior staff (others) were 11.1%. The implication here is that more men in the University are of higher level status than females. This also means that the University authorities may have to encourage more women to pursue further training to get to higher levels in future. A similar study by Olormtoba and Ajayi (2006) revealed that more men occupy leadership positions than women.

4.1.3 : A Cross Tabulation of Status and Campus of Respondents

<table>
<thead>
<tr>
<th>Status</th>
<th>Junior Staff</th>
<th>Senior Staff</th>
<th>Senior Member</th>
<th>Mgt. Member</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winneba</td>
<td>16</td>
<td>38</td>
<td>65</td>
<td>7</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td>(5.4)</td>
<td>(12.8)</td>
<td>(22)</td>
<td>(2.4)</td>
<td>(43.2)</td>
</tr>
<tr>
<td>Kumasi</td>
<td>19</td>
<td>48</td>
<td>37</td>
<td>2</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>(6.4)</td>
<td>(16.2)</td>
<td>(12.5)</td>
<td>(0.7)</td>
<td>(35.8)</td>
</tr>
<tr>
<td>Mampong</td>
<td>2</td>
<td>36</td>
<td>11</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>(0.7)</td>
<td>(12.2)</td>
<td>(3.7)</td>
<td>(0)</td>
<td>(16)</td>
</tr>
<tr>
<td>Ajumako</td>
<td>3</td>
<td>10</td>
<td>2</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(3.4)</td>
<td>(0.7)</td>
<td>(0)</td>
<td>(4.4)</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>132</td>
<td>115</td>
<td>9</td>
<td>296</td>
</tr>
<tr>
<td></td>
<td>(13.5)</td>
<td>(44.6)</td>
<td>(38.9)</td>
<td>(3)</td>
<td>(100)</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2012 figures in parentheses are percentages

A cross tabulation of status and campus of respondents revealed that there are more senior members (22.6%) in Winneba than all the other campuses, with Kumasi (12.5%), Mampong (3.7%) and Ajumako (0.7%). These numbers reflect in the size of the campuses vis-a-vis the available academic programmes and students. Appointments of senior members to the various campuses are based on the academic programmes offered on these campuses. This means that the more
the academic programmes and the larger the campus, the more the resource persons required to support academic work. This is reflected in the University Corporate Strategic Plan (2009-2013).

### 4.1.4: A Cross Tabulation of Campus and Sex of Respondents

<table>
<thead>
<tr>
<th>Campus</th>
<th>J/Staff</th>
<th>S/Staff</th>
<th>S/Member</th>
<th>M/Member</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex:</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(6)</td>
<td>(29)</td>
<td>(21.9)</td>
<td>(1.1)</td>
<td>(58)</td>
</tr>
<tr>
<td>Female</td>
<td>(7.1)</td>
<td>(15.9)</td>
<td>(17)</td>
<td>(2.1)</td>
<td>(42)</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>127</td>
<td>110</td>
<td>9</td>
<td>283</td>
</tr>
</tbody>
</table>

**Source:** Field Survey, 2012  figures in parentheses are percentages

A Cross Tabulation of Campus and Sex of Respondents revealed that majority of the respondents (58.3%) in all the campuses were males while 41.7% of females responded for all the campuses. The implication here is that there are more men in the University than women in all campuses of the University. This also means that the distribution of human resources to campuses does not depend on gender. Staff allocation to a campus depends on the need and individual capability to perform on a mandate required and therefore any attempt to bridge the gender imbalances here may not be very important. Again this differences in gender imbalances on various campuses may not necessarily affect communication.
4.1.5: A Cross Tabulation between Rank and the Campus of the Respondents

<table>
<thead>
<tr>
<th>Rank:</th>
<th>Ass Prof/ DR</th>
<th>Snr Lec./ SAR</th>
<th>Lecturer/ AR</th>
<th>SRA/ SAA</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winneba</td>
<td>6 (2.3)</td>
<td>16 (6.2)</td>
<td>43 (16.7)</td>
<td>28 (10.9)</td>
<td>24 (9.3)</td>
<td>117</td>
</tr>
<tr>
<td>Kumasi</td>
<td>1 (0.4)</td>
<td>0 (0.0)</td>
<td>37 (14.4)</td>
<td>25 (9.7)</td>
<td>27 (10.5)</td>
<td>90</td>
</tr>
<tr>
<td>Mampong</td>
<td>0 (0)</td>
<td>2 (0.8)</td>
<td>13 (5.1)</td>
<td>9 (3.5)</td>
<td>10 (3.9)</td>
<td>34</td>
</tr>
<tr>
<td>Ajumako</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (0.8)</td>
<td>8 (3.1)</td>
<td>6 (2.3)</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>7 (2.7)</td>
<td>18 (7)</td>
<td>95 (37)</td>
<td>70 (27.2)</td>
<td>67 (26.1)</td>
<td>257</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2012 figures in parentheses are percentages

A Cross Tabulation between rank and the campus of the respondents revealed that more senior members (26.1%) from Winneba responded, while 14.8% responded from Kumasi, 5.9% from Mampong and none (0%) responded from Ajumako. The rest of the respondents were senior and junior staff (53.2%) in all the campuses. The implication is that, there are more junior and senior staff in the University. This goes to affirm the ratio in statistics requirement of manpower needs for the University by the National Accreditation Board (NAB) of one senior member to five supporting staff.

4.2: Perceptions of Staff on Organisational Communication in UEW

Staff perception on organisational communication in UEW were ascertained by asking them to state the extent to which they agreed with 30 items that constituted their perspective on nature of communication in UEW. A one sample t-test was conducted to determine whether the responses varied from the mean score. The results of one sample t-test computed at Df = 308; p ≤ 0.05, as
indicated in Table 4.2, show that the t-values for all the statements were significant at 5%. The implication is that responses to statements from the sample were representative of the population’s perceptions with respect to organizational communication in UEW.

This implies that, respondents generally agreed that the nature of communication in the University is good. This is indicated in the p-values of all the statements and the mean of means value of 3.86 which is equivalent to 4 on the scale and corresponds to the ‘Agree’ response category. This means that communication in the University clearly reflects the general nature of communication and takes a wide variety of forms ranging from two people having a face to face conversation to hand signals to messages sent over the global telecommunication networks (Rouse and Rouse, 2005). Though some mean values are less than the mean of means value of 3.86, they are perceived to be statistically significant as evidenced in the study.
Table 4.2: Perception of Staff on Organisational Communication in UEW

<table>
<thead>
<tr>
<th>Statements</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of different Communication channels</td>
<td>309</td>
<td>4.14</td>
<td>0.93</td>
<td>78.39</td>
<td>.000</td>
</tr>
<tr>
<td>Interpersonal Communication reduce delays</td>
<td>309</td>
<td>3.96</td>
<td>0.74</td>
<td>94.19</td>
<td>.000</td>
</tr>
<tr>
<td>Channel of communication chosen</td>
<td>309</td>
<td>4.08</td>
<td>1.02</td>
<td>70.49</td>
<td>.000</td>
</tr>
<tr>
<td>Communication skills are necessary</td>
<td>309</td>
<td>4.27</td>
<td>0.91</td>
<td>82.51</td>
<td>.000</td>
</tr>
<tr>
<td>Com. /organizational effectiveness exist</td>
<td>309</td>
<td>3.91</td>
<td>1.08</td>
<td>63.31</td>
<td>.000</td>
</tr>
<tr>
<td>Communication behavior is required</td>
<td>309</td>
<td>4.04</td>
<td>0.89</td>
<td>79.60</td>
<td>.000</td>
</tr>
<tr>
<td>Distance in communication is a challenge</td>
<td>309</td>
<td>3.62</td>
<td>1.24</td>
<td>51.49</td>
<td>.000</td>
</tr>
<tr>
<td>Use of different channel is important</td>
<td>309</td>
<td>3.95</td>
<td>1.03</td>
<td>67.13</td>
<td>.000</td>
</tr>
<tr>
<td>Staff state of health influence communication</td>
<td>309</td>
<td>3.95</td>
<td>1.15</td>
<td>60.40</td>
<td>.000</td>
</tr>
<tr>
<td>Social/cultural issues affect communication</td>
<td>309</td>
<td>3.57</td>
<td>1.29</td>
<td>48.58</td>
<td>.000</td>
</tr>
<tr>
<td>Level of education influence communication</td>
<td>309</td>
<td>3.91</td>
<td>1.08</td>
<td>63.44</td>
<td>.000</td>
</tr>
<tr>
<td>Work schedule can affect communication</td>
<td>309</td>
<td>3.66</td>
<td>1.19</td>
<td>53.81</td>
<td>.000</td>
</tr>
<tr>
<td>Sources of information is important</td>
<td>309</td>
<td>3.86</td>
<td>1.03</td>
<td>66.20</td>
<td>.000</td>
</tr>
<tr>
<td>Place/time of communication is important</td>
<td>309</td>
<td>4.08</td>
<td>0.79</td>
<td>90.29</td>
<td>.000</td>
</tr>
<tr>
<td>Team work influence communication</td>
<td>309</td>
<td>4.17</td>
<td>0.97</td>
<td>75.32</td>
<td>.000</td>
</tr>
<tr>
<td>University policy affects communication</td>
<td>309</td>
<td>4.31</td>
<td>0.72</td>
<td>105.08</td>
<td>.000</td>
</tr>
<tr>
<td>Organizational structure affects communication</td>
<td>309</td>
<td>3.87</td>
<td>1.11</td>
<td>61.24</td>
<td>.000</td>
</tr>
<tr>
<td>Bureaucracy affects communication</td>
<td>309</td>
<td>4.17</td>
<td>1.06</td>
<td>69.41</td>
<td>.000</td>
</tr>
<tr>
<td>Ethnicity/tribalism/nepotism influence c’tn</td>
<td>309</td>
<td>3.82</td>
<td>1.17</td>
<td>57.40</td>
<td>.000</td>
</tr>
<tr>
<td>Poor working conditions affects c’tn</td>
<td>309</td>
<td>3.65</td>
<td>1.12</td>
<td>56.94</td>
<td>.000</td>
</tr>
<tr>
<td>Dissatisfaction at work affects c’tn</td>
<td>309</td>
<td>3.86</td>
<td>1.11</td>
<td>61.07</td>
<td>.000</td>
</tr>
<tr>
<td>Lack of feedback influences c’tn</td>
<td>309</td>
<td>4.27</td>
<td>0.86</td>
<td>87.08</td>
<td>.000</td>
</tr>
<tr>
<td>Level of grievances influences c’tn</td>
<td>309</td>
<td>4.08</td>
<td>0.89</td>
<td>80.84</td>
<td>.000</td>
</tr>
<tr>
<td>Colleagues level of support influence c’tn</td>
<td>309</td>
<td>3.91</td>
<td>0.96</td>
<td>71.54</td>
<td>.000</td>
</tr>
<tr>
<td>Conflict resolution mechanism is necessary</td>
<td>309</td>
<td>3.98</td>
<td>0.97</td>
<td>72.20</td>
<td>.000</td>
</tr>
<tr>
<td>Adverse information affects c’tn</td>
<td>309</td>
<td>3.63</td>
<td>1.12</td>
<td>57.23</td>
<td>.000</td>
</tr>
<tr>
<td>Use of memo/meeting is necessary</td>
<td>309</td>
<td>3.56</td>
<td>1.12</td>
<td>54.63</td>
<td>.000</td>
</tr>
<tr>
<td>University regulations/rules are required</td>
<td>309</td>
<td>2.65</td>
<td>1.21</td>
<td>38.62</td>
<td>.000</td>
</tr>
<tr>
<td>Lack of vision/mission affects c’tn</td>
<td>309</td>
<td>3.42</td>
<td>1.16</td>
<td>51.66</td>
<td>.000</td>
</tr>
<tr>
<td>Volume of information affects c’tn</td>
<td>309</td>
<td>3.36</td>
<td>1.21</td>
<td>48.65</td>
<td>.000</td>
</tr>
<tr>
<td>Mean of means</td>
<td></td>
<td>3.86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2012

SCALE: Strongly Agree = 5; Agree = 4; Somewhat Agree = 3; Disagree = 2; Strongly Disagree = 1. Df = 308; p ≤ 0.05 (significant; 2-tailed)

Common forms of communication in the University include speaking, writing, gesturing and broadcasting. When a person communicates, he establishes a
common ground of understanding and in the organisational context; it brings about unity of purpose, interest and effort (Barth, 2003). The process by which information and feelings are shared by people through exchange of verbal and non-verbal messages, or the successful transmission of information through a common system of symbols, signs, behaviour, speech, or writing signals their understanding of the message received (Kalla, 2005).

