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INTERCULTURAL PROCESSES IN MULTINATIONAL TEAMS

SUSAN FARMAR CANNEY DAVISON

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fulfilment of the requirements for the degree of
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ABSTRACT

INTERCULTURAL PROCESSES IN MULTINATIONAL TEAMS

Many international teams have recently been created in large multinational organisations as part of a response to increased global competition. There has been almost no research into how these teams operate nor into the effectiveness of current recommended practices for improving performance. The impact of cultural differences is not well understood and the greater communication difficulties are not explained. From this gap, the research question emerged:- ‘What effects do the different cultural backgrounds of the team members have on the interaction, processes and outcomes of international teams?’

Rather than using ‘culture’ as a predictor of individual behaviour in these teams, the literature suggested focusing on the team’s interaction at the group level. A group process model from the literature was revised to incorporate six predictors of individual participation in international teams.

Twenty three operational and training teams comprising twenty seven nationalities were selected in three European and two Hong Kong based British owned multinationals. Using pre and post questionnaires, coded participation rates and structured observational analyses, it was found that culturally influenced leadership style, being a mother tongue speaker, being a member of the organisationally dominant nationality, and previous international experience significantly affected the individual participation rates in these teams.

The observational analysis found stereotypical behaviour and exclusive interaction patterns. The participation curves were steepest in Hong Kong operational teams and levels of simultaneous talk highest in British dominated teams.

The research led to a discussion on meaningful participation, integrating diversity and suggested best practices. It also highlights the need for integrated team models across the individual, team and organisational level.

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Note:

'Document B is sometimes mentioned in the text. This document contains the full results of the structured observation of the video recordings of each of the teams. These are summarised in Chapter Five of this thesis. A bound copy of Document B is available as 'Phd: document B, Sue Canney Davison 1995' from the library of London Business School, Sussex Place, Regent's Park, London NW1 4SA. Tel + 44 171 262 5050. Fax + 44 171 724 7875.

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1. CHAPTER ONE: INTRODUCTION

'Making local heroes international'

'Multinational teams do not happen naturally - on the contrary the human inclination is to stick to its own kind...therefore it is occasionally necessary to intervene...to force people to overcome the 'foreigner' hurdle and safeguard the ideal of multinational teams. The value derived from the combined different backgrounds makes it well worth taking some risks'

Percy Barnevik. CEO ABB. Financial Times (January 17th 1994 pg 8).

1.1 The research questions

This useful quote from Percy Barnevik highlights certain issues about multinational teams. Firstly, they are very topical. Secondly, it is implied that they encounter hurdles caused by the perception of 'other' people as 'foreigners', by creating a 'them' and 'us'. Thirdly, that organisations are expecting a lot from multinational teams and are ready to take risks in order to extract that latent value. Lastly, at least Percy Barnevik, and probably most managers, do not think that organisations can create multinational teams and then presume to get the best out of them without some intervention.

The reasons for the current interest in multinational teams are outlined below in section 1.2. The other three themes outlined above, highlight important questions.

1) Is the origin of a 'them' and 'us' identification based only in the ethno - linguistic differences in these teams and if so, when is it most likely to manifest and what form does it take?

2) Do some team compositions avoid it more than others?

3) Suppose a team does not have an ideal ethno - linguistic composition. Are there certain interaction patterns that will prevent these differences becoming a hurdle?

If so, what form do they and other useful interventions take ?

This research aims to answer these questions under the broader question **'what effects do the different cultural backgrounds of the team members have on the interaction, processes and outcomes of international teams?'**

In summing up international human resource management in the 1990's Schein (1986) gives international teams a special mention as a missing theme. He muses on the effect of multi-cultural groups on organisational sacred cows and untruths. 'Would they suppress things even more, or could the multi-cultural composition legitimate opening up all kinds of issues and questions that would be undiscussable in a more homogeneous group?' There are many questions to be asked about what is happening in these teams and what they may be capable of. However as mentioned above, the next step is to explore the reasons for the current surge of interest in multinational teams.

1.2 The current international business environment

The reason behind this current rise in interest in these teams lies in the evolution of multinational corporations and the large increase in regional and global political and economic agreements and integration. The evolutionary history of large multinational corporations has been traced from their beginnings on the American railroads to their current global reach through writers like Chandler (1962, 1986) Perlmutter (1969), Hedlund (1986) and more recently Bartlett and Ghoshal (1989). They trace a pattern of growth through three main stages: ethnocentric polycentric and geocentric described below.

1.2.1 Stages of evolution in multinational corporations

In the first stage, managers are sent out from the headquarters' country to manage international subsidiaries. In the second stage, overseas parts of the company are more self sufficient and sometimes run by local people who may have also been seconded to the headquarters' sites for periods of time. In the third stage, there is regional or global integration of the company and the development of a cadre of international managers from diverse nationalities who implement the global strategy in different parts of the world. These stages have been called ethnocentric, polycentric and geocentric by Perlmutter (1969) and international, multinational and global by Bartlett and Ghoshal (1989). Bartlett and Ghoshal propose a further evolutionary stage which they called the transnational solution. The organisation develops to become an interdependent network of dispersed specialised sites of core competence, which are all involved in enhancing organisational learning. This is again serviced by a pool of 'international' managers drawn from many countries.

1.2.2 The effect of this evolution on international teams

This corporate evolution has brought about changes in the composition and purpose of international teams. In the ethnocentric stage, many companies had one or more headquarters

expatriates running a team of locals in an overseas site and these teams can still be seen today, (e.g. British Airways Japan office in Snow et al 1993). In the polycentric stage, other nationals would come to head office or the parent country and create international teams in the parent company, but seldom at the most senior levels. After a period of secondment, these nationals would return to their home countries to run regional operations. In the 1980's and early 1990's, things changed dramatically.

The scale of global competition seems to have increased dramatically. The European and American economies slowed while the Pacific Rim and Asia took off. Giant European and American corporations were forced to downsize and become much more flexible and co-operative to maintain their global reach. Many cross border mergers, alliances and joint ventures were formed, creating another set of instant international teams. At the same time, NAFTA, the European Union, ASEAN and other strong regional economic agreements came into force and GATT worked to decrease trade barriers. These created another major shift in corporate strategies that came into effect in the early nineties.

1.2.3 Recent major shifts

Large European companies, like Unilever and British Petroleum, integrated their sixteen or more different European operations into one company, and all the formerly quite independent marketing directors, for instance, found themselves in a team looking for common strategies rather than eyeing each other from a distance (see Snow et al 1993). Ford Motor Company first integrated its European manufacturing and is now integrating its transatlantic product development structure in a massive change programme called Ford 2000. Asia and Latin America will be added later. Using groupware computer technology, American and German design teams work on the same model simultaneously across the Atlantic (Economist Jan 7th 1995).

In the pharmaceutical industry, where two teams would previously develop a drug on each side of the Atlantic, Wellcome and its American subsidiary, Burroughs Wellcome have created transatlantic medical development teams. These are a few of many possible examples of companies working to integrate their knowledge and learning, and gaining global efficiencies. The result is that people who were used to working at a distance, or even sometimes competing internally, are now interdependent. This explosion has created many different forms of international teams or what are often called 'large standing workgroups'. Many of these groups are seeking answers to the questions posed by Barnevik's quote.

It should be noted that the world is also changing outside multinational corporations. Teams of scientists, bureaucrats and politicians from all over world now have to work together to study global environmental, developmental and health issues such as global warming, pollution, Aids and the spread of infectious diseases such as malaria. The increasing use of the United Nations peace keeping forces means soldiers from different countries are having to co-exist in difficult and tense situations. It is fair to say that many of the moves towards greater scientific understanding, ecological survival and economic and political stability will be made through international teams and meetings. Understanding more about how such teams and meetings can arrive at the most effective decisions and outcomes has far reaching consequences.

An important point of definition needs to be made here. Although different writers have used the words international, multinational and transnational to describe different stages of organisational development, there is not yet any agreed basis on which to ascribe different terms to different types of teams composed of individuals from a variety of nationalities, or to the different stages of such teams' development. Perhaps in the future classifications using the different words may prove useful. For the purposes of this research, these teams will for the most part be referred to as international teams. The use of multinational or transnational can be read as interchangeable. Further, the title of this thesis was designed to capture the context of teams in multinational corporations. It was not meant to infer that these organisations were at some specific level of cross-border or global development.

1.2.4 Differentiating international teams from previous national teams

Two present day key issues make international teams different. The first key issue is the obvious one: these teams bring together individuals with different cultural norms and experience. The second issue is new. As teams are set up across regional and global areas, they are also struggling to work in the different regulatory and economic requirements of each country and often work at a distance. Many of the early international teams were located within one site and business context. It is difficult enough to overcome the 'foreigner' hurdle face to face, it is even more difficult to do it across large distances and many time zones. Companies are naturally asking how to enhance the effectiveness of these expensive but crucial teams and avoid the difficulties that could be caused by cultural misunderstandings or 'us' and 'them' behaviour.

1.2.5 Recommended best practices and the research so far

The small amount of work recommending best practice for these teams (e.g. Adler 1986, Philips 1992) is not based on in depth research, because there has been very little done before 1990.

Adler (1986) works logically through the impact of cultural diversity and comes up with a set of sensible but limited ideas. Philips (1992) takes the static value dimension work, other well known aspects of leadership and team management, anecdotes and a few case studies. From these she pieces together again logical, but limited prescriptions. On the other hand, three PhD theses on and around the subject (Ling 1990, Lee 1993, Salk 1992) have begun to fill in pieces of the jigsaw puzzle, change former patterns of understanding and have begun to give the field a context. Even with this in-depth research, the demand for substantiated answers far exceeds the supply. This was, and still is, a strong motivating factor and this research aims to contribute some answers and put a few more co-ordinates on the map to guide future researchers.

1.3 The development of the research question

1.3.1 The common link

In 1990, three strands of international management interested the author because of her cross-cultural work:

- 1) the development of the topic of intercultural management from its origins in anthropology, sociology and psychology,
- 2) the value and validity of special international management competences ,
- 3) the interdependence between individuals, groups and organisations in the international business world.

It took Karl Weick of Michigan at a doctoral consortium in August 1990 to first see the common point of intersection. Hearing the three threads, he said 'teams, study what is happening in international teams'. With this, much fell into place. The researcher had lived in and worked with international groups for ten years. Weick's suggestion also reinforced the important role international teams will play in the success or failure of the large transnational companies. Teams can respond to global strategies while responding to local demands and situations. It also brought home how international teams are multiple 'crossroads' or 'intersections' between different factors and levels of analysis, (a point also raised by Salk (1992)). The relevant types of intersections in this research on international teams are that these teams represent:

- * a point in time where people with different experiences and skills meet to achieve a common task through a joint group process
- * an instance of the intersection of larger cultural groups, resulting in different types of interaction and in which certain individual and group identities will be enacted.

* defined points of interchange between individuals and the organisation as a whole

The order of these three points of exchange highlights the emphasis in the research. It is first about teams and secondly about individuals from different national cultures. If the main aim of the research was to develop the understanding of what happens to an individual when he or she interacts with an individual from another culture, then the team is a very complex place to start because of the multiple nationalities and the overlay of group dynamics. This research is instead looking to ask **‘what effect do the different cultural backgrounds of the team members have on the interaction, processes and outcomes of international teams?’**

1.3.2 Narrowing down the broad research question

The lack of previous research on international teams had a major influence in how the research question was tackled. There were no guidelines as to where the boundaries may be, no comprehensive literature search from which to choose an angle for further research, no well researched framework into which more threads could be woven. There was the wide and deep territory of group research in general, an uncohesive but growing literature on cross cultural research and some research on the effect of other kinds of heterogeneity (such as ethnicity, race, sex, abilities) on team processes and outcomes.

