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*THE IMPACT OF NATIONAL CULTURES AND INTERPERSONAL FACTORS
ON MANAGERIAL COMMUNICATION*

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Doctor of Philosophy

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The University of Aston in Birmingham

The Impact of National Culture and Interpersonal Factors
on Managerial Communication

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Doctor of Philosophy
1988

SUMMARY

This study was undertaken for two primary purposes. The first was to discover whether or not two of the four cultural dimensions depicted by Hofstede (1980), namely Power Distance and Uncertainty Avoidance, could be repeated using samples from seven organizations operating in three distinct cultural settings. The second was to assess the degree to which these dimensions affect superior-subordinate communication across the culturally-different groups. Also, the impact of the three interpersonal factors: Trust in Superior, Upward Influence and Mobility Aspirations was investigated cross-culturally.

Participants were 291 managers from seven organizations; four Sudanese, two white British and an organization in Britain run by a group of British citizens of Pakistani extraction. It was hypothesized that the Power Distance and Uncertainty Avoidance of the three groups would replicate Hofstede's. Specific implications of these dimensions for organizational communication and in particular for superior-subordinate communication were also hypothesized.

Multiple regression analyses were performed with items of the two cultural dimensions and the three interpersonal factors (each in turn) forming the independent variables, while the organizational communication aspects formed the dependent variables. T-tests between means were also used to compare and contrast issues such as directionality of information flow across organizations operating in these settings.

Work-related values of each of the three cultural groups provided support for Hofstede's model. However, only tentative support was given to the hypothesized relationships between the cultural dimensions and organizational communication. Similarly, weak associations were found between the three interpersonal factors and superior-subordinate communication behaviour.

Some practical and theoretical implications are offered. An evaluation of the study and recommendation for further research are also given.

KEY WORDS:

cross-cultural, interpersonal, superior-subordinate, communication, organizational

To:

The people of the Sudan who taught us that other people matter.

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CHAPTER ONE

INTRODUCTION

1.1) Research Problem

This study's aim was to present new empirical data, from seven organizations across three culturally distinct groups (Sudanese, British and Pakistani-British¹), so as to cast more light on the validity and consistency of Hofstede's findings and interpretations and to extend his work. It also set out to examine some of the direct organizational implications of his cultural dimensions. Managerial communication and superior-subordinate communication were taken as organizational facets which would reflect cultural differences. Essentially, the study aims to test the culture-specific thesis i.e organizational processes are influenced, to a larger extent, by the cultural settings on which they operate, hence, organizational theories ought to be culture relative. Furthermore, three interpersonal factors have frequently featured in the organizational communication literature as having considerable impact on both the quantitative and qualitative attributes of superior-subordinate communication behaviour. These are, Trust in Superior; Upward Influence and Mobility Aspirations. The impact of these variables was also examined cross-culturally.

1.2) Key Variables

It can be seen from the above that throughout the thesis there are three key variables. These are: Culture, Interpersonal Factors and Communication. These are introduced and defined below.

(1) The terms British-Pakistani, Pakistani in Britain and Pakistani will be used interchangeably throughout the thesis to refer to the sample of British citizens of Pakistani extraction.

1.2.1) Culture

Though the concept of "culture" is yet to be rigorously delineated from related and often overlapping concepts (e.g. nation), there is little doubt of its overriding importance in the study of social relations and its pre-eminence in many disciplines. It is certainly of paramount importance, especially in the case of psychology, for cultural variation to be considered. This is because of the fact that, as a science, psychology was born and brought up in the West. According to Jahoda (1973):

'Psychology abounds in theories and generalizations couched in terms implying that they relate to the behaviour of all human beings everywhere; but the necessary evidence indicating the probability of such implicit claims being justified is rarely forthcoming' (p. 461).

He went on to argue that:

'...psychology as a would-be science aiming at general laws stands to gain greatly by suitable studies in developing countries; it could even be doubted whether in the absence of such work many claims to have formulated "general" laws could be justified' (p. 462).

In fact, the organized efforts of scholars to investigate cultural variation and its impact on human behaviour in organizational settings commenced in the 1950s. Roberts in 1970 uncovered more than 500 publications in a nonexhaustive analysis of this research area. An equal number of publications have probably been added since then. However, despite the fact that cross-cultural investigations of organizational behaviour is a frequent endeavour, and despite the bulk of empirical work available, little is known of the exact relationship between culture and organizational behaviour. This is principally because research in this area has been haunted by methodological and conceptual drawbacks.

However, within this bulk of research Hofstede (1980) has contributed a salient study which leads towards a theory of organizational behaviour and work-related values. While many cross-cultural researchers have been accused of misconceptualizing the term "culture", and using it in an all-inclusive manner (e.g Roberts,1970; Ajiferuke and Boddewyn,1970), Hofstede aimed 'at being specific about the elements of which culture is composed' and to this end he identified 'four main dimensions along which dominant value systems...can be ordered' (Hofstede, 1980, p. 11).

Hofstede's research project aimed at identifying the fundamental differences in the way people in various cultures perceive and interpret their world. Thus, in terms of its significance for further research and development of theories of organizational behaviour, Hofstede's (1980) contribution is of immense value. His cultural dimensions warrant further investigation because of the unique methodology he followed and his departure from traditional dimensions.

In this thesis, the implications for organizational communication of two out of the four cultural dimensions depicted by Hofstede (1980), namely, Power Distance and Uncertainty Avoidance, will be examined across three culturally distinct settings.

1.2.2) Interpersonal Factors

Task-oriented relationships are pervasive and an ever-present part of human beings' lives whether in family, school or organizational settings. A correspondingly important role is played by interpersonal relations which are an integral part of the successful completion of task-oriented activities.

Hence, given the pervasiveness of task-oriented activities in our lives, and the important role of interpersonal communication in the successful completion of these tasks, this study includes certain interpersonal factors and examines the facilitations and

constraints engendered by them on intraorganizational communication.

Three interpersonal factors have frequently featured in the literature as having significant impact on organizational communication. These include, the degree of trust that subordinates have in their superiors, the extent of superiors' hierarchical influence (i.e upward influence) and mobility aspirations. However, empirical support for the impact of these factors is equivocal and contradictory. The present study tests, cross-culturally and across seven different organizations, the tentative findings pertaining to the nature of association between these factors and organizational communication.

1.2.3) Organizational Communication

The selection of organizational communication as a key variable was made on the basis of the following four points.

Firstly, communication is an intrinsic and pervasive aspect of organizations and it is the social glue that holds organizations together. Some theorists and organizational scholars argue that organizations should be viewed as information processing systems (e.g. Tushman and Nadler, 1978). Some even assert that organizations can be differentiated in part on the basis of their communicational features. For instance, Sims and LaFollette (1975) singled out "openness of upward communication" as an organizational climate factor.

Secondly, researchers investigating the workplace have long recognized the importance of communication and its intimate relationship with many organizational outcomes, including job satisfaction and performance in general (Muchinsky, 1977a; O'Reilly, 1978).

Thirdly, with "culture" being an issue of central relevance to the present study, a strong relationship between culture and

communication has frequently featured in the literature. For instance, Hall (1959) stated that 'culture is communication and communication is culture' (p. 191). Pacanowsky and O'Donnell-Trujillo (1982) referred to culture as the web or a network that 'is the residue of the communication process' (p.123). Similarly, Spradley (1979) contended that culture is 'learned, revised, maintained, and defined in the context of people interacting' (p.6).

Fourthly, and with the previous three points in mind, it was considered that the selection of communication as a key variable would maximize the chance of cultural differences manifesting themselves. Commenting on the cultural relativity of organizational processes, Child and Keiser (1979) concluded that cultural factors have 'most bearing upon modes of individual conduct and interpersonal relationships' (p. 268).

Thus, any cultural differences established in this study are more likely to be manifested, more strongly, in organizational communication. As an organizational facet, communication deals directly with interpersonal relationships and these emanate from the predominant beliefs and value systems.

1.3) Specific Variables

Central variables to this study are broadly divided into independent and dependent variables. The independent variables comprises the two work-related value dimensions of "Power Distance" and "Uncertainty Avoidance" and the three interpersonal factors of "Trust in Superiors", "Upward Influence" and "Mobility Aspirations". Communication variables make up the dependent variables.

a) Independent Variables

1.3.1) Power Distance and Uncertainty Avoidance

"Power Distance" and "Uncertainty Avoidance" were taken as cultural dimensions to examine their implications for organizational communication across three culturally distinct groups.

Power Distance refers to the extent members of a society accept that power in institutions is unequally distributed. Uncertainty Avoidance refers to the extent to which members of a society feel uncomfortable under conditions of ambiguity.

The two dimensions of Power Distance and Uncertainty Avoidance were chosen for this study because, as Hofstede (1980a) has maintained, they are relevant for organizational structure and behaviour within an organization. So, Power Distance is closely related to sharing of power and centralization, while Uncertainty Avoidance is highly associated with formalization.

Thus, Power Distance and Uncertainty Avoidance were used to draw a set of factors that appear relevant for both testing Hofstede's theory and understanding some organizational factors such as organizational communication when used as a manifestation of cultural variation.

1.3.2) Interpersonal Factors

Below are some operational definitions of the three interpersonal factors mentioned above.

Trust in Superiors

As used here, Trust in Superiors refers to respondents' perception of being able to communicate openly and freely with their superiors without fear of negative consequences. It is taken as a

general relational characteristic rather than being a product of any special type of interaction.

Upward Influence

By Upward Influence reference is made to how respondents perceive their superior as one who has pull with those at higher levels and can make things happen. The term also refers to the perceived ability of such a superior to enhance or impede respondents' careers.

Mobility Aspirations

This refers to respondents' ascendance drive. In other words, it deals with the construct of how desirous upward career mobility is.

1.4) Outline of the Research Design

The research design adopted in this study included seven different organizations operating in three culturally distinct groups. The cultural groups were Sudanese, white British (hereafter referred to as British) and British-Pakistani. With the inclusion of the Sudanese and the British, who represent two national groups with culturally and ecologically distinct modes of living, the study appropriately fits a cross-cultural rather than merely a cross-national status which many studies in the area fall short of fulfilling (Jahoda, 1970).

While the inclusion of the Sudanese and the British participants in a cross-cultural study is understandable, inclusion of the Pakistani is equally interesting. While cross-cultural investigations aim in general at a better understanding of the impact exerted by cultural components (i.e. beliefs, values and attitudes) on behaviour, these components have frequently been investigated across rather than within national boundaries. This has generally been the case despite the fact that cultural

variations do not necessarily follow geographical or political boundaries. In other words, within-national differences are obvious yet seldom investigated (Roberts, 1970). The condition of the British-Pakistani approximates that of a subculture and their values and attitudes could, therefore, be compared with those emanating from the mainstream (British) culture.

The Pakistani apparently still live by the strong cultural traditions of the country they originated from. In a multicultural country, such as Britain, the effect of different socialization processes would undoubtedly influence adult organizational behaviours and result in distinct value systems (O'Reilly and Roberts, 1973).

1.5) Central Hypothesis

Generally speaking, managers of the Arab nations are often considered as authoritarian and/or paternalistic rather than democratic or consultative, and tend to discourage participatory decision-making in their organizational settings. Research suggests that authoritarianism among the Arab nations is caused partly by their culture and social values, and partly by their educational systems (Barrett and Bass, 1976; Meade and Whittaker, 1967).

Consequently, significant differences between the three groups of participants regarding the two cultural dimensions of Power Distance, and Uncertainty Avoidance are predicted. The question is, what are the implications of cultural variations as far as the communication behaviours of the Sudanese, the white British, and the Pakistani in Britain are concerned, bearing in mind that these two dimensions deal directly with the style of management and the distribution of power within an organization?

This is the research question that the present study attempted to answer. A considerable body of research supports the notion that national cultures are likely to contain certain values which in

return are quite capable of shaping organizational behaviour. Since previous research shows that the behaviour of Arab managers is determined to a great extent by the cultural values and norms which prevail in that part of the world (e.g Almaney, 1981; Al-Nimir and Palmer, 1982; Badawy, 1974), the proposition in this respect is that cultural values and attitudes with such potentialities are most likely to manifest themselves in a principal ingredient of organizational behaviour, namely, superior-subordinate communication.

On the other hand, research in the field of organizational communication indicates that members of an organization can adopt different patterns of communication in the workplace depending on certain interpersonal factors such as trust in superiors, hierarchical influence, and mobility aspirations. These three factors are supposed to have the power to impose certain characteristics over the qualitative as well as the quantitative attributes of the superior-subordinate interaction. Hitherto, the evidence presented does not enhance our knowledge of organizational communication, and does not show the type of communication to expect and when.

Thus, the present study proposes an association between organizational communication behaviour and the cultural values and attitudes that prevail among members of an organization. At the same time, previous tentative propositions in the field between certain interpersonal factors and superior-subordinate communication behaviour will be tested cross-culturally.

1.6) Distinctive Features of the Study

It is apparent that with international organizations expanding and becoming more and more multi-national in character, and more frequently various organizations from different parts of the world being engaged with one another, a compelling need for clearly understanding the impact of different cultural values is mounting.

Empirical research, however, seems to have largely bypassed the fundamental issue of determining the salient dimensions of cultural variations and their relevance to specific organizational variables. Even with the presence of Hofstede's work, little is known about the consistency and the salience of his cultural dimensions especially in multi-ethnic societies, and their impact on specific organizational processes. To this end, the present study attempted an expanded but modified replication of the Hofstede study. In taking a culturalist stance (i.e. predicting that cultural variation will be manifested in organizational behaviour), the present study sought to empirically examine the validity and consistency of research findings reported in a prominent study from the culturalist school of thought.

Furthermore, inclusion of the Sudanese sample provides a representation of value systems spread over a wide range of Middle Eastern countries. Although these countries are heterogeneous in political and economic considerations, they are culturally homogeneous (Muna, 1980; Badawy, 1979; Ali and Al-Shakis, 1985). Arab and/or Middle Eastern countries are of substantial global importance particularly to Western countries which depend to a great extent on reciprocal trade and joint ventures, such as the recently announced major arms sale agreement between Britain and Saudi Arabia (July, 1988).

Essentially, the outcomes of this study have particularly important implications for multinational enterprises. Such corporations by their very nature necessitate a considerable appreciation of the different types of cultural settings in which they operate. Such understanding would, without doubt, aid the success of their overseas ventures. As frequently advocated, prior knowledge of the Arab's value systems, beliefs, attitudes and traditions is imperative to successfully conducting joint ventures with those nations (Almaney, 1981; Wright, 1981).

Hence, the significance of the present study can be summarized in four major points:

- 1- The research design adopted represents a significant departure from previous empirical work in the area. Essentially, the present study refines attempts towards the delineation of the cultural relativity of organizational behaviour. It does so by specifying organizational facets likely to be influenced by variations in these cultural factors.
- 2- Results of this research will cast more light on the value systems prevailing among members of Arab and/or Middle Eastern countries. This is of significant importance to the international business community.
- 3- With the inclusion of the British-Pakistani, the research work sheds light on within-country differences of work-related values, something which Hofstede's study did not attempt.
- 4- Finally, in considering organizational communication as a key variable, the present study investigates the possibility of a link between cultural components and intraorganizational communication. In doing so the study opens up possibilities for a better understanding of organizational communication.

1.7) Structure of the Thesis

Chapter Two provides the general and theoretical background to the research. Chapter Three focuses on organizational communication. It reviews the relevant literature and explains the communicational variables incorporated in the study.

Chapter Four deals with the research design and the methodology adopted. Chapter Five reports and discusses the work-related values of Power Distance and Uncertainty Avoidance of the three cultural groups.

Chapter Six compares and contrasts the general communication features across the three cultural groups. Chapters Seven and Eight relate Power Distance and Uncertainty Avoidance to communication variables.

Chapters Nine, Ten and Eleven deal with the interrelationships between the quantitative and qualitative attributes of superior-subordinate communication and the three interpersonal factors of Trust, Upward Influence and Mobility Aspirations.

Chapter Twelve concludes the thesis by summarizing the main findings and suggesting their implications for theory and practice. It also offers an evaluation of the study and some suggestions for future research.

CHAPTER TWO

Culture and Organizations: A General Background

2.1) Introduction

The impetus to renewed interest in cross-cultural comparative studies of organizations, which this study represents, has come from the failure, despite concerted efforts during the last two decades or so, to establish substantial, meaningful "effects" of cultural variables on organizational processes. The ambiguous results of several studies led some critics to question whether any research focusing on the impact of cultural traits was likely to identify the most important (cultural) variables which potentially influence organizational processes (Neghandi, 1985).

There seems to be three basic problems behind the confusion regarding the influence of "culture". The first problem is the vague definition of culture. In fact endeavours to reach a common definition of "culture" have never faded away. The price of this has been quite a number of definitions which inhibit rather than aid the conceptualization of this term. '...Such diffusion, even confusion, among definitions of culture has not contributed to clarify as to what are the essentials captured by this concept rather than by any other' (Child, 1981, pp. 323-324).

The second problem is the lack of a proper theoretical model. The need for a proper theoretical approach to cross-cultural research has been called for by a number of writers in this area (e.g Roberts, 1970; Neghandi, 1974; Child, 1981). A general criticism levelled at previous research is that the impact of "culture" was neither predicted beforehand nor explained afterwards (Child, 1981).

The third problem is that studies reporting to have a cross-cultural status are actually cross-national comparisons. Researchers in this area have mostly used the term "culture" to denote two different countries or nations, or loosely to mean research conducted outside the United States. However, in the strict sense cross-cultural research should be:

'confined to people contrasting sharply in modes of life and ecology such as Ashanti and Scots, excluding comparative studies of culturally similar populations like French and English which are probably called "cross-national' (Jahoda, 1970, p.57).

This chapter incorporates three main parts in which an attempt will be made to remedy the previously mentioned drawbacks. Part one will attempt to review major definitions of the term "culture", to see what is common between them and to offer our own understanding of the term. The principal aim was to make it clear for the reader what is meant by "culture" whenever the term is mentioned in this thesis.

Secondly, substantial work has been done concerning the impact of culture on organizational behaviour and processes. Thus, the literature review in part two of this chapter throws light on the propositions of both the proponents and opponents of cultural impact on organizations. In doing so this part aims to put this study into perspective and highlight the common failing of some social scientists, whereby one aspect or concept has been overemphasized to the neglect or total exclusion of the other.

Part three describes some of the sociopolitical attributes of the Sudanese, British and British-Pakistani groups. It discusses the relevance of cultural values emanating from these cultural settings to organizational behaviour. The complexity of the term "culture" made it necessary to theoretically delineate its components and to relate these to the work-related values of Power Distance and Uncertainty Avoidance. The idea was to explore the

characteristics and the relative strengths and weaknesses of the sociopolitical institutions such as the family, religion, educational system and political and economic systems. Emphasis will be made on values and behavioural patterns emanating from these institutions and deemed relevant to the present study. The role of these institutions, as behavioural domains, in, and their interaction with, both the social identity process and patterns of organizational behaviour will also be discussed. Such a general background will aid understanding not only the cultural diversity of these three groups, but also gives a general idea about the relative cultural setting in which organizations operate.

Finally, the interlink between "national culture" and "Organizational culture" will be discussed.

Part One

Towards a Conceptualization of Culture

2.2) The Need for a Definition of "Culture"

One of the concepts of central value and relevance to cross-cultural research is "culture". However, the conceptualization of this term has proven to be a controversial one indeed. That Kroeber and Kluckholm (1952) could collect about 164 definitions of the term, implies that definitions are formed to emphasize whatever suits a particular purpose, and one wonders how many more definitions were formed ever since.

This diversity of view on the exact meaning of culture gave some researchers the feeling that it is fruitless to undertake the task of defining the term "culture". For instance, Segall (1984) commented that, because it is a vague entity, culture should be cast merely as an independent variable. He doubted that:

'...it is worth the effort to try to enhance the concept's clarity or to struggle to articulate a universally

acceptable definition' (p.153).

Similarly, Hall (1959) has suggested that the best way of conceptualizing "culture", is to treat it in its entirety and regard it merely as a 'form of communication' (p.37). To him culture is communication and communication is culture.

Yet any progress in the field of cross-cultural research is contingent upon a clear understanding as to what the term "culture" exactly means. As rightly argued by Roberts (1970):

'...without this definition a theory of culture is impossible to derive. Without some theoretical notions explaining culture and predicting its effect on other variables, we cannot make sense of cross-cultural comparisons' (p.330).

2.2.1) Different Definitions

In the early days, cultures were conceived to be the total, standardized and established way of life and the total way of thought. Tylor's [1871](1924) famous and much quoted definition of culture is a typical example. It refers to culture as:

'...that complex whole which includes knowledge, belief, art, morals, customs and other capabilities and habits acquired by man as a member of society' (p.1).

One can construe such a comprehensive definition as to virtually accommodate three major components. These include:

- 1- Social organization i.e the way in which a group of people organize themselves as a distinctive social identity with similarly distinctive activities, customs and institutions etc.

2- Technology i.e the man-made part of culture which include such things as the artifacts and techniques of material culture.

3- Ideological systems i.e people's system of knowledge beliefs, values and expressive symbols.

However, the major liability of this definition is that it is an all-inclusive one. So, it is not surprising that researchers have endeavoured to refine Tylor's pioneering attempt. However, his definition has proven to be too comprehensive to the extent that almost all of the following attempts at defining "culture", more or less, revolved around one or two of the three components outlined above.

Hence, by (1952) Kroeber and Kluckholm were able to identify 164 definitions. In an attempt to capture all the central ideas of "culture" as gathered from these definitions, Kroeber and Kluckholm (1952) defined culture as consisting of:

'...patterns, explicit and implicit, of and for behaviour, acquired and transmitted by symbols constructing the distinctive achievement of human groups including their embodiment in artifacts; the essential core of culture consists of traditional ... ideas and especially their attached values; culture systems may, on the other hand, be considered as products of action, on the other as conditioning elements of future action' (p.181).

Thus, a synthetic attempt that sought to reconcile definitions of "culture" ended in dragging back all previous efforts to square one; to the attempt made by Tylor almost a century ago. Tylor's definition and the one offered by Kroeber and Kluckholm (1952) share the assumption that culture is a very wide dimension that incorporates almost everything. Of course, such an all-inclusive approach would not enhance our striving for a clear understanding

of which cultural features can be related to what types of organizational processes (Child, 1981; Roberts, 1970).

In another attempt, Kroeber and Parsons (1958) distinguished between "culture" and "social systems". Culture was said to be limited to:

'...transmitted and created content and pattern of values, ideas and other symbolic meaningful systems as factors in the shaping of human behaviour' (p.582).

On the other hand, they reserved the term "social system" to:

'...designate the specially relational system of interaction among individuals and collectivities' (p.583).

In an attempt to differentiate even further between "culture" and "social systems" Parsons (1973) commented that whereas:

'the cultural system... is specifically concerned with systems of meaning, the social system is a way of organizing human action which is concerned with linking meaning to the conditions of concrete behaviour in the environmentally given world' (p. 36).

In a somewhat similar way, more recently Rohner (1984) distinguished two opposing anthropological views of culture; namely, culture as a behavioural or a meaning system. Those who view culture as a behavioural system would refer to it as:

'...the regularly occurring, organized modes of behaviour in technological, economic, religious, political, familial and other institutional domains within a population' (p.113).

On the other hand, those who see culture as a meaning system define it as:

'...a symbol system, an ideational system, a rule system, cognitive system' (p.113).

However, distinguishing between behaviour and meaning is controversial indeed. While it is an overestimation to say that culture causes behaviour, it is extremely difficult to separate culture and behaviour. The obvious question that presents itself, as has been noticed by Jahoda (1984) would be 'how investigators manage to get at culture if it is really so remote from behaviour?' (p.143).

The foregoing makes it clear that among social scientists, debate has raged for several years over defining the term culture. The only progress as shown by Keesing (1974) is that the older definitions of cultures as the entire way of life of a people including technology and material artifacts, or as everything that one would need to know to become a functioning member of a particular society, have been displaced in favour of defining culture as cognitive systems through which people experience and express meanings. This trend is exemplified by the words of Geertz (1973) who commented that:

'Culture is best seen not as complexes of concrete behaviour patterns _ customs, usages, traditions, habit clusters ... but as a set of control mechanisms, plans, recipes, rules, instructions for the governing of behaviour' (p.44).

Indeed, the search for a definition of culture can proceed almost indefinitely, since the term seems to evolve with science. However, in this connection the present author would like to offer a "synthetic" understanding of "culture". This is particularly necessary since most of the definitions reviewed tend to overemphasize a certain aspect of "culture" to the neglect of

others. If a useful definition of the term "culture" is to be reached, somehow, the following concepts should be represented.

Firstly, most attempts towards defining culture recognize its existence and that it is related to persons-in-environments.

Secondly, culture is learned and not genetically passed. It is 'a set of learned ways of thinking and acting that characterizes any decision making human group' (Beals et al., 1977, p.28). 'Culture refers to the learned repertory of thoughts and actions exhibited by members of social groups _ repertories transmissible independently of genetic heredity from one culture to the next' (Harris, 1979, p.47).

Thirdly, after it has been learned and digested, to survive a cultural trait must be transmitted through generations. As put by Herskovitz (1963):

'What forms may compose culture, they must be acquired by succeeding generations if they are not to be lost' (p.313).

It is the continuity of these cultural traits through generations that makes certain groups eligible to be considered as "collectively mentally programmed", to use the words of Hofstede (1980). He argued that:

'When we speak of the culture of a group a tribe, a national minority, or a nation, culture refers to the collective mental programming that these people have in common, the programming that is different from that of other groups, tribes, regions, minorities or majorities, or nations. Culture in this sense of collective mental programming is often difficult to change...because it has become crystallized in the institutions these people have built together.' (p.43).

Fourthly, history is another factor that features frequently in the conceptualization of culture. If a certain mode of behaviour is to be accepted or rejected it has to pass through the standards set by the prevailing norms; and 'only history in its widest sense can give an account of these social acceptances and rejections' (Benedict, 1936, p.167).

Finally, a particularly important attribute of culture, and one of great relevance to the present study, is that the behaviour of a certain cultural group is the means through which culture will manifest itself. This is why researchers, notably anthropologists, study a particular culture through the observable behaviour of the people who represent that culture. As stated by Kluckholm (1957):

'Culture is the way of thinking, feeling and believing. It is the group's knowledge stored up...for future use. We study the products of this "mental" activity: the overt behaviour' (p.24).

Many researchers have asserted that "culture" carries potent social implications reflectable in the explicit behaviour of the people who share a particular culture. Thus, certain cultural values affect behaviour which links culture in an intimate integration with action (Swilder, 1986). Having said that, however, one should emphasize that, there is always going to be departures from the norm within any culturally homogeneous group. In other words, there is always going to be individual differences and internal variations in the behaviour of a certain group. Nevertheless, there are always going to be identifiable patterns of behaviour, which could unmistakably be attributed to a certain cultural group or by which a certain cultural group can easily be identified.

2.2.2) A Workable Definition of Culture:

In view of the ongoing, this section sought to offer the

understanding of the term "culture" as will be adopted throughout this study. So, for the purposes of the present study "culture" will be defined in the sense of shared beliefs, attitudes and values, be that derived from religious, historical, linguistic, artistic or physical origins. A group of people belonging to the same culture would share certain beliefs, attitudes and values. These in turn would be capable of exerting strong influences potent of shaping the behaviour of the cultural group, making it easy to perceive that group as a culturally homogeneous one.

This definition is, admittedly, an enumerative rather than an exhaustive one. However, this is the price to be paid if the conceptualization of a term such as "culture" is not to turn into a general and/or all encompassing definition. Thus, in this respect the definition offered above is more precise than previous attempts that end up defining "culture" as '...the whole complex of distinctive features characteristic of a particular stage of advancement in a given society' (Whitehill, 1964, p. 69).

The definition offered above is quite similar to the one offered by Fayerweather (1959) who defines "culture" as '...the attitudes, beliefs and values of a society' (p.7). Nevertheless, the definition adopted in this study puts more emphasis on the interrelationship between "culture" and behaviour. To reiterate Jahoda's (1984) remarks, to be able to successfully delineate the prominent traits of a certain culture, researchers have to resort to the explicit behavioural modes of individuals who represent that culture. Hence, whenever cultural differences are mentioned in the present study, these should be construed as variations in attitudinal and value-related behaviours. Since the central attention of the study is focused on organizational behaviour, the general theme of cultural differences spoken about are those measured pertaining to organization and work-related values and attitudes.

To summarize, the chapter so far has focused on defining the term "culture". Although a difficult task, the above definition gives an idea of what is meant by "culture" whenever the term is mentioned in this study. Accordingly, hereafter the term will be used without quotes.

Part Two

2.3) Cross-cultural Studies of Organization and Management

2.3.1) Introduction

'Intuitively ...people have always assumed that bureaucratic structures and patterns of action differ in different countries of the Western world and even more markedly between East and West. Men of action know it and never fail to take it into account. But contemporary social scientists have not been concerned with such comparisons.'
(Crozier, 1964 p. 210)

It does not require a massive literature search to show that since Crozier made this accusation the situation has changed dramatically. In the last two decades or so, many researchers have expressed their doubts about the appropriateness of Western theories of management and organizational behaviour for organizational settings across nations and/or across cultures (e.g Ronen and Shenkar, 1985). These doubts stem from structural, economic, and cultural differences between countries in general and particularly between industrialized and developing countries.

Although almost all researchers and organizational theorists accept and respect the role played by structural, economic, technological and/or cultural factors in cross-national variations, there is considerable disagreement about the extent of influence of each these factors. These disagreements have culminated into an ongoing debate between those who believe that organization management is a science governed by universal principles, the so-called culture-free thesis, and those who argue that these principles are determined by a relative culture, the so-called culture-specific or culturalist school (Child and

Kieser, 1979; Hickson et al., 1979; Maurice, 1979). It is not the purpose here to provide a comprehensive review of cross-cultural and/or cross-national literature. A number of those exist (e.g Roberts, 1970; Bahagat and McQaid, 1982; Child, 1981; Tannenbaum, 1980). Rather, an overview of research conducted from a culturalist point of view (the stance adopted in this study) and an evaluation of the strengths and weaknesses will be given.

Section (2.3.3) will be concerned with the culture-specific, culture-free arguments. An evaluation of each perspective will be given and a suggestion for reconciliation commended. To this end, one issue, namely organizational structure which has captured the interest of both perspectives, will be emphasized. A brief account of what each of the opposing perspectives has to say about organizational structure will be offered.

Hence, this part of the chapter will be structured as follows; a critical review of cross-cultural organizational research; an outlining of the culture-specific viz., culture-free thesis; a reconciliatory note and the stance of the present study.

2.3.2) Cross-cultural Organizational Research

A number of organizational and management scholars and theorists have argued that cultural blindness, ethnocentrism and claim for universality has done more harm than good for the field of management (Hofstede, 1980a; Adler, 1983).

Hofstede (1978) asserted that the impact of cultural variation on human behaviour has been depicted as early as the days of Montaigne (1533-1592) and Pascal (1623-1662). The organized effort of scholars to investigate cultural differentiation and its effect on human behaviour in organizational settings commenced in the late 1950's, and has never faded away since. Many scholars regarded the work by Harbison and Mayers (1959) and the innovative work of Mclelland (1961) as the formal beginning of cross-cultural organizational inquiries. Ever-since, the field has attracted

quite a number of researchers. By 1970, Roberts in a nonexhaustive analysis of cross-cultural research related to organizational behaviour, uncovered about 526 publications (Roberts, 1970). Since then even more studies have been conducted within such context, probably caused by the spread of multinational corporations and the need for comparative management studies. Quite a number of articles have reviewed the literature in this field (e.g Barrett and Bass, 1970; Roberts, 1970; Bahagat and McQaid, 1982; Neghandi, 1974; Ajiferuke and Boddewyn, 1970; Child, 1981; Drenth, 1985).

2.3.3) The "Ideational" versus the "Institutional"

There is a number of ways of grouping studies in this field to look at what they offer. The best way is to borrow from Keesing (1974) and then place studies under either an "ideational" or "adaptive systems" umbrella. Keesing (1974) has distinguished between anthropological theories which treat cultures as "ideational systems", and those which treat them as "adaptive systems". The former conceives cultures as sets of ideas, values and patterned ways of thinking. They deal with the cognitive side of culture. Hence, they emphasize the assertion that culture exists primarily among the cognition of individuals in the form of particular beliefs held by them and transmitted through generations.

On the other hand, the "adaptive systems" or the "institutionalists" as they may also be called, refer to cultures as a scheme of living (an institution) whereby communities get adjusted to their environmental or ecological surroundings.

Subsequently, cross-cultural and/or cross-national studies of organizations which emphasize the role of ideas, values and meanings shared by organizational members, could be placed in the "ideational" category. On the other hand, those who deal with the way organizations reflect the sociopolitical context in which they operate, would qualify for the "adaptive systems" or the

"institutional" perspective (Child and Tayeb, 1983). Since the present study represents an ideational stance, the following subsection will concentrate on reviewing some of the studies eligible to be grouped under the "ideational" approach. Studies pertaining to the "institutionalist" perspective, however, will be dealt with when the attention is focused on the culture-free viz., the culture-specific arguments.

2.3.3.1) The Ideational Trend

The "ideationalist" researchers are by far the larger group. They discuss and study values, attitudes, beliefs, management perception and personality variables (see for instance, Haire et al., 1966; Hofstede, 1980; Sirota and Greenwood, 1971; Griffeth et al., 1980). Several investigators focus on the area of leadership (Chemers, et al., 1966; French, et al., 1960; England, 1978). A number of researchers have been attracted by the issue of motivation (e.g Heller, 1963; Rosner, et al., 1973). Some were interested in organization members, their satisfaction and attitudes towards their organizations (e.g Tannenbaum, 1980).

Despite the fact that cross-cultural investigation of organizational behaviour is a frequent endeavour, and despite the bulk of empirical work available, we know, relatively, very little about the relationship between organizational behaviour and national cultures. The area has been haunted by methodological and conceptual drawbacks in terms of sampling errors and lack of theoretical frameworks. As has been noticed by Heller (1985) the term "culture". is sometimes used uncritically that in some contexts a sentence would make as much sense as without this word.

Culture is most frequently treated as a residual entity and as an afterthought (Roberts, 1970). Culturalists have also been criticized for using the term in an all-inclusive manner. As Ajiferuke and Boddewyn (1970) pointed out when they surveyed comparative management studies: 'Culture is one of those terms that defy a single all-purpose definition, and there are almost as

many meanings of culture as people using the terms.' (p.154). Hence, it is not a surprise to find out that cross-cultural research is not well guided by the theoretical understanding, and data are often weak and conclusions are difficult to comprehend (Roberts, 1970; Child, 1981).

2.3.4) Nations and Attitudinal Dimensions

Despite the drawbacks and problems alluded to above, the picture is not so gloomy as it looks at first glance. There are quite a number of eminent efforts for better understanding of cultural influences on employees' attitudes and behaviour in organizations. By treating cultures as distinct entities, one line of research in the area of cross-cultural and/or cross-national organizational behaviour has tended to form clusters of countries.

A recent review of research on cross-cultural values (Ronen and Shenkar, 1985) concluded that various societies can be assigned to clusters on the basis of relative similarity and differences among their attitudes and work-related values. These differences were thought to have stemmed from societies' distinctive cultural identities, and varied along dimensions such as religion, language and geographical location. However, most of the studies reviewed, and for pragmatic reasons, used a country as the unit of analysis, thereby allowing for convenient (though not entirely justified) delineation of national attitudes.

Outcomes of the cluster of countries are highly respectable. This respectableness stems from the fact that a great deal of their results are consistent, bearing in mind that there was quite a degree of overlap between the variables investigated. Moreover, the fact that they used big samples including up to 88,000 from 66 countries (Hofstede, 1976; 1980), plus the variation in industry and groups of employees give high credit to what these studies have yielded.

To illustrate the credibility and consistency of these studies, for instance, Redding (1976) and Badawy (1979) each investigated the Far East and Arabic countries from the Gulf, respectively. Each of these studies produced one cluster. Each of these two clusters has featured as a separate cluster in a different study by Hofstede (1980), who has found somewhat a similar country clusters to the ones previously reported by Haire et al., (1966).

So, to conclude, despite the criticism levelled against cross-cultural and/or cross-national organizational research conducted from an "ideational" point of view, one is forced, the cause being the consistency of findings, to at least accept the fact that cultural differences do exist and that they do shape employees' work-related values and attitudes.

2.3.5) The Convergence-Divergence Argument

The convergence-divergence arguments represent the culture-free and culture-specific perspectives respectively. The convergence argument is that increasing industrialization has more influence on organizations than cultural factors. Through time cultural differences will disappear in the face of industrialization.

The culture-free, convergence, contingency or universalism argument, as it is interchangeably used in the literature, can be traced back to the works of Harbison and Mayers (1959) and Kerr et al., (1960). They argued that despite political, ideological and cultural variations, countries are brought closer to one another as a result of industrialization. Symbolizing this stance, Harbison and Mayers (1959) held what they called "logic of industrialization" responsible for forming certain type of organization and management. They meant by this logic that:

'...the industrialization process has its set of imperatives: things which all societies must do if they hope to conduct a successful march to industrialism'. [Likewise] 'Organization build-

ing has its logic too,[hence], there is a general logic of management development which has applicability both to advanced and industrializing countries in the modern world' (p.117).

Building on the culture-free theme, the contingency approach is gaining more and more supporters (Child, 1981; Hickson et al., 1979; Neghandi, 1979). Devotees of this school believe that organizational variables are contingent upon certain parameters buried in the environment or context in which an organization operates. Provided these parameters are held consistent, a worldwide conclusions are feasible. Hence, Hickson et al.,(1974) contended that:

'...whether the culture is Asian European or North American, a large organization with many employees improves efficiency by specializing their activities but also by increasing controlling and coordinating' (p.64).

A few years later, Hickson et al.,(1979) made three propositions. These include:

- (1)'In all countries, big organizations will be the most formalized and specialized in structure. ..
- (2) In all countries, organizations in big parent groups will be the most formalized and specialized. ...
- (3) In all countries, organizations dependent on others will take decisions centrally and in addition decisions will be taken for them outside and above them.' (pp. 37-38).

In a study comparing British, American and Canadian organizations, Hickson et al.,(1981) reported a stable pattern of relationships between contextual variables and elements of structure. It is such findings that led them to propose the culture-free thesis in which they postulate that relationships between the structural characteristics of work organizations and variables of

organization context will be stable across societies (Hickson et al., 1974; 1979).

Further support that runs in the same vein was given by Badran and Hinings (1981) with data from Egypt. Despite functioning in a less developed country, the effects of contextual factors on organizational structure proved to be as similar as those affecting English organizations operating in the Midlands. Although some differences were spotted, notably Egyptian organizations were found to be more structured, possible explanations were given for that. For instance, since the public enterprise is part of governmental machinery, this very fact could be responsible for exposure to excessive rules and procedures. Likewise, Ayoubi (1981) reported the significance of organization size on functional specialization, standardization and formalization.

Opposing to the convergence (culture-free) devotees are those who advocate a divergence (culture-specific) argument. Advocators of the culture-specific -hence, divergence- school argue that since societies exhibit distinct and persistent cultures, organizations operating in different social contexts are likely to experience the consequences of such variation (Hofstede, 1980). Despite similarities in formal structures, members of organizations located in different organizations will behave and relate to each other differently, because of cultural traits.

Proponents of the cultural relativity of organization have, as stated previously, asserted the impact of culture on management conceptions (Laurent, 1983), on attitudes of employees and managers (Hofstede, 1980) and on the structure of organizations (Brossard and Maurice, 1976; Maurice, 1979). This last category represents the "institutionalists" within the culture-specific perspective. They particularly oppose the conclusions arrived at by the culture-free theorists pertaining to organizational structure. The culture-specific advocators believe that cultural

values and norms persist despite industrialization and these are bound to show in organizational processes.

Maurice (1976) criticize the importance granted to what he called the "technological determinism" in explaining organizational behaviour. He and his co-workers (1980) rather attributed national differences in the organization of manufacturing units in France, Germany and Britain to societal variations in terms of different national educational and training practices. Sorge (1982) questioned the plausibility of the culture-free or contingency theory, by stating that such proposal is acceptable only if:

'...one is prepared to accept that industrialism is a homogeneous material base and that it is different, in this respect, from gathering, hunting, farming, herding or trading and transport' (p. 63).

He went on to argue that:

'...agricultural societies produce strikingly dissimilar patterns of society despite "agriculturalism" as it might be called' (pp. 63-64).

Similarly, Crozier (1964) held the educational system in France principally responsible for reinforcing certain cultural characteristics which led to the dysfunction of the French bureaucracy. More recently, Tayeb (1987) in comparing English and Indian manufacturing units, reported significant differences pertaining to organizational variables between firms operating in these societies. However, these differences were attributable to and consistent with differences in the socio-economic factors and with employees' cultural traits, more so than with variables proposed in the contingency model.

Thus the controversy goes on:

'Cultural differences from one country

to another are more significant than many writers now appear to recognize. A [culture-free claim] is hardly warranted by either evidence or institution at this stage in the development of management theory' (Oberg, 1963, p.142).

In a more recent article, Neghandi (1975) asserted the importance of contextual variables as size, technology location and market conditions over the importance of the sociocultural variables, in determining managerial practices, behaviour and effectiveness. In the same year and the same journal, Bedeian (1975) stated how the relevance of cultural variation to organizational processes is a well-established fact. More recently, Neghandi (1985) without undermining the importance of cross-cultural investigations, talked about how the road, as a result of the logic of technology, is becoming one for all managerial processes. In the same book, Laurent (1985) concluded that management processes in different countries are:

'as much culture bound as their cooking, and that international management has to avoid the trap of international cuisine. National cultures may still offer some genuine recipes' (p. 56).

2.3.5.1) Critical Evaluation of the Convergence-Divergence Research Work

Beside the foregoing disagreements about the exact influence exerted by cultural values as opposed to contextual variables, the literature is also filled with a host of criticism that has been levelled by each of the culture-specific and the culture-free advocators at one another. Since the present study represent a culturalist stance, the second part of this section will be devoted towards giving a brief account of the major weaknesses in research conducted from a culture-specific point of view. The idea is to highlight these drawbacks and see how the present study went about avoiding them. However, the culture-free research, on the other hand, is not free at all of methodological and

conceptual problems. Thus, this section will start by giving a brief account of the criticism levelled at the culture-free research.

As has been rightly argued by Seddon (1986), the culture-free thesis 'while understandable at the theoretical level, is of little help to those in the field, who "know" cultural differences to influence behaviour' (p. 305). Moreover, and beside being criticized for the undermining of the role of distinguishable cultural variations, the validity of the culture-free proponents has been questioned (Fry, 1982). For instance, two of the ubiquitous variables adopted in the culture-free perspective are size and technology. However, as has been noticed by Roberts and Boyacigiller (1984) there have been some discrepancies in tapping these two variables. As an example they cited Hickson et al., (1979) who measured technology:

'...in a much less encompassing manner than was size. [Hence] the conceptual "size" of the two variables as measured is not the same ... consequently comparisons of their correlations with other variables are [questionable]' (p. 456).

As for the research work conducted from a culture-specific perspective, the following five points have frequently featured as points of criticism.

Firstly, researchers have been criticized for their vague usage of the term "culture". Culture is said to have been offered as the cause of differences whenever researchers have failed to attribute such differences to non-cultural variables. Hence, researchers are said to have treated culture as '...residual factor which is presumed to account for national variations that have neither been postulated before the research nor explained after its completion' (Child, 1981, p.306).

In this connection, an effort has been made in this study toward the conceptualization of the term "culture". Section (2.1.3) in this chapter defines culture within the context of this study.

Secondly, cross-cultural and/or cross-national organizational research has been haunted by methodological and conceptual drawbacks. As described by Roberts and Boyacigiller (1985).

'There is little agreement about the issues that should be examined or about the conduct of those examinations' (p. 426).

In the research design of the present study every possible effort was taken to ensure the validity and the reliability of the methods adopted (see Chapter Four). A vast majority of the research propositions was made in such a way that they can easily be tested using sophisticated and powerful statistical techniques. It was also clear in the mind of the researcher what were the exact issues to be examined and these are discussed in point number three below.

Thirdly, the area is said to be lacking with regard to research approaches whereby an attempt is made to identify specific cultural dimensions and subsequently examining their impact on specific organizational variables. Although Hofstede (1980) has studied specific cultural dimensions, the implications of these dimensions for organizational processes were merely speculative (see Hofstede, 1980, p. 119 and pp 176-177). However, the present study represents an attempt where this particular sort of research approach is adopted. This is done by identifying Power Distance and Uncertainty Avoidance as the specific cultural dimensions and the issues pertaining to organizational communication as the ones where an important organizational facet is specified.

Fourthly, many cross-cultural studies for pragmatic reasons assumed that cultures follow political and/or national boundaries (Ronen and Shenkar, 1985). Many of the samples in cross-cultural

studies were driven from multi-cultural countries. Countries like the United States, Great Britain, Canada and Belgium, to name few, have frequently featured in cross-cultural studies and have frequently been treated as culturally homogeneous. In other words, within-country variation has not been catered for. The present study attempted to overcome this particular weakness in two respects. Firstly, by studying Sudanese and British samples the study incorporated two populations with sharply contrasting modes of life and ecology. The significance of this is that the study comfortably qualifies for being a cross-cultural rather than merely a cross-national one. Moreover, cultural variations are likely to stand out in such a study more so than when comparing, for instance, the British and the French (Jahoda, 1970). Furthermore, the inclusion of the British-Pakistani in some respect caters for the within country variations. The Pakistani in Britain share certain sociopolitical variables with the British (economic, political, educational and jurisdictional), thus any value-related differences would point to cultural variations more than to any of the above mentioned variables.

Finally, the culture-specific proponents have been accused of over-emphasizing the role of culture to the neglect or total exclusion of contextual factors. As mentioned before (Chapter Four) it would have been preferable for the present study to incorporate contextual as well as cultural variables. However, due to other considerations, (notably limits engendered by the regulations of a doctorate programme and preference of "depth" over "width" not to mention resource problems germane to cross-cultural investigations) this study concentrates on cultural variables. As will become apparent from the following section, no claims have or will be made throughout this thesis that "culture" will be offered as the sole explanation of perceived differences in organization across nations. This is why organizational communication rather than more controversial issues such as structure has been chosen as an organizational facet in which cultural variations can be reflected.

To conclude section (2.3.5) and the sub-section (2.3.5.1) above, the debate between the advocators of the culture-free and the culture-specific arguments seems to be an endless one. In taking organizational structure as an issue of interest for both camps, the foregoing showed how each group interprets structural variations perceived when comparing organizations from a cross-cultural and/or cross-national point of view. To the culture-specific advocators organizational processes are culture-bound. Hence, theories made outside a particular cultural setting would not necessarily apply in another one. On the other hand, the culture-free theorists advocate a universal thesis in which organization in all countries is viewed to be the same provided certain factors are similar. To the universalist, organization is contingent only on such contextual factors as size and technology. Subsequently, the degree of centralization or formalization, for instance, is attributable to the size and technology of an organization rather than to factors emanating from this organization operating in a certain sociopolitical setting. So far, and on the evidence of empirical work reviewed, the balance does not appear to swing in favour of neither the "culturalist" nor the "universalist". However the following section, which brings Part Two of this chapter to an end, discusses the possibility of a reconciliation.

2.3.5.2) A Reconciliatory Note

The possibility of a reconciliation between the culture-free and the culture-specific propositions is offered by Child and Kieser (1979). They examined both proposals by closely scrutinizing more relatively comparable companies from Great Britain and West Germany. Taking advantage of the fact that both countries are approximately at the same stage of industrialization while "thought to be" culturally different, they tested the culture-free and the culture-specific arguments. Both theories were found to be partially correct. To cheer up the culture-free camp, in both countries the size of the organization and size of a parent organization emerged as significant predictors of organization

structure. But, while managers in larger and decentralized British firms perceived themselves as having great authority, size does not engender the same feeling among their German counterparts. Thus, the good news for the culture-specific proponents was that German managers differed in "perceived authority" and "mean attributed influence", i.e being perceived by their colleagues as having less influence within their companies. Furthermore, despite the relatively limited authority they enjoyed, and the repetitious character of German managers' jobs, they seemed to be highly satisfied with them. This has been interpreted as a reflection of the German social culture in which such a situation is regarded as legitimate since the father enjoys extreme authority and a dominant role in the family life (Child and Kieser, 1979). As a reconciliatory model and one that needs to be tested, Child and Kieser (1979) suggested a model which:

'...reiterate the view that cultural effects will be most powerful in the process of organization relating to authority, style, conduct, participation and less powerful in formal structuring and overall strategy' (p. 77).

This study sets out to test the first part of Child's suggested model. By adopting an ideational, culture-specific view, an attempt was made to identify the impact of the work-related values of Power-Distance and Uncertainty Avoidance depicted by Hofstede (1980) on superior-subordinate communication across three culturally distinct groups. Part Three which follows, deals with the cultural settings of these three groups and lays down the theoretical foundation for the two work-related values.

Part Three

2.4) Cultural Settings of the Sudanese, British and Pakistani Organizations

Due to the complexity of culture, it has been argued that it is

necessary to delineate theoretically the subcomponents of culture which are potentially relevant and likely to exert an influence on organizational behaviour (Goodman and Moore, 1972). Some writers have attempted to postulate a linkage between certain cultural dimensions and organizational factors. For instance, Evan (1975); Hofstede (1980) and Child (1981) with great plausibility suggested some organizational factors which are likely to prevail if certain value orientations are to be dominant. Like Evan (1975) and Hofstede (1978), Child (1981) made use of Kluckhohn and Strodtbeck's (1961; cited in Evan, 1975) theory of variation in value orientation in which they suggested five value orientations on which cultural systems can vary. These were described by Child (1981) as:

- '(1) Human nature- is it regarded as good, evil or mixed and can it be changed?
- (2) The relationship of man to nature- does this involve mastery over nature, harmony with nature, or subjugation to nature?
- (3) Time orientation- is this to future present or past?
- (4) Orientation towards activity- is this being, being-in-becoming, or doing?
- (5) Types of relations between people- is the orientation toward individualism, teamwork or hierarchical relations?' (p. 325).

Thus, for instance, with reference to number five, if the value orientation of hierarchical relations is stronger than that of individualism in a certain culture, a general feature of organizations operating in such cultural setting will place more emphasis on hierarchical demarcation with little or no participation or delegation of power to lower ranks. A more precise implication of these will be in the distribution of amenities and fringe benefits (Child, 1981).

After arriving at his two dimensions of Power Distance and Uncertainty Avoidance, Hofstede (1980) similarly postulated the

relevance of these dimensions to organization behaviour. While the primary concern of this study is to assess the ramifications of these cultural dimensions to organizational behaviour, the following sections theorize the roots of these dimensions in the Sudanese, British and Pakistani cultural settings.

2.4.1) Cultural Settings of the Research Groups

A considerable body of research and theory in several disciplines (notably Anthropology and Sociology) singles out four major social institutions and behavioural domains as primarily responsible for the socialization of members of society and as influential in shaping their cultural features. These institutions include the family (Olsen, 1974); religion (Ellis et al., 1978; Brown, 1987); the educational system (Stenhouse, 1967); and the political and economic system (Ellis et al., 1978). The central aim of this section is to establish and illuminate the basic features of these institutions in the Sudanese, British and Pakistani cultures. An attempt will be made towards describing each of these institutions and the values and beliefs we think they are likely to emit which can bear relevance to the present study.

The earliest group that most of us experience is the family, and the first leaders with whom we become acquainted are our parents. As we go to school teachers take on parental roles. There is said to be a tendency, particularly during childhood and adolescence, for us to regard all authority figures in a somewhat similar way to our parents. This is also said to be carried over to the working life of an individual (Lindgren and Harvey, 1981). As summarized by Evan (1975):

'Mediating between organizational systems and culture are social - structural mechanisms, viz., patterns of interaction comprising the status-sets of employees in the famous institutional spheres of society- the family, the economy, the polity, the religious and educational systems' (p. 14).

Obviously these four institutions are interrelated and by no means mutually exclusive. Existing research evidence shows religion to have a considerable impact on family and at least in the West family matters were found to influence religious beliefs (D'Antonio, 1985). On the other hand, the political and economic systems have been found to influence and to be influenced by familial relationships (Stephens, 1963) and by the educational system (Shultz, 1973; Little, 1983).

In the following sections the Sudanese and the British will be fully compared and contrasted across these four institutions. However, since the Pakistani in Britain are currently sharing two of these four institutions with the British (namely the educational and the political and economic systems) emphasis will be made on factors that hinder their assimilation and/or acculturation in the mainstream culture. Furthermore, it should be mentioned that, as will become apparent from the sub-sections to follow, the Pakistani and the Sudanese show greater similarities as regard family structure and familial relations, besides sharing one religious faith (Islam). So, while the Pakistani share two social institutions with the British, they, more or less, share the other two with the Sudanese. This makes the position of the Pakistani in Britain a very intriguing one indeed, and for this reason we opted for their inclusion in this study.

However, before comparing and contrasting these three cultural groups, brief idea about the Sudan and the Sudanese will be outlined.

2.4.2) The Sudan: Physical, Historical and Social Features

2.4.2.1) The Land and the People

Situated at the crossroads of Africa, Sudan's position has played a prominent role in directing the course of both its history and politics. This vast land of nearly one million square miles in size provided a meeting place for the Pharonic, Christian and

Islamic civilizations with indigenous ones such as that of Meroe. Similarly, the Sudan lends itself to immense geographical and climatic variation; from the desert in the north to the swamp and jungle in the south.

The ethnic origin of the people of the Sudan is mixed as one would expect for such a large piece of land. However, roughly, the Sudanese population can be seen as belonging to two main ethnic groups. The people of Arabic extraction who inhabit Northern and Central Sudan form the majority of the population. The second group, the Negroid people, inhabit the Southern Region.

The population of the Sudan was 20.56m. at the census held in February 1983, and according to UN estimates is increasing at an annual rate of 2.9%. About 71% of the population live in rural areas, 18% in urban and semi-urban areas and the remaining 11% are nomadic. The population is concentrated in the Central Region mainly because this is where most of the employment opportunities are available.

Culturally, the Sudan is far more homogeneous than it is racially. This is attributable to three main factors. In the first place, the vast majority of the Sudanese are Muslims. Secondly, the spread of Islam could not have been achieved without the spread of the Arabic language, the language of the Koran. This what makes the Arabic language the national language of Sudan, used in business, education, journalism, broadcasting and adopted throughout the country. Even within the Southern Region, muslims represent about 17% of the population and a great number of southerners speak the Arabic language or a pidgin form of it as a lingua franca (Sandwell, 1982). Finally, the intermixing of the population through marriage further homogenizes the nation.

In this thesis we are concerned principally with central Sudan. This is mainly for three reasons. Firstly, despite their original descent from distinct tribal groups, inhabitants of central Sudan are relatively more homogeneous. This homogeneity stems from

their sharing of common traditions and culture and aided further by Islam and Arabic heritage. Secondly, central Sudan is most representative of the Sudanese culture. Finally, central Sudan is the most prosperous and influential part of the country, and this is where we can fairly easily find organizations from which we sought cooperation and assistance for this study.

2.4.2.2) Recent History

The Sudan was ruled as an Anglo-Egyptian condominium from 1899 until achieving independence as a parliamentary republic on January 1st 1956. After the first Military coup in Africa in November 1958, the army took control of the state. A Supreme Council of the Armed Forces was set up and ruled until October 1964, when it was overthrown in a civilian revolution. The civilian government that followed failed to improve the economic situation and in May 1969 power was seized by a group of officers who formed what has come to be known as the Nimeri regime. Nimeri abolished all existing political institutions and organizations and the "Democratic Republic of the Sudan" was proclaimed, with supreme power invested in the hands of members of the Revolutionary Command Council (RCC). In 1974 Nimeri was nominated as President, a new government (mainly from military or ex-military officers) was formed, the RCC was dissolved and only one political party was recognized.

A prominent feature of the 12 years to follow was that the army continued to play an important role in the country's affairs. With waves of nationalizations in the early 1970's, the state has come to play a most significant role in the economy. Consequently, the pre-1971 capitalism was replaced by a large and powerful public sector.