In this study, respondents agreed with the perceptive statement that numerous pathways, channels (oral, written, electronic) are used to convey messages in UEW (mean = 4.08, SD = 1.02) because the satellite nature of the campuses necessitates the use of various forms of communication. This is done to ensure that recipients of information are always reached through one form of communication or the other. This scenario is consistent with the assertion by Belo (1990) that, the use of different mediums in delivering information would ensure that, at least, one means of communication reaches the recipient. In an interview, a staff reported similarly that,

“I sometimes use the memo, whatsapp and short message service (SMS) to communicate simultaneously to staff to ensure that information gets to the recipients through one of these channels. My boss will often ask me to go to the recipients in person to deliver or give out information and further advice that when the person is absent, I call his cell phone or send him a text message.”

Again respondents agreed with the statement that Interpersonal communication are more likely to meet specific needs of staff in overcoming risk and complexities in communication in the University. The statement scored a mean of 3.96, above the grand mean of 3.86, signifying a higher level of importance as a communication channel. This finding is in line with Oetzel et al. (2001), whose research highlighted the link between interpersonal communication and staff
cohesion. In a heterogeneous community like the UEW the use of interpersonal communication will be one of the surest ways of ensuring staff cohesion and harmony which will ultimately lead to improvement in job performance.

In an interview, a staff submitted that,

“Our fax machine is not working at the moment and so we resort to the use of telephones, reports and letters more when communicating outside the University and also depending on the right means chosen. How can I work better when I have to go outside the University to fax urgent documents?”

This response is in agreement with Longest et al., (2000) that, the least used channel of communication in a large organisation is the diagonal flow which links up many staff in the organisation to make information move faster to avoid bureaucracy.

The perceptive statement, “well developed communication skills were also found to be statistically significant for personal effectiveness” with a meanscore of 4.27. This implies that effective performance on the job depends on ones personal communication skills. This will ensure better dissemination of information as well as better understanding of information so disseminated by staff. Kay (2000) noted that, the use of a well developed communication channel and skill was necessary for personal effectiveness.

The perception of location of office and time of communication were also both established to be relevant in the communication process according to the findings. With a mean score of 4.08, it implies distance have some effect on communication and hence performance in a mult-campus University. These effects include interruption of messages, delays by the sender, absence of vehicle
or means of communication, poor weather conditions, and power outage on recipient campus. Message can be distorted if it travels a great distance from its sender to the ultimate receiver down through the formal school organisation hierarchy (Tourish, 2010).

This observation is again strengthened by a respondent who recounted his experiences during the interview that,

“I believe our system here is complex because of the different campuses, the distance involved and the short periods we sometimes need to send messages which results in interruptions or information loss. Even recently we were having meeting of all campus senior staff by video conference and it keeps going-off!”

Again from the results that, staff agreed teamwork supports the free flow of information in the University, scored a mean of 4.17. Working in teams help in fostering relationships among staff and promotes cordiality as well. This facilitates free information flow and engenders trust among staff. This notion is in line with the findings of Ada (2007) in his contribution to organisational communication and eliminating barriers in organization that, unclear regulation and poor team work could affect communication flow in an organisation.

From Table 4.2, staff strongly agreed with the statement that the nature of communication in the University is bureaucratic and full of red-tapism (mean = 4.31). Bureaucracy has the tendency of slowing down communication or distorting the message that is being transmitted because it has to pass through several hands before getting to the intended users. This strong assersion agrees with that of Bozeman (2000) who opined that bureaucracies (red-tapes) like rules, regulations and procedures that remain in force and entail compliance tend to become a burden in large organisations. Scott and Pandey (2000) have also
indicated that red-tape has been considered as a barrier to improved communication and and does not benefit clients in general. The adverse effect of bureaucracy was expressed vividly by a respondent in an interview thus:

“What annoys me most is when I send message and some people tell me they don’t get it just because sometimes it is delivered late. Again, a decision that could be made on a campus after one request will have to be sent to Winneba; and you have to wait for a long time”

Lack of feedback or not communicating at all is another important statement that respondents perceived as necessary and affect information flow (mean = 4.27). Feedback in the University ensures that the communication process is complete and there is convergence in meaning in relation to the communication process. This finding is in agreement with that of Taylor (2004) that the work place barriers to communication include not obtaining feedback at all. Again in supporting this view, Sperry and Whiteman (2003), enumerated five components of effective communication with feedback as one that is important, to the individual, team, unit and organisation as a whole. Richardson and Laville (2010) also pointed out that feedback is a basic requirement of good interpersonal communication, and plays an important role in the success of performance in organisations. Feedback has again been shown to be very important in Personal Communication Model (Oloruntoba, 2012), which expatiates on both feedback and feed forward of staff in interactive communication process.

Another important statement that describes the nature of communication in UEW has to do with the magnitude of grievance and how it influences communication flow with a mean score of 4.07. The more staff begin to make
complains and file grievances, the slower the communication process and this tends to affect the general performance of staff. This is because the complaints and grievances have to be investigated and possibly redressed before further progress can be made. In discussing the nature of communication, especially vertical communication in organisations, Carnary (2011) indicated that the lesser the number of grievances and disputes in organisations, the faster the flow of information. The findings of Richardson and Laville (2010) also lend credence to the effect of complaints and grievances on communication flow in organisations.

4.3: Performance of the Organisational Communication System

Communication systems in the UEW are broad and their levels of availability depends on the performance of the University’s communication system. These systems include the staff themselves, telephone, fax machines, computer, scanners video conference and the networks that are available in the offices of the University. The knowledge and use of the systems of communication, the availability and use of ICT and other facilities in the University determine the communication systems and how they relate to performance; as appeared in the conceptual framework of this study. Communication performance here refers to the execution of various tasks in line with one’s job description vis a vis the tools and channels of communication available to the individual on the job to meet optimal standard. It also includes the expectation of a person’s day to day job schedule, depending on his effectiveness and efficiency within the organisation. The foregoing assertion is similar to McGinn and Keros (2002) who demonstrated that people have greater
difficulty developing a shared logic of exchange and coordination when they communicate with channels with challenges. Similarly, negotiations, according to Moore et al., (1999) on communication issues to the individual on the job can result in improved performance if the channels are good. In seeking to bring to the fore the frustrations in the systems of communication in the University a staff had this to say:

“I didn’t know how to use the fax machine and that cost me a lot. Sometimes tonner in my printer runs out and I have no spare immediately from the stores. Paper jam in my old printer also causes frustration”

To further analyse staff perceptions of communication systems’ performance in the University, the perceptive statements in table 4.8 were subjected to t-test to determine their influence the communication system performance and the results, as shown in table 4.8, indicate that all of them were significant at 0.05 or 5% level of significance. This is indicated by the p-values for all the statements. This implies that they all contributed significantly in influencing the performance of the communication system in UEW.

In line with the above outcome, Sperry and Whiteman (2003) are of the view that managers must develop a methodology for thinking through and effectively communicating with superiors, subordinates and their peers. Communication with colleagues, should be open to all, whether junior or senior staff with the view of enhancing performance, information provision and paraticipation in regulatory and policy process. The finding is again in agreement with that of Kalla (2005).

The use of magazines/newsletters, sign and demonstrations, characterised as non verbal communication equally affect performance of staff. In all cases, it is
preferred that for effectiveness in communication, both verbal and non verbal communication processes in the University should be applied. According to Riggio (2006) it is important to consider everyone as having difficulties in conveying and interpreting non-verbal communication, like the use of magazines/newsletters, sign and demonstrations. Individuals therefore vary in their abilities to monitor and control their use. In an interview with staff on the above subject a staff said,

“To a large extent our newsletters and magazines help to make us aware of things but come very late. Currently we use videoconference system also to save costs and minimize risks. I remember how we used to travel long distances to campuses for meetings and other programmes, so the recent installation of the video conference system has made me stable and I can now have more time to engage with my students.”

Communication with superiors also significantly influenced the perception of organizational systems performance (see table 4.8). Communication with superior affords subordinates the opportunity to air their views, make complaints, make appeals and, in most cases, make some requests too. Generally it gives them the opportunity to be part of the decision making process and thus contributes to the feedback system in the communication process. Table 4.8 again shows that respondents agreed that superiors’ communication with staff was good with mean value of 3.34. This indicates that majority of the respondents see communication with superiors to be good in the University. The means of improving superiors communication with subordinate staff could be through the vertical communication (top-down and bottom-up) approach in the organisation. The bottom-up approach to communication affords the staff at lower levels of the organizational structure the opportunity to freely communicate with their supervisors. This is likely to improve their performance
at work and hence increase in behavioural conformity with the University’s goals. This assertion is in agreement with Hall (2007) who suggested that filtering out “upward communication widely acknowledges that upward feedback, upward communication and open-door policies deliver significant organisational benefits” such as enhanced participation and better decision making. On the other hand, Downs and Adrian (2004) contended that downward communication and poor upward communication can have significant impact on employee satisfaction, productivity and overall organisational performance.

The mean values for the use of circulars and notices in communication (3.22) as shown in table 4.8, is indicative of the fact that the respondents perceive them to be effective channels of communication. The 3.22 is equivalent to ‘Good’ on the scale. The results also show that in addition to circulars and notices similar channels like the use of letters, newsletters, memos, periodicals and magazines, also influence communication systems and administrative performance in the University. The availability of information through these channels help in marketing the University, at local, national and international levels. The Harvard Business Review (1999) classifies the process of communication at the micro level into formal and informal communication, internal communication practices (memos, circulars, newsletters, presentations, strategic communications, work direction, performance reviews and meetings) and externally directed communications (public, media, inter-organisational). Though respondents generally perceived the use of circulars, memos and newsletters to be a good channel of communication, some had some reservation
about their effectiveness and these reservations are captured in the sentiments of a staff member:

“Even though we get information from our newsletters, they often come very late. For instance, things you should have known months earlier and act on are sometimes communicated to us very late. I even missed a scholarship opportunity because of the late delivery of a circular”

Superiors communicating with subordinates also influences the communication systems and performance in the University. The mean score was 3.0 implying that the communication between superiors and subordinate is good and it gives the subordinates the opportunity to contribute to the decision-making process. More importantly, superiors’ communicatoin with subordinates were usually in the form of instructions, cautionings and advise and were related to job termination issues, arbitration outcomes and general news and information about the organisation. All these communication channels and their availability could affect job performance. Many researchers agree with the findings of this study. McGinn and Keros (2002); Tanis and Postmes (2008) and Wolbert (2002) support involving staff in decision making to improve communication, and De Dreu and Carnevale (2003) and De Dreu et al., (2008) opined that information sharing and integration are strongly influenced by the orientation that people hold toward their negotiation or group discussion partners. Koufteros et al., (2007), however, indicated that centralization of decision making process help minimize communication challenges. A highly elated junior staff member could not hide her joy about their involvement in decision-making in the University and had this to say:

“I am always happy when they call us at meetings and ask us of our opinion. I was a member of the committee that evaluated the procurement of our furniture because the first one bought three years ago was not good”
The nature of information flow from colleagues was also perceived to influence communication systems and performance in the University. A mean value of 3.26 was recorded, indicating that the flow of information from colleague staff members is perceived to be good. The type of information is either based on facts or can be classified as grapevine information. Keyton (2011) suggested the grapevine as one of the methods of improving informal communication but warned on the careful use of it. Donald et al., (1981) in adding their voice to the use of grapevine, indicated that it is not a less important source of information. They also admonished managers to acknowledge the informal communication systems and use them for the welfare of their staff.

Official information that flow from colleagues to other staff include notices relating to promotions, transfers, pensions and other conditions of service. Besides these notices and other detailed information are embodied in the conditions of service, statute and the scheme of service of the University. In some few instances the grapevine serves as the initial channel of communication official information until it is formerly communicated to staff. These happen when there is information leakage from staff and such instances lend themselves to all forms of interpretations and assessments, some of which may sometimes be completely wrong. According to Lumberg and Ornstein (2008) a superior who requires information from a subordinate in a different department could obtain it easily and faster through the diagonal approach in communication. This belief is also in line with the traditional views of communication dominated by the downward or top-down communication flows.
Other statements that were perceived to influence communication system and performance in the University had mean values ranging from 2.90 to 2.99. These statements include staff educational level, knowledge in communication, management of information, location of campuses and the use of staff suggestion box. Other statements; quality of media, staff from different background, chain of communication, sources of information, level of interaction, use of channel, coaching, staff motivation, staff awareness, staff opinion and the use of ICT had lower mean scores of between 2.40 and 2.88, indication that their influence on communication system performance in the University was rather low.