Starting out to discover what was needed to usefully answer the research question felt like swimming in a sea of endless possibilities of both cross-cultural and group research. Two main aims channelled the long slow process of narrowing down the options.

1.3.2.1 The first aim

The first aim was driven by a strong sense of wanting to find out what was happening in organisations. Were they applying any of the recommended best practices? (e.g. Adler 1986, Canney Davison 1991). If they were, how relevant and comprehensive were they? If they were not, how much difference would it make if they were implemented?

1.3.2.2 The second aim

The subsequent aim was to redress the strong bias in much previous cross-cultural research to focus exclusively on static internal and individual cultural measures, which avoids looking at the rich but complex patterns of interaction that take place when people from different backgrounds get together. In other words, the aim of this work was to take up a suggestion posed recently (Triandis 1994, Goffee and Jones 1993) to focus on the cross cultural interaction. There is already a large amount of data that can lead to static generalisations about each nationality (e.g.

Haire and Ghiselli 1966, Hofstede 1980a, Trompenaars 1993). These have occasionally been presumed to relate to or even predict what might happen in international teams (e.g. Philips 1993).

Generalising about nationalities at the individual level seems both inaccurate and probably counter-productive. The fact is that there are many contextual and personality factors which will affect an individual's behaviour in these teams. Cultural stereotypes or generalities are most often used to reinforce the dysfunctional in-group, out-group identification that some writers (e.g. Hedlund 1993, Bartlett and Ghoshal 1989) suggest international project teams can break down. This common use of stereotypes narrowed the research aim to looking at the interaction within international teams in a way which would not generate more stereotypes or generalisations about national cultures, nor about particular individuals because they were brought up in certain national cultures.

1.3.2.3 The effect of a broad question on the methodology

The narrowing down of the broad research question became part of the research process itself. It was not something that was possible to do at the outset on a nearly empty map. It pushed the research towards using a broad multiple methodology and towards recording the interactive data so that it could be looked at from different angles if necessary. It also meant collecting more data than has been possible to absorb in this monograph. The broad start also meant a large literature review. This has been left as comprehensive as possible for future researchers, but restructured for the needs of this research.

1.4 Summary of key findings

1.4.1 Predictor variables

Five culturally influenced predictors and one personality predictor of individual participation and overall team balance of participation and satisfaction emerged from the literature survey:

- * Leadership style
- * Common language facility
- * Being a member of the same nationality as the leadership group of the company
- * Being a member of a numerically larger national subgroup within the team
- * Having previous international experience
- * Having an extrovert or introvert personality preference.

1.4.2 The sample and its limitations

These variables were tested in 23 international teams (sixteen training teams and seven operational teams) in five large multinational companies in Europe and East and South East Asia. The findings are limited by the fact that all the teams worked in English and within the context of British or Anglo - Dutch led organisational cultures. The sample included single team meetings ranging from half an hour to four days and only one team over time, whose membership changed so dramatically that it is counted as separate teams. This allows no comment on team development over time and prevented any discussion on the issues of working at a distance. However within these limitations, some useful findings emerged.

1.4.3 Hypotheses

Based on a revised team process model, hypotheses were generated at the individual and group levels of analysis. The individual level hypotheses proposed that the predictor variables would effect the frequency of participation and perceived levels of influence of team members. The group level hypotheses proposed that different types of team composition would affect the balance of participation and levels of satisfaction in the teams.

1.4.4 Statistical findings

Analyses of the data show that the pattern of participation of pre -appointed leaders is affected by the cultural context of the teams. Mother tongue speakers and members of the same nationality as the leadership group of the organisation (called here the dominant culture) participated more frequently and for greater lengths of time than non mother tongue speakers and non dominant culture individuals. Teams with larger numerical subgroups of mother tongue speakers had much higher levels of simultaneous talk than other teams and this tended to exclude second language speakers from the interaction.

Previous international experience increased the participation of non dominant culture individuals, but had no effect on the participation levels of dominant culture individuals. The level of individual participation measured across all teams was not affected by either belonging to a numerically larger national subgroup in the team, or having an extrovert or introvert preference as measured by Myers Briggs.

1.4.5 Observational data

The observational analysis of stereotypical evaluative comments in some teams suggested strong in-group out-group identification by dominant culture individuals, which also involved ascribing different levels of status to different nationalities within a particular organisation. By comparing the most satisfied team, the most balanced team, the most evaluative team and the least satisfied team and adding pieces of observational data, a list of optimal compositional factors, approaches to the task and interactive patterns could be drawn up. Three training teams also provided an opportunity to look at the effect of facilitator led intervention that encouraged the team to review its interaction during the task.

1.5 The content and structure of the chapters that follow

1.5.1 Chapter Two: the literature review

As mentioned, the aim of the literature review was to define the boundaries of international team research in general as comprehensively as possible and at the same time serve to narrow the focus of this particular research. Its pattern investigates the three points of intersection (outlined above) that international teams represent. First a group process model is established, and the small amount of international research reviewed. As this is meagre and anecdotal, it is extended into the larger body of research looking at differences between comparable teams of different cultures and heterogeneous teams (by function, ethnicity, race, sex, ability, attitude etc.).

The search for how to use culture as a research variable then takes a long journey through the definitions of culture and its previous implementation in cross cultural research. The difficulty of basing this interactive research on previous research that has seen culture as a static concept is exposed. Interesting points about what may be happening to some individuals in these teams are raised by looking at the theories and findings of the cultural adaptation and acculturation literature. This section on culture is completed by pulling out the lessons learnt over the years about cross-cultural methodology.

The search then returns to the group process model and examines the inputs, processes and outcomes from a cross cultural perspective. This led to the emergence of the six main variables and the decision to focus on participation as the main process variable and the limited options for outcome measures in the context of this field research. A revised group process model for international teams was then built.

1.5.2 Chapters Three and Four: The hypotheses and methodology

In these two chapters, the hypotheses that emerge from the revised group process model and the findings in the literature chapter are built. They fall into two categories. The first category applies the six predictors of participation and perceived involvement and influence to the individuals across all teams. The second category looks at the teams' compositions and compares the different levels of the balance in participation and overall satisfaction between the twenty four teams.

Chapter Four outlines the methodology designed to test the hypotheses in organisational settings. As far as possible, the recommendations from the literature survey were adopted and if not, the subsequent limitations were recognised.

1.5.3 Chapters Five and Six: the findings

The methodology allowed two types of results; one from observational data of the teams and the other from numerical and statistical findings. Chapter Five summarises the demographic, observational and numerical and questionnaire data (in the form of charts) from each team. This information is written up in full in the accompanying document B. Chapter Six tests the hypotheses using the statistical results from coding the participation of each team and the pre and post questionnaires.

1.5.4 Chapters Seven and Eight

Chapter Seven describes the scope and limitations of the methodology and findings. Within that framework, it then uses the observational findings to illustrate the statistical findings and provides the forum for deeper discussion of the results. The key findings are summarised and then the observational data is used as a basis for further speculation about the underlying reasons for some of the findings. Chapter Eight relates the findings to the proposed model and explores the contribution to theory and avenues of future research. Chapter Eight concludes by speculating on how teams can use these findings and the actions they imply to improve the effectiveness of international teams in multinational organisations.

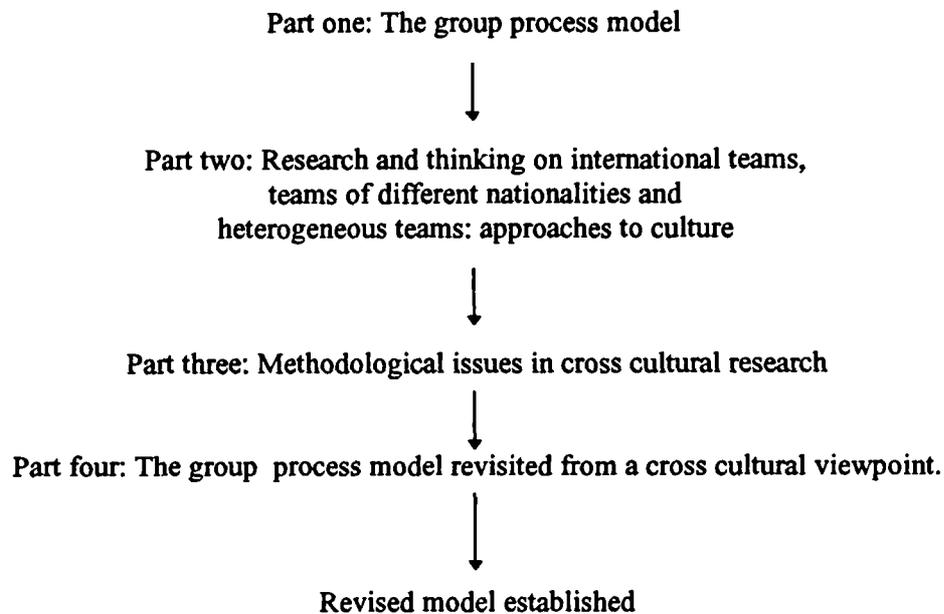
2. CHAPTER TWO: THE LITERATURE REVIEW

2.1 Introduction

The aim of this chapter is to review all the literature that pertains to the research question ‘**what effects do the different cultural backgrounds of the team members have on the interaction, processes and outcomes of international teams?**’.

The path the literature review takes to explore these cross-roads is determined by the lack of any previous extensive review in this area. This review is therefore comprehensive, to overview the whole territory, rather than to immerse in the detail of one specific area. The main themes are illustrated below.

Figure 2.1 Map of literature review



This review first establishes the usefulness of a common group process model that has been developed by a number of researchers. The model first considers the inputs into a team, then the processes the team goes through to reach the outcomes.

The research on international teams, comparisons between teams of different cultures, and heterogeneous teams is reviewed, and the main learning points brought out. This part of the review suggested some possible input variables that are relevant to international teams. However it did not provide any in depth insights or arguments about how to use culture as a research variable in studies of international teams.

The third section then looks at the definition and use of culture as a variable in other cross cultural research. After reviewing the various issues that arise, the choice was made to focus on the interaction within international teams rather than the cultural antecedents of individual behaviour. Other pertinent issues such as cultural adaptation and the notion of convergence in large companies were examined. This section ends by looking at the lessons learnt from previous cross cultural methodology.

The review then returns to analyse the group process model in some depth. Each of the inputs was scrutinised from a cross cultural perspective. The inputs were explored, the most appropriate level of interaction was then decided upon and the likely outcomes reviewed. From this, a revised group process model, relevant to international teams was created.

2.2 Part One: The Group Process Model

The research on groups over the last 70 years is extensive. As this study is focused on the interaction between people within teams and working groups, this area of the group research will be highlighted. McGrath (1984) provided useful frameworks to shape and give meaning to the voluminous literature contributing to the main area of interest for this research. McGrath (1984) briefly charts the history of group research from the 1920's and points out the lack of any serious theoretical integration for a long period after Lewin in the 1930's. He suggests there 'was some basis for hope that efforts toward such theory building are increasing.' The subsequent work of Hackman and Morris (1983, 1990) Gladstein/Ancona and Caldwell (1984, 1999, 1992) and Gersick (1988, 1989, 1990) may be seen as recent contributions to that effort.