Owing to a combination of technical problems, inadequate management skills and corruption, the economy of the country went from bad to worse. On April 6th 1985, Nimeri was deposed in a bloodless military coup. The ex-Minister of Defence appointed a

Transitional Military Council (TMC) to govern the country, but pledged a return to civilian rule after a one-year transitional period. In the meantime, an interim Cabinet was announced, whose members were mainly civilians.

In April 1986 the TMC honoured their pledge and a general election took place. As a result a coalition government was formed between the Umma Party (UM) and the Democratic Unionist Party (DUP).

2.4.3) Familial Relations

Within the family the study is going to consider some of the prominent relationships regarded as relevant to the present study. Particularly, emphasis will be made on the basic patterns and principles of family organization which are characteristic of the three cultural groups. They include: child-rearing practices, parent-child relationships and family size.

The family can ideally be regarded as the agent for socialization. It shapes the roles its members play in society, it is the decider of morality and the maker of values, beliefs and attitudes that determine how individuals are supposed to behave in their social interaction. Numerous studies have stressed the importance of the family in the development of the individual. Accordingly, the family has been construed as to constitute the basic framework in which the life of the individual unfolds.

As regard the relevance of the first few years of an individual's life to his/her adulthood conduct, White (1975) unequivocally contends:

'After 17 years of research on how human beings acquire their abilities, I have become convinced that it is to the first three years of life that we should now turn most of our attention. My own studies, as well as the work of many others, have clearly indicated that the experiences of those first years are far

more important than we had previously thought. In their simple everyday activities, infants and toddlers form the foundations of all later development' (p. xi).

Indeed, in any society life begins in a family, and it is here where one first builds up a picture of the world. Family members are usually the first people one learns to classify and subsequently base his/her interaction with them on such bases. So, an understanding of kin relation is essential to the understanding of social interaction at all. However, the way in which kinship relations are defined varies from one society to another and the principles of definition may even be quite different from the merely biological ones which are familiar to the people with European heritage.

On the other hand, while social structure is said to be one of the culturally determined features, it is the parent-child relation and the process of socialization that is said to be the prominent mechanism which brings about a particular pattern of social structure (Olsen, 1974). Following is a brief account of familial relations in the Sudanese, British and Pakistani groups with greater emphasis on the issues mentioned above.

2.4.3.1) Sudanese Familial Relations

In the Sudan the family, both in its nuclear and extended forms, is the main educator of young children until they go to school at the age of six or seven. In the Sudanese culture, one's first loyalty is to the family on which reputation and well being depend. Family members exert considerable influence on the individual concerning education, employment, marriage, religious obligations and family honour.

In child-rearing practices Sudanese parents were found to differ significantly from those in America. Badri (1978) found that Sudanese particularly put more emphasis on their children being

obedient, docile and polite. This is especially endorsed when children are dealing with elder people. Children are expected to show proper deference and respect to their elders. The questioning of decisions and judgements made by parents (supervisors) is considered neither permissible nor proper.

A commonly used technique for going about achieving the compliance of children is corporal punishment. Regrettably, one has to admit that physical or corporal punishment is ubiquitous in Sudanese houses. Talking and reasoning with children comes second (Badri, 1978). A host of clinical and experimental evidence exists which shows that the quality of child-rearing practices are of prime importance to the subsequent development of the child into an adult. For instance, the disadvantages of corporal punishment for controlling children's behaviour have been well documented. Adoption of corporal punishment would result into the disruption of social behaviour and will bring children into adults with meek and submissive personalities (Arzin and Holtz, 1966).

Sudanese do not generally encourage their children to participate in discussions. In a comparative research Dennis (1957) studied how American, Sudanese and Lebanese children regard everyday objects. In an answer to the question 'What is ____ for?', and with reference to mouth, although children in all three cultural contexts tended to regard the mouth primarily as useful in eating, American children were significantly more likely to mention its use in talking. This difference has been interpreted by the researcher as reflecting parental attitudes toward the participation of children in discussions.

At any one time, the Sudanese household may look rather similar to the domestic unit in a number of other societies, but ideally this unit is better described using the indigenous Arabic term Bait (meaning house). "House" is thought to be a better translation because Bait may also signify a building.

Affairs of the house are ultimately managed by the head, though certain tasks and responsibilities could be delegated to other members. The head is responsible for all members. Within the house the head is supposed to be given privileges like being served first at meals (sometimes with elder males), or if it is a joint meal he has to start it. Relations between members are hierarchically organized along lines of distinctions based on age, sex, expectation of permanency in the house and to some extent level of education and financial contribution.

The continuing entity of the house is more important than any individual member. Members are expected to maintain the status of their house within the wider community and an individual who threatens to bring shame on the house (through marital links with "bad" houses or any sort of anti-social behaviour) could be cut off from membership.

In general, the younger members of the house are seen as indebted to the older members for their upbringing, and in return they are expected to take care of the older members where they could no longer manage for themselves. This, from an Islamic point of view, is an obligation (Koran, Chapter 17, Verse 20). The relations between generations are characterized by the Islamic principles of respect, obedience and benevolence. Young ones are supposed to obey and show deference for their elders, women for their men and a new bride for her mother-in-law.

2.4.3.2) Pakistani Familial Relations

The Pakistani population of Britain currently numbers rather more than 355,000 more than half of whom were locally born (HMSO, 1982). Mass migration from the Indian sub-continent began in the 1950's when Britain was suffering from an acute shortage of labour. Most migrants have come in large numbers from a few compact areas, notably the Punjab (Khan, 1977). The significance of this is that most of them were able to maintain and strengthen their familial relationships.

A substantial number of studies of the Pakistani community are now available, all of which indicate the great significance of kinship loyalties both during migration and in the subsequent process of communal and ethnic consolidation (Dahya, 1974). It is worth mentioning at this point that the "family" concept of the Pakistani is very similar to the one we assigned to the Sudanese and very distinguishable from the British concept of a family (Bollard, 1982). The common factor in the case of the first two is Islam.

Traditionally, a Pakistani family can be extended to accommodate a man, his sons and grandsons, together with their wives and unmarried daughters. Because such a number can hardly be fitted into their present residential properties in Britain, they were forced to make-do with living in different properties. Dahya (1973, 1974) describes how the first substantial number of the Pakistani migrants arriving in Bradford and Birmingham obtained rented accommodation with the few existing Asian landlords. Each community, village and kinship group were forced to establish itself in separate houses. Hence, as far as the Pakistani are concerned,

'empirically observable households in Britain may often be no more than a local facet of a much wider network of familial relationships which binds together, similar households scattered around the world' (Bollard, 1982, p.118)

Thus, although the joint (extended) family has undergone certain "structural" change, necessitated by the new residential conditions in Britain, its "functional" virtues remained the same.

In a typical Pakistani family all relationships are intrinsically hierarchical, between the sexes, between the generations and between older and younger in the same generation (Khan, 1977). The family can be regarded as an organization where the superordinates are expected to support and care for their subordinates, while subordinates are expected to respect and obey

their superordinates. It is upon the maintenance of these asymmetric reciprocities that God (Allah) will be pleased, and it is upon their maintenance that the unity and continuity of the family depend.

2.4.3.3) British Familial Relations

In comparison with Sudanese and Pakistani families, the British families are different in some respects. Most notable is the small size of the British family. Ashford (1987) reported that in Britain a great majority regard two children as ideal size, and hardly anybody would choose to have more than three children. Furthermore, it is the exception rather than the norm to find three-generation families under the same roof. In Britain independence is highly valued and children are "pushed" out of home as early as possible (Rose, 1968; Roberts, 1978).

Child-parent relationships have become progressively much more relaxed and open during the present century. More recently, Ashford (1987) found that parents in Britain believe that children in today's society have gained status within the family, have been given more independence, and enjoying more respect from their parents than was the case a generation or two earlier. In fact, the relatively high independence enjoyed by British children has led to the call for rather more harsh parent-child relationships. A Study Commission on the Family (1982) voiced its concern that the power of the British family as a major socializing force may be weakening.

2.4.4) Educational Systems

The primary role of education is to socialize citizens into the cultural values of their respective society. The importance of the role played by education stems from the fact that education exerts direct influence on other social institutions like the family, the political and economic systems and even religious beliefs.

The attitudes that teachers adopt towards children, and the general emotional atmosphere of the school, appear to be of critical importance in determining the way in which children tackle problematic tasks that face them. This in turn has a closer relationship to their working days as adults.

Children who are exposed to educational environment which is encouraging, supportive and not overly judgmental are more likely to develop positive and confident attitudes towards themselves and their work than are children placed in environments in which the reverse is the case (Coopersmith, 1967).

Research evidence also suggests that education socializes citizens into the political culture (Almond and Verba, 1963). More recently, Heath and Topf (1987) showed that the level of education in a society affects the degree of involvement in politics, which, subsequently influence moral liberalism.

In the West in general, democracy came into being largely because of the contribution of a highly educated ruling class and a literate electorate. The eighteenth and nineteenth-century British aristocracy provide an example of highly educated ruling classes which took the task of preparing the country for democracy. Furthermore, the expansion of education went hand in hand with the broadening of the electorate. This is exemplified in England by the passing of the Education Act in 1870, following the Reform Bill of 1867 which gave municipal rights to the urban artisan class.

In contrast, both conditions have been absent in the Sudan. While immediately after independence in 1956 the country adopted a parliamentary-democratic institution, it did so without having either an educated ruling class or a literate mass. The ultimate result was the first military coup in Africa, only two years after independence.

The following sub-sections will outline both the Sudanese and the British educational systems. Again, emphasis will be made on the features that bear a relationship with the work-related values of each of the two groups. As far as the British-Pakistani are concerned, a brief note will be made on the factors that could hinder any efforts taken by the educational authorities in Britain towards their integration into the mainstream culture.

2.4.4.1) Sudanese Educational System

Because of the tremendous problems of providing elementary education for millions of children who are not in school, Sudan has not been able to devote much attention to preschool programmes. Facilities are inadequate and there are only a few nursery schools or kindergartens scattered throughout urban areas.

The government provides free elementary education from the age of seven. The secondary level is divided into two stages; junior secondary (intermediate) of three years duration which is completely academic, and senior secondary (secondary) of three or four years duration. Secondary education is of three types: academic, technical and teacher training.

There are five universities in the country. Pupils from the academic secondary schools are accepted at the University of Khartoum, subject to their reaching the required standards. The other four include, the Islamic University, Juba University, Gezira University and Cairo University (Khartoum branch). There is also the Khartoum Polytechnic which was formed in 1975 by the amalgamation of 13 existing technical institutes.

The social education of the child is, of course, carried out in the home, where discipline and respect for elders are inculcated. This predetermines his/her mind towards acceptance of authority.

The educational system in the Sudan is highly centralized. Almost all schools employ the same language of instruction, follow the

same curriculum and use the same textbooks. The recruitment and training of teachers is also centralized. The curriculum of the Sudanese schools is highly pedantic and dominated by examinations.

The available literature bounds with statements by researchers confirms the high value given to printed material in Arabic and Islamic societies in general. For instance, Tibawi's (1972) view is that:

'The problem is rooted in Arabic and Islamic practice in the age of decadence when reliance on memory and learning by rote, adherence to existing texts and respect for authoritative opinion became established at lower and higher levels of education' (p. 211).

This phenomenon of memorization and respect for printed material in the educational systems of many developing countries has also been reported in the Sudan by Douglas (1977) and in all Islamic countries (Sader, 1977). Tibawi (1972) relates such a non-creative educational system to two over-riding forces: the teaching method (the interpersonal instructing) and the evaluation method (the paper examination).

2.4.4.1.1) The Teaching Method

The teacher-pupil relationship is an authoritarian one. The nature of the Sudanese educational system is typically characterized by the traditional type of classroom with its rows of desks arranged before the teacher and a blackboard. The immobile students occupied and quiet, and engaged in more or less identical tasks. Essentially, the dominant-submissive or superior-subordinate role pattern experienced by the child at home is perpetuated.

The learning process is highly dependent upon memorizing theories and facts lectured by teachers without the chance to discuss or argue. Thus, little chance is given for students to develop

analytical skills and problem solving abilities. High credibility is assigned to textbooks, and challenging printed materials or what the teacher says are alien concepts.

2.4.4.1.2) The Evaluation Method

As is the case in many other developing countries (Little, 1983) the Sudanese educational system emphasizes the quantity rather than the quality of education. The Sudanese economy is becoming increasingly bureaucratized. Subsequently, educational qualifications have become imperative for recruitment and selection. In order to cope with too many application forms for a particular job, personnel managers raise the level of qualification for that job. This qualification escalation has placed a great pressure and burden on the school system to expand. Because the main interest in education is the certificates it provides, the quality of education suffers (Little, 1983).

In this connection, it has been asserted that Sudanese students direct their study entirely towards passing the end-of-year examinations (Douglas, 1977, Sandwell, 1982). They may neglect to study for eight months or so and then cram intensively during the last months on notes, guides and questions asked in previous examinations. The student-to-staff ratio is very high, and practically no check is made on daily assignments. Large classes make it difficult to hold discussions and/or administer periodic tests during the year.

2.4.4.2) The British Educational System

British parents are required by law to see that their children receive full-time education between the age of five and sixteen. Although there is no statutory requirement to provide education for the under-fives, successive governments have expanded nursery education. In addition, many children attend informal pre-school playgroups organized by parents and voluntary bodies such as the Pre-school Playgroups Association.



Compulsory education begins at five years of age when children go to infant school, at the age of seven many go to junior schools. The usual age for transfer from primary to secondary school is 11. Most of the students attend a publicly maintained system of education aimed at giving all children education suited to their particular abilities. A large majority attend comprehensive schools which take students without reference to ability or aptitude and provide a wide range of secondary education. For students over 16 years of age tertiary colleges provide a wide range of vocational training. There are 47 universities in Britain, including the Open University. There are 30 polytechnics which provide courses in a wide range of subjects.

In England and Wales, responsibility for the education service is distributed between central government, the local education authorities, the governing bodies of educational institutions and the teaching profession. The service can, hence, be appropriately described as a national system yet locally administered.

The day-to-day running of the publicly maintained education service is left to the local education authorities; it is their duty to provide schools and colleges in their area and administer them. Although the responsibility for the curriculum rests with the individual authority or school governing body, the timetabling of subjects, the choice of textbooks and the detailed content and method of day-to-day teaching are largely left to the discretion of headteachers and their staff (King, 1979).

Hence, the British educational system is one that gives scope for local as well as national initiative, allowing authorities, schools and teachers a wide measure of freedom to develop education along lines they consider best suited to their localities.

The British educational system can be contrasted to the Sudanese one not only in respect to the flexible way by which it is administered, but in respect to other fundamental and ideological

matters. There are vast differences between the two systems not only in school building and classrooms arrangement and organization, but in methods of teaching and curricula as well as teacher's attitudes and relationship to students.

For example, while corporal punishment has long disappeared from British schools, in the Sudan even students at the secondary school are liable to physical punishment. When it comes to the philosophy of education itself, the nature of the Sudanese system is based on traditional ideas, while the British educational system has, as a result of new ideas and trends, undergone dramatic change.

Barnard (1961) identified some of the theories upon which the educational system in England and Wales is based:

- 1- The assertion that human beings are naturally gifted and possess a natural readiness to develop. Therefore, the educator's role is to assist "nature's" march of development. The pupils' part is to arm themselves with the techniques necessary for inquiring such as observation and self-discovery.
- 2- The educational system should be geared towards the optimum of individual's self-reliance in intellectual as well as in moral matters.
- 3- The child should not be given a rule, but should rather be encouraged to make his/her own generalizations from the particulars presented.

Thus, it would appear that the British educational system puts more emphasis on individuality, creativity and choice among other things. The direct implications of any of the previously mentioned theories would be a dynamic teacher-pupil relationship and a more relaxed, flexible and free educational system. All

concerned within a classroom will be involved and conduct will be participative (Bossert, 1979).

That there are differences between the Sudanese and the British educational systems is quite obvious, but what about the Pakistani in Britain? The inclusion of the Pakistani sample of this study was done with the understanding that, like their British counterparts, the Pakistani in Britain have been exposed to the same sociopolitical systems (legal, political, economic and educational). However, it should be mentioned that in the last few years the British educational authorities have become more aware of the fact that Britain is a multicultural society and that, for instance, religious observance can not be universally based on Christianity (Times, September the 7th, 1987, p.15). Such sensitivity on the part of the educational authorities together with other factors (such as the Pakistani being the largest demographic ethnic group in Bradford where the sample of this study was drawn) have led, we believe, to a more cohesive ethnic culture which has helped preserve the insularity of the Pakistani's cultural patterns.

2.4.5) Religion

The existing substantial research work has emphasized the relevance and importance of religion and religious beliefs for cultural traits, notably values and value formation (Brown, 1987; Thornton, 1985). Hence, religion has generally been conceptualized as:

'...the vital source of norms and beliefs creating family solidarity, defining appropriate behaviour within and between families and with individuals and groups external to the family' (D'Antonio, 1985, p. 395).

While Islam enjoys a predominant role in people's life among the Sudanese and the Pakistani both in Britain and in Pakistan, English surveys have shown that between 6 and 22 per cent deny any

church membership, and between 16 and 20 per cent deny any belief in God (ITA, 1970; cited in Brown, 1987). Rowntree and Lavers (1951) highlighted the discrepancies between the Church and the way of life of the British people. They contended that:

'despite the devoted adherence to the churches of million of ordinary men and women who make up church membership, it remains true that in the lives of a large majority of people of all classes of the community the church is no longer relevant' (p. 352)

Nevertheless, Rowntree and Lavers (1951) did notice a practical measure of Christianity in how the British conduct themselves and the way they deal with one another. To quote their words:

'even if church congregations are small, there is a substantial measure of practical Christianity in the way men deal with men' (p. 356).

Indeed, in the West in general, many changes have taken place which have led to the interpretation of religious obligations, commitments and beliefs in an individualistic way. Expansion in science, emphasis on the individual's autonomy, rationalization and abstract thought, besides the complexity of human relationships, have led to the undermining of the role of religious institutions (Greeley, 1972). People in the West:

'are now looking to religion more for its personal meaning and less for its moral rules and are feeling more confidence in their own ability to define standards of conduct independently of the [divine] doctrines and teachings' (Thornton, 1985, p. 385).

On the other hand, Islam enjoys total adherence and complete submission to its guidance among Muslims. In fact, the very meaning of Islam is, literally, total submission to Allah (God) and to the standards of conduct conveyed in the Koran and Sunna

(teachings, sayings and approvals made by the prophet Mohamed PBUH). Islam covers all and every aspect of the social and personal life of individuals from family life and family structure to organizational policies and interpersonal as well as international relationships (Wright, 1981).

Moreover, while the Sudanese keep passing religious values and beliefs to their offsprings, the British are seemingly emphasizing general values. When asked which qualities parents should try to teach their children, Ashford (1987) reported that three qualities, honesty, good manners and respect for others, stood out as the most popular ones by the British parents. Obedience and religious faith were seldom chosen. By contrast, Sudanese parents emphasize religious faith, obedience and showing deference for elders as the qualities they teach to their children (Badri, 1978).

To recapitulate, so far in this section an attempt has been made to differentiate the Sudanese and the British cultures on the bases of the status of religion and religious beliefs. It was made clear that while the British culture is becoming increasingly secular, religion is still a major contender in defining Sudanese belief systems, attitudes structures, norms, roles, ideologies and values. The remainder of this section will touch briefly on the role of religion in the insulation and the cohesion of the Pakistani cultural pattern in Britain.

Religion, we believe, is directly responsible for the low level of integration of the British-Pakistani into the mainstream culture in Britain. Their faith has led them to maintain a notable internal cohesion rather than any tendency towards assimilation and/or acculturation.

Rokeach (1960), in a similarity scaling of Christian denominations, found that members of the all major Christian groups ranked as least similar to themselves Jews then Muslims then atheists. In this connection, Triandis and Triandis (1960)

have also shown that religious identity is an important and significant criterion in judging the similarity of others. However, the process of contrasting one group of a certain denomination against another or others, does not only create a differentiation job, but also maintains the solidarity and internal cohesion of that particular group (Tajfel, 1982).

2.4.6) Political and Economic Culture

This section is mainly concerned with comparing the political and economic systems of the Sudanese and the British. While the British political and economic systems have been fairly stable through the last century or so, section (2.3.1.2), in reviewing the the Sudanese recent history, has already made it clear how things have changed and are still changing as far as the Sudanese sociopolitical institutions are concerned. The political and economic systems are, without doubt, important in shaping societies values and attitudes towards such factors as power sharing and authority distribution and how individuals will expect and accept responsibility.

However, although there is a lack of research evidence that relates the issues of politics and economy to organizational processes in relation to the Sudan, we thought to give some of our views.

2.4.6.1) The Sudan

The Sudanese organizations of today owe their origin, shape and form wholly to the period of British rule towards the end of the 19th century. Organization structures, administrative procedures and work methods were faithful replica of the British models. This was especially the case because most of the managerial and policy making levels were occupied by British and other European expatriates. Even when the Sudanese constructed their own companies in certain sectors, such as cotton textiles, the

character of their companies was influenced to a greater extent by the British model.

However, while the administrative practices of the Sudanese organizations were modelled after the British, the authority relations and power distribution levels were typical of what can be expected in a colonized country. After independence, the only change that took place in most of organizational practices, was the substitution of Arabic in the place of English (El Faki, 1983). The highly structured and extremely authoritarian administrative practices inherited from the colonial powers continued to exist after the Sudanization of jobs.

Continuity of the autocratic styles of management in the Sudanese enterprises can be attributed to two intrinsic and pervasive features of the political culture of the Sudan.

The first one is the autocratic regimes that plagued the Sudan since independence. In this regard, it suffices to say that the Sudanese people have, in the 32 years after independence, experienced 23 years of military rule. Years of civilian rule, albeit few and far between, were characterized by the absence of real political institutions which fosters and permits true public participation.

Secondly, the intervention of the military junta did not restrict political institution only, but extended its grip to the area of private enterprises as well. A classic example is the waves of nationalizations in the early 1970's with which the State come to play a most significant role in the economy. Furthermore, by abolishing all Trade Union activities, any realistic chances of power sharing were demolished.

With reference to the economy, and as previously mentioned, the Sudanese economy is primarily agricultural and pastoral with about 80% of the economically active population engaged in the agricultural sector. Regarding industry, the ginning of cotton

encouraged the beginning of industry in the early 20th century. With the expansion of cotton production, the number of ginning factories has increased, with the Gazira Board alone operating the largest single ginning complex in the world.

With the exception of enterprises producing soap, soft drinks and vegetable oils, large-scale manufacturing of important substitutes started only after 1960. Official encouragement of industrial development began with the 1959 Approved Enterprises Act and the establishment in 1961 of the Industrial Development Bank. The 1959 Act was modified several times and finally replaced in 1980 by the Encouragement of Investment Act. Like its predecessors the 1980 Act gave the industrial sector incentives in the shape of low taxes, exemptions from customs duties and favourable tariffs for freight and electricity charges.

Although the majority of private capital today is channelled into the import-export business, the role of private industry has always been an important one. during 1960 and despite the nationalizations of 1971, private enterprises continue to dominate several branches of manufacturing, including textiles, flour milling, cigarettes, footwear, soft drinks, to name some of the prominent ones.

2.4.6.2) Great Britain

Great Britain has one of the most famous democracies of the World. The United Kingdom's constitution, unlike most of other countries' is an unwritten one, founded partly on statute, partly on common law and partly on convention. Furthermore, it can be changed to adapt to changing conditions.

Organs of the government are quite distinguishable, with Parliament as the supreme legislature, headed by the Queen as the Head of State. The executive body consists of the government (Cabinet and the Ministers); governmental departments; and local authorities. This entails a highly decentralized system with

great deal of power delegated and wide range of public participation.

Up to the 18th century the British economy was mainly agrarian. In the late 18th and 19th centuries, however, rapid growth took place and Britain became one of the first industrialized nations, basing its wealth on coalmining, on manufacturing of iron and steel, heavy machinery and textiles, on shipbuilding and on trade. Industrial development has continued in the 20th century, owing to new sources of energy, new manufacturing industries and new forms of transport.

Max Weber is widely known to have attributed the economic change that transformed the West in general from a predominantly feudalistic system to capitalism and private ownership, to has become known as the "Protestant Ethic"(Weber, 1930). A statement made by the Reverend M.D. Babcock and quoted by Herzberg (1968) exemplifies the doctrine of the "Protestant Ethic". As he puts it:

'Business is religion and religion is business. The man who does not make a business of his religion has a business life of no character' (p. 32).

It is attributed to Martin Luther to have advocated the radical concept that the individual must be solely responsible for his own salvation and hence undermining the role of the Church as a mediator. It is well known that Weber believed that there is a link between the "Protestant Ethic" and Calvinism. While Martin Luther had undermined the mediatory role of the Church, John Calvin expanded this concept even further with his introduction of the doctrine of "predestination". The popular interpretation of "predestination" was that the chosen ones would be those who can measure their success in business values, and (material) success became the sign of the "Elect" (Weber, 1930).

Anyway, development of economic enterprises renders the British economy an open economy in which international trade is a vital part of economic performance. The economy is primarily based on private enterprise, and present government policy is aimed at encouraging and expanding the private sector. This becomes evident in the recent privatization of British Gas, British Telecommunication and the expectant privatization of Electricity, Water and Steel.

Subsequently, the private sector in Britain is a strong one and it accounts for 75% of GDP and of a similar proportion of general employment. The traditional economic strength of Britain in general and particularly the private sector, as a pioneer in the industrial revolution, has been in manufacturing and services sections.

2.5) Sociocultural Institutions and Work-related Values

In the four sections above, an attempt has been made to describe compare and contrast four major sociocultural institutions in the Sudanese, British and British-Pakistani cultural settings. These include familial features, educational systems, religious beliefs and the political and economic systems. It has been made clear that while the Pakistani share the last two with the British, they are closer to the Sudanese with respect to familial relationships and the Islamic faith. On the other hand, the British and the Sudanese vary to a greater extent in shapes and forms of these institutions which, we anticipated, will result in different modes of values and beliefs. Prominent differences exist between the Sudanese and the Pakistani on the one hand, and the British on the other with regard to family-size, parent-child relationship, and religious beliefs. However, while the Pakistani in Britain are exposed to the same sociopolitical systems (notably educational, political, economic and legal systems) these were shown to be significantly different from the Sudanese sociopolitical systems. The obvious question is, what is the relationship between values emanating from these institutions and work life? The following

subsections are concerned with the available body of theory and empirical work that links these institutions with work-related values.

2.5.1) Familial Relations and Work-related Values

A considerable body of research shows that, some values of potential relevance to organizational settings do emanate from familial relationships. As has been stated previously, quite a number of social psychologists believe that familial relationships will be carried over to the working life of an individual (e.g Lindgram and Harvey, (1981 ; Hofstede, 1980). For instance, the size of the family has been found to be a determining factor in cultural values, particularly those pertaining to power distribution and power sharing (Olsen, 1974).

More significantly, and as far as we consider it, the status of the child in both the Sudanese and Pakistani communities is not greatly different from that of children under Western cultural systems. There is a distinct difference, however, when it comes to the question of authority. In an Islamic society, normally parents have little difficulty in enforcing their authority for they are treated even by married children (who could be parents in their own rights) with the greatest respect, this is being a duty constantly recommended by the Koran (e.g Chapter 17, Verse 20).

As for the British-Pakistani, they appear to have maintained familial relationships quite similar to the ones predominantly prevailing in their country of origin. In fact, one of the roles played by the family is to safeguard the continuity of social attitudes and values. More recently, for instance, research on the intergenerational transmission of attitudes has shown that, particularly mothers' attitudes were very significant predictors of children's attitudes in adulthood (Acock and Bengtson, 1980) In fact, Glass et al. (1986) have even found that attitudinal differences in three-generation to be small and insignificant.

In view of the foregoing, the study proposes a direct association between familial relationships and values pertaining to power and authority. Hence, parent-child relationship will bear relation to power distribution in hierarchically structured organizations. Similarly, the degree of children dependence will have a direct impact on the degree of readiness and willingness of members of a society to deal with ambiguous situations.

Hence, it is predicted that both the Sudanese and the Pakistani will show greater power distance and higher uncertainty avoidance compared to their British counterparts.

2.5.2) Educational Systems and Work-related Values

The primary role of education is said to be, the perpetuity of the cultural values and social attitudes. The teacher-pupil relationship takes over from the parent-child relationship and perpetuates the qualities experienced at home. Educational systems have always been regarded as endorsing certain cultural values. For instance, the French are renowned for educational elitism while the German are best known for egalitarianism, and these were thought to shape organizational behaviour in both countries (Hutton, et al., 1977).

We differentiated the Sudanese and British educational systems in two respects which we felt relevant to this study. While the Sudanese educational system is a centralized one where the teacher-pupil relationship is an authoritarian one, the educational atmosphere in Britain is significantly more relaxed and participative. These have a direct relation to attitudes towards power and authority and towards students' confidence in themselves (Coopersmith, 1967). Moreover, while the Sudanese educational system places more emphasis on instructing, respect for printed material, reliance on memory and learning by rote, the British system places more emphasis on self reliance and creativity.

Thus, while the British educational system trains pupils for problem solving, autonomy and acceptance of responsibility, the Sudanese educational system is more likely to produce submissive, docile and obedient adults.

Consequently, the Sudanese educational system is predicted to perpetuate the values of high power distance and greater formality and intolerance for ambiguity. On the other hand, the British educational system is expected to reproduce values towards the lower end of these dimensions. As for the Pakistani in Britain, we anticipated that the insularity of their cultural patterns and their cohesion as an ethnic group will militate against any tendencies towards integration in the mainstream culture in Britain.

2.5.3) Religion and Work-related Values

Religious obligations and religious beliefs will have an intimate relation with attitudes towards power and authority and perhaps even more closely to attitudes towards one's own ability. While the Sudanese and the Pakistani are relatively more religious, the British, like Western societies in general, have become increasingly more secular (Greeley, 1972).

Power and authority in Islam is hierarchically assigned to those in the community who have certain qualities (Koran, Chapter 4, Verse, 59). By contrast, in a secular society the individual's confidence in his/her own ability grows significantly. High emphasis is placed on an individual's autonomy. Hence, we expect religion and religious beliefs to relate similarly to power distance and uncertainty avoidance.

2.5.4) Political and Economic Systems and Work-related Values

The political and economic systems have frequently featured as an influential indicator of social values. For instance, Stephens (1963; cited in Ellis et al., 1978) showed how political structure

would influence social values. He stated that societies with autocratic political structure are more likely to foster "severe" socialization practices, such as clear-cut power and deference relationships and a strong emphasis on obedience.

The difference between the Sudanese and British political and economic systems was asserted previously. However, the Pakistani in Britain are exposed to the same political and economic systems as their British counterparts. Nevertheless, research evidence shows that Muslim communities in Britain in general, and the Pakistani in particular, lack any effective political representation. Compared to other ethnic minorities in Britain, the Jews for instance, no member of the Muslim community of Britain has yet been elected to parliament (Charlton, 1985). This adds support to the frequent comment about the insularity of the Pakistani in Britain.

To recapitulate, values emanating from and perpetuated by the previously mentioned sociopolitical systems will be contained in the minds of members of the three cultural groups incorporated in the present study. We believe these values are strong enough to shape organizational behaviour of the members of these cultural settings.

2.6) National Culture viz., Organizational Culture

One of the properties an organization with any history at all has to have is an organizational culture. Organizational culture is a term that denotes the nature of an organization, its norms, customs and way of doing things as perceived by those who work in it. Thus it is "...the shared patterns of thought, belief, feelings and values that result from shared experience and common learning (Schein, 1985, p.50).

The notion that organizations as such have cultures has been advocated fairly frequently (e.g. Allaire and Firsirotu, 1984). Borrowing from anthropology, organizations have been

conceptualized as miniature societies. Thus, '...while the uniqueness of individuals is expressed in their personality, the individuality of organizations may be expressed in terms of their differing cultures (Eldrige and Crombie, 1974, p.88).

The culture of an organization stems directly from the values, beliefs and assumptions of its founders and leaders (Hofstede, 1985; Schein, 1984, 1985). Essentially, to understand an organizational culture one has to understand the individual intentions of its founder(s) and their value system. Ideally, these intentions, assumptions and value systems do not come out of the blue; rather they are highly interdependent with external factors buried in the surrounding environment. These external factors are the belief, values and attitudes fostered by members of the social group or groups who exist in that environment i.e. the national culture. This is because, 'founders of organizations, while usually unique individuals, are also children of a national culture' (Hofstede, 1985, p.349).

In other words, there is an intimate relation between national cultures and the internal culture of organizations operating in them. An exception perhaps could be subsidiaries of multi-national corporations which generally import their indigenous sub-cultures and/or mold those existing in host countries. So, as noticed by Hofstede (1985) one can always sense that there is something American about I.B.M. and something Swiss about the Red Cross all over the world.

However, the link between organizational culture and the native culture of its founder(s) is an armchairs speculation and there is no empirical work, to the author's knowledge, which substantiate these assumptions. When the present study was designed, one of its primary aims was to test this very issue. The intention was to adopt the case-study technique for gathering information about the internal culture of the organizations incorporated in the study. However, as mentioned in Chapter Four, most members of the administrative bodies of these organizations were against the

idea. This is why the concept of organizational culture was not included in the present study. Moreover, since the emphasis of the present study is placed on "depth" as opposed to "width", further research is warranted if the issue of the interlink between national cultures and organizational cultures is to be thoroughly investigated.

CHAPTER THREE

Organizational Communication

3.1) Introduction

Communication is a vital component of any social system and an essential one if meaning is to be transmitted, information exchanged, and co-ordination attained. Researchers have even regarded communication as the social glue that ties organizations together (Porter and Roberts, 1976). Thus,

'It is impossible to conceive of any organization without communication, just as we cannot imagine a human being living without a blood supply' (Francis, 1987, p.3).

It has been stated that ' the ability to communicate is a managerial necessity. Good managers are good communicators, poor managers are most often poor communicators' (Hammaker and Rader, 1977,p. 89). Similarly, McCarthy has noted that ' communication is the tool by which a manager manages' (McCarthy,1978,p.9). Quite a number of managers have frequently indicated that communication had played a major role in their professional success or failure (Bennett,1971; Pearse, 1977).

Indeed, the importance of communication and its relevance to management in organizational settings is quite obvious. Yet despite this fact, our knowledge of organizational communication behaviour is relatively small. In reviewing the research and theory in this field, Redding (1979) concluded that only two simple streams of generalizations could be identified. The first one was that good news travels up while bad ones travel down. The second one was that considerate communication behaviours, such as "supportiveness" and "listening", on the part of superiors will

result in more satisfied and more productive subordinates. One would agree with these remarks, and it could be stated that since organizational communication lacks a proper theoretical model such trivial and fairly commonsensical conclusions are not unexpected (Richetto, 1977; Redding, 1979).

This chapter consists of two main parts. The first part is an introduction to the study of organizational communication. It also offers our conceptualization of the term "communication". The second part gives a critical review of the literature pertaining to the five issues of organizational communication with which this study is principally concerned.

3.2) A General Background

Three major categories of communication are generally regarded to be especially relevant to the study of organizational behaviour. At one extreme is the highly technical and very sophisticated "information theory" approach. At the other extreme is what is known as the "nonverbal communication" approach. In the middle lies the "organizational and interpersonal" approach. A very brief overview of the two extreme approaches is necessary to put our discussion of the organizational and interpersonal communication (which represents the view on which this study is based) into proper perspective.

3.2.1) Information Theory

Strictly speaking, information theory is a scientific approach to the study of communication. Its goal is to encode messages by making use of their statistical nature and to use electrical signals to transmit messages over a certain channel with minimum error (e.g Pierce, 1961). Through emphasizing communication from a mathematical point of view, information theorists like Wiener (1954) have developed what is known as cybernetics. Much change and updating has happened since the introduction of information theory and cybernetics. As Gallager (1968) has noted 'in the last

twenty years, information theory has been made more precise, has been extended, and has been brought to the point where it is being applied in practical communication systems' (p. 1-2).

3.2.2) Nonverbal Communication

The other extreme of the technically-based information theory approach is the nonverbal communication. This refers to ' all behaviour expressed consciously or unconsciously, performed in the presence of another or others, and perceived either consciously or unconsciously' (Don Hellriegel, et al, 1983,p. 165). Nonverbal communication can take many shapes, among the most recognized are "body language" and "paralanguage". Body language includes facial expressions and what people do with their eyes, feet, hands, and posture. Even a person's clothing can be significant in body language. Paralanguage includes things such as voice quality, volume, speech rate, pitch, laughing, yawning, and nonfluencies (saying "ah", "um", "uh") (Fisher, 1981).

3.2.3) Interpersonal Communication

The third approach, and the one which is adopted in this study, is the interpersonal communication approach. Here the major emphasis is on transferring information from one person to another. According to this approach, communication is considered as a basic method of manipulating behavioural change, and it incorporates the psychological processes of perception, learning, and motivation. Interpersonal communication plays a central role in the organizational communication process and is directly relevant to the study of organizational behaviour. Of course, interpersonal communication does include nonverbal communication, but for practical reasons this study will make no attempt to include it.

3.2.4) Definition

'Definitions of communication are legion, yet many attempts end up in a confusion of vagueness and ambiguity' (Lewis,1980,p.8). The

concept of communication is used by laymen and social scientists alike in their efforts to explain such behaviour. A small sample of such definitions will reflect this ambiguity. For one scientist communication is the sending and receiving of information within a complex organization (Redding and Sanborn, 1964). For another it is the process of exchanging information and transmitting meaning within an organization (Khatz and Khan, 1966). For a third one it is the coordination of a number of people who are interdependently related (Goldhaber, 1974).

In fact, there are more than twenty-five different conceptions of communication, more than fifty different descriptions of the human communication process, and more than fifteen different models (Sereno and Mortensen, 1970; Dance, 1970). Communication theorists have conceived the process structurally, functionally, and in terms of intent; they have defined it with reference to source, channel, receiver, code, and effect (Branlund, 1968).

However, for the purpose of this study a workable definition offered by Lewis (1980) will be adopted. He defines communication as '...the sharing of messages, ideas, or attitudes resulting in a degree of understanding between a sender and a receiver' (Lewis, 1980, p.9). This thesis will extend this definition to include hierarchically structured organizational settings. Thus we will define organizational communication as the sharing of messages, ideas, and/or attitudes between or among members in an organizational setting.

3.3) Literature Review

A considerable body of research has examined communication behaviour in organizational hierarchies. Within this bulk of research, three interpersonal factors have frequently been considered as to have a possible association with organizational communication behaviour in general, and particularly superior-subordinates communication. These, include;

- a) Perceived trust in superiors.
- b) Upward influence of superiors.
- c) Mobility aspirations i.e the desire to be promoted.

3.3.1) Trust in Superiors

Since the early 1950's, researchers have been investigating the impact of trust on superior-subordinate communication behaviour. Some definitions of the term "trust", include reference to communication. For instance, trust has been defined as '... reliance upon the communication behaviour of another person in order to achieve a desired but uncertain objective in a risky situation' (Griffin, 1967, p.224). Roberts and O'Reilly (1974a) reported a significant relation between perceived accuracy of information and the degree of trust between superiors and their subordinates. When subordinates expressed high trust in their immediate superiors, they were also convinced that the information they received from upward was extremely accurate. Furthermore, the degree of trust in superiors also affected subordinates' desire for interaction with superiors, in the sense that subordinates with high trust also showed a great desire for interaction with their bosses.

The issue of mistrust and quality of information has also been investigated by Zand (1972) who concluded that:

'one who does not trust will conceal or distort relevant information, and avoid stating or will disguise facts, ideas conclusions and feelings that he believes will increase his exposure to others, so that the information he provides will be low in accuracy, comprehensiveness, and timeliness' (p. 230).

These remarks have been substantiated by O'Reilly (1978) who found that when trust is high, more information, including unfavourable

important data, is passed upwards without filtering or alteration, and that low trust in the receiver resulted in more suppression by the sender, especially of unfavourable information. An experiment also confirmed that accurate information between two individuals is less likely to occur under conditions of mistrust than under conditions of trust (O'Reilly, 1978). Likewise, Mellinger (1956) in studying a large governmental agency found that employees who felt more trust in one another communicated more frequently and perceived information exchanged among themselves as accurate. He contended that a communicator who does not trust the receiver tends to hide personal beliefs about a third party when communicating with the receiver. More recently, Gaine (1980) reported that trusting, ambitious people usually do not bother to communicate routine messages upward, while in problem job situations, the more trust and ambition subjects have, the less they feel compelled to withhold such information from superiors. Tendency towards inaccurate communication by subordinates is also found to be greater when they have limited trust in their superiors' motives and intentions (Read, 1962; Fleishman and Salter, 1963).

Conversely, a group of researchers found a negative relationship between trust and quality of information exchanged. In three different settings, husband and wife, father and son, superior-subordinate, accuracy was related to low levels of trust (Larson, 1967; Mix, 1972; Ross, 1973, respectively). One possible explanation for such inconsistency of research findings is that the studies of trust reported earlier could have measured a different construct from the one focused on by this group of studies.

3.3.2) Upward Influence

A second factor thought to have direct consequences for interaction tendencies between superiors and their subordinates is perceived influence. For instance, Alkire et al (1968) reported that high-status subjects when at the receiving end obtained more

useful information and asked more clarifying questions than their low-status counterparts. Lilloco (1972) also found that high influential superiors received more accurate information from their subordinates than their less influential colleagues. Furthermore, if subordinates see their immediate superiors as having comparatively little power to assist them in solving their problems, they are more likely to bypass those superiors and reach for higher ranks.

In a more sophisticated series of studies O'Reilly (1978) confirmed the impact of influence on interpersonal communication behaviour. Under conditions in which subordinates perceive superiors to possess high influence, they supply them with more favourable information about themselves. Thus, it seems that status differences do affect the quality (accuracy) of information conveyed in a superior-subordinate interaction.

3.3.3) Mobility Aspirations

The third interpersonal factor is mobility aspirations. When passing information to superiors, subordinates know that this information will be used either to aid management in controlling and directing, or to evaluate the worth of their performance. Some researchers believe that if subordinates are highly ambitious, they are liable to be tempted to filter, alter, and colour the information so as to portrait a favourable picture of themselves.

Hampton, Summer, and Webber (1973) provide three intriguing theories regarding the communication behaviour of ambitious people. These are:

- '1) In the pursuit of their work goal, people tend to communicate with those who will help them to achieve their aims, and not with those who will retard or not assist their accomplishment.
- 2) People tend to direct their communication toward those who can make them feel more

secure and gratify their needs, and away from those who threaten them, make them feel anxious, or generally provide unrewarding experiences.

- 3) Persons in an organization communicate to improve their positions' (p. 88).

If these three postulations are correct, one needs a number of combinations and permutations of trust, influence, and mobility aspirations to be able to work out the result of each proposition. As will be demonstrated by a group of studies later, these three propositions may contradict one another as well as the findings of other research.

One would expect in hierarchically structured organizations for high-ranking positions to have considerable access to and control over information. This results in the occupants of such high-ranking positions possessing more power and having high status. Previous research has shown that the combined presence of power and status results in severe restriction of upward communication (Cohen, 1958). In an attempt to separate the effects of power and status, some researchers have emphasized the importance of status over power. For instance, Bradley (1978) found that high status and high-power people receive more upward communication than high-power but low-status people.

More detailed studies which focused solely on the impact of status (Branlund and Holland, 1963; Allen and Cohen, 1969) have shown that high-status people are more likely to communicate with one another than with low-status people, and low-status individuals were found to more likely attempt to communicate with high-status persons than with one another.

However, most of the previously mentioned studies were conducted in laboratories. When experimental results are translated into organizational terms, 'the striving for status and power ... usually becomes a desire for promotion' (Lillico, 1972, p.48).

When subordinates provide information to their superiors who have control over the subordinates' fate, those subordinates are likely to be more guarded than when communicating with others of similar status. Early research confirms that subordinates with high advancement drive who believe that their superiors have the power to influence their upward mobility are more likely to attempt to create favourable impression by becoming friendlier and more supportive of the superior (Kelley, 1951; Cohen, 1958).

High mobility aspirations have also been linked with manipulation of upward communication through filtering and the omission of negative information (Read, 1962; Roberts and O'Reilly, 1974a). Even when a subordinate trusts his/her superior, high mobility aspirations 'strongly militate against accurate communication of potentially threatening information' (Read, 1962, p.13).

From the foregoing empirical body of research that deals with the impact of subordinates' mobility aspirations on upward communication, two basic premises emerge. These are, "status approximation" and "instrumental orientation" according to Lillico's (1972) typology. Regarding "status approximation", individuals with high mobility aspirations communicate more frequently with high-status persons. In doing so they attempt to bridge the status gap and "psychologically" substitute for the upward mobility they so badly strive to achieve. This line of research findings is exemplified by results reported by, for instance, Slobin et al., (1968). They found that individuals in a business organization will show more tendency to communicate self-disclosure information to their superiors than to divulge it downward. This has been interpreted as an attempt on part of the low status personnel to establish greater "intimacy" with high-status and high-power individuals. By doing so these individuals achieve, psychologically speaking, more equality between themselves and those who occupy higher ranks, and at the same time avoid "intimacy" with lower ranks which would signify personal relationships with those at lower levels (Porter and Roberts, 1976).

The second theorem refers to upward communication of those with high mobility aspirations as "instrumentally oriented". This is represented in a series of studies that reported a negative relationship between mobility aspirations and accuracy of information sent to superiors. For instance, Read (1962) contended that:

'One would expect that the more the executives are upwardly mobile ..., the less accurately they will communicate upward "negative" aspects of their work performance' (p.4).

The justification offered for such an outcome was that the more subordinates value progressing upward in the hierarchy, the more likely they are to withhold, restrict or distort information about the problems they experience in their day-to-day work. Similarly, and from a laboratory study, Anthanassiades (1973) has shown some results which substantiate the idea that subordinates' motive to ascend will cause them to distort their communication with their superiors. The rationale is that subordinates are apt to perceive such behaviour as instrumental to the attainment of their goals.

These two theorems are not necessarily mutually exclusive. A subordinate can strive for bridging the status gap through seeking intimate relationships with his/her superior, and at the same time conveying only information that portrays a positive and favourable impression of himself or herself while communicating upward.

In contrast to this line of findings, some researchers hold the view that ambitious people strongly associate themselves with their superiors (Robins and Jones, 1973; Roodman and Roodman, 1973, cited by Gaine, 1980). In a more recent series of experiments and field studies, it has been found that the more ambitious the subordinates, the less likely they are to distort or withhold upward communication. On the contrary, they seek and strive to interact with their superiors, and convey accurate information while interacting with them (O'Rielly, 1978; Gaine, 1980).

3.3.4) Directionality of Information Flow

Directionality of information flow in hierarchical structures is another organizational communication facet which has drawn the attention of a number of researchers. Dubin and Spray (1964) studied a group of eight executives and found that they initiated more communication with their subordinates than they received, with the initiation of communication between peers being equal, and communication with subordinates far more frequent than with superiors. Most recently, Luthans and Larsen (1986) supported such findings. They reported a high frequency of communication from superiors to their subordinates, with the least amount of interaction between managers and their superiors. They also found that managers communicated more with others outside the organization than they do with their peers. This later finding is in line with what was previously found for general managers (Stewart, 1982; Kotter, 1982), and successful managers (Luthans et. al, 1985).

3.3.5) Modalities of Communication

When it comes to empirical work pertaining to modalities of communication, the relative paucity of research becomes quite clear. The scarcity of research efforts designated to modalities of organizational communication was attributed to the lack of interest among the scholars of sociology and social psychology. While the former are preoccupied with studying mass media, the latter place more emphasis upon non-verbal clues of face-to-face interaction in experimental settings and among small groups (Cashdan and Jordin, 1987).

Regarding the modalities used in interaction between members of an organization, the face-to-face modality has generally been singled out as the most frequently used method (e.g Luthans and Larsen, 1986).

In one of the few published reviews on the telephone and its social consequences, Aronson (1971) notes the 'ninety-odd years of scholarly neglect, not to say disdain' with which the telephone has been met. This is fairly generalizable in many respects to research on modalities of organizational communication in general.

Few studies using diary and observation have looked at how frequently people within organizations use the telephone. For instance Stewart (1967) found that managers spent a total of 60% of the working day on conversation and 10% of all conversations were via the telephone. In a similar study Klemmer and Snyder (1972) investigated the communication activities of more than 2,600 personnel staff of a large research and development laboratory. They found that the average person spent between 50 and 80% of a typical working day communicating. Two-thirds of this communication was categorized as talking and listening, of which about 16% was via the telephone.

These studies reveal only frequency of using the telephone without answering the when and why questions. However Goddard (1973), who used self-completion questionnaires in a survey of 705 employees of 72 firms in central London, reported 1,544 meetings and 5,266 telephone calls. His data allows for comparisons between the telephone and face-to-face meetings. In general telephone calls were shorter with 87% lasting between 2 and 8 minutes. On the other hand, face-to-face meetings were longer with 80% of them lasting more than 10 minutes and 15% lasting more than 2 hours. The vast majority of the phone calls (83%) were not pre-arranged whereas 83% of the face-to-face were prearranged. Perhaps these findings could point to the degree of formality (the aura of authority) intrinsic to each of the face-to-face and the telephone modalities. It would appear that the telephone is a highly personalized and less formal method as regards organizational communication. The informality of the telephone is enhanced further by the fact that no written records are kept of what has been said and disputes may arise regarding the content of the conversation.

When studied from a cross-cultural point of view, some nations were found to adhere much more to certain modalities than to others. For instance, French organizations have always been regarded as more bureaucratic and formalized, and hence adhere more frequently to formal means of communication like written methods and formal meetings than to relatively less formalized organizations in Germany (Hutton, Lawrence, and Smith, 1977), in Britain (Graves, 1972), or in America (Weinshall, 1979).

3.4) Summary

To recapitulate, the literature pertaining to five main issues in organizational communication has been reviewed. Three of them dealt with the interpersonal factors of perceived trust, perceived influence and mobility aspirations. The other two dealt with the frequency and percentage of time spent in interacting either upward, downward, or laterally (horizontally). Although at face-value this bulk of research looks quite sufficient to enhance our understanding of superior-subordinate communication behaviour, most of the studies previously mentioned suffer major methodological and conceptual drawbacks. Moreover, many of these studies reached contradictory results even regarding a single factor such as trust or mobility aspirations.

One possible reason, may be that many of the studies were conducted in laboratories. In fact Porter and Roberts (1976) found that up to the time of their review, the bulk of empirical knowledge about organizational communication rested on merely 22 field studies. It is obvious that laboratories have an environment which differ a great deal from real organizational settings. This very fact makes generalizations from experimental conditions to real organizational settings very questionable (Weick, 1965). In a laboratory one cannot cater for factors such as total organizational size, status of participants and their hierarchical positions, their desire to achieve, and for the systems of co-ordination that prevail in real organizational settings.

An example of some of the methodological weaknesses which have been overlooked by some organizational communication researchers can be seen in Read's (1962) study in which he reported a negative relationship between mobility aspirations and accuracy of upward communication. His dependent variable was supposed to measure the agreement between subordinates and superiors regarding the most serious problem facing them at work, which was then taken as an indication of the degree of distortion of information. It can be seen that a major weakness lies in the fact that people at different organizational levels may agree or disagree about what should be regarded as a serious problem without necessarily implying any deliberate manipulation or restriction of information.

Furthermore, as has been noted by Roberts and O'Reilly (1974a) conceptualization of some of the terms used in research vary from one study to another. For instance, 'in one study the concept of "influence", is operationalized as "status", in another as "prestige", and in still another as "power"' (ibid, p. 206). Thus, it does not come as a surprise when going through the literature to come across such extremely critical remarks as the ones made by Richetto (1977). He opened his overview of the organizational communication field by asserting that it is '..like the teary-eyed little girl in party dress, all dressed up with no place to go ' (ibid, p. 331).

CHAPTER FOUR

Research Design and Methodology

4.1) Introduction

This chapter deals with the methods and procedures used to operationalize the theoretical constructs cited in the research propositions in Chapter One. However, the operationalization of these theoretical constructs in the course of empirical work is at best exceedingly difficult and the relationship between items of data and theoretical propositions is very often complex. Yet, it is a difficulty one has to live and deal with if one wants to escape the consequences of approaching the study of organizational behaviour in purely theoretical terms.

It is believed that assumptions pertaining to organizational behaviour will become part of the scientific theory when they shed conceptual ambiguity and include a body of testable and tested generalizations, not only within certain environmental (cultural) boundaries, but cross-culturally as well.

Chapter One stated the main objectives of this study. Accordingly, this study sets out to realize two aims. Firstly, to present new empirical data from the Sudan, Britain and from an ethnic group within the mainstream British culture (i.e. the Pakistani), which cast more light on the validity of the findings and interpretations of Hofstede (1980). The major concern of this will be with the two dimensions of Power Distance and Uncertainty Avoidance. Secondly, to examine the organizational implications of these dimensions as well as the implications of three interpersonal factors for organizational communication across these three cultural groups. These interpersonal factors include: Trust in Superiors, Perceived Influence of Superiors and Mobility Aspirations. This chapter relates the way in which these

constructs were measured and the statistics used to interpret relationships between them.

The chapter is divided into two main parts. Part one briefly reviews cross-cultural and/or cross-national research strategies. It also outlines the stance of the present study. Part two deals with the methodology adopted, the procedure followed for data collection, biographical features of the participants, statistical tests used and the empirical properties of the questionnaire. The chapter closes with a note on the research challenges faced by this study.

Part One

4.2) Cross-cultural and/or Cross-national Research Strategies

Campbell and Naroll (1972), in considering the importance of cross-cultural research, contended that such research can serve as:

'...a crucible in which to put to more rigorous test psychology's tentative theories, enabling one to edit them and select among alternatives in ways which laboratory experiments and correlational studies within our own culture might never make possible' (p. 436).

Many researchers and scholars have learned the message mentioned above and cross-cultural investigations have become a common endeavour. Galtung (1969) differentiated between the "nomothetic" (generalizing) and "ideographic" (singularizing) sciences. While the "nomothetic" proposition deals with phenomena that can be found over a wide range of time and space, the ideographic proposition is about phenomena limited to specific time and space. Borrowing from Galtung, Lammers (1978) maintains that in both cross-cultural and cross-national investigations, two styles of scientific inquiry have generally been adopted. These are: the "nomothetic" (law-posing and also known as the etic) and the

"ideographic" (describing the particular and also referred to as the emic approach).

Child and Tayeb (1983) and Sekeran (1983) fully discussed these two broad categories of research strategy for the cross-cultural and cross-national study of organizations. Thus, in an "ideographic approach", organizations and their contexts form certain configurations and patterns which are culture-specific or culture-relative, despite differences in their contingencies (e.g. technology, size) and other task-related factors (e.g. Sorge, 1983; Lammers and Hickson, 1979). On the other hand, the "nomothetic approach", by its law-posing stance and proposition of generalizations, claims a culture-free and universality of relationships between organizations and their contexts. Hence, '...whether the culture is Asian or European or North American, a large organization with many employees improves efficiency by specializing their activities but also by increasing controlling and coordinating' (Hickson et al., 1974, p.64).

Chapter Two offered a broad discussion of the two theoretical perspectives pertaining to the study of organizations from cross-cultural and/or cross-national point of view. Obviously, the research design which one chooses has a direct relationship to the culture-specific viz., culture-free perspectives, and subsequently to the "ideographic" "nomothetic" typology of research design and approach (Child and Tayeb, 1983).

Hence, an adoption of the culture-specific perspective (i.e. relativity of organizational theories to cultural contexts e.g. Hofstede, 1980) would mean an adoption of the "ideographic" (singularizing) approach, merely because the culture-specific perspective places considerable emphasis on divergence and cultural relativity of theories. Consequently, the generalizability of theories made in different cultural settings and their applicability and appropriateness in other cultural settings is questionable.