Poor communication systems, whether for written or oral, can serve as serious barriers to business and could obstruct the efficiency of work organization. For instance, vague electronic mail (email) messages that require clarification, documents that need rewriting due to errors, and uninformed presentations and speeches, can greatly affect the flow of work in work environment. Effective communication skills are crucial to successfully completing any job, be it large or small. Usually when staff team up to complete a task, the value of each person's skills will increase exponentially. Without implementing clear communication practices, however, the achievement of the task may come at a slow pace or may never be completed. Management of organisations should also be aware that communication skills impact the motivation of staff as a whole. A highly communicative and collaborative work environment is likely to promote higher productivity, creativity and inspiration. If communication skills are poor, employees will have no enthusiasm in doing their work and may question the
value of what they do. Poor communication skills could therefore demoralise staff and force them to sit through dull and boring presentations where they are provided with unclear instructions, leading to confusion and monotony. This behaviour could also cripple the organisation’s innovation and capacity to make positive contributions to society. The results further indicate that all the t-values were significant at 5% and this means that all the statements contributed significantly to the performance of the communication system at UEW.
<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
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<th>P</th>
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</table>

**Source:** Field Survey, 2012

Scale: Excellent = 5; Very Good = 4; Good = 3; Fair = 2; Poor = 1, df = 308;

\[ p \leq 0.05 \text{ (significant; 2-tailed)} \]
4.4: Organisational Communication and Group Cohesion

Staff cohesion in the University was expected to influence larger group communication and general participation in University activities. Group cohesion as used in this thesis refers to the degree to which a number of people constantly work together for the achievement of a common goal. The effects of organisational communication system on group cohesion was measured on a 3-point Likert scale with response categories as high (3), medium (2) and low (1). On the whole respondents are of the opinion that group cohesion in the University is moderate with a mean of means of 1.90 which is equivalent to 2 on the scale. All statements with mean values greater than the mean of means value of 1.90, were deemed to influence group cohesion in the University positively.

The first variable, staff cooperation, had a mean value of 2.04 and therefore influences group cohesion in the University. The cohesion among staff has resulted in cordiality and collaborations that ensure complimentality in terms of job performance. Sections within the University complement each others efforts where necessary, to ensure effectiveness and efficiency. Staff with heavier work load sometimes get assistance from colleagues. Some departments on the same campus in the University which do not offer sandwich academic programmes, for instance, rely on the support of staff of other departments to augment their mapower base for effective implementation of their programmes. Similarly, there is cross-campus collaboration among staff that makes it possible for staff with special skills and expertise to offer support in the running and management of programmes that require their expertise. Neorreklit and Schoenfeld (2000)
However, opined that the problems of cooperation among staff arise from lack of understanding between work groups in merging organisations and that reduces effectiveness at work. Staff cooperation, according to Alagheband (2004), is rather a mutual communication between subordinates and superiors that makes them more acquainted with each other. Building acquaintances among staff ensures cordiality and harmony which ultimately enables them to work together without much difficulty.

Allowing staff to express their opinions freely on matters relating to the management of the University yielded a mean score of 2.14, meaning that the staff are of the view that expression of opinions has a moderate influence on group cohesion. See Table 4.4. When individuals in groups are given the opportunity to air their views in the University, it could enhance the level of cohesion of those groups. Decision-making process in most cases, give staff the opportunity to make their suggestions and bring forward their views on critical issues. This makes them feel involved and enhances their active participation in the decision-making process. It again enhances ownership of decisions made and thus reduces resistance during implementation. Boree and Thill (2000) are of the view that exchanging knowledge and opinions in organisational communication promotes positive atmosphere in organisations.

The following statement from a staff member during the interview conducted appear to be in line with the above outcome,

“Some meetings like the open forum facilitate group cohesion. The end of year party for me is best and that is where people have the opportunity to socialise. I get satisfied and closer to people when our leader is good and sociable but rather afraid when he is the strict type.”
Tribalism influences group cohesion in the University with a mean score of 2.08. From the results in Table 4.4 respondents agreed that the influence of tribalism was moderate within staff of the University. It is normal to find people from the same cultural background with the same values/beliefs interacting more often at work places than they would do with people from other cultural backgrounds. This could result in segregation, sidelining, exclusion, non-recognition and nepotism. Even though tribalism may not be new to staff experiences in UEW, the fact that it has a moderate influence on group cohesion is indicative of the fact that management has to find ways of encouraging interaction across cultures and tribes so as to further reduce its influence to the bearest minimum. The findings of this study confirm what was discovered by Grunig et al (2001) and Tindal (2009) that people coming from different backgrounds could promote racial, tribal insensitivity, tension and mistrust in the work place. This sentiment expressed by one of the respondents about the medium of communication lends credence to the influence of tribalism on group cohesion in the University.

“I feel comfortable communicating in my local language than in English, so I am closer to people from my traditional or cultural background.”

The effect of dissatisfaction among staff in the University on group cohesion also recorded mean of 2.01 as indicated in Table 4.4. From the results, respondents agreed that dissatisfaction among staff at work was moderate. Factors that make staff unhappy or uncomfortable are most likely to result in dissatisfaction among staff. Some of these factors are management/leadership style, conditions of service, inadequate facilities for work and selective justice. This finding by this study falls in line with the outcome of Zhang and Agarwal’s
(2009) research which indicated that many organisational output including staff dissatisfaction could affect organisational efficiency negatively.

Inadequate and/or unclear information communicated through the use of circulars, bulletins and magazines is also perceived by the respondents to moderately affect group cohesion with a mean score of 2.08. It is perceived that the use of such documented means of communication could promote group cohesion, enhance performance and promote information flow in the University if staff were well informed and well connected on their availability and use. In the opinion of Cheney and Christenson (2001), lack of adequate information, interaction, the right network and cross-fertilisation of ideas could partly be blamed on poor group cohesion.

Respondents perceived all the remaining statements to have moderate influence on group cohesion in the University. These statements have mean values ranging from 1.65 for gender stereotyping to 2.05 for non-uniformity in salary. University management need to work towards addressing these sentiments or opinions expressed by staff so as not to situation. A further deterioration in group cohesion could create divisions and disunity among staff. This will, in turn reduce staff morale and ultimately affect performance adversely.

Another variable that lowly affected group cohesion was the inadequate nature of capacity building in communication among peers in the University with a mean score of 2.04. In effect, the availability of training (long and short term), in-services training, on-the-job training, orientations and attachments for staff in
the University, could greatly affect the level of cohesion. Inadequate nature of capacity building in communication among peers was observed by Chory and Hubbell (2008) who stressed that communication barriers that interrupt activities could commence from limited capacity building due to lack of money and time.

Non uniformity in the single spine salary structure on group cohesion also influences group cohesion in the University with a mean score of 2.05, indicating the effect of disparities in pay structure on group cohesion. When senior members, senior staff and junior staff of the University have issues on salary placements and some disparities, it beholds on the Public Service Authorities (PSA) to streamline such issues to avoid possible strikes and other social unrest cases. Non uniformity here is similar to absence of fairness and if not considered could affect not only group cohesion but general commitment of staff in UEW.

In a similar argument on fairness in working environment, Podskeoff et al.,(2000) developing their argument from Organ and Ryan (1995) concluded that when personality and citizenship performance are carefully considered, it will result in organisational commitment in the long run.

Other Variables from the analysis have effect on group cohesion but were at a lower level. While promotion/transfer of staff, communication facilities, level of development/growth, staff moral nature of communication and unclear University policy all scored a mean greater than 1.90, in-fighting among staff, individual personal interest, inter/intra campus communication, time/place of communication, the use of grapevine information, divide and rule method, the multi campus nature of the University, well defined nature of job description,
the availability of information feedback information and the level of motivation also scored means greater than 1.80.

Variables with the least influence on group cohesion scored mean values between 1.60 and 1.80 and include gender stereotyping, information from colleagues, effect of job improvement/rotation, the use of ICT and periodic training for staff Okiy (2005) in line with similar with the above points out poor and inadequate telecommunication facilities among others as challenges militating against effective communication. Improving on effective communication upwards, grapevine communication, among others, that could more faster in working organisations should be restored to (Keyton, 2011).

Again communication based on feed back for effectiveness. Harvey-Jones (2005) indicated that communication must be seen as a dialogue and not a monologue.
### Table 4.4: Group Cohesion effect on organisational communication

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of staff cooperation</td>
<td>304</td>
<td>2.04</td>
<td>0.59</td>
</tr>
<tr>
<td>Level of staff motivation</td>
<td>301</td>
<td>1.88</td>
<td>0.59</td>
</tr>
<tr>
<td>Periodic training available</td>
<td>300</td>
<td>1.70</td>
<td>0.71</td>
</tr>
<tr>
<td>Existence of a two-way communication</td>
<td>300</td>
<td>1.84</td>
<td>0.62</td>
</tr>
<tr>
<td>Effect of feedback in communication</td>
<td>300</td>
<td>1.84</td>
<td>0.70</td>
</tr>
<tr>
<td>Use of ICT in communication</td>
<td>301</td>
<td>1.79</td>
<td>0.68</td>
</tr>
<tr>
<td>Opinion on expression communication</td>
<td>297</td>
<td>2.14</td>
<td>0.72</td>
</tr>
<tr>
<td>Promotion/transfer of staff</td>
<td>301</td>
<td>1.94</td>
<td>0.72</td>
</tr>
<tr>
<td>Communication facilities available</td>
<td>296</td>
<td>1.95</td>
<td>0.75</td>
</tr>
<tr>
<td>Information availability for staff</td>
<td>296</td>
<td>1.84</td>
<td>0.65</td>
</tr>
<tr>
<td>Well-defined job description</td>
<td>299</td>
<td>1.84</td>
<td>0.79</td>
</tr>
<tr>
<td>Effect of job improvement on Ctn</td>
<td>291</td>
<td>1.73</td>
<td>0.75</td>
</tr>
<tr>
<td>Effect of multi-campus nature in Ctn</td>
<td>296</td>
<td>1.86</td>
<td>0.79</td>
</tr>
<tr>
<td>Level of growth &amp; dev't in Ctn</td>
<td>294</td>
<td>1.94</td>
<td>0.68</td>
</tr>
<tr>
<td>Existence of divide &amp; rule method</td>
<td>292</td>
<td>1.80</td>
<td>0.82</td>
</tr>
<tr>
<td>Staff morale on communication</td>
<td>296</td>
<td>1.91</td>
<td>0.72</td>
</tr>
<tr>
<td>Level in use of grapevine information</td>
<td>293</td>
<td>1.90</td>
<td>0.79</td>
</tr>
<tr>
<td>Effect of tribalism communication</td>
<td>296</td>
<td>2.08</td>
<td>0.81</td>
</tr>
<tr>
<td>Self ego/selfishness in communication</td>
<td>290</td>
<td>1.98</td>
<td>0.84</td>
</tr>
<tr>
<td>Dissatisfaction among staff in Ctn</td>
<td>294</td>
<td>2.09</td>
<td>0.84</td>
</tr>
<tr>
<td>Time of communication by staff</td>
<td>294</td>
<td>1.89</td>
<td>0.81</td>
</tr>
<tr>
<td>Lack of circulars/bulletins</td>
<td>292</td>
<td>2.08</td>
<td>0.85</td>
</tr>
<tr>
<td>Intra/inter campus communication</td>
<td>294</td>
<td>1.90</td>
<td>0.79</td>
</tr>
<tr>
<td>Effect of C'tn on staff</td>
<td>296</td>
<td>1.91</td>
<td>0.74</td>
</tr>
<tr>
<td>Nature of communication</td>
<td>285</td>
<td>1.93</td>
<td>0.79</td>
</tr>
<tr>
<td>Information from Colleagues</td>
<td>283</td>
<td>1.80</td>
<td>0.82</td>
</tr>
<tr>
<td>Gender stereotyping in Ctn</td>
<td>288</td>
<td>1.65</td>
<td>0.78</td>
</tr>
<tr>
<td>Personal interest on Ctn</td>
<td>282</td>
<td>1.81</td>
<td>0.82</td>
</tr>
<tr>
<td>Nature of capacity building</td>
<td>287</td>
<td>2.04</td>
<td>0.82</td>
</tr>
<tr>
<td>Unclear policy statements</td>
<td>289</td>
<td>1.94</td>
<td>0.84</td>
</tr>
<tr>
<td>Non-uniformity in salaries</td>
<td>292</td>
<td>2.05</td>
<td>0.87</td>
</tr>
<tr>
<td>In fighting among colleagues</td>
<td>291</td>
<td>1.83</td>
<td>0.88</td>
</tr>
</tbody>
</table>

**Source:** Field Survey, 2012  
Grand mean 1.90  
Scale: Low = 1  Moderate = 2  High = 3

#### 4.4.1 Cluster Analysis of Staff on Group Cohesion in UEW

The University promotes the use of committee system which contributes to building team spirit among staff across the organisational structure. Creation of
committees are based on policy documents provided by the University and officially communicated to all staff. Team dynamics such as personality differences, qualification and personal interest drive the action(s) of each staff, hence the tendency to either stick to work norms or get involved in other personal matters or organisational politics in an attempt to lobby for specific policy measures to be taken in the University. These team differences, competition and indirect struggle for limited budgeted resources could again result in the formation of natural cliques, given the different background of staff. These cliques, again, could metamorphose into ideological blocs, thereby creating larger groups (clusters) in communicating directives on task execution to promote the objectives of the University.