2.2.1 Defining a team

First it is important to define the difference between groups and teams. McGrath (1984) defines groups as 'those social aggregates that involve mutual awareness and potential mutual interaction'. He continues by suggesting that 'a time based, mutual interdependence can reasonably be called 'dynamic' and that size, interdependence and temporal pattern really reflect degrees of 'groupness'. McGrath chooses to leave his definition of a group 'fuzzy' within the boundaries of these three factors. Tannenbaum et al (1992) point out that 'while all teams are groups, not all groups are teams'. In their estimation, for a group to qualify as a team, its members must rely on each other and share a common goal.

Tannenbaum et al (1992) refine the concept saying 'a team is defined as a distinguishable set of two or more people who interact dynamically, interdependently and adaptively toward a common and valued goal/objective/mission, and who each have some specific roles or functions to

perform'. Katzenbach and Smith (1993) suggest that groups become teams through disciplined action. Teams shape a common purpose, agree on performance goals, define a common working approach, develop high levels of complementary skills and hold themselves mutually accountable for results. Katzenbach and Smith (1993) then make a distinction between the work of teams (ideally not larger than seven people) and teamwork that can be done by a whole organisation.

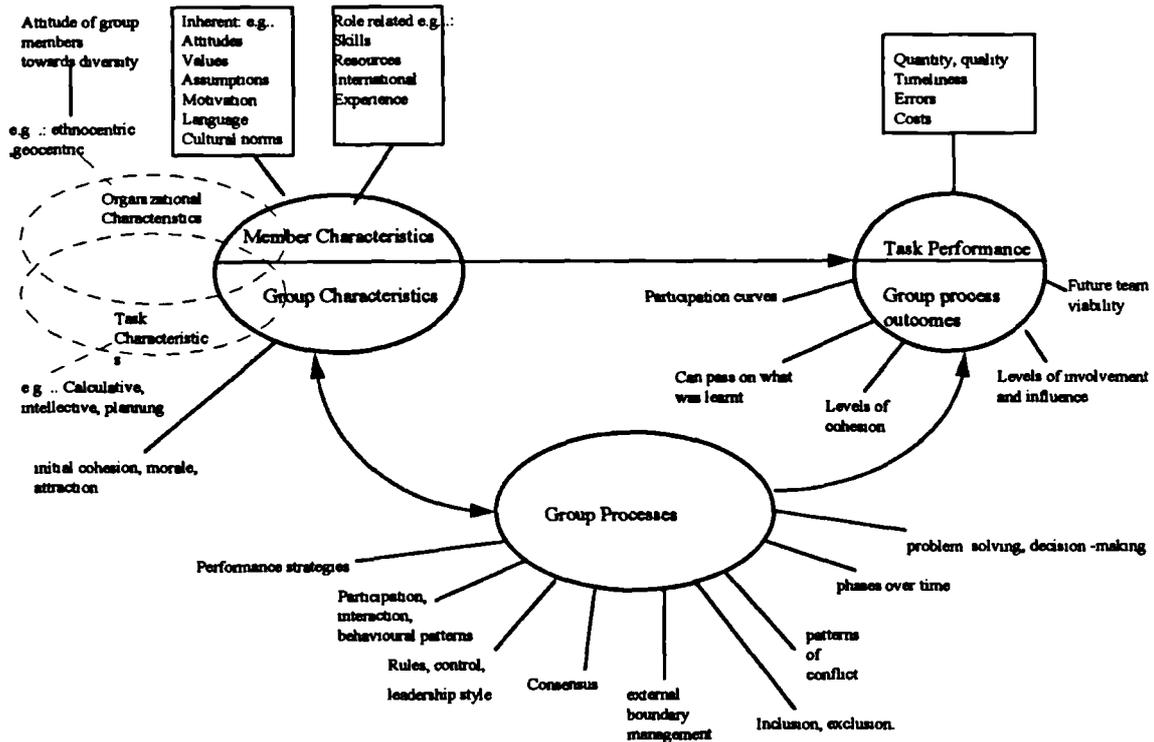
McGrath (1984) refers to natural groups as 'groups that exist independently of the researcher's activities and purposes'. In that sense, all the groups in this study will be natural groups, and will fit into his further categorisation of task forces, with limited time frames and a limited band of activity scope. They will in McGrath's terms be 'concocted' from within companies to perform 'endogenous', 'simulated' or 'artificial' tasks (McGrath 1984).

A study of 'transnational teams' in organisations (Snow et al 1993) yielded an initial typology of business development/product launch teams, regional headquarters teams, functional teams, international joint venture teams, and corporate headquarters teams. Further categorisations are whether the teams were part of everyday business or 'compensatory', and whether they had been initiated top down or bottom up. These factors were seen to affect the focus and motivation of the team members. As with Tannenbaum et al (1992), although the focus of this study is on teams as a subset of groups, the terms 'group' and 'team' will be used interchangeably in this monograph.

2.2.2 Using a process model: Input - Process - Outcome

Several researchers (eg. Hackman 1983, Steiner 1972, Gladstein 1984) have produced useful theoretical models for team performance (see Goodman 1986 for review). A commonly used and appropriate model for this research is an adaptation of the input-throughput-output model framed by Tannenbaum et al (1992). In general the team inputs include individual and team characteristics, the characteristics of the task and how the work is structured. The throughputs are the processes through which the team communicates, co-ordinates, makes decisions and converts its inputs into outputs. McGrath (1984) defines the group interaction process as 'patterned behaviour of members of a standing group in behaviour setting (juxtaposition of the standing group and the task), in relation to tasks/situation and environment'. The outputs are the performance of the team on the task and changes in the team and individuals. A team model adapted from Hackman and Morris (1975) Gladstein, (1984), Maznevski (1994), McGrath (1984), Hare (1976), Watson and Michaelson (1988), Ling (1990), Salk (1992) is constructed in Figure 2.2

Figure 2.2 Combined group process model



The important point to note about this model is that the inputs are on both the individual and group levels. The work of Ling (1990) and Salk (1992) adds in the importance of organisational factors and the attitude of the group members towards diversity and equality.

This model has been created around teams of one nationality. This literature review should result in an appropriate adaptation of the model for international teams. To achieve that, it needs to do three things.

1. To see if the current research on international teams, teams of different cultures and heterogeneous teams can lead to a deeper understanding or adaptation of this model for international teams
2. To decide the appropriate use of culture as a variable in this research
3. To examine the inputs, processes and outcomes of the current model from a cross cultural perspective and to identify the most pertinent variables to answer the research question.

2.3 Part Two: Research on International Teams, Homogeneous Teams of Different Nationalities and Heterogeneous Teams

2.3.1 Research on international teams

Considering the wealth of cross cultural studies, the amount of group research and a small but growing body of research on diverse teams, the lack of research on international teams is surprising. There are prescriptions, where Hofstede's (1980) dimensions are used to ascribe individual cultural differences and these are then used to project the possible resulting interactive difficulties in international teamwork (eg. Rigby 1987, Philips 1992).

There are also a few pieces of more useful descriptive field work. Ferrari (1972) repeatedly asked individuals to rank countries before working together and found that this ranking correlated significantly with their rank ordering of individuals. Members judged as being most qualified were always coming from the countries which were judged to be the most developed and economically strong. The same ranking test was applied at the end of the course when people had the opportunity to substitute real experience for personal stereotypes and no statistical relationship was found between the ranking of members and the ranking of their nationalities. He noted that members with the lowest level of education and lowest professional qualifications were most influenced by national stereotypes.

Ferrari (1972) goes on to suggest that the nationality of the individuals will influence the 'group role' expectations of the other members in such a way as to determine which particular role position a new member will be put into before passing the 'reality' test of his work behaviour in the group. He observed that the aggressive behaviour of an authoritarian supervisor provoked other group members in response to 'discharge' on the 'lowest' national status members. He went on to say that leadership, cliques and sub-grouping will follow the same rules based on national status if no corrective forces are present to modify the trend.

Ferrari stresses that rationality plays a much smaller role than emotion in a person's attitude toward foreigners. He ends by suggesting that 'creative' types of behaviour find favourable ground in international group dynamics. While his research method are not described, the description of the effects of mainly unconscious high and low status culture rankings and the resulting prejudices is useful. So an important variable may be the relative status of nationalities in each organisational setting.

Helmholt (1992) analysed discussion patterns in both Japanese, German and mixed French/German teams using a framework of communication behaviours. As an example of the

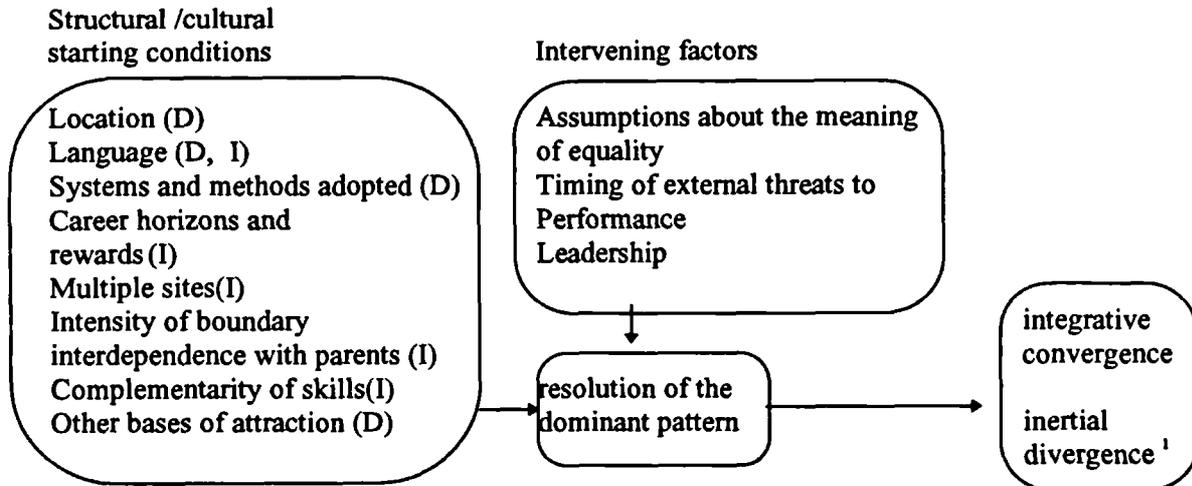
results, they characterised how the French 'create an atmosphere of eyeblinking complicity to make your counterparts laugh' and how the Germans 'create an atmosphere of trust by a clear orientation on a common task'. In other words the researchers have used their diagnostic framework to describe the stereotypical differences between individuals of the two nationalities, rather than the team dynamics.

Working with long-term German/ American work groups, Dieter - Meyer (1993) describes differences in cultural expectations, patterns of relationship building, conversational styles and meetings styles. While Ferrari (1972) found that the attribution of stereotypes due to ranking may change with experience, Meyer found that 'unless interaction is guided by a sense of the actual cross cultural differences' the stereotypes tended to remain stable and be reinforced through interaction suggesting that 'interaction tends to reduce rather than undermine the biased perceptions that feed them'.

Like Triandis and Vassiliou (1967) and Naidoo (1980) before him, Dieter -Meyer (1993) found that stereotypes were often double sided. Americans were seen as friendly, open and flexible, but also insincere, uncritical and shallow'.

More recently, Salk (1992) looked at three international joint ventures. The model resulting from her research is outlined below.