Adoption of the "nomothetic" (generalizing and law-posing) approach, in contrast, will accordingly mean an adherence to the culture-free (Universalistic) perspective. Claims for universality will obviously call for more divergence and similarities, and undermine any propositions leading to the particularization of organization as a result of the relative cultural setting in which organizations operate.

Child and Tayeb (1983) suggested three different designs for a "nomothetic" strategy applicable for investigating organizational settings from a cross-cultural and/or cross-national point of view. In each case, researchers are preoccupied with matching organizations and controlling for variables of interest.

The first research design opts for a simultaneous inclusion of cultural, contingency and political economy variables. By nature, such an all-inclusive approach calls for sophisticated multivariate techniques by which the impact of various combinations and permutations of the cultural, contingency and political economy variables on organizational matters could be assessed.

The second research design, and the one adopted in the present study, is again "nomothetic". It is based mainly on matching and controlling of the relevant variables under investigation and safeguarding against any confounding variables. An adoption of this research strategy would call for the researcher to match organizations in order to maximize the impact exerted by variables of interest, at the same time controlling for the intervening or miscellaneous variables (variables which may exert a similar impact on the dependent variable[s]). This design is exemplified by the Hofstede's (1980) study.

The third research design caters for both the "nomothetic" and "ideographic" approaches. This design is recommended for certain research situations where a contextual phenomenon such as the introduction of micro-electronics is believed to prevail across

samples of organizations operating in distinct environmental settings. This particular organizational phenomenon is treated from a nomothetic point of view, while the cultural variation is treated ideographically. For further discussion of these three designs the reader is referred to Child and Tayeb (1983).

4.2.1) Research Design

In this study, the second research design mentioned above was adopted. Thus, this study has followed nomothetic, cross-cultural research lines in which organizational communication in general (and, in particular, superior-subordinate communication behaviour) was investigated in seven organizations and across three cultural groups. These included Sudanese, British and Pakistani in Britain. While the inclusion of the Sudanese and British samples in a cross-cultural study is understandable, the inclusion of the British Pakistani is even more interesting. The study took advantage of the fact that in today's Britain, beside the mainstream culture, many ethnic groups have preserved their distinctive cultures. In other words, the study sought to exploit the intercultural situation within Britain. With the British and Pakistani organizations being staffed predominantly in each case by either British or Pakistani while sharing the same political, economic legal systems, technological, market and being of comparable size, the variance of macro political and economic variables was thus minimized. Again the British and Sudanese organizations were matched on industry, ownership, size and economic orientation i.e. profit nonprofit orientation (see Table 1 below).

Across the three cultural groups the two cultural dimensions of Power Distance and Uncertainty Avoidance, as well as the three interpersonal factors of Trust, Influence and Mobility Aspirations were taken as the independent variables. Aspects pertaining to organizational communication formed the dependent variables.

Adoption of this research design is justifiable for two main reasons. Firstly, in Chapter Two and in reviewing the literature, the relevance of cultural values to organizational behaviour has been highlighted. Secondly, these organizations were matched on profession, size, economic orientation and independence (Table 1 below). They are independent in the sense of not being part of a domestic giant with subsidiary plant locations or being held by a multinational corporation. This was particularly so in the case of the Textile companies. Moreover, in the context of an industry such as textiles, there is a very high probability of the technology and the resultant organization structure would be similar. Subsequently, the possibility of the cultural variables under investigation being exposed to the maximum was strengthened. Of course, a more sophisticated and complex design that would cater for other cultural, contingency and political economy variables would have been more desirable, yet this would call for more time, money and effort. Given the fact that this study was governed by the time limits and regulations of a doctoral programme, the exclusion of other factors will be appreciated.

Part Two

4.3) Methodology

4.3.1) Sample Configuration

Figure 1 schematically presents the research design of the study. It shows that the sample involved seven organizations and included a total of 291 managerial personnel. The initial idea was to secure the cooperation of as many Sudanese organization as possible, which could then be matched with British and British_Pakistani counterparts. However, this turned out to be a very difficult task indeed. Such difficulty stemmed mainly from three factors. Firstly, most of the enterprises in the Sudan are government-owned (see Chapter Two), while in Britain the vast majority are privately-owned. Secondly, the Pakistani in Britain

Table 1

General Organizational Features

Group	Sudanese		British		Pakistani
Organization	Textile	Military	Military	Textile	Textile
Size/No. of Employees	500	-	-	490	325
Ownership	Private	-	-	Private	Private
Status	Independent	-	-	Independent	Independent
Economic Orientation	Profit	Nonprofit	Nonprofit	Profit	Profit

tend, as most ethnic minorities do, to own family-type businesses rather than big enterprises. Moreover, the sensitivity of researching among an ethnic group (to which the researcher is an outsider) decreased our chances even further, and the textile company where we managed to secure cooperation was approached through personal contact with a community leader. This community leader was, incidentally, the landlord of the researcher's accommodation. Thirdly, as shown in Appendix E, quite a number of the white British industries with which this study hoped to match some of the Sudanese organizations, at least on an industry-by-industry basis, have declined our request for their cooperation. However, through the personal contact of the author's supervisor we managed to get access to the white British textile and military organizations which feature in this study.

Figure 1: Schematic Presentation of the Study Sample

Cultural Group		
Sudanese	British	Pakistani
Textile (53)	Textile (22)	Textile (26)
Military (50)	Military (29)	-
Cement (50)	-	-
Sugar (61)	-	-

In the light of the above mentioned reasons we were able to include only the variables displayed in Table 2 below. These were broadly divided into dependent and independent variables. The independent variables were outlined in Chapter One. The following sub-sections deal with the dependent variables.

4.3.2) Definition of Analytic Variables

Before introducing the analytic variables, some of the concepts should be defined.

"Superior-subordinate"

The expressions "superior" and "subordinate" originated from Latin roots and are used here in the same manner. When joined together they denote a relationship in which one person is at a top (superior) rank and another at a subrank (subordinate) or is working under another person.

Table 2

Factors Investigated in the Study

Organizational Communication Variables	Interpersonal Variables	Work-related Values
<p>a) <u>Quantitative Attributes</u></p> <ul style="list-style-type: none"> -Interaction with Superiors -Desire for Interaction -Time Spent on Sending -Time Spent on Receiving 	<ul style="list-style-type: none"> i) Trust in Superiors ii) Upward Influence iii) Mobility Aspiration 	<ul style="list-style-type: none"> i) Power Distance ii) Uncertainty Avoidance
<p>b) <u>Qualitative Attributes:</u></p> <ul style="list-style-type: none"> -Perceived Accuracy -Summarization -Gatekeeping 		
<p>c) <u>Directionality of Information Flow:</u></p> <ul style="list-style-type: none"> -Directionality-Upward -Directionality-Downward 		
<p>d) <u>Modalities of Communication:</u></p> <ul style="list-style-type: none"> -Written Modalities -Face-to-face -The Telephone 		

Despite the importance of informal interactions between superiors and their subordinates, this study was concerned only with formal relationships. Thus, emphasis was made on interactions influenced by the formal authority driven from the relative organizational positions of those who are involved. This is because, in general, most research evidence indicates that superior-subordinate interactions are usually dominated by task issues, and that superiors and subordinates usually talk more about impersonal issues than they do about personal issues (Jablin, 1979).

The Dependent Variables

Contained within the questionnaire were the independent variables which can be categorized into two main groups. Group one includes variables that relate to organizational communication in general, for instance directionality of information flow and modalities of communication. These were previously defined and discussed in Chapter Three. Group two mainly includes variables related to superior-subordinate communication behaviour. Variables pertaining to superior-subordinate communication have been grouped under two headings, namely: Quantitative and Qualitative Attributes of Superior-subordinate communication.

Quantitative Attributes

These relate to the volume of information exchanged in a superior-subordinate communication. They include four main issues:

- 1- Percentage of time spent by subordinates on interaction with superiors.
- 2- Subordinates' desire to interact with their immediate superiors.
- 3- Percentage of time spent by subordinates receiving from their superiors.
- 4- Percentage of time spent by subordinates sending to their superiors.

Qualitative Attributes

As the name implies, these relate to factors that affect the quality of information exchanged between superiors and their subordinates. Three were included in this study:

- 1- Perceived accuracy of downward communication.
- 2- Frequency of subordinates summarizing while transmitting to their superiors.
- 3- Frequency of subordinates gatekeeping while passing information to their superiors.

Summarization is defined as the act of reducing a bulk of information by covering the main points concisely, while gatekeeping denote the act of deciding what information to pass on to others.

4.3.3) Participants and Procedure

4.3.3.1) The Sudanese

Analyzable data were gathered from managers at lower, middle and senior level positions in four different organizations. These include a Sugar company, a Textile company, a Cement company and the Military. Personal distribution of the questionnaires was adopted to overcome problems associated with the postal service in the Sudan, to maximize the response rates and to provide an opportunity to clarify questions regarding the purpose of the study.

Two approaches were followed to obtain respondents' participation. First, in the Sugar, Textile and Cement companies cooperation of several top executives was sought through personal contacts. The executives for their part, solicited the cooperation of their colleagues at the three different managerial levels and provided the names of those willing to participate in the study. Then these were approached by the author and given the questionnaires. In this connection it must be said that almost all of those who

were approached by the top executives have given their consent. The response rate in this case was approximately 91%. Another approach which secured participation of the sample from the Military was to seek the cooperation of a senior training officer who gave the questionnaires to 50 army officers of a training unit. Subjects were asked to take the questionnaire home and to bring it back after completion. The response rate of the Military sample was 100%.

All respondents of the Sudanese sample received an explanation through a form letter attached to the questionnaire and also verbally whenever possible. The main message was that this study was a cross-cultural study and general conclusions rather than individual results were the primary concern of the study. In addition, respondents were assured that the study had been initiated with the support of the University of Khartoum and not commissioned by the top management of any of the organizations. It was also emphasized that the basis of their participation was entirely voluntary and the information provided would be held in confidence and used only for research purposes. Each of the organizations has been promised a synopsis of the findings.

In all four organizations an attempt was made to gather a census rather than a sample of their respective managerial staff. However, a part from the Military, absenteeism, leaves, etc. meant that only about 87%, 88% and 77% of the potential staff at the Sugar, Textile and Cement organizations (respectively) participated in this study.

A translated version of the questionnaire was given to the Sudanese participants. To test for cultural bias and to check its accuracy, the questionnaire was translated into the Arabic language by a group of Sudanese Postgraduate Students at Aston University, U.K and back translated by a lecturer at a translation unit, University of Khartoum, Sudan. Few differences were found between the original and the new version. These differences were reconciled and the final version was reviewed by a senior

researcher in cross-cultural psychology at the University of Khartoum. Fidelity to the source version was maintained throughout the translation apart from two slight changes (see section 4.2.4.1).

The total sample size was 214 out of 245 questionnaires distributed to participants. This comprised 61 from the Sugar, 53 from the Textile, 50 from the Cement and 50 from the Military. The overall response rate was 87.35%.

All of the respondents were male who held managerial and/or supervisory posts in the sense that they had subordinates who reported directly to them, as well as being supervised themselves. Table 2a presents a brief profile of the participants. It shows that 10 of the Sudanese were at a top managerial level^{*}, 45 at a middle level and 159 at a lower-middle or lower managerial level. The mean age of the total sample was 34 years. The educational background of respondents ranged from 10 to 18 years of formal education with a mean of 15 years.

4.3.3.2) The British

The British sample included 22 managerial staff from a textile company, and 29 officers from the military, representing a response rate of 100% in each organization. All of the respondents were males and at a managerial or supervisory level.

Cooperation of the sample from the British Textile was attained through personal contacts of Dr. Shackleton the supervisor of this research. With reference to the Military, access was secured through a Major in the army who was undertaking postgraduate research under the supervision of Dr. Shackleton. Great effort

* Organizational level was decided with the help of an insider informant usually from the Personnel Department.

Table 2a: Personal Characteristics of the Participants (N=291)

Variables	Sudanese (214)	British (51)	Pakistani (26)
<u>Managerial Level</u>			
Top management	10	-	-
Middle management	48	-	-
Middle-low management	156	-	-
	214		
<u>Age Group</u>			
Less than 30 years	63	08	06
30 to 39 years	104	29	11
40 to 49 years	37	12	8
50 to 59 years	10	-	-
	214	48	25
<u>Educational Background</u>			
8 to 12 years	67	26	4
13 to 15 years	64	16	13
16 to 18 years	83	08	08
	214	47	25

was made to include more samples from the Sugar and Cement industry in Britain but to no avail (see Appendix E).

Table 2a shows a brief profile of the British participants. It shows that the age of the sample ranged from 25 to 49 of years with a mean of 35 years. In terms of the number of years spent on formal education, these ranged from 8 to 18 years with a mean of 12 years. Unfortunately, most of the respondents did not respond to the question asking them to state their organizational level. Maybe they thought a sincere answer would jeopardize the confidentiality of their responses.

All respondents received an explanation about the nature of the study. In addition it was emphasized that the basis of their participation was entirely voluntary and the information provided would be held in confidence and used only for research purposes.

4.3.3.3) The British-Pakistani

Access to a textile company in the Yorkshire area in Britain was secured through a Pakistani community leader. The fact that the author of this work lived with a prominent figure in the Pakistani community did play a significant role in ensuring such a cooperation. In most cases, questionnaires were left with the respondents and collected later. The questionnaire was identified as a confidential university survey pertaining to managerial staff only, and anonymity was guaranteed. The 26 responses represent a 52% response rate.

The organization was owned and run by a predominantly British citizens of Pakistani extraction. Due to the sensitivity of the issue, the question about their place of birth was omitted. However, through personal contacts with the organization, it is known that most of the participants were born in the U.K or had lived here since early childhood.

Again, all of the respondents were males at managerial level. The mean age of the sample was 36 years. The educational background of the respondents ranged from 12 to 18 years of formal education, with a mean of 13 years. As was the case with the British group, most of the respondents did not state their organizational level (Table 2a).

4.3.4) Statistical Analyses

4.3.4.1) Factor Analyses

Firstly, the factor procedures available in the Statistical Package for the Social Sciences (SPSS) (Nie, Bent and Hull, 1970) were used to factor analyze the data obtained from the

participants. The factor analyses were carried out using the most common, most generally agreed upon procedures available, including the PA2 method of principal factoring with iteration and orthogonal rotation of the factors using the Varimax criterion.

To demonstrate the discriminant validity of the multi-item scales of the Organizational Communication Questionnaire (OCQ) by Roberts and O'Reilly (1974) reliability tests were also carried out (see section 4.3.5.3). Three other statistical techniques were used to test the hypotheses proposed in this study. These include Contingency Coefficient C, T-test and Multiple Linear Regression. Following is a brief account of these techniques.

4.3.4.2) Contingency Coefficient C

The properties of some of the scales (e.g "Perceived style of Management") meant that the Contingency Coefficient C was used. C is uniquely useful in cases where one or both of the variables for which the extent of association is to be measured have only categorical (nominal scale) properties (Siegel and Castellan, 1988). However, C has no sampling distribution against which an observed C can be tested for significance. This is mainly because in the process of computing C the X would have already been computed. Thus, the significance of the X is usually provides an adequate indication of the significance of C (Siegel and Castellan, 1988). So when the C value is reported the value of X and its level of significance, as well as the degrees of freedom, will also be reported.

4.3.4.3) T-test

T-test provides the facility to test the significance of the difference in the means of a variable in two independent groups. It also provides the same facility for means measured within the same set of cases, i.e within the same group. Hence, t-test was used to test significance of the difference in the means of variables both between organizations across the three cultural

groups, as well as within each of the organizations; notably between scores of superiors and subordinates of the same organization pertaining to a particular communicational variable. Whenever t-test was used, means, standard deviations (S.D), degrees of freedom (df), t-values and level of significance are reported.

4.3.4.4) Multiple Linear Regression

Multiple linear regression is a method for measuring the effects of several factors concurrently. Since this study is concerned with analyzing the relationship between a dependent variable (usually a communication variable) and a set of independent variables (cultural or interpersonal variables), multiple linear regression is the most appropriate statistical technique. Accordingly, it was used in testing all of the hypotheses where a functional relationship is proposed in this study. Three of the statistics associated with the multiple linear regression are reported throughout the thesis and worth explaining. These include Multiple R (M/R), R Square (\hat{R}^2), Beta Coefficient (Beta) and F_value.

Multiple R or multiple correlation assesses the strength of the dependence between the dependent variable and the independent variables. However, more emphasis will be placed on \hat{R}^2 . This is because the interpretation of \hat{R}^2 is straightforward (Nie et. al, 1970). \hat{R}^2 , or the coefficient of multiple determination, measures the percentage of the variation in the dependent variable which is explained by the variations in the independent variables taken together. \hat{R}^2 will also be used to determine the increment accounted for by each of the independent variables in explaining the total variation in the dependent variable.

The Standardized Coefficients or the Beta Coefficients as denoted throughout the thesis, indicate whether the independent variable

significantly relates to the dependent variable when all other independent variables were controlled. An examination of the Standardized Beta Coefficients allows for the comparison of the relative contribution of the independent variable in predicting the variation in the dependent variable.

Significance of R^2 is assessed by evaluating the significance of the F-value. In other words, to decide if the percentage of the variance explained by the independent variable(s) could have occurred by chance, one must calculate an F-value and check its significance.

4.3.5) The Questionnaire¹

The study employed two instruments to measure the variables included in this investigation. These measures were used in the form of a two-parts questionnaire. Part one contained the Organizational Communication Questionnaire which will be described in the following sub-section. Part two contained the part of Hofstede's (1982) Values Survey Module which measures Power Distance and Uncertainty Avoidance. It also contained the biographical information such as age, level of education and organizational level. This second part will be discussed in the following chapter.

4.3.5.1) The Organizational Communication Questionnaire

The Organizational Communication Questionnaire (OCQ) was developed by Roberts and O'Rielly (1974) to measure organizational communication within and across organizations. It consists of 36 items measuring 16 dimensions of organizational communication. Eight of the dimensions consist of multi-item scales scored on a seven point Likert format:

(1) A complete listing of the questionnaire items is included in Appendix A.

Trust in Superiors (3 items).
Upward Influence (3 items).
Mobility Aspirations (2 items).
Accuracy (3 items).
Overload (2 items).
Summarization (3 items).
Gatekeeping (3 items).
Desire for Interaction (3 items).

Three of the dimensions consist of multi-item scales requiring the respondent to indicate percentage of time pertaining to;

Directionality-upward (3 items).
Directionality-downward (3 items).
Directionality-lateral (3 items).

Four of the dimensions are single-item scales requiring the respondent to indicate the frequency various modes of communication are used. These include; written, face-to-face, the telephone and others. The last dimension consists of a single item scale scored on a seven point Likert format indicating the degree of satisfaction with communication in the organization.

The OCQ was chosen for three reasons. Firstly, a number of studies have investigated this instrument and have found it to be a factorially stable instrument with good reliability (Roberts and O'Reilly, 1974a; Muchinsky, 1977; Yeager, 1978). For instance, Muchinsky (1977) found supportive results for this device. Most of the factors he derived replicated the original scales of the OCQ with satisfactory reliability coefficients. Secondly, Roberts and O'Reilly (1974) concluded at the end of their study that their questionnaire should be useful in comparing communication between organizations as well as in relating communication to other relevant organizational variables. Indeed, communication has been related to other organizational facets using this device (e.g, O'Reilly and Roberts, 1974, 1977; Muchinsky, 1977). Thirdly, this device delineates the dimensions used in the hypotheses such as

frequency of interaction, directionality, accuracy, summarization, gatekeeping and modalities of communication.

Two slight changes were deemed necessary. Specifically, the original version received from Professor Roberts was designed for naval staff. Thus, this author reworded some questions to suit the work groups included in this study. This was done by using general terms such as "department" and "organization" in place of "the Navy". Secondly, the question about satisfaction with communication was tapped by five different facial expressions. To safeguard against any cultural biases and discrepancies between items of the same questionnaire, this scale was changed into a seven point Likert format scale ranging from "Very satisfied" to "Very dissatisfied". This alteration was recommended by most of the Sudanese students who helped in translating the English version.

Below is an outline of the empirical properties of the OCQ, based on this study.

4.3.5.2) Empirical Properties of the OCQ Factor Analyses and Reliability Findings

Factor analysis represents a set of statistical techniques which can be used so as to empirically assess the basic structure underlying a set of items. The procedure investigates structure based on the patterning of responses by individuals to the items under consideration (Nie, Bent and Hull, 1970).

Factor analysis is a suitable technique with which to assess the validity of the OCQ in terms of the a priori scales advanced by Roberts and O'Reilly (1974). Validity is used here in the sense that the basic structure of the instrument would be that which it suppose to reveal. Thus, if the OCQ is valid, one would expect participants to respond to the items in such a way that the independent dimensions depicted by Roberts and O'Reilly will account for the pattern of responses. Moreover, the items for a

given a priori scale should cluster together on the same factor, indicating that they are tapping the same dimension.

Tables 1 through 7 in Appendix B present the number of factors extracted in each organization, the percentage of variance accounted for by each factor, the eigenvalue and the number of items. The item numbers are listed in the first column denoting the factor for which they most highly correlate or load. Items are omitted if they load most heavily on a rotated factor that did not have an eigenvalue of ≥ 1.00 .

All seven organizations appear to point almost uniformly to a twelve-factor structure for the OCQ. Comparing across organizations, there was virtually total agreement as to items loading in the same factor. Below is an outline of the reliabilities of these dimensions across the seven organizations. After examining the resultant factor structures, it was determined that the factor structure which best represented the data from the questionnaire was that of the twelve factor orthogonal rotation, which is shown in Appendix B. Tables 3 through 12 report the resultant factor structure of the multi-item scales. Each factor is presented separately in the tables. Each table contains the same factor across the seven organizations as well as the reliability scores.

Trust in Superiors

This scale was used to assess the extent to which respondents have trust in their immediate superiors. It consists of three items:

- 1- How free do you to discuss with your immediate superior the problems and difficulties you have in your job without jeopardising your position or having it "held against" you latter?

End points: 1-Completely free.

7-Very cautious.

This item is shortened as "Disclosure of Grievance".

2- Immediate superiors at times must make decisions which seem to be against the interests of their subordinates. When this happens to you as a subordinate, how much trust do you have that your immediate superior's decision was justified by other considerations?

End points: 1=Trust completely.

7=Feel very distrustful.

This item is shortened as "Unfavourable Decisions".

3- To what extent do you have confidence and trust in your immediate superior regarding his general fairness?

End points: 1=Have little confidence and trust.

7=Have complete confidence and trust.

This item is shortened as "General Fairness".

Reliability analyses of this 3-items, 7-point Likert type scale (Table 3) indicated the measure was internally consistent. Cronbach's alphas were .68, .86, .89, .91, .75, .61, and .84 in the Sugar, Cement, Sudanese Textile, Sudanese Military, British Military, British Textile and Pakistani Textile respectively. These results are consistent with previous studies in which this scale has shown to have acceptable internal consistency reliability. For instance, Muchinsky (1977) and Roberts and O'Reilly (1974a) in more than ten samples showed this scale to be internally consistent. Further support for this scale's reliability was found in studies by Fulk et. al, 1985; Harrison, 1985; and Fulk and Mani, 1986 who reported coefficient alphas of .71, .84 and .90 respectively.

Table 3

Factor Analysis and Reliability Coefficients of Trust In Superiors Scale

Item No	Items	Sudanese			British			Pakistani		
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile	
2	Disclosure of Grievance	.39	.68	.45	.86	.81	.74	.82		
4	Trust Unfavourable Decisions	.78	.53	.36	.80	.78	.75	.33		
9	Trust General Fairness	.63	.50	.68	.69	.59	.72	.82		
Eigenvalues		1.34	1.33	1.10	1.99	5.3	4.50	1.40		
Percentage of Variance		4.90	5.00	4.00	7.30	17.40	14.50	4.50		
Factor Number		9	8	10	8	1	2	9		
Cronbach's Alpha		.68	.86	.89	.91	.75	.61	.84		

Upward Influence

A 3-items scale was used to measure subordinates' perceptions of their superior's hierarchical influence. These include the following items:

- 1- How often is your immediate superior successful in overcoming restrictions (such as regulations or quotas) in getting you the things you need in your job, such as equipment, personnel, etc.?

End points: 1=Always successful.
7=Never successful.

- 2- In general, how much do you feel that your immediate superior can do to further your present career?

End points: 1=Much.
7=Little.

- 3- How much weight would your immediate superior's recommendation have in any decision which would affect your standing in this organization, such as promotions, transfers, etc?

End points: 1=Important.
7=Unimportant.

These three items are shortened as: "Overcoming Restrictions", "General Influence" and "Recommendation" respectively.

Reliability analyses of this scale (Table 4), indicated that it was fairly stable across the Sudanese organizations. Cronbach's alphas were: Sugar=.76; Sudanese Textile=.77; Cement=.74; Sudanese Military=.87; British Military=.57; British Textile=.40 and Pakistani Textile=.50.

It is clear that the reliability scores of the British and Pakistani organizations were less than adequate. A possible explanation might be the small samples attained in these organizations. This is said because results obtained from the Sudanese organizations (samples of 50 or more) as well as those from previous studies showed this scale to be fairly reliable (Roberts and O'Reilly, 1974; 1974a; Yaeger, 1978). More recently, Fulk and Mani (1985) in studying a sample of 308 clerical and managerial employees reported a coefficient of .72 for this scale.

Mobility Aspirations

Aspirations for upward mobility were measured on a 2-items scale. These were:

- 1- As part of your present job plans, do you want a promotion to a higher position at some point in the future?

End points: 1=Content as I am.
7=Very much.

- 2- How important is it for you to progress upward?

End points: 1=Not important.
7=Very important.

These two items are shortened as "Desire for Promotion" and "Importance of Promotion" respectively.

As can be seen in Table 5, this scale proved to be adequately reliable across all seven organizations. It showed coefficient alphas of .70 in the Sugar; .61 in the Sudanese Textile; .83 in the Cement, .69 in the Sudanese Military; .73 in the British Military; .87 in the British Textile and .77 in the Pakistani Textile.

Table 4

Factor Analysis and Reliability Coefficients of Upward Influence Scale

Item No	Items	Sudanese			British			Pakistani		
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile	Textile
3	Overcoming Restrictions	.57	.70	.62	.58	.36	.64	.64	.60	
5	General Influence	.91	.70	.74	.96	.74	.46	.46	.43	
6	Influence of Recommendation	.73	.69	.69	.91	.72	.33	.33	.79	
Eigenvlues										
		1.49	2.55	2.58	2.25	2.20	1.37	1.37	2.82	
Percentage of Variance										
		5.40	9.60	9.40	8.20	7.20	4.40	4.40	8.90	
Factor Number										
		8	4	5	6	6	10	10	5	
Cornbach's Alpha										
		.76	.77	.74	.87	.57	.40	.40	.50	

Table 5

Factor Analysis and Reliability Coefficients of Mobility Aspirations Scale

Item No	Items	Sudanese				British		Pakistani	
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile
7	Desire for Promotion	.80	.70	.70	.63	.82	.83	.76	
8	Importance of Promotion	.71	.63	.95	.56	.71	.85	.85	
Eigenvalues		1.01	1.06	1.76	1.20	1.89	2.93	2.04	
Percentage of Variance		3.50	3.90	6.40	4.40	6.20	9.4	6.50	
Factor Number		12	11	7	11	7	5	7	
Cronbach's Alpha		.70	.61	.83	.69	.73	.87	.77	

Accuracy

Accuracy of information was assessed with a 3-items scale. These items asked respondents to assess the perceived accuracy of information received from:

- 1) Immediate superiors.
- 2) Subordinates.
- 3) Peers (others at the same job level).

Table 6 shows that in four out of the seven organizations the coefficient alpha of this scale was well above .70 with the lowest alpha being .55 in the Pakistani organization. Roberts and O'Reilly (1974a) reported a test-retest reliability of .52 for the item assessing perceived accuracy of information received from superiors. Muchinsky (1977) in assessing the reliability of the whole scale reported an alpha of .54.

Directionality-Upward

Three items assessed the level of upward flow of information. These items asked respondents to state percentage of time they spend on:

- 1) Interaction with their superiors.
- 2) Receiving from subordinates.
- 3) Sending to superiors.

Table 7 shows this scale to be a highly reliable one. These results are comparable to the ones reported in previous studies (e.g, Roberts and O'Reilly, 1974).

Directionality-Downward

Three items measured the percentage of time respondents spent in transmitting information downward. These items asked them to state what percentage of time they spent on:

Table 6

Factor Analysis and Reliability Coefficients of the Accuracy Scale

Item No	Items	Sudanese				British		Pakistani	
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile
18	Accuracy of Superiors	.79	.39	.51	.35	.57	.38	.78	
19	Accuracy of Subordinates	.94	.79	.37	.74	.45	.79	.71	
20	Accuracy of Peers	.68	.71	.40	.92	.49	.82	.78	
Eigenvalues		2.51	2.50	1.06	3.46	1.00	2.08	1.08	
Percentage of Variance		9.10	9.40	3.80	12.6	3.20	6.70	2.70	
Factor Number		3	5	11	1	11	7	12	
Cronbach's Alpha		.80	.74	.69	.77	.65	.75	.55	

Table 7

Factor Analysis and Reliability Coefficients of the Directionality-Upward Scale

Item No	Items	Sudanese			British			Pakistani		
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile	Textile
10	Interaction with Superiors	.50	.49	.74	.73	.48	.72	.86		
24	Receiving from Subordinates	.58	.88	.84	.85	.88	.87	.83		
26	Sending to Superiors	.37	.66	.90	.80	.89	.79	.89		
Eigenvalues		1.51	3.50	3.30	2.18	4.43	2.78	3.70		
Percentage of Variance		5.49	13.16	12.09	7.90	14.50	8.96	11.74		
Factor Number		7	3	3	7	2	6	4		
Cronbach's Alpha		.83	.80	.89	.79	.60	.75	.93		

- 1) Interaction with subordinates.
- 2) Receiving from superiors.
- 3) Sending to subordinates.

Table 8 shows the factor analyses and the reliability scores across the seven organizations. As can be seen, the scale was highly reliable. All of the organizations scored .70 or more. Again, these findings are in line with previous studies. Muchinsky (1977) and Roberts and O'Reilly (1974) reported coefficients of .84 and .82 respectively.

Directionality-Lateral

Horizontal flow of information was assessed by three items. These items asked respondents to state percentage of time they spent on:

- 1) Interaction with their peers.
- 2) Receiving from their peers.
- 3) Sending to their peers.

Cronbach's reliability coefficients of this scale are shown in Table 9. It shows the scale to be a fairly consistent one. Muchinsky (1977) reported an alpha of .76. It is clear that apart from the Sudanese Military, all other organizations showed a coefficient alpha of .70 or more. The score of the Sudanese Military was .67.

Desire for Interaction

Item loadings and reliability coefficients of "Desire for Interaction" scale are presented in Table 10. The scale consists of three items. Each asked respondents to state how desirable is it to interact with:

- 1) Immediate superiors.
- 2) Subordinates.

Table 8

Factor Analysis and Reliability Coefficients of the Directionality-Downward Scale

Item No	Items	Sudanese			British			Pakistani		
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile	Textile
11	Interaction with Subordinate	.53	.70	.73	.53	.43	.78	.85		
23	Receiving from Superiors	.68	.72	.97	.84	.83	.52	.93		
27	Sending to Subordinates	.36	.84	.80	.84	.85	.83	.72		
Eigenvalues		2.02	4.66	4.41	2.94	1.69	3.71	3.86		
Percentage of Variance		7.31	17.54	16.11	10.70	5.50	11.94	12.26		
Factor Number		5	1	1	3	8	3	3		
Cronbach's Alpha		.79	.84	.90	.87	.70	.80	.93		

Table 9

Factor Analysis and Reliability Coefficients of the Directionality-Lateral Scale

Item No	Items	Sudanese			British			Pakistani		
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile	Textile
12	Interaction with Peers	.71	.74	.39	.35	.58	.44	.87		
25	Receiving from Peers	.54	.52	.90	.86	.92	.73	.53		
28	Sending to Peers	.76	.54	.92	.85	.51	.83	.40		
Eigenvalues		3.18	3.57	2.62	2.43	2.48	1.08	1.12		
Percentage of Variance		11.5	13.40	9.60	8.80	8.10	2.70	3.60		
Factor Number		2	2	4	5	5	12	10		
Cronbach's Alpha		.70	.71	.77	.67	.82	.89	.80		

3) Peers (others at the same level).

If one has to accept .50, as a "thumb rule" to be the minimum score for accepting a scale as satisfactorily reliable, Table 10 shows that coefficient alphas for the "Desire for Interaction" scale were satisfactory in 3 out of the 7 organizations. Three organizations scored in the region of .34 and the British Textile approached the .50 mark with a score of .48. Previous analyses of the reliability of this scale are somewhat comparable to the ones reported here (Muchinsky, 1977; Roberts and O'Reilly, 1974).

Summarization

Frequency of respondents' adherence to summarization while transmitting information was measured with 3 items. These include:

- 1) Frequency of summarizing to Superiors.
- 2) Frequency of summarizing to Subordinates.
- 3) Frequency of summarizing to peers.

Table 12 displays the loadings of these three items and the coefficient alphas of the scale across the seven organizations. It can be seen that the scale was fairly consistent. The resultant coefficient alphas were generally in line with previous scores obtained for the same scale. For instance, Muchinsky (1977) reported a coefficient alpha of .80.

Gatekeeping

Frequency of gatekeeping while passing information within the organization was measured by 3 items. They denote:

- 1) Frequency of gatekeeping to superiors.
- 2) Frequency of gatekeeping to subordinates.
- 3) Frequency of gatekeeping to peers.

Table 10

Factor Analysis and Reliability Coefficients of the Desire for Interaction Scale

Item No	Items	Sudanese				British		Pakistan	
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile
35	With Superiors	.74	.61	.36	.53	.32	.60	.46	
36	With Subordinates	.68	.72	.97	.84	.83	.52	.59	
37	With Peers	.36	.84	.80	.84	.85	.83	.41	
Eigenvalues		2.31	1.13	1.59	1.01	1.07	1.82	1.08	
Percentage of Variance		8.40	4.30	5.80	3.60	3.11	5.90	2.70	
Factor Number		4	10	10	8	12	11	12	
Cronbach's Alpha		.63	.59	.55	.33	.34	.48	.35	

Table 13 shows the item loadings and the coefficient alphas of this scale across the seven organizations. As can be seen, the scale was fairly reliable in five out of the seven organizations. The two exceptional cases were the British Military and Textile which yield alphas of .41 and .47 respectively. Such an outcome is hard to justify and interpret. However, one needs to bear in mind these low scores when discussing the issue of gatekeeping within the British organizations. Having said that, the scores of both British organizations pertaining to the reliability of this scale were not too low than the scores presented in the literature. For instance, in a test-retest reliability analysis of the item that measures gatekeeping to superiors Roberts and O'Reilly (1974) reported a coefficient of .53. In assessing the internal consistency of the three items that make up the gatekeeping scale, Muchinsky (1977) reported a coefficient alpha of .46.

Summary of the OQ Properties

To recapitulate, this section dealt with the validity and reliability of the OQ. As for its validity, and after examining the resultant factor structures, it was determined that the factor structure which best represented the data from Roberts and O'Reilly's (1974) OQ was that of the twelve factor orthogonal rotations reported in the previous section and displayed in Tables 1 through 7 in Appendix B.

Thus, it has been concluded that the basic dimensional structure of this instrument is more or less what the authors claim for it. The only exception was that some of the items that are supposed to load independently in separate factors pooled together in one factor. Notably, in most of the seven organizations items pertaining to modalities of communication (i.e., written, face-to-face and the telephone) shared one factor with items of general satisfaction with communication. Moreover, some of the modalities showed their highest loadings in factors we excluded because they had an eigenvalue <1.0.

Table 11

Factor Analysis and Reliability Coefficients of the Summarization Scale

Item No	Items	Sudanese				British		Pakistani	
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile
29	To Superiors	.87	.50	.79	.91	.64	.90	.90	
30	To Subordinates	.88	.59	.86	.71	.78	.69	.79	
31	To Peers	.91	.80	.65	.56	.84	.79	.47	
Eigenvalues		6.32	1.59	4.04	3.33	3.83	3.23	1.64	
Percentage of Variance		22.9	6.00	14.80	12.17	12.50	10.4	5.20	
Factor Number		1	7	2	2	3	4	8	
Cronbach's Alpha		.93	.63	.88	.82	.78	.83	.59	

Table 12

Factor Analysis and Reliability Coefficients of the Gatekeeping Scale

Item No	Items	Sudanesse			British			Pakistanl		
		Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile	
32	To Superiors	.41	.43	.70	.77	.84	.61	.92		
33	To Subordinates	.90	.54	.70	.79	.63	.53	.56		
34	To Peers	.67	.40	.30	.64	.85	.41	.79		
Eigenvalues		1.29	1.01	1.21	2.75	1.20	1.10	4.88		
Percentage of Variance		4.70	3.60	4.40	10.03	3.90	3.60	15.50		
Factor Number		10	12	9	4	10	11	1		
Cornbach's Alpha		.57	.66	.61	.74	.41	.47	.72		

As far as the reliability of the OCQ is concerned, internal consistency reliability (Coefficient Alpha) were performed for all multi-item scales. These could be categorized into three major groups. Namely, interpersonal factors, quantitative attributes of communication and qualitative attributes of communication.

The interpersonal factors included the three dimensions of Trust in Superiors, Upward Influence and Mobility Aspirations. Tables 3, 4 and 5 showed all three dimensions to be satisfactorily consistent.

The quantitative attributes of communication included items pertaining to the amount of information exchanged between a sender and a receiver. These items were buried in dimensions denoting directionality of information flow besides the scale that taps desire for interaction. All items pertaining to directionality of information flow and across all seven organizations were shown to have high levels of internal consistency. As for the "Desire for Interaction" scale it was fairly reliable in the Sudanese civilian organizations and appeared to be not so consistent in the two Military organizations as well as in the British and Pakistani textiles. The coefficient alpha of the British Textile (.48) was, however, closer to the acceptable level of .50.

As for the scales tapping qualitative attributes, these include three scales. Namely, "Accuracy", "Summarization" and "Gatekeeping". As for the accuracy scale, it was fairly stable across the seven organizations. Similarly, the summarization scale showed to be fairly consistent across the seven organizations. The scale that taps gatekeeping again showed acceptable coefficient alphas in most of the organizations.

Thus, one can conclude that the questionnaire designed by Roberts and O'Reilly (1974) to measure organizational communication both within and between organizations is fairly reliable. Out of the ten dimensions adopted in this study nine were shown to be fairly reliable. The only exception was the scale that taps "Desire for Interaction" which although has shown fairly acceptable alphas in most of the organizations, remains the only scale that showed

alphas of .33 and .34 in both Military organizations and an alpha of .35 in the Pakistani Textile. Hence, the interpretations of results pertaining to desire for interaction in these organizations should better be understood in the light of this fact.

4.4) A Note on Research Design

This section attempts to consider any methodological weaknesses that could be pointed to, or challenged, in the design of this study. They are challenges almost all cross-cultural and/or cross-national investigations conducted in the field (as opposed to laboratories) have to face. They have to do with the sampling procedures and the samples incorporated in this study. However, these challenges are intimately related to the problems of access and cooperation alluded to in section 4.3.1. The challenges can be posed in the following manner.

Firstly, in comparing organizations from the Sudanese, British and Pakistani cultural settings, how can one be sure that any differences can confidently be attributed to cultural differences rather than to other factors intrinsic in the companies themselves? Secondly, how can one be sure that the Pakistani organization in Britain was sufficiently "Pakistani" to represent a valid basis of comparison between its members and those of its British and Sudanese counterparts.

Regarding the first challenge, and put in a different manner, it questions the closeness or similarity between organizations in the three cultural settings in variables that could have an impact on the dependent variables comparable to the one hypothesized between the cultural traits and these dependent variables. In other words, to what extent were irrelevant variables controlled to

(1) Overload is not incorporated in this study, beside the fact that although modalities are included in the study they are measured by single-item scales.

maximize the approximate isolation of cultural traits?

Of course, it would have been preferable to be able to control for every single aspect to ensure that in each of the three groups all other things were identical apart from nationality or ethnic background. But in a non-experimental study of this kind, such high standards of matching and control can, by definition, rarely, if ever, be attained. However, in so far as it was possible, organizations were matched as closely as possible within the textile industry across the three cultural groups and in the Military organizations in the Sudan and Britain.

Furthermore, the organizations chosen for comparison were all engaged in, more or less, highly routine and non-creative or highly sophisticated production activities in case of the profit-oriented (Textile) organizations. In the context of an industry such as textiles, there is a very high probability that the technology and the resultant organization structure would be similar. This would particularly be the case if it is known that the human resources (organizational size) were fairly comparable.

Hence, it was felt that the general management of production processes and activities would be similar across the three organizations involved and any differences could be attributed to cultural rather than contextual variables.

Moreover, when initially designed, this study sought to use the case-study technique for gathering further information from each of the seven organizations incorporated in this study. The case-study was thought of as a complementary technique (the triangulation approach) together with the questionnaire. The idea was to aid the research process through gathering more quantitative as well as qualitative data beside tapping issue pertaining to organizational culture and scope of market. Unfortunately, in the majority of cases the senior executives of the organizations were not enthusiastic about the idea of members of staff being interviewed. The idea of the case-study almost jeopardized the cooperation of the top management of the Pakistani organization who equated the technique with the job of the tax-man! However, the questionnaire given to the Sudanese sample

included Form-B of the Organizational Climate Questionnaire by Litwin and Stringer (1968). Unfortunately, preliminary analyses of the statistical properties of this instrument throw doubt on its validity and reliability. Furthermore, cooperation of the British and Pakistani organizations was conditioned on reducing the length of the questionnaire. In view of the theoretical design and assumptions of the study, the Litwin and Stringer's (1968) device was severed to secure collecting the rest of the data.

The second methodological challenge pertains to the inclusion of the Pakistani group. In other words, is the cultural traits of this group "Pakistani" enough to sufficiently justify the treatment of this group as a distinct cultural group. Two aspects give good grounds for the treatment of this group as a distinct cultural group. Firstly, the anecdotal evidence, including the initial observation of the researcher. Secondly, these anecdotal observations were substantiated by evidence driven from the literature. In Chapter Two, issues of the ethnic identity of the Pakistani living in Britain was discussed at length. From theory and empirical evidence, Chapter Two showed how many cultural factors are impeding the assimilation and acculturation of this group into mainstream British culture. Furthermore, this study sought to assess the level of the insularity of the Pakistani organization through the case-study, which top management opposed. However, knowing the organization through personal contacts, it was known that all share holders and employees were Pakistani as were the vast majority of the customers.

To conclude, there is no suggestion that the sampling procedure in this study was perfect in all respects. However, the foregoing discussion attempts to indicate the ways in which efforts were taken to both approximate comparability and to secure cooperation, while at the same time considering the very real limitations of a non-experimental research design. To quote Sekaran (1983):

'At this stage of cross-cultural research it would be advisable to pay appropriate attention to sampling design issues without getting unduly obsessed with them' (p. 65).

Similarly, Brislin and Baumgardner (1971) state that although true random sampling is preferable for the successful completion of research projects, studies conducted with nonrandomly driven samples can also be valuable, especially if they are well described in the methodology section (as has been done here in Section 4.3.3). At least such studies can offer some guidance to other researchers to choose samples more purposefully and relate bits and pieces of data in a more meaningful manner.

4.5) Research Proposition

4.5.1) Power Distance and Uncertainty Avoidance

Since Power Distance and Uncertainty Avoidance are conceptually related to the power relationship construct between a superior and his or her subordinates (in the case of Power Distance), and the notion of coping with uncertainty and ambiguity (in the case of Uncertainty Avoidance), it is predicted that these cultural dimensions should bear a considerable degree of relevance to the communicational behaviour in a superior-subordinate interaction.

4.5.1.1) Power Distance and Communication Behaviour

Power differences between a superior and his or her subordinates may cause distortion in the upward flow of information. The greater the power of a receiver (superior) over the sender (subordinate), the greater the filtering of information detrimental to the welfare of the sender (Campbell, 1958). One way of manipulating unfavourable information in a superior-subordinate interaction is through summarizing and gatekeeping (Read, 1962; Watson, 1965; Watson and Bromberg, 1965). Gatekeeping has been conceptualized as serving as a "psychological substitute " for actual movement up the hierarchical ladder on the part of those who are at the bottom of the power scale (Read, 1962; Kelley, 1951).

In Chapter Two it has been argued that, in general, Sudanese's scores on Power Distance are likely to indicate a large power and authority differences between superiors and subordinates. Essentially, one would expect Sudanese organizations to have more centralized power and authority (Table 12a). Consequently, one would expect such distribution of power to reflect itself on both the quantitative as well as the qualitative attributes of superior-subordinates communication. Hence, the following hypotheses have been formulated.

i) Consequences for the Quantitative Attributes of Communication

The fact that a superior is democratic or autocratic will be realized through the communication behaviour with his or her subordinates. Since Sudanese and Pakistani managers are expected to be perceived as autocratic and/or paternalistic rather than democratic and/or consultative (Chapter Two), upward communication is more likely to be reactive rather than interactive, and so :

Hypothesis 1:

In Sudanese and Pakistani organizations downward communication will be significantly greater than upward communication. Upward communication in the white British organizations is hypothesized to be significantly greater than that of the Sudanese or of the Pakistani in Britain.

In the four styles of management described in Likert's science-based system of management, one important feature is the character of the communication process between superiors and their subordinates (Likert, 1961; 1967). In an authoritarian environment managers have little or no trust in their subordinates, and they hold all of the authority. Subordinates do not participate in the decision-making process, and there is very little upward communication. By contrast, in a consultative or

Table 12a: Connotations of Power Distance as a Social Norm

Large Power Distance	Small Power Distance
Superiors consider subordinates as being of different kind.	Superiors are not that different.
Subordinates consider superiors as being of different kind.	Subordinates are not that different.
Few should be independent.	All should be interdependent
Power holders are entitled to privileges.	All should have equal rights.
Institutions should be as centralized as possible.	Institutions should be as decentralized as possible.
In organizations, control should come from above.	Control should come from within.
Organizational communication should be top-down.	Organizational communication should be up, down and lateral.
Managers make decisions autocratically and paternalistically.	Managers make decisions after consulting with subordinates.
Employees reluctant to trust each other.	Employees show more cooperativeness.

Source: Adapted from Hofstede (1980, p.119), (1979, p.113).

participative environment, there is mutual trust between managers and their subordinates, and communication is in both upward and downward directions.

One variable of the three Power Distance indices describes the prevailing style of management as perceived by the subordinates. This description has been adopted by Hofstede (1980) from Tannenbaum and Schmidt (1958), and it differentiates between whether a manager "tells", "sells", "consults", or "joins". Lately, the description of the fourth type has been changed to a participative "consensus" style, to almost conform with Likert's (1967) "system 4", since the occurrence of the "majority vote style" is seen rarely in practice (Hofstede, 1980). According to Hofstede, this particular item indicates the dominant values about managerial decision-making behaviour in a culture. In a way, these four descriptions implicitly indicate the degree of participation by the subordinates in the decision-making process. Hence:

Hypothesis 2:

The degree of participation (as indicated by the prevailing style of management), will be closely related to the volume of upward communication in each of the three groups.

ii) Consequences for the Qualitative Attributes of Communication

Power differences between superiors and their subordinates should affect such qualitative features as the perceived accuracy of information. In an authoritarian environment, one would expect superiors to withhold most of the information from their subordinates, at the same time subordinates are likely to refrain from summarization and/or gatekeeping while transmitting to their bosses. Consequently, one would expect the degree of Power Distance to affect the qualitative attributes in a superior-subordinate interaction in the following manner:

Hypothesis 3:

Perceived quality of downward communication in the Sudanese and Pakistani organizations should differ from that of the white British ones.

Subordinates in the first two groups should rate downward communication as more accurate than their white British counterparts. To the Sudanese and Pakistani subordinates, downward communication should be perceived as information received from an authority, hence apt to be highly accurate.

Hypothesis 4:

In the Sudanese and Pakistani organizations, summarization to superiors is hypothesized to be significantly less than to their subordinates. Again, participants from the white British organizations are likely to surpass members of the two other groups as far as summarizing and/or gatekeeping to bosses is concerned. The degree of participation should affect frequency of summarizing and/or gatekeeping while transmitting to bosses. The more democratic the superior, the more frequently will his or her subordinates indulge in summarizing and/or gatekeeping.

4.5.1.2) Consequences of Uncertainty Avoidance for Communication

Arab managers have generally been regarded as preferring to play it safe and refrain from risky decisions, and as always sticking to short-span planning and carefully calculated decisions (Patai, 1983). Arabs as well as many other nations have scored high on the Uncertainty Avoidance (Hofstede, 1980; Shackleton and Ali, 1988). One obvious implication for such high intolerance of ambiguity is a correspondingly high degree of formalization. A plausible result of this will be preference for clear requirements and instructions (Table 12b).

However, the precise effect of this diversity of cultural background on preference for a particular mode of communication was hard to anticipate. Prima facie, members of a less formalized culture will adhere less frequently to formal modalities of communication. In other words, if a society shows a high intolerance for ambiguity this is likely to result in more formalized organizations, which in turn will be reflected in employees preference for relatively more formal means of communication. Chapter Eight offers further discussion of the degree of formality of the three channels of communication incorporated in the study. It is concluded that the face-to-face modality frequently features as a formal mode of communication. Thus one can speculate that:

1) Consequences for Channel Selection

Hypothesis 5:

In the Sudanese and Pakistani organizations preference for formal means of communication (namely, written and face-to-face), will be greater than for less formal ones (the telephone). Adherence to less formal modes of communication i.e using the telephone, is hypothesized to be greater among the white British managers than among their Sudanese or Pakistani in Britain.

ii) Consequences for Qualitative Attributes of Communication

While Power Distance is conceptually associated with the authority of persons, Uncertainty Avoidance bears close relation to the authority of the rules (Hofstede,1980). Accordingly, one would expect authority of the rules within organizations which operate

Table 12b: Connotations of Uncertainty Avoidance as a Social Norm

High Uncertainty Avoidance	Low Uncertainty Avoidance
Less achievement motivation	Stronger achievement motivation.
Lower ambition for individual advancement	Stronger ambition for individual advancement.
Hierarchical structures of organizations should be clear and respected.	Hierarchical structures of organizations can be bypassed for pragmatic reasons
Preference for clear requirements and instructions.	Preference for broad guidelines.
Company rules should not be broken.	Rules may be broken for pragmatic reasons.
Conflict in organizations is undesirable.	Conflict in organizations is natural.
However, initiative of subordinates should be kept under control.	Delegation to subordinates can be complete.
Lower tolerance for ambiguity in perceiving others.	Higher tolerance for ambiguity in perceiving others.

Source: Adapted from Hofstede (1980, pp. 176-177).

in countries with high uncertainty avoidance tendencies to curtail any forces leading to the distortion of upward communication. Hence, it has been predicted that:

Hypothesis 6

The higher the level of tolerance of ambiguity, the more will downward communication be rated as accurate.

Hypothesis 7:

High intolerance of ambiguity should affect frequency of distortion to upward information through summarization and/or gatekeeping.

4.5.2) Interpersonal Factors and Superior-subordinate Communication

The three interpersonal variables of Trust in Superiors, Upward Influence and Mobility Aspirations have frequently been shown to influence individual communication in organizations. The literature pertaining to these three factors is reviewed in Chapter Three. The following hypotheses were formulated in the light of the available, albeit tentative, body of research. The hypotheses which the present study will test in relation to the impact of these three interpersonal factors on superior-subordinate communication behaviour are:

Hypothesis 8:

Perceived trust in superiors in the three groups would affect the perceived accuracy of information received from above in a positive way. That is to say, the more the subordinates

trust their superiors, the more they will consider downward communication as accurate.

Hypothesis 9:

The degree of trust should affect the frequency of manipulating upward communication through summarization and/or gatekeeping in a negative way. That is, the more the subordinates trust their superiors, the less they will adhere to summarization and/or gatekeeping.

Hypothesis 10:

Perceived influence of superiors should correlate with the magnitude of upward communication inversely. In other words, the more influential the superior, the less will the subordinates interact with him/her.

Hypothesis 11:

The greater the superior's upward influence, the more accurate will downward communication be perceived. The greater the superior's influence, the less likely will his or her subordinates engage in summarization and/or gatekeeping while they are transmitting upward. Manipulation of upward information is assuming power.

Hypothesis 12:

The higher the aspirations for promotion, the more the interaction with superiors.

Hypothesis 13:

The higher the aspirations for promotion, the more the desire for interaction with superiors.

Hypothesis 14:

The higher the subordinate's aspirations for upward mobility, the more he or she will adhere to summarization and/or gatekeeping while communicating with superiors.

Figure 2 shows the pattern of the hypothesized relations between the cultural dimensions and the interpersonal factors on one hand (independent variables), and communicational behaviour on the other (dependent variables). It summarizes the proposed interrelationships between the predictors (Independent variables) and the criteria (the dependent variables).

The predictors are comprised of the two cultural dimensions of Power Distance and Uncertainty Avoidance and the three interpersonal factors of Trust in Superiors, Upward Influence and Mobility Aspirations. These two categories of predictors are supposed to exert an impact on the criteria (i.e issues pertaining to organizational communication). The criteria consist of four major aspects of organizational communication. These include; qualitative attributes, qualitative attributes, directionality of flow, and modalities of communication. Each one of these is given a similar pattern to the one given to the items it composes. For instance, modalities of communication includes written methods, face-to-face and the telephone modalities.

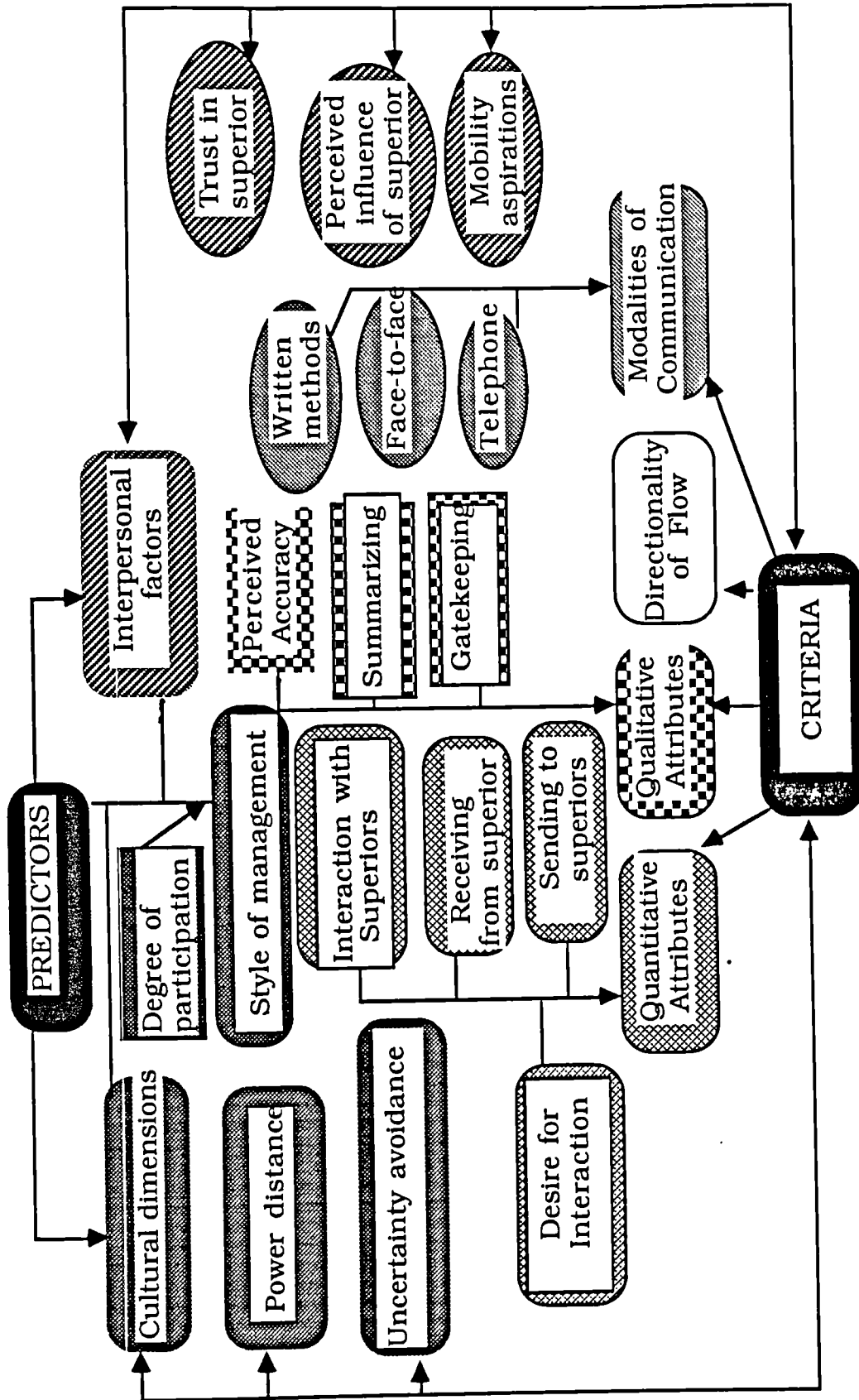


Figure 1 : Pattern of the hypothesized relations between cultural dimensions, interpersonal factors and organizational communication.