A two step cluster analysis was therefore used to identify the natural group cohesion of staff in UEW. Though the variables were measured on a three-point Likert scale (low, moderate, high), the two step cluster analysis was deemed appropriate, because, it was to identify the tendency for respondents to converge in a particular group, even if the variables were measured differently or not on the same scale.

In all, four clusters were identified and these were based on staff classification. Cluster one was dominated by Senior members and Senior staff (lecturers, Assistant Registrars, Senior Research Assistants and Senior Administrative Assistants) who are likely to assist or be directly involved in the implementation of the strategic objectives of the University. The cluster is therefore labeled tactical group, which serves as the medium for work plan implementation too. Cluster two was also dominated by Junior and senior staff (Senior Research
Assistants, Senior Administrative Assistants and clerks) and is named as operational group (cluster). This group contributes to communication through proposals, suggestions, appeals and requests. Clusters three (3) comprise only Senior members of the University community: Professors, Registrar, Associate Professors, Deputy Registrars, Senior Lecturers and Senior Assistant Registrars, hence the cluster is the Strategic communication group in the University. The calibre of staff here are likely to make final decisions for the University and approve all plans including the corporate strategic plan initiated by the tactical group. Contingent cluster, cluster four (4) on the other hand, is not dominated by any management level group but consists of a mixed spectrum of staff who associate themselves with the work environment based on the situation at hand. Membership of this cluster is drawn from various segments of the University based on expertise, skill, interest among others. A case in point is a committee put in place to investigate issues or staff or a representation to a funeral on behalf of staff in the University. The clusters, names, membership and their roles are summarised in Table 4.4.1.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Name</th>
<th>Membership</th>
<th>Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tactical group</td>
<td>Senior members and senior staff</td>
<td>Supervisory role (leading, directing and instructing) Implementor of tasks</td>
</tr>
<tr>
<td>2</td>
<td>Operational group</td>
<td>Senior staff and Junior staff</td>
<td>Executing day to day tasks, workforce (executing task, taking instructions &amp; reporting)</td>
</tr>
<tr>
<td>3</td>
<td>Strategic communication group</td>
<td>Senior members</td>
<td>Managerial role of providing vision (terms of reference, resources, discipline, etc)</td>
</tr>
<tr>
<td>4</td>
<td>Contingent group</td>
<td>Mixed staff</td>
<td>Depending on situation/tasks, staff are selected for particular an specific tasks. (eg. Crises Communication management, Ad-hoc committee, etc)</td>
</tr>
</tbody>
</table>
The four clusters identified represent employee cohesion patterns. Cluster 1 had 105 respondents, representing 34%. Cluster 2 had 107, respondents representing 34.6. Clusters 3 and 4 had 81 and 16 members, representing 26.2% and 5.2% respectively. A chi-square test of independence between the groups and employee ranks showed $\chi^2: 51.797$ (df = 15) $P < 0.01$. This means that employee rank has the tendency of influencing group patterns as staff usually will feel more comfortable with colleagues of the same rank. Again the chi-square test for employee membership of a cluster (group) was also influenced by the campus of the employee with $\chi^2: 19.061$ (df = 12) $P < 0.05$. The results are consistent with communication practice in the University, since ranks and campuses determine the job specification (various campuses have different areas of specialisation). Winneba campus specialises in Arts and Social Science; Kumasi, in Business and Technology; Mampong is into Agriculture while Ajumako specialises in Languages.

**Table 4.4.2 Cluster Distribution of Staff**

<table>
<thead>
<tr>
<th>CLUSTERS</th>
<th>1 (Tactical)</th>
<th>2 (Operational)</th>
<th>3 (Strategic)</th>
<th>4 (Contingent)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ass Prof/DR</td>
<td>0</td>
<td>1(0.3)</td>
<td>5(1.6)</td>
<td>1(0.3)</td>
<td>7(2.3)</td>
</tr>
<tr>
<td>Snr Lecturer/SAR</td>
<td>6(1.9)</td>
<td>2(0.6)</td>
<td>10(3.2)</td>
<td>0</td>
<td>18(5.8)</td>
</tr>
<tr>
<td>Lecturer/AR</td>
<td>31(10)</td>
<td>26(8.4)</td>
<td>34(11)</td>
<td>5(1.6)</td>
<td>96(31.1)</td>
</tr>
<tr>
<td>SRA/SAA</td>
<td>14(4.5)</td>
<td>39(12.6)</td>
<td>12(3.9)</td>
<td>6(1.9)</td>
<td>71(23)</td>
</tr>
<tr>
<td>Others</td>
<td>31(10)</td>
<td>24(7.8)</td>
<td>11(3.6)</td>
<td>1(0.3)</td>
<td>67(21.7)</td>
</tr>
</tbody>
</table>

Figures in parentheses are percentages  
**Source:** Field Survey, 2012
Table 4.4.3 Cluster distribution across campus

<table>
<thead>
<tr>
<th>CLUSTERS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Tactical)</td>
<td>39(12.6)</td>
</tr>
<tr>
<td>2 (Operational)</td>
<td>43(13.9)</td>
</tr>
<tr>
<td>3 (Strategic)</td>
<td>38(12.3)</td>
</tr>
<tr>
<td>4 (Contingent)</td>
<td>12(3.9)</td>
</tr>
<tr>
<td>Total</td>
<td>132(42.7)</td>
</tr>
</tbody>
</table>

Figures in parentheses are percentages

Source: Field Survey, 2012

Table 4.4.4 Cluster Membership Distribution

<table>
<thead>
<tr>
<th>Cluster</th>
<th>n</th>
<th>% of Sample</th>
<th>% of Cumulative Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>105</td>
<td>34.0</td>
<td>34.0</td>
</tr>
<tr>
<td>2</td>
<td>107</td>
<td>34.6</td>
<td>68.6</td>
</tr>
<tr>
<td>3</td>
<td>81</td>
<td>26.2</td>
<td>94.8</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>5.2</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>309</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2012

4.4.2 Categorical variable importance in cluster determination

To better understand communication parameters influencing respondents membership of a group, cluster determination was conducted with the Bonferroni Adjustment, with the Chi-square as the test statistics for the four groups. In Cluster 1, the test revealed that staff moral, communication facilities, promotion/transfer of staff, time of communication and the two-way communication channels were the communication variables that influenced respondents cluster membership. In Cluster 2, staff moral, divide and rule method, the multi-campus nature, well defined job description and nature of capacity building, significantly determined employees’ membership of the cluster.
The figures below indicate the manifest statements that are likely to pull or push respondents towards a particular cluster (group). Agreement among humans is based on their tendency to gravitate toward a particular group (cluster) of people they share similar opinions with at the work place. Using the thirty manifest likert items for determining group cohesion in Table 4.9 in the cluster analysis, the results in all the four figures showed whether a particular statement is the pull or push factor for determining a respondent’s membership of a cluster (group). If the chi square measure (blue line) exceeds the test statistic (gold line), then it means that the variable is not a determining factor in a cluster membership but if the test statistic (gold line) crosses the blue line, the researcher concludes that the variable is a push/pull factor, based on which members belong to a cluster.

**Figure 4.4.1: Determinants of Cluster One**

**Source:** Field Survey, 2012
In Cluster 3 respondents generally agreed that personal interest, effect of tribalism, feedback and self ego determined their membership of the cluster. In cluster 4, non-uniformity in salary structure, unclear policy statements, nature of capacity building and information from colleagues influenced respondents membership.
TwoStep Cluster Number = 3

Figure 4.4.3: Determinants of Cluster Three
Source: Field Survey, 2013

TwoStep Cluster Number = 4

Figure 4.4.4: Determinants of Cluster Four
Source: Field Survey, 2013
4.4.2 Group Cohesion and Organisational communication pattern

To identify the underlining parameters of communication in a group, an exploratory factor analysis with Varimax Rotation (an interaction method to find out exhaustive list of different factors) was used to extract the variable underpinning organisational communication. The factor analysis revealed four independent communication parameters that explained 48% of the variance in communication pattern in UEW vis-à-vis group cohesion. The principal components, underlying the cohesion pattern among all the four clusters extracted were labeled as corporate planning, stratification, organizational politics and organizational culture based on the characteristics of factor loadings in each principal component.

Pearson correlation was used to determine the relationship among the identified principal components in the University. The coefficients (r) measure the magnitude or strength and the direction of the relationship between two variables out of a scale value of 1 or 100%. The results in Table 4.4.4 reveal that corporate identity and corporate planning had the highest significant positive correlation (r = 0.626, p < 0.01). The positive and significant relationship means that corporate planning and corporate identity influence each other with a correlation of 62.6% therefore implying good corporate planning is likely to result in a rise in corporate identity by 62.6%. in the University. A positive change in corporate identity is also likely to improve corporate planning by 62.6%. Organisational politics and corporate planning were also found to be positively and significantly correlated (r =0.509, p< 0.01). Healthy organisational politics is likely to lead to an enhanced strategic thinking among members of the University community.
and thereby improving corporate planning by 50.9%. In other words, effective corporate planning would likely strengthen corporate identity in the University.

The relationships between the other variables (corporate planning and stratification, organizational politics and stratification, corporate identity and corporate planning and corporate identity and organizational politics) all had \( r < 0.5 \); though statistical evidence points to a significant relationship among these parameters. What it means is management need to consider these factors in enhancing and improving staff cohesion in future. Besides it draws the attention of management to the importance of various informal and formal groups, constituents and committees in attempt to realise its vision.
### Table 4.4.5: PPMC Correlation on Organisational Communication

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>Corporate Planing</th>
<th>Stratification</th>
<th>Organisational Politics</th>
<th>Corporate Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLUSTERS Corporate Planing</td>
<td>Correlation 1.00</td>
<td>Significance (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stratification</td>
<td>Correlation 0.416***</td>
<td>Significance (2-tailed) 0.00</td>
<td>Df 306</td>
<td></td>
</tr>
<tr>
<td>Organisational Politics</td>
<td>Correlation 0.509***</td>
<td>Significance (2-tailed) 0.00</td>
<td>Df 306</td>
<td></td>
</tr>
<tr>
<td>Corporate Identity</td>
<td>Correlation 0.626***</td>
<td>Significance (2-tailed) 0.00</td>
<td>Df 306</td>
<td></td>
</tr>
</tbody>
</table>

*** indicates significance at 0.01 alpha level

**Source:** Field Survey, 2012
4.4.3 ANOVA of group cohesion

A one-way ANOVA was conducted for the various components to determine if differences exist in terms of group cohesion amongst the four principal components identified. From Table 4.4.5, the F value for corporate planning ($F = 52.729$, $df = 308$; $P < 0.01$) indicates that there are differences in group cohesion among the four groups because of corporate planning. With regards to stratification, difference occurred among the four groups in terms of communication pattern and group cohesion ($F = 231.451$, $df = 308$; $P < 0.01$). Organistional politics also significantly varied in different groups (cluster) with ($F = 36.197$, $df = 308$).

Corporate identity, between groups and within groups had a mean square of 21.925 and 0.794 respectively with an F-statistic of 27.606 ($df = 308$ ; $P < 0.01$). The result implies that members of the four clusters demonstrate or inculcate the University’s core values differently in their various roles and functions in the organisation. The University’s Corporate identity will include the logo (font, combination of word and image), official envelopes used in communication, business cards used by individual officers, letterheads, flyers, magazines, posters and the University web performances. The gains from the cluster and their groupings depend on the model, the culture and capacity of the cluster. Besides, the professional way to the cluster in this study, attempts to save staff members lots of energy, misunderstanding and use of resources, enhances the learning capacity of behavioural changes to improve the motivation of the people at work (Cadic Guidelines, 2013).
Table 4.4.6: Oneway ANOVA on group cohesion

<table>
<thead>
<tr>
<th>Source: Field Survey, 2012</th>
</tr>
</thead>
</table>

4.4.4 Post Hoc Test Analysis

To be sure that the conclusions from the ANOVA Analysis were not spurious, a Post Hoc analysis with multiple comparison was conducted for all clusters at 95% confidence interval with Dunnett T3 (Appendix 5) being the test statistics because unequal variances was assumed. Clusters had unequal weights in the sampled population due to the varying number of respondents in each cluster. The Dunnett T3 test revealed that, differences do not exist in the various groups in terms of corporate planning as a determinant of group cohesion. However, differences do actually exist with regards to the effect of stratification in communication pattern on group cohesion in UEW.
The above case implies that no differences exist in relation to the effect of organizational politics on group cohesion. Insignificant relationship also exist between group 1 and 4, groups 2 and 4, groups 3 and 4 and groups 4 and all other groups; hence we conclude that no significant differences exist among the various groups (clusters), giving organizational politics as parameters for group cohesion. Since there are no differences from the results, cohesion here could influence job performance. Riggio (2006) opined that close and collaborative relationships with clients may be an important factor in influencing group cohesion and staff performance. Engleberg and Wynn (2003) also stressed that when analysing the general effectiveness in group cohesions, there is clear indication that this cohesion could be weakened when there are differences among staff, hence productivity and cohesiveness could equally be affected. The more cohesive the group, the happier and more productive the group can be too (McBride, 2006).