Figure 2.3 Salk's (1992) model of inputs and interventions in cross cultural joint venture teams



D = influencing relative dominance of groups
I = influencing social identification tendencies

Salk (1992) highlights that certain input factors influence the relative dominance of one of the joint venture cultures, while others influence the tendency to identify with one or other social group. Some of the teams in this study are likely to be training teams and some operational, so some input factors may be more relevant than others. Despite Salk's weak descriptions and conclusions of its role, language comes out as a key variable that affects both dominance and identification.

What the model also emphasises is the need to look for sources of possible domination in these teams. In this study, the location of the training teams may emphasise the dominance of a headquarter's nationality. This in turn may give higher status to individuals of that culture over another.

Another interesting factor in this research is the assumption about the meaning of equality. Joint ventures are specific instances of bi-cultural teams. Ling (1990) suggested that an important factor may be the team's attitudes towards diversity, reflecting an ethnocentric or geocentric norm in the organisational culture.

¹ Salk's (1992) definitions of integrative convergence and inertial divergence are given later in the chapter.

Language, dominance and resulting attitudes towards diversity seem to be the most relevant input factors reinforced by Salk (1992).

2.3.2 Comparisons of teams of different cultures

Prescriptive literature aside (eg Philips 1992, Adler 1976) the remaining amount of experimental research literature falls into two sections; research comparing whole teams in different cultures and heterogeneous teams in general.

There has been a range of group research in cultures other than the US eg. Misumi (1959), Kashima and Callan (1994) in Japan, Delgado (1981) with Hispanics, Chemers et al (1966) with Arabs, Putti (1985) in Singapore and Bond (1990) in Hong Kong. Some of it has compared similar tasks between different cultures rather than looking at teams in one culture: eg. Hare (1969) on communication networks in Africa, US and the Philippines, Schacter et al (1954) on threat and rejection in seven countries. No comprehensive review has been done since Shuter (1977).

Aware of the predominance of group research done in all American groups, Shuter (1977) reviewed the small amount of research that demonstrated cultural differences in regard to leadership, conformity, and network performance. He highlighted that groups were more effective with autocratic leadership in India and China (Meade 1967, 1970), Lebanon (Diab 1970) and Japan (Misumi 1959). However Chinese Americans exposed to American culture were more comfortable with more democratic leadership (Meade 1970). Conformity to group norms also changes between cultures (Whittaker and Meade 1967, Milgram 1961).

Gyr (1951) then extracted four culture specific attitudes interviews within Chinese, American, Near Easterners and South Americans committees. He found different underlying attitudinal rationales to seemingly similar behaviour. The four predominant attitudes were:

- * Consistency of others motives, particularly characterised by statements by South Americans such as 'representatives cannot change their minds'
- * Equal collaboration to reach the group goal which was expressed most strongly by the Americans and Near Easterners
- * Awareness of superiority, strongly supported by the Chinese

- * Delegation trust strongly supported by the Americans²

Again the emphasis is on different levels of superiority and equal collaboration. Lee's work (1993) takes this further and is very relevant for this research. It shows the effectiveness of focusing on one process. Lee (1993) studied forty four meetings in Hong Kong (working in Cantonese) and Australian banks (working in English) and analysed the participative decision styles through a socio - linguistic decision - making framework. Her findings on the differences between Hong Kong Chinese and Australian team leadership styles and member behaviours contradict many of the mostly Western generated stereotypes about the differences between Hong Kong Chinese and Western leader - subordinate behaviours (eg. Kirkbride et al 1988, Redding 1990, Silin 1976, Bond 1991, Wai Ling Young 1982, Kaplan 1966). However her findings do support some earlier Chinese research findings. Her main findings are tabled below:

Table 2.1 Hong Kong Chinese / Australian Behaviours

Hong Kong Chinese Leaders	Australian Leaders
Tend to lecture subordinates about principles behind policies and instructions	Hover between authority assertion and authority disclaiming attitudes
Expressly invite the contributions of named subordinates	Seldom expressly invite subordinates to contribute
Greater use of open questions and strategies to draw out sensitive issues from subordinates, eg. greater use of explicit choices and open ended consultation	Much less open consultation. instead, use of loaded questions and ritualistic consultation to involve and influence the subordinates towards desired outcome
Warm hearted, paternalistic, condescending	
Similar gate-keeping and facilitatory strategies and appeals to organisational principles applied more situationally	Similar gate-keeping and facilitatory strategies and appeals to organisational principles applied more universally

²It is interesting to note the comparison of these early findings with the later value dimensions of Hofstede(1980) Laurent (1983) and Trompenaars (1993).

Hong Kong Chinese Subordinates	Australian subordinates
React with ready compliance and ritualistic deference. Will only offer factual non evaluative statements until manager draws it out further.	Query and challenge directives. Self initiated and self sustained pattern of challenging the establishment.
Very few unsolicited contributions.	More frequent unsolicited propositions, show more initiative and are more active in the discussions.
More direct invited and uninvited disagreement with superiors when asked, especially when defending their own proposition, but never self initiated. Fewer 'hedges' and 'disclaimers'	Less direct disagreement with superiors, more use of 'hedges' and 'disclaimers'. Greater range of indirectness.
Engage in acrid exchange and heated discussion	Engage in acrid exchange and heated discussion
Consensus in hierarchical meetings but look to leader for final decision	Consensus in hierarchical meetings but look to leader for final decision

If participative leadership means allowing unsolicited speech acts, then Lee (1993) found Australians are more participative than Hong Kong Chinese. If however, participative leadership means stimulating open ended unbiased consultation and allowing direct statements of disagreement and criticism, then Hong Kong Chinese are more participative than Australians. If participative leadership means allowing acrid exchange and heated discussion in the search for consensus with the leader making the final decision in difficult situations, then both Hong Kong Chinese and Australians are equally participative. Lee's detailed ethno-methodological work highlights the unhelpfulness of universal definitions of words like 'participation' or 'effective leadership'. Her work also suggests that there will be different patterns in simultaneous talk and participation between Western led and Chinese led international teams. So, one important input, for this research is the culturally determined leadership style which may in turn be affected by the composition of the team.

The review of these two sections of the literature have shown how small the body of available research is. Nevertheless some possible culturally affected variables came to light :

- * The cultural context and norms of the leader/follower relationship
- * The relative status of nationalities leading to different attitudes towards equality and diversity

- * The level of fluency in the working language

While providing some useful guidance on important culturally influenced inputs, none of the international teams research looks at what the advantages or disadvantages of international teams are compared to national teams. This has been the focus of research on heterogeneous teams in general.

2.3.3 Research on heterogeneous teams

2.3.4 Diversity improves creativity

Overall the body of literature supports the notion that groups heterogeneous in ethnicity (Ling 1990, Watson et al 1993), sex (Hoffman, Harburg and Maier 1952) attitudes (Triandis, Hall and Ewen 1965) and abilities (Shaw 1981) can be more creative, especially in terms of the quality of ideas (McCleod and Lobel 1992) than homogenous groups (Kirchmeyer and McLellan 1991). This is either because of the greater differences in perspectives (Cox and Blake 1991, Jackson 1991, Triandis et al 1965) or because of differences in the ability to come up with more ideas. However, O'Reilly and Flatt (1989), Ancona and Caldwell (1992) are recent examples of researchers who found a negative effect of heterogeneity on group performance.

In a theoretical piece, O' Bannon and Gupta (1993) argue for a curvilinear effect across the relationship between heterogeneity and performance on any one demographic variable, but ignore the type of task. They suggest that increasing heterogeneity may be helpful to group functioning up to a point beyond which the costs begin to outweigh the benefits. They also go on to elaborate previous research into an assertion that heterogeneity of cognitive resources, in concert with homogeneity of social cohesion factors will exhibit the greatest company performance.

So to date, the question whether heterogeneous teams are more effective than homogenous team is still open. The implication is that the answer to the original question of which type of team is most effective may be answerable only for specific types of heterogeneity eg. inherent or role related (Jackson 1992, Moscovici 1994) working on specific team tasks or objectives in specific organisational contexts. In fact, out of such contexts, it seems an unhelpful question.

2.3.5 Diversity creates communication difficulties

The same research often also reports that heterogeneous teams will have greater communication difficulties (eg Watson et al 1993). However, previous researchers have rarely explained what

precisely those difficulties are, why they come about or how they are expressed (eg Triandis 1965)

Adler (1986 p 131) only mentions the fact that communication is slowed down and the chances for errors increase. She adds that there may also be disagreement over causes of events, relevance of information and how conclusions are drawn. Watson et al (1993) report that diverse groups had more difficulty in agreeing on what was important and in working together, and that more frequently had members who tried to be too controlling. That is all that is said to identify the cause of the lower group process measures for heterogeneous teams.

The problem is the high reliance on statistical scores rather than descriptive data which was shown to be so effective in Lee's (1993) research. This represents a surprisingly large gap in the literature as to what precisely the communication difficulties are in these teams, and highlights the need to devise a methodology that allows some light to be thrown on them.

2.3.6 Status issues

Evidence also shows that with experience, heterogeneous groups can improve their communication (Watson et al 1993, Shaw 1981) but that status differences will remain a problem (Shaw 1981). Ethnic differences can create such status differences as shown in Katz, Goldston and Benjamin's research on biracial groups (1956). They found:

- 1) Whites made more remarks than Negroes
- 2) Negroes spoke more to whites than whites to Negroes
- 3) Negroes spoke more to whites proportionately than to one another
- 4) Whites spoke more to one another, proportionately, than to Negroes

This study shows that ethnic or racial status differences and so presumably national status differences mentioned earlier (eg. Ferrari 1972, Salk 1992) can be seen by looking at the frequency of participation and the pattern of interaction.

Cox et al (1991) took another approach and based their research on one of Hofstede's (1980) dimensions. - individualism - collectivism. They found no measurable statistical differences between groups of Asians, Afro - Americans, Hispanics and Anglo's on a collectivist-individualist questionnaire based on Triandis et al (1986) and Hui (1988). However they did find significant differences between all Anglo (assumed more individualistic) and mixed (assumed more co-operative) groups in their choices of co-operative game strategy.

In the discussion of acculturation and bi-culturalism, Cox et al (1991) propose that minority groups would on the whole be acculturated to or go along with the majority norms when they expected them to predominate. However they also observed that minority groups exhibited more of their own 'sub-culture' norms, in this case greater co-operation, when feedback sessions raised their hopes that this kind of behaviour would be reciprocated.

In recommending practices for multicultural teams, Adler(1986) prescribes task related selection, recognition of differences, a common goal, equal power, mutual respect and feedback for effective multicultural teams. Under 'equal power' she writes that 'leaders must guard against vesting disproportionate power in host country members, members of the same nationality as the employing organisation, members from the most technologically advanced or economically developed countries, or those with ideologies most consonant with their own' (Pg140).

These status issues suggest that:

- 1) Minority cultures in organisations (such as regional rather than HQ nationalities) will tend to adapt to central organisational norms unless encouraged to do otherwise.
- 2) Nationalities with higher levels of perceived power may dominate the interaction in these teams.

Out of Adler's four sources of majority status, the most useful one in this context is the notion that relatively higher cultural status may be conferred by belonging to the same nationality as the majority leadership group of the employer organisation. This creates a specific input relating to cultural dominance in this research. At the same time, it would be interesting to see if this type of organisationally conferred dominance has a stronger influence than the effect of a numerical majority of a minority culture in any one meeting. So numerically larger subgroups of any one nationality seems another important culturally determined compositional input to add to the list of possible predictor variables.