CHAPTER FIVE

National Culture and Work-related Values

5.1) Introduction

Chapter Two highlighted the ongoing dispute between the proponents of the culture-free thesis, and those of the so-called culture-specific or culturalist school. It made it clear that the culturalist school have raised considerable doubt regarding the transferability of management methods made in the West to other parts of the world (Hofstede,1980a; Hunt,1981; Jenner,1982). Advocates of this line of thinking have argued that, since societies exhibit distinct and persistent cultures, organizations in different social contexts are likely to experience the implications of such variation. Organization members from different cultures will differ in their need for achievement, affiliation, security and self-actualization, and these have a close relationship to behaviour within an organization. Societies also differ in the norms and attitudes of people towards authority. Consequently subordinates from different societies react differently to supervisors and will experience different organizational rules considering rights and duties (e.g Tannenbaum,1980).

A prominent study from the culturalist school of thought is the one reported by Hofstede(1980a) (in his book Culture's Consequences). Hofstede carried out an empirical analysis which resulted in a framework of four dimensions for differentiating national cultures. While many cross-cultural researchers have been accused of misconceptualizing the term "culture", and using it in an all-inclusive manner(see Chapter Two), Hofstede attempts to be specific about the elements of which culture is composed. In fact conceptualization of the term "culture" is proving to be

very controversial. For an in depth investigation of this issue see Chapter Two.

As has been prescribed in Karl Popper's work, it is of utmost importance in the social sciences for theoretical propositions to withstand repeated and rigorous tests (Popper, 1959). This is what the data reported in this chapter seek to do. The cultural dimensions of Power Distance and Uncertainty Avoidance depicted by Hofstede were tested using samples from seven different organizations, four Sudanese, two white British, and a Pakistani organization in Britain, in an attempt to replicate and extend the work of Hofstede (1980).

5.2) An Empirical Model of Culture

Hofstede's work is well known in the area of cross-cultural research and his book *Culture's Consequences* has been extensively reviewed and generally praised (e.g. Blankenburg, 1983; Kidd, 1982; Boungartel, 1982; Triandis, 1982). His data comprised answers of individual employees of IBM to a standardized paper-and-pencil attitude questionnaire. His research project aimed at identifying the fundamental differences in the way people in various countries perceive and interpret their world. The research was based on the strategy of using narrow but well matched samples. Except for nationality, the samples were similar in many respects. They varied only marginally on age and sex. Therefore, it was assumed that systematic and stable differences between respondents from different countries could only be explained by country culture. Hence the position of a particular country was expressed by its index-score on the previously mentioned dimensions.

Hofstede's theory is a simple one: differences in attitudes are the result of the different "mental programmes" that each individual carries, and by which his or her behaviour is determined. These mental programmes are a product of early

childhood, reinforced in later life by socialization and life experience in a cultural group or society.

Hofstede's work is unique in that it uses an empirical survey to build a model of cultures. His sample includes 116,000 subjects from over 40 countries. From this data bank he arrived at four dimensions which differentiate national culture groups. These are defined by Hofstede(1985) as:

- (1) Power Distance, that is the extent to which the members of a society accept that power in institutions and organizations is distributed unequally.
- (2) Uncertainty Avoidance, that is the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity, which leads them to support beliefs promising certainty and to maintain institutions protecting conformity.
- (3) Individualism, meaning a preference for a loosely knit social framework in society in which individuals are supposed to take care of themselves and their immediate families only. This is as opposed to Collectivism, meaning a preference for a tightly knit social framework in which individuals can expect their relatives, clan, or other in-group to look after them, in exchange for unquestioning loyalty.
- (4) Masculinity, that is a preference for achievement, heroism, assertiveness, and material success; as opposed to Femininity, meaning a preference for relationships, modesty, caring for the weak, and the quality of life.

5.3) An Evaluation of the Hofstede's Model

Hofstede's four dimensions correlated significantly with many other external measures collected by others, such as the incidence of domestic political violence, the obligation for citizens to

carry identity cards, and press freedom (Hofstede,1980). Ecological factors also seemed to corroborate these dimensions. A highly significant negative correlation (-0.65) was reported between the degree of Power Distance found for a country and the distance of its capital from the equator (Hofstede,1980). A recent ecological factor analysis of data collected from nine Asian and Pacific countries using Rokeach's Value Survey resulted in five major factors. Four of these factors correlated significantly with the four dimensions previously mentioned (Hofstede and Bond,1984). Furthermore, the usefulness and relevance of these dimensions to the understanding of some organizational processes have been frequently mentioned, including the underlying values of organization development (Jaeger,1986), organizational commitment (Flynn and Solomon,1985), and the cooperativeness and advancement of managers (Rosenstein,1985).

As Triandis has stated, these four dimensions seem to "make sense", and Hofstede has indeed undertaken an extended study which 'will stand as one of the major landmarks of cross-cultural research for many years to come'(Triandis,1980,p.90). Indeed, Hofstede's study is a unique one. It has immense value and great significance for further research and for the development of theories of organizational behaviour. Yet Hofstede's study suffers from some limitations. As Hunt (1981) and others have pointed out, the representativeness of his sample is questionable. One can doubt the generalizability of findings based on a sample drawn from a large multinational company such as IBM. IBM may tend to hire similar persons worldwide reducing national differences ; or the internal climate of such a big multinational company may exert homogeneizing influences on the values of its members. Secondly, Hofstede has been accused of assuming that national cultures do follow country political boundaries, and that his sample did not cater for within country differences. This issue has been highlighted by the fact that a number of the countries included in his sample are multicultural such as U.S.A., Canada, and Belgium) (e.g Jaeger,1983).

5.4) A Replication and an Extension

By identifying the country as the unit of analysis, Hofstede (1980;1980a;1983) differentiated the countries in his sample on the basis of four clusters. A country was allocated to a particular cluster according to its scores on Power Distance Index (PDI) and Uncertainty Avoidance Index (UAI). Between their upper and lower percentile PDI and UAI formed four clusters. Namely, large power distance and weak uncertainty avoidance, large power distance and high uncertainty avoidance, small power distance and high uncertainty avoidance, and small power distance and weak uncertainty avoidance.

The two dimensions of power distance and uncertainty avoidance were chosen because, as Hofstede (1980a) has maintained, they are more relevant for organizational structure and behaviour within an organization. So, PDI is closely related to sharing of power and centralization, while UAI is highly associated with formalization. In the case of Power Distance, and since the superior-subordinate relationship is a pervasive and an intrinsic one in all hierarchically structured organizations, and one that bears great resemblance to earlier relationships in an individual's life (e.g., child-parent, teacher-pupil), the societal values and norms that shapes these earlier relationships will be carried over into organizations (Kakar, 1971). Thus, organizations operating in cultural settings with high Power Distance the distribution of power would be formalized in hierarchies that perpetuates those experienced at home and school. Essentially, employees participation and delegation of power to lower ranks would be highly restricted in organizations operating in cultural settings with great Power Distance. Subsequently, authority and power will be centralized at the top.

On the other hand, Uncertainty Avoidance bear an interrelationship with formalization because it deals directly with the degree to which organizational members, in response to their culturally acquired mental programmes, adhere to rules. Rules generally

serve the purpose of controlling people's behaviour and aim toward making it as predictable as possible. The higher the intolerance for ambiguity and uncertainty, the more likely organization will adopt a large degree of rules and formalization.

The general hypothesis is that being both an Arabic and African country, Sudanese scores on PDI and UAI will be somewhere between these two separate clusters reported by Hofstede. Using the ecological factor (distance between the capital city of a country and the Equator), and with Khartoum, the capital, being the nearest Arabic capital to the Equator, the PDI score should be higher than other Arab countries. As for the white British, it is hypothesized that the scores reported by Hofstede (1980) will be replicated.

Another sample in this study is a group of subjects who identify themselves as British of Pakistani extraction (hereafter will be referred to as Pakistani). The Pakistani in Britain have been included to see whether cultural values related to work change as a result of the exposure such an ethnic group experiences from the mainstream British culture. In other words, it will be interesting to see to what extent there has been an acculturation and assimilation on the part of the Pakistani managers who live in Britain as far as the work-related values are concerned. In some respect, the inclusion of the Pakistani sample can be deemed relevant to the issue of "within country" differences which has been regarded as a weakness in the Hofstede model.

5.5) Power Distance and Uncertainty Avoidance

To measure Power Distance and Uncertainty Avoidance levels in the three cultural groups incorporated in this study, a version of the Values Survey Module (VSM) developed by Hofstede (1982) was administered. The version given to the Sudanese group was translated into the Arabic language and back-translated to check its accuracy (see Chapter Four). Both samples from Britain were given an English version of VSM. The composition of the VSM was

developed by Hofstede to measure differences in values. A value was defined as a 'broad tendency to prefer certain states of affairs over others' (Hofstede, 1980, p.19).

The PDI and the UAI were calculated by Hofstede from the scores on six different items.

5.5.1) Power Distance Index

The PDI was composed of the following three items:

- a) "Employees Afraid":
Percentages of employees perceiving co-workers afraid to disagree with superiors (mean score on a 5-point scale).
- b) "Perceived Manager":
Percentages of employees perceiving their boss as an autocratic or a paternalistic.
- c) "Preferred Manager":
Percentage of employees who prefer a consultative manager.

The theoretical range of the index is from -90 to +210. The values of the 40 countries were in the range 11 to 94.

The questionnaire item that taps subordinates' perception of their fellow workers as afraid to disagree with their superiors, has been considered as a central item for exploring power distance differences between countries. The other two items which make up the PDI were adopted from Tannenbaum and Schmidt (1958). They described four types of boss which differentiate the manager who "tells", "sells", "joins" or "consults". According to Hofstede, the item that refers to the perceived style of these four types of managers indicates the dominant values about managerial decision-making behaviour in a culture. It asks the respondents to state the type that closely describe their current boss. The third item of the PDI, also related to these four types of managers, asks the respondents to state the style most preferable to them.

Thus, whereas the "Employees Afraid" item asks for the perceived behaviour of co-workers, the "Perceived Manager" item asks for the perception of their boss's behaviour. Pascale (1978) suggests that respondents should be asked to assess their superior's decision-making style since, when respondents are asked to assess their own decision-making style, they tend to bias their responses in the direction of being more consultative. The same can be said for "Employees Afraid". Had the respondents been asked to assess how frequent they feel afraid to disagree with their superiors, they may have biased their answers towards a lesser frequency of such an instance. Instead, the question asked them how frequently they perceive their fellow workers as afraid to disagree with their superiors. In contrast to the first two items, which deal with perceptions rather than values, the third item, "Preferred Manager", expresses a value. Hofstede (1980) calls this a "value as the desired".

The statistical analyses showed these three items as factorially stable. In other words, in most of the cases, factor analyses showed that the items that comprise PDI clustered together on the same factor indicating that they are tapping the same dimension (see Table 13 below). Furthermore, Pearson correlations between core items of PDI across the three cultural groups showed significant coefficients in the majority of cases. As can be seen in Table 14 the only exception was in the British group where an insignificant correlation was found between "Employees Afraid" and "Perceived Manager". Hofstede (1980) reported a significant correlation between these two items particularly so when the latter is perceived as autocratic or paternalistic. Knowing that a great majority of the British respondents opted for a democratic or consultative boss, this insignificant correlation between perceived style of management and subordinates' being afraid to disagree with superiors is perhaps expected.

Table 13

Factor Analyses of the PDI and UAI Items in the
Sudanese, British and Pakistani Groups

Items	Sudanese		British		Pakistani	
	Loadings		Loadings		Loadings	
	I	II	I	II	I	II
Preferred Manager	.56	.23	.80	.41	.88	.03
Perceived Manager	.67	.16	.01	.68	.85	.08
Stress	.13	.56	-.60	.44	.56	.64
Employees Afraid	.58	.08	.60	.41	.87	.16
Work Stability	.11	.86	-.45	.14	.10	.81
Rule Orientation	.41	.64	.01	.80	.01	.78
Eigenvalue	1.70	2.13	1.87	1.34	2.64	1.64
% of Variance	24.7	75.3	31.2	22.4	43.9	27.4

5.5.2) Uncertainty Avoidance Index

UAI was composed of the following items:

- a) "Rule Orientation":
The mean score of agreeing with the statement that 'company rules should not be broken - even when the employee thinks it is in the company's best interest'.
- b) "Employment Stability":
The percentage of employees stating that they are intending to work for less than 5 years for the company.
- c) "Stress":
The mean score of stress as expressed in answering the question 'How often do you feel nervous or tense at work?'

Table 14

Pearson Correlation Between the Core Power Distance
Items in the Three Cultural Groups

Cultural Group	a With b		a With c		b With c	
	r	p	r	p	r	p
Sudanese (N=214)	.46	.00	.39	.00	.33	.00
British (N=51)	.40	.00	.64	.00	.16	.25
Pakistani (N=26)	.62	.00	.69	.00	.65	.00

Note:

a- Preferred Manager.

b- Perceived Manager.

c- Employees Afraid.

The theoretical range of the UAI is from -150 to +230. The 40 countries ranged between 8 and 122.

Hofstede (1980) relates the "Rule Orientation" item to the findings of the Aston group (Pugh and Hickson, 1976), in particular to the "structuring of activities". Thus, the higher the intolerance for ambiguity in a particular culture, the more formalized the organizations operating in such a cultural setting will be. The item that taps "Employment Stability" was found to reflect actual behaviour. Scores of this item correlated highly with the level of turnover (Hofstede, 1980). The third item which measures the level of stress is also thought to be connected with intolerance for ambiguity. The face validity of these three items is indeed very high, and they seem to form 'one societal Uncertainty Avoidance syndrome' (Hofstede, 1980b, p. 120). Table 15 assesses the interrelation between the core items of UAI.

Table 15

Pearson Correlation Between Core Uncertainty Avoidance
Items in the Three Cultural Groups

Cultural Group	a With b		a With c		b With c	
	r	p	r	p	r	p
Sudanese	.55	.00	.41	.00	.59	.00
British	.28	.05	.41	.00	.11	.43
Pakistani	.35	.05	.36	.05	.37	.05

Note:

a- Stress.

b- Employment Stability.

c- Rule Orientation.

In a factor analyses across the cultural groups (Table 13 above) these three items clustered in independent factors with adequate eigenvalues and were responsible for a considerable portion of the variance. Pearson correlations between the core items of UAI are displayed in Table 15. As can be seen, in the majority of cases the correlations were significant. The only exception was in the British group where "Employment Stability" showed an insignificant ($p > .05$) correlation with "Rule Orientation". Across 40 countries a significant correlation of .59 was found between these two items (Hofstede, 1980). One factor which could be responsible for the weak relationship between these two items in Britain is the high level of unemployment. This could force people to work for longer periods than they would have liked given the opportunity of another job.

5.6) Scores of the Research Groups

In an evaluation of replication studies using VSM , it has been found that an adjustment in the observed PDI and UAI scores is necessary (Bosland,1985). Some other factors besides the respective national culture were found to have an impact on PDI and UAI scores. These included factors such as the educational level, mean age, occupational level of the sample, and perhaps the organizational subculture . Bosland has calculated a table which indicates the number of points to be added or subtracted from the observed PDI and UAI on the basis of years of education. So with reference to the PDI scores, we should subtract 4 from the Sudanese score, 26 from the white British score, and 15 from the Pakistani in Britain. In the case of UAI we should subtract 9 from the Sudanese score, and add 8 and 2 to the white British and Pakistani in Britain respectively.

Table 16 shows the PDI indices and the overall PDI scores for the Sudanese, British, and Pakistani groups. It also shows the PDI scores adjusted for education. Table 17 shows the UAI indices and the overall UAI scores for these three ethnic groups. It also shows the UAI scores adjusted for education.

Figure 3 (page 166) shows a Power Distance x Uncertainty Avoidance plot for Western and Eastern African countries and for Arab countries including the Sudan. It also shows the PDI x UAI scores for Great Britain and Pakistani as reported by Hofstede (1983) and the ones reported in this study. The overall PDI score of the Sudanese managers is nearer to the PDI scored by some other Arabic and African nations (Hofstede,1983). Hofstede reported a PDI of 85,80, and 65 for the Arab, West African, and East African groups respectively. Again, the UAI scores of the Sudanese group is similar to other Arabic and African nations. Hofstede (1983) reported a UAI of 65, 50, and 54, for the Arab, East African; and West African groups respectively. With great power distance and weak uncertainty avoidance, Sudanese scores reported here are in harmony with some of the Arab, East and West African nations.

It can also be seen that while the British managers in this study scored very close to the ones reported by Hofstede (i.e low power distance and weak uncertainty avoidance), the Pakistani in Britain have scored closer to their country of origin (i.e great power distance and high uncertainty avoidance).

Table 16: PDI for the Sudanese, British, and Pakistani Groups

The Three Indices of PDI					
(a)	%(b)	%(c)	PDI=	PDI	
Not afraid to disagree	Superiors are autocratic or paternalistic.	Prefer consulative manager.	135-25a+b-c	Adjusted for education.	
Ethnic group					
Sudanese	2.13	81.48	76.83	86	80
British	3.12	70.00	56.00	71.00	45
Pakistani	3.31	74.60	61.50	65.35	50

5.7) Summary and Discussion

In the discussion, emphasis will first be placed on the overall scores on PDI and UAI. The results reported here provide support for Hofstede's dimensions of Power Distance and Uncertainty Avoidance. With large Power Distance and weak Uncertainty Avoidance, Sudanese scores reported here are typical of African nations. Yet it can be seen that Sudan does not fit exactly into either the Arab cluster or into the East African and West African

Table 17: UAI for the Sudanese, British, and Pakistani Groups

The Indices of UAI					
(a)	(%b)	(c)	UAI	UAI	
Rule	employment	Stress	300-30a-	adjusted	
orienta-	stability		(% more	for educat-	
tion.			than 5	ion.	
			years in b		
			-40 x c.		
Ethnic group					
Sudanese	2.21	68.53	2.78	53.97	45
British	3.22	46.10	3.56	15.00	23
Pakistani	2.85	34.60	3.10	55.90	58

ones (Figure 3 below). This is as hypothesized, and is no doubt due to the unique ethnical composition of the Sudan. Sudan is part of both African and Arab world, yet does not qualify to totally affiliate with either. This is because Sudan is an amalgam of many ethnic groups, some of which are of Arabic origin and others from an African background.

Sudan's PDI reported here show some similarity with the Arab, East and West African clusters. With 80 (after adjustment) , 85, 65, and 80 respectively, they could all be classified as members of the large PDI cluster (Hofstede,1983).

With regard to the UAI, Sudan's score of 45 (after adjustment) is similar to those of the East and West African groups reported by Hofstede. Their scores were 50, and 54 respectively. Sudan's

score is low enough to include it in the weak UAI and Large PDI cluster along with African and some other nations.

The closeness of the Sudanese score on PDI to the Arab, and on both PDI and UAI to those of the East African groups, is understandable since Sudan is generally regarded as an Arabic and/or East African country. The intriguing result is the closeness between the Sudanese score on PDI and that of the West African cluster. This could be the result of two factors. First, quite a number of Western Africans, especially from Chad and Nigeria, have migrated through the years to western and central parts of the Sudan for religious, political, and economic reasons. After the colonial occupation of West Africa, and with the direct overland route from there to Mecca passing through the Sudan, many West African Muslims migrated eastwards to go on pilgrimage to Saudi Arabia. Many settled in the Sudan (Al Nagar, 1968; Birks, 1978). Also, a considerable number of immigrants from Senegal, Nigeria and Chad came to the Sudan to work in the Gezira Cotton Scheme, many of whom have now settled there (Davies, 1964).

Secondly, the Islamic religion predominates in the Sudan as well as many parts of Western Africa and is a powerful influence in both cultures. It is quite significant that the code of Islam most widely adhered to to-day in the Sudan has closer affinities with West Africa than with other Islamic nations to the north and east. Furthermore, there is a very active interchange of Islamic missionaries between the Sudan and Western Africa with the African Islamic Centre being in Khartoum. It is quite obvious that religious practices and beliefs could shape the values and attitudes that prevail in a society. This is especially so in the case of Islam which covers every aspect of the social and personal life of individuals.

Sudan's position on PDI being nearer to the Arab group is also justifiable. Three dominant characteristics, namely, Arabic

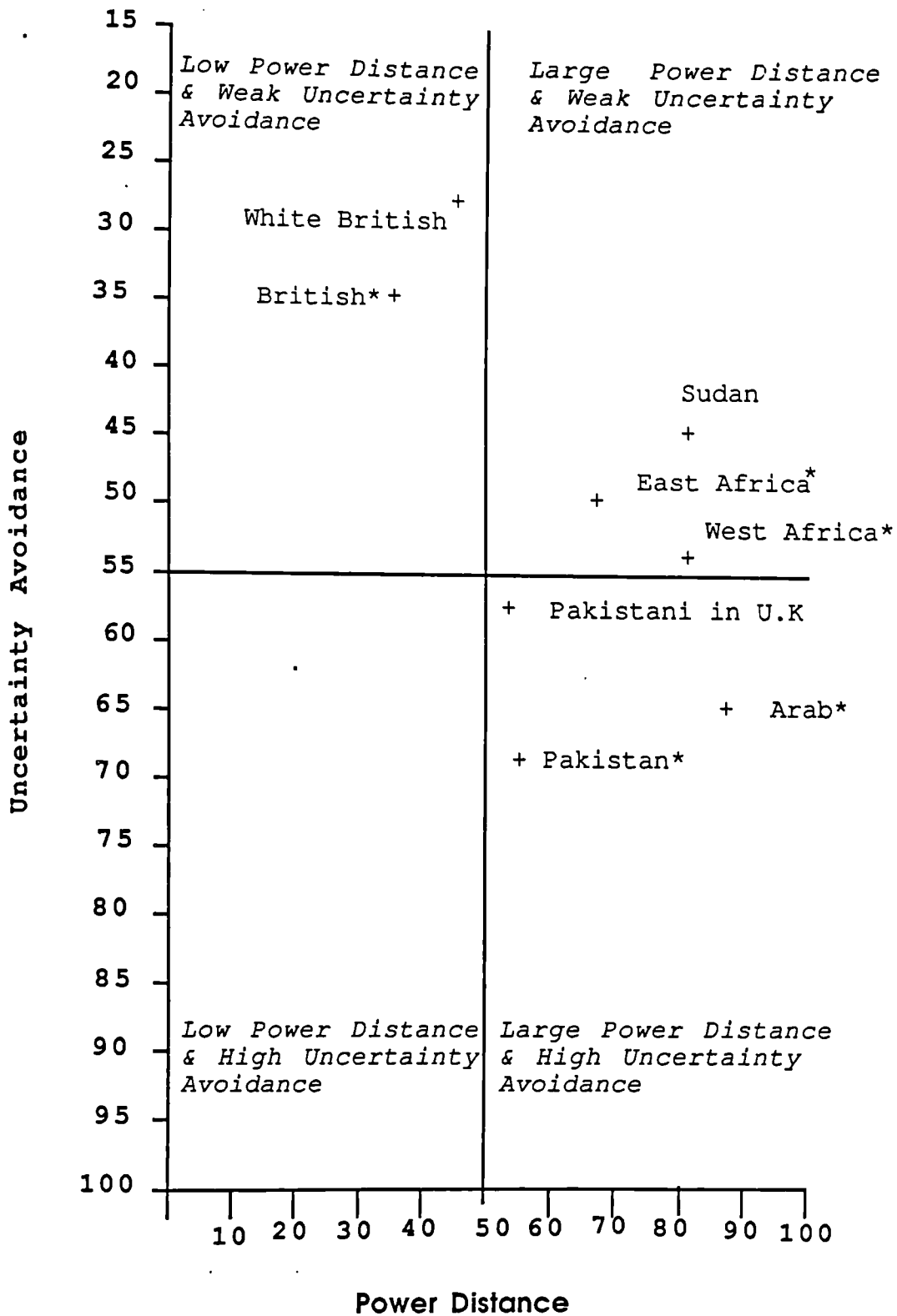


Figure 3 PDIXUAI For The Sudanese, East African, West African, Arab Countries, Pakistan Pakistani In U.K, And Great Britain.

* As reported by Hofstede (1983).

blood, Arabic language and Islam, draw the Sudanese more and more northwards to the Arab world rather than to the African nations to the South and West. Sudan, as well as other Arab nations, is dominated by certain values such as submission, obedience and respect of the rule. Both religion and tribal relations dictate the attitudes of individuals towards authority and power. Arabs appear to share these values despite living in different economic and political conditions (Muna,1980; Polk,1980; Badawy,1979; Ali and Al-Shakis,1985).

Unfortunately, Hofstede (1980) does not report the scores of each individual country of the Arabic and African nations, in which case comparison could have been more precise.

It is obvious that there are significant differences on both PDI and UAI between the Sudanese, the white British, and the Pakistani in Britain. The differences between the British managers and the Sudanese managers lie in accordance with the results of other research (e.g Ronen and Shenkar,1985). An interesting result, however, is the great difference in both PDI and UAI between the white British and the Pakistani in Britain. As figure 1 illustrates, the Pakistani are much closer to their country of origin than to the scores of their present home.

Quite a number of paradigms have been advocated for viewing the ethnicity and the acculturation and assimilation process (e.g. Dashefshy and Shapiro,1974; Glazer,1976). We do not intend to discuss again the cultural and/or the psychocultural aspects that hinder or enhance the acculturation and assimilation process of the Pakistani into the mainstream culture in Britain (see Chapter Two), but it suffices to say that the Pakistani culture of origin plays a predominant role in impeding the process of their assimilation. With such great variance in major cultural factors as religion, language, family structure, attitudes and values, one would expect very little fit or resemblance between the Pakistani and the mainstream British culture (Mithum, 1983). Being a group of people who speak a common language and share the same cultural

traditions, the Pakistani can fairly be defined as an ethnic group (Hicks and Leis, 1977).

To conclude, the overall PDI and UAI of the Sudanese, white British and Pakistani groups reported here provide support for Hofstede's (1980) dimensions of Power Distance and Uncertainty Avoidance. The overall scores allocates Sudan to a position one would expect knowing the scores of some other Arabic and African nations with which Sudan shares cultural and geographical attributes. As expected, the white British and the Pakistani in Britain scored closer to Great Britain and Pakistan respectively.

What is needed now is an understanding of the implications of these cultural dimensions on specific organizational processes and facets. This is what Chapters Six and Seven will attempt to do with Power Distance and Uncertainty Avoidance respectively. In each case, issues pertaining to organizational communication were taken as organizational facets likely to reflect differences between these three cultural groups. It was predicted that these differences can be attributed to the cultural differences found and discussed in this chapter.

CHAPTER SIX

General Features of Communication Across the Research Groups

6.1) Introduction

Within a hierarchically structured organizational setting, formal information flows vertically (downward and upward) and/or horizontally (laterally). Of the two kinds, perhaps vertical (superior-subordinate) flow of communication is the most frequent and the most important. This, then, is the type of organizational communication this chapter will deal with. The purpose of this chapter is to describe, compare and contrast the general features of superior-subordinate communication behaviour of the Sudanese, British and the Pakistani organizations. Results of tests for significance of differences across these three cultural groups in the case of the Textile, and between the Sudanese and the British in case of the Military organizations will be reported and discussed. Only results of the between organizational comparisons (i.e across the cultural groups) will be presented in the chapter. Tables that contain the results of the within organizational differences (i.e between superiors and subordinates of the same organization) will be presented in Appendix C. Because of the fact that this thesis is not principally concerned with within organizational differences, there is no chapter and only little discussion on these differences. The interested reader is referred to Appendix C, Tables 1 to 4 and 7 to 11. However, such results will be referred to and discussed so as to enrich our discussion of the between groups' results.

Three main aspects of superior-subordinate communication behaviour will be considered. These include, quantitative attributes, directionality of information flow, and qualitative attributes of their interaction. The fourth factor on which these three cultural groups will be compared and contrasted pertains to

communication within an organization in general. It is frequency of adhering to a medium to convey information. Frequency of adherence to three modalities has been investigated, namely, written, face-to-face, and the telephone (note: medium, method and modality will be used to convey the same meaning, and will be used interchangeably).

6.2) Quantitative Attributes

6.2.1) Time Spent on Interaction with Superiors versus with Subordinates

Comparisons between percentage of time spent on interaction with superiors versus subordinates in the three cultural groups are shown in Table 1 (Appendix C). It was found that, frequency of interaction with subordinates was significantly greater than with superiors in all seven organizations. T-values are; 5.94 ($p < 0.01$); 3.10 ($p < 0.01$); 4.70 ($p < 0.01$); 3.12 ($p < 0.01$) in the Sudanese Sugar, Textile, Cement and Military organizations respectively. The British Textile and Military organizations scored a t-value of 4.50 ($p < 0.01$), and 4.01 ($p < 0.01$) respectively. The Pakistani Textile organization scored a t-value of 5.54 ($p < 0.01$). These findings are consistent with previous research which has found that managers in general interact more with their subordinates than with their superiors or peers (Dubin and Spray, 1964; Luthan and Larsen, 1986).

6.2.2) Interaction with Subordinates

In Table 18 an attempt was made on assessing the significance of difference, if any, across the three cultural groups regarding percentage of time spent on interaction with subordinates. It can be seen that two significant difference are found. The first one was between the Sudanese and Pakistani groups ($t=3.58$, $p < 0.01$) in the textile industry. The second one was between the Sudanese and the British ($t=2.27$, $p < 0.05$) again in the textile industry. No significant difference was found between the British and the

Pakistani managers from the textile organizations as regarding time spent on interaction with subordinates.

When testing for difference between means of time spent interacting with subordinates in the Sudanese and British Military, the difference was also found to be insignificant (see Table 18).

These results imply that Sudanese managers spent less time on interaction with their subordinates than their Pakistani or British counterparts in the Textile, with the difference between the Pakistani and the British, and between the British and the Sudanese in the Military being insignificant.

6.2.3) Interaction with Superiors

Tests for differences between means of percentage of time spent on interacting with superiors across the three cultural groups in the Textile and Military organizations are shown in Table 19. As can be seen, there is a statistically significant difference between the Sudanese on the one hand, and both the British and Pakistani on the other with t-values of 5.36 ($p < 0.01$), and 4.37 ($p < 0.01$) respectively. It seems that Sudanese managers interact with their superiors more than do their British and Pakistani counterparts. Table 19 shows that the difference between percentage of time spent on interaction with superiors in the British versus the Pakistani was insignificant.

Results of the significance of difference between means of time spent on interaction with superiors in the Sudanese and British Military organizations are also shown in Table 19. As was the case for the civilian organizations, time spent by Sudanese officers was significantly greater than that of their British counterparts ($t=2.05$, $p < 0.05$). Thus, these results indicate that in general, Sudanese managers spent more time on interaction with

their superiors than their British and/or Pakistani counterparts.

Regarding quantitative attributes of superior-subordinate interaction within organizations these results show that in all seven organizations time spent on interaction with subordinates was significantly greater than that spent on interaction with superiors.

Table 18

Interaction with Subordinates Across the
Cultural Groups

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	42.26	10.17	3.58	77	0.00
Pakistani	53.65	17.64			
Sudanese	42.26	10.17	2.27	73	0.05
British	51.50	24.64			
Pakistani	53.65	17.64	0.34	46	—
British	51.50	24.64			
<u>Military</u>					
Sudanese	42.80	14.43	1.95	77	—
British	51.72	25.75			

Regarding the quantitative attributes of vertical interaction (i.e. with superiors and/or with subordinates) across the three cultural groups, and from the evidence available at present, it seems that there was no significant difference between the British and the Pakistani both in upward and downward interactions. Regarding the Sudanese and the British on one hand, and the Sudanese and the Pakistani on the other, these findings indicate that downward interaction was significantly less in the Sudanese group. However, the difference between the Sudanese and the British Military was insignificant.

With reference to upward interaction across these three cultural groups in the Textiles, it was found that Sudanese managers interact more frequent with their superiors than do their British or Pakistani counterparts. Likewise, in the Military, Sudanese officers surpassed their British counterparts in percentage of time spent on interaction with superiors.

Results pertaining to frequency of upward interaction across the three cultural groups are antagonistic to what was predicted in hypothesis 1. The assertion was that, due to the prevailing style of management (which is predominantly autocratic and/or paternalistic) one would expect interaction with superiors in the Sudanese participants to be significantly smaller than that of at least their British counterparts who showed a predominantly participative or consultative style of management. Having said that, results of the Sudanese group may have resulted from factors other than the possibility of a participative atmosphere being enjoyed by this group. The closeness of supervision one would expect as an outcome of authoritarian styles of management may be responsible. In other words, communication by Sudanese subordinates could be reactive rather than interactive, and since it was shown that in all organizations downward interaction was by far greater than upward interaction, the explanation alluded to above seems to be a plausible one.

Table 19

Interaction with Superiors Across the Cultural Groups

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	34.15	11.51	4.37	77	0.00
Pakistani	20.96	14.63			
Sudanese	34.15	11.51	5.36	73	0.00
British	17.41	14.10			
Pakistani	20.96	14.63	0.76	46	0.50
British	17.41	14.10			
<u>Military</u>					
Sudanese	33.30	9.77	2.05	77	0.05
British	22.48	19.08			

6.3) Directionality of Communication Flow

Section 6.2.1 above examines how frequent superiors and subordinates interact with one another. This section will focus on the directionality of information flow. Section 6.3.1 and section 6.3.2 will deal with directionality of information flow within organizationally speaking. Section 6.3.1 will examine percentage of time spent on receiving from superiors versus that spent on receiving from subordinates. Section 6.3.2 will deal with percentage of time spent on sending to superiors versus to subordinates.

To compare and contrast the three cultural groups sections 6.3.3 and 6.3.4 will examine, across these cultural groups, directionality downward and upward respectively. Directionality downward is composed of receiving from superiors and sending to subordinates (sections 6.3.3.1 and 6.3.3.2, respectively). Directionality upward will cover receiving from subordinates and sending to superiors (sections 6.3.4.1 and 6.3.4.2, respectively).

6.3.1) Receiving from Superiors versus from Subordinates

Table 2 (Appendix C) shows that there was a significant difference between time spent on receiving from superiors compared to subordinates in all seven organizations. Apart from the British Military, all respondents reported that they spent more time receiving from their subordinates than from their superiors. In the Sudanese Sugar, Textile, Cement, and Military organizations t-values are 6.34 ($p < 0.01$); 3.56 ($p < 0.01$); 3.41 ($p < 0.01$); 4.08 ($p < 0.01$) respectively. T-values of the British and Pakistani Textile organizations are 2.99 ($p < 0.01$) and 5.92 ($p < 0.01$) respectively.

The odd one out was the British Military organization. Although the difference was significant ($t = 2.36$, $p < 0.05$), their result indicate that they spent more time receiving from superiors than from their subordinates. This result of the British Military could be attributed to the nature of organization. Although results from the Sudanese Military were different, one would generally expect Military personnel to receive from their superiors more than they do from their subordinates.

6.3.2) Sending to Superiors versus to Subordinates

Table 3 (Appendix C) shows that in the four Sudanese and the Pakistani organizations, sending to subordinates was significantly greater than to superiors. T-values in the Sudanese Sugar, Textile, Cement, and Military organizations are $t = 6.03$, $p < 0.01$; $t = 3.66$, $p < 0.01$; $t = 3.86$, $p < 0.01$; $t = 3.66$, $p < 0.01$ respectively. The

Pakistani organization shows a t-value of 4.83 ($p < 0.01$). The only exception was the two British organizations where the difference approached significance (Textile, $t = 1.99$, $p < 0.06$; Military, $t = 1.82$, $p < 0.08$).

Within-organizational Differences

In sections 6.3.1 and 6.3.2 above, within-organizational differences between receiving and sending to superiors versus to subordinates were reported. T-tests findings show that, apart from the British Military, receiving from superiors was significantly greater than from subordinates. Also it was found that sending to subordinates was significantly greater than to superiors in all four Sudanese organizations and the Pakistani Textile. These results would indicate, at least as far as the Sudanese and the Pakistani organizations are concerned, that downward communication is generally greater than upward communication. These results are in line with the ones reported earlier (Table 1, Appendix C), and they similarly support the findings of Dubin and Spray (1964) and Luthans and Larsen (1986). In the following two sections emphasis will be made on differences across the three cultural groups as regarding directionality downward and upward.

6.3.3) Directionality Downward

Downward communication is generally initiated by management and flows downward to subordinates. It usually conveys information about objectives and goals, policies, job descriptions, evaluations and feedback. Two dimensions of superior-subordinate interaction tap this factor. These include, percentage of time spent on receiving from superiors, and percentage of time spent on sending to subordinates.

6.3.3.1) Receiving from Superiors

Table 20 shows the results of testing for mean differences in time spent on receiving from superiors across the three cultural groups. It indicates that Sudanese managerial staff of the Textile organization generally spent more time receiving from superiors than their British or Pakistani counterparts ($t=2.54$, $p<0.01$; $t=4.57$, $p<0.01$; respectively).

Results in the Military organizations were different from those found in the civilian ones between the Sudanese and the British groups. Table 20 shows that British officers spent more time than their Sudanese counterparts on receiving from their superiors. This seems obvious in the light of what has been reported previously. Of all seven organizations, the British Military was the only one to show that receiving from superiors was significantly greater than from subordinates (Table 2, Appendix C).

6.3.3.2) Sending to Subordinates

When testing means for difference in sending to subordinates across the three cultural groups, Table 21 shows that the only significant difference existed between the Sudanese and the Pakistani groups in the Textile industry. It seems that Pakistani managers spend more time sending to their subordinates than do their Sudanese counterparts.

Although it is clear that, within organizations, percentage of time spent on sending information downward is far greater than upward, across groups differences are not so clear. This is particularly the case as far as differences on directionality downward are concerned.

Table 20

Receiving from Superiors Across the
Three Cultural Groups

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	34.81	11.05	4.57	77	0.00
Pakistani	21.15	14.58			
Sudanese	34.81	11.05	2.54	73	0.01
British	26.45	16.27			
Pakistani	21.15	14.58	1.12	46	-
British	26.45	16.27			
<u>Military</u>					
Sudanese	34.00	10.55	2.95	77	0.01
British	46.03	24.87			

Table 21

Sending to Subordinates Across the
Cultural Groups

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	43.77	10.92	2.44	77	0.02
Pakistani	51.73	17.49			
Sudanese	43.77	10.92	0.15	73	—
British	43.18	23.17			
Pakistani	51.73	17.49	1.42	46	—
British	43.18	23.17			
<u>Military</u>					
Sudanese	48.00	15.12	0.06	77	—
British	47.70	27.60			

6.3.4) Directionality Upward

Upward communication is generally initiated at the lower parts of an organization and flows to management principally to report on activities and general feedback. It is important for a number of reasons neatly summarized by Sholtz (1962, p.61):

- 1 It provides management with needed information for decision-making.
- 2 It helps employees relieve the pressure and frustration of the work.

- 3 It enhances the employees' sense of participation in the enterprise.
- 4 It serves as a measure of the effectiveness of the downward communication.
- 5 As a bonus, it suggests more rewarding uses of downward communication for the future.

Table 22

Receiving from Subordinates Across the
Cultural Groups

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	44.34	09.86	3.71	77	0.00
Pakistani	55.77	17.10			
Sudanese	44.34	09.86	1.01	73	-
British	48.18	22.71			
Pakistani	55.77	17.10	1.29	46	-
British	48.18	22.71			
<u>Military</u>					
Sudanese	47.80	14.40	4.88	77	0.00
British	26.21	24.42			

6.3.4.1) Receiving From Subordinates

Table 22 shows that Pakistani managers spent more time receiving from their subordinates than do Sudanese managers ($t=3.71$, $p<0.01$). The difference between the Pakistani and the British on

the one hand, and the British and the Sudanese on the other, was insignificant. In the Military organizations, also shown in Table 22, there was a significant difference between the Sudanese and the British regarding percentage of time spent on receiving from subordinates. The Sudanese officers spent more time than their British counterparts in receiving from subordinates ($t=4.88$, $p<0.01$).

6.3.4.2) Sending to Superiors

Table 23 shows that, when testing for differences in mean time spent on sending to superiors across the three cultural groups in the Textile and the Military, the only significant difference was found between the Sudanese and the Pakistani Textiles. Table 23 shows that Sudanese managers spent more time than their Pakistani counterparts on sending upward ($t=3.85$, $p<0.01$).

Table 23 also shows that the difference between mean time spent on sending to superiors in the Sudanese and the British Military was insignificant.

So, as in the case of directionality downward, differences across these three cultural groups as far as directionality upward is concerned does not seem to be that significant.

6.4) Qualitative Attributes

6.4.1) Perceived Accuracy.

As can be seen in Table 4 (Appendix C), there was a significant difference between the degree of perceived accuracy of information received from superiors versus that received from subordinates. The Sudanese Sugar, Textile, Cement, and Military organizations scored t-values of; 14.62 ($p<0.01$); 2.23 ($p<0.01$); 3.51($p<0.01$); and 4.92 ($p<0.01$) respectively. In the British Military and

Table 23

Sending to Superiors Across the
Cultural Groups

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	34.06	10.33	3.85	77	0.00
Pakistani	23.46	13.55			
Sudanese	34.06	10.33	1.84	73	0.10
British	27.96	18.17			
Pakistani	23.46	13.55	0.98	46	0.40
British	27.96	18.17			
<u>Military</u>					
Sudanese	34.50	12.95	0.72	77	0.50
British	31.76	22.12			

Textile organizations, the t-values are 8.67 ($p < 0.01$) and 3.10 ($p < 0.01$) respectively. The Pakistani organization scored a t-value of 2.61 ($p < 0.05$).

Hence, these results indicate that, within organizationally speaking, information received from above are more likely to be perceived as accurate than those received from subordinates.

Once again, tests for differences between means across the three cultural groups in the case of the Textile industry, and between the Sudanese and British in the case of the Military, were

calculated. As shown in Table 24 below, for the Textile and the Military, there was no significant difference between these three cultural groups in their perception of the degree of accuracy of information received from above.

Table 24

Perceived Accuracy of Downward Communication

Cultural group	Mean	S.D	T-value	df	P
<u>Textiles</u>					
Sudanese	2.51	1.05	0.28	77	—
Pakistani	2.23	0.82			
Sudanese	2.51	1.05	0.33	73	—
British	2.59	0.96			
Pakistani	2.23	0.82	1.41	46	—
British	2.59	0.96			
<u>Military</u>					
Sudanese	2.16	0.79	0.10	77	—
British	2.52	0.91			

6.4.2) Frequency of Summarization

Table 5 (Appendix C) shows results of t-tests between means of frequency of summarizing while transmitting to superiors versus while transmitting to subordinates. There was a significant difference in the four Sudanese organizations (Sugar, $t=18.56$, $p<0.01$; Textile, $t=10.50$, $p<0.01$; Cement, $t=8.31$, $p<0.01$; and

Military, $t=3.04$, $p<0.01$). The difference was also significant in the Pakistani organization ($t=4.12$, $p<0.01$). However, there was no significant difference between the means of summarizing to superiors versus summarizing to subordinates in the British organizations. It seems that Sudanese and Pakistani managers summarize more while transmitting downwards than when they are transmitting to superiors, while British managers summarize equally to bosses and subordinates.

Table 25

Summarizing to Superiors Across the
Three Cultural Groups

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	4.36	1.69	3.39	77	0.01
Pakistani	3.04	1.48			
Sudanese	4.36	1.69	4.74	73	0.01
British	2.50	1.14			
Pakistani	3.04	1.18	1.39	46	0.20
British	2.50	1.14			
<u>Military</u>					
Sudanese	6.02	1.72	10.92	77	0.00
British	2.28	0.92			

Results of differences between means of summarizing to superiors across the three cultural groups in the Textiles are shown in Table 25. It can be seen that, while there was a statistically significant difference between the Sudanese on the one hand and both the British and Pakistani groups on the other ($t=4.74$, $p<0.1$; $t=3.39$, $p<0.01$ respectively), the difference between the British and the Pakistani was not significant. Results of the Sudanese Textile show that their managers summarize less than their British or Pakistani counterparts while they are transmitting upward.

Similarly, Table 25 shows that British military officers summarize more than their Sudanese counterparts while transmitting to their superiors ($t=10.92$, $p<0.01$).

To recapitulate, it seems that Sudanese and Pakistani managers summarize less while communicating with their superiors than to their subordinates. To the British it makes no difference who was going to receive the information, and their summarization upward was almost the same as their summarization downward. Although the Pakistani summarization to superiors is less than to subordinates, it appeared to be greater than that of their Sudanese counterparts.

6.4.3) Frequency of Gatekeeping

Results of t-tests between means of frequency of gatekeeping while passing information to superiors versus to subordinates in all seven organizations are shown in Table 7 (Appendix C). There was a significant difference in two Sudanese organizations (Textile, $t=3.58$, $p<0.01$; Cement, $t=3.09$, $p<0.01$), the two British organizations (Military, $t=2.03$, $p<0.05$; Textile, $t=5.46$, $p<0.01$), and in the Pakistani Textile ($t=3.86$, $p<0.01$). These results indicate that, while in the Sudanese and British organizations gatekeeping takes place when passing information to superiors, in the Pakistani organization gatekeeping occurs more while they are passing to their subordinates.

Table 26 shows the results of t-tests between means of gatekeeping while passing information to superiors across the three cultural groups. There was no significant difference between the Sudanese and either the British or the Pakistani. However, gatekeeping while passing to superiors in the British Textile organization was significantly greater than in the Pakistani Textile organization ($t=2.61$, $p<0.05$). This is an expected result, bearing in mind that Pakistani managers have shown that they gatekeep more while passing downward than when they are passing to their bosses (see Table 7, Appendix C).

In the Military organizations (Table 25) it can be seen that, British officers surpassed their Sudanese counterparts in gatekeeping while passing to superiors ($t=5.59$, $p<0.01$).

So, as regarding frequency of gatekeeping while passing information to superiors, within organizational differences reveal that gatekeeping to superiors was significantly greater than to subordinates in two out of the four Sudanese organizations, beside in the two British ones. In the Pakistani Textile gatekeeping to subordinates was significantly greater than to superiors.

With reference to differences in frequency of gatekeeping to superiors across the three cultural groups in the textile industry, the present evidence seems to support, albeit tentatively, a verdict of non significant difference. In the Military, gatekeeping to superiors was greater among the British than among their Sudanese counterparts.

To recapitulate, and as regarding the qualitative attributes of superior-subordinate communication behaviour, the within organizational differences seem to be more clear and consistent than the ones between the three cultural groups. Generally speaking, information received from superiors are more likely to be perceived as accurate than those received from subordinates. At least in the Sudanese and Pakistani organizations, summarization while transmitting to superiors was significantly

less than while communicating with subordinates. With reference to gatekeeping, the results show that although gatekeeping takes place while passing to superiors in the Sudanese and British organizations, Pakistani managers gatekeep more frequent while communicating downwards.

Regarding comparisons of the qualitative attributes of superior-subordinate interaction across the three cultural groups, no significant difference was found as far as perceived accuracy of information received from above is concerned. With reference to summarization while transmitting upward, only one significant difference exists between the Sudanese and Pakistani groups. Pakistani summarization to their bosses was significantly greater than that of their Sudanese counterparts. Regarding gatekeeping to superiors, two statistically significant differences were found. Firstly, British managers in the Textile surpassed their Pakistani counterparts. Secondly, in the Military, British officers surpassed their Sudanese counterparts in frequency of gatekeeping while passing information to superiors.

6.5) Modalities of Communication.

6.5.1) Written Modalities

Table 10 (Appendix C) shows that in the Sudanese group adherence to the written modality was significantly greater than to the telephone in the Sugar, Textile, and Cement organizations ($t=6.10$, $p<0.01$; $t=9.72$, $p<0.01$; $t=2.02$, $p<0.05$; 4.56 , $p<.01$; respectively). In the British group it was the reverse. The difference was significant in the Military ($t=4.80$, $p<0.01$) and insignificant in the Textile organization. This is an interesting finding, because it shows that the British Military as the only organization where telephones were used more than written modalities. Difference between usage of written methods versus the telephone was also insignificant in the Pakistani organization.

Table 26

Gatekeeping to Superiors Across
the Three Cultural Groups

Cultural group	Mean	S.D	T-value	df	P
Sudanese	4.08	1.84	1.17	77	.30
Pakistani	3.54	2.06			
Sudanese	4.08	1.84	1.76	73	.10
British	4.82	1.10			
Pakistani	3.54	2.06	2.61	46	.05
British	4.82	1.10			
<u>Military</u>					
Sudanese	1.66	1.27	5.59	77	.01
British	3.41	1.45			

When tested against frequency of using face-to-face modality, Table 10 (Appendix C) shows that apart from the Sudanese Cement and Military, adherence to face-to-face modality was significantly greater than to written methods.

As regards between groups comparisons, Table 27 below shows that Sudanese managers in the Textile organization adhere more to the written modality than do their Pakistani ($t=5.73$, $p<0.01$) or British counterparts ($t=6.92$, $p<0.01$). It also shows that Sudanese military officers surpassed their British counterparts in frequency of using written modalities ($t=6.54$, $p<0.01$).

Table 27

Adherence to Written Modalities in the
Sudanese, British, and Pakistani Groups

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	34.81	7.14	5.73	77	0.001
Pakistani	22.04	12.35			
Sudanese	34.81	7.14	6.92	73	0.001
British	17.64	14.01			
Pakistani	22.04	12.35	1.13	46	—
British	17.64	14.04			
<u>Military</u>					
Sudanese	30.50	9.91	6.54	77	0.001
British	14.41	11.19			

6.5.2) Face-to-face Modality

Face-to-face, or otherwise known as person-to-person communication embraces a wide variety of situations. These would include, meetings, conferences, oral instructions and private discussions in offices to name few.

It is clear from figure 3 below that the face-to-face modality was the most frequently adhered-to method of communication in all three cultural groups. In Table 11 (Appendix C) it can be seen that across the three cultural groups and in all seven

organizations percentage of using face-to-face modality was significantly greater than using the telephone. In section 6.3.1 above it has also been reported that face-to-face modality is used more frequently than written modalities in five out of seven organizations.

Of all different mediums of communication, face-to-face seems to be the most frequently adhered to modality. This is particularly the case as far as within organizational differences are concerned. Obviously, face-to-face modality possesses certain advantages over other ones. For instance, it provides a chance for "a total impression" neither written or the telephone can cater for. This is of course is by virtue of the physical presence of both the sender and the receiver which also permits the usage of non-verbal communication (body language) and the chance for instant feedback and the opportunity to probe.

Table 28 below shows that British participants use more face-to-face communication than their Sudanese counterparts in the Textile ($t=5.26$, $p<0.01$) or the Military ($t=8.63$, $p<0.01$) organizations. It also shows that British managers use the face-to-face modality more than Pakistani managers in the Textile organization ($t=2.48$, $p<0.02$).

6.5.3) The Telephone

It can be seen in Table 29 that British managers in the Textile organization surpassed their Sudanese counterparts in frequency of using the telephone ($t=3.64$, $p<0.01$). There was no significant difference between the Sudanese and the Pakistani, or the British and the Pakistani, in frequency of using the telephone. Also, Table 29 shows that officers in the British Military use the telephone modality more than their Sudanese counterparts ($t=3.11$, $p<0.01$).

and organizational communication.

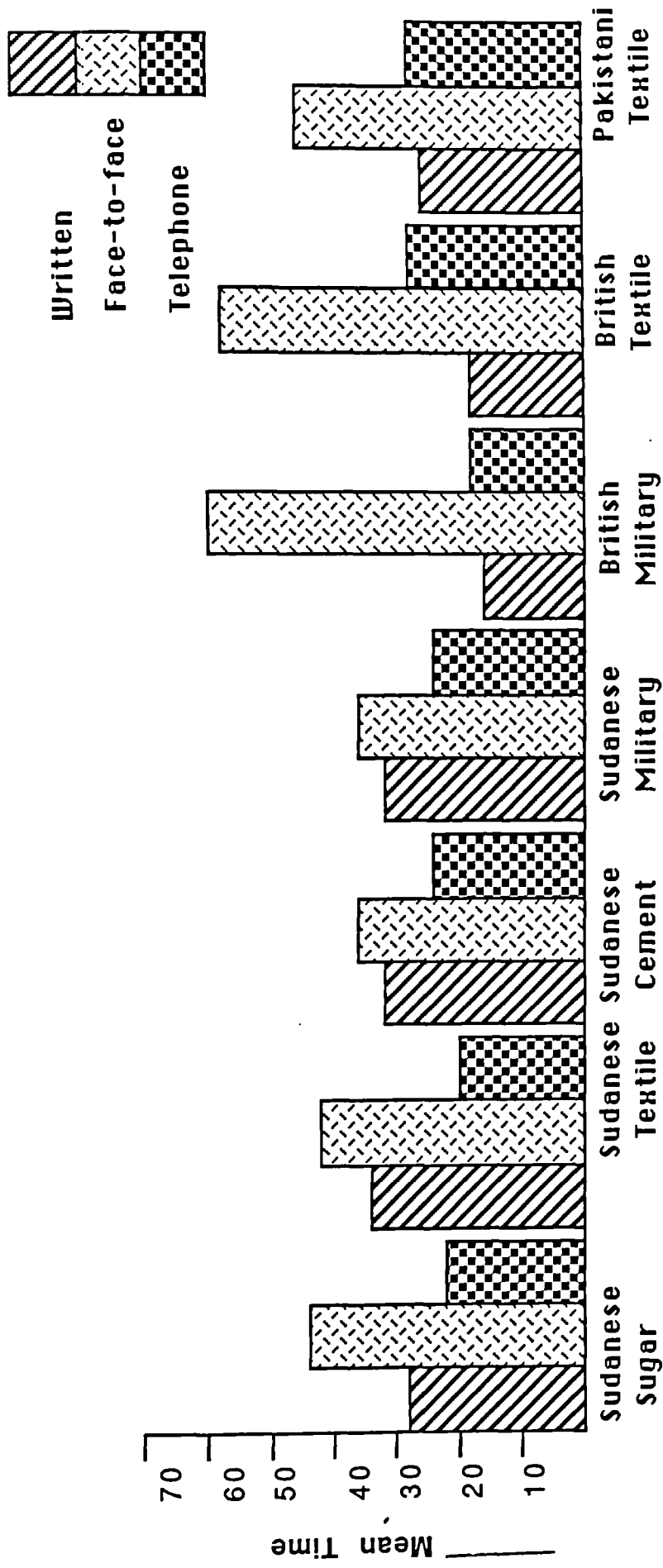


Figure 4:
Mean Time Spent on Adherence to
Communication Modalities in All
Seven Organizations

Table 28

Using Face-to-face Modality in the Sudanese,
British and Pakistani Groups

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	41.23	7.53	1.24	77	-
Pakistani	44.73	17.22			
Sudanese	41.23	7.53	5.26	73	0.001
British	58.55	20.54			
Pakistani	44.73	17.22	2.48	46	0.02
British	58.55	20.54			
<u>Military</u>					
Sudanese	34.40	11.77	8.63	77	0.00
British	65.00	19.32			

Table 29

Adherence to the Telephone in the Sudanese,
Pakistani and British Organizations

Cultural group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	20.38	6.49	1.13	77	-
Pakistani	23.32	15.78			
Sudanese	20.38	6.49	3.64	73	0.00
British	27.04	9.34			
Pakistani	23.32	15.78	0.99	46	-
British	27.04	9.34			
<u>Military</u>					
Sudanese	19.90	12.88	3.11	77	0.00
British	28.30	10.48			

6.6) Summary and Discussion

To conclude, this chapter dealt with the general features of organizational communication both with and between the seven organizations incorporated in this study. Emphasis was placed on four major aspects of organizational communication. They include; quantitative attributes of communication, qualitative attributes of communication, directionality of information flow and modalities of communication. With reference to the first two aspects of communication the study was particularly concerned with issues pertaining to superior-subordinate communication behaviour.