In brief with objective four, group cohesion here refers to the “social glue” or bonding relationship for staff to stay together and to be attracted to the group. It is believed that work teams demonstrating strong group cohesion will function and perform better in achieving work goals. Cohesion is, however, not caused by one single factor, but the interaction of more than one factor as has been depicted by the variables in objective four. While group cohesion may influence group performance, group performance may create or increase group cohesion (Tactics, 2012). This could make sense as everyone would want to be on a winning team. According to Tactics (2012), the influential factor that will create a positive relationship between group cohesion and group performance is when
the group members’ commitment to the organization’s performance goals and norms is high. Another school of thought (Anon, 2014) confirmed a positive relationship between group cohesion and group performance when the group's commitment to the organisation's performance/goals was high.

There is the likelihood that members of highly cohesive groups may also be motivated to accomplish more, which may not necessarily be in line with the organisation’s interest in communication performance process. In such instances, group cohesion can also have a negative effect on group task/performance. A case in point is a team of senior members in the University could have a group interest in helping each other to develop their skills and place emphasis on matters relating to their promotion rather than on their productivity or job performance. This should be a wake-up call to management in attempt to promote cohesion as stated in McBride (2006), that the more cohesive the group, the happier and more productive it can be. However, when group commitment to its organisation's performance/goals was low, group cohesiveness will have a negative relationship with its job performance. Hence when leading a small group, it is important to understand the appropriate times to use organisation’s interest alone to avoid misunderstandings (Caputo, Hazel, McMahon, and Dannels, 2002). Similarly, Engleberg and Wynn (2003) stated that when analysing the effectiveness of a group, it is important to consider that increased productivity and increased cohesiveness have a reciprocal relationship in the group functionality.
4.5: Ranking of Constraints Militating Against Communication Flow

Communication constraints were measured from 30 statements on a five point Likert scale with the following response categories: 1 = no constraint, 2 = not serious, 3 = somehow serious, 4 = serious and 5 = very serious constraints. The Kendall’s coefficient of concordance was used to rank the 30 constraints as reported by the respondents. The overall mean rank showed a value of 0.04 with chi-square value ($\chi^2$) of 389.895 (df = 2) p< 0.01.

The results in table 4.13 indicated that, lack of suggestion boxes is the least constraint militating against communication with a mean rank of 19.02. Inadequate office spaces, laboratories and poor transportation system were ranked as the second least communication barriers with means of 17.95 each. Bureaucratic procedures has a fair share of 17.19 and was ranked as the third least factor affecting communication in the University. Low staff morale and attitude to work had mean ranks of 17.12 and 16.87 respectively, and were ranked as the 24th and 25th leasts barriers to communication flow in the University. Other variables such as inadequate motivation, distributed information, personality differences, absence of mentors, among others had mean ranks of between 16.75 and 14.51 as indicated in Table 4.5. Unclear organizational structure and lack of supervision had a mean value of 13.17 each and ranked as the 4th constraints. Distance in the location of offices or laboratories, inadequate qualified human resource and inexperienced staff were ranked the most serious constraints in communication patterns with mean values of 12.98, 12.24 and 12.16 respectively.
In conclusion, distances between offices or laboratories (because of where they are located), inadequate qualified human resource and inexperienced staff are the most challenging barriers to communication in the University whiles physical communication facilities such as lack of suggestion boxes, inadequate office space and poor transportation systems are the least communication constraints in the University.

Table 4.5: Coefficient of concordance (W) rank of communication constraints

<table>
<thead>
<tr>
<th>NO.</th>
<th>CONSTRAINTS</th>
<th>MEAN RANK</th>
<th>POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lack of suggestion boxes</td>
<td>19.02</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>Inadequate office space/ laboratories</td>
<td>17.95</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>Poor transportation system</td>
<td>17.95</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>Bureaucratic procedures</td>
<td>17.19</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>Low staff morale</td>
<td>17.12</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>Attitude to work</td>
<td>16.87</td>
<td>24</td>
</tr>
<tr>
<td>7</td>
<td>Inadequate motivation</td>
<td>16.75</td>
<td>23</td>
</tr>
<tr>
<td>8</td>
<td>Inadequate consultations</td>
<td>16.72</td>
<td>22</td>
</tr>
<tr>
<td>9</td>
<td>Inadequate/poor equipment</td>
<td>16.42</td>
<td>21</td>
</tr>
<tr>
<td>10</td>
<td>Distort of information</td>
<td>16.38</td>
<td>20</td>
</tr>
<tr>
<td>11</td>
<td>Inadequate lighting system</td>
<td>16.31</td>
<td>19</td>
</tr>
<tr>
<td>12</td>
<td>No exit interview</td>
<td>16.24</td>
<td>18</td>
</tr>
<tr>
<td>13</td>
<td>Personality differences</td>
<td>16.09</td>
<td>17</td>
</tr>
<tr>
<td>14</td>
<td>Little grievance procedures</td>
<td>15.96</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>Dysfunctional systems</td>
<td>15.64</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>Not communicating</td>
<td>15.34</td>
<td>14</td>
</tr>
<tr>
<td>17</td>
<td>Geographical location of Campus</td>
<td>15.3</td>
<td>13</td>
</tr>
<tr>
<td>18</td>
<td>No open-door policy</td>
<td>15.2</td>
<td>12</td>
</tr>
<tr>
<td>19</td>
<td>Ambiguous communication</td>
<td>15.17</td>
<td>11</td>
</tr>
<tr>
<td>20</td>
<td>No mentors</td>
<td>14.9</td>
<td>10</td>
</tr>
<tr>
<td>21</td>
<td>No meetings/for a</td>
<td>14.74</td>
<td>9</td>
</tr>
<tr>
<td>22</td>
<td>Unclear responsibilities</td>
<td>14.71</td>
<td>8</td>
</tr>
<tr>
<td>23</td>
<td>Poor room conditions</td>
<td>14.54</td>
<td>7</td>
</tr>
<tr>
<td>24</td>
<td>Lack of capacity</td>
<td>14.51</td>
<td>6</td>
</tr>
<tr>
<td>25</td>
<td>Lack of c’t’n skills</td>
<td>14.3</td>
<td>5</td>
</tr>
<tr>
<td>26</td>
<td>Unclear organisational structure</td>
<td>13.17</td>
<td>4</td>
</tr>
<tr>
<td>27</td>
<td>Lack of supervision</td>
<td>13.17</td>
<td>4</td>
</tr>
<tr>
<td>28</td>
<td>Distance of offices/laboratories</td>
<td>12.98</td>
<td>3</td>
</tr>
<tr>
<td>29</td>
<td>Inadequate qualified staff</td>
<td>12.23</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>Inexperienced staff</td>
<td>12.16</td>
<td>1</td>
</tr>
</tbody>
</table>

Kendall’s W 0.044; \( \chi^2 \) 389.895 (df = 29) p < 0.01. 1 = Highest constraint and 28 = Least constraints Source: Field Survey, 2012
4.5.1 Factor Analysis on Constraints militating against communication flow

Respondents were made to identify 30 factors thought to be militating against organizational communication in the University. From the given factors a factor analysis (Table 4.5) was conducted to reduce the data for further analysis using the Alpha Factoring method for the extraction. The factors less than 0.5, were insignificant as communication constraint and were suppressed leaving the factors equal to or greater than 0.5. These factors were regrouped for further analysis. The rotated factor matrix analysis in Table 4.5 shows the variables with factor scaling greater than 0.5. The factors classified in Kendall’s coefficient of concordance (W) was adopted to rank the classified variables to assess which ones highly militated against organisational communication in the University. The rotated factors were grouped under four major headings as: Human, System, Administrative and Structural constraints.

4.5.1.1 Human Constraints

Factor 1 from the rotated factor matrix Table (4.5.1) was classified as ‘Human Communication Failure’ which comprised the following factors: personality differences (0.755), not communicating (0.788), inadequate motivation (0.539), inexperienced staff (0.670), low staff morale (0.669), distortion of information (0.690), no meetings/fora (0.677) and lack of communication skills (0.698). However, Human Communication Failure is ranked fourth according to Kendall’s mean rankings. From Table 4.5.1 it could be inferred that, Personality centredness of staff was assessed to be a major constraint followed by inadequate consultation. Differences among staff in the University could affect
communication, especially when they decide not to communicate. Bird (2002) identified three communication-related barriers in business organizations as moral silence (failing to speak up about issues that are known to be wrong), moral deafness (failing to hear or attend to moral concerns raised by others) and moral blindness (failure to recognize the moral implications of actions).

Inadequate motivation and inexperienced staff also militates against communication as shown in Table 4.12. This finding confirms that of Johnson (2003) that motivation was given inadequate attention by models on specific individual differences that influence performance and further proposed an expanded model of how individual differences could influence administrative performance in organizations. Low morale among staff, distortion of information, lack of meetings/forums and lack of communication skills among staff affect communication between and among the staff of the institution. Again lack of confidence in a person as a result of lack of prior experience and fear of being exposed to external criticism could serve as a barrier to communication (Ruderstam and Newton, 2001).

4.5.1.2 System Constraints

Factor 2 from Table 4.5.1 was also classified as ‘System Constraints’ in communication and values obtained after the analysis were all above 0.5. These variables included: Inadequate/Poor equipment (0.553), Inadequate qualified staff (0.588), Inadequate lighting system (0.572), Unclear organizational structure (0.568), Lack of supervision (0.600) and Unclear responsibilities (0.706). The results indicate that all the constraints were significant since they
were all above 0.5, emphasising general consensus of respondent. Okiy (2005) stated that in an academic environment in Nigeria, poor and inadequate telecommunication facilities, poor level of computer literacy, poor level of computer facilities, poor level of awareness of internet facilities among policy makers, government officials and the ruling class in general and minimum involvement of academic institutions in network building, were challenges militating against communication. Similarly, Chisenga (2004) surveyed the use of ICTs in public libraries and listed poor equipment and unqualified staff as some of the factors militating against information, communication and technology development in Africa.

4.5.1.3 Administrative Constraints

Bureaucratic procedures (0.566), No exit interview (0.527) and Inadequate consultations (0.537) constituted the third factor. Again from Table 4.5.1, all figures were above 0.5 and classified as ‘Administrative Constraints’. This suggests that in a way, administrative bottlenecks such as bureaucratic procedures, no exit interviews and inadequate consultations militate against communication and could affect performance in the University. Scott and Pandey (2000) have indicated that red tape has been considered as a barrier to improving benefits provided to clients through communication.