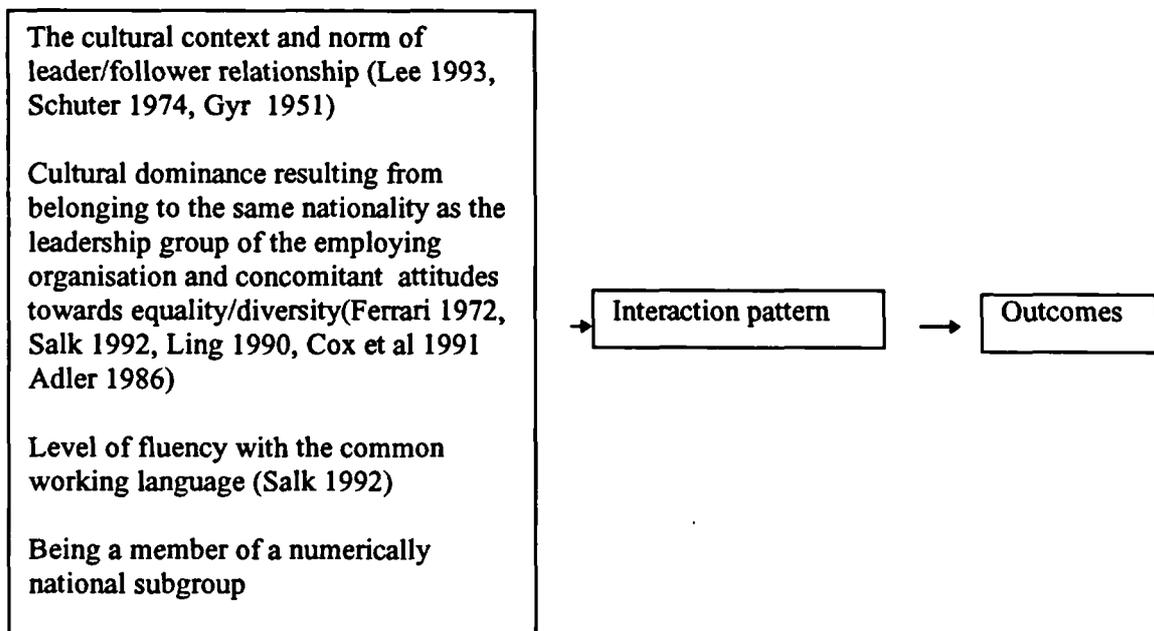
2.3.7 Implications available from this body of research

The findings in this body of research strongly imply that at this early stage, there is a need to examine the internal processes of international teams in organisational rather than in experimental settings, before there can be a useful assessment of effectiveness compared to homogeneous teams in either organisational or experimental conditions. It has highlighted that heterogeneous

teams may have greater communication problems than single nationality teams, but said very little about what these are specifically.

This body of research on international, cross cultural and heterogeneous teams has also clarified some possible input variables that are likely to affect the participation and interaction within international teams. Some of these are organisationally dependent, eg. the dominant culture which further stresses the need for research in organisational settings. These cultural inputs are summarised in the figure below.

Figure 2.4 Possible predictor variables in an international team model



2.3.7.1.1 A note on methodology

Much of the experimental research has been done on groups (often of students) working together for as short as 30 mins, using a game or simulated problem solving task that bears little relationship to the participants' daily work problems or the real life criteria of effectiveness. Researchers such as Watson et al (1993) made an effort to do research on teams working together for a few months. Even so their methodology can be criticised on a number of counts such as using a questionnaire generated from national teams to measure effective group process and using a (presumably American biased) review of group process in between the four team sessions.

The greatest weakness of all the experimental research comparing outcomes of homogeneous and heterogeneous teams is that measuring internal diversity of an experimental team on the basis of nationality and ethnicity does not measure the real value of that diversity to a company in an organisational setting. For instance the Finnish and German parts of a company may have been competing internally for resources, projects and political power. There will be a large increase in efficiency to the company as a whole in getting the two sides together in a mixed team even if those teams would not have a higher overall performance on some created set task than teams of all Finns or all Germans.

2.3.8 Two Approaches to Culture in Multinational Teams

While the research on international heterogeneous teams threw up some possible input variables at the individual and team level, it did not clarify a clear theoretical position of how to use culture as a research variable in this research. The next section sets out to discover if the large body of cross-cultural research can provide a deeper theoretical underpinning for culture in this research. It begins with the need to define culture.

Triandis (1994) comments

‘In analysing cultural behaviour data, it is helpful to conceptualise *individuals* as belonging to different cultures, groups or organisations and so on; *situations* as evoking different kinds of *behaviour*; and a variety of constructs (such as habits, values and attitudes) as linking consistencies in situations with consistencies in behaviour. If individuals are grouped according to culture so that within group variance on the constructs of interest is smaller than the between groups variance, then culture has a role as an explanatory variable.’

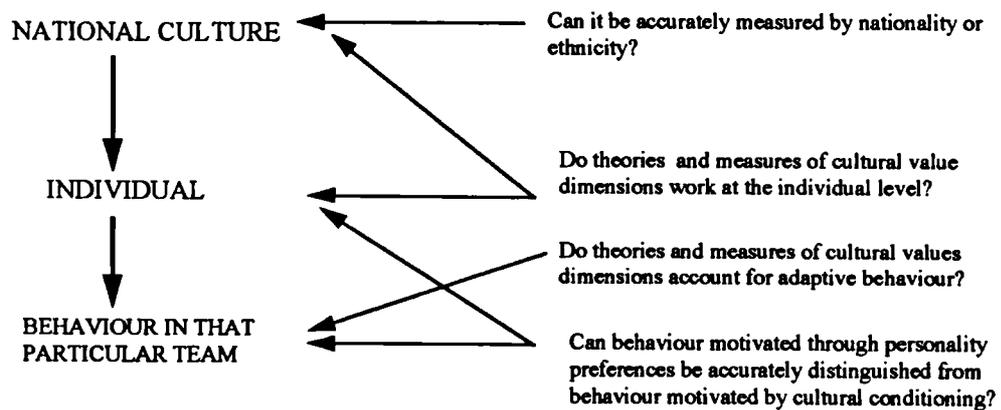
There may only be single representatives of any one culture in these teams, so concepts of within group and between group variance may not apply. However, it is still intercultural research because although culture is recognised as belonging to a group as a whole, it is normally operationalised at the individual level through using nationality to assign any one individual to a ‘cultural’ group. These different individuals will create an intercultural pattern of interaction and team process. This means that there are two possible levels of analysis from which to look at culture as a research variable in international teams; the individual and team.

2.3.8.1 The individual level

The first approach would be to analyse an individual's cultural as opposed to personal and psychological conditioning and use it to theoretically predict or explain the way that individual behaves in an international team. This approach is illustrated below.

Figure 2.5: First approach to researching teams

The first approach to measuring the effect of cultural differences on group process in multinational teams



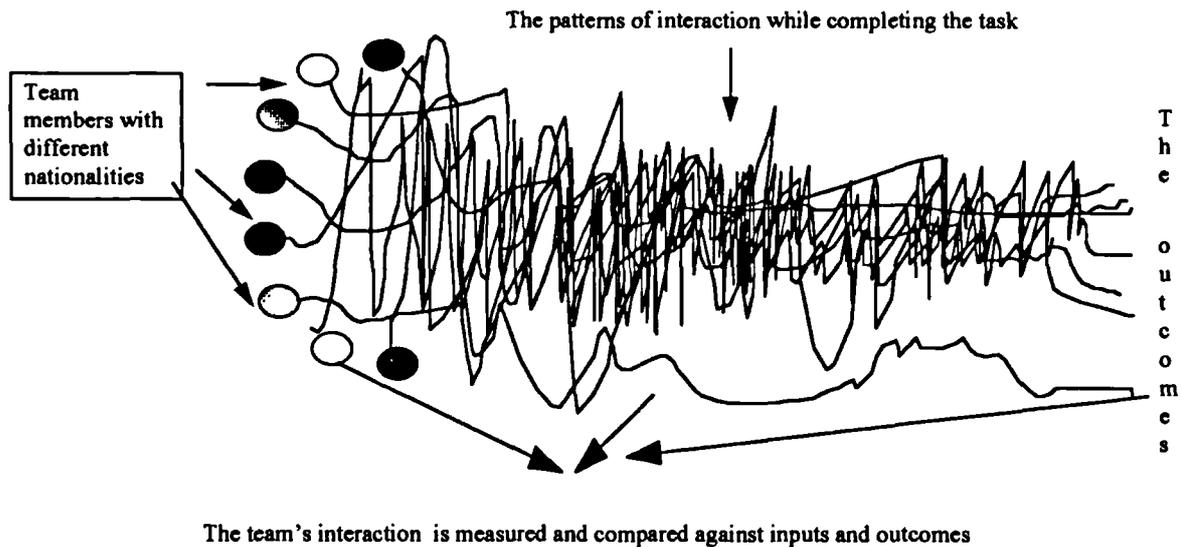
To do the first kind of predictive research at the individual level, the questions in the right hand column need to have clear answers.

2.3.8.2 Group level

The second level of analysis would observe and calibrate the patterns of interaction within the team and look for explanatory individual and contextual culturally affected variables which do not emphasise individual psychology. Most of the variables that emerged in part one fall into this category. This second approach is illustrated below.

Figure 2.6 Second approach to researching teams

The second approach to measuring the effect of cultural conditioning on group process in multinational teams.



The second type of research, using the team interaction as the main level of analysis, may be able to say something interesting about the effects of certain mixes of cultures as represented by individuals within the teams as well as the effect of the cultural variables outlined in the first section.

These two approaches represent Bochner's (1986) categories of within- skin or between - skin cross cultural research. The first approach favours the view that an individual's behaviour is largely determined by internal attributes such as physiology and genes or internalised dispositions such as personality and cultural conditioning. The second approach inclines towards a situational and contextual explanation of behaviour. Bochner (1986) points out that 'between - skin' psychologists argue that individuals must be studied in their social contexts and tend to use systemic observation of on going behaviour, which in this case means in-company field research. The within- skin psychologists are more likely to favour laboratory experimental studies. Although Bochner goes on to suggest 'that in many respects cross cultural psychology can be said to have a between - skin situational orientation', the literature review reveals that the large gap in the research on group interaction between people of different cultures exists because most cross cultural research has taken the within- skin approach and focused on individuals. Can that approach be extended to look at team interaction?

2.3.9 Culture as a research variable in multinational teams: dependent or independent?

The aim of this part of the literature search is to discover what models or theories support either of the two approaches outlined above. As illustrated in Figure 2.5, there are three questions that need to be answered to support the use of culture as an independent antecedent to individual behaviour in teams. The first question is: 'Can culture be accurately measured by nationality or ethnicity?' Many writers have criticised conceptualising individuals from different cultures as synonymous with individuals from different nationalities (Triandis 1994, Roberts et al 1984), so it is necessary to first explore the definition of culture.

2.3.9.1 Defining culture

The lack of a consistency or even an effort to define culture is a constant cry from reviewers of cross cultural studies (eg. Roberts and Boyacigiller 1984, Redding 1992, Bhagat and McQuaid 1984). The crux of the struggle seems to be to define culture in a meaningful way when it is separated from the attributes through which it is recognised. For instance, having found 164 definitions of culture in use, Kroeber and Kluckhohn (1952) define culture as 'the historically created designs for living, implicit, explicit, rational, irrational, non-rational which exist at all times as potential guides for the behaviour of man'. It is so all encompassing that it is not an operational definition.