As regards the within-organizational comparisons, there were more similarities across these three groups than differences. That is to say, in almost all seven organizations, quantity of downward communication surpassed that of upward communication. As regards the qualitative attributes, respondents in all three groups regarded information received from above to be significantly more accurate than that received from subordinates. Similarly, the propensity to summarize and/or to gatekeep while communicating to superiors was significantly less than while communicating downward. In fact this was only in the Sudanese and Pakistani organizations, to the British it would appear that the recipient of information (whether a superior or a subordinate) makes no difference. The Pakistani group was also the odd one out as regards gatekeeping to superiors viz., subordinates. While in the Sudanese and British organizations, gatekeeping takes place when passing information to superiors, in the Pakistani organization gatekeeping occurs more while communicating with subordinates.

However, between group comparisons are of more interest to this study than within organizational ones (i.e., comparisons between communicating with superiors or with subordinates). Based on the findings in the present study, and with reference to between group comparisons, no difference appear to exist between the British and Pakistani groups as regards the quantitative attributes of communication (Table 30 below). Contrary to what was predicted,

the Sudanese surpassed both groups in percentage of time spent on interaction both up and down the hierarchical ladder. There seems to be a closer interrelationship in the Sudanese group between the volume of information received from above and the one going up.

As regards directionality of information flow, no significant difference was found between the Sudanese and British or between the British and Pakistani groups. However, the Sudanese surpassed their Pakistani counterparts in frequency of both upward and downward flow of information (Table 30).

With reference to the qualitative attributes of communication, no significant difference was found between the British and Pakistani groups as regards the accuracy of downward communication or frequency of summarization and/or gatekeeping to superiors. Table 30 shows that the British surpassed their Sudanese counterparts in frequency of summarizing and gatekeeping to superiors. This is an interesting finding and it is in line with what was predicted in Chapter Four. Table 30 also shows that the Pakistani participants surpassed their Sudanese counterparts in frequency of summarization to superiors. A non-significant difference was predicted.

In considering communication modalities, it can be seen in Table 30 that the only significant difference between the British and Pakistani was in frequency of adherence to face-to-face modality where the British surpassed their Pakistani counterparts. On the other hand, the only significant difference between the Sudanese and the Pakistani was in frequency of adherence to written modalities where the Sudanese surpassed their Pakistani counterparts. As displayed in Table 30, British participants surpassed their Sudanese counterparts in frequency of adherence to both face-to-face and the telephone modalities. On the other hand, Sudanese respondents reported to have used written modalities more frequently than their British counterparts.

Table 30 General Features of Organizational Communication

Communication Variables	Sudanes viz.,	Sudanes viz.,	British viz.,
Features	British	Pakistani	Pakistani
Quantitative	Interaction	Sudanes surpassed	Sudanes surpassed No significant
Attributes	with Superior		difference
	Interaction	Sudanes surpassed	Sudanes surpassed No significant
	with	British in the	difference
	subordinates	Textile only	
Directionality	Upward	Not significant	Sudanes surpassed Not significant
of Information			
Flow	Downward	Not significant	Sudanes surpassed Not significant
Qualitative	Accuracy	Not significant	Not significant Not significant
Attributes	Summarization	British surpassed	Pakistani surpassed Not significant
	Gatekeeping	British surpassed	Not significant Not significant
Modalities	Written	Sudanes surpassed	Sudanes surpassed Not significant
	Face-to-face	British surpassed	Not significant British surpassed
	the Telephone	British surpassed	Not significant Not significant

These findings point to clear differences between the Sudanese and British groups across both civilian and military organizations. As regards the Pakistani, they appear to share some of the communicational properties with the British and some with the Sudanese groups. For instance, in frequency of upward summarization they were closer to the British than to the Sudanese group with both British and Pakistani summarizing more to superiors than Sudanese counterparts. With reference to gatekeeping, however, the British surpassed both Sudanese and Pakistani groups, with the difference between the latter being insignificant (Table 30).

In Chapter Four relations were predicted between cultural dimensions as well as interpersonal factors on the one hand, and certain communicational features on the other. This chapter established certain differences between these three groups. Chapters Seven and Eight will test the possibility of an interrelationship between these differences and the two cultural dimensions of Power Distance and Uncertainty Avoidance respectively. Associations between these differences and the three interpersonal factors of Trust, Upward Influence and Mobility Aspirations will be investigated in chapters Nine, Ten and Eleven respectively.

CHAPTER SEVEN

Power Distance and Communication Behaviour

7.1) Introduction

In reviewing the literature on cross-cultural and/or cross-national organizational behaviour (Chapter Two), it has been made clear that a considerable body of research supports the notion that national cultures are likely to contain certain values which in return are quite capable of shaping organizational behaviour. Our proposition in this respect is that cultural values and attitudes with such potentialities will most likely manifest themselves in a principal ingredient of organizational behaviour such as superior-subordinate communication.

As a reminder, following are the three variables that make up the Power Distance index (more details can be found in Chapter Five). These include:

- 1- Preferred style of management.
- 2- Current style of management.
- 3- Frequency of participants perception of their fellow workers as afraid to disagree with superiors.

Shackleton and Ali (1988) have found that the Sudanese scores on the two cultural dimensions of Power Distance and Uncertainty Avoidance (Hofstede, 1980) were quite similar to those of some Arabic and African nations, and significantly different from those of the British and the Pakistani living in Britain. The Sudanese showed a large Power Distance and high uncertainty avoidance. In the same study, and as previously reported in Chapter Four the British scores on both dimensions were significantly lower than those of the Sudanese and/or the Pakistani living in Britain. Pakistani in Britain scored closer to their country of origin

rather than to their current home. The question is, what are the implications of such findings as far as the superior-subordinate communication behaviour of the Sudanese, the British and the Pakistani in Britain are concerned, bearing in mind that these two dimensions deal directly with the style of management and the distribution of power within an organization?

Hofstede (1980) maintained that PDI is conceptually related to the power relationship construct between a superior and his or her subordinates. Consequently, it is predicted that this cultural dimension should bear a considerable degree of relevance to the communicational behaviour in a superior-subordinate interaction.

Power Distance between a superior and subordinate may cause distortion in the upward flow of information. The greater the power of a receiver (superior) over the sender (subordinate), the greater the filtering of information detrimental to the welfare of the sender (Campbell, 1958). One way of manipulating unfavourable information in a superior-subordinate interaction is through gatekeeping (Read, 1962; Watson, 1965; Watson and Bromberg; 1965). Gatekeeping has been conceptualized as serving as a "psychological substitute" for actual movement up the hierarchical ladder on part of those who are at the bottom of the power scale (Read, 1962; Kelley, 1951). Otherwise, subordinates may through summarization emphasize their favourite points and censor whatever information they feel capable of undermining their interests.

Since the scores of the Sudanese and Pakistani managers on PDI (see Chapter Four, and Hofstede, 1980) indicate a great Power Distance, one would expect their organizations to have more centralized power and authority. Consequently, one would expect the profoundly unequal distribution of power to reflect itself on both the quantitative as well as the qualitative attributes of superior-subordinate communication. The quantitative attributes denote the magnitude of superior-subordinate communication in terms of frequency of interaction, desire for interaction, and the volume of downward and upward communication. Qualitative attributes refer to certain aspects of superior-subordinate

interaction such as perceived accuracy of information received from above, frequency of summarization while transmitting to superiors, and frequency of gatekeeping while passing information upward.

This chapter will deal with the impact of Power Distance as measured by the Power Distance Index (PDI). Regression analysis will be used in which the three indices of PDI will be taken as the independent variables. Each of the variables that make the quantitative and the qualitative attributes will form the dependent variable. As has been stated earlier, the regression model should not be considered as representing a strict causality, but rather it should be considered as serving as a convenient theoretical structure that represents the associations we alluded to in the hypotheses, and which have frequently been postulated in the organizational behaviour literature.

Emphasis will firstly be made on the association between Power Distance and the quantitative attributes of superior-subordinate interaction. Secondly, relationships between Power Distance and the qualitative attributes of superior-subordinate communication behaviour will be investigated. Regression findings will be presented in such a way that only R^2 and F values will be reported. The insignificant findings for each of the seven organizations will be shown in Appendix D.

7.2) Power Distance and Quantitative Attributes of Communication

In Chapter Six we saw that the only significant difference between these three cultural groups, as far as quantitative attributes of superior-subordinate interaction are concerned, is antagonistic to what has been predicted. Sudanese subjects surpassed their British and Pakistani counterparts in frequency of interaction with their superiors. This section presents the results of the regression analysis model in which the three indices of PDI form the independent variables, and items that tap the magnitude of

Table 31

Power Distance and Frequency of Interaction
with Superiors in the Sudanese Organizations

	Sugar		Textile		Cement		Military	
	r^2	F	r^2	F	r^2	F	r^2	F
Preferred manager	.32	12.58**	.53	14.42**	.33	7.29*	1.00	.00
Current manager	.48	8.18**	.70	6.98**	.34	.32	1.003	.07
Afraid to disagree	.49	.65	.71	.58	.36	.34	1.019	.38
**p<.01,	F(3,61)=8.15		F(3,53)=8.91					
*p<0.05	p<0.01		p<0.01					

Table 32

Power Distance and Frequency of Interaction
with Superiors in the British and Pakistani
Organizations

	British		Pakistani			
	Military	Textile	Textile	Textile		
	r^2	F	r^2	F	r^2	F
Preferred manager	.03	.70	.02	.43	.08	.61
Current manager	.34	12.26**	.28	6.85*	.15	.48
Afraid to disagree	.39	2.11	.28	.08	.61	5.97*
**p<.01, *p<.05	F(3,29)=5.31		F(3,26)=11.57			
	p<0.01		p<.05			

superior-subordinate interaction will, in turn, be taken as the dependent variable.

The fact that a superior is democratic or autocratic will, without doubt, be actualized through the communication behaviour with his or her subordinates. Since the Sudanese and Pakistani managers have been shown to be perceived as autocratic and/or paternalistic rather than participative or consultative, (Chapter Five) upward communication in the Sudanese and Pakistani organizations is more likely to be reactive than interactive. Hence, hypothesis 2 (Chapter Four) stated that the volume of upward flow of information will be negatively related to the extent of Power Distance. So, the larger the Power Distance, the less will subordinates interact with their superiors.

7.2.1) Power Distance and Frequency of Interaction with Superiors

In Table 31 above the three indices of PDI has been taken as the independent variables and frequency of interaction with superiors as the dependent variable in all four Sudanese organizations. It can be seen that with reference to the Sudanese group only two significant associations are found, in the Sugar and the Textile organizations. Table 31 shows that in the Sugar the three indices of PDI accounted for about 49% of the variation in percentage of time spent on interaction with superiors $F(3,61)=8.15, p<0.01$. Table 31 also shows that in the Textile the three indices of PDI appeared to be responsible for about 71% of the variation in percentage of time spent on interaction with superiors $F(3,53)=8.91, p<0.01$. This suggests that, in the Sudanese Sugar and Textile, the degree of Power Distance significantly affects frequency of interacting upward. In Appendix D it can be seen that in the Sugar and the Textile two of these three indices of PDI showed fairly high Beta coefficients. These results indicate that, the more Sudanese managers show their preference for a democratic or participative style of management, the more they will interact with their superiors. Similarly, the more they perceive their superior as democratic and/or participative, the

more they are likely to report a high frequency of interacting upward.

Regarding the British group, it can be seen in Table 32 that the only significant relation is in the Military organization where these three indices accounted for about 39% of the variation in the dependent variable ($F=5.31, p<0.01$).

With regard to the Pakistani organization, it can be seen in Table 32, that the three indices of PDI accounted for 61% of the variation in frequency of upward interaction. One out of these three indices accounted for a significant portion of the total variation in percentage of time spent on interaction with superiors. The extent to which employees perceived that subordinates in general were afraid to disagree with their superiors accounted for about 38% of the variation in percentage of time spent on interaction with superiors ($F=5.97, p<0.05$) with a Beta coefficient of 0.68. Considering the manner in which this variable has been coded, this would imply a negative correlation between Power Distance and frequency of upward interaction. That is to say, the larger the Power Distance between a superior and his/her subordinates, the less will the subordinates interact with their superiors.

A common finding among the Sudanese and the British groups is that the prevailing style of management does affect upward interaction in a positive way. The more democratic and/or participative the superior, the more will his/her subordinates spend time on upward interaction. Furthermore, all Sudanese organizations, apart from the Military, showed a positive relationship between the style of management preferred and upward interaction. Knowing that the majority of our respondents have opted for a participative style, this will of course mean an indirect corroboration to what has been stated above i.e., the more a superior is perceived as democratic the more will subordinates spend more time in upward communication.

Results of the Pakistani group are slightly different from those of the Sudanese and the British. The significance was between the variable that taps the extent to which subordinates perceive their fellow workers as afraid to disagree with their superiors. This would indicate a negative correlation between the degree of Power Distance and level of upward interaction.

7.2.2) Power Distance and Desire for Interaction with Superiors

To throw more light on the relation between Power Distance and quantitative attributes of superior-subordinate communication, Table 33 presents regression findings of the Sudanese organizations with desire for upward interaction as the dependent variable. It can be seen that only two significant relationships were found in the Sudanese Sugar and Cement organizations. In the Sugar, PDI indices accounted for about 15% of the variation in desire for interaction with superiors ($F=3.29, p<0.05$). In the Cement, the three indices of PDI accounted for 17% of the total variation in desire for interaction with superiors ($F=3.14, p<0.5$). Although the overall regression equation of the relationship between measures of PDI and desire for interaction with superiors in the Sudanese Textile organization was not significant, it can be seen that the variable which denotes the prevailing style of management (i.e degree of participation) is significantly related to the desire for interaction with superiors.

Results of the British and Pakistani organizations are reported in Table 34. There was no significant association between measures of PDI and desire for interaction with superiors in the British or Pakistani Textile organizations. However, in the British Military (Table 34) current style of management appeared to have a significant interrelationship with desire for interaction with superiors. It can be seen that in the British Military current style of management accounted for 11% of the variation in desire for interaction with superiors ($F= 4.92, p<0.05$).

Table 33

Power Distance and Desire for Interaction with Superiors
 In the Sudanese Organizations

Source of Variation	Sugar		Textile		Cement		Military									
	M/R	Beta	M/R	Beta	M/R	Beta	M/R	Beta								
Preferred Manager	.306	-.63	8.85	.004	.000	.06	.18	.356	.127	.28	2.49	.191	.037	.25	1.99	
Current Manager	.384	.147	.39	3.58	.260	.070	.38	6.33	.396	.157	.30	2.39	.194	.038	.04	.07
Afraid to Disagree	.384	.148	.03	.04	.368	.136	.27	3.33	.412	.170	.17	.74	.220	.048	.13	.57

**p<.01, *p<.05

F(61,3)=3.29, p<.05

F(50,3)=3.14, p<.05

Table 34

Power Distance and Desire for Interaction with Superiors
 In the British and Pakistani Organizations

Source of Variation	British Military		British Textile		Pakistani Textile	
	M/R	Beta	M/R	Beta	M/R	Beta
Preferred Manager	.000	.01	.00	.026	.50	.004
Current Manager	.329	.43	4.92 [*]	.042	.10	.049
Afraid to Disagree	.410	.168	1.88	.058	.80	.071

*p<.05

Results of the Sudanese Sugar, Textile and Cement organizations corroborate what has been reported by Harrison (1985). Using Vroom and Yetton's (1973) scale of decision making styles, she found that desire of interaction (measured by the same scale adopted in this study) accounted for about 19% of the variation in the degree of subordinates' participation in the process of decision making ($F= 53.03, p<0.01$). Thus, if participation by subordinates in the process of decision-making is culture bound, as some research evidence shows to be the case (e.g. Badawy, 1979; Hofstede, 1980) then clearly these results are indicating that desire for interaction with superiors will similarly be culture relative. However, it is worth mentioning, that Hofstede (1980) has picked out one variable as a central measure of PDI. It is the variable that taps the extent to which members of an organization perceive their co-workers as afraid to disagree with their superiors. According to these results, it is another variable which proves to be more relevant to the quantitative attributes of superior-subordinate interaction. This variable is the perceived (prevailing) style of management. In the Sudanese organizations, it accounted for about 6% of the total variation in desire for upward interaction in the Sugar ($F=3.58, p<.05$) and for 7% of the variation in the Textile company ($F= 6.33, p<0.05$) with a Beta coefficient of 0.38 (Table 33). In the British Military it accounted for 11% of the variation ($F= 4.92, p<0.05$) with a Beta coefficient of -0.43 (Table 34).

Although the Sudanese Textile and the British Military are organizationally different, an interesting point of comparison is the difference in the direction of the correlation between current style of management and the desire for upward interaction. Results of the Sudanese Textile showed a positive sign of the Beta coefficient, while the British Military showed a negative one. With reference to the Sudanese Textile, these results suggest that the more subordinates have the chance to participate in the decision-making process, the more they desire to interact with their superiors. Results of the British Military indicate that, the less democratic the style of management, the more will

subordinates desire to interact with their superiors. While the outcome of the Sudanese Textile is intuitively expectable, the negative relationship between desire for upward interaction and degree of participation in the case of the British Military is also plausible. It could be said that subordinates in the British Military are striving to satisfy the need generated by the authoritarian and strictly formal atmosphere one would expect in such an organization.

7.3) Power Distance and Downward Communication

Downward communication has been measured by percentage of time spent by subordinates on receiving from their superiors. Table 35 presents the regression findings with percentage of time spent on receiving from superiors as the dependent variable, and the three indices of PDI as the independent variables in the Sudanese organizations. The only significant relation exists in the Sugar where the independent variables accounted for about 35% of the total variation in percentage of time spent on receiving from upward ($F=4.41$, $p<0.01$). It can be seen that, although the overall regression equation in the Sudanese Textile was not significant, the variable of preferred style of management accounted for 36% of the total variation in time spent on receiving from superiors ($F=7.43$, $p<0.05$) with a Beta coefficient of 0.54.

With regard to the British and Pakistani organizations, it can be seen in Table 36 that no statistically significant relation was found between measures of PDI and percentage of time spent on receiving from superiors in any of the three organizations. Hence, it is only in two organizations (Sudanese Sugar and Cement) out of seven that we may be able to predict downward communication from indicators of the degree of Power Distance. Regression findings of the Sudanese Sugar and Cement show that, the greater the Power Distance the more will be the volume of downward communication. This is clear from the positive relation between measures of PDI and frequency of downward communication.

Table 35

Power Distance and Downward Communication
in the Sudanese Sugar and Textile

Source of Variation	Sugar				Textile			
	M/R	R	Beta	F	M/R	R	Beta	F
Preferred Manager	.574	.330	.57	13.3**	.603	.364	.54	7.43*
Current Manager	.586	.344	.19	.54	.611	.373	.12	.18
Afraid to Disagree	.588	.346	.04	.10	.615	.378	.10	.07

**p<.01, *p<.05 F(61,3)=4.41, p<.01

7.4) Power Distance and Upward Communication

Upward communication was measured by percentage of time spent by subordinates on sending to superiors. Table 37 shows the results of taking percentage of time spent on upward communication as the dependent variable and the three indices of PDI as the independent variables in the four Sudanese organizations. It can be seen that in the Sugar the three indices of PDI accounted for about 56% of the total variation in percentage of time spent on sending upward (F=10.51, p<0.01). Table 37 also shows that these three indices accounted for about 73% of the total variation in percentage of time spent on sending to superiors in the Sudanese Textile (F=9.78, p<0.01). No significant association was found between the three indices of PDI and percentage of time spent on sending to superiors in the Sudanese Military (Table 37). However, in the Cement "preferred manager" accounted for 26% of the total variation in time spent on upward communication (F=5.26, p<.05).

Regarding the British group, the only overall significant association between measures of PDI and percentage of time spent

Table 36

Power Distance and Downward Communication
 in the British and Pakistani Organizations

Source of Variation	British Military			British Textile			Pakistani Textile						
	M/R	R	Beta	F	J	M/R	R	Beta	F	J	M/R	R	Beta
Preferred Manager	.020	.000	.10	.00	.281	.079	.20	1.71	.317	.100	.08	.78	
Current Manager	.179	.032	.20	.85	.204	.204	.60	3.00	.413	.171	.36	.51	
Affraid to Disagree	.337	.113	.29	2.29	.522	.273	.29	1.69	.453	.205	.20	.22	

on sending upward was found in the Textile. As can be seen in Table 38, these three indices accounted for about 36% of the total variation ($F=3.37$, $p<0.05$). As regards the Military, Table 38 also shows that the variable that taps the prevailing style of management accounted for about 16% of the total variation in the volume of upward communication ($F=5.30$, $p<.05$). There was no significant relationship in either the British Military or the Pakistani Textile.

It is worth mentioning that a prominent outcome of the regression findings between indices of PDI and upward communication is the variable that taps the perceived style of management which has shown a significant association with time spent on sending to superiors. In the Sugar it accounted for about 11% ($F=5.86$, $p<0.05$), in the Sudanese Textile it accounted for about 28% ($F=11.60$, $p<0.01$), and in the British Textile it accounted for about 21% of the total variation ($F=4.99$, $p<0.05$). Although the overall regression equation in the British Military was statistically insignificant, again "current style of management" accounted for a considerable amount of percentage of time spent on upward communication.

A clear and indeed a logical pattern emerges from these findings. That is, there is a statistically significant interrelationship between the prevailing style of management and the quantity of information exchanged in a superior-subordinate interaction. The more democratic and/or participative the decision-making style adopted by the superior, the more will his/her subordinates interact or have the desire to interact with such superior and the more will the subordinates engage in upward communication. However, the relationship between the prevailing style of management in an organization and the volume of downward communication is not so significant. The results of two Sudanese organizations suggest that, the greater the Power Distance, the greater will be the flow of information from superiors to subordinates (section 7.2.3 above).

Table 37

Power Distance and Upward Communication
in the Sudanese Organizations

Source of Variation	Sugar		Textile		Cement		Military									
	M/R	R	Beta	F	M/R	R	Beta	F	M/R	R	Beta	F				
Preferred Manager	.639	.409	.14	18.67	.652	.425	.32	9.62	.510	.260	.12	5.26	.210	.044	.20	1.20
Current Manager	.719	.518	.56	5.86	.841	.708	.63	11.66	.519	.269	.23	.18	.212	.045	.04	.03
Afraid to Disagree	.747	.558	.21	2.28	.853	.727	.20	.79	.617	.381	.69	2.34	.330	.109	.26	1.73

**p<.01. *p<.05 F(61,3)=10.51, p<.01 F(53,3)=9.78, p<.01

Table 38

Power Distance and Upward Communication
 In the British and Pakistani Organizations

Source of Variation	British Military		British Textile		Pakistani Textile							
	M/R	R	M/R	R	M/R	R						
Preferred Manager	.166	.028	.01	.77	.105	.011	.51	.22	.085	.007	.30	.05
Current Manager	.438	.192	.45	5.30*	.465	.217	.76	4.99*	.441	.194	.58	1.39
Afraid to Disagree	.461	.213	.16	.65	.600	.359	.43	4.01*	.464	.216	.16	.14

*p < .05

F(22,3)=3.37, p < .05

To further test the relationship between the prevailing style of management and level of interaction in a superior-subordinate communication, a cross-tabulation between these two variables has been calculated in all seven organizations. The contingency correlation (C) was used to test for interrelationships between perceived style of management and frequency of interaction with superiors. As can be seen in Tables 1 to 7 (Appendix F) four organizations showed a significant association between perceived style of management and percentage of time spent on interaction with superiors. It was found that in the Sudanese Textile the more autocratic or paternalistic the superior, the less will his/her subordinates interact with the superior ($C=0.74$, $p<0.01$). Similarly, results of the Pakistani Textile showed a significant relationship ($C=0.76$, $p<0.01$). Again a positive correlation was found in the Sugar ($C=0.67$, $p<0.01$) and Cement ($C=0.63$, $p<0.05$). No significant correlation was found in the two Military organizations or in the British Textile.

In summary, the general results of the relationship between Power Distance and the quantitative attributes of superior-subordinate interaction substantiate what was predicted in hypothesis 2 (Chapter Four). These results also corroborate what has been previously found between the level of subordinates' participation and quantity of upward communication (Harrison, 1985).

7.5) Power Distance and Qualitative Attributes of Superior-subordinate Communication

Power differences between superiors and their subordinates should affect such qualitative features as accuracy of information. In an authoritarian environment, one would expect superiors to withhold most of the information from their subordinates. At the same time subordinates are likely to refrain from summarizing and/or gatekeeping while transmitting to their bosses. Consequently, one would expect the degree of Power Distance to affect the qualitative attributes in a superior-subordinate

interaction in the manner alluded to in hypotheses 3 and 5 (see Chapter Four).

7.5.1) Power Distance and Perceived Accuracy of Downward Communication

It has been reported before (see Chapter Six) that all seven organizations show significant differences between perceived accuracy of information received from superiors and information received from subordinates, with the former generally deemed as being more accurate. Here a regression analysis model was used to see if significant relation that can be inferred from the three indices of PDI. There was no significant relation between measures of Power Distance and perceived accuracy of information received from superiors in three out of the four Sudanese organizations (Appendix D). The only statistically significant relation was found in the Textile (Table 39) where only one variable, namely "perceived style of management", accounted for about 36% of the variation in perceived accuracy of information received from above ($F=6.92$, $p<0.05$) with a Beta coefficient of $-.90$.

Table 39 also shows the only significant result of the British organizations. In the Military (preferred style of management) bore a significant association with perceived accuracy of downward information ($F=4.80$, $p<0.05$) with a Beta coefficient of $-.39$.

It is in the Pakistani organization, (Table 39) that a significant association exists ($F= 3.61$, $p<0.05$). Again it was the perceived style of current manager that is responsible for a greater portion of the variation. This variable accounted for 12% of the variation in perceived accuracy of information received from superiors ($F=10.23$, $p<0.01$), with a Beta coefficient of 0.77 . This is in line with what was predicted for both the Pakistani and the Sudanese groups in hypothesis 3. The Pakistani seem to regard downward communication as information received from an authority,

hence apt to be accurate. However, results from the Sudanese group do not substantiate this assumption.

Hence, as far as the association between perceived accuracy of downward communication and Power Distance, these results do not suggest clear cut differences between the three cultural groups. Only the Pakistani showed an overall significant relation between measures of PDI and perceived accuracy of information received from superiors. One of the three variables that measure Power Distance, namely "current style of management", accounted for a significant portion of the variation in perceived accuracy of information received from above. Thus, once again, prevailing style of management emerges as the one variable with the potentiality to exert a significant impact on the perception of the accuracy of downward communication. The more authoritarian the superior, the more likely that information received by his/her subordinates be rated as accurate information.

7.5.2) Power Distance and Frequency of Summarization to Superiors

Table 40 presents the results of the multiple regression analysis of the three indices of PDI and frequency of summarizing while transmitting to superiors in the Sudanese organizations. Within the Sudanese group the Sugar, Textile, and Cement organizations show that there was a significant association between measures of Power Distance and frequency of summarizing to superiors. In the Sugar, the three indices accounted for 30% of the variation ($F=8.12$, $p<0.01$). The regression equation in the Sudanese Textile show that PDI indices accounted for more than 33% of the variation in the dependent variable ($F=8.11$, $p<0.01$). In the Cement, these indices accounted for 32% of the variation ($F=7.34$, $p<0.01$). There was no significant association in the Sudanese Military.

Table 41 shows the regression findings of the Pakistani and the British organizations. It can be seen that, there was no

Table 39

Power Distance and Accuracy of Downward Communication in the
Sudanesse Textile, British Military and Pakistani Textile

Source of Variation	Sudanesse Textile		British Textile		Pakistani Textile							
	M/R	R-Beta	M/R	R-Beta	M/R	R-Beta						
Preferred Manager	.098	.010	.13	.389	.151	-.39	4.80	.347	.185	-.43	2.94	
Current Manager	.610	.372	-.90	6.92	.399	.159	-.11	.24	.552	.305	-.77	10.23
Afraid to Disagree	.634	.402	.25	.55	.406	.165	-.09	.17	.575	.330	-.24	.85

**p<.01, *p<.05

F(3,26)=3.61, p<.05

Table 40

Power Distance and Summarizing to Superiors
 in the Sudanese Organizations

Source of Variation	Sugar		Textile		Cement		Military						
	M/R	R Beta	M/R	R Beta	M/R	R Beta	M/R	R Beta					
Preferred Manager	.541	.293	7.78	.531	.282	11.12	.453	.205	8.66	.001	.000	-.02	.02
Current Manager	.541	.293	-.04	.05	.295	1.00	.534	.291	5.85	.140	.019	-.12	.55
Afraid to Disagree	.547	.299	-.08	.46	.332	1.70	.569	.324	6.31	.145	.021	-.02	.02

**p<.01, *p<.05 F(61,3)=8.12, p<.01 F(53,3)=8.11, p<.01 F(50,3)=7.34, p<.01

Table 41

Power Distance and Summarizing to Superiors
 in the British and Pakistani Organizations

Source of Variation	British Military		British Textile		Pakistani Textile							
	M/R	B	Beta	E	M/R	R	Beta	E				
Preferred Manager	.154	.086	.32	2.57	.499	.249	-1.30	9.04	.002	.001	.04	.01
Current Manager	.358	.128	.37	23.5	.503	.255	-.13	.21	.014	.002	.09	.09
Afraid to Disagree	.367	.134	.10	.19	.694	.482	1.02	7.87	.155	.024	.17	.30

*p<.05

F(22,3)=5.58, p<.01

significant association in the British Military or in the Pakistani Textile company between measures of Power Distance and frequency of summarizing while transmitting to superiors. However, results of the British Textile show that these three indices accounted for about 48% of the variation ($F=5.58$, $p<0.01$).

In assessing which of the three indices bear more relevance to frequency of summarizing while transmitting upward, the preferred style of management appears to be the most relevant. In the Sudanese Sugar, (Table 40) this variable was responsible for 29% of the variation ($F=7.70$, $p<0.01$) with a Beta coefficient of -0.54 . In the Sudanese Textile, it accounted for 28% ($F=11.12$, $p<0.01$) with a Beta coefficient of -0.43 . In the Cement, it accounted for 22.5% ($F= 8.60$, $p<0.01$) with a Beta coefficient of -0.47 . In the British Textile (Table 41) it accounted for 25% of the variation ($F= 9.04$, $p<0.01$) with a Beta coefficient of -1.30 . One can notice that the Beta coefficients are very high. The negative signs are because answers of the frequency of summarization scale have been coded in such a way that higher scores indicate lower degree of summarization.

When coding the variable that taps preferred style of management, a high score of 3 was given to the consultative style and a score of 4 to the participative style. Accordingly, these results indicate that, if members of the Sudanese Sugar, Textile, and Cement, and those of the British Textile had had the style of management preferable to them (in most cases consultative or participative), they would have adhered to summarization while transmitting information to their superiors. Tentatively, these results seem to support the part pertaining to frequency of summarizing and degree of participation (as indicated by the current style of management) which has been predicted in hypothesis 5.

7.5.3) Power Distance and Frequency of Gatekeeping to Superiors

With regard to the relation between Power Distance and frequency of gatekeeping while passing information to superiors, Appendix D shows the results of regression analysis of the Sudanese organizations. There was no significant relation in three out of the four Sudanese organizations. The only significant relation was found in the Cement (Table 42) where the three indices of PDI accounted for about 16% of the variation in frequency of gatekeeping while transmitting upward ($F=2.86$, $p<0.05$). Again, the preferred style of management accounted for the highest portion of the total variation (14%) with a Beta coefficient of -0.31.

For the British and Pakistani organizations the results are also shown in Table 42. The only significant relation in the British group was found in the Military, and it was only between the variable that taps the preferred style of management on the one hand and frequency of gatekeeping on the other ($F=4.58$, $p<0.05$). It is interesting to note that, unlike the Sudanese Cement, the sign of the Beta coefficient of this variable in the British

Table 42

Power Distance and Gatekeeping to Superiors in the Sudanese Cement and British Military Organizations

Source of Variation	Sudanese Cement				British Military			
	M/R	R	Beta	F	M/R	R	Beta	F
Preferred Manager	.376	.141	-.30	3.04	.262	.069	.47	4.58*
Current Manager	.393	.155	-.18	.83	.425	.181	.34	2.92
Afraid to Disagree	.396	.157	.07	.12	.439	.192	-.13	.35

* $p<.05$

$F(2,50)=2.86$, $p<.05$

Military's regression equation was positive. This suggests that had members of the Sudanese Cement had the type of manager they preferred, they would not have adhered to gatekeeping while passing information upward. To the members of the British Military it is the reverse. Had members of the British Military had the style of management they preferred, they would have indulged in more gatekeeping.

Both results are plausible. Judging from the type of organization, it looks as if it is a matter of a large degree of respect to authority and rules in the case of the British Military, while it is a matter of trust or lack of it that determine frequency of gatekeeping to superiors in the case of the Sudanese Cement.

It was predicted in the second part of hypothesis 5 (Chapter Four) that Sudanese and Pakistani subjects would refrain from gatekeeping while passing information to superiors. While the Pakistani organization (Appendix D) along with three Sudanese ones showed no significant association between measures of Power Distance and frequency of gatekeeping to superiors, one variable of the three indices of PDI in the Sudanese Cement and the British Military produced results in line with what was predicted.

In summary, and as far as the impact of Power Distance on the qualitative attributes of superior-subordinate communication behaviour is concerned, regression findings in this study suggest two main outcomes. Firstly, perceived accuracy of downward

communication in the Pakistani group is contingent on the prevailing style of management. The more autocratic the superior the more will information received from him/her be perceived as accurate. Secondly, frequency of manipulating upward communication through summarization and/or gatekeeping depends upon whether a subordinate has the style of manager he or she deems preferable. Knowing that the vast majority of the subjects opted for a democratic and/or participative style of management when asked to state their preference, one can deduce that qualitative attributes of superior-subordinate interaction, just as with quantitative ones before, are influenced to a greater extent by the prevailing style of management.

7.6) Summary and Discussion

To conclude, the regression analyses findings reported in this chapter point to a significant interrelationship between perceived style of management and the propensity to withhold upward communication. However, a considerable body of research (including the present study) reports cross-cultural differences as far as the predominant style of management is concerned. While British organizations were found to be managed by relatively more participative and democratic styles, the Sudanese and Pakistani ones were managed by predominantly autocratic and/or paternalistic managers. Essentially, and since style of management is an intrinsic factor to the Power Distance dimension, the findings of the present study suggest an intimate relationship between the

cultural dimension of Power Distance and certain features of superior-subordinate communication.

The present study shows that in countries with large Power Distance (Sudanese and Pakistani) upward communication will be affected. This is because in such countries autocratic styles of management predominate. Consequently, subordinates will have little chance to interact with their superiors.

As regards the qualitative attributes of superior-subordinate communication behaviour, this chapter showed that the larger the Power Distance, the more will information received from above be perceived as accurate. Apparently, information received from above is regarded as information received from an authority and likely to be accurate. Another explanation could be that in such countries subordinates are accustomed to act upon upward information rather than to question its accuracy. Similarly, summarization and/or gatekeeping while passing information to superiors was found to be contingent upon the prevailing style of management. The more democratic and/or participative the superior, the more likely did subordinates summarize and/or gatekeep while transmitting upward. This finding seems to suggest that subordinates in large Power Distance countries fear the reprisals of interfering with upward communication. In both the Sudanese and Pakistani groups, regression findings showed that, had they had the style of management they preferred, they would have indulged in summarizing and gatekeeping to those superiors.

CHAPTER EIGHT

Uncertainty Avoidance and Communication Behaviour

8.1) Introduction

Uncertainty Avoidance is conceptually related to the notion of coping with uncertainty and ambiguity. Thus, it has been predicted that the cultural dimension of Uncertainty Avoidance should bear a considerable degree of relevance to the communicational behaviour in a superior-subordinate interaction. Among the implications of Uncertainty Avoidance relevant to this study are communicational aspects such as, that intolerance of ambiguity will entail high preference for clear requirements and instructions and lower tolerance of inaccurate information. Consequently, members of organizations operating in cultural settings with high levels of Uncertainty Avoidance are more likely to adhere to formal means of communication and would be prone to underestimate accuracy of information received from above in comparison to those pertaining to lower levels of Uncertainty Avoidance. Chapter Six stated how the Sudanese, British and Pakistani groups showed different scores on UAI. In Chapter Four hypotheses 5, 6 and 7 predicted the relationships between Uncertainty Avoidance and issues of organizational communication.

This chapter will firstly present the regression findings of the three cultural groups with measures of UAI as the independent variables and the qualitative attributes of communication (in turn) forming the dependent variables. Secondly, emphasis will be placed on the impact of uncertainty avoidance and frequency of adhering to each of the three modalities of communication.

In assessing the interrelationship between Uncertainty Avoidance and these communicational issues, it is worth repeating the three items that make up the UAI. These are:

- 1-"Feeling Tense": denoting how frequently a respondent felt tense and/or nervous during work.
- 2-"Employment Stability": this refers to how long a respondent intends to continue working for the organization.
- 3-"Rule Orientation": stating the respondent's degree of agreement with the statement that, company rules should not be broken even if he/she believes that it was in the interest of the company to do so.

8.2) Uncertainty Avoidance and Quality of Communication

While Power Distance is conceptually associated with the authority of persons, Uncertainty Avoidance bears close relation to the authority of the rules (Hofstede,1980). Accordingly, one would expect authority of the rules within organizations which operate in countries with high Uncertainty Avoidance tendencies to curtail any forces leading to the distortion of upward communication. Hence, a negative correlation can be predicted between Uncertainty Avoidance and perceived accuracy of information received from above. Information received from superiors should be perceived by their subordinates as accurate. This should be particularly the case in the Sudanese and Pakistani groups which showed a relatively high scores on UAI. Similarly, summarization and gatekeeping while communicating with superiors should be negatively related to Uncertainty Avoidance. The following three sub-sections present the regression findings that test these propositions.

8.2.1) Accuracy of Downward Communication

Accuracy of information refers to how accurate subordinates will rate information they receive from their superiors. In Chapter Five we saw how in most cases information received from superiors was rated as significantly more accurate than that received from below. This finding pertains to within organizational differences. In this section, however, comparisons between the three cultural groups are considered.

Results of the regression analysis with perceived accuracy of downward communication as the dependent variable and measurements of UAI as the independent variables for the three groups are presented in Table 43.

As regards the Sudanese group, the only significant association was found in the Sugar company where measures of Uncertainty Avoidance accounted for about 32% of the variation in perceived accuracy of downward communication ($F=3.86$, $p<.05$). Regression findings of the Sugar are presented in Table 44. Signs of the interrelationship between measures of Uncertainty Avoidance and perceived accuracy of information received from superiors imply that the higher the intolerance for ambiguity, the more will information received from above be perceived as accurate. Table 44 shows that two variables of the Uncertainty Avoidance index bore significant relation with the degree of accuracy assigned to downward communication. It shows that the more information received from above was rated as inaccurate, the more subordinates felt tense at work. "Feeling Tense" accounted for 15% of the total variation in the how accurate will downward communication be perceived ($F=5.23$, $p<0.05$) with a Beta coefficient of $-.62$. The second major impact was made by the "Rule Orientation" variable. It accounted for about 15% of the total variation ($F=5.57$, $p<0.05$) with a Beta coefficient of $.62$. Again, high rule orientation and formalization (i.e. high Uncertainty Avoidance) would imply a lower rate of accuracy to information received from superiors.

Table 43

Uncertainty Avoidance and Qualitative Attributes of Upward Communication Across the Three Cultural Groups

Qualitative Attributes	Sudanese		British		Pakistani		
	Sugar	Textile	Cement	Military	Military	Textile	Textile
	² R _F	² R _E	² R _F	² R _E	² R _F	² R _E	² R _F
Accuracy	.32 3.86*	.07 -	.14 -	.01 -	.16 -	.17 -	.26 -
Summarization	.15 3.46*	.21 4.37*	.29 6.17*	.05 -	.13 -	.28 -	.27 -
Gatekeeping	.11 -	.01 -	.18 3.46*	.03 -	.04 -	.02 -	.14 -

**p<.01, *p<.05

²R=Percentage of variation explained by the independent variables.

F=Value of F and the significance of the increments in R.

Although these outcomes may seem logical and in line with what has been predicted, none of the other six organizations substantiated them. This may suggest an interference from the internal organizational climate rather than a societal impact. This explanation has been offered not only because of the results of the other Sudanese organizations but also because of what was found in the Pakistani group. While the UAI score of the Pakistani group is the largest (see Chapter Six) the analysis (Appendix D) showed no significant association between measures of Uncertainty Avoidance and perceived accuracy of downward communication. Similarly, no significant results were found in the British organizations (Appendix D).

Table 44

Uncertainty Avoidance and Accuracy of Downward
Communication in the Sugar Organization

	M/R	R^2	Beta	F	p
Feeling Tense	.403	.163	.62	5.23	.05
Employment Stability	.405	.164	.29	.06	n.s.
Rule Orientation	.563	.317	.63	5.57	.05

$F(3,61)=3.86, p<.05$

8.2.2) Summarization to Superiors

Hypothesis 6 predicted a negative correlation between Uncertainty Avoidance and distortion of upward communication. Clarity of information called upon by high intolerance for ambiguity would militate against the propensity to reduce or totally withhold upward communication. This section reports on regression findings with frequency of summarization to superiors as the dependent variable.

Table 43 displays the results of the three groups. As regards the Sudanese organizations, there was a significant interrelationship between the dependent and the independent variables in all of the three civilian organizations. In the Sugar, the three indices of UAI accounted for more than 15% of the variation in frequency of summarizing to superiors ($F=3.46$, $p<0.05$). In the Textile, measures of intolerance of ambiguity accounted for 21% of the total variation in frequency of summarization while transmitting to superiors ($F=4.37$, $p<0.01$). Again, in the Cement, almost 29% of the variation in summarizing to superiors was explained by the three indices of Uncertainty Avoidance ($F=6.17$, $p<0.01$).

The impact of intolerance for ambiguity was fairly consistent among these three organizations. The general outcome was, as predicted in hypothesis 6, the higher the indicators of Uncertainty Avoidance, the lower the propensity to summarize while transmitting to superiors. Further details of the regression findings of the Sudanese civilian organizations are shown in Table 45.

The only exception in the Sudanese results were those of the Military where no significant association was found between measures of uncertainty and frequency of summarization to superiors. A plausible explanation would be the nature of the organization. Whatever the motives behind summarization, in the military they seem to differ from the motives of members of civilian organizations. It is possible for frequency of upward summarization in a military organization to differ from those of civilian ones. For instance, if it is distortion and concealment subordinates are after when summarizing to superiors, in a military organization both the motive behind summarization and the degree of risk taken in doing so would be higher than in the case of a civilian organization. Thus, if subordinates were summarizing to conceal personal weaknesses, for example, one would expect the motive for doing so to be higher than in civilian organizations. This is mainly because disclosure of such information to bosses could cause more severe repercussions than

would be the case in civilian organizations.

On the other hand, risk taken would also be higher than in civilian organizations. That is to say, if distortion and concealment of upward communication is a punishable act, and if it became evident to superiors that the information they received have been tampered with, culprits in a military organization are likely to face severe punishment than would their counterparts in a civilian organization (Kipnis and Cosentino, 1969).

Results of the British and Pakistani organizations reported in Table 43 show that the overall regression equations were not significant in any of the three organizations. However, as can be seen in Table 46 single items of the UAI engendered significant impact on frequency of upward summarization in the British Military and Pakistani Textile. In the British Military, "Employment Stability" showed a statistically significant relation with frequency of summarizing to superiors ($F=3.27$, $p<0.05$) with a Beta coefficient of -0.46 . In the Pakistani organization it was "Rule Orientation" that bore a significant relation with frequency of summarizing to superiors ($F=5.83$, $p<0.05$) with a Beta coefficient of -0.49 .

Tables 45 and 46 show that, in four out of five significant relations between measures of UAI and frequency of summarization while transmitting to superiors, one variable shows consistent relevance to the dependent variable. Namely, "Rule Orientation". In the Sudanese Sugar, it accounted for 10% of the total variation ($F=8.00$, $p<0.01$) with a Beta coefficient of -0.49 . In the Textile, it accounted for 17% of the total variation ($F=11.53$, $p<0.01$) with a Beta coefficient of -0.57 . In the Cement, it accounted for almost 27% of the total variation in frequency of summarizing to superiors ($F=10.34$, $p<0.01$) with a Beta coefficient of -0.45 . Similarly, in the Pakistani Textile, "Rule Orientation"

Table 45

Uncertainty Avoidance and Summarizing to Superiors
 in the Sudanese Organizations

Source of Variation	Sugar		Textile		Cement		Military								
	M/R	Beta	M/R	Beta	M/R	Beta	M/R	Beta							
Feeling Tense	.318	-.49	8.00	.413	.170	-.57	11.33	.515	.266	-.45	10.34	.212	.045	-.20	1.25
Employment Stability	.377	-.36	3.53	.459	.211	-.24	2.27	.535	.286	-.13	.47	.213	.045	-.03	.02
Rule Orientation	.392	-.15	.77	.459	.211	-.02	.02	.536	.287	-.04	.06	.213	.045	-.01	.00

**p<.01, *p<.05 F(3,61)=3.46, p<.05 F(3,53)=4.37, p<.01 F(50,3)=6.17, p<.01

Table 46

Uncertainty Avoidance and Summarizing to Superiors
 in the British and Pakistani Organizations

Source of Variation	British Military		British Textile		Pakistani Textile							
	M/R	R Beta	F	M/R	R Beta	F						
Feeling Tense	.296	.088	-.46	3.27	.469	.220	-.47	2.77	.495	.245	-.49	5.83
Employment Stability	.356	.127	-.25	.86	.511	.261	-.30	1.46	.508	.258	-.16	.61
Rule Orientation	.358	.128	-.03	.03	.529	.280	-.21	.46	.524	.274	-.14	.50

*p < .05

explained about 26% of the variation in frequency of summarizing while transmitting to superiors.

"Rule Orientation" examines the extent to which respondents agree with the statement that "company rules should not be broken", and it has been regarded by Hofstede (1980) as the central measure of Uncertainty Avoidance. The "Rule Orientation" answers, like summarization, have been coded in such a way that a lower score indicates a greater extent of rule orientation, hence high intolerance of ambiguity. Results of the three civilian organizations and those of the Pakistani Textile indicate that the higher the rule orientation, the less would be the propensity to summarize while transmitting to superiors. This is in accordance with what was predicted in hypothesis 7.

Surprisingly, frequency of summarization to superiors in the Sudanese Military showed no significant relation to any of the UAI indices. Judging from its nature one would have expected a higher rule orientation in a military organization than would normally expect in a civilian one. Overall, and even though the F ratio of the Sudanese Military was not significant, there was a definite trend in support of hypothesis 7 which predicted a negative association between Uncertainty Avoidance and propensity to summarize to superiors.

Results of the British group pertaining to intolerance of ambiguity and propensity to summarize while transmitting to superiors were generally insignificant (Table 43). However, in the Military, only one variable of the UAI indices showed a significant association with frequency of summarizing to superiors, namely, "Employment Stability" (Table 46). Employment stability examines the duration of time a respondent is expecting to continue working for his/her organization. Answers were coded in such a way that a higher score indicates a longer time. Thus, as far as the British Military is concerned, the longer the respondent was going to stay in the organization, the

less he was going to adhere to summarizing while transmitting to superiors.

In summary, in the Sudanese group the central variable to the Uncertainty Avoidance dimension showed an intimate and indeed highly significant negative interrelationship with the propensity to summarize to superiors. However, this finding held only in the civilian organizations. Results of the Pakistani group run in a similar vein. The reader will recall that both the Sudanese and Pakistani groups showed higher levels of intolerance of ambiguity (Chapter Five). It would appear that summarizing to superiors is an intolerable and risky thing to do. On the other hand, regression findings of the British group showed no significant interrelationship between UAI indices and upward summarization. Perhaps the relatively low intolerance of ambiguity showed by this group (Chapter Five) would explain why the British surpassed both groups in frequency of summarizing to superiors (Chapter Six).

8.2.3) Gatekeeping to Superiors

Withholding information while communicating with superiors is probably one of the most significant factors as far as distortion of upward communication is concerned. The three indices of UAI were regressed on frequency of gatekeeping to superiors. The need for clear requirements and instructions engendered by high intolerance for uncertainty entails a correspondingly high need for less distorted communication.

However, as displayed in Table 43, only one significant interrelationship was found between Uncertainty Avoidance and gatekeeping to superiors. In the Cement (Table 47) the three indices of UAI explained about 18% of the variation in frequency of gatekeeping to superiors $F(3,50)=3.46, p<.05$. The most significant variable was the one that taps frequency of feeling tense during work. This variable accounted for about 16% of the total 18% explained by the three UAI indices ($F=3.92, p<.05$). This finding imply that the more a respondent feels tense or

nervous during work hours the more he will gatekeep while transmitting upward.

Table 47

Uncertainty Avoidance and Gatekeeping
in the Cement

Source of Variation	M/R	R^2	Beta	F
Feeling Tense	.405	.164	-.39	3.92*
Rule Orientation	.427	.182	-.16	1.14
Employment Stability	.429	.184	.06	.11

* $p < .05$

$F(3, 50) = 3.46, p < .05$

Thus, the evidence available at present does not show a significant interrelationship between intolerance for ambiguity and the propensity to withhold information while communicating upward. Even in the Cement the central variable to the UAI i.e., "Rule Orientation" did not explain a significant proportion of the variation in frequency of gatekeeping to superiors. This leads us to reject the second part of hypothesis 8 which predicted a negative association between level of intolerance for ambiguity and frequency of gatekeeping.

8.3) Uncertainty Avoidance and Modalities of Communication

By modalities, reference is made to the channel through which information is transmitted. Frequency of using each of the three categories of channel were investigated. These include: written, face-to-face, and the telephone.

This section investigates the possibility of a connection between the cultural dimension of Uncertainty Avoidance and frequency of adhering to each of the three modalities mentioned above. Previous research, ostensibly, attributes adherence to certain modalities over others to cultural values without spelling out what these cultural values are. For instance, the French have frequently featured as adhering more to written modalities of communication than do their counterparts in Britain, (Graves, 1972) America, (Weinshall, 1979) or Germany (Hutton et al., 1977). In Hofstede's study (1980) the French score on UAI was higher than that of the British, American or Germans. Could there be an association between preference for a certain modality of communication and societal intolerance for ambiguity? This study specifically attempted to examine such a possibility.

That the three groups incorporated in this study might be perceived as representing contrasting cultures in relation to work-related values is discussed in Chapter Five. Those with relatively higher scores on UAI (Sudanese and Pakistani) are expected to be more formal (Chapter Four). However, the precise effect of this diversity of cultural background on preference for a particular mode of communication was hard to anticipate. Prima facie, members of a less formalized culture will adhere less frequently to formal modalities of communication. In other words, if a society shows a high intolerance for ambiguity this is likely to result in more formalized organizations, which in turn will be reflected in employees preference for relatively more formal means of communication. The question is, how can one say this mode of communication is more or less formal than the other? Among the three modalities of communication investigated here, certain ones have obvious advantages over the others (see Table 48).

Dividing them into two major categories, written and oral methods, written methods have the aura of authority and formality, can be stored permanently, and they are more efficient in transmitting information accurately. In fact, the level of using written instructions and excessive adherence to written communication has

generally been taken as an indication of the level of formalization within an organization. The question then is to assign a grade of formality/informality to the oral modalities.

Table 48

Principal Media of Communication: Advantages and disadvantages

Media	Advantages	Disadvantages
Written: (e.g. letter, memorandum, report)	Provides written record and evidence of despatch and receipt.	Takes time to produce, communication is formal and distant.
Oral: (face-to-face, and the telephone).	Direct medium of communication physical proximity allows for instant feedback.	Difficult to hold ground in face of opposition; disputes may arise over what was said

Source: Adapted from Evans (1984, p. 7).

Oral communication can generally be divided into two major categories, namely, face-to-face and mediated communication (through the telephone, audio-visual etc.). In comparison to the face-to-face modality, other oral modalities are generally regarded as less formal, more personal and prone to be less accurate. The present study includes only the face-to-face modality and the telephone. Thus, the following three points of comparison between the face-to-face and the telephone would explain why this study proposed a formal and more authoritative status to the face-to-face as a mode of communication.

Firstly, status differentials are likely to emerge more clearly in face-to-face communication than when communicating through the telephone (Williams, 1977). The telephone media cannot cater for non-verbal cues which would enhance the nature of communication particularly when it meant to be a formal one. Eventually, the absence of the eye contact would mean the absence of the dominance, friendliness or approval gestures and cues which can establish the formality/informality of conversation.

In connection with the issue of non-verbal cues, and with more emphasis placed on the efficiency of the face-to-face modality in transmitting accurate information, Craig (1975) (cited in Williams, 1977) argues that:

'...channel capacity is a function of channel bandwidth, it decreases as one moves from face-to-face to video and audio conferencing...Face-to-face communication provides wide channel bandwidth in which messages can be transmitted and received by any of the five senses so that the uncertainty of the message is reduced' (p. 2).

Secondly, efficiency of information transmission is better when communicating face-to-face as opposed to the telephone (see the quote above). Furthermore, communicators report that they particularly feel remoteness and unreality when communicating with people via telecommunications (e.g., Champness, 1973; Short et al., 1976). Perhaps it is these attitudinal differences that enhance the informality of the telephone as a communication medium in organizations. Adherence to the telephone in organizational communication was significantly less than to the written and face-to-face modalities across the three cultural groups (Chapter Six).

Thirdly, the authority of the face-to-face modality can be deduced from Milgram's classic studies. In his studies of obedience Milgram (1965) varied the conditions of "closeness of authority". In one condition the subject and the experimenter were in the same room and in another the experimenter gave his instructions by

telephone. Subjects were significantly more obedient in the face-to-face condition (subject and experimenter in the same room) than in the telephone only.

The three points mentioned above would imply a more formal status to the face-to-face modality in comparison to the telephone. Having said that, it is quite obvious that meeting face-to-face in impromptu meetings, in the corridor, or near the coffee machine can hardly be regarded as a formal way of communication. An unfortunate limitation of this study is the negligence of communication context. Previous studies have called for the consideration of the context within which people communicate (Olsen and Lucas, 1982). However, since respondents have been requested at the outset of the questionnaire to imagine a typical work week, one would expect that in reporting the frequency of using the modalities discussed above, they would only report communication pertaining to work. Previous research suggests that communication activities could be recalled and reported with almost complete accuracy (Cashdan and Jordin, 1987).

In Chapter Six (section 6.3) results of the three cultural groups regarding frequency of using each of the three modalities showed that Sudanese use written methods more than the British or Pakistani managers do, with the difference between the British and Pakistani respondents reportedly insignificant (section 6.3.1).

With regard to face-to-face modality, the British surpassed both Sudanese and Pakistani counterparts with the difference between the last two groups being insignificant (section 6.3.2).

With reference to the usage of the telephone it was reported that the British managers used the telephone more than their Sudanese or Pakistani counterparts with the difference between the last two being insignificant (section 6.3.3).