4.5.1.4 Structural Constraints

Factor 4 is classified as ‘Structural Constraints’ in Table 4.5.1 with values significant at 0.5 and above. The factor comprises distance of offices/laboratories (0.500), inadequate office space/laboratories (0.555), poor
transportation system (0.707) and lack of suggestion boxes (0.592). From the general findings, the four factor mention have the tendency of affecting communication performance since they are constraints measured at significant level. Taylor (2004), opined that barriers to effective communication in the workplace included staff not thinking clearly before communicating, not listening intelligently, not selecting appropriate media, poor timing and place of communication, using inappropriate language and failing to obtain feedback. He adds that if care is not taken, structural constraint could be disastrous and result in failure of communication all-together. In addition, distance of office and laboratories, inadequate office space and laboratories, poor transportation system and lack of suggestion boxes in the University; all influence the way staff communicate, as they are not of any form of support in the communication performance process. Simillarly, Tourish (2010) contends that a message is distorted if it travels a great distance from its sender to the ultimate receiver through the formal organisation hierarchy.
Table 4.5.1: Communication Constraints : Rotated Factor Matrix\textsuperscript{a}

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Geographical location of Campus</td>
<td></td>
</tr>
<tr>
<td>Distance of offices/laboratories</td>
<td></td>
</tr>
<tr>
<td>Inadequate/poor equipment</td>
<td>.553</td>
</tr>
<tr>
<td>Inadequate qualified staff</td>
<td>.588</td>
</tr>
<tr>
<td>Inadequate lighting system</td>
<td>.572</td>
</tr>
<tr>
<td>Poor room conditions</td>
<td></td>
</tr>
<tr>
<td>Inadequate office space/ laboratories</td>
<td>.555</td>
</tr>
<tr>
<td>Poor transportation system</td>
<td>.707</td>
</tr>
<tr>
<td>Lack of suggestion boxes</td>
<td>.592</td>
</tr>
<tr>
<td>Dysfunctional systems</td>
<td></td>
</tr>
<tr>
<td>Unclear organizational structure</td>
<td>.568</td>
</tr>
<tr>
<td>Lack of supervision</td>
<td>.600</td>
</tr>
<tr>
<td>Unclear responsibilities</td>
<td>.706</td>
</tr>
<tr>
<td>Bureaucratic procedures</td>
<td>.566</td>
</tr>
<tr>
<td>Ambiguous communication</td>
<td></td>
</tr>
<tr>
<td>Lack of capacity</td>
<td></td>
</tr>
<tr>
<td>No exit interview</td>
<td></td>
</tr>
<tr>
<td>Little grievance procedures</td>
<td></td>
</tr>
<tr>
<td>No mentors</td>
<td></td>
</tr>
<tr>
<td>No open-door policy</td>
<td></td>
</tr>
<tr>
<td>Attitude to work</td>
<td></td>
</tr>
<tr>
<td>Inadequate consultations</td>
<td>.537</td>
</tr>
<tr>
<td>Personality differences</td>
<td>.775</td>
</tr>
<tr>
<td>Not communicating</td>
<td>.788</td>
</tr>
<tr>
<td>Inadequate motivation</td>
<td>.539</td>
</tr>
<tr>
<td>Inexperienced staff</td>
<td>.670</td>
</tr>
<tr>
<td>Low staff morale</td>
<td>.669</td>
</tr>
<tr>
<td>Distort of information</td>
<td>.690</td>
</tr>
<tr>
<td>No meetings/for a</td>
<td>.677</td>
</tr>
<tr>
<td>Lack of communication skills</td>
<td>.698</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Extraction Method: Alpha Factoring.
Rotation Method: Varimax with Kaiser Normalization.

\textbf{Source:} Field Survey, 2012
4.6 Hypothesis Testing

In this part of the analysis and discussions, the null hypotheses were tested for acceptance or rejection. A case in point is the relationship between demographic characteristics of staff (independent variables) and administrative performance (dependent variable), which were accordingly investigated in the study. Both F-test and chi-square methods were employed in the calculations and discussed subsequently.

4.6.1: $H_{01}$: There are no significant differences in the effectiveness of organisational communication among various campuses

The assumption made here is that since the campuses of the University are located in various distant places, there could be differences also in the nature/pattern of communication on the different campuses and also between campuses of the University. Table 4.6 shows the result of the F-test statistics within campus and between campuses with their mean squares.
Table 4.6.: F Test Difference of Communication Performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of organizational environment communication on group cohesion</td>
<td>Between Groups</td>
<td>120.447</td>
<td>3</td>
<td>40.149</td>
<td>0.778</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>15491.080</td>
<td>300</td>
<td>51.637</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15611.526</td>
<td>303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effect of managerial communication on group cohesion</td>
<td>Between Groups</td>
<td>156.435</td>
<td>3</td>
<td>52.145</td>
<td>1.371</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>11408.196</td>
<td>300</td>
<td>38.027</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>11564.632</td>
<td>303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constraint to communication flow</td>
<td>Between Groups</td>
<td>3926.170</td>
<td>3</td>
<td>1308.72</td>
<td>2.482</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>158188.17</td>
<td>300</td>
<td>527.294</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>162114.34</td>
<td>303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness of communication in University</td>
<td>Between Groups</td>
<td>2644.484</td>
<td>3</td>
<td>881.495</td>
<td>2.207</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>119437.03</td>
<td>299</td>
<td>399.455</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>122081.51</td>
<td>302</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of communication environment in University</td>
<td>Between Groups</td>
<td>889.267</td>
<td>3</td>
<td>296.422</td>
<td>1.837</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>48397.072</td>
<td>300</td>
<td>161.324</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>49286.339</td>
<td>303</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2012

The null hypothesis of no significant difference in the effectiveness of communication has not been rejected, in respect of the variables in Table 4.6 at 5% alpha level. The researcher concludes that significant differences do not exist in the patterns of communication among the four campuses of the University of Education, Winneba. The implication here is that, the patterns and modes of communication on the various campuses of the University are similar.
Differences exist in areas of specialisation in academic programmes on various campuses. The Mampong campus for instance specialises in Agriculture Education. Kumasi campus is into Technology Education and Business Education. Ajumako Campus on the otherhand, specialises in Languages, while the main campus in Winneba, specialises in Sciences, Arts and other Social disciplines. The implication here is that both non-teaching and teaching staff of the University are employed based on their competence and specialisation, in relation to the discipline and this could also influence the pattern of communication but not significantly. The significance level of the organisational environment on communication depends on the nature/level of team work, ethnic influences, social/cultural issues and organisational structure of the University. The University operates as a unit under one council and policy, one management, irrespective of the location of campus.

Another variable, managerial communication also does not significantly influence the nature of communication among staff in the University as indicated in Table 4.6. This could also be as a results of communication skills, use of different channels to communicate and the general behaviour of staff in the University. identity in this direction could be uniform across campuses hence the level of semblance.

From the above out come, we therefore fail to reject the null hypothesis, hence there is no significant difference in pattern of communicatin among various campuses of the University.
4.6.2 H02: Staff profile does not influence the effectiveness of organisational communication

To test the hypothesis on the selected demographic characteristics of staff, a chi-square statistic was used to compute the influence. Such demographic characteristics include gender, rank, education and marital status.

4.6.2.1 Marital status

Marital status from Table 4.6.1 significantly influences the level of communication effectiveness in the University at $\chi^2_{0.01} 24.783$, df = 6, P < 0.01. Currently the demographics from Table 4.6.1 show a sizable number, 89(33.6%) of staff are in the single category. The implication here is that many more of staff in the single category, were likely to proceed on matrimonial and maternity leave in the near future, hence more responsibility to family life too. The implication here is that productive working hours in the University as a whole is likely to reduce in the absence of such staff.

4.6.2.2 Educational level of Staff

The study further revealed that level of education significantly determines the level of performance in the University at a significant level of $\chi^2_{0.01} 24.605$, df 8 P < 0.01 that the higher educational qualification one has the better the performance all things being equal. The implication here is that, as an educational institution, higher academic qualifications are very important to its sustainable development. This observation of many well educated staff likely to perform better falls in line with Boynton (2006) and Plowman (2005) who
opined that, being highly educated within the mixed-motive model could better
to contribute to communication performance.

4.6.2.3 Staff Status/rank

From Table 4.6.1 Status shows a test statistic of $\chi^2_{0.05} = 20.481$, $df = 8$, $P < 0.01$, meaning that the status of a staff influence his level of communication effectiveness. The higher the status (senior member or management member) the more likely it will influence communication effectiveness in the University. Professional status, like belonging to a Royal Charter, according to Tobin (2004), could assist practitioners immensely in their work.

Table 4.6.1: Chi square results of staff profile and communication performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\chi^2_{cal}$</th>
<th>$\chi^2_{tab}$</th>
<th>Df</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>4.413</td>
<td>5.992</td>
<td>2</td>
<td>0.110</td>
<td>Not significant</td>
</tr>
<tr>
<td>Marital status</td>
<td>24.783</td>
<td>12.592</td>
<td>6</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Education</td>
<td>24.605</td>
<td>15.507</td>
<td>8</td>
<td>0.002</td>
<td>Significant</td>
</tr>
<tr>
<td>Rank</td>
<td>20.481</td>
<td>15.507</td>
<td>8</td>
<td>0.009</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2012

4.6.3: There is no significant relationship among staff profile, perception of communication pattern, communication performance, group cohesion and constraints (Ho3)

To test for group cohesion, two constructs were derived from the variables; staff cooperation, opinion expression, effect of job improvement, dissatisfaction among employees, use of circulars, nature of communication and non uniformity in salaries structure were considered. The constructs underpinning group cohesion are managerial communication and organisational environment. The
results of a Pearson correlation test in Table 4.6.2 show that communication effectiveness is positively influenced by managerial communication and organisational environment. The results show that managerial communication (r = 0.496; p-value = 0.00) is positively correlated and significantly influences communication effectiveness among employees in UEW, meaning that as managerial communication improves communication effectiveness also rises. The effect of organisational environment on effectiveness of communication among staff (r = 0.376; p-value = 0.00) is also positive and significant therefore a conducive organisational environment for communication will increase the communication effectiveness among staff of the University.

The two variables that measure the group cohesion among staff are organisation environment and managerial communication and results from Table 4.6.2 indicate a positive relationship with communication performance. When cohesion is weak, the relationship among staff becomes weak too and that could affect general performance of staff. This is in line with the findings of Long et al., (2000). Innovative policies suggested by Long et al (ibid) in dealing with the effects of weak cohesion on staff performance include motivation, participation, promotion and consultations.

The correlation matrix in Table 4.6.2 indicates that organisational environment and managerial communication positively and significantly influence each other (r = 0.851; p < 0.05). This means that a congenial organisational environment is likely to improve managerial communication. An organisational environment that
is based on issues rather than personality cult is also more likely to encourage open managerial communication in the University.

The results in Table 4.6.2 further reveal that a positive and significant relationship exists between respondents perception of the communication pattern and the constraints \( (r = 0.504; p < 0.05) \). This means that the constraints militating against the achievement of an effective communication performance increases staff perception of the communication system in the University. This implies that management’s inability to overcome the challenges facing the University communication system is likely to increase staff perception of insurmountable communication barriers in the organisation.

The organisational environment is also positively and significantly related to the constraints facing the communication system \( (r = 0.386; p < 0.05) \). A conducive organisational environment will minimise the constraints of the communication constraints in the University. However, an unfriendly or tensed organisational environment will worsen or increase the communication constraints because of increased distrust among member of staff.

The ability of management to accept different shades of opinions and employee willingness to contribute to discussions on management directives and activities promote group cohesion. This means that communication objectives in the University should encourage constructive criticisms from employees to promote team work and enhance productivity, considering the fact that the University working system also depends on the committee system. This assertion is in line with the outcome of Yoo and Alari (2001) who found that in established groups,
group cohesion had larger influence than communication media for measure of task participation and social presence.

Job improvement determines the level of group cohesion. When staff are happy, it automatically affects their performance and those factors as group cohesion and increase productivity can be realised (McBride, 2006). Management will therefore have to design jobs that improve employee capacity and performance since the University evolves on global parameters in shaping higher education. Again, when staff become dissatisfied with the communication parameters, it is likely to affect the team spiritedness and employee performance at the work place (since people will tend to rely on their own efforts to do everything at the expense of other employees capacity training). Similarly on the foregoing, Kolb, Jin and Song (2008) opined that team work, training effectively and employee participation should cover relationship management, yet little attention is made towards communication and conflict management.
Table 4.6.2: Pearson Correlation Matrix between staff profile, perception of communication pattern, communication performance, group cohesion and constraints

<table>
<thead>
<tr>
<th>Variables</th>
<th>Age</th>
<th>Experience</th>
<th>Organisational Environment</th>
<th>Managerial communication</th>
<th>Constraints</th>
<th>Communication effectiveness</th>
<th>Communication Perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>0.49***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.00)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational Environment</td>
<td>-0.101</td>
<td>0.014</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>(0.117)</td>
<td>(0.813)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial</td>
<td>-0.071</td>
<td>0.022</td>
<td>0.851***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>communication</td>
<td>(0.27)</td>
<td>(0.711)</td>
<td>(0.00)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constraints</td>
<td>-0.048</td>
<td>0.005</td>
<td>0.386***</td>
<td>0.323***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.454)</td>
<td>(0.934)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.59)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>-0.009</td>
<td>-0.017</td>
<td>0.376***</td>
<td>0.496***</td>
<td>0.031</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>effectiveness</td>
<td>(0.886)</td>
<td>(0.771)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.59)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of</td>
<td>0.035</td>
<td>0.024</td>
<td>0.244***</td>
<td>0.158***</td>
<td>0.504***</td>
<td>0.032</td>
<td>1</td>
</tr>
<tr>
<td>communication</td>
<td>(0.59)</td>
<td>(0.687)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.571)</td>
<td></td>
</tr>
</tbody>
</table>

Figures in parentheses are p-values and *** denotes significance at 1% alpha level.