Subjective definitions depend on shared meaning and values and do not see culture as a separate measurable entity (eg Geertz 1973 and Triandis 1972). More objective definitions include external and internal factors that can be measured as an entity (eg Herskovits 1954, Hofstede 1980) and in Herskovits' case 'culture rarely intrudes into conscious thought'.

Triandis et al (1988) suggest that in order to understand the way in which culture relates to social psychological phenomena, we must analyse it by determining dimensions of cultural variation. Bhagat and McQuaid (1982) suggest that this provides a more rigorous basis for definition and interpretation of similarities and differences. The limitations of this way of thinking are demonstrated at the end of this section.

Triandis (1994) points out that as culture requires interaction to be transmitted (eg. through generations) people must (1) share a language, (2) live in the same time period and (3) be geographically contiguous. If these are three necessary criteria for a distinct culture to exist, it is easy to see why nationality has often been used as a rough guide. Nations have to sort out some common language to function with at the nation state level, even if there are numerous different official languages and scripts within their national borders (eg. India's use of English, China's

different spoken languages against one common script). The basis of the criticism of using nationality as synonymous with culture (eg. Bhagat and McQuaid 1982) needs to be examined in depth, as differences in nationality is what companies are using to distinguish multinational or international teams from national ones.

2.3.9.2 Can culture be measured by nationality or ethnicity?

2.3.9.2.1 Nationality

The answer seems to be 'not accurately', with the proviso that it is hard to find workable alternatives. Even a brief look at the literature reveals that the definitions of nationality and ethnicity are also based on the notion of culture (Phinney 1990, Brass 1991, Edwards 1977 De Vos 1980) which then has to be defined. The dilemma is whether someone belongs to a certain culture because of the way they think, the subjective level (which may be difficult to measure), or because of the way they behave (which may not seem to other people to be consistent in certain circumstances with ways that they think), or because of where they are and the artefacts and attributes that surround them, the objective level. The same dilemma of choosing between subjective, behavioural or objective levels (Brass 1991) is found in using nationality or ethnicity as synonymous with culture. Nationality can be purely objective, ethnicity can imply a more subjective identification.

Nationality is given either by birthplace or ethnicity depending on the policy of the countries involved, policies that can render some people stateless. While some nationalities are ethnically quite homogeneous (eg. Japan) compared with others that are very diverse (Malaysia, USA, Brazil) (Furnham and Bochner 1986 pg. 19), people of different ethnic backgrounds, with different ways of thinking and behaving based in one country all share the same nationality. Any one of them could change their passport without changing their sense of national pride or ethnic roots. In other words, nationality as given by passport can be totally external, whereas this research needs to at least represent culture as internalised, if it is to be reflected in some way through an individual's thinking and behaviour.

2.3.9.2.2 Ethnicity

Could ethnicity be a more accurate descriptor of a coherent internalised set of ways of thinking and behaving amongst a recognisable group of people?

'People, like books, lose something in translation...It is the fate of migrants to be stripped of history, to stand naked amidst the scorn of strangers, upon whom they see rich clothing, the brocades of continuity, and the eyebrows of belonging'

Salman Rushdie, in Shame

Ethnicity does have the advantage of having greater internal bias than nationality. Some writers see it as a given, others as needing to be actively achieved. That said, the original external categorisation of race was very broad, eg. the non hierarchical geographical Americanus, Europaeus, Asiaticus and Afer of Linnaeus (1758) or the more subjective and hierarchical Caucasian, American, Mongolian, Malay and Ethiopian of Blumenbach (1795).

Later ethnic categorisations still used these terms but have been further developed along patterns of forced or unforced immigration; eg. in America, Hispanic, Afro-Caribbean, Afro - American, East Indian (as opposed to native Indian) Amer-Asian, with no attention paid to the multiple languages, nationalities or tribes within these categories. However over time and due to mass migration, ethnicity no longer takes language or geography into account. It is no more useful and perhaps more complex as a rough objective measure of culture than nationality. That said, the status of a person's ethnic identity in any one nation state has been shown to affect their perceptions and behaviour, especially around learning language (eg. De Vos 1980, Hall B J and Gudykunst W B 1987, Clement R and Kruidener B G 1985), causal attribution (eg. Taylor D M and Jaggi V 1974, Hewstone and Ward C 1985), self perceptions (eg. Moghaddam F M & Taylor D M 1987), performance in school, expectations and motivation to achieve (eg. Naidoo 1980), the controversial IQ differences (Murray and Hernstein 1994), and behaviour in groups (eg. Katz et al 1958, 1960).

2.3.9.2.3 The alternative cultural dimensions approach

Unfortunately, the alternatives of determining cultural dimensions of variation (Triandis et al 1988) do not yield a clearer picture. The idea that you can choose any variable to describe culture so long as the individuals one is studying all identify with it and so long as there is another set of other individuals from another culture that does not, surely means that a parameter for measuring culture does not exist outside the variable one is studying. In other words, one could say that the whole human race belongs to the culture of people who lie down to sleep, but only some humans belong to the tea drinking culture.

'Cross cultural' research would focus on the relationship of one variable to another and these interrelationships are sure to become very complex in how and when they overlap and in the

different weighting different variables are given in different contexts. As more and more factors are added in, perhaps the only logical outcome would be that each individual has their own culture. This would support those who have argued that we can do away with the term once we understand all the interconnections (Laurent 1990, Brooke 1986). Thinking through the logical consequences of this route, it is clear to see why using nationality has been used as a convenient if rough parameter.

2.3.9.3 Avoiding defining culture

As there is no one agreed definition of culture, researchers have defined culture according to the needs and context of their study and especially in relation to the variables being examined (Sackmann 1989). Given the lack of theory, Roberts and Boyacigiller (1984) do come up with some concrete proposals about how to create a workable definition of culture for research. They suggest that a general rule is to select an organisational problem of interest and then borrow or develop a theoretical argument relating this problem to a set of relative proximal external constructs. Once those constructs are defined, the search for boundary interchange mechanisms can begin.

This again seems to point to the second approach illustrated in Figure 2.6, of measuring the interaction of international teams as the 'problem of interest' and relating it to variables that are dependent on the external impact of national cultures, such as language and national status. However, an alternative is still offered by the second question in Figure 2.5 posed below.

2.3.9.4 Can culture be successfully measured at the individual level by the values dimension research?

Again the answer that emerges from the research to date is 'no'. Most of the research is static, based on individual questionnaires, and as there is no theory connecting static values to interaction or adaptive behaviour, it is not a suitable theoretical underpinning for this research.

Rokeach (1973) defines a value as 'an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. Hofstede (1980) defined values as a broad tendency to prefer certain states of affairs over others. They are an attribute of individuals as well as collectivities.

The evolution of the research on value dimensions can be followed through Parsons and Shils (1951), Kluckhohn and Strodtbeck (1961), Haire and Ghiselli (1966), Mead (1967), Rokeach (1973) England (1975), Ronen and Kraut (1977), Zavalloni (1980) Hofstede (1980), Elizur et al

(1991) Trompenaars (1993). The detail of what the different researchers proposed and found is not relevant to this study at this point

Certain value dimensions have been found to be robust across enough cultures to be interesting, even if the way in which the dimensions were elicited had to change in different cultures (eg. Hofstede and Harris Bond 1986, Adler, Campbell and Laurent 1989). Triandis and others have spent a great deal of research effort investigating the universal (etic) and culture specific (emic) aspects of whether a culture is focused on the individual (individualism) or on the group (Collectivism) (see Triandis et al 1993, Hui & Villareal 1989, Kagitcibasi and Berry 1989). The question is whether they can accurately measure culture at the individual level in international teams

Major problems with this research for this study are:

1. Individual dimensions are used that were not meant to be taken in isolation (eg. Trompenaars 1993 using Parson and Shils 1951), and hence on their own have little use to explain a culture as a whole. Both Hofstede (1980) and Smith et al (1994) working on the Trompenaars database found some correlation between two of the dimensions across a wide range of countries.
2. Although some dimensions are strongly etic, especially for intergroup responses on a large scale (eg. Hofstede 1980, Leung and Bond 1989), their manifestations in different cultures and environments can be quite different, needing emic analysis (Triandis & Marin 1983, Davidson et al 1976, Triandis et al 1993). Even Hofstede (1980) cautioned against this 'ecological fallacy'. Eco - logic differs from individual logic (pg. 25 abridged version).
3. There is no clear explanation of how value dimensions assessed from written questionnaires influence behaviour in different social contexts; a major problem for this research.
4. The studies do not include descriptions or theories of adaptation to different contexts. There is a subtle assumption within most of these studies that culture somehow influences people unconsciously, albeit in different degrees, so that a normal distribution is expected across any one value dimension. However it is clear that individuals can become conscious of their own values, especially when confronted with a different culture and so may choose to either be more or less committed to those values. Support for the notion that people adapt comes from:

Black and Mendenhall' (1990) and Earley (1987) on the effectiveness of cross cultural training,

Ratiu's (1983) study that found that managers who modify their preconceptions through experience are ranked more 'international' than others,

Furnham and Bochner's (1986) suggestion (pg. 135) that experienced cultural travellers avoid the downturn of the culture shock curve.

Triandis (1989) suggests that ' exposure to other cultures increases individualism

Brannon (1993a) talks about different levels of commitment to national norms.

There are signs of interpersonal synchrony (eg. Condon 1982, Adler and Graham 1989) in intercultural interaction.

5. The work of Hofstede (1980) and Trompenaars(1993) for instance, does not take into account the difference between unconscious and conscious norms.

The value dimensions work embodies the difficulties of crossing different levels of analysis (Rousseau 1985, Klein et al 1994, Leung 1989) and of using aggregated individual scores to capture the interrelationship within the group (eg. Bougon et al 1977) and between groups.

In summary, the value dimensions research as it stands cannot accurately predict the cultural conditioning of any one individual or be a predictor for that individual's behaviour in a mixed team. This is largely due to the lack of theory about the relationship of certain value dimensions to adaptive behaviour and to the fact that they are statistical ly assessed through aggregating individual questionnaire surveys

Although value dimensions cannot underpin this research, Triandis (1994) works hard to show the utility of Hofstede's research. He suggests that 'the fact that values influence a wide range of behaviours seems widely accepted'. It is interesting to project how these dimensions might affect behaviour in teams. For instance, individualists may feel a need to work hard to gain in- group acceptance by displaying their knowledge competitively, which collectivists do not (Triandis 1994, Elleson 1983). Triandis (Triandis & Leung 1985) has identified procedures that identify allocentric (who give more weight to the goals of their in-group that to their own personal goals)

from idiocentric (who place their own personal goals above the goals of their in-group), but they have not been tested in team situations.

Finally, it is important to note at this point that as well as value dimensions, cognitive differences and non verbal behaviours could also be held constant and examined for cultural variance (see Triandis and Albert (1987) for extensive list). Non verbal cross cultural communication has been studied in some depth (eg. Hall 1959, Gudykunst and Ting-Toomey 1988) and one can imagine where there is a sub group whose signals are opaque to other members, such as the subtlety of Finnish or Japanese negative signals to most Europeans, it will play a role in determining the interaction in these teams. However there is still the difficulty of attributing behaviour to either cultural conditioning or personality. This leads to the third question in Figure 2.5 that needs to be answered.