The following sections present regression analysis findings with the three indices of UAI forming the independent variables and the

three modalities of communication, in turn, making the dependent variable. As stated previously, it is hard to predict any sort of an association between the dependent and the independent variables. However, since the general theme of this study is exploratory, it is plausible to predict a positive relationship between relatively more formal means of communication (such as written methods or face-to-face) and intolerance for ambiguity. On the other hand, adherence to less formal and relatively more personal methods of communication such as the telephone is expected to correlate negatively with intolerance for ambiguity. In other words, the higher the intolerance for ambiguity, the less will respondents adhere to using the telephone.

Table 49 displays a summary of the regression findings with measures of Uncertainty Avoidance forming the independent variables and frequency of adherence to each of the three modalities of communication as the dependent variables. These results are discussed in more details in the following subsections.

8.3.1) Written Modalities

Although the Sudanese group is the one that showed more adherence to written modalities as opposed to the British and Pakistani nationals, regression findings showed no significant relation between frequency of using written methods for communication and measures of intolerance for ambiguity (Appendix D). Similarly, no significant results were found for the British Group.

Among the three national groups the Pakistani was the only one that showed a significant association between measures of UAI and frequency of adherence to written modalities. As Table 50 shows, the three items that measure the degree of intolerance for ambiguity accounted for 81% of the variation in percentage of

Table 49

Uncertainty Avoidance and Modalities of Communication

Modalities	Sudanese		British		Pakistani					
	R	F	R	F	R	F				
Written	.01	-.25	-.32	-.19	-.01	-.05	-.81	7.00		
Face-to-face	.10	.35	-.14	.07	.13	.33	2.94	.41		
The Telephone	.09	.40	-.50	4.30	.10	.11	.47	5.37	.67	5.18

Notes: Only the overall value of R and F are reported i.e. the total variation explained by the three independent variables.

Table 50

Measures of Uncertainty Avoidance and Using Written
Modalities in the Pakistani Organization

Source of Variation	M/R	R^2	Beta	F
Feeling Tense	.566	.320	.15	3.29*
Employment Stability	.604	.365	.05	.42
Rule Orientation	.897	.808	-.82	11.50**

**p<.01, *p<.05 F(3,26)=7.00, p<.05

Table 51

Measures of Uncertainty Avoidance and Using Written
Modalities in the Sudanese Military

Source of Variation	M/R	R^2	Beta	F
Feeling Tense	.215	.046	.22	1.26
Rule Orientation	.242	.059	.16	.34
Employment Stability	.435	.189	-.45	3.85@

@-p<.06

using written modalities (F=7.00, p<0.05). "Rule Orientation" alone accounted for about 44% (F=11.50, p<0.01) with a Beta coefficient of -.82. The negative sign of the Beta weight implies that, the more people were rule oriented (i.e high Uncertainty Avoidance), the more they adhered to written methods.

This is in line with the part of hypothesis 9 pertaining to the Pakistani group. However, results of the Sudanese group, as

stated previously, did not substantiate hypothesis 9. As can be seen in Table 51, the Military is the only Sudanese organization that approached significance. Here, "Rule Orientation" accounted for about 13% of the total variation in frequency of adhering to written modalities ($F=3.85$, $p<.06$) with a Beta coefficient of $-.45$. Compared to the results of the British Military, those of the Sudanese Military provide support to what was predicted in hypothesis 9.

8.3.2) Face-to-face Modality

It has been reported earlier (Chapter Six, section 6.3.2) that the British managers surpassed their Sudanese and Pakistani counterparts in frequency of using face-to-face modality. There was no significant association between intolerance for ambiguity and frequency of adhering to face-to-face communication in the Sudanese and Pakistani groups (Appendix D).

As regards the British, the only significant interrelationship was found in the Textile. Here, as reported in Table 52 below, two variables out of the three UAI indices showed a significant association with the dependent variable. "Feeling Tense" accounted for 23% of the total variation in frequency of using face-to-face modality in communication ($F=5.85$, $p<0.05$) with a Beta coefficient of $.25$. This implies an inverse correlation between feeling tense at work and the propensity to communicate via face-to-face modality. This finding corroborates what has been suggested by previous research. For instance, Wilson (1974) suggested that when communicating through face-to-face and due to the presence of another or others, a person may feel that he or she is being evaluated rather than being merely communicating.

The other variable that showed a significant association with frequency of using face-to-face modality was "Employment Stability". It accounted for about 8% of the total variation in the dependent variable ($F=2.24$, $p<.05$) with a Beta coefficient of $.31$. This finding implies that, the more a respondent is

intending to work for the organization the more he/she will adhere to the face-to-face channel while communicating. This is indeed is a logical finding and it provides further support for what has been reported in previous research. For instance, Housel and Davis (1977) singled out face-to-face as the most satisfying channel compared to written and the telephone modalities, and they reported a positive correlation between using face-to-face modality and satisfaction with upward communication in general. Eventually, one would expect satisfied members of an organization to have longer tenure.

Table 52

Measures of Uncertainty Avoidance and Using Face-to-face Modality in the British Textile

Source of Variation	M/R	r^2	Beta	F
Feeling Tense	.476	.226	.25	5.85*
Rule Orientation	.555	.308	.22	2.24*
Employment Stability	.573	.329	.20	.56

F(3,22)=2.94, p<.05

*p<.05

8.3.3) Frequency of using the Telephone

When comparing these three national groups on frequency of using the telephone (Chapter Six, section 6.3.3) the results found were in line to what was predicted for the Sudanese and the British groups. The British (relatively low UAI score) surpassed their Sudanese counterparts (relatively high UAI score) in frequency of using the telephone (relatively less formal modality) across both the Textile and Military organizations. No significant difference was found between the Pakistani and the Sudanese with regard to frequency of adhering to the telephone. However, results of the

British (low UAI) when compared to those of the Pakistani (high UAI) were found to be insignificant. This is antagonistic to what was predicted in Chapter Four. The Pakistani, it has been argued, since showing a relatively higher UAI score than their British counterparts, the difference between them as regards usage of the telephone would be significant. The British were predicted to significantly surpass the Pakistani. This finding would call for two plausible explanations.

Firstly, our typology in which a less formal status has been given to the telephone could not be as valid as we thought it would be. However, the general trend of theory and research (section 8.3 above) coupled with the results of the Sudanese when compared to the British appear to support such a typology.

Secondly, the Pakistani, in running their enterprises in Britain could have found it necessary to adopt the British style of doing things. In other words, they could have been forced to forsake some of their work-related values (bureaucracy and formality) if they are to survive as a successful enterprise. Moreover, we came to know that the Pakistani Textile was initially a white British firm which was taken over by a group of Pakistani enterprunours. Although we know that at present it is a predominantly Pakistani company, little is known about how long has it been like this.

With regard to the Sudanese group, only two significant relationships were found. Table 53 shows that in the Cement, the three indices of UAI accounted for about 50% of the variation in frequency of using the telephone ($F=4.30$, $p<0.05$). Two out of the three indices of UAI would appear to have significant relationship with the dependent variable. Firstly, "Feeling Tense", accounted for 27% of the total variation ($F=5.61$, $p<0.05$) with a Beta coefficient of .64. This implies that the more frequently an employee feels tense or nervous, the less he/she will adhere to using the telephone in communication. Secondly, "Employment Stability" accounted for about 20% of the total variation ($F=5.24$, $p<0.05$) with a Beta coefficient of .55. This finding implies

that; the more an employee intends to work for the organization, the less he/she will adhere to using the telephone in communication.

The second significant result, as regards the Sudanese group was found in the Textile. Here only one variable of the three UAI indices showed a significant association with the dependent variable. Again, "Employment Stability" (Table 53 below) accounted for 21% of the variation ($F=4.35$, $p<0.05$) with a Beta coefficient of .50. This would imply that the more a respondent is intending to stay working for the Sudanese Textile the less will he use the telephone as a channel for communication.

With regard to the British group, the only significant result was found in the Textile. Here (Table 54) the three indices of UAI accounted for 47% of the variation in frequency of adhering to the telephone ($F=5.37$, $p<0.01$). Table 53 also shows that the three indices of UAI accounted for 67% of the variation in frequency of using the telephone in the Pakistani Textile ($F=11.60$, $p<.05$). In both the British and Pakistani organizations, it was "Feeling Tense" that accounted for a significant portion of the total variation in frequency of using the telephone. In the British organization this variable was responsible for 25% out of 47% explained by all three UAI indices. In the Pakistani Textile it accounted for more than half (about 34%) of the total variation (67%) explained by the independently variables.

8.4) Discussion

The regression analyses presented above point to three general categories. Firstly, UAI indices appear to explain in a highly significant and consistent way the variation accounted for in the communicational (dependent) variable(s). In this case one is more likely to accept cultural variation in work-related values as the independent variable. When this occurs we always turn our attention to the significance of the impact exerted by "Rule

Table 53

Uncertainty Avoidance and the Telephone in the
Sudanesse Organizations

Source of Variation	Sugar		Textile		Cement		Military									
	M/R	R	Beta	E	M/R	R	Beta	E	M/R	R	Beta	E				
Feeling Tense	.028	.001	-.23	.02	.430	.185	-.19	2.95	.522	.272	.64	5.61	.008	.000	-.04	.00
Employment Stability	.291	.084	.38	2.38	.634	.402	.50	4.35	.684	.474	.55	5.24	.218	.048	.05	1.25
Rule Orientation	.291	.085	.03	.01	.634	.402	.03	.00	.706	.498	.51	.47	.322	.104	.29	1.50

*p<.05

F(3,50)=4.30, p<.05

Table 54

Uncertainty Avoidance and the Telephone in the
British and Pakistani Organizations

Source of Variation	British Military		British Textile		Pakistani Textile							
	M/R	R	Beta	F	M/R	R	Beta	F				
Feeling Tense	.290	.084	-.24	2.47	.501	.251	-.21	6.71	.246	.342	-.72	5.18
Employment Stability	.304	.092	-.21	.24	.604	.364	-.12	3.38	.316	.418	.05	.68
Rule Orientation	.329	.108	-.18	.44	.687	.472	-.46	3.69	.818	.670	.16	2.35

*p<.05

F(3,22)=5.37, p<.05

F(3,26)=11.60, p<.05

Orientation". This is mainly because it is this variable that Hofstede (1980) has regarded as central to tolerance or intolerance of ambiguity as a societal norm.

Secondly, and slightly related to the previous one, certain regression findings seem to lie in accordance with theory. However, results were found in one or two organizations rather than the others. Such findings are hard to interpret particularly with the Pakistani group being represented by only one organization. In other words, for the Sudanese one can tell if the results are compatible with the cultural norm depicted for the group and whether they were consistent across the four organizations or at least the civilian ones. Nevertheless, the central variable of "Rule Orientation" will again be used to decide whether there was good reason to believe cultural variations were responsible.

The third category include incidents where one or the other two variables that make up the UAI shows significant and consistent results (across groups or across organizations within a group), the interpretation would, we think, better be one of organizational rather than cultural implications.

The first one is exemplified by our investigation of the likelihood of subordinates' summarization while transmitting upward. Chapter Six established that, in the Sudanese and Pakistani organizations summarization to superiors was significantly less than in their British counterparts. Regression findings reported above show that in both the Sudanese and Pakistani organizations UAI variables explained a significant proportion of the variation in frequency of summarizing to superiors. Moreover, it was "Rule Orientation", the central variable of the UAI that seems to account for a considerably and highly significant percentage of the overall variation in summarizing to superiors.

Two findings fitted in the second category. Firstly, results of the Sugar showed that a significant portion of the variation in perceived accuracy of downward communication was explained by the extent of intolerance of ambiguity. Thus, the higher the intolerance for ambiguity, the more will information received from above be rated as accurate. Despite the fact that this finding was not supported by any other organization it is in line with what was predicted in Chapter Four. Moreover, "Rule Orientation" accounted for a significant portion of the total variation. In this connection Hofstede (1980) argued that if high uncertainty avoidance is the societal norm, those at the top in organizations will be perceived as responsible for controlling the uncertainty. Therefore, information received from above is an information from an authority hence likely to be accurate.

Within the second category still are the regression findings of relating written modalities to UAI indices. The only significant association was in the Pakistani organization. When high intolerance of ambiguity is the societal norm it was predicted that adherence for written modalities would also be high. This proposition seems to be substantiated by the Pakistani results. Similarly, results of the Sudanese Military lent similar support albeit at .06 level of significance.

Although these findings seem to be straight forward, results of the civilian Sudanese organizations being insignificant confounds them. The Sudanese managers not only showed low tolerance for ambiguity (Chapter Five) but also surpassed both their British and Pakistani counterparts in communicating via written modalities. Previous research suggests that the more formalized (low tolerance of ambiguity) societies are, the more will adherence to written modalities flourish in organizations operating there (Weinshall, 1979; Hutton et al., 1977).

As regards the third category, and in relating UAI variables to channel selection, the evidence presented in this study appears to show variables (among the UAI items) pertaining to organizational

rather than to national culture as having the impetus to influence how frequent a certain channel will be used. For instance, with frequency of using face-to-face modality as the dependent variable the only significant interrelationship was reported in the British group (where low intolerance for uncertainty was the norm). Here two out of the three UAI indices showed significant relations with the dependent variable. Firstly, the less tense subordinates feel at work, the more likely they will use person-to-person or unmediated communication. Secondly, the longer a subordinate intends to work for the same organization, the more he/she selects face-to-face medium for communicating.

Given the fact that this finding did not hold in any of the other organizations, (including the British Military), one is inclined to suggest organizational climate as a possible culprit. Previous research supports such a possibility. For instance, Muchinsky (1977) reported significant correlation between satisfaction with work in general and frequency of using face-to-face communication. In showing less tension during work hours and aiming for longer tenure, members of the British Textile appear to imply general satisfaction with their jobs. In reporting high frequency of unmediated communication their results seem to corroborate previous research findings.

Similarly, findings of the regression analyses that tested the interrelationship between UAI items and using the telephone point to organizational culture rather than the national culture at large as an influential factor. Again, it was frequency of feeling tense beside the intention to continue working for the same employer that explain significant portion of the variation in the dependent variable. Moreover, the impact exerted by these variables seems to be consistent across groups with high as well as ones with low intolerance of uncertainty as a social norm.

8.5) Summary

To conclude, this chapter sought to relate intolerance of ambiguity as a societal norm to organizational communication behaviours. Two communicational factors were examined. The first one pertains to superior-subordinate communication. It included perceived accuracy of downward communication (information received from superiors), frequency of summarizing to superiors and frequency of gatekeeping to superiors. The second one refers to channel selection.

This chapter showed that when investigating the qualitative attributes of superior-subordinate communication behaviour, work-related values pertaining to intolerance of ambiguity ought to be considered as potentially relevant.

As regards preference for certain modalities of communication over others, factors emanating from organizational climate appear to be more relevant than those pertaining to the societal norm of intolerance of ambiguity.

CHAPTER NINE

Trust in Superiors and Superior-subordinate Communication Behaviour

9.1) Introduction

Trust is a vital element in any relationship and is a mutual one. Lack of trust leads to fears about the misuse of information and consequently to substantial manipulation and filtering of such information (see Chapter Three). Several studies have reported that possession of power by a leader causes subordinates to feel uneasy, distrustful and reluctant to reveal weaknesses to their superiors (e.g. Hutchins and Fielder, 1960; Mulder, 1959). Thus, being highly autocratic and/or paternalistic (see Chapter Five) the Sudanese and the Pakistani managers are hypothesized to have little confidence in their subordinates (Likert, 1961;1967). Similarly, one would expect their subordinates to have little trust in their superiors.

This chapter incorporates four main sections. Section one is concerned with the research question of whether there were significant differences in levels of trust in superiors across the three cultural groups. Section two presents the regression findings that test for associations between perceived trust in superiors and the quantitative attributes of superior-subordinate communication. Section three presents the results pertaining to the relationship between perceived trust in superiors and the qualitative attributes of superior-subordinate communication. The last section presents and discusses the main findings in relation to what has been predicted in hypotheses 8 and 9 in Chapter Four.

9.2) Trust in Superiors

This section will compare the mean scores of the Sudanese, British

and Pakistani groups in the Textile organizations and those of the Sudanese and British Military officers as measured by the three items which tap the level of trust in superiors. These three items were discussed in Chapter Four and their statistical properties were assessed. As a reminder, following are these three items.

- 1- How free do subordinates feel to discuss with their superiors work-related problems without this being taken against them.
- 2- How trustful do subordinates feel when their superiors take decisions that seem unfavourable from the subordinates point of view.
- 3- How subordinates generally rates their trust in their superiors regarding their general fairness.

In Chapter Four the internal reliability tests show that these three items have a high consistency and can be treated as a composite scale. In reporting the results these three items will be shortened as: Disclosure of Grievance; Unfavourable Decisions; and General Fairness respectively.

9.2.1) Disclosure of Grievance

Table 55 displays the t-tests results between mean scores of the three cultural groups pertaining to propensity to disclosure of grievance to superiors. As far as the Textile organizations are concerned, Sudanese managers showed significantly less tendency to disclose their grievance to their superiors without the fear of negative repercussions, than both their Pakistani ($t=8.54$, $p<.01$) and British ($t=5.58$, $p<.01$) counterparts. Results of the Pakistani and the British groups show that the Pakistani disclose their compliance more freely to their superiors than do their British counterparts ($t=4.67$, $p<.05$).

Table 55 also shows results of the Military organizations. Again the Sudanese officers showed significantly less tendency, compared to the British, to disclose their grievance to their superiors without fears of negative consequences ($t=4.69$, $p<.01$).

9.2.2) Trust Unfavourable Decisions

Sometimes superiors have to make decisions that seems to be against the interests of their subordinates; to what extent do

Table 55

Disclosure of Grievance Across the Three Groups

Cultural Group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	3.87	1.06	8.54	77	.01
Pakistani	1.65	.94			
Sudanese	3.87	1.06	5.58	73	.01
British	2.32	1.13			
Pakistani	1.65	.94	2.20	46	.05
British	2.32	1.13			
<u>Military</u>					
Sudanese	4.32	1.49	4.69	77	.01
British	2.72	1.36			

subordinates trust the intentions of their superiors and believe that they are justified? Table 56 again, shows the Sudanese managers as the group that more significantly doubts the intentions of their superiors when they take decisions that looks unfavourable from the subordinates point of view. They showed less trust for unfavourable decisions made by superiors than their

Table 56

Trust Unfavourable Decisions

Cultural Group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	3.64	1.23	5.91	77	.01
Pakistani	1.96	1.04			
Sudanese	3.64	1.23	4.13	73	.01
British	2.36	1.14			
Pakistani	1.96	1.04	1.25	46	-
British	2.36	1.14			
<u>Military</u>					
Sudanese	4.16	1.43	3.89	77	.01
British	2.93	1.16			

Pakistani ($t=5.91$, $p<.01$) and British ($t=4.13$, $p<.01$) counterparts. There was no difference between the British and the Pakistani groups.

With reference to results of the Sudanese and British Military, they corroborated results showed by the civilian organizations. That is to say, Sudanese officers, in comparison to their British counterparts, showed less trust in the intentions of their superiors in the wake of unfavourable decisions ($t=3.89$, $p<.01$).

9.2.3) Trust General Fairness

In consistency with the previous two factors, Table 57 shows the Sudanese as the group that shows significantly less trust in the general fairness of their superiors than their Pakistani ($t=7.27$, $p<.01$) and British ($t=3.90$, $p<.01$) counterparts. There was no significant difference between the British and the Pakistani groups. Again, results of the Sudanese and British military

organizations were in line with those of the civilian ones. Sudanese officers showed significantly less trust in their superiors' general fairness in comparison to their British counterparts ($t=5.63$, $p<.01$).

Table 57

Trust General Fairness

Cultural Group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	3.30	1.41	7.27	77	.01
Pakistani	5.65	1.16			
Sudanese	3.30	1.41	3.90	73	.01
British	5.68	1.00			
Pakistani	5.65	1.16	.09	46	-
British	5.68	1.00			
<u>Military</u>					
Sudanese	2.70	1.91	5.63	77	.01
British	5.03	1.43			

In considering the scores on these three items, members of the Sudanese group emerge as the ones who have significantly less trust in their superiors in comparison to both the British and Pakistani groups. Moreover, the difference between the Sudanese and British holds in both civilian and military organizations. However, the difference between the British and the Pakistani is not so significant. The next question to be answered is to what extent does the level of trust in superiors relate to the quantitative and qualitative attributes of superior-subordinate communication behaviour? The following two sections set out to answer this question.

9.3) Trust and Quantitative Attributes of Communication

This section presents regression findings of the quantitative attributes of superior-subordinate communication with the three items that measure trust as the independent variables. Quantitative attributes of superior-subordinate communication were measured by four main items. These include percentage spent by subordinate on interaction with superiors, subordinates' desire for interaction with superiors, percentage of time spent by subordinates on receiving from superiors and percentage of time spent by subordinates sending to their superiors. The following sub-sections present results of regression models in which each of these four variables will be taken (in turn) as the dependent variable. The three items that measure trust in superiors will form the independent variables. Only tables presenting significant results will be shown in this chapter and in most cases only R^2 and the F value along with the level of significance will be shown. Tables including further details of regression findings for each of the seven organizations can be found in Appendix G.

9.3.1) Trust and Upward Communication

1) Sudanese Organizations

Regression findings of the Sudanese organizations with percentage of time spent on interaction with superiors as the dependent variable and the three measures of trust in superiors as the independent variables are shown in Table 58. It can be seen that, the only significant association exists in the Textile where measurements of the degree of subordinates' trust in superiors account for 59% of the variation in percentage of time they spent in interaction with them $F(3,53)=5.35$, $p<0.05$. The most significant impact was engendered by the variable that measures trust in superiors to the extent of "disclosure of grievance". Table 58 shows that this variable accounts for about 37% of the total variation ($F=7.70$, $p<0.05$). This implies that in the Textile organization, if subordinates can trust their superior to

the extent that they can air their complaints to him/her, without fearing that it might be taken against them, they will spent more time interacting with such a superior.

ii) British and Pakistani Organizations

Results of the British group along with those of the Pakistani Textile are displayed in Table 59. It shows that, while there was no significant relationship in the British or Pakistani Textile, results of the British Military show a significant association between one of the variable that measures trust in superiors and percentage of time spent on interaction with superiors. As in the case of the Sudanese Textile (Table 58) Table 59 shows that in the British Military the variable that taps the extent to which subordinates can feel free to air their grievance to bosses without the fear of it being taken against them, bore a significant relationship to time spent on upward interaction. It accounted for about 15% of the variation ($F=4.67$, $p<0.05$).

Table 58

Trust and Frequency of Upward Communication
in the Sudanese Organizations

Source of Variation	Sugar		Textile		Cement		Military	
	R ²	F	R ²	F	R ²	F	R ²	F
Disclosure of Grievance	.02	.50	.37	7.70*	.21	4.09	.01	.21
Unfavourite Decisions	.08	1.75	.43	1.16	.22	.01	.05	.97
General Fairness	.10	.58	.59	4.48	.22	.01	.07	.62

* $p<.05$

$F(3,53)=6.35$, $p<.05$

Table 59

Trust and Frequency of Upward Communication
in the British and Pakistani Organizations

Source of Variation	British		Pakistani			
	Military		Textile		Textile	
	2_R	F	2_R	F	2_R	F
Disclosure of Grievence	.15	4.67*	.07	1.52	.03	.18
Unfavourite Decisions	.15	.09	.13	1.18	.33	2.72
General Fairness	.17	.58	.14	.25	.44	.96

*p<.05

Table 59 shows that no significant association is found in the Pakistani organization between perceived trust in superiors and time spent in interaction with them.

9.3.2) Trust and Desire for Interaction with Superiors

Desire for interaction with superiors has generally been regarded as an indication of the volume of superior-subordinate communication (Harris, 1985, Roberts and O'Reilly, 1974a). For instance Roberts and O'Reilly (1974a) reported that subordinates with high trust in their superiors showed an equally high desire for interaction with their superiors. In this study, the interrelationship between desire for interaction with superiors and trust in them was tested through regression analysis. The aim was to see how much, if any, of the variation in desire for upward interaction could be attributed to the level of trust a subordinate has in his superior.

There was no significant association in any of the seven organizations between perceived trust in superiors and the desire for interaction with them (Appendix G).

9.3.3 Trust and Downward Communication

One way to measure the volume of communication between a superior and his/her subordinates is to measure the percentage of time spent by the subordinate on receiving and/or sending to their superiors. This section deals with percentage of time spent on receiving from superiors (i.e. downward communication) as reported by the subordinates.

Regression findings of the Sudanese organizations with percentage of time spent on receiving from superiors as the dependent variable and measures of trust in superiors as the independent variables are shown in Table 60. Only two significant associations were found in the Sugar and Textile. It can be seen in Table 60 that in the Sugar organization, one of the three variables that taps trust in superiors bears a significant relationship with percentage of time spent in receiving from upward. Namely, trusting superiors for decisions that seems unfavourable to the subordinate accounts for about 15% of the variation in time spent on receiving from superiors ($F=4.77$, $p<0.05$). In the Textile organization it is a different factor. As before in the case of frequency of upward interaction, subordinates of the Sudanese Textile show a significant association between trust to the extent of disclosure of grievance and frequency of receiving from superiors. Again, if subordinates in the Sudanese Textile feel that they can trust their superiors and air their complaints without the fear of the possibility of such activity being taken against them, they will also spend a significant percentage of time on receiving from upward ($F=9.00$, $p<0.01$).

As can be seen in Appendix G, there was no significant association in the British or Pakistani organizations between perceived trust in superiors and time spent on receiving from above.

Table 60

Trust and Receiving from Superiors
in the Sudanese Organizations

Source of Variation	Sugar		Textile		Cement		Military	
	R ²	F	R ²	F	R ²	F	R ²	F
Disclosure of Grievance	.01	.16	.41	9.00**	.11	1.78	.03	.69
Unfavourite Decisions	.16	4.77*	.42	.13	.19	1.35	.03	.13
General Fairness	.16	.02	.46	.86	.21	.37	.03	.01

**p<.01, *p<.05

9.3.4) Trust and Upward Communication

Table 61 displays the regression findings with the three variables that measure perceived trust in superiors as the independent variables and percentage of time spent in sending upward as the dependent variable in four Sudanese organizations. It can be seen that two significant associations between the dependent and the independent variables were found in the Sudanese Military and Textile. Firstly, there appears to be a very significant interrelation between perceived trust in superiors and percentage of time spent on sending upward. Measures of perceived trust in superiors accounted for 78% of the variation in time spent on sending upward (F=13.08, p<0.01). Among the three variables that tap perceived trust in superiors, two have proven to be highly associated with time spent on sending upwards. Firstly, "disclosure of grievance, again accounted for a significant portion (about 40%) of the total variation (F=9.63, p<0.01). Secondly, trusting superiors' general fairness, accounted for about 29% of the total variation (F=14.37, p<0.01).

Table 61 also shows that in the Sudanese Military, one variable of the three that measures trust in superiors showed a significant association with time spent on sending upward. If military

officers could trust their superiors to make such decisions that look unfavourable from the view point of the subordinates, the latter will also spend more time in sending to these superiors.

This variable accounted for about 18% of the total variation in time spent on sending upward ($F=5.31$, $p<.05$) with a Beta coefficient of $-.65$.

As can be seen in Appendix G there was no significant association between perceived trust in superiors and percentage of time spent on sending upward in the British Military, Textile or in the Pakistani Textile respectively.

To recapitulate, the previous sections investigated the possibility of an interrelationship between trust in superiors and the quantity of information exchanged in a superior-subordinate communication. Only one organization, and in particular one of the three variables that measure trust in superiors showed a significant association with three out of the four factors that tap the quantitative attributes of superior-subordinate communication (see summary of results shown in Table 52). The organization is the Sudanese Textile and the variable is the one that measures subordinates trust in superiors to the extent of feeling free to make their complaints known without fearing the repercussions of doing so. It showed a significant association with time spent on interacting with, receiving from and sending to superiors in the Sudanese Textile.

Moreover, some of the single items of the scale that measures perceived trust in superiors have also showed significant relationships with indicators of the quantity of superior-subordinate communication. In the British Military 'disclosure of grievance' accounted for 15% of the total variation in time spent on interaction with superiors ($F=4.67$, $p<.05$). Trusting superiors for unfavourable decisions accounted for about 15% of time spent on

Table 61

Trust and Sending to Superiors in the
Sudanese Textile and Military

Source of Variation	Textile				Military			
	M/R	R^2	Beta	F	M/R	R^2	Beta	F
Disclosure of Grievence	.632	.40	-.63	8.63**	.083	.01	-.19	.19
Unfavourite Decisions	.703	.50	-.44	2.28	.426	.18	-.65	5.31*
General Fairness	.884	.78	.63	14.37**	.437	.19	.14	.30

**p<.01, *p<.05

F(3,53)=13.08, p<.01

receiving from superiors in the Sugar (F=4.77, p<.05). Finally, in the Sudanese Military, trusting superiors for unfavourable decisions accounted for about 18% of the total variation in percentage of time spent on sending upward (F=5.31, p<.05).

So, at least regression findings of the Sudanese Textile give us good reason to believe that perceived trust in superiors can ostensibly affect the volume of information exchanged in superior-subordinate communication.

9.4) Trust and Qualitative Attributes of Superior-subordinate Communication

Hypotheses 8 and 9 in Chapter Four predicted an interrelationship between trust in superiors and the qualitative attributes of superior-subordinate communication behaviour. They predicted a positive correlation between trust in superiors and accuracy of information received from above. So, the more trust in superiors the more will information received from above be perceived as accurate. Regression findings that test such a claim are presented in section 9.4.1 below.

9.4.1) Trust and Accuracy of Downward Communication

Regression findings of the Sudanese organizations with perceived accuracy of downward communication as the dependent variable and perceived trust in superiors as the independent variable are shown in Table 63. The only significant relationship between the dependent and the independent variables is to be found in the Sudanese Textile and between only one independent variable and perceived accuracy of downward communication. Table 63 shows that, if a subordinate in the Textile can trust his/her superior to the extent that he/she can make his/her complaints known, he or she is more likely also to perceive information received from such superior as accurate ($F=3.84, p<.05$). This is in line with what has been predicted in hypothesis 8.

With regard to the British and Pakistani organizations, regression findings are presented in Table 64. Only one significant relationship was found between perceived accuracy of downward communication and trust in superiors. It is in the British Military where measures of perceived trust in superiors accounted for 32% of the variation in perceived accuracy of information received from above ($F=3.97, p<0.05$). One can conclude that officers from the British Military organization who trusted their superiors, perceived information received from them as accurate. This is indeed a logical finding, and it substantiates hypothesis 8. Nevertheless, and as stated above, only results of the Sudanese Textile showed an inclination towards a similar relationship between trust and perceived accuracy of downward communication.

These results suggest two things. Firstly, the type of organization has no effect on the relationship between perceived trust in superiors and accuracy of information received from above. That is to say, in both a civilian and a military

Table 62: Trust and Quantitative Attributes of Communication

Quantitative Attributes	Sugar		Sudanes		British		Pakistan							
	R ²	F	R ²	F	R ²	F	R ²	F						
Interaction with-Suparlara	.10	-	.59	5.35	.21	-	.07	-	.17	-	.14	-	.44	-
Desire for -Interaction	.02	-	.09	-	.07	-	.10	-	.13	-	.14	-	.04	-
Receiving from -Suparlara	.16	-	.46	-	.21	-	.03	-	.04	-	.08	-	.22	-
Sending to -Suparlara	.07	-	.78	13.03	.20	-	.19	-	.10	-	.07	-	.39	-

Note: Only the overall value of R² and F are reported i.e. the total variation explained by the three independent variables.

**p<.01, *p<.05.

R²-Percentage of variation explained by the independent variables.

F-Value of F and the significance of the increments in R².

Table 63

Trust and Perceived Accuracy of Downward Communication
in the Sudanese Organizations

Source of Variation	Sugar		Textile		Cement		Military	
	r^2	F	r^2	F	r^2	F	r^2	F
Disclosure of Grievence	.00	.13	.06	3.84*	.01	.08	.01	1.08
Unfavourite Decisions	.01	1.06	.01	.18	.02	.33	.02	.26
General Fairness	.04	1.84	.08	.46	.02	.33	.02	.15

*p<.05

Table 64

Trust and Perceived Accuracy of Downward Communication
in the British and Pakistani Organizations

Source of Variation	British				Pakistani	
	Military		Textile		Textile	
	r^2	F	r^2	F	r^2	F
Disclosure of Grievence	.24	1.84	.00	.00	.03	.26
Unfavourite Decisions	.26	1.00	.01	.12	.05	1.00
General Fairness	.32	1.09	.02	.10	.05	.11

F(3,29)=3.97

p<.05

organization trust in superiors could affect subordinates' perception of how accurate is the information they receive from above. Secondly, cultural differences have no impact on shaping the relationship between trust in superiors and accuracy of downward communication.

However, results of the other five organizations renders one to wonder, if a less cautious generalization could be made, the internal climate and/or culture of an organization should be taken into consideration.

9.4.2) Trust and Summarizing to Superiors

Summarization is one way of manipulating upward communication, and one which without doubt affect the quality of information received by superiors. By reducing the initial volume of information and perhaps emphasizing certain points rather than others, subordinates can filter upward communication. In hypothesis 9 a negative correlation was predicted between perceived trust in superiors and frequency of summarizing while transmitting upward.

So, the more trust subordinates have in their superiors, the less they will adhere to summarization.

This section presents the regression findings for the three cultural groups with summarizing to superiors as the dependent variable and the three items measuring trust in superiors as the independent variables. The aim is to test the hypothesis stated in Chapter Four and to see if there are any differences as far as the three cultural groups are concerned.

With regard to the Sudanese group, as can be seen in Table 63, three out of the four organizations showed a significant association between perceived trust in superiors and frequency of summarization while transmitting upward. In the Textile, the measures of perceived trust in superiors accounted for about 26% of the variation in frequency of summarizing to superiors ($F=5.68$,

p<0.05). In the Cement, perceived trust in superiors accounted for about 21% of the variation in frequency of summarizing while transmitting upward (F=4.00, p<0.05). Also, while the overall regression equation in the Military is not significant, Table 65 shows that two out of the three variables that measure perceived trust in superiors showed a significant relation with frequency of summarizing while transmitting upward. These are, firstly, "disclosure of grievance" which measures the extent to which subordinates feel free to make their complaints known to their superiors without the fear of this being taken against their interests. It accounted for 2% (F=3.95, p<0.05). Secondly, "trust for unfavourite decisions". This variable measures the extent to which subordinates trust their superiors for decisions which are unfavourable from the subordinates point of view. It accounted for 12% of the total variation in frequency of summarizing to superiors (F=6.31, p<0.01).

Regression findings of the British and the Pakistani organizations are shown in Table 66. It shows that, it is only in the British Military that a significant association exists between trust in superiors and frequency of summarization while transmitting upward. In the British Military two out of the three variables that tap perceived trust in superiors accounted for about 25% of the variation in frequency of summarizing to superiors (F=4.33, p<0.01). These include "trust for unfavourite decisions" and "trust superiors' general fairness". In fact the latter accounted for about 24.5% of the total variation in frequency of summarizing to superiors (F=7.54, p<.05).

There was no significant interrelationship between perceived trust in superiors and frequency of summarizing while transmitting upward in the British or the Pakistani Textile organizations.

These findings imply that, indeed there appear to be an association between perceived trust in superiors and frequency of summarization while transmitting upward. The Sudanese Textile, Cement and Military along with the British Military provided

Table 65
Trust and Upward Summarization in the Sudanese Organizations

Source of Variation	Sugar		Textile		Cement		Military	
	² R	F	² R	F	² R	F	² R	F
Disclosure of Grievance	.01	.23	.03	2.90	.20	5.51	.02	3.95
Unfavourable Decisions	.01	.01	.05	1.30	.21	.01	.12	6.31*
General Fairness	.02	.08	.26	6.26*	.21	.01	.14	.82
**p<.01, *p<.05								
F(3,53)=5.68 F(3,50)=4.00								
p<.05 p<.05								

Table 66

Trust and Upward Summarization in the British and Pakistani
Organizations

Source of Variation	British				Pakistani	
	Military		Textile		Textile	
	r^2	F	r^2	F	r^2	F
Disclosure of Grievence	.00	.00	.02	.34	.06	2.39
Unfavourite decisions	.01	.17	.07	.42	.07	.19
General Fairness	.25	7.54*	.08	.30	.10	.59

*p < .05

F(2,29)=4.33

p < .01

results to substantiate what has been predicted in hypothesis 9. Appendix G presents the regression findings of the seven organizations, including the Beta coefficients, which shows the direction of the correlation between each of the three independent variables with frequency of summarization. So, bearing in mind that summarization to superiors is coded in such a manner that a low score signifies greater frequency of summarization and knowing the way each of the three items that measure trust in superiors has been coded (see Chapter Four), our findings indicate a counter production to the one hypothesized in hypothesis 9. Instead of a negative association between trust in superiors and upward summarization, a positive one is found. Regression findings indicate that the more subordinates trust their superiors the more they will indulge in summarization while transmitting upward. This was the case in all the organizations in which a significant interrelationship has been established.

Since there was no significant results in the British or the Pakistani Textile organizations, this meant that we can only

compare results of the Military across the Sudanese and British groups.

Both the Sudanese and British Military showed that the more trust the subordinates have in their superiors, the more frequently they will adhere to summarization while transmitting upward. The only difference between these groups was in what such trust is based on. While in the British Military the most significant factor was trusting superiors' general fairness, this was the least significant factor to the Sudanese officers. Officers of the Sudanese Military showed significant interrelationship between the other two variables that measure trust and frequency of upward summarization. These include, "disclosure of grievance" and "trusting unfavourite decisions".

9.4.3) Trust and Gatekeeping to Superiors

Gatekeeping is the process through which a subordinates decides which information to pass on to superiors. In hypothesis 9 it was predicted that frequency of such an act will depend on the level of trust a subordinate has in his or her superior. It was stated that the less trust a subordinate has in a superior, the more he or she will adhere to gatekeeping while passing information upward. In this case the act of gatekeeping will be carried out with filtering and/or distortion of upward communication in mind. However, subordinates may gatekeep if they decide that their act of censorship is necessitates by the importance of the material at hand. Unfortunately, measured only frequency of gatekeeping to superiors without asking about when and why. With this limitation in mind, the regression findings with frequency of gatekeeping to superiors as the dependent variable and perceived trust in superiors as the independent variable are shown in Table 67 for the Sudanese organizations, and Table 69 for the British and Pakistani organizations.

With regard to the Sudanese group, Table 67 shows that two out of the four organizations show significant association between trust

in superiors and frequency of gatekeeping upward. It can be seen that in the Cement, perceived trust in superiors accounted for 13% of the variation in frequency of gatekeeping while passing information upward ($F=3.60$, $p<0.05$). The second organization is the Military where the three variables that measure trust in superiors accounted for about 21% of the variation in frequency of gatekeeping while passing information upward ($F=4.03$, $p<0.05$).

Results of the Sudanese Cement and Military are also presented in Table 68. In the Cement it can be seen that the most significant of the three variables that measure trust in superiors is the one that taps "disclosure of grievance". This variable accounted for 12% of the total variation (the total was 13%) in frequency of gatekeeping while passing information to superiors ($F=3.59$, $p<.05$) with a Beta coefficient of .30.

This result implies that, there is a positive relationship between trust in superiors and gatekeeping while passing information upward. In other words, if managers of the Cement can trust their superiors to the extent of airing their complaints to them, there is a high possibility that such managers can gatekeep while passing information to their superiors.

Results of the Sudanese Military are different. As can be seen in Table 68 two out of the three variables that measure trust have shown a significant association with gatekeeping to superiors. Firstly, "disclosure of grievance" which accounted for about 12% of the total variation in frequency of gatekeeping while passing information to superiors ($F=10.27$, $p<.01$) with a Beta coefficient of $-.63$. This finding indicates that officers in the Sudanese Military, unlike those of the Cement, will gatekeep to superiors if they feel that they can not trust them enough to the extent of making their complaints known without reaping negative repercussions. Intuitively, one could expect gatekeeping in this case to serve as a distorting process. The second variable of trust was "trusting for unfavourite decisions", and it accounted

Table 67

Trust and Gatekeeping to Superiors in the Sudanese Organizations

	Sugar		Textile		Cement		Military	
Source of Variation	r^2	F	r^2	F	r^2	F	r^2	F
Disclosure of Grievence	.01	.54	.04	.78	.12	3.59*	.12	10.27**
Unfavourite Decisions	.02	.03	.04	.11	.13	.50	.16	3.98*
General Fairness	.02	.53	.04	.02	.13	.00	.21	2.90

**p<.01, *p<.05

F(2,50)=3.60 p<.05 F(3,50)=4.03 p<.05

Table 68

Trust and Gatekeeping to Superiors in the Sudanese Cement and Military Organizations

	Cement				Military			
Source of Variation	M/R	r^2	Beta	F	M/R	r^2	Beta	F
Disclosure of Grievence	.352	.124	.30	3.59*	.187	.035	-.40	3.98*
Unfavourite Decisions	.365	.133	.11	.50	.397	.158	-.63	10.27**
General Fairness	.365	.133	.01	.00	.456	.208	.28	2.90

**p<.01, *p<.05

F(2,50)=3.60, p<.05 F(3,50)=4.03, p<.05

for about 4% of the total variation ($F=3.98$, $p<.05$) with a Beta coefficient of $-.40$. Again, this finding signifies a negative correlation between trust and gatekeeping to superiors. If officers in the Sudanese Military can not trust the intentions of their superiors when those superiors make such decisions that fall short of subordinates' interests, the latter are more likely to gatekeep more frequently when communicating with their superiors.

So, here we have two different impacts of trust in superiors as far as gatekeeping is concerned within one cultural group. Of course an obvious explanation is the nature of each organization, and it seems to be a plausible if not a logical reason for our findings. In a hierarchically structured organization like the Military, there will be less chance for superiors and subordinates to break down the barriers of formality and develop intimate and warm relations with one another. Consequently, low ranking members of the organization have little chance to freely complain to superiors. With regard to the second variable, "trust unfavourable decisions", again the reason offered above can explain the findings. Subordinates will frequently refer harsh decisions to the great status differentials between themselves and their superiors.

The British and Pakistani Organizations

Table 69 displays the results of the British and Pakistani groups. It can be seen that there was no significant relationship between perceived trust in superiors and frequency of gatekeeping while passing information upward in the British organizations.

Regression findings of the Pakistani Textile show that a significant interrelationship was found between one of the variables that measure trust and frequency of gatekeeping to superiors. It can be seen that , although the overall regression equation was not significant, the variable that taps

Table 69

Trust and Gatekeeping to Superiors in the
British and Pakistani Organizations

Source of Variation	British				Pakistani	
	Military		Textile		Textile	
	r^2	F	r^2	F	R	F
Disclosure of Grievance	.00	.01	.03	.78	.19	6.82*
Unfavourite Decisions	.08	1.71	.26	1.40	.19	.12
General Fairness	.08	.10	.26	.10	.24	1.26

*p<.05

"disclosure of grievance" showed a significant association with frequency of gatekeeping while passing information to superiors. It accounted for about 19% of the variation in the dependent variable ($F=6.82$, $p<0.05$) with a Beta coefficient of .59. This tells us that there is a positive correlation between this variable of trust in superiors and gatekeeping while passing information upward. It appears that managers of the Pakistani organization if they can trust their superiors to the extent of feeling free to disclose their grievance without the fear of this being taken against their interests, will gatekeep more frequently to those superiors.

9.5) Discussion

It was proposed that the volume of information exchanged between superiors and their subordinates would be directly related to perceived trust in superiors. Results of only one organization, namely the Sudanese Textile, supported this expectation for all

behaviours pertaining to the quantitative attributes of superior-subordinate communication; except in the case of desire for interaction with superiors. Two other variables of trust in superiors have shown positive significant association with quantitative aspects of superior-subordinate communication. In the Sugar, trusting superiors for unfavourable decisions was significantly related to percentage of time spent on receiving from upward. The second link was between the same variable of trust and percentage of time spent on sending to superiors in the Sudanese Military. Previous research reported an interrelationship between trust in superiors and desire for interaction with superiors (e.g., Roberts and O'Reilly, 1974a). In this study none of the seven organizations provide results to offer further empirical support for this relationship. However, one of the three variables that measure trust in superiors appeared to be especially relevant to quantitative attributes of superior-subordinate communication. Subordinates who can freely disclose their grievance to their bosses reported more downward and upward communication.

Previous research suggested an interrelationship between these three variables and perceived trust in superiors (e.g., Roberts and O'Reilly, 1974a; Fulk and Mani, 1986; Komsky and Krivonos, 1980).

With reference to perceived accuracy of information received from above, officers of the British Military reported that if they trust their superiors, they will subsequently estimate downward communication as accurate. This finding was further supported by results of the Sudanese Textile. No significant association was found between perceived trust in superiors and accuracy of downward communication in any of the other five organizations (Appendix G).

The relationship between perceived trust in superiors and frequency of summarization while transmitting upward hold across four out of the seven organizations incorporated in this study.

These include, the Sudanese Textile, Cement, Military, and the British Military. The findings reported in the present study are in line with those found in previous research (e.g., Roberts and O'Reilly, 1974a). If subordinates have trust in their immediate superiors they will also summarize while transmitting upward.

Similarly, there is tentative support for the hypothesized relation between trust and withholding upward communication through gatekeeping. Three out of the seven organizations substantiate what was predicted in Chapter Four. However, while results of the Sudanese Cement and the Pakistani Textile indicated a positive relationship, the Sudanese Military showed a negative relationship. In other words, managers in the civilian organizations will gatekeep if they trust their superiors, while officers in the Military will gatekeep if they do not trust their superiors. It is possible that managers in the civilian organizations employ gatekeeping as a process of reducing the load of upward communication when they do not anticipate problems regarding the accuracy and credibility of the information they pass upward. This is enhanced by the fact that a reciprocal trust exists between themselves and their superiors. In the case of the Military the functional aspects of gatekeeping, such as withholding of information, may be employed to distort upward communication. The tendency to do so will be enhanced by the lack of trust in superiors (Read, 1962; Komsky and Krivonos, 1980; Roberts and O'Reilly, 1974a; O'Reilly and Roberts, 1974). This negative association between trust and gatekeeping in the Military could be maximized by two overriding factors. Firstly, as a direct result of the nature of organization in which status differentials are so great, superiors and subordinates would have little chance to build channels through which interpersonal trust could be strengthened. Secondly, it could be that, because of the harsh methods of punishments frequently adopted in the Military withholding of upward communication serves as an important shield particularly when there is a lack of trust between the subordinate and his/her superior.

Table 70

Trust and Qualitative Attributes of Communication
Across the Sudanese, British and Pakistani Groups

	Sudanese		British		Pakistani									
	Sugar	Textile	Cement	Military	Textile	Textile								
Qualitative														
Attributes	R^2	F	R^2	F	R^2	F								
Accuracy	.04	-	.01	-	.02	-	.32	3.97	.02	-	.05	-		
Summarization	.01	-	.26	5.68	.21	4.00	.14	-	.25	4.33	.08	-	.10	-
Gatekeeping	.02	-	.04	-	.13	3.60	.21	4.03	.08	-	.26	-	.24	-

*p<.05

Note: Only the overall value of R^2 and F are reported i.e. the total variation explained by the three independent variables.

R^2 -Percentage of variation explained by the independent variables.

F=Value of F and the significance of the increments in R^2 .

9.6) Summary

This chapter investigated the impact of perceived trust in superiors on both the quantitative and qualitative attributes of superior-subordinate communication.

Quantitative attributes of superior-subordinate communication included such aspects as frequency of interaction with superiors, desire for interaction with superiors, time spent on receiving and sending to superiors.

Three variables were considered as major indicators of the qualitative attributes of superior-subordinate communication. These include, perceived accuracy of downward communication, frequency of summarization to superiors, and frequency of gatekeeping to superiors.

Overall results of the Sudanese group, and in particular those of the Textile, provide modest support for the relationships hypothesized from the literature between trust in superiors and the volume of information exchanged in a superior-subordinate communication.

Results of the British and Pakistani groups are generally insignificant as far as links between trust in superiors and the various indicators of the magnitude of superior-subordinate communication are concerned.

As was the case with the quantitative attributes of communication, regression findings pertaining to the relationship between perceived trust in superiors and the qualitative attributes of superior-subordinate communication behaviour (see summary of findings in Table 70) seem to provide tentative and modest support for the relationships proposed in the literature and hypothesized in Chapter Four. If anything results of the present findings showed no cultural differences between the three groups included.

The only differences were found between civilian and military organizations even within the same cultural group.

CHAPTER TEN

Upward Influence and Superior-subordinate Communication Behaviour

10.1) Introduction

Division of labour (differentiation) and coordination (integration) are intrinsic and pervasive features of hierarchically structured organizations. Social structures are developed for the purpose of guiding and constraining the behaviour of organizational members towards goal accomplishment. This renders the two features of leadership (headship) and subordinateship an intrinsic and pervasive feature of organizational settings with hierarchical structures¹. Obviously, there are going to be "superiors" and "subordinates". Generally, it is the superiors, by virtue of their positional power, who will influence the subordinates if organizational goals are to be achieved.

Given the pervasiveness of influence activities within organizations, it is not surprising that a considerable body of research has related superior's influence to intraorganizational communication (see Chapter Three). Superior's influence has even been regarded as inherent in the nature of superior-subordinate communication. For instance, Walter (1966) notes that:

(1) This does not apply to cooperation and kibbutzims and similar organizations where by definition status differentials are minimal or nonexistent.

'...to study influence one must first study communication, for influence without communication is as wildly implausible as action at a distance' (p. 190).

This chapter deals with the impact of perceived influence of superiors on superior-subordinate communication behaviour in the Sudanese, British and Pakistani groups. It will, firstly introduce the study of superior's influence. Subsequently, the scores of the three cultural groups that indicate the level of superior's influence will be compared and contrasted. The following two sections will deal with the impact of perceived influence of superiors on the quantitative and qualitative attributes of superior-subordinate communication.

A hierarchical regression model with measures of perceived influence of superiors as the independent variables was used. This analyses was used because there could be joint variance among the predictors, and because we would like to know the immediate effect of each of the items that measure superior's influence. A required significance level of at least .05 was used for all statistical tests. This chapter will include only tables presenting summary of the regression findings when dealing with the three cultural groups. Tables including further details of the regression analysis findings for each of the seven organizations can be found in Appendix G.

10.2) Upward Influence

The importance of acquiring influence within organizations has been well documented. It has generally been equated with the ability to get things done (Kanter, 1979; Salancik and Pfeffer, 1977). This is what makes the subject of intraorganizational influence a very sensitive and perhaps an ethical one.

One of the most prominent sources of superior's influence is positional power (Gabarro, 1979). Positional sources of influence include; the formal power (legitimate power) prescribed by an

organizational structure, the ability to reward and punish, and control over resources. This is also known as "headship" (Kochan et al., 1975). Superior's influence is also strengthened by the fact that they derive their influence directly from their relationship with their subordinates; a relationship which is by nature a dependency relationship. Although the superior-subordinate relationship is supposed to be one of mutual dependence, it is often the case that, it is the subordinate who shows more dependence on the superior than the other way round (Emerson, 1962).

The span of formal authority will directly affect the superior's ability to deal with the critical uncertainties and problems facing the subordinates, a factor that plays a significant role in enhancing or weakening the perceived influence of superiors. The more a superior gains formal authority, the more will the subordinate be dependent on him/her/ and, obviously, the more influential will he/she be perceived.

According to Jacobson (1972), the methods used to exert influence include any mediating activity through which the source of influence affects the target of the influence attempt. A group of researchers have also shown a growing interest in conceptualizing superior's influence in an operant framework of leadership. The general theme of their approach equates the superior with a reinforcement or punishment agent which influences subordinates' behaviour through the control of positive (reward) and negative (punishment) stimuli. Thus, the greater the magnitude of leader-mediated positive or negative incentives, the greater will be the superior's influence (Ashour and Johns, 1983).

This study looks at superiors' influence from a similar perspective. The items that measure superior's influence were described in Chapter Four where also their statistical properties have been assessed. As a reminder, these three items are shortened as; Overcoming Restrictions, General Influence, and Recommendation. In Chapter Four we saw that while the internal

reliability tests of these three items across the Sudanese organizations revealed a satisfactory level of consistency, a relatively low level of consistency was shown in the British and Pakistani organizations.

However, these three items are conceptually related to influence and did show a tendency to form a composite scale (see Chapter Four). Nevertheless, the findings reported in this chapter should be interpreted in the light of the low internal consistency shown by these three items particularly across the British and the Pakistani organizations. This in fact, is one of the limitations of using just one device to measure a variable.

10.3) Perceived Influence of Superiors

This section will report the t-test findings of differences between means across the three cultural groups (using samples of the Textile organizations) and between the Sudanese and the British in case of the Military. The three cultural groups will be compared and contrasted using (in turn) each of the three items that measure influence.

10.3.1) Superior's Success in Overcoming Restrictions

Table 71 shows the results of t-tests between means of the three cultural groups. As can be seen, of the three groups Pakistani superiors were perceived as significantly more influential than both their Sudanese ($t=4.20$, $p<.01$) and British ($t=2.98$, $p<.01$) counterparts. No significant difference was found between the Sudanese and British in either the Textile or the Military.

10.3.2) Superior's General Influence

Table 72, again shows the Pakistani as the most influential of the three groups. Managers of the Pakistani Textile perceived their superiors' general influence as significantly higher than their Sudanese ($t=3.69$, $p<.01$) and British ($t=2.89$, $p<.01$) counterparts.

Table 71

Superior's Success in Overcoming Restrictions

Cultural Group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	3.30	1.35	4.20	77	.01
Pakistani	2.08	.80			
Sudanese	3.30	1.35	.88	73	-
British	3.00	1.27			
Pakistani	2.08	.80	2.98	46	.01
British	3.00	1.27			
<u>Military</u>					
Sudanese	3.16	1.78	n.s	77	-
British					

NOTE:

There was a seven-point answer scale ranging from "Always Successful" to "Never Successful". Answers were coded in such a manner that a higher score indicates a lower level of success in overcoming restrictions. This back-to-front way of coding was adopted to safeguard against mechanical responses from participants.

Table 72

General Influence of Superiors

Cultural Group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	3.47	1.31	5.69	77	.01
Pakistani	1.85	.83			
Sudanese	3.47	1.31	1.74	73	-
British	2.86	1.49			
Pakistani	1.85	.83	2.89	46	.01
British	2.86	1.49			
<u>Military</u>					
Sudanese	2.68	1.42	2.79	77	.01
British	3.69	1.71			

Note:

There was a seven-point answer scale ranging from "Much" to "Little". Answers were coded in such a manner that a lower score indicates a higher level of general influence. The scale was coded in this to avoid mechanical responses.

There was no significant difference between the British and the Sudanese civilian samples. However, Table 72 shows that officers of the Sudanese Military rated the general influence of their superiors significantly higher than their British counterparts (t=2.79, p<.01).

10.3.3) Influence of Superior's Recommendation

As can be seen in Table 73, Pakistani managers have given much weight to superior's recommendation than their Sudanese counterparts ($t=5.37$, $p<.01$). Table 73 also shows that the only significant difference between the Sudanese and British civilian samples. Managers of the British Textile have given much greater weight to superior's recommendation than did their Sudanese counterparts ($t=3.80$, $p<.01$). However, results of the Military organizations show a different outcome. British officers have given less weight to superiors' recommendation than their Sudanese counterparts ($t=2.15$, $p<.05$).

In summary, as far as civilian organizations are concerned, t-tests results put Pakistani managers as the most influential of the three groups, followed by the British, with the Sudanese in the third place. However, results of the Military pertaining to the British and Sudanese groups differ from those revealed in civilian (Textile) organizations. Sudanese officers have rated the influence of their superiors significantly higher than did their British counterparts. The inconsistency between results from civilian organizations and those from Military could be attributed to differences between the two organizations. Previous research has shown significant variation between civilian and military organizations when an attempt was made to influence subordinates. For instance, Kipnis and Cosentino (1969) have reported such differences. They found that while military supervisors relied more and more on direct attempts such as punishment to influence their subordinates, industrial supervisors relied more on their persuasive power.