Source: Field Survey, 2012
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Effective Organizational communication is widely believed to have the capacity to improve administrative performance in organisations. This study was premised on the perception that output will seriously be affected if communication in UEW is ineffective. The study examined the effectiveness of organisational communication on administrative performance in UEW which run a multi-campus system. Considering the need for prompt and effective communication within and between staff of the University for the realisation of its mission and vision, the study examined the available systems of communication, administrative performance of the staff and challenges in communication among others. The mixed research design was adopted for the study. Using multistage sampling techniques, 428 staff were selected. Questionnaires were administered to 400 staff and the remaining 28 were interviewed. A total of 309 (77.3%) questionnaires were returned. The data collected were analysed using the Statistical Package for Social Sciences (SPSS) version 18.0 and Microsoft Excel. Descriptive statistics such as frequency counts, means, standard deviations, percentages, means, factor analysis, cluster analysis, chi-square, t-test, correlation and F-test were used to analyse objectives one to five of the study. Three hypotheses were tested in null forms at 0.05 level of significance using Analysis of Variance (ANOVA) and chi-square.
5.1 Summary of Findings

This section highlights the main findings of the study based on the objectives. Objective one looked at selected socio-demographic characteristics of staff were: age, campuses, gender (sex), rank (title), status in the University, educational qualification, years at post (tenure) and marital status. Majority of the staff were in active age group, between 26-40 years. The University has more male staff (58.3%) than female (41.7%). Majority of staff involved in the communication process (37%) were Senior members. In terms of educational qualification majority of the staff hold Masters Degree. More than half of the staff (56.2%) have served the University between 1 to 5 years with the rest serving between 6 to 20 years. Majority of respondents (62.6%) are married.

Objective two sought to measure the perceptions of staff on the nature of communication in the University using a five point Likert scale. Respondents generally agreed that the Likert items or perceptive statements reflected the nature of communication in the University. This is indicated by the overall mean value of 3.86 which is equivalent to ‘Agree’ on the response scale.

Objective three examined the organizational communication system and the perception of staff on performance. It was found that, communication systems available for use in the University are large and were perceived to influence administrative performance. The knowledge and use of the systems of communication, the availability and use of ICT and other facilities in the University are the underlying determinants of communication systems in relation to performance. Here a mean difference test was used to identify the variables that
influence communication system and administrative performance. The majority of the respondents (83.1%) agreed that the nature of communication system in the University was at least good. Their responses ranged from good to excellent.

With respect to objective four, organisational communication was found to have moderate influence on staff cohesion with a grand mean of 1.90. Further analysis using the two-step cluster analysis yielded four clusters, namely, tactical group, operational group, strategic group and contingency group which represented four employee cohesion patterns, Senior members and Senior staff, Senior staff and Junior staff, Senior members only and a Mixed group respectively. The two-step cluster analysis again revealed four groups of employee cohesion patterns. Clusters I and II showed high cohesion while clusters III and IV showed low cohesion. This shows that employee rank influences the grouping patterns and membership of a cluster (group) and was also influenced by the campus of the employee, as revealed from the chi-square analysis.

An exploratory factor analysis with Varimax Rotation showed that four independent communication parameters explained 48% of variance in communication pattern in UEW vis-à-vis group cohesion. A Pearson correlation coefficient value of 0.026 showed organizational culture and corporate planning to be positively and significantly correlated at $p < 0.01$. The results of a one-way ANOVA conducted for the various clusters to determine if differences exist among the four groups identified in terms of group cohesion revealed that corporate planning ($F = 52.729$, $df = 308$; $P < 0.01$) accounted for the differences.
With objective five, respondents were made to identify 30 factors militating against organizational communication in the University. Factor analysis was conducted to reduce the data for further analysis using the Alpha Factoring method for the extraction. The factors classified in Kendall’s coefficient of concordance (W) was adopted to rank the classified variables to assess which ones highly militated against organisational communication in the University. Location of offices or laboratories, inadequate qualified human resource and inexperienced staff were the most challenging barriers to communication in the University whiles physical communication facilities such as lack of suggestion boxes, inadequate office space and poor transportation systems ranked the least communication constraints in the University.

5.2 Conclusions

Based on the findings of the study, the researcher reached the following conclusions: Selected demographic characteristics play important aspect of the study. Majority of the staff in UEW are in the 26-40 age range as compared to the older age groups. The gender structure of staff is also male dominated and only very few respondents, constituting 2.7% hold Professorial positions. Majority (44.3%) of the respondents had Masters Degree qualifications in terms of their educational level. It was clear that more than half of the respondents have served the University for between 1 and 5 years, implying that the University could continue to rely on the services of experienced staff outside the University on some academic and administrative matters. Majority of respondents (62.6%) are married while those who were single constitute 33.6%. 

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The nature of communication system in the University is influenced by the availability of numerous pathways, channels (oral, written, electronic), interpersonal communication, communication skills of staff, location of office and time of communication, teamwork, bureaucracy and red-tapism, feedback and the magnitude of grievance resolution mechanisms. The effectiveness of communication at UEW is influenced by the nature of the current communication system, staff communication with superiors, staff contributions to discussions, subordinate communication and information flow from colleagues, the various sources of information and staff educational level. Others include the use of magazines/newsletters and sign language and demonstrations (characterised as non-verbal communication). In all cases communication channel make an interplay in effective flow of information but that comes with challenges too.

Official information that flow from colleagues to other staff include notices relating to promotions, transfers, pensions and other conditions of service. In some few instances the grapevine serves as the initial channel of communication of official information until it is formally communicated to staff.

The effectiveness of communication is also positively influenced by organisational environment and managerial communication. The demographic characteristics that influence communication performance among staff are gender, rank, education and marital status.

The factors affecting group cohesion are staff cooperation, expression of opinions relating to management issues, level of staff dissatisfaction, inadequacy
of information communicated, availability of training (long and short term), orientations and attachments for staff in the University, Non uniformity in the single spine salary structure and the multi campus nature of the University.

The most serious constraints millitating against communication flow in the University are inexperience of staff, inadequate qualified human resource, distance to offices/ laboratories, unclear organisational structure leading to role conflict, lack of supervision and lack of communication skills.

**Contribution to Knowledge**

This study has made significant original contributions to knowledge at both the academic and practical levels in Ghana as the first explanatory empirical study. The research is the first of its kind in a Ghanaian University and it has provided in-depth exploration on the effect of Organisational Communication on Staff Performance. The literature reviewed as well as the field survey that was conducted revealed the need for more empirical research to establish the capacity of effective Organisational Communication to deliver intended outcomes. The study will contribute to the understanding of gaps that need to be filled to make Communication more efficient.

Earlier studies on the effect of Organisational Communication on staff performance were conducted in jurisdictions whose cultural settings are strikingly dissimilar from the Ghanaian context; hence, another major contribution to knowledge. The results of this study has added new dimensions to the study and coupled with the existing stock of theories, it has increased the
knowledge base of the model in training and practice, but in a new context.

The review of the literature in study revealed a methodological deficit because there is over reliance on qualitative approach in most of the previous studies which lacked in-depth empirical investigation. However, this study employed both quantitative and qualitative approaches which made it possible for all aspects of the study to be extensively explored. Therefore, this study is the first of its kind to use these approaches and to provide a richer appreciation of Organisational Communication in Ghana and beyond.

5.3 Recommendations

Based on the findings of the study, the following recommendations are made to improve the effectiveness of communication in UEW.

1. To ensure effective communication and administrative performance, there is the need for upgrading the knowledge and skills of staff. Again, majority of the respondents (73.9%) have degree qualifications. However out of this large population, only 2.7% are professors or hold analogous position. It is therefore recommended that management of the University to support the development of senior members to move towards attaining the statuses of senior lecturers, associate professors and professors; which could improve on communication in general.

2. Considering the dispersed nature of the UEW (multi campus nature), campuses should be given the opportunity to act on routine issues at College level, making them semi-autonomous, before getting to central administration. This attempt in decentralizing information through the
support of management could reduce the communication traffic among campuses or from the main campus, Winneba, to satellite campuses to further appreciate the essence of time.

3. To enhance administrative performance and effective communication, it is recommended that the University authority should promote the use of information flow, feedback, relationships between superiors and subordinates; and use of circulars, letters, notices, newsletters, should be greatly enhanced in the University.

4. To enhance organisational communication, group cohesion and team work is important. The result revealed that staff were unhappy with the influence of ethno-linguistic use at work place, salary discrimination, lack of capacity and little cooperation of some staff. It is therefore recommended for management of the University could use the organisation of durbars and other social events periodically to bring staff together, create awareness and foster stronger cooperation to enhance the communication system.

5. For a University to have good organisaional communication and effective administrative performance, the bottlenecks hindering communication performance must be done away with. This research revealed a tall list of communication challenges in UEW. These challenges were classified into four main constraints (Human, systems, administrative and structural) and the support of management could reduce the bottlenecks.

a. **Human constraint**: With human constraint, individuals and groups were perceived to be the sole cause of such challenges at work. It is recommended that such staff are identified and given further training and education in
communication, human relations, and appropriate ethical behaviour and with the needed motivation.

b. **Systems constraint:** This challenge has to do with the use of machines, equipment and other resources, e.g. unreliable power supply, poor telephone network and lack of computers. It is recommended that priority is given to the provision of appropriate and adequate innovative and durable machines and equipment to ensure effective communication.

c. **Administrative constraint:** Bureaucracy was identified as a major constraint to effective communication and information flow in the University. It is recommended that the administrative structure should be re-examined and the possible causes of delays in information flow removed to ensure effective and timely information dissemination within and without the University system. There is also the need to create awareness among staff through education and training on work ethics to make them more effective and efficient in their work.

d. **Structural constraint:** Some of the constraints identified in the study were poor transportation system, lack of suggestion boxes, long distances and lack of adequate space. It is recommended that management of the University should make provision for the procurement and supply of these items in future budgets.

6. Managers need to communicate effectively to motivate staff put up their best. The following suggestions could improve communication skills in the work place in the University:

a. Formal speeches, one-on-one and group discussions are popular forms of verbal communication. Verbal communication ensures speedy information
flow and feedback. However, senior members in the University who have supervisory roles should be encouraged to constantly reinforce verbal communication when relating to other levels of staff at work place.

b. Staff lamented that some superiors do not communicate clearly. It is recommended therefore that management should ensure that through the periodic in-service training, supervisors are reminded to present their information, whether verbal or written, in clear and unambiguous language to reduce the misinterpretation and misunderstanding among staff.

c. The study further identified appropriate media and other effective forms of communication to include memoranda, SMS messages, notices, meetings and house journals. The researcher recommends that staff should apply more than one means of communication (using the principle of redundancy) for effective information flow among staff. This approach will ensure that at least one of the messages is received and feedback obtained.

5.4 Areas for Further Research

Though this study has provided valuable insight into the effect of communication of staff performance in the study area, it has equally led to some unanswered questions relative to its capacity to produce the desired outcomes in Ghana. The research therefore represents the beginning of an effort that is geared towards making Organisational Communication better. As a result, further studies are required to broaden this research so as to help improve the quality of Organisational Communication in Ghana and other jurisdictions. In view of this, the following recommendations are made for future research:
This study was limited to only UEW, and it is therefore recommended that future works should have a larger scope that would strengthen the findings of this study in order to ascertain whether generalising these findings is possible beyond where this research was undertaken.

The researcher also recommends further research to investigate the influence of other factors such as cultural, job related factors of trainees, and other environmental issues that could affect the quality of Organisational Communication in institutions with the same governance architecture.

Another acknowledged limitation of this study was its over reliance on data obtained within the period of study. A repetition of this study in the future could add the benefit of a longitudinal scope and could allow researchers to understand how the effect of Organisational Communication can affect Staff Performance.
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APPENDIX A

QUESTIONNAIRES

DEPARTMENT OF AGRICULTURAL EXTENSION, RURAL DEVELOPMENT AND GENDER STUDIES

FACULTY OF AGribusiness AND COMMUNICATION SCIENCES

UNIVERSITY FOR DEVELOPMENT STUDIES, NYANKPALA CAMPUS, TAMALE, GHANA

QUESTIONNAIRE ON ORGANISATIONAL COMMUNICATION AND JOB PERFORMANCE AT THE UNIVERSITY OF EDUCATION, WINNEBA (UEW)

Dear Respondent,

I should be grateful if you could spare me few minutes of your busy schedule to respond to these questions. The outcome of the exercise which is purely for academic purpose would be treated in strict confidence.

I therefore urge you to please complete and return this questionnaire to the undersigned as soon as possible.

Thank you in advance for your cooperation.