2.3.9.5 Is there a clear distinction between culture influence and personality and individual psychology?

2.3.9.5.1 Concepts of self

As Redding (1992) and Triandis (1994) have recently pointed out, the boundary line between culture and personality is not clear, and again the answer is 'no'. Kagitcibasi and Berry (1979) argue that 'because the concept of person, like any other concept, is socially constructed, it is a cultural product that shows cross cultural variation. (eg. Erez and Earley 1993, Marsella DeVos and Hsu (eds.) 1985. Kumon 1984). The Western notion is that 'every society is composed of individuals and that every culture is created by and expressed in the individual' (Hsu 1985) However, some studies (eg. Schweder and Bourne 1984) show sociocentric, holistic conceptions of individual - society relations 'where person units are believed to be altered by the relations into which they enter. Kumon (1984) describes a Japanese 'person' as not having a hard shell of personality or definite identity as an 'individual', even though he does have a membrane to separate him from people belonging in the same context.

If self and personality are defined differently in different cultures, and culture is not yet defined, then clearly the boundary line will be a fuzzy one. Personality type questionnaires such as the Myers Briggs Type Indicator (Myers and McCaulley 1985) have focused on types of information processing preferences or behavioural styles; 'cultural questionnaires' have focused on value preferences around relationships and organisational structures. As cognitive processes are affected by cultural contexts (eg. Triandis and Albert 1987, Redding 1990, Kumon 1984) and

personal experiences affect our values preferences, such tools are also unlikely to draw clear boundaries within different cultural contexts.

2.3.9.5.2 Empirical research

Attempts have been made to establish a workable theoretical and empirical base for separating out culture and personality. Triandis et al (1986) first suggested looking at different levels of acculturation and looking for what converges with the host culture as acculturation increases. Triandis (1989) then argued that private, public and collective aspects of self are sampled with different probabilities in different cultures and that this has specific (and predictable on the basis of other research) consequences for social behaviour. Triandis et al (1990) then timed the speed at which similar groups arrived at consensus on the importance of different value sets and suggested that those found at high speed represented cultural agreement.

England and Harpaz (1983) tested multiple groups within a culture and decided that if other differences such as social class, age, race and gender did not emerge, then the construct being investigated was cultural rather than psychological if the individual differences were also very small.

In order to lift these studies into a general theory, a workable definition of culture is needed as well as a global theory of personality that takes into account the impact of very different self concepts. Sampson (1989) suggests that this is far from being established in the field of psychology. So despite empirical attempts, at this point there is no clear way to distinguish culture from personality as the antecedent to particular behaviours at the individual level across the relevant cultures in this study.

2.3.10 Confirming the second approach

This important finding and the discussions and findings around nationality and value dimensions rule out the first predictive approach of looking at cultural processes in multinational teams illustrated in Figure 2.5. At this incipient stage of research on international teams, the findings in this part of the literature survey support the alternative approach illustrated in Figure 2.6; that of observing and calibrating the participation within any one team and analysing the effect of the mix of nationalities through certain culturally affected variables. It also begins to suggest that it will be fruitless to describe group process through aggregation of individual behavioural categories because it will be difficult to accurately ascribe these to personality, cultural influence or adaptation of either, or to the group circumstances.

The background theory to the second approach is grounded in the group literature and some inputs have already been found in the research done on heterogeneous and international teams. However, before returning to assess the group literature from a cross cultural point of view, there are some outstanding issues in cross cultural research that need to be addressed, as well as methodological lessons to be learnt from former cross cultural studies.

2.3.11 Other relevant themes in cross cultural research.

There are five of these that need to be looked at briefly for their impact on international team members and interaction in multinational contexts:

1. Cultural adaptation.
2. The subjective / objective dilemma.
3. The converger/ diverger debate including the impact of national culture on organisational culture.
4. Organisational cultures and managing diversity.
5. Cultural synergy.

Cultural adaptation needs to be explored to discover how likely it is that the behaviour seen in these teams is 'true' cultural behaviour and also what it is that individuals gain from international experience. The emic / etic debate highlights the need to look at these teams in context. The convergers suggest that these teams may not be as heterogeneous as they seem. As mentioned by Adler (1986) in part one, the organisational culture has probably created a dominant nationality and finally the meaning of cultural synergy needs to be established before embarking on this research.

2.3.11.1 Cultural adaptation

Cultural adaptation is a huge area of discussion and research, covering stereotypes, culture shock and adaptation, bi-culturalism and the whole thorny issue of intercultural competences. Most of it could well be relevant to what could be happening to individuals in international teams, but the literature is too large to explore here, especially if the focus of this research is on the pattern of participation rather than changes in individual psychology. The main three issues for this research are stereotypes, processes of adaptation and personality traits that relate to cultural adjustment.

2.3.11.1.1 Stereotypes

The persistence of stereotypes suggests that team members may interact in response to stereotypical attitudes towards certain nationalities rather than directly in response to another individual's ideas or behaviour. This could be a powerful reason for communication difficulties in international teams. The literature reveals some facts about stereotypes.

- a) Stereotypes are fairly resilient and can be said to have a kernel of truth (Prothro and Melikian 1955). One would rather label individuals as non stereotypical than change a national stereotype (Adler 1986 pg. 74).
- b) Changes in stereotypes are not uniform and in fact they may change even though the behaviours on which they are based are exactly the same (Triandis and Vassiliou 1967, Naidoo 1980 pg. 219).
- c) That stereotypes may change more slowly than the actual culture (Triandis 1985)
- d) That the accuracy and subsequent adjustment of stereotypes depends on prior exposure to correct information or media (see Church 1982, Berrien 1969, Weiss 1994)
- e) We all have knowledge of them, but we don't all act on them (Devine 1989)

Triandis (1985) found some evidence that behavioural intentions and role perceptions are the first elements of subjective culture to move in the direction of the mainstream. On the other hand, stereotypes are only indirectly and remotely related to behaviour, so they continue to show ethnic affirmation. Cultures do themselves change (eg Reader 1988), so there must be some contextual threshold point, at both the individual and group level, between a number of individuals being labelled as 'non stereotypical' and saying that the culture has changed.

Church (1982) also describes several studies that have found support for the notion of the two-way mirror hypotheses where individuals from 'low status' (in the eyes of Americans) cultures form their attitudes based on their understanding of how their nationality is perceived. This could be an important factor in international teams mixing individuals from developed and developing countries. Team members may become demotivated if they think their nationality is perceived as low status.

2.3.11.1.2 Processes of adaptation

The way that people adapt around and beyond their initial cultural conditioning has been described in depth by many authors (eg. Adler 1986, Furnham and Bochner 1986, Church 1982, Taft 1985) and the types and patterns of 'cultural shock, culture fatigue' hypothesised, researched and discussed in detail. Church (1982) puts forward the evidence that the U curve of adjustment is certainly not universal and in fact needs to be so flexible to account for research findings that it becomes meaningless. There may be a case for hypothesising that minority members of international teams suffer the same kind of culture shock, whatever that is, that expatriates experience on arrival in a different country.

Tioborn (1982) and Hofstede (1980) have made attempts to rate cultures relative to each other and to give a measure of the distance between them, so some mixes of nationalities in international teams may have more difficulty than others. Galtung (1965) found that home nationality explained adjustment response variables much better than did the host country of sojourn.

An important question here is whether changes of behaviour are less significant than changes in underlying values, which in turn are less significant than changes in basic assumptions about how the world works. What assessment is to be made if a team participant is measured as highly individualistic before the team work starts, acts in a highly collective way during the teamwork and yet measures again highly individualistic on a post teamwork questionnaire.

Convergers may take it as an intermediary stage of convergence, value dimensions researchers may say that the behaviour was temporary and not related to the real cultural values of the participant, others may take it as a sign of bi-culturalism or that the individual is highly adaptable across cultures. This literature suggests that adaptations to 'foreign' group norms are more likely to be at the cognitive and behavioural levels than at the level of value laden norms. Even then, these are likely to be in certain specific areas, because the structure of cognition and information processing is likely to have been deeply embedded through mother tongue languages (eg. Redding 1990) and certain behavioural norms are likely to be heavily value laden or unconscious (Herberg 1982).

This uncertainty in the literature again supports focusing on the relationship between team interaction and group level factors, rather than starting with the individuals, their possible psychological changes and projecting how the interaction should turn out. It is also clear that good models of culture will allow for these adaptive processes (eg. Triandis 1972).

2.3.11.1.3 Personality traits and intercultural competence.

Many companies are looking for psychological tests that will indicate whether their managers will adapt well or not to international assignments. The discussion and debate around whether identifying specific international management competences is either possible or desirable has been a heated one for quite some years (eg. Murray and Murray 1986, Sanders 1988, Barham 1989). Suffice it to say that suggested key competences have ranged across 'helicopter view with a sense of reality' (Muller 1970), 'cognitive complexity', 'boundary spanning', 'geocentric' (Finney and Von Glinow 1988), and 'creating a matrix in the mind of managers' (Bartlett and Ghoshal 1989). Questions about how to observe and measure such 'competences' have naturally arisen

It is not difficult to imagine that an individual who has lived and worked in different countries may behave differently in an international team to someone of the same nationality who has had no international experience. How are these changes accounted for? The growing literature on the antecedents and necessary skills of intercultural effectiveness tends to find that cross-cultural adjustment emphasises personality traits, while overseas job performance relates to interpersonal skills, role adjustments, family status and support and occupations (Bochner, Lin and McCleod, 1979, Church 1982, Kealey 1989, Wiseman, Hammer and Nishida 1989, Imahori and Lanigan 1989, Ruben 1989, Cui and Awa 1992).

Personality variables such as non-authoritarian, increased personal flexibility, sociability and assertiveness and more realistic sojourn goals and expectations all relate to more positive adjustment. Wiseman et al (1989) found higher levels of ethnocentrism an impediment to both culture specific and culture general understanding. Black and Gregersen (1989) also found that prior expectations in Japanese expatriates were crucial to sojourn success.

There is little evidence that overseas assignments increase international mindedness (presumably of Americans) (Church 1982, Bochner et al 1979). While previous international experience does seem to lower stress, it is not correlated with effective transfer of skills (Kealey 1989). Church (1982) concludes that overall personal growth in terms of self reliance and self awareness (which do not seem strongly related to performance) appears to be a more consistent sojourn outcome than changes in more value laden, culture based ideologies and norms, at least as perceived by the sojourners themselves.

These findings suggest that in this study, it is worth asking about the team participants' expectations about the groupwork and international experience prior to the groupwork and seeing

if there is some way to isolate these variables in relation to participation rates and patterns and their perceptions of post- group work assessments of the experience. With regard to international experience, self reliance may be helpful for those 'low status' minority team members, but could have the opposite effect in dominant group members, making them even more overbearing. Previous international experience could be an important fifth predictor variable of an individual's participation in an international team, especially for 'low status' members.

In summary: This literature suggests that there may be stereotypical behaviour, especially concerning perceptions of high and low status nationalities in these teams. That adaptation may well take place at the behavioural level rather than cognitive or values level. Personality traits are unlikely to predict cultural sensitivity, although previous international experience may increase an (especially 'low' status) individual's level of participation in international teams. However as the processes of change in stereotypes and cultural adaptation are not well understood, there is again support for focusing on the interaction rather than the individual antecedents of behaviour.