Likewise, the discrepancies between the Sudanese civilian and Military organizations in comparison to their British counterparts (e.g. Table 72 above) can be understood in a similar way. "General Influence", we think, could be the most valid predictor of all three items. As shown in Table 72 above, while the

Table 73

Influence of Superior's Recommendation

Cultural Group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	3.72	1.49	5.37	77	.01
Pakistani	1.89	1.21			
Sudanese	3.72	1.49	3.80	73	.01
British	2.32	1.29			
Pakistani	1.89	1.21	1.17	46	-
British	2.32	1.29			
<u>Military</u>					
Sudanese	2.86	1.62	2.15	77	.05
British	3.69				

Note:

There was a seven-point answer scale ranging from "Important" to "Unimportant". Answers were coded in such a manner that a lower score indicates a higher level of importance of superior's recommendation. This back-to-front way of coding was adopted to safeguard against mechanical responses.

Sudanese military officers rated the general influence of their superiors as significantly higher than their British counterparts ($t=2.79$, $p<.01$) the difference in the Textile organizations was not significant. In fact, it points to a different outcome. That is to say, the general influence of the British managers being viewed as higher than that of their Sudanese counterparts (Means of 2.86; 3.47 respectively with answers coded in back-to-front way). In line with Kipnis and Cosentino's (1969) findings, perceived influence of the Sudanese military officers could have been increased as a result of the method they use to control the behaviour of their subordinates.

Furthermore, one would expect supervisory powers in civilian organizations to be reduced through other factors such as union contracts and delegation of responsibilities to lower ranks personnel more than would be the case in military organizations.

10.4) Superior's Influence and Superior-subordinate Communication Behaviour

A considerable body of research suggests that, the extent of influence held by a superior is likely to affect his/her subordinates' communication behaviour. For instance, House, Filley, and Gujarati (1971) found that, when superiors have very high levels of influence it increases status differentials between the superiors and their subordinates leading to restrictions of upward flow of communication. They argued that:

'Where supervisors are seen to have such high influence, it is likely that there will be greater status separation between them and their subordinates, and that such status differentiation will result in a restriction of upward information flow, less willingness on the part of subordinates to approach superiors, and less satisfaction with the social climate of the work unit.'
(p. 429).

More recently, Brass (1984) reported a significant relation between perceived influence of an individual in hierarchically structured organizations, and the volume of communication he/she receives. Finally, a weak relationship was reported by O'Reilly and Roberts (1974), and Roberts and O'Reilly (1974a) between superiors influence and quality of downward communication, such that a subordinate's perception of his/her superior as having high influence was directly related to high estimated accuracy of information received from above.

The following two sections will present the regression analyses findings to test the possibility of a relationship between influence and the quantitative and qualitative attributes of superior-subordinate communication. Each of the variables that measure the quantitative and qualitative features of superior-subordinate communication were regressed on the three items that make up the influence scale.

10.4.1) Influence and the Quantitative Attributes

Measures of superior's influence were taken as the independent variables with the variables that tap the quantitative features of superior-subordinate communication behaviour (in turn) forming the dependent variable.

Measures of the quantitative attributes of superior-subordinate communication included such variables as frequency of interaction with superiors, desire for interaction with superiors, percentage of time spent on receiving from superiors and percentage of time spent on sending to superiors. A summary of the regression findings for all seven organizations is displayed in Table 74. It can be seen that the proportion of the explained variation in the dependent variables was very low with the overall regression equations being insignificant.

However, as can be seen in Table 75, the variable that measures the "General Influence" of superiors showed a positive significant

relationship with time spent on sending upward in both Sudanese and British Military organizations. It accounted for about 9% of the total variation in time spent on sending to superiors in the Sudanese Military ($F=6.23$, $p<.05$). In the British Military it accounted for about 10% of the total variation ($F=8.11$, $p<.01$). These findings indicate that, officers in both British and Sudanese military organizations will spend more time in sending to superiors whose general influence has been rated as high.

10.4.2) Influence and Qualitative Attributes

Perceived influence of superiors was regressed on accuracy of downward communication, frequency of summarization while transmitting to superiors and frequency of gatekeeping while passing to superiors. A summary of the regression analyses findings is reported in Table 76. It can be seen that only two significant associations were found between the dependent and the explanatory variables.

Firstly, in the Sugar, influence of superiors accounted for 26% of the variation in how accurate information received from influential superiors will be perceived ($F 3,61, =2.96$, $p<.05$). Further details are shown in Table 77, which reveal that, of the three variables that measure superior's influence, the one that taps "General Influence" added significantly to the variance explained in accuracy of downward communication. It accounted for 20% of the total variation ($F=5.81$, $p<.05$) with a Beta coefficient of .67.

This finding indicates that the more a superior is regarded as influential, the more likely information received from him/her be perceived as accurate. This finding is consistent with what has been reported by Roberts and O'Reilly (1974a). None of the other organizations lend any support for this finding. However, the British Military findings showed a similar result at the .08 level of significance (see Appendix G).

Table 74: Influence and Quantitative Attributes of Communication in the Three Cultural Groups

	Sudanesse			British			Pakistani							
Quantitative Attributes	Sugar	Textile	Cement	Military	Military	Textile	Textile	Military	Textile					
	\hat{R}^2	P	\hat{R}^2	P	\hat{R}^2	P	\hat{R}^2	P	\hat{R}^2					
Frequency of	.02	.89	.34	.19	.30	.18	.10	.45	.03	.84	.10	.58	.26	.64
Interaction														
Desire for	.09	.47	.03	.96	.11	.65	.01	.97	.08	.55	.06	.75	.34	.53
Interaction														
Receiving	.12	.37	.16	.57	.19	.43	.03	.87	.12	.36	.03	.90	.14	.84
Sending	.02	.92	.31	.24	.61	.51	.23	.09	.17	.19	.08	.66	.30	.58

\hat{R}^2 -Percentage of variation explained by the independent variables.

P-Significance of F and of the increments in \hat{R}^2 .

Table 75

Influence and Upward Communication in the
Sudanese and British Military

Source of Variation	Sudanese			British		
	M/R	² R	F	M/R	² R	F
Overcoming Restrictions	.125	.016	3.33	.019	.000	.36
General Influence	.327	.107	6.23*	.315	.099	8.11**
Recommendation	.476	.226	3.70@	.411	.169	2.10@

**p<.01

*p<.05

@=Not significant

Table 76: Influence and Qualitative Attributes of Communication in the Three

Groups

	Sudanesse			British			Pakistan							
Qualitative	Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile	Textile					
Attributes	R	P	R	P	R	P	R	P	R					
Accuracy	.26	.05	.09	.77	.24	.30	.02	.94	.24	.08	.05	.83	.49	.30
Summarizing	.05	.73	.52	.05	.20	.40	.10	.47	.07	.60	.27	.13	.30	44
Gatekeeping	.15	.24	.18	.53	.29	.20	.15	.28	.04	.80	.15	.30	.35	51

²R=Percentage of variation explained by the independent variables

P=Significance of F and of increments in ²R

Table 77

Influence and Accuracy of Downward Communication
in the Sugar Organization

Source of Variation	ΔR	R^2	Beta	F
Overcoming restrictions	.146	.022	.12	.59
General Influence	.447	.200	.67	5.81*
Recommendation	.512	.262	.31	2.10

* $p < .05$ F(3,61)=2.96, $p < .05$

Secondly, in the Sudanese Textile, measures of superior's influence showed a significant relationship with frequency of summarizing to superiors. Table 78 Shows that the proportion of explained variation in frequency of summarizing to superiors is high. It shows that the explanatory variables have accounted for 52% of the variation in frequency of summarizing while transmitting to superiors ($F_{3,53}=3.91$, $p < .05$). The variable that measures perceived influence through frequency of superior's success in overcoming restrictions accounted for a greater portion of the total variation explained. It accounted for about 44% of the total variation in summarizing to superiors with a Beta coefficient of $-.58$ ($F=10.01$, $p < .01$).

Similarly, Table 78 below shows that although the overall regression equation was not significant, in the British Textile, success in overcoming restrictions again showed a significant relationship with frequency of summarization while transmitting to superiors. It accounted for about 24% of the total variation ($F=6.34$, $p < .05$) with a Beta coefficient of $-.39$. Both results from the Sudanese and British Textile indicate a negative relation between superior's influence and frequency of summarization while transmitting upward. In other words, the more influential a superior is, the less likely will his/her subordinates indulge in summarizing while transmitting upward.

Table 78

Influence and Summarization in the Sudanese
and British Textile Organizations

	Sudanese Textile			British Textile		
Source of Variation	M/R	² R	F	M/R	² R	F
Overcoming Restrictions	.660	.435	10.01*	.491	.241	6.34*
General Influence	.661	.437	.05	.497	.247	.17
Recommendation	.718	.516	1.78	.515	.266	.45

F(3,53)=3.91, p<.05

**p<.01

*p<.05

Table 79

Influence and Gatekeeping in the
Sudanese Sugar and Military

	Sudanese Sugar		Sudanese Military			
Source of Variation	M/R	² R	F	M/R	² R	F
Overcoming Restrictions	.361	.130	4.07	.368	.140	4.08
General Influence	.389	.151	.65	.377	.142	.19
Recommendation	.389	.151	.00	.381	.145	.08

*p<.05

Regression findings that relate influence to frequency of gatekeeping are also displayed in Table 77 above. None of the seven organizations showed an overall significant association. However, as reported in Table 79 above, superior's influence as reflected in the incidence of superior's success in overcoming restrictions showed a significant association with frequency of gatekeeping to superiors in both Sudanese Sugar and Military.

In the Sugar, superior's perceived success in overcoming restrictions accounted for 13% of the total variation ($F=4.04$, $p<.05$) with a Beta coefficient of $-.44$.

In the Military superiors' perceived success in overcoming restrictions accounted for 14% of the total variation ($F=4.08$, $p<.05$) with a Beta coefficient of $-.40$.

These findings of the Sudanese organizations show that the more influential the superior is perceived to be, the less likely will subordinates gatekeep while passing information upward.

These findings together with the ones pertaining to frequency of summarizing to superiors, are in line with previous research. For instance, Roberts and O'Reilly (1974a) showed that subordinates are less likely to manipulate upward communication if they regard their superiors as influential.

Roberts and O'Reilly (1974a) drawn their subjects from four diverse organizations. These include, a state mental health outpatient facility in which status differentials are minimal, officers and enlisted men of high technology military unit, nursing and clerical staff of an emergency medical centre and respondents from six branches of a financial institution. All 429 respondents had a supervisor to whom they were required to pass information. Of the four organizations, respondents of the outpatient facility showed a significant negative relationship between perceived influence of superiors and the propensity to summarize upward communication (correlation coefficient of $-.21$,

p<.05); and only respondents from the financial institution showed an association between upward influence and propensity to withhold information in its way to superiors (correlation coefficient of .29, p<.01).

The results reported in this study gave a similarly tentative support for the possibility of an interrelationship between upward influence and the propensity to summarize or totally withhold information while communicating with superiors.

10.5) Discussion

As has been reported above, some of the organizations showed significant associations between superiors influence and some of the variables that tap the quantitative attributes of superior-subordinate communication. This finding held in both the Sudanese and British Military. Findings of the Military, both in the Sudan and Britain, were interesting. They suggest that the higher subordinates rate the influence of their superiors, the more they will spend time communicating upward. This corroborates the findings of previous research (Glauser, 1984). It would appear that superiors' upward influence may facilitate subordinates' upward communication. This finding is understandable since most people would like to associate with bosses who can get things done.

Similarly, three links were predicted between superiors' influence and qualitative attributes of superior-subordinate communication. However, only modest support for the predicted relation was attained. Firstly, in the Sugar, the more influential the superior, the higher the accuracy of downward communication would be. Superiors with high influence are likely to be perceived as credible sources of information (O'Reilly and Roberts, 1977).

Secondly, in the Sudanese and British Textile organizations a negative relationship was found between superiors' influence and subordinates' summarization while transmitting upward. Thirdly,

superiors' influence similarly affected frequency of subordinates gatekeeping while transmitting upward. This was supported by the regression findings of the Sudanese Sugar and Military organizations.

The findings pertaining to upward influence and frequency of summarizing and gatekeeping to superiors make sense if one views upward communication as instrumental or detrimental to subordinates' interests. As House, Filley and Gujarati (1971) have observed, subordinates may be reluctant to openly communicate with a superior if he/she possesses high influence. It would seem, therefore, that status differential may enhance both the quantity and quality of downward communication (O'Reilly and Roberts, 1977), but at the same time may impede open and accurate upward communication if too high.

Overall, these results provide only modest support for what was predicted in Chapter Four in relation to the impact of influence on the quantitative and qualitative attributes of superior-subordinate communication behaviour. As has been mentioned previously (see Chapter Four), and as far as the British and Pakistani groups are concerned, the scale that measures superiors' influence revealed a relatively low internal consistency. This could be the reason for these equivocal results. In other words, there could be a relationship between superior's influence and quantitative and qualitative features of superior-subordinate communication behaviour which this study failed to capture as a direct result of the poor reliability showed by this scale especially in the Pakistani group. Another factor could be the relatively smaller sizes of participants particularly in the British and Pakistani categories. However, in previous research where both weaknesses were not present, upward influence similarly failed to exert significant impact on superior-subordinate communication behaviour. For instance, Fulk and Mani (1986) despite reporting a respectable alpha coefficient of .72 for this scale, showed that the impact of upward influence on superior-subordinate communication remained low.

The evidence provided in this study suggests an intrinsic factor within the organization as a contingency factor that maximize or minimize the impact of upward influence on communication. This is because, although superiors influence affected superior-subordinate communication, it did so in certain organizations rather than in all organizations. Its impact was consistent and significant in the Military organizations in both the Sudan and Britain. Again, Roberts and O'Reilly (1974a) reported similar results in a Military organization as opposed to other three civilian organizations included in their sample. It is obvious that military organizations wherever they are share certain organizational characteristics which bear direct relation to these findings. For instance, being highly structured, status differentials are likely to be significantly higher than in civilian ones.

10.6) Summary

To recapitulate, although perceived influence of superiors did not show the impact it was predicted to exert on the quantitative and/or qualitative attributes of superior-subordinate communication across all seven organizations, these findings give us reasonable support for accepting what has been predicted in hypotheses 10 and 11 in Chapter Four.

Thus to conclude, one would expect that, in organizations where status differential are high such as in the Military, the impact of superiors' influence on their subordinates' communication behaviour will be maximized. The present study shows that the impact exerted by upward influence, albeit modest, does not hold in one cultural group as opposed to another. Rather it produced a similar impact across different cultural settings. Across some of both Sudanese and British organizations incorporated in this study, the likelihood of upward influence being a determinant factor in superior-subordinate communication behaviour was equally present. In other words, in both Sudanese and British organizations perceived influence of superiors produced the same

affect as far as the quantitative and the qualitative attributes of superior-subordinate communication are concerned.

CHAPTER ELEVEN

Mobility Aspirations and Superior-subordinate Communication Behaviour

11.1) Introduction

The fact that employees in general strive for and seek promotion has been well documented (Gannon, 1971). Managerial staff, in particular, have been found to be more desirous of getting a promotion than those at lower organizational levels. For instance, in studying hierarchically structured organizations Schutte and Light (1978) have noted that managerial levels:

'are typically comprised of relatively committed, high mobility-minded people; whereas lower levels are characterized by less mobile people, for whom promotion is not expected and, therefore, not as important' (p.261).

Within the organizational behaviour literature, a considerable body of research exists which relates employees mobility aspirations to certain organizational processes and in particular to superior-subordinate communication. The relationship between employees mobility aspirations and their communication behaviour with superiors is apparently attributable to the nature of hierarchically structured organizations. Such organizations can be appropriately described as 'political structures which provide opportunities to develop careers' (Zaleznik, 1970, p.48). Out of this concern with developing careers, it seems, stems the importance of promotion and demotion in people's lives (Rosenbawm, 1979).

This chapter investigates the relevance of subordinates' mobility aspirations to the quantitative and qualitative attributes of upward communication in the Sudanese, British and Pakistani

groups. The first research question was to determine if there were significant differences in levels of mobility aspirations across these cultural groups. Subsequently, emphasis will be made on whether there was a relationship between mobility aspirations and upward communication. To this end, this chapter will, firstly, compare and contrast the mean scores of the three cultural groups pertaining to the level for advancement shown by each group. The following two sections will deal with the impact of mobility aspirations on the quantitative and qualitative attributes of upward communication.

As mentioned before (Chapter Four), a hierarchical regression analysis model was used with measures of mobility aspirations as the independent variables. A required significance level of .05 was used for all statistical tests. However, in certain cases and when results show tendencies toward the acceptance or rejection of research propositions and/or aid the discussion, an even higher level of significance was adopted. The chapter will include mainly tables representing summaries of the findings for each of the three cultural groups. Tables including further details of the regression findings for each of the seven organizations can be found in Appendix G. However, whenever the discussion of the results dictates, tables reporting detailed and relevant information will be also presented within the text of this chapter.

11.2) Mobility Aspirations

In reviewing the literature Chapter Three shows how researchers believe that high advancement drive affects communication behaviour of ambitious subordinates while communicating with their superiors. This section will compare the mean scores of the Sudanese, British and Pakistani groups in the Textile organizations, and those of the Sudanese and British military officers as measured by the two items which tap mobility aspirations.

These two items were developed by Roberts and O'Reilly (1974). A seven-point Likert format was also used in this study. The two items that comprise the scale are:

1- As part of your present job plans, do you want a promotion to a higher position at some point in the future?

End points: Content as I am (1)
Very much (7).

2- How important is it for you to progress upward?

End points: Not important
Very important (7).

In Chapter Four the internal reliability tests show that these two items have a high consistency and can be treated as a composite scale. In reporting the results these two items will be shortened as: Desire for Promotion and Importance of Promotion, respectively.

11.2.1) Desire for Promotion

Table 80 displays the t-tests results between means of the three cultural groups pertaining to desire for upward mobility. As far as the Textile organizations are concerned, Sudanese managers showed significantly more desire for promotion than both their Pakistani ($t=3.30$, $p<.01$) or British ($t=2.35$, $p<.05$) counterparts. There was no significant difference between the British and Pakistani groups.

Table 80 also shows results for the Military organizations. There was no significant difference between the mean scores of the British and Sudanese military officers as regards desire for promotion.

11.2.2) Importance of Promotion

Table 81, again shows the Sudanese managers of the Textile as the group that attaches more importance to getting promoted than both their Pakistani ($t=3.65$, $p<.01$) and British ($t=3.83$, $p<.01$) counterparts. No significant difference was found between the British and the Pakistani managers of the Textile organizations.

Similarly, there was no significant difference between the Sudanese and the British military officers regarding the importance attached to being promoted. In fact both groups view moving up the hierarchical ladder as highly important.

When considering the scores on these two items, members of the Sudanese group significantly surpass their Pakistani and British counterparts regarding mobility aspirations. However, this finding holds only in the Textile (civilian) organizations, as opposed to the Military. Tables 80 and 81 show no significant difference between the mobility aspirations of the Sudanese and the British officers. This gives us good reason to believe that mobility aspirations could be occupationally determined rather than macro-culture-relative. It seems that, wherever an organization operates, employees will have high mobility aspirations. This is especially if advancing up the organizational ladder means so much to employees as one would expect it to be the case in the Military.

Similarities between the three cultural groups were advocated not only because of the results in the Military, but also those of the British and Pakistani Textiles. Certainly, these two groups are likely to differ significantly culturally (see Chapter Five), yet they show more or less similar aspirations for being promoted.

Furthermore, generally speaking, members of all three cultural groups have shown high mobility aspirations i.e all scores were in the upper percentile of the scale. Means of the aggregate of the

Table 80

Desire for Promotion

Cultural Group	Mean	S.D	T-value	df	P
<u>Textile</u>					
Sudanese	6.25	.62	3.30	77	.01
Pakistani	5.69	.84			
Sudanese	6.25	.62	2.35	73	.05
British	5.77	1.11			
Pakistani	5.69	.84	—	46	—
British	5.77	1.11			
<u>Military</u>					
Sudanese	6.86	1.67	—	77	—
British	6.69	.60			

scores in these two items were well above average (end points were 1 and 7). In the Textile organizations means of the aggregate of the scores were 6.39, 5.75, and 5.68 for the Sudanese, Pakistani, and British respectively. In the Military means of the aggregate of the scores were 6.66 for the Sudanese and 6.64 for the British.

11.3) Mobility Aspirations and Quantitative Attributes Of Upward Communication

Desire for and importance of promotion were taken as the independent variables and regressed in turn on measures of the magnitude of communicating upward. These include frequency of

Table 81

Importance of Promotion					
Cultural Group	Mean	S.D	T-value	df	P
Textile					
Sudanese	6.53	.82	3.65	77	.01
Pakistani	5.81	.80			
Sudanese	6.53	.82	3.83	73	.01
British	5.59	1.22			
Pakistani	5.81	.80	—	46	—
British	5.59	1.22			
Military					
Sudanese	6.46	.86	—	77	—
British	6.59	.73			

interacting with superiors, desire for interaction with superiors and percentage of time spent on sending upward.

Table 82 displays a summary of the regression analysis findings. The proportion of explained variation in each of the dependent variables was very low with the overall regression equation being statistically significant in three equations. Firstly, in the Sudanese Military mobility aspirations accounted for 24% of the variation in time spent on interaction with superiors ($F=4.03$, $p<.05$). This indicates that the more subordinates are promotion-minded, the more they will interact with their superiors.

Table 82: Mobility Aspirations and Quantitative Attributes of Upward
Communication in the Three Cultural Groups

	Sudanese			British			Pakistani							
	Sugar	Textile	Cement	Military	Military	Textile	Textile	Textile	Textile					
	R ²	F	R ²	F	R ²	F	R ²	F	R ²					
Interaction	.05	-	.07	-	.10	-	.24	4.03	.16	-	.17	-	.46	-
with Superior														
Desire for	.05	-	.02	-	.27	-	.08	-	.08	-	.31	4.24	.30	-
Interaction														
Sending to	.01	-	.04	-	.06	-	.01	-	.14	-	.19	4.70	.38	-
Superiors														

*p < .05

R² = Percentage of variation explained by the independent variables.

F = Value of F and the significance of the increments in R²

Secondly, in the British Textile mobility aspirations showed a significant association with desire for interaction with superiors. It accounted for 31% of the variation in desire for upward interaction ($F=4.24$, $p<.05$).

Thirdly, in the British and Pakistani textiles, although the overall equation was not significant, the variable that taps "Desire for Promotion" accounted for a significant portion of the variation in sending to superiors. The following presents further details of these findings.

Table 83 presents further details of the regression findings of the Sudanese and British Military organizations pertaining to mobility aspirations and frequency of upward interaction. As can be seen, the variable that taps desire for promotion has had a negligible impact on percentage of time spent on interaction with superiors. This finding hold in both groups. It was the high level of importance which members of both organizations attached to getting a promotion that added significantly to the variance explained. "Importance of Promotion" accounted for 24% of the variation in frequency of interaction with superiors ($F=8.04$, $p<.01$) with a Beta coefficient of .62.

Table 83 presents further details of the regression findings of the Sudanese and British Military organizations pertaining to mobility aspirations and frequency of interaction with superiors. As can be seen in both groups, "Desire for Promotion" has had a relatively negligible impact on the dependent variable. It was the "Importance of Promotion" that added significantly to the variance in frequency of interaction with superiors. In the Sudanese Military "Importance of Promotion" accounted for 24% of the variation in frequency of interaction with superiors ($F=8.04$, $p<.01$) with a Beta coefficient of .62. In the British Military "Importance of Promotion", again, showed a considerable positive relation with frequency of upward interaction. However, it should be mentioned that in the British Military this relationship was significant at a lower level of significance. At .08 level of

significance "Importance of Promotion" accounted for about 10% of the total variation in frequency of interaction with superiors in the British Military.

Further details of the regression analyses that investigate the relationship between mobility aspirations and desire for upward interaction are displayed in Table 84. Here again, "Importance of Promotion" showed a more intimate association with the dependent variable than "Desire for Promotion". As has been reported earlier, the only overall significant regression equation was found in the British Textile. Here, "Importance of Promotion" added significantly to the explained variation in desire for interaction with superiors. It accounted for 23% of the variation in the dependent variable ($F=6.33$, $p<.01$) with a Beta coefficient of $-.75$. This finding (when considering the way in which the scale that measures desire for upward interaction has been coded) indicates that in the British Textile, managerial staff with high mobility aspirations will also be highly desirous of interacting with their superiors. Results of the Sudanese and Pakistani Textile organizations, although not statistically significant, gave an indication too that "Importance of Promotion" is much closely related to subordinates' desire for upward interaction than "Desire for Promotion" (Beta coefficients were $-.14$ and $-.54$, respectively).

However, in one organization "Desire for Promotion" did show a significant association with the magnitude of upward communication. Table 85 shows that in the British Textile "Desire for Promotion" accounted for 19% of the total variation in percentage of time spent on sending to superiors ($F=4.70$, $p<.05$) with a Beta coefficient of $.44$. In the Pakistani Textile a similar relationship approached the $.05$ level of significance. At $.08$ level of significance, "Desire of Promotion" accounted for 38% of the variation in sending upward ($F=4.22$, $p<0.1$) with a Beta

Table 83

Mobility Aspirations and Upward Interaction
in the Sudanese and British Military

	Sudanese		British			
Source of Variation	M/R	R ² Beta	F	M/R	R ² Beta	F
Desire for Promotion	.016	.00 .09	.00	.240	.06 .00	.00
Importance of Promo-	.494	.24 .62	8.04*	.403	.16 .40	3.26 ^o

F(2,50)=4.03, p<.05

*p<.01

^o= Significant at .08

coefficient of .61. In the Sudanese Textile although there was no significant association between measures of mobility aspirations and frequency of sending to superiors, again, it is "Desire for Promotion" rather than "Importance of Promotion" that accounted for a relatively greater portion of the variation.

To recapitulate, the results pertaining to the relevance of mobility aspirations to quantitative attributes of upward communication are consistent with the predictions made in hypothesis 13 in Chapter Four i.e., subordinates' mobility aspirations could influence the quantity of their upward communication.

There is some evidence in this study to suggest that subordinates with high mobility aspirations are more likely to seek and strive for greater communication with their superiors. These findings are in line with previous research (e.g. Robins and Jones, 1973; Roodman and Roodman, 1973; O'Reilly, 1978; Gaine, 1980). Furthermore, these findings more or less hold across the three cultural groups in both civilian and military organizations.

An interesting finding, and one that will form a discussion point for the rest of this section, is the way in which each of the two items that measure mobility aspirations interrelated with the three dependent variables. While "Importance of Promotion" showed more relationship with "Frequency of Interaction" and "Desire for Interaction" with superiors, "Desire for Promotion" associated more closely with "Sending to Superiors".

A possible explanation is that, responses assessing the "Importance of Promotion" are largely attitudinal. On the other hand, responses assessing "Desire for Promotion", while still attitudinal, are likely to be manifested in how the respondent may act. Respondents have less control over how frequently they can "interact" with their superiors, as opposed to how frequently they can send to superiors. In a situation of superior-subordinate interaction a superior could be the initiator and the subordinate

Table 84

Mobility Aspiration and Desire for Upward Interaction in the Sudanese
British and Pakistani Textile Organizations

	Sudanese		British		Pakistani				
Source of Variation	M/R	R	F	M/R	R	F			
Desire for Promotion	.017	.00	.00	.279	.08	1.02	.081	.01	.10
Importance of Promotion	.145	.02	.25	.555	.31	6.33	.545	.30	2.47

*p < .01

F(2,22) = 4.24, P < .05

Table 85

Mobility Aspiration and Sending to Superiors in the Three Textile

Organizations

Source of Variation	Sudanese		British		Pakistani			
	M/R	F	M/R	F	M/R	F		
Desire for Promotion	.199	.04	.436	.190	4.76	.613	.38	4.22
Importance of Promotion	.204	.04	.436	.190	.00	.613	.38	.00

*p<.05.

@=Significant at .08.

has merely to react. Whereas in the process of sending upward it is the subordinate who decides how frequently he/she communicate with the superior.

11.3) Mobility Aspirations and Qualitative Attributes of Upward Communication

Some researchers have indicated that the quality of information going upward is least likely to be good when subordinates are ambitious and have high advancement drive (Athanasziades, 1973; Read, 1962). It is suggested that such subordinates are more likely to filter, colour and even withhold information believed to be detrimental to their advancement.

The following two sections investigate such assumptions and examine to what extent mobility aspirations will affect the quality of upward communication across the three cultural groups as well as in different occupations and organizations. To achieve this, measures of mobility aspirations were regressed on how frequently subordinates summarize and gatekeep while passing information to their superiors. Frequency of summarizing and gatekeeping were chosen because they give an indication to how frequently subordinates manipulate upward communication.

11.3.1) Summarizing to Superiors

A summary of the regression findings is presented in Table 86. As can be seen, the proportion of the explained variation in frequency of summarizing to superiors was weak and insignificant in all seven organizations. However, Table 87 presents further results for each of the three Textile organizations. As can be seen in Table 87, "Desire for Promotion" of the Pakistani managers showed a significant association with frequency of summarizing while transmitting upward. It accounted for about 41% of the total variation in the dependent variable ($F=4.97$, $p<.05$) with a Beta coefficient of $-.64$. The negative sign of the Beta coefficient indicates that, the more managerial staff of the

Pakistani organization are desirous of getting a promotion, the more they are likely to summarize while communicating with their superiors.

Although results of the Sudanese and British Textile organizations did not substantiate this finding at the .05 level of significance, they nevertheless showed a similar trend. In both groups "Desire for Promotion" contributed considerably to the variance in frequency of summarizing to superiors.

11.3.2) Gatekeeping to Superiors

As regards gatekeeping, only the Sudanese Sugar out of the seven organizations showed an overall significant regression equation. Mobility aspirations of the Sugar managerial staff did affect how frequently they gatekeep while passing information to their superiors. Measures of mobility aspirations accounted for 41% of the variation in frequency of gatekeeping to superiors ($F=8.97$, $p<.01$).

Table 88 reports the regression findings pertaining to mobility aspirations and frequency of gatekeeping to superiors, in all four Sudanese organizations. These results would help in the discussion of the only overall significant association found.

As can be seen in Table 88, in the Sugar, measures of mobility aspirations accounted for a high proportion of the variation in frequency of gatekeeping while passing information to superiors. This finding is partially supported by results of the Textile and Cement. Managers of the Sudanese Textile desirous of promotion also tend to gatekeep more frequently while communicating with their superiors ($F=4.34$, $p<.05$) with a Beta coefficient of $-.49$. In the Cement, desire for upward mobility accounted for 24% of the variation in frequency of gatekeeping to superiors ($F=4.08$, $p<.05$).

Table 86: Mobility Aspirations and Qualitative Attributes of Upward
Communication Across the Three Groups

	(1)	(2)	(3)	(4)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
	Sudanese		British		Pakistan		Sudanese		British		Pakistan		Sudanese		British		Pakistan		
Qualitative																			
Attributes	R^2	F	R^2	F	R^2	F	R^2	F	R^2	F	R^2	F	R^2	F	R^2	F	R^2	F	
Summarization	.02	-	.21	-	.23	-	.12	-	.14	-	.19	-	.50	-					
Gatekeeping	.14	8.97*	.33	-	.26	-	.12	-	.07	-	.12	-	.17	-					

*p<.01

Sudanese:(1)=Sugar; (2)=Textile; (3)=Cement; (4)=Military.

British:(1)=Military; (2)=Textile.

R^2 =Percentage of variation explained by the independent variables.

F=F value and significance of the increments in R^2 .

Table 87

Mobility Aspirations and Summarizing to Superiors
 In the Three Textile Organizations

	Sudanesse		British		Pakistani							
Source of Variation	M/R	Beta F	M/R	Beta F	M/R	Beta F						
Desire for Promotion	.46	.21	- .45	3.2	.36	.13	- .65	4.03	.41	.41	- .64	4.97
Importance of Promotion	.46	.21	- .01	.01	.43	.19	- .38	1.4	.71	.50	- .27	.88

*p<.05.

0=Significant at .09.

Table 8B: Mobility Aspirations and Gatekeeping to Superiors in the Sudanese Organizations

Source of Variation	Sugar			Textile			Cement			Military						
	M/R	² R	Beta F	M/R	² R	Beta F	M/R	² R	Beta F	M/R	² R	Beta F				
Desire for Promotion	.434	.188	-.77	17.18*	.494	.244	-.49	4.34*	.419	.176	-.89	4.08*	.337	.114	-.38	2.69
Importance of Promotion	.639	.408	-.57	9.67*	.517	.326	-.29	1.46	.509	.259	-.55	1.57	.343	.118	-.08	.12

**p<.01, *p<.05 F(2,61)=8.97, p<.01

As can be seen in Table 88, all Sudanese organizations showed negatively signed Beta weights which indicate a negative association between mobility aspirations and gatekeeping to superiors. Results presented in Appendix G similarly show that, although none of the British or Pakistani organizations showed a significant relationship between the dependent and the independent variables, the general tendency (judging from the signs of the Beta coefficients) was for a negative relation between mobility aspirations and gatekeeping to superiors.

11.4) Summary and Discussion

To conclude, this study provided some results that confirm similar findings of previous research. As regards the interrelationship between mobility aspirations and the quantitative attributes of upward communication, research evidence suggests that individuals with high mobility aspirations communicate more frequently with their superiors (Read, 1962; Maier et. al, 1963). Athanassiades (1973, 1974) lends further support to this conclusion. The evidence presented in this study runs in a similar vein. Regression findings reported above revealed significant interrelationships between mobility aspirations and some of the measures that tap the quantity of upward communication. It appears that individuals with high mobility aspirations communicate more frequently with superiors.

However, with reference to summarizing and gatekeeping to superiors, a negative correlation was found between mobility aspirations and these communicational activities. These findings similarly lie in accordance with previous research (e.g., Fulk and Mani, 1986).

It appears that, those with high mobility aspirations engage in more communication with their bosses, yet at the same time they will also show greater propensity to summarize and gatekeep while transmitting upward. Both findings make sense if one views upward communication as instrumental for those with high ascendance

drive. Moreover, both findings fit into the two categories driven from the literature and outlined in Chapter Three.

Participants who communicate more frequently with their superiors as a result of their high mobility aspirations fit into the "status approximation" premise. In doing so they seek to either impress their superiors and/or bridge the status gap and psychologically substitute for the upward mobility they are aiming for. On the other hand, through summarizing and/or gatekeeping, participants with high mobility aspirations do what is instrumental to the attainment of their goals.

As regards any cultural differences on the impact of mobility aspirations on upward communication, these results failed to detect any. Furthermore, there were no differences between the results of civilian organizations as opposed to the two military ones.

CHAPTER TWELVE

Conclusion

12.1) Introduction

This chapter looks at the outcomes of this study and assesses its contribution to knowledge. It also looks at the theoretical and practical implications of the research findings, offers an evaluation of the study and gives some suggestions for future research.

12.2) Summary of Main Findings

At the outset of this study it was noted that most of the previous cross-cultural and/or cross national research could be placed into one of two categories. On the one hand, the culture-specific advocates propose a cultural relativity of theories pertaining to the workplace. On the other, the culture-free devotees advocate the universality of such theories.

This thesis has sought to evaluate the work-related values of the Sudanese, British and Pakistan in Britain managers and to assess the relationship between these values and organizational communication. Moreover, interrelationships between the three interpersonal factors of Trust in Superiors, Upward Influence and Mobility Aspirations on the one hand, and superior-subordinate communication behaviour on the other were tested.

In taking a culture-specific stance (Chapter Four) the study attempted not only to replicate and extend the findings of Hofstede (1980), but also to examine the direct impact of his findings on organizational behaviour. Specifically, the study was concerned with the Power Distance and Uncertainty Avoidance dimensions. Organizational communication and particularly

superior-subordinate communication was chosen as an organizational facet apt to manifest cultural differences.

Hence, the general plan of this study was to identify the work-related values of Power Distance and Uncertainty Avoidance of the three culturally distinct groups, and then to relate these to communicational behaviours in organizations operating in the three cultural settings. The impacts of the three interpersonal factors mentioned above were also investigated cross-culturally.

Chapter Two advanced the general hypotheses about the possible links between the societal institutions (i.e the family, educational system, religion, and political and economic system) and the work-related values of Power Distance and Uncertainty Avoidance. It was argued that attitudes to power and authority and those pertaining to an individual's perception of his/her own ability may have a significant bearing to the two work-related values. Essentially, these values are supposed to reflect themselves in organizational behaviour. To this end, intraorganizational communication and, in particular, superior-subordinate communication was elected as an intrinsic and pervasive phenomenon. Chapter Four specifically predicted the impact of the two cultural dimensions and the three interpersonal factors on superior-subordinate communication behaviour. Chapters Five to Eleven report and discuss the empirical investigation taken to test these hypotheses.

Members of the three cultural groups were found to adopt significantly different values. In particular, the British showed relatively less Power Distance and Uncertainty Avoidance scores than both their Sudanese and Pakistani counterparts. As for the impact of these value systems on communication behaviour there was significant differences between the three cultural groups that fell in accordance with the hypothesized relationships. As regards the three interpersonal factors, the general tendency of research results was towards confirming the central hypothesis that perceived trust in superior, superiors's hierarchical

influence and mobility aspirations appear to affect both the quantitative and qualitative attributes of superior-subordinate communication behaviour. However, there were no differences across the three cultural groups, i.e these three interpersonal factors engendered the same impact across the seven organizations. Nevertheless, the research evidence available at present points to organizational climate as possible contingency for intraorganizational relationships.

Although the findings of the present study resulted from the empirical investigations of these three groups and across only seven organizations, this research was carried out in such a way that generalizations for similar situations are possible. The general conclusions that could be driven from this study are explained as follows:

- 1- Confirming Hofstede's (1980) findings, the Sudanese, British and Pakistani-British were found to have substantially different value systems. The evidence presented in this study as regards the dimensions of Power Distance and Uncertainty Avoidance lies in line with what Hofstede (1983) found for some Arabic and African nations with which Sudan shares some cultural and geographical attributes. The Sudanese have similarly shown large Power Distance and high Uncertainty Avoidance. The Pakistani-British scored closer to their country of origin than to their current home. Again, they showed large Power Distance and high Uncertainty Avoidance scores. The British with small Power Distance and low Uncertainty Avoidance replicated what was reported by Hofstede (1980, 1983).
- 2- In investigating the general features of organizational communication, two general

outcomes were found. Firstly, there were more similarities than differences between the three groups as far as the within-organization comparisons (i.e between superiors and subordinates of the same organization) are concerned. Secondly, between group differences (e.g upward communication in the Sudanese viz., British viz., Pakistani) were greater than similarities particularly between the Sudanese and British groups.

- a) As regards the within-organizational comparisons, for instance, across all organizations downward communication was significantly greater than upward communication. Similarly, perceived accuracy of downward communication was higher than that of upward communication. Also, the face-to-face channel was reportedly the most frequently used modality.
- b) As regards the between group comparisons and with reference to the quantitative attributes, both upward and downward flow of information were significantly greater in the Sudanese group than in any of the other two. Results pertaining to the qualitative attributes show the British as the group that summarizes and gatekeeps to superiors more than their Sudanese counterparts. No similar difference was found between the Pakistani and their Sudanese or British counterparts.
- c) In considering communication modalities, the British surpassed both other groups in adherence to the face-to-face and the telephone channels.

The Sudanese used written modalities more than both their British and Pakistani counterparts.

- 3)- Consequences of Power Distance for superior-subordinate communication appear to be significant, particularly when one considers the style of management perpetuated by this cultural dimension. Thus, in societies where large Power Distance is the norm, organizations are more likely to be managed by autocratic or paternalistic managers. Consequently, the more autocratic a superior, the less would be the quantity of upward communication, yet the more would downward communication be perceived as accurate. On the other hand, the more participative the superior, the more will the subordinate engage in summarizing and gatekeeping while transmitting to bosses.
- 4- Intolerance of ambiguity, as indicated by high Uncertainty Avoidance as a societal norm, appear to have a negative interrelationship with summarizing to superiors.
- 5- In countries where intolerance of ambiguity is a societal norm, accuracy of information received from above is likely to be rated high.
- 6- Preference for a particular channel of communication appears to be related to issues like general satisfaction with work more so than to cultural norms.
- 7- Trust in superiors as an interpersonal factor seems to decide the volume of information exchanged in a superior-subordinate communication. The more trusting the

subordinates, the more will be the volume of both upward and downward communication.

- 8- The more trust subordinates have in their superiors, the higher they will rate the accuracy of downward communication, and the more frequently they will summarize and gatekeep to their superiors.
- 9- In organizations where status differentials are high (e.g the Military) the higher the superiors' upward influence, the more the upward communication.
- 10- Modest support was also given to the following propositions:
 - a) The more influential the superior, the higher the accuracy of downward communication be.
 - b) The more influential a superior, the less would his/her subordinates summarize and/or gatekeep while transmitting upward.
- 11- Organizational members with high advancement drive are more likely to seek and strive for greater communication with their bosses.
- 12- Organizational members who are desirous of upward mobility will engage in frequent summarization and gatekeeping while transmitting to their superiors.

12.3) Evaluation of the Study

To the knowledge of the present author, no research has yet been reported that has attempted to extend or validate Hofstede's (1980) conclusions. This is particularly true with regard to relating any of his four dimensions to specific organizational variables. This lack of research may be largely because of the debate between the culture-specific and the culture-free theorists. Essentially, this debate has degenerated into a dialogue between the contextually deaf and the culturally blinkered. It would appear that, for instance, the culture-free advocates have accepted a premise that is neither fully supported nor clearly refuted by the current literature and that has led to a belief that research in this area is unnecessary.

However, in a clear departure from previous research, the present study attempted to delineate both the cultural dimensions (independent variables) and the organizational facet (dependent variable) where cultural variations could be reflected. Research in the area has generally been conducted with no a priori hypotheses about what cultural effects to expect. The present study differs from previous work in its concern with cultural differences along certain cultural dimensions and their implications for a specific organizational factor. This is one main contribution of this study, in that hitherto researchers have tended to be vague about both culture as an independent variable and the dependent factor(s) it suppose to affect.

Another strength of the present study lies in the research strategy adopted. The inclusion of the British and the Sudanese who represent two nations with distinct modes of living and ecological surroundings comfortably qualifies this study as a cross-cultural rather than merely a cross-national one. The inclusion of the British and the Pakistani-British led to some interesting findings. The fact that these two groups and their workplaces share a situation in which the influences of other environmental factors (i.e political, economic and legal),

together with size market and ownership were held reasonably constant, made the findings of the empirical investigation more credible and valid.

Although the study was largely an exploratory one, as no empirical study of cultural influence on managerial communication, and in particular for a country like the Sudan, has hitherto been carried out, the study enjoys an original stance. Essentially, this study contributes to our knowledge in the following ways:

- 1- It has opened up a new approach to the comparative study of organizational processes in general and in particular to the study of intraorganizational communication by pointing to the role of national cultures and their role in shaping work-related values. The study also confirms the role of interpersonal factors such as Trust in Superiors, Upward Influence and Mobility Aspirations as possible contenders in shaping both the quantitative and qualitative attributes of superior-subordinate communication behaviour.
- 2- It has indicated the direction of influence exerted by the specific cultural dimensions of Power Distance and Uncertainty Avoidance on aspects of managerial communication. This has not, hitherto, been done by any empirical research in either the area of cross-cultural and/or cross-national organizational research nor in the area of organizational communication. The findings of this study could, therefore, form the foundation of emerging general theory of cultural influence on organizational communication.
- 3- The study has also drawn attention to specific

aspects of organizational communication in general and in particular superior-subordinate communication that can be regarded as dysfunctional.

- 4- Finally, the findings of this study also add credence to the conclusions of Hofstede (1980).

In spite of the above mentioned contributions, some methodological weaknesses of this research should be noted.

Firstly, although the findings may appropriately be generalized to other organizational levels, the unique characteristics of managerial staff should be kept in mind. For instance, power and status differentials could have been maximized if the superior/subordinate categories were filled by samples drawn from managerial staff and shop floor levels respectively. However, in the present study we found it easier to match managerial staff from a developing country like the Sudan with British counterparts than would have been the case if blue collar workers were included. Furthermore, in generalizing the results of the Military organizations to other organizations (e.g service and profit making) the unique characteristics of the Military should be kept in mind. As noted by Rushing (1978) 'organizational orientation, specifically profit versus nonprofit orientation, may be a significant contingency for intraorganizational relationships' (p. 689).

Secondly, and in connection with the previous point, because of sample size and single industry constraints, any generalizations from these results must be made with caution.

Thirdly, one particular scale of the Roberts and O'Reilly (1974) Organizational Communication Questionnaire, namely, Upward Influence, showed a relatively low internal consistency, particularly in the Pakistani and British groups. However, Roberts and O'Reilly (1974a) demonstrated internal consistency and

test-retest reliability for a larger sample and research showing direct and buffering effects of organizational dimensions on job satisfaction and organizational climate has provided confirmation of the construct validity of the questionnaire (Muchinsky, 1977).

Fourthly, for reasons discussed in Chapter Four, organizational climate and/or organizational culture was excluded from the investigation. However, in many cases during the course of interpreting the findings of this study, observed variations appeared to be better understood in the light of such factors as the internal culture of the institution. Citing organizational culture or climate as a causal factor or one with buffering effects is not an uncommon practice (e.g. Allaire and Firsirotu, 1984).

Fifthly, another limitation was our focus on discrete organizational communication behaviour to the exclusion of the context and circumstances. For instance, summarization may be undertaken for legitimate purposes in some instances.

Finally, a major limitation to our study was the use of data collected from only one single source of information. While this facilitated to a greater extent the process of matching participants across the three cultural groups, it left us with no chance to cross-check respondents' perceptions. Moreover, their view is a view of managerial staff and may tell us little of how non-managerial personnel would behave.

12.4) Theoretical and Applied Implications

The conclusions mentioned in Section 12.2 above have both theoretical and practical implications for organizational theory in general and in particular to organizational and superior-subordinate communication. However, these implications should be viewed with consideration to the specific samples incorporated in the study and the fact that although cultures are more stable

change in values and attitudes due to novel experiences can not be ruled out.

12.4.1) Theoretical Implications

Perrow (1970) stated that:

'The cultural norms and values of a society set limits upon what can be done with the "raw materials" of organizations. Generally, these limitations pertain to the treatment of human beings' (p. 118).

Such causal relations between societal norms and values and organizational behaviour are not uncommon. What is less common, however, is an empirical attempt to define what is culture, delineate its components and relate these to specific organizational processes. Hofstede (1978) contends that few writers and scholars of organizational behaviour deny the influence of culture, but many are guilty of extrapolating conclusions from one culture to another without questioning the validity of such actions.

The research design adopted in this study represents a significant departure from the past and suggests directions for future research. Results of the present study refine the culture-specific perspective by delineating both the specific cultural dimensions and organizational factors supposed to reflect any cultural variation. This study made it clear that investigators need to examine cultural differences in terms of both stating what these differences are and how they are supposed to influence organizational behaviour.

The present study provides support for the culture-specific theorists who advocate the cultural relativity of theories pertaining to organizational behaviour. The findings of this study show that there is considerable consistency across the three cultural groups between their socio-cultural institutions (i.e. the

family, religion, educational system and political and economic system) and their work-related values. There was also some consistency between participants' work-related values and their organizational communicational behaviour.

As for the impact of the interpersonal factors on superior-subordinate communication, the present study lends support for previous research findings. However, the study also indicates that the internal climate of an organization should be considered if a better understanding of the impact of these interpersonal factors on superior-subordinate communication behaviour is to be attained.

12.4.2) Practical Implications

Researchers have consistently been requested that the material they present should bear relevance and usefulness to the world of businessmen and women as opposed to academic audiences only. Such is the goal of the following section which draws from the findings of the present study; and discusses its practical implications.

A considerable body of research exists, supported by some of the conclusions reached in this study, which suggests major discrepancies between Western managerial attitudes and those of managers from developing parts of the world.

Most commentators of the development of the workplace in developing countries have cited the incompatibility of Western and traditional values as the major hurdle (e.g Orpen, 1978). It is frequently suggested that underdeveloped countries have remained poor and backward because of their rigid and closed cultural systems. While this is true to some extent, the fact remains that at least in traditional capitalism-oriented organizations, little or no efforts seem to have been undertaken towards the imposition of new value systems which would not violate the indigenous value systems yet at the same time lie in harmony with industrialization. Until this balance is achieved, harsh and

strong comments as the ones made by Onyemelukwe (1973) and quoted by Seddon (1985) will continue to emerge. He contended that:

'From...contrasts between the industrial and traditional cultures it is often concluded that, to enter the era of industrialization the traditional culture must be bent or, better yet, destroyed' (p. 98).

It is true that managerial practices and skills of Western origin have frequently been transmitted to other parts of the world with great ethnocentricity. Since it is less likely for most parts of the world to exchange their cultures for ones which are identical or compatible with that of Western industrialized nations, the gap between the two needs to be lessened. It is through studies such as the present one that the nature of the discrepancies can be understood and worked upon.

In bridging the gap, it would appear, two strategies need to be followed. If a certain societal value proves to be the prime impetus behind certain modes of behaviour which are deemed as dysfunctional and that value is difficult or impossible to change (e.g religious values), it would be more useful to focus on changing the behaviours than on changing the values themselves (Munro, 1983). Secondly, possible change can be achieved through the creation of a sub-culture which is more compatible with organizational effectiveness and less hostile to indigenous values. This is where the findings of the present study have direct practical relevance particularly to the Sudanese results. It concerns the likely effectiveness of attempts to train or alter managerial styles predominantly perceived among the Sudanese.

As an example of the first strategy, in the Sudanese organizations there appears to be a high degree of incongruity between the perceived and the preferred style of management with the former being highly autocratic and/or paternalistic and the latter being participative. If the prevailing style of management in the Sudanese organizations is perpetuated by cultural norms, as the

available body of research seem to suggest, most of the causes of some of the dysfunctions currently prevailing in the Sudanese organizations can thus be culturally influenced. In this case, it is useless and futile to undertake any attempts towards improving democracy through training and several expensive development programmes and packages. In this case, less emphasis on democracy through training and more actual decentralization of power might make radical improvements to participation within the Sudanese organizations.

Research evidence (e.g Kuc, et. al, 1980) similarly suggests that a balance can be struck between running effective organizations and catering for indigenous conditions. In countries where the prevailing political and economic ideologies are different from those of the West, countries adopt different control strategies and industrial relations policies which suit their positions.

As for the pedagogical implications of this study, we believe that it would be too late for training and development programmes imported mainly from U.S.A. to bring any change in managerial behaviour. Although we have argued throughout the thesis that work-related values are perpetuated through socialization, attitude theories suggest that change can be achieved through communication and persuasion (e.g Kleinke, 1984). Thus, if certain work-related values prove to be incompatible with effective organizational performance, schools and colleges should be entrusted to modify or change these values. Moreover, professional cultures or sub-cultures can be imposed before potential organizational personnel start their careers. This idea was unequivocally put by a despairing Sudanese manager who in referring to the civil service remarked:

'We are accustomed to do our work within the framework of the civil service regulations where there is no room for initiative and innovation. [Any change] ...will be useful for graduates who are not yet damaged by civil services dullness' (Ketchum, 1984, p. 153).

There is an additional consequence of these findings to multinational companies which warrants discussion. This concern the fact that multinational companies are frequently faced with the problem of staffing their overseas subsidiaries. In reviewing this issue, Tung (1979) found that cultural familiarity, public relations and cost constituted the key reasons behind staffing with nationals of the host country. Also, one can add political considerations which could dictate the use of the least number of expatriates. Thus, the practical implications of the present study could be useful in the process of socializing both the expatriate managers to achieve maximum harmony with the new value system and in socializing members of the host country to achieve maximum fitness with the firm's demands.

12.5) Suggestions for Future Research

Certainly, this study does not claim to have included in the investigation all potentially relevant cultural or organizational factors. A brief glance at Child and Tayeb's (1983) review of research designs in cross-cultural and/or cross-national organizational research indicates the impracticality of including all pertinent variables within a single study. This is particularly the case if the investigation to be conducted cross-culturally. On the whole the author of the dissertation is fairly satisfied that the theoretical model adopted in this study, and the methodology used towards its operationalization, were, to a large extent, effective and worth replicating.

The outcomes of this study give good grounds for further investigation on a much wider basis. The evidence presented in this study is such that national cultures can no longer be ignored as one of the prime contingencies affecting organizational communication. Similarly, the interpersonal factors of Trust in Superiors, Upward Influence and Mobility Aspirations added significantly to the explanation of superior-subordinate communication behaviour. Although the findings are correlational and do not establish causality, they do shed light on the general

features of superior-subordinate communication in culturally distinct settings.

In conclusion, the two cultural dimensions of Power Distance and Uncertainty Avoidance together with the three interpersonal factors of Trust in Superiors, Upward Influence and Mobility Aspirations are constructs that appear to have identifiable behavioural underpinnings. The magnitude of the interrelationships between these factors and intraorganizational communication is encouraging.

In spite of the contribution made by the present study there are related areas where further research is needed. Future research could expand on the findings and methodology of this study in several ways. The following directions of research are suggested:

- 1- Because of cultural inhibition with some questions and the constraints of instrument length, the present study was not able to examine the impact of internal organizational culture and/or climate. In the future it would be of interest to learn how organizational culture relates to wider environmental settings. Also, how internal culture relates to the interpersonal factors of Trust, Influence and Mobility Aspirations.
- 2- The research now lends itself to the development of further and similar (e.g participation) organizational processes to be investigated over a wider population. For instance, Future research should further delineate and refine categories of organizational processes and relate these to cultural dimensions. One possibility is to investigate the degree of participation since it was shown to be linked to superior-subordinate communication behaviour.

- 3- Future research of managerial communication should be directed towards understanding subordinates' motivations to distort.
- 4- The same study can be replicated in another multi-ethnic society like the U.S.A or Belgium to examine the extent to which these work-related values are consistent and to what extent they shape organizational processes such as the degree of formalization, centralization, etc.
- 5- A longitudinal study might show interrelationships between changes in value systems and organizational behaviour. This might be particularly valuable in societies undergoing rapid political and economic changes; such as Hong Kong.
- 6- A highly useful approach to future research might involve the use of observational methods in measuring communication behaviour and its consequences.

APPENDICES

Appendix A: The Questionnaire

This is a series of questions about how people communicate at work. Imagine a typical week at work in your current job, and answer the questions accordingly. Please attempt to answer all questions. Some questions ask you to fill in a answer. Others have seven point scales on which to answer by marking with a tick. On these questions, please check the point that represents most closely how you feel. For instance, to the question, "How rich do you want to be?" you might answer:

Very poor | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very rich

(1) Do you have subordinates working for you? Yes ... No ...

(2) How free do you feel to discuss with your immediate superior the problems and difficulties you have in your job without jeopardising your position or having it "held against" you later?

Completely free | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very cautious

(3) How often is your immediate superior successful in overcoming restrictions (such as regulations or quotas) in getting you the things you need in your job, such as equipment, personnel, etc?

Always successful | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Never successful

(4) Immediate superiors at times must make decisions which seem to be against the interests of their subordinates. When this happens to you as a subordinate, how much trust do you have that your immediate superior's decision was justified by other considerations?

Trust completely | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Feel very distrustful

(5) In general, how much do you feel that your immediate superior can do to further your present career?

Much | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Little

(6) How much weight would your immediate superior's recommendation have in any decision which would affect your standing in this organization, such as promotions, transfers, etc?

Important | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Unimportant

(7) As part of your present job plans, do you want a promotion at some point in the future?

Content as I am | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very much

(8) How important is it for you to progress upward?

Not important | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very important

(9) To what extent do you have confidence and trust in your immediate superior regarding his general fairness?

Have little | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Have complete
confidence confidence and
and trust trust

While workin what percentage of the time do you spend interacting with:

- 10) Immediate superiors?%
- 11) Subordinates?%
- 12) Peers (others at the same level)%
- 13) Others (please specify)?%

Of the total time you engage in communications while on the job, about what percentage of the time do you use the following methods to communicate:

- 14) Written?%
- 15) Face-to-face?%
- 16) Telephone?%
- 17) Others (please specify)?%

When receiving information from the sources listed below, how accurate would you estimate the information given?