B.C. Campion
(Signed)
# SECTION A: Perception of Staff on the Nature of Communication in the University

Please tick (√) as appropriate in the space(s) provided.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Statements</th>
<th>Nature of Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strongly Agree (5)</td>
</tr>
<tr>
<td>1</td>
<td>Numerous pathways, channels/oral, written, ICT are used to convey messages in UEW</td>
<td></td>
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<td>2</td>
<td>Inter-personal communication are more likely to meet specific needs of staff in overcoming risk and complexities in delays</td>
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<td>3</td>
<td>Obtaining the right information sometimes depends on the channel chosen to communicate</td>
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<td>4</td>
<td>Well-developed communication skills are necessary to personal effectiveness in organisation</td>
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<td>5</td>
<td>There is a strong relationship between communication effectiveness and organisational effectiveness in UEW</td>
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<td>6</td>
<td>Communication is one of the several types of motivated behaviours in organisations</td>
<td></td>
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<td>7</td>
<td>When the distance between the communicator and the recipient increases, quality and quantity of message decreases</td>
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<td>8</td>
<td>I sometimes use a number of channels to ensure that messages reach staff on time</td>
<td></td>
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<tr>
<td>9</td>
<td>The state of staff well-being health condition) can affect communication</td>
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<tr>
<td>S/N</td>
<td>Statements</td>
<td>Nature of Communication</td>
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<td>-----</td>
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<tr>
<td>10</td>
<td>Social and cultural issues among staff affect communication</td>
<td></td>
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<td>11</td>
<td>The low level of educational qualification of the Sender/Receiver could affect communication</td>
<td></td>
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<tr>
<td>12</td>
<td>Communication could be affected by tight work schedule of staff</td>
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<tr>
<td>13</td>
<td>Staff identify their superior as the primary source for receiving information from top management</td>
<td></td>
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<td>14</td>
<td>Generally the office and time of communication is relevant to both parties in the process</td>
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<td>15</td>
<td>Team work supports free flow of information in UEW</td>
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<tr>
<td>16</td>
<td>Unclear University Policy/Regulations could affect communication</td>
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<td>17</td>
<td>The nature and size of organisational structure affects the free flow of information</td>
<td></td>
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<td>18</td>
<td>Bureaucracy and red-tape affect communication process</td>
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<td>19</td>
<td>Ethnicity/Tribalism/Nepotism at work affect communication</td>
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<td>20</td>
<td>General office working conditions affect communication</td>
<td></td>
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<td>21</td>
<td>Dissatisfaction in working conditions affects communication</td>
<td></td>
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<td>22</td>
<td>If staff do not get the necessary feedback it affects communication flow</td>
<td></td>
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<tr>
<td>23</td>
<td>The magnitude of grievances in organisation</td>
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<td>S/N</td>
<td>Statements</td>
<td>Nature of Communication</td>
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<td>Strongly Agree (5)</td>
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<td>Agree (4)</td>
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<td></td>
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<td>Somewhat Agree (3)</td>
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<td></td>
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<td>Disagree (2)</td>
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<td></td>
<td></td>
<td>Strongly Disagree (1)</td>
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<tr>
<td>24</td>
<td>Lack of support from colleagues results in insufficient information</td>
<td></td>
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<tr>
<td>25</td>
<td>The absence of conflict resolution mechanism affects the flow of information</td>
<td></td>
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<tr>
<td>26</td>
<td>Receipt of adverse information from two or more people will not augur well for effective communication</td>
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<tr>
<td>27</td>
<td>Sometimes a memo is poor choice, whereas a small group meeting is a better choice in communication</td>
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<tr>
<td>28</td>
<td>I sometimes go contrary to the University communication policy to carry out an assignment</td>
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<tr>
<td>29</td>
<td>In some instances unclear vision/mission are passed on without adequate information</td>
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<tr>
<td>30</td>
<td>The large volume of information in multi-campus institutions is a hindrance in communication flow</td>
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</table>
SECTION B: Organisational Communication system and administrative performance in UEW

Please tick (√) as appropriate in the space(s) provided.

<table>
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<tr>
<th>S/N</th>
<th>Statements</th>
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<td></td>
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<td></td>
<td></td>
<td>Very Good (4)</td>
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<td>Good (3)</td>
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<td></td>
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<td>Fair (2)</td>
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<tr>
<td></td>
<td></td>
<td>Poor (1)</td>
</tr>
<tr>
<td>1</td>
<td>The nature of organisational communication in UEW</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The availability and use of verbal and non-verbal communication</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The way my superior communicates with me</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The use of ICT generally by staff</td>
<td></td>
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<tr>
<td>5</td>
<td>The use of the circulars and notices in communicating with staff</td>
<td></td>
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<td>6</td>
<td>Superior’s willingness to listen to staff suggestions</td>
<td></td>
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<td>7</td>
<td>Superior’s readiness to encourage employees to express their opinions</td>
<td></td>
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<td>8</td>
<td>Staff awareness of major policy changes</td>
<td></td>
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<td>9</td>
<td>Staff contributions at meetings</td>
<td></td>
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<td>10</td>
<td>General feedback on day-to-day activities of staff</td>
<td></td>
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<td>11</td>
<td>Staff motivation by superior</td>
<td></td>
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<td>12</td>
<td>The amount of information available to enhance work</td>
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<td>13</td>
<td>Nature of feedback from superior</td>
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<td>14</td>
<td>Subordinates communication with superior</td>
<td></td>
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<td>15</td>
<td>The nature and location of the campuses</td>
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<td>16</td>
<td>My general assessment of communication in UEW</td>
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<tr>
<td>S/N</td>
<td>Statements</td>
<td>Excellent (5)</td>
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<td>17</td>
<td>The nature and size of the campuses and communication</td>
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<td>18</td>
<td>Coaching as used to enhance communication in UEW</td>
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<td>19</td>
<td>The time taken to enhance inter-campus communication</td>
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<tr>
<td>20</td>
<td>Despite the distance, communication with staff between campuses</td>
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<td>21</td>
<td>Familiarity with channel/system of communication</td>
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<td>22</td>
<td>The level of interaction between superior and his subordinates</td>
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<td>23</td>
<td>The level of information flow from colleagues of same status</td>
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<td>24</td>
<td>The nature of management information</td>
<td></td>
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<td>25</td>
<td>Sources and amount of information received</td>
<td></td>
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<tr>
<td>26</td>
<td>The chain of communication in UEW</td>
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<td>27</td>
<td>The general knowledge and skills of staff in communication</td>
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<td>28</td>
<td>The effect of communication with staff of different background</td>
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<td>29</td>
<td>The level of staff educational background in communication</td>
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<td>30</td>
<td>The quality of media available in communication</td>
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</table>
## SECTION C: Staff Perception of Organisational Communication on Group Cohesion

Please tick (√) as appropriate in the space(s) provided.

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<thead>
<tr>
<th>S/N</th>
<th>Statement</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>High (3)</td>
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<tr>
<td>1</td>
<td>The effect of staff cooperation in the University on group cohesion</td>
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<td>2</td>
<td>The effect of improved staff motivation on group cohesion</td>
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<td>3</td>
<td>The promotion of periodic training on group cohesion</td>
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<td>4</td>
<td>Two-way communication on group cohesion in UEW</td>
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<td>5</td>
<td>The effect of feedback in communication with superiors on group cohesion</td>
<td></td>
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<tr>
<td>6</td>
<td>The use of ICT by staff to promote cohesion</td>
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<td>7</td>
<td>When staff are encouraged to express their opinion, the effect on group cohesion</td>
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<td>8</td>
<td>The effect of promotion and transfer of staff on group cohesion</td>
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<tr>
<td>9</td>
<td>The nature of communication facilities available and their effect on group cohesion</td>
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<tr>
<td>10</td>
<td>The level of group cohesion and effect on the amount of information available</td>
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<td>11</td>
<td>Effect of well-defined job description and group cohesion</td>
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<td>12</td>
<td>The effect of job improvement on group cohesion</td>
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<tr>
<td>13</td>
<td>The effect of multi-campus nature of UEW on group cohesion</td>
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<tr>
<td>14</td>
<td>The effect of staff cohesion on growth and development in UEW</td>
<td></td>
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SECTION D: Constraints militating against Communication flow in the University

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SECTION E: Demographic Characteristics of Staff

Please tick (√) as appropriate in the space(s) provided.

1. Name of respondent (Optional) ..............................................................

2. Name of Campus ..................................................................................

3. Your Department/Section/Unit ..............................................................

4. Gender Male [ ] Female [ ]

5. Age (in years) ......................................................................................

6. Ethno-linguistic group (tribe): .............................................................

7. Marital status:
   Married [ ]
   Single [ ]
   Divorce [ ]
   Widow/er [ ]
   Separated [ ]

8. Job title/Rank: ....................................................................................

9. Your status in the University
   Junior [ ]
   Senior [ ]
   Senior member [ ]
   Management member [ ]

10. Number of years at post (tenure): ......................................................

11. Highest educational Qualification: ....................................................
    PhD [ ]
    MPhil/MSc/MBA/MA [ ]
    BSc/BA/BEd/BBA [ ]
    Diploma [ ]

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INTERVIEW GUIDE (QUESTIONS)

- How does the geographical location (distance) of one campus constitute impediment to another in communication?
- How does the use of equipment affect the flow of information?
- How does the nature/supply of power affect communication?
- How does the use of transport affect communication?
- How does the structure of UEW affect communication in the University?
- How does the level of education affect communication?
- Can the individual personality affect communication in the University?
- Can role conflict affect communication flow in the University?
- Does motivation of staff affect communication flow in the university?
- How can grapevine affect communication flow in the university?
- Does meeting have effect on communication flow in the university?
APPENDIX B

DETERMINING SAMPLES FOR RESEARCH ACTIVITIES

ROBERT V. KREJCIE
University of Minnesota, Duluth

DARYLE W. MORGAN
Texas A. & M. University

The ever increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population. In the article “Small Sample Techniques,” the research division of the National Education Association has published a formula for determining sample size. Regrettably a table has not been available for ready, easy reference which could have been constructed using the following formula.

\[ s = X^2 NP(1-P) + d^2 (N-1) + X^2 P(1-P). \]

\( s \) = required sample size.

\( X^2 \) = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

\( N \) = the population size.

\( P \) = the population proportion (assumed to be .50 since this would provide the maximum sample size).

\( d \) = the degree of accuracy expressed as a proportion (.05).

No calculations are needed to use Table 1. For example, one may wish to know the sample size required to be representative of the opinions of 9000 high school teachers relative to merit pay increases. To obtain the required sample size enter Table 1 at \( N = 9000 \). The sample size representative of the teachers in this example is 368. Table 1 is applicable to any defined population.

The relationship between sample size and total population is illustrated in Figure 1. It should be noted that as the population increases the sample size increases at a diminishing rate and remains relatively constant at slightly more than 380 cases.

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Note.—$N$ is population size.  
$S$ is sample size.
SAMPLE SIZE VS.
TOTAL POPULATION

SAMPLE SIZE

POPULATION

mes Standard Error = .05
FORMULAE FOR DETERMINING NEEDED SAMPLE SIZES

POPULATION SIZE UNKNOWN:

\[
\text{SAMPLE SIZE} = \frac{\left( \frac{\text{RANGE}}{2} \right)^2}{\left( \frac{\text{ACCURACY LEVEL}}{\text{CONFIDENCE LEVEL}} \right)^2}
\]

Confidence Levels:

\begin{align*}
\alpha & \quad \alpha/2 \\
.10 \text{ level} & = 1.28 \quad 1.64 \\
.05 \text{ level} & = 1.64 \quad 1.96 \\
.01 \text{ level} & = 2.33 \quad 2.58 \\
.001 \text{ level} & = 3.09 \quad 3.29
\end{align*}

Accuracy Levels:

\begin{align*}
\text{Range} \times \text{Desired Level of Accuracy (expressed as a proportion)}
\end{align*}

POPULATION SIZE KNOWN:

\[
\text{SIZE} = \frac{X^2NP (1-P)}{d^2 (N-1) + X^2P (1-P)}
\]

\[X^2 = \text{table value of Chi-Square \(d.f. = 1\) for desired confidence level} \]

\[.10 = 2.71 \quad .05 = 3.84 \quad .01 = 6.64 \quad .001 = 10.83\]

\[N = \text{population size}\]

\[P = \text{population proportion (assumed to be .50)}\]

\[d = \text{degree of accuracy (expressed as a proportion)}\]
### APPENDIX C

#### POST HOC TESTS USING DUNNETT T

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<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean difference is significant at the 0.05 level.
# APPENDIX D

## STAFF STRENGTH AS AT MAY 15, 2012

<table>
<thead>
<tr>
<th>Category</th>
<th>Winneba Campus</th>
<th>Kumasi Campus</th>
<th>Mampong Campus</th>
<th>Aijumako Campus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>T</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Senior Members (Teaching)</td>
<td>195</td>
<td>58</td>
<td>253</td>
<td>57</td>
<td>9</td>
</tr>
<tr>
<td>Senior Members (Non-teaching)</td>
<td>69</td>
<td>21</td>
<td>90</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Senior Staff</td>
<td>171</td>
<td>91</td>
<td>262</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td>Junior Staff</td>
<td>422</td>
<td>153</td>
<td>575</td>
<td>136</td>
<td>36</td>
</tr>
<tr>
<td>Grand Total</td>
<td>857</td>
<td>323</td>
<td>1180</td>
<td>242</td>
<td>78</td>
</tr>
</tbody>
</table>