18) Completely accurate | Immediate superiors | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Completely inaccurate

19) Completely accurate | Subordinates | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Completely inaccurate

20) Completely accurate | Peers- others at your job level | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Completely inaccurate

21) How often do you find the amount of the available information hinders rather helps your performance?

Almost never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Fairly often

22) Do you ever feel that you receive more information than you can effeciently use?

Never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Always

Of the total time you spend receiving information at work, what percentage comes from:

- 23) Immediate superiors?%
- 24) Subordinates?%
- 25) Peers (others at the same level)%

Of the total time you spend sending information at work, what percentage goes to:

- 26) Immediate superiors?%
- 27) Subordinates?%
- 28) Peers (others at the same level)%

29) When transmitting information to immediate superiors, how often do you summarize by emphasizing those aspects which are important and minimizing those aspects which are less important?

Always | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Never

30) When transmitting information to subordinates, how often do you summarize by emphasizing those aspects which are important and minimizing those aspects which are less important?

Always | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Never

31) When transmitting information to peers, how often do you summarize by emphasizing those aspects which are important and minimizing those aspects which are less important?

Always | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Never

Of the total amount of information you receive at work, how much do you pass on to:

32) Immediate superiors

All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | None

33) Subordinates

All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | None

34) Peers (others at your job level)

All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | None

How desirable do you feel it is in your department to interact frequently with:

35) Immediate superiors?

Very desirable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Completely undesirable

36) Subordinates?

Very desirable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Completely undesirable

37) Peers?

Very desirable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Completely undesirable

38) Are there forces leading to ommissions or distortions of upward flow of information?

Virtually no | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Powerful forces
forces distort to distort

39) To what extent are you satisfied with communication in general, including the amount of information you receive, contacts with your immediate superior and others, the accuracy of information, etc?

Very satisfied | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Dissatisfied

The descriptions below apply to four different types of managers. First, please read through these descriptions:

Manager 1 : Usually makes his/her decisions promptly and communicates them to his/her subordinates clearly and firmly. He/she expects them to carry out these decisions loyally and without raising difficulties.

Manager 2 : Usually makes his/her decisions promptly but, before going ahead, tries to explain them fully to his/her subordinates. He/she gives them the reasons for the decisions and answers whatever questions they may have.

Manager 3 : Usually consults with his/her subordinates before he/she reaches his/her decisions. He/she listens to their advice, considers it and then announces his/her decision. He/she then expects all to work loyally to implement it whether or not it is in accordance with the advice they gave.

Manager 4 : Usually calls a meeting of his/her subordinates when there is an important decision to be made. He/she puts the problem before the group and invites discussion. He/she accepts the majority viewpoint as the decision.

40) Now for the above types of managers, please mark the one which you prefer to work under (circle one answer number only):

a) Manager 1 b) Manager 2 c) Manager 3 d) Manager 4

41) To which one of the above four types of managers would you say your own superior most closely corresponds?

a) Manager 1 b) Manager 2 c) Manager 3 d) Manager 4

42) How often do you feel nervous or tense at work?

a) I always feel this way 1
b) Usually 2
c) Sometimes 3
d) Seldom 4
e) I never feel this way 5

43) How frequently in your work environment are subordinates afraid to express disagreement with their superior?

a) Very frequently 1
b) Frequently 2
c) Sometimes 3
d) Seldom 4
e) Very seldom 5

44) How long do you think you will continue working for the organization or company you work for now?

a) Two years at the most 1 b) From two to five years 2
c) More than five years (but I probably will leave before I retire) 3
d) Until I retire 4

45) Please indicate your degree of agreement with the following statement: 'A company or organization's rules should not be broken—not even when the employee thinks it is in the company's best interest.'

a) Strongly agree 1 b) Agree c) Undecided 3
d) Disagree 4 e) Strongly disagree 5

46) Are you:

a) Male 1 b) Female 2

47) How old are you?

48) How many years of formal school education did you complete? Starting with Primary school, count only the number of years each course should officially take, even if you spent less or more years on

it: if you took part-time or evening course, count the number of years
the same course would have taken you full time? Number of Years

49) What kind of work do you do?
.....
.....
.....

Appendix B: Factor Analyses Results of the OQ

Table 1: Factor Analysis of the OQ: The Sugar

Item No.	Factor and Item Label	Item Loading	Eigenvalue	% of Variance	Factor No.
	<u>Summarization</u>		6.32	22.9	1
29	To superiors	.87			
30	To subordinates	.88			
31	To peers	.91			
	<u>Directionality-Lateral</u>		3.18	11.5	2
12	Interaction with peers.	.71			
25	Receiving from peers.	.54			
28	Sending to peers.	.76			
	<u>Accuracy</u>		2.51	9.10	3
18	Of superiors.	.79			
19	Of subordinates.	.94			
20	Of peers.	.68			
	<u>Desire for Interaction</u>		2.31	8.40	4
35	With superiors.	.74			
36	With subordinates.	.90			
37	With peers.	.43			
	<u>Directionality-Downward</u>		2.20	7.31	5
11	Interaction with subordinates.	.53			
23	Receiving from superiors.	.68			
27	Sending to subordinates.	.63			
	<u>Modalities</u>		2.01	7.30	6
16	The telephone.	.91			
17	Others.	.89			
	<u>Directionality-Upward</u>		1.51	5.49	7
10	Interaction with superiors.	.50			
24	Receiving from subordinates.	.58			
26	Sending to superiors.	.73			
	<u>Upward Influence</u>		1.49	5.40	8
3	Overcoming restrictions.	.57			
5	General Influence	.91			
6	Recommendation.	.73			
	<u>Trust</u>		1.34	4.90	9
2	Disclosure of grievence.	.39			
4	Unfavourable decisions.	.78			
9	General fairness.	.63			
	<u>Gatekeeping</u>		1.29	4.70	10
32	To superiors.	.41			
33	To subordinates.	.90			
34	To peers.	.67			

Table 1 continued

21	<u>Overload</u> Information hinder more than it help.	.82	1.16	4.20	11
22	Redundancy.	.42			
7	<u>Mobility Aspiration</u> Desire for promotion.	.80	1.01	3.50	12
8	Importance of promotion.	.71			

Table 2: Factor Analysis of the OCQ: The Sudanese Textile

Item No.	Factor and Item Label	Items Loading	Eigenvalue Variance	% of Variance No.	Factor
	<u>Directionality-Downward</u>		4.66	17.54	1
11	Interaction with subordinates.	.70			
23	Receiving from superiors.	.72			
27	Sending to subordinates.	.84			
	<u>Directionality-Lateral</u>		3.57	13.4	2
12	Interaction with peers.	.74			
25	Receiving from peers.	.52			
28	Sending to peers.	.54			
	<u>Directionality-Upward</u>		3.50	13.16	3
10	Interaction with superiors.	.49			
24	Receiving from subordinates.	.88			
26	Sending to superiors.	.66			
	<u>Upward Influence</u>		2.55	9.60	4
3	Overcoming restrictions.	.70			
5	General Influence	.70			
6	Recommendation.	.69			
	<u>Accuracy</u>		2.51	9.40	5
18	Of superiors.	.39			
19	Of subordinates.	.79			
20	Of peers.	.71			
	<u>Modalities and satisfaction.</u>		1.68	6.30	6
14	Written.	.89			
15	Face-to-face.	-.58			
16	Telephone.	-.33			
38	Distortion.	.72			
39	Satisfaction.	.77			
	<u>Summarization</u>		1.59	6.0	7
29	To superiors	.50			
30	To subordinates	.59			
31	To peers	.80			

Table 2 continued

	<u>Trust</u>		1.33	5.0	8
2	Disclosure of grievance.	.68			
4	Unfavourable decisions.	.53			
9	General fairness.	.50			
	<u>Overload</u>		1.23	4.60	9
21	Information hinder more than it help.	.50			
22	Redundancy.	.54			
	<u>Desire for Interaction</u>		1.13	4.30	10
35	With superiors.	.61			
36	With subordinates.	.58			
37	With peers.	.73			
	<u>Mobility Aspiration</u>		1.06	3.90	11
7	Desire for promotion.	.70			
8	Importance of promotion.	.63			
	<u>Gatekeeping</u>		1.01	3.60	12
32	To superiors.	.43			
33	To subordinates.	.54			
34	To peers.	.40			

Table 3: Factor Analysis of the OCQ: The Sudanese Cement

Item No.	Factor and Item Label	Item Loading	Eigenvalue	% of Variance	Factor No.
	<u>Directionality-Downward</u>		4.41	16.11	1
11	Interaction with subordinates.	.73			
23	Receiving from superiors.	.97			
27	Sending to subordinates.	.80			
	<u>Summarization</u>		4.04	14.80	2
29	To superiors	.79			
30	To subordinates	.86			
31	To peers	.65			
	<u>Directionality-Upward</u>		3.30	12.09	3
10	Interaction with superiors.	.74			
24	Receiving from subordinates.	.84			
26	Sending to superiors.	.90			
	<u>Directionality-Lateral</u>		2.62	9.68	4
12	Interaction with peers.	.39			
25	Receiving from peers.	.90			
28	Sending to peers.	.92			
	<u>Upward Influence</u>		2.58	9.32	5
3	Overcoming restrictions.	.62			
5	General Influence	.74			

Table 3 continued

6	Recommendation.	.69			
	<u>Modalities</u>		2.10	7.60	6
14	Written.	.82			
15	Face-to-face.	-.23			
16	Telephone.	-.46			
	<u>Mobility Aspiration</u>		1.76	6.40	7
7	Desire for promotion.	.70			
8	Importance of promotion.	.95			
	<u>Desire for Interaction</u>		1.59	5.80	8
35	With superiors.	.36			
36	With subordinates.	.79			
37	With peers.	.77			
	<u>Gatekeeping</u>		1.21	4.40	9
32	To superiors.	.70			
33	To subordinates.	.70			
34	To peers.	.30			
	<u>Trust</u>		1.10	4.0	10
2	Disclosure of grievence.	.54			
4	Unfavourable decisions.	.63			
9	General fairness.	.68			
	<u>Accuracy</u>		1.06	3.80	11
18	Of superiors.	.51			
19	Of subordinates.	.37			
20	Of peers.	.40			
	<u>Overload</u>		1.01	3.10	12
21	Information hinder more than it help.	.37			
22	Redundancy.	.58			

Table 4: Factor Analysis of the OCQ: The Sudanese Military

Item No.	Factor and Item Label	Item Loading	Eigenvalue Variance	% of No.	Factor
	<u>Accuracy</u>		3.46	12.60	1
18	Of superiors.	.35			
19	Of subordinates.	.74			
20	Of peers.	.92			
	<u>Summarization</u>		3.33	12.17	2
29	To superiors	.91			
30	To subordinates	.71			
31	To peers	.56			
	<u>Directionality-Downward</u>		2.94	10.70	3
11	Interaction with subordinates.	.53			
23	Receiving from superiors.	.84			
27	Sending to subordinates.	.84			
	<u>Gatekeeping</u>		2.75	10.03	4
32	To superiors.	.77			
33	To subordinates.	.79			
34	To peers.	.64			

Table 4 continued

	<u>Directionality- Lateral</u>		2.43	8.80	5
12	Interaction with peers.	.35			
25	Receiving from peers.	.86			
28	Sending to peers.	.85			
	<u>Upward Influence</u>		2.25	8.20	6
3	Overcoming restrictions.	.56			
5	General Influence	.96			
6	Recommendation.	.91			
	<u>Directionality- Upward</u>		2.18	7.90	7
10	Interaction with superiors.	.73			
24	Receiving from subordinates.	.85			
26	Sending to superiors.	.80			
	<u>Trust</u>		1.99	7.3	8
2	Disclosure of grievence.	.86			
4	Unfavourable decisions.	.80			
9	General fairness.	.69			
	<u>Modalities</u>		1.75	6.40	9
14	Writttten.	-.50			
15	Face-to-face.	.84			
16	Telephone.	-.50			
	<u>Overload</u>		1.34	4.90	10
21	Information hinder more than it help.	.83			
22	Redundancy.	.88			
	<u>Mobility Aspiration</u>		1.20	4.40	11
7	Desire for promotion.	.63			
8	Importance of promotion.	.56			
	<u>Desire for Interaction</u>		1.01	3.60	12
35	With superiors.	.53			
36	With subordinates.	.40			
37	With peers.	.76			

Table 5: Factor Analysis of the OCQ: The British Military

Item No.	Factor and Item Label Loading	Items	Eigenvalue Variance	% of No.	Factor
	<u>Trust</u>		5.31	17.40	1
2	Disclosure of grievence.	.81			
4	Unfavourable decisions.	.78			
9	General fairness.	.59			

Table 5 continued

	<u>Directionality- Upward</u>		4.43	14.50	2
10	Interaction with superiors.	.48			
24	Receiving from subordinates.	.88			
26	Sending to superiors.	.89			
	<u>Summarization</u>		3.83	12.50	3
29	To superiors	.64			
30	To subordinates	.78			
31	To peers	.84			
	<u>Modalities and satisfaction.</u>		3.38	11.1	4
14	Written.	.22			
15	Face-to-face.	.71			
16	Telephone.	-.85			
38	Distortion	.55			
39	Satisfaction.	.31			
	<u>Directionality- Lateral</u>		2.48	8.10	5
12	Interaction with peers.	.58			
25	Receiving from peers.	.92			
28	Sending to peers.	.51			
	<u>Upward Influence</u>		2.20	7.20	6
3	Overcoming restrictions.	.36			
5	General Influence	.74			
6	Recommendation.	.72			
	<u>Mobility Aspiration</u>		1.89	6.20	7
7	Desire for promotion.	.82			
8	Importance of promotion.	.71			
	<u>Directionality- Downward</u>		1.69	8.50	8
11	Interaction with subordinates.	.43			
23	Receiving from superiors.	.83			
27	Sending to subordinates.	.85			
	<u>Overload</u>		1.47	4.80	9
21	Information hinder more than it help.	.78			
22	Redundancy.	.87			
	<u>Gatekeeping</u>		1.20	3.90	10
32	To superiors.	.84			
33	To subordinates.	.63			
34	To peers.	.85			
	<u>Desire for Interaction</u>		1.07	3.11	11
35	With superiors.	.32			
36	With subordinates.	.57			
37	With peers.	.44			
	<u>Accuracy</u>		1.00	3.20	12
18	Of superiors.	.57			
19	Of subordinates.	.45			
20	Of peers.	.49			

Table 6: Factor Analysis of the OCQ: The British Textile

Item No.	Factor and Item Label	Item Loading	Items	Eigenvalue Variance	% of Variance	Factor No.
	<u>Overload</u>			5.13	16.50	1
21	Information hinder more than it help.	.82				
22	Redundancy.	.78				
	<u>Trust</u>			4.50	14.50	2
2	Disclosure of grievence.	.74				
4	Unfavourable decisions.	.75				
9	General fairness.	.72				
	<u>Directionality-Downward</u>			3.71	11.94	3
11	Interaction with subordinates.	.78				
23	Receiving from superiors.	.52				
27	Sending to subordinates.	.83				
	<u>Summarization</u>			3.23	10.40	4
29	To superiors	.90				
30	To subordinates	.69				
31	To peers	.79				
	<u>Mobility Aspiration</u>			2.93	9.40	5
7	Desire for promotion.	.83				
8	Importance of promotion.	.85				
	<u>Directionality-Upward</u>			2.78	8.96	6
10	Interaction with superiors.	.72				
24	Receiving from subordinates.	.87				
26	Sending to superiors.	.79				
	<u>Accuracy</u>			2.08	6.70	7
18	Of superiors.	.38				
19	Of subordinates.	.79				
20	Of peers.	.82				
	<u>Desire for Interaction</u>			1.82	5.90	8
35	With superiors.	.60				
36	With subordinates.	.71				
37	With peers.	.36				
	<u>Modalities and satisfaction.</u>			1.59	5.10	9
14	Writtten.	.46				
15	Face-to-face.	-.68				
16	Telephone.	.77				
38	Distortion	.72				
39	Satisfaction.	.76				
	<u>Upward Influence</u>			1.37	4.40	10
3	Overcoming restrictions.	.64				
5	General Influence	.46				
6	Recommendation.	.33				

Table 6 continued

	<u>Gatekeeping</u>		1.10	3.60	11
32	To superiors.	.61			
33	To subordinates.	.53			
34	To peers.	.41			
	<u>Directionality- Lateral</u>		1.08	2.70	12
12	Interaction with peers.	.44			
25	Receiving from peers.	.73			
28	Sending to peers.	.83			

Table 7: Factor Analysis of the OCQ: The Pakistani Textile

Item No.	Factor and Item Label Loading	Items	Eigenvalue Variance	% of No.	Factor
	<u>Gatekeeping</u>		4.88	15.50	1
32	To superiors.	.92			
33	To subordinates.	.56			
34	To peers.	.79			
	<u>Overload</u>		4.74	15.00	2
21	Information hinder more than it help.	.85			
22	Redundancy.	.78			
	<u>Directionality- Downward</u>		3.86	12.26	3
11	Interaction with subordinates.	.85			
23	Receiving from superiors.	.93			
27	Sending to subordinates.	.72			
	<u>Directionality- Upward</u>		3.70	11.74	4
10	Interaction with superiors.	.86			
24	Receiving from subordinates.	.83			
26	Sending to superiors.	.89			
	<u>Upward Influence</u>		2.82	8.90	5
3	Overcoming restrictions.	.60			
5	General Influence	.43			
6	Recommendation.	.79			
	<u>Modalities and satisfaction.</u>		2.53	8.00	6
14	Written.	.87			
15	Face-to-face.	.69			
16	Telephone.	.40			
38	Distortion	.94			
39	Satisfaction.	.88			
	<u>Mobility Aspiration</u>		2.04	6.50	7
7	Desire for promotion.	.76			
8	Importance of promotion.	.88			

	<u>Summarization</u>		1.64	5.20	8
29	To superiors	.90			
30	To subordinates	.79			
31	To peers	.47			
	<u>Trust</u>		1.40	4.50	9
2	Disclosure of grievence.	.82			
4	Unfavourable decisions.	.33			
9	General fairness.	.82			
	<u>Directionality-</u>		1.12	3.60	10
	<u>Lateral</u>				
12	Interaction with peers.	.87			
25	Receiving from peers.	.53			
28	Sending to peers.	.40			
	<u>Accuracy</u>		1.10	3.40	11
18	Of superiors.	.78			
19	Of subordinates.	.71			
20	Of peers.	.78			
	<u>Desire for Interaction</u>		1.08	2.70	12
35	With superiors.	.46			
36	With subordinates.	.59			
37	With peers.	.41			

APPENDIX C: General Features of Organizational Communication

Table 1

Percentage of Time Spent on Interaction with Superiors versus Subordinates in the Three Groups.

Organization	Interaction with:	Mean	S.D	T-value	df	P
Sudanese Sugar	Superiors	31.89	9.41	5.94	60	0.00
	Subordinates	45.98	10.79			
Sudanese Textile	Superiors	34.15	11.51	3.10	52	0.00
	Subordinates	42.26	10.17			
Sudanese Cement	Superiors	31.50	9.54	4.70	49	0.00
	Subordinates	45.60	12.96			
Sudanese Military	Superiors	33.30	9.77	3.12	49	0.00
	Subordinates	42.80	14.43			
British Military	Superiors	22.48	19.08	4.01	28	0.00
	Subordinates	51.72	25.75			
British Textile	Superiors	17.41	14.10	4.50	21	0.00
	Subordinates	51.50	24.64			
Pakistani Textile	Superiors	20.96	14.63	5.54	25	0.00
	Subordinates	53.65	17.64			

Table 2

Mean Time Spent on Receiving from Superiors versus Subordinates in the Three Groups

Organization	Receiving from:	Mean	S.D	T-value	df	P
Sudanese Sugar	Superiors	34.34	08.87	6.34	60	0.00
	Subordinates	48.61	09.67			
Sudanese Textile	Superiors	34.81	11.05	3.86	52	0.00
	Subordinates	44.34	09.86			
Sudanese Cement	Superiors	34.80	10.40	3.41	49	0.00
	Subordinates	45.60	13.27			
Sudanese Military	Superiors	34.00	10.55	4.08	49	0.00
	Subordinates	47.80	14.40			
British Military	Superiors	46.03	24.87	2.36	28	0.03
	Subordinates	26.21	24.41			
British Textile	Superiors	26.45	16.27	2.99	21	0.01
	Subordinates	48.18	22.71			
Pakistani Textile	Superiors	21.15	14.58	5.92	25	0.00
	Subordinates	53.77	17.10			

Table 3

Mean Time Spent on Sending to Superiors versus Subordinates in the Three Groups

Organiza- tion	Sending to	Mean	S.D	T- value	df	P
Sudanese Sugar	Superiors	34.26	9.48	6.03	60	.00
	Subordinates	49.29	10.83			
Sudanese Textile	Superiors	34.06	10.33	3.66	52	.00
	Subordinates	43.77	10.92			
Sudanese Cement	Superiors	33.80	10.91	3.86	49	.00
	Subordinates	46.50	13.49			
Sudanese Military	Superiors	34.50	12.95	3.66	49	.00
	Subordinates	48.00	15.12			
British Military	Superiors	31.76	22.12	1.82	28	.08
	Subordinates	47.70	27.60			
British Textile	Superiors	27.95	18.17	1.99	21	.06
	Subordinates	43.18	23.17			
Pakistani Textile	Superiors	23.46	13.55	4.83	25	.00
	Subordinates	51.73	17.49			

Table 4

Perceived Accuracy of Information Received from Superiors versus Subordinates in the Three Groups

Organiza- tion	Information received from	Mean	S.D	T- value	df	P
Sudanese Sugar	Superiors	1.82	0.70	14.62	60	.00
	Subordinates	2.87	0.81			
Sudanese Textile	Superiors	2.51	1.05	2.23	52	.03
	Subordinates	2.91	1.24			
Sudanese Cement	Superiors	2.20	1.09	3.51	49	.00
	Subordinates	2.84	1.13			
Sudanese Military	Superiors	2.16	0.79	4.92	49	.00
	Subordinates	2.84	1.15			
British Military	Superiors	2.52	0.91	8.67	28	.00
	Subordinates	4.38	1.47			
British Textile	Superiors	2.59	0.96	3.10	21	.01
	Subordinates	3.50	1.47			
Pakistani Textile	Superiors	2.23	0.82	2.61	25	.02
	Subordinates	2.85	1.16			

Note: There was a seven-point answer scale ranging from "Completely Accurate", to "Completely Inaccurate", and responses were coded in such a way that a higher score indicates a lower degree of accuracy.

Table 5

Perceived Accuracy of Information Received from Superiors In the Three Groups

Cultural group	Mean	S.D	T-value	df	P
Textile					
Sudanese	2.51	1.05	0.28	77	—
Pakistani	2.23	0.82			
Sudanese	2.51	1.05	0.33	73	—
British	2.59	0.96			
Pakistani	2.23	0.82	1.41	46	—
British	2.59	0.96			
Military					
Sudanese	2.16	0.79	0.10	77	—
British	2.52	0.91			

Table 6

Frequency of Summarizing to Superiors versus to Subordinates in the Sudanese, British, and Pakistani Organizations.

Organization	Summarizing to:	Mean	S.D	T-value	df	P
Sudanese Sugar	Superiors	4.34	1.33	18.56	60	.00
	Subordinates	2.41	0.92			
Sudanese Textile	Superiors	4.36	1.69	10.50	52	.00
	Subordinates	2.28	1.06			
Sudanese Cement	Superiors	4.08	1.71	8.31	49	.00
	Subordinates	2.80	1.33			
Sudanese Military	Superiors	6.02	1.72	3.04	49	.00
	Subordinates	5.40	1.87			
British Military	Superiors	2.28	0.92	0.84	28	.41
	Subordinates	2.10	1.11			
British Textile	Superiors	2.50	1.14	0.96	21	.35
	Subordinates	2.73	1.24			
Pakistani Textile	Superiors	3.04	1.48	4.12	25	.00
	Subordinates	2.27	1.04			

Note: There was a seven-point answer scale ranging from "Always" to "Never", and responses were coded in such a way that a higher score indicates a lower degree of summarization.

Table 7

Gatekeeping to Superiors versus to Subordinates in the Sudanese, British, and Pakistani Organizations.

Organiza- tion	Amount passed to:	Mean	S.D	T- value	df	P
Sudanese Sugar	Superiors	3.66	1.75	0.30	60	.76
	Subordinates	3.57	1.40			
Sudanese Textile	Superiors	4.08	1.84	3.58	52	.00
	Subordinates	3.28	1.26			
Sudanese Cement	Superiors	3.22	1.54	3.09	49	.00
	Subordinates	2.64	0.94			
Sudanese Military	Superiors	1.66	1.27	1.63	49	.11
	Subordinates	1.96	1.37			
British Military	Superiors	3.41	1.45	2.03	29	.05
	Subordinates	2.69	1.34			
British Textile	Superiors	4.82	1.10	5.46	21	.00
	Subordinates	2.73	1.24			
Pakistani Textile	Superiors	3.54	2.06	3.86	25	.00
	Subordinates	5.12	0.99			

Note: There was a seven-point answer scale ranging from "All" to "None", and responses were coded in such a manner that a higher score indicates a higher degree of gatekeeping.

Table 8

Percentage of Using Written Modalities versus the Telephone in the Three Groups

Organiza- tion	Modality	Mean	S.D	T- value	df	P
Sudanese Sugar	Written	29.80	04.71	6.10	60	0.00
	Telephone	21.77	08.22			
Sudanese Textile	Written	34.81	07.14	9.72	52	0.00
	Telephone	20.38	06.49			
Sudanese Cement	Written	32.40	09.75	2.02	49	0.05
	Telephone	11.20	11.20			
Sudanese Military	Written	30.50	09.91	4.56	49	0.01
	Telephone	19.90	12.88			
British Military	Written	14.41	11.19	4.80	28	0.01
	Telephone	28.30	10.48			
British Textile	Written	17.64	14.01	1.23	21	0.23
	Telephone	23.32	15.78			
Pakistani Textile	Written	22.04	12.35	1.69	25	0.10
	Telephone	27.04	09.34			

Table 9

Percentage of Using Face-to-face Modality versus Written Ones in the Sudanese, British and Pakistani Organizations

Organiza- tion	Modality	Mean	S.D	T- value	df	P
Sudanese Sugar	Face-to-face Written	41.93 29.80	8.94 4.71	9.33	60	0.01
Sudanese Textile	Face-to-face Written	41.23 34.81	7.53 7.14	4.52	52	0.01
Sudanese Cement	Face-to-face Written	35.50 32.40	10.06 9.75	1.57	49	-
Sudanese Military	Face-to-face Written	34.40 30.50	11.77 9.91	1.80	49	-
British Military	Face-to-face Written	65.00 14.41	19.32 11.19	11.99	28	0.01
British Textile	Face-to-face Written	58.55 17.64	20.54 14.01	7.73	21	0.01
Pakistani Textile	Face-to-face Written	44.73 22.04	17.28 12.35	5.44	25	0.01

Table 10

Percentage of Using Face-to-face Modality versus the Telephone in the Three Groups

Organiza- tion	Modality	Mean	S.D	T- value	df	P
Sudanese Sugar	Face-to-face Telephone	41.93 21.77	8.94 8.22	9.71	60	0.00
Sudanese Textile	Face-to-face Telephone	41.23 20.38	7.53 6.49	12.25	52	0.00
Sudanese Cement	Face-to-face Telephone	35.50 27.00	10.06 11.20	3.18	49	0.03
Sudanese Military	Face-to-face Telephone	34.40 19.90	11.77 12.88	5.82	49	0.01
British Military	Face-to-face Telephone	65.00 28.30	19.32 10.48	8.84	28	0.00
British Textile	Face-to-face Telephone	58.55 23.32	20.54 15.78	4.88	21	0.00
Pakistani Textile	Face-to-face Telephone	44.73 27.04	17.28 9.34	3.75	25	0.00

Appendix D:

1) POWER DISTANCE AND COMMUNICATION

Table 1

Regression Analysis- Measures of PDI and Frequency of Interaction with Superiors in the Sudanese Sugar.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.564	0.318	.56	12.58**
Current manager	0.694	0.481	.66	8.18**
Afraid to disagree	0.703	0.494	.12	.65

F(3,61)=8.15, p<0.01
**p<0.01

Table 2

Regression Analysis- Measures of PDI and Frequency of Interaction with Superiors in the Sudanese Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.725	0.526	.45	14.42**
Current manager	0.837	0.700	.59	6.98**
Afraid to disagree	0.842	0.709	.13	.58

F(3,53)=8.91, p<0.01
**p<0.01

Table 3

Regression Analysis- Measures of PDI and Frequency of Interaction with superiors in the Sudanese Cement.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.572	0.327	.47	7.29*
Current manager	0.585	0.342	.16	.32
Afraid to disagree	0.599	0.359	.27	.34

*p<0.05

Table 4

Regression Analysis- Measures of PDI and Frequency of Interaction with Superiors in the Sudanese Military.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.012	0.000	.01	.00
Current manager	0.056	0.003	.06	.07
Afraid to disagree	0.137	0.019	.18	.38

Table 5

Regression Analysis—Measures of PDI and Frequency of Interaction with Superiors in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.159	0.025	.09	.70
Current manager	0.581	0.338	.61	12.26**
Afraid to disagree	0.624	0.389	-.27	2.11 NS

F(29,3)=5.31, p<0.01
**p<0.01 NS=Not Significant

Table 6

Regression Analysis—Measures of PDI and Frequency of Interaction with Superiors in the British Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.146	0.021	-.54	.43
Current manager	0.530	0.281	.86	6.85*
Afraid to disagree	0.533	0.284	.12	.08

*p<0.05

Table 7

Regression Analysis—Measures of PDI and Frequency of Interaction with Superiors in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.283	0.080	.05	.61
Current manager	0.386	0.149	.35	.48
Afraid to disagree	0.782	0.612	.68	5.97*

*p<0.05 F(3,26)=11.57, p<.05

Table 8

Regression Analysis—Measures of PDI and Perceived Accuracy of Downward Communication in the Sudanese Sugar.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.012	0.000	-.12	.00
Current manager	0.096	0.009	.16	.24
Afraid to disagree	0.102	0.010	.03	.03

Table 9

Regression Analysis—Measures of PDI and Perceived Accuracy of Downward Communication in the Sudanese Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.098	0.010	.30	.13
Current manager	0.610	0.372	-.90	6.92*
Afraid to disagree	0.634	0.402	.25	.55

*p<0.05

Table 10

Regression Analysis—Measures of PDI and Perceived Accuracy of Downward Communication in the Sudanese Cement.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.139	0.019	.13	.29
Current manager	0.183	0.033	.26	.21
Afraid to disagree	0.208	0.043	-.20	.13

Table 11

Regression Analysis—Measures of PDI and Perceived Accuracy of Downward Communication in the Sudanese Military.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.077	0.006	.02	.16
Current manager	0.250	0.063	-.27	1.51 NS
Afraid to disagree	0.250	0.063	.01	.00

Table 12

Regression Analysis—Measures of PDI and Perceived Accuracy of Downward Communication in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.389	0.151	-.39	4.80*
Current manager	0.399	0.159	-.11	.24
Afraid to disagree	0.406	0.165	-.09	.17

*p<0.05

Table 13

Regression Analysis—Measures of PDI and Perceived Accuracy of Downward Communication in the British Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.139	0.019	.85	.39
Current manager	0.311	0.097	-.47	1.63 NS
Afraid to disagree	0.357	0.127	-.38	.63

Table 14

Regression Analysis—Measures of PDI and Perceived Accuracy of Downward Communication in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Current manager	0.347	0.120	.77	10.23**
Preferred manger	0.552	0.305	-.43	2.94 NS
Afraid to disagree	0.575	0.330	-.24	.85

F(3,26)=3.61, p<0.05
**p<0.01

Table 15

Regression Analysis—Measures of PDI and Frequency of Gatekeeping to Superiors in the Sudanese Sugar.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.084	0.007	-.07	.26
Afraid to disagree	0.090	0.008	-.04	.08
Current manager	0.090	0.008	.01	.00

Table 16

Regression Analysis—Measures of PDI and Frequency of Gatekeeping to Superiors in the Sudanese Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.250	0.063	-.23	2.24 NS
Current manager	0.268	0.072	-.13	.67
Afraid to disagree	0.278	0.077	.08	.28

Table 17

Regression Analysis—Measures of PDI and Frequency of Gatekeeping to Superiors in the Sudanese Cement.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.376	0.141	-.30	3.04 NS
Current manager	0.393	0.155	-.18	.83
Afraid to disagree	0.396	0.157	.07	.12

$F(2,50)=2.86, p<0.05$

Table 18

Regression Analysis—Measures of PDI and Frequency of Gatekeeping to Superiors in the Sudanese Military.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.083	0.007	.08	.19
Afraid to disagree	0.086	0.007	.03	.04
Current manager	0.090	0.008	-.03	.04

Table 19

Regression Analysis—Measures of PDI and Frequency of Gatekeeping to Superiors in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.262	0.069	.47	4.58*
Current manager	0.425	0.181	.34	2.92 NS
Afraid to disagree	0.439	0.192	-.13	.35

* $p<0.05$

Table 20

Regression Analysis—Measures of PDI and Frequency of Gatekeeping to Superiors in the British Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Afraid to disagree	0.356	0.126	-.83	3.87 NS
Current manager	0.554	0.307	.58	3.07 NS
Preferred manager	0.555	0.308	.07	.02

Table 21

Regression Analysis—Measures of PDI and Frequency of Gatekeeping to Superiors in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Preferred manager	0.097	0.009	-.15	.24
Current manager	0.190	0.036	.27	.87
Afraid to disagree	0.221	0.049	-.18	.29

11) UNCERTAINTY AVOIDANCE AND COMMUNICATION

Table 1

Measures of Uncertainty Avoidance and Perceived Accuracy of Downward Communication in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.156	0.024	-.30	.67
Employment Stability	0.176	0.031	.25	.18
Rule Orientation	0.401	0.161	.51	3.86 NS

Table 2

Measures of Uncertainty Avoidance and Perceived Accuracy of Downward Communication in the British Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.211	0.045	-.10	.93
Employment Stability	0.301	0.090	-.51	.96
Rule Orientation	0.409	0.167	-.39	1.66

Table 3

Measures of Uncertainty Avoidance and Perceived Accuracy of Downward Communication in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.091	0.008	-.27	.06
Employment Stability	0.180	0.032	-.35	.15
Rule Orientation	0.507	0.257	-.58	1.51

Table 4

Measures of Uncertainty Avoidance and Written Modalities in the Sudanese Sugar.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.093	0.009	.07	.24
Employment Stability	0.096	0.009	.02	.02
Rule Orientation	0.097	0.009	.01	.00

Table 5

Measures of Uncertainty Avoidance and Written Modalities in the Sudanese Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.120	0.014	-.68	.19
Employment Stability	0.255	0.065	.21	.65
Rule Orientation	0.502	0.252	.88	2.76 NS

Table 6

Measures of Uncertainty Avoidance and Written Modalities in the Sudanese Cement.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.361	0.131	-.70	2.25
Employment Stability	0.478	0.229	.67	1.79
Rule Orientation	0.563	0.316	-.36	1.67

Table 7

Measures of Uncertainty Avoidance and Written Modalities in the Sudanese Military.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.215	0.046	.22	1.26
Employment Stability	0.242	0.059	.16	.34
Rule Orientation	0.435	0.189	-.45	3.85*

*p < .06

Table 8

Measures of Uncertainty Avoidance and Written Modalities in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.090	0.008	-.07	.22
Employment Stability	0.098	0.010	-.10	.04
Rule Orientation	0.120	0.014	-.10	.12

Table 9

Measures of Uncertainty Avoidance and Written Modalities in the British Textile.

Source of Variation	Multiple R	R sq	Beta	F
Feeling Tense	0.165	0.027	-.15	.56
Employment Stability	0.172	0.030	-.20	.05
Rule Orientation	0.231	0.053	.22	.45

Table 10

Measures of Uncertainty Avoidance and Face-to-face Modality in the Sudanese Sugar.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.031	0.001	-.09	.03
Employment Stability	0.271	0.074	.48	2.04
Rule Orientation	0.320	0.102	-.27	.80

Table 11

Measures of Uncertainty Avoidance and Face-to-face Modality in the Sudanese Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.359	0.129	.13	1.92
Employment Stability	0.506	0.256	.07	2.03
Rule Orientation	0.591	0.350	-.62	1.59

Table 12

Measures of Uncertainty Avoidance and Face-to-face
Modality in the Sudanese Cement.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.018	0.000	.22	.01
Employment Stability	0.149	0.022	-.03	.31
Afraid to disagree	0.376	0.142	-.42	1.81

Table 13

Measures of Uncertainty Avoidance and Face-to-face
Modality in the Sudanese Military.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.263	0.069	-.20	1.94
Employment Stability	0.320	0.103	-.21	.93
Rule Orientation	0.321	0.103	.03	.01

Table 14

Measures of Uncertainty Avoidance and Face-to-face
Modality in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Feeling Tense	0.016	0.000	.03	.00
Employment Stability	0.247	0.061	.02	.39
Rule Orientation	0.641	0.410	.73	2.96

Appendix E: RESEARCH CORRESPONDENCE

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20th March 1985

Dear Mr Forman

I am the supervisor of Mr Abbas Ali who is a Sudanese research student. Mr Ali is half-way through the first year of a three year study, funded by the Sudanese Government, leading to a Ph.D. degree from this university. The subject of the research is a cross-national study of organizational behaviour in certain industries, including sugar and cement.

I am writing to you to request your cooperation. The particular focus of the study at the present time is on the nature of the communication patterns and preferences of managers in the sugar industry in Britain. Later this year, the work will extend to comparisons with the sugar industry in the Sudan.

Mr Ali would like to interview a few managers (no more than half a dozen) about their style of communicating with others in the organization and about their preferences for methods of communication. He would then like to send a larger sample of managers a questionnaire to complete about the same topic. Participation in the study would naturally be voluntary and comments kept strictly confidential to the researchers. However, in return for cooperation, we would release to your company and to participating managers a generalized picture of the results. We believe that communications in organizations depend in part on the cultural context and affect both satisfaction and efficiency.

If you would be interested in helping the progress of this research, and I do hope you are, perhaps you could get in contact with me. Myself or Abbas Ali would be pleased to either come and see you, or discuss matters at length on the phone, if you wished to know more.

Yours sincerely,

Dr V. J. Shackleton
Lecturer in Organizational Behaviour

Mr Greenway
Personnel Director
Tate and Lyle Plc
Sugar Quay
Lower Thames Street
London EC3R 6DQ

20th March 1985

Dear Mr Greenway

I am the supervisor of Mr Abbas Ali who is a Sudanese research student. Mr Ali is half-way through the first year of a three year study, funded by the Sudanese Government, leading to a Ph.D. degree from this university. The subject of the research is a cross-national study of organizational behaviour in certain industries, including sugar and cement.

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Yours sincerely,

Dr V. J. Shackleton
Lecturer in Organizational Behaviour

Mr B.A. Stott
Personnel Director
The Rugby Portland Cement PLC
Crown House
Evreux Way
Rugby
Warwickshire CV21 2DT

20th March 1985

Dear Mr Stott,

I am the supervisor of Mr Abbas Ali who is a Sudanese research student. Mr Ali is half-way through the first year of a three year study, funded by the Sudanese Government, leading to a Ph.D. degree from this university. The subject of the research is a cross-national study of organizational behaviour in certain industries, including sugar and cement.

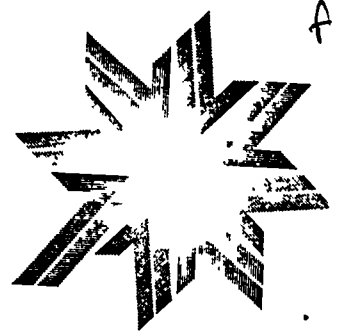
I am writing to you to *request your cooperation*. The particular focus of the study at the present time is on the nature of the communication patterns and preferences of managers in the cement industry in Britain. Later this year, the work will extend to comparisons with the cement industry in the Sudan.

Mr Ali would like to interview a few managers (no more than half a dozen) about their style of communicating with others in the organization and about their preferences for methods of communication. He would then like to send a larger sample of managers a questionnaire to complete about the same topic. Participation in the study would naturally be voluntary and comments kept strictly confidential to the researchers. However, in return for cooperation, we would release to your company and to participating managers a generalized picture of the results. We believe that communications in organizations depend in part on the cultural context and affect both satisfaction and efficiency.

If you would be interested in helping the progress of this research, and I do hope you are, perhaps you could get in contact with me. Myself or Abbas Ali would be pleased to either come and see you, or discuss matters at length on the phone, if you wished to know more.

Yours sincerely,

Dr V. J. Shackleton
Lecturer in Organizational Behaviour



our reference
NAF/LGC

your reference

date
11 April 1985

Dr V J Shackleton
Lecturer in Organizational Behaviour
The University of Aston
MANAGEMENT CENTRE
Nelson Building
Gosta Green
BIRMINGHAM B4 7DU

BRITISH SUGAR plc
Kidderminster Sugar Factory
PO Box 6 Kidderminster
Worcestershire DY11 7QA
Telephone Kidderminster (0562) 24
Telex 335653

Dear Dr Shackleton

I am in receipt of your letter dated 20 March 1985 with regard to communication patterns and preferences of managers in the sugar industry in Britain. I regret to inform you that the company does not wish to become involved in the research, however, I do wish you every success with the project.

Yours sincerely

N A Forman
Factory Manager

Registered Office
PO Box 26 Oundle Road
Peterborough PE2 9SU
Registered in England 315158

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Appendix F:

Table 1: Cross-tabulation: Style of Management By Frequency of Interaction with Superiors in the Sudanese Sugar

Style of Management	Autocratic	Paternalistic	Participative	Consultative	
0-15	-	4	-	-	
16-30	1	35	2	-	
31-45	-	10	-	1	
46 and more	-	-	8	-	
Column Total	1 (C=0.67, X=49.61, df=24, p<.01)	49	10	1	61

Table 2: Cross-tabulation: Style of Management By Frequency of Interaction with Superiors in the Sudanese Textile

Style of Management	Autocratic	Paternalistic	Participative	Consultative	
0-15	2	-	-	-	
16-30	5	19	4	-	
31-45	3	6	4	-	
46 and more	-	1	7	2	
Column Total	10 (C=0.74, X=65.82, df=27, p<.01)	26	15	2	53

Table 3: Cross-tabulation: Style of Management By Frequency of Interaction with Superiors in the Sudanese Cement

Style of Management	Autocratic	Paternalistic	Participative	Consultative	
0-15	-	4	-	-	
16-30	4	21	2	-	
31-45	4	5	6	-	
46 and more	-	2	2	-	
Column Total	8 (C=0.63, X=33.20, df=18, p<.05)	32	10	0	50

Table 4: Cross-tabulation: Style of Management By Frequency of Interaction with Superiors in the Sudanese Military

Style of Management	Autocratic	Paternalistic	Participative	Consultative	
0-15	-	2	-	-	
16-30	2	21	-	-	
31-45	4	15	2	-	
46 and more	1	3	-	-	
Column Total	7 (C=0.50, X=16.60, df=16, p<.41)	41	2	-	50

Table 5: Cross-tabulation: Style of Management By Frequency of Interaction with Superiors in the British Military

Style of Management	Autocratic	Paternalistic	Participative	Consultative	
0-15	-	14	-	-	
31-45	-	-	1	-	
46 and more	-	2	2	2	
Column Total	1 (C=0.74, X=34.23, df=36, p<.55)	20	6	2	29

periors in the Sudar

Source of Variation	Multiple R	R sq.	Beta	F
31-45	-	1		-
46 and more	-	2		2

Table 6: Cross-tabulation: Style of Management By Frequency of Interaction with Superiors in the British Textile

Style of Management	Autocratic	Paternalistic	Participative	Consultative	
0-15	4	7	2	-	
16-30	-	3	-	-	
31-45	-	-	3	1	
46 and more	1	-	-	-	
Column Total	5 (C=0.73, X=35.45, df=21, p<.32)	10	5	1	21

Table 7: Cross-tabulation: Style of Management By Frequency of Interaction with Superiors in the Pakistani Textile

Style of Management	Autocratic	Paternalistic	Participative	Consultative
0-15	1	13	-	-
16-30	3	4	1	-
31-45	-	-	3	-
46 and more	-	1	-	-
Column Total	4	18	4	0
	(C=0.76, X=35.45, df=16, p<.01)			
				26

Appendix G: Interpersonal Factors and Communication

1) TRUST IN SUPERIORS AND COMMUNICATION

Table 1

Measures of Trust in Superior and Frequency of Interaction with Superiors in the Sudanese Sugar.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.134	0.018	-.10	.50
Unfavourite Decisions	0.283	0.080	-.18	1.75
General Fairness	0.318	0.101	.16	.58

Table 2

Measures of Trust in Superior and Frequency of Interaction with Superiors in the Sudanese Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.610	0.372	-.15	7.70*
Unfavourite Decisions	0.654	0.427	-.31	1.16
General Fairness	0.771	0.593	.47	4.48

*p<.05

F(3,53)=5.35, p<0.05

Table 3

Measures of Trust in Superior and Frequency of Interaction with superiors in the Sudanese Cement.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.463	0.214	-.51	4.09 [@]
Unfavourite Decisions	0.463	0.215	-.03	0.01
General Fairness	0.464	0.215	.04	0.01

@p<0.05

Table 4

Measures of Trust in Superior and Frequency of Interaction with Superiors in the Sudanese Military.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.089	0.008	-.06	.00
Unfavourite Decisions	0.212	0.045	.37	.97
General Fairness	0.263	0.069	.21	.62

Table 5

Measures of Trust in Superior and Frequency of Interaction with Superiors in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
Grievance	0.384	0.148	-.31	4.67*
Unfavourite Decisions	0.388	0.150	-.01	.09
General Fairness	0.412	0.170	.16	.58

*p<0.05

Table 6

Measures of Trust in Superior and Frequency of Interaction with Superiors in the British Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Grievance	0.266	0.071	-.41	1.52
Unfavourite Decisions	0.353	0.125	-.33	1.18
General Fairness	0.370	0.137	.14	.25

Table 7

Measures of Trust in Superior and Frequency of Interaction with Superiors in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Grievance	0.157	0.025	-.16	.18
Unfavourite Decisions	0.573	0.329	-.70	2.72
General Fairness	0.661	0.437	.84	.96

Table 8

Measures of Trust in Superior and Percentage of Time Spent on Receiving from Superiors in the British Military

Source of Variation	Multiple R	R sq.	Beta	F
Grievance	0.158	0.025	-.12	.69
Unfavourite Decisions	0.176	0.031	-.13	.16
General Fairness	0.193	0.037	.09	.16

Table 9

Measures of Trust in Superior and Percentage of Time Spent on Receiving from Superiors in the British Textile

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.039	0.002	-.28	.03
Unfavourite Decisions	0.055	0.003	-.02	.03
General Fairness	0.291	0.084	.37	1.60

Table 10

Measures of Trust in Superior and Percentage of Time Spent on Receiving from Superiors in the Pakistani Textile

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.021	0.001	-.78	.00
Unfavourite Decisions	0.357	0.127	-.15	.87
General Fairness	0.469	0.220	.77	.59

Table 11

Measures of Trust in Superior and Percentage of Time Spent on Sending to Superiors in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.185	0.034	-.07	.98
Unfavourite Decisions	0.281	0.079	-.33	1.28
General Fairness	0.320	0.103	-.18	.67

Table 12

Measures of Trust in Superior and Percentage of Time Spent on Sending to Superiors in the British Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.245	0.060	-.13	1.28
Unfavourite Decisions	0.264	0.070	-.13	.19
General Fairness	0.266	0.071	.04	.02

Table 13

Measures of Trust in Superior and Percentage of Time Spent on Sending to Superiors in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.268	0.072	.73	.54
Unfavourite Decisions	0.353	0.125	.22	.36
General Fairness	0.626	0.392	1.32	2.19

Table 14

Measures of Trust in Superior and Perceived Accuracy
of Downward Communication in the Sudanese Sugar.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.113	0.013	-.21	1.84
Unfavourite Decisions	0.184	0.034	-.16	1.06
General Fairness	0.190	0.036	.05	.13

Table 15

Measures of Trust in Superior and Perceived Accuracy
of Downward Communication in the Sudanese Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.253	0.064	.35	3.84*
Unfavourite Decisions	0.273	0.074	.11	.46
General Fairness	0.279	0.078	.07	.18

Table 16

Measures of Trust in Superior and Perceived Accuracy
of Downward Communication in the Sudanese Cement.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.081	0.007	-.10	.33
Unfavourite Decisions	0.110	0.012	-.10	.33
General Fairness	0.117	0.014	.05	.08

Table 17

Measures of Trust in Superior and Perceived Accuracy
of Downward Communication in the Sudanese Military.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.113	0.013	-.23	1.08
Unfavourite Decisions	0.143	0.021	.11	.26
General Fairness	0.154	0.024	-.07	.15

Table 18

Measures of Trust in Superior and Perceived Accuracy
of Downward Communication in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.494	0.244	.28	1.84
Unfavourite Decisions	0.547	0.300	-.20	1.09
General Fairness	0.568	0.323	.20	.88

$F(3,29)=3.97, p<.05$

Table 19

Measures of Trust in Superior and Perceived Accuracy
of Downward Communication in the British Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.119	0.014	-.09	.12
Unfavourite Decisions	0.132	0.017	.06	.06
General Fairness	0.132	0.017	.01	.00

Table 20

Measures of Trust in Superior and Perceived Accuracy
of Downward Communication in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.153	0.023	.21	.95
Unfavourite Decisions	0.219	0.048	-.13	.26
General Fairness	0.230	0.053	.08	.11

Table 21

Measures of Trust in Superior and Frequency of
Summarization to Superiors in the Sudanese Sugar.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.083	0.007	-.07	.23
General Fairness	0.100	0.010	.06	.18
Unfavourite Decisions	0.101	0.010	.02	.01

Table 22

Measures of Trust in Superior and Frequency of Summarization to Superiors in the Sudanese Textile.

Source of Variation	Multiple R	R sq.	Beta	F
General Fairness	0.459	0.211	-.37	6.26*
Grievence	0.488	0.239	.27	2.90
Unfavourite Decisions	0.508	0.258	-.17	1.30

F(3,53)=5.68, p<0.05
*p<0.05

Table 23

Measures of Trust in Superior and Frequency of Summarization to Superiors in the Sudanese Cement.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.445	0.198	.38	5.61*
Unfavourite Decisions	0.454	0.206	-.09	
General Fairness	0.455	0.207	-.04	

F(3,50)=4.00, p<0.05
*p<0.05

Table 24

Measures of Trust in Superior and Frequency of Summarization to Superiors in the Sudanese Military.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.133	0.018	.42	3.95*
Unfavourite Decisions	0.351	0.123	-.81	6.31**
General Fairness	0.373	0.139	-.15	.82

**p<.01, *p<.05

Table 25

Measures of Trust in Superior and Frequency of Summarization to Superiors in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
General Fairness	0.496	0.246	-.54	7.54*
Unfavourite Decisions	0.501	0.251	-.08	.17
Grievence	0.502	0.251	.01	.00

F(2,29)=4.33, p<.01
*p<.05

Table 26

Measures of Trust in Superior and Frequency of Summarization to Superiors in the British Textile.

Source of Variation	Multiple R	R sq	Beta	F
Unfavourite Decisions	0.220	0.048	-.17	.30
General Fairness	0.240	0.058	-.19	.42
Grievence	0.274	0.075	-.20	.34

Table 27

Measures of Trust in Superior and Frequency of Summarization to Superiors in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Grievence	0.250	0.062	-.37	2.39
General Fairness	0.301	0.091	-.18	.59
Unfavourite Decisions	0.314	0.099	.09	.19

11) UPWARD INFLUENCE AND COMMUNICATION

Table 1

Measures of Superior's Influence and Perceived Accuracy of Downward Communication in the Sudanese Sugar.

Source of Variation	Multiple R	R sq.	Beta	F
Restrictions	0.146	0.022	.12	.59
General influence	0.447	0.200	.67	5.81*
Recommendations	0.512	0.262	.31	2.10

$F(3,61)=2.96, p<.05$

* $p<.05$

Table 2

Measures of Superior's Influence and Perceived Accuracy of Downward Communication in the Sudanese Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Restrictions	0.000	0.000	.00	.00
General influence	0.269	0.073	.17	.94
Recommendations	0.305	0.093	.20	.25

Table 3

Measures of Superior's Influence and Perceived Accuracy of Downward Communication in the Sudanese Cement.

Source of Variation	Multiple R	R sq.	Beta	F
Restrictions	0.053	0.003	.01	.04
General influence	0.407	0.165	.77	2.73
Recommendations	0.490	0.240	.46	1.28

Table 4

Measures of Superior's Influence and Perceived Accuracy of Downward Communication in the Sudanese Military.

Source of Variation	Multiple R	R sq.	Beta	F
Restrictions	0.049	0.002	.02	.06
General influence	0.094	0.009	.33	.16
Recommendations	0.126	0.016	.24	.17

Table 5

Measures of Superior's Influence and Perceived Accuracy of Downward Communication in the British Military.

Source of Variation	Multiple R	R sq.	Beta	F
Restrictions	0.253	0.064	.11	1.85
General influence	0.388	0.151	.50	2.60
Recommendations	0.487	0.237	.35	2.82

Table 6

Measures of Superior's Influence and Perceived Accuracy of Downward Communication in the British Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Restrictions	0.000	0.000	.11	.00
General influence	0.204	0.041	.32	.82
Recommendations	0.218	0.048	-.13	.12

Table 7

Measures of Superior's Influence and Perceived Accuracy of Downward Communication in the Pakistani Textile.

Source of Variation	Multiple R	R sq.	Beta	F
Restrictions	0.000	0.000	.02	.00
General influence	0.131	0.017	.08	.11
Recommendations	0.698	0.488	.72	4.57 NS

111) MOBILITY ASPIRATIONS

Table: 1

Mobility Aspirations and Frequency of Gatekeeping to Superiors in the Sudanese Sugar.

Source of Variation	Multiple R	R^2	Beta	F
Desire for promotion	0.434	0.188	-.77	17.18**
Importance of promotion	0.639	0.408	-.57	9.67**

F(2,61)=8.97, p<.01
**p<.01

Table: 2

Mobility Aspirations and Frequency of Gatekeeping to Superiors in the Sudanese Textile.

Source of Variation	Multiple R	R^2	Beta	F
Desire for promotion	0.494	0.244	-.49	4.34*
Importance of promotion	0.517	0.326	-.29	1.46

*p<.05

Table: 3

Mobility Aspirations and Frequency of Gatekeeping to Superiors in the Sudanese Cement.

Source of Variation	Multiple R	R^2	Beta	F
Desire for promotion	0.419	0.176	-.89	4.08*
Importance of promotion	0.509	0.259	-.88	1.87

*p<.05

Table: 4

Mobility Aspirations and Frequency of Gatekeeping to Superiors in the Sudanese Military.

Source of Variation	Multiple R	R^2	Beta	F
Desire for promotion	0.337	0.114	-.38	2.69
Importance of promotion	0.343	0.118	-.08	.12

Table: 5

Mobility Aspirations and Frequency of Gatekeeping to Superiors in the British Military.

Source of Variation	Multiple R	R^2	Beta	F
Desire for promotion	0.256	0.065	-.21	.80
Importance of promotion	0.264	0.070	-.08	.12

Table: 6

Mobility Aspirations and Frequency of Gatekeeping to Superiors in the British Textile.

Source of Variation	Multiple R	R^2	Beta	F
Desire for promotion	0.277	0.077	-.52	2.41
Importance of promotion	0.344	0.119	-.32	.90

Table: 7

Mobility Aspirations and Frequency of Gatekeeping to Superiors in the Pakistani Textile.

Source of Variation	Multiple R	R^2	Beta	F
Desire for promotion	0.213	0.045	-.20	.28
Importance of promotion	0.415	0.172	-.36	.92

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