2.3.11.2 The Emic/Etic, Subjective/ Objective dilemma

The subjective / objective dilemma has been called many things, eg. ideographic and nomothetic (Child and Tayeb 1982-3), culturally specific and culturally general (Adler 1983) and universal and culture specific by Triandis (1994), the terms emic/etic were derived from Pike's (1966) discussions of phonetics, (universal voice utterances) and phonemics, (culturally specific voice utterances.). Emic /etic factors will probably run through all the factors analysed in this study. The focus will be on looking for the antecedents of the patterns of participation rather than individual behaviour in multinational teams. In this regard, Kagitcibasi and Berry (1989) put forward a useful point of view.

'Just as we cannot claim to observe a universal based on a single culture result...so we cannot label a pattern as unique...when it is found to differ from patterns in other cultures that we know. The important goal is to discover the structural and functional antecedents of each pattern, to understand how it comes about and how it works, so that we can predict whether and under what conditions it might be seen in another cultural context'

This suggests that while this research may test a group process model across all the teams, it should also aim to observe and analyse the events in each team within its own cultural and organisational context.

2.3.11.3 Cultural convergence or divergence?

In brief, 'convergers' do not see cultural differences as fundamental, but believe that 'culture will just be a quaint quirk' (Levitt 1983) when there is a homogeneous global business culture and universal management theory (eg. Everett et al 1982, Hickson et al 1974). In comparison 'divergers' believe that cultural differences, especially cognitive and perceptual differences, are so deep that cultures, despite adaptation and change will always differ significantly (Triandis 82-3, Laurent 1983).

As the teams in this study will probably be observed in organisational settings, it is important to note that for convergers, there are recognisable 'contingency' factors, such as technology, market, geographic diversification, large scale production, socio-economic status that impose a universal pattern of administration, forcing managers to act in similar ways (Child and Tayeb 1983, Gruenfeld and Mac Eachron 1975). Pugh et al (1969) suggest that specialisation and formalisation have been found to be significantly correlated to company size in different cultures, overlooking the fact that in turn, company size may be strongly related to cultural and environmental factors (eg. Redding 1990).

The convergers' argument for international teams could be expressed as, 'aren't the skills of managing successful international teams only slightly more complex versions of the skills needed to manage any team?' Divergers do not appear to be disagreeing in principle, but are arguing for much greater degrees of complexity than are being anticipated.

The convergers' arguments also raise three issues to be aware of in field research. Firstly, as discussed below, all the participants may have already been heavily influenced by the teamworking methods or training within each organisation and that these may be similar between multinational organisations whatever their cultural contexts. Secondly, the teams are from large organisations where roles are probably more formalised, and so overall their team behaviour may be more formalised than in smaller organisations, regardless of culture. Thirdly, that some hierarchical status, perhaps even national hierarchical status reflecting the organisation's country of origin, is likely to be present in all the companies studied, even if it is expressed in different ways.

2.3.11.4 Organisational culture and managing diversity

Adler and Jelinek (1986) discuss how national culture may influence organisational culture, particularly where human resources and managerial behaviour are concerned. (eg. Schneider 1988, ed. Evans, Doz and Laurent 1989). If the influence of the national culture has stayed

within the organisational culture as it has spread geographically, this could have a profound effect on teamwork within the organisation and leave some team members uncomfortable with the established norms. (eg. Lam 1986). Even if they exhibit similar behaviour, the underlying logic of why someone is behaving that way can differ (Maruyama 1985 Adler, Doktor and Redding 1986).

Ling (1990) compares Perlmutter's four dimensional typology of ethnocentric, polycentric, geocentric and regiocentric (Perlmutter 1969 and Heenan and Perlmutter 1979) and Adler's (1983d) typology of parochial, ethnocentric and synergistic organisational cultures. The resulting prescriptions about organisational attitudes are predictable and 'the orientation toward a foreign people, ideas, resources' in headquarters and subsidiaries and in host and home environments becomes crucial in the multinationality of an organisation (Perlmutter 1969). Ling (1990) points out that despite such theorising, there has been no empirical research on the link between organisational type and how the attitude towards diversity is managed in teams within that organisation.

Suppose a measure of an ethnocentric culture is how well the geographic spread of production and sales is reflected in the mixed nationalities of top management of any multinational. On this measure most of the long established multinationals would still tend towards the ethnocentric rather than geocentric categories (Hu 1992). The leaders may well be internationally minded, but the demographics may well be sending unwanted messages of different levels of national status throughout the organisation, creating a dominant culture.

2.3.11.5 What is cultural synergy?

One of the most alluring concepts to arise out of thinking about cross cultural interaction is the notion of teams of people reaching some kind of cultural synergy. Redding (1992, 1994) posed two alternative approaches to this issue. He first distinguishes the recommended empathy approach, which he describes as universal and 'is often the only real advice emerging from the many studies which describe differences in a theoretical vacuum.' As almost all the comparative research has been on static differences rather than interaction (Triandis 1994) the current weighting for this approach is unsurprising. Redding (1992) stresses that we only have vague ideas of how this synergy works and how to determine appropriate mixtures of differences and skills which allow it to happen.

Salk (1992) gives a good description of what the conditions of synergy may look like, and some answers as to how it is arrived at in joint venture teams. She called her two possible outcomes,

'integrative convergence' or 'inertial divergence'. 'Integrative convergence' is defined as a state where the following conditions prevail:

- * trust between members generally is high
- * there is sufficient commitment to the team's identity such that parental/national based social identities play an unimportant role in how team members explain and understand daily life
- * there is an appreciation of individual differences and contributions
- * there is an observed behavioural convergence around certain shared practices and behavioural expectations
- * while the practices and norms that dominate may be those of one of the cultures in the venture (team), there is an openness to influence and modification of these practices by members of the non dominant group

What is useful about Salk's description, is that she defines her terms without using ideas that focus on integrating or transcending differences. Some of Adler's (1980, 1986) language and quotes in her description of synergy imply a strongly etic approach to the issue; eg. 'builds on similarities and fuses differences', 'creates new forms of management and organisation that transcend the individual cultures of their members'.

Likewise, Masnevski (1994) defines 'integrating diversity' as 'combining elements into a unified result where the whole is greater than the sum of the parts and as such is synergistic.' Her theoretical model builds on Blakar's (1985) theory of communication in terms of six preconditions for successful diverse communication. Common language aside, the six preconditions are: 1) shared social reality, 2) ability to decenter, 3) motivation to communicate, 4) ability to negotiate and endorse contracts of behaviour, 5) ability to attribute difficulties appropriately and 6) confidence. Masnevski herself points out that the 'process of integration' has not yet been the focus of group research.

In the future this model may give some predictive value at the individual level of the effectiveness of an international team, while avoiding the traps of the value dimensions research. What is difficult to foresee is how to measure the conditions, comprehensively and accurately, before the team starts to work together. For instance according to Masnevski, measuring an individual's 'social reality' involves a shared 'here and now', language and perspective. The

first two are fairly straightforward, but discovering each individual's perspectives on the content and process of the task, as well their perspectives of each other would be difficult, and we do not yet know which aspects of social reality have the most influence on international team process. Such a quest is the aim of this research. It should be pointed out that integrative convergence, and cultural synergy or integration will be used as interchangeable phrases throughout this thesis.

2.3.12 Culture as a variable in international team research: Summary.

The first approach, to use culture as a predictor of individual behaviour in an international team, does not answer the necessary three questions raised in Section 2.3.3.1 for the reasons below:

1. Nationality is not an adequate substitute for culture, but there is no current viable alternative and it is the factor that companies use to distinguish international teams from national ones. While being aware of the limitations, such as its external rather than internal focus and the very different levels of ethnic homogeneity within national borders, it will be used to underpin this study.
2. The research on value dimensions has mostly been 'static' (Sekaran 1983, Triandis 1994) - using questionnaires and being based on aggregate scores of individuals. It cannot therefore accurately measure an individual's behaviour nor predict behaviour or adaptation. Groups of one nationality have been compared with groups of another in the hopes that they will demonstrate the cultural stereotypes generated from the theoretical approach (eg. Schacter et al 1954, Cox et al 1991) and to some extent they have. However, for all the difficulties explored, this has not been tried at the individual level in mixed teams.
3. There is no way of clearly separating cultural or personality antecedents of behaviour or arriving at a global definition of personality.

These three essential problems and the outcomes of the other additional points raised point towards using the second approach and to studying international teams within the context of multinational organisations.

This second approach will observe and calibrate the interaction and examine the relationship to cultural variables in the composition of the teams that affect that interaction.

The review so far has shown five possible culturally determined inputs for a revised group process model that can provide a suitable theoretical underpinning. There are many established

'inputs' (Hackman and Morris 1975) that affect team process and international teams are just as likely to be affected by them as national teams. After learning the lessons of cross cultural methodology, the review will examine established inputs looks to see which ones are likely to be most affected by culture and if they change the five factors already identified.

The gap in descriptive knowledge of possible communication problems points to using multiple methods; that is both a quantitative method to measure established hypotheses, as well as a structured observational technique to pick up other factors that are affecting the dynamics.

The literature survey has so far brought the focus onto between - skin rather than within-skin research (Bochner 1986) and the importance of the organisational context suggests that field research in a number of companies as opposed to experimental research would give the best results.

2.4 Part Three: Methodological Issues In Cross Cultural Research

'Cross -cultural research is like virtue:- everybody is in favour of it, but there are widely differing views as to what it is and ought to be'

Frijda and Johoda 1966

Much has been written on the methodological problems of cross cultural research. Some of it is levelled as straight criticism of researchers in the field and some attempts to offer constructive solutions to the numerous difficulties.

While a few studies of cross cultural differences and discussions on methodology began to take place in the 1950's (eg. Prothro and Melikian 1954a, 1954b, 1955, Schacter et al 1954, Eggen 1954) the field began to flourish in the 1960's, beginning with Milgram's (1961) experiments on nationality and conformity between Norwegians and Frenchmen, and then driven by Triandis' and Berrien's emerging work on values, stereotypes and frequency of contact (eg. Triandis and Vassilou 1967, Triandis 1967, Berrien 1966, Berrien 1969).

The methodological issues created by fusing the already established fields of anthropology, sociology and psychology were becoming apparent in the 1960's (Campbell 1961). Berrien (1967) warned that 'unless these problems are defined and examined, there is some danger that we may accumulate data having little generality and less validity'. After laying out the Etic-Emic dilemma historically and practically, Berry (1969) concluded that 'without some established

framework for making cross cultural comparisons, I can only foresee an accumulating hodge-podge of unrelated anecdotal studies’.

The focus over the last thirty years has been to have periodic reviews of both the progress and lack of it, both theoretically and methodologically (eg. Roberts 1970, Adler 1983,1984, Adler, Doktor and Redding 1986, Barratt and Bass 1976, Bhagat and McQuaid 1982, Lonner and Berry 1986, Triandis, 1972, 1983, 1992, 1994, Boyacigiller and Adler 1991, Dunphy and Stunneberg 1984, Child 1981, Redding 1992). A few authors have also worked to outline important issues for research or to devise typologies for cross cultural management studies (Roberts and Boyacigiller 1983, Adler 1983, Adler 1983).

On the whole, the reviews (eg. Roberts 1970, Bhagat and McQuaid 1982) suggest that Berry’s warning went unheeded and both Adler(1983) and Redding (1992) have made efforts to create a field in which to plot the hodge-podge. Redding (1992) warned that we may have caused ‘at least thirty years waste’. He suggests that one of the problems is that the sociological perspective has not been integrated, because including that perspective immediately raises questions about research legitimacy.

Specific cross cultural methodological problems will first be summarised in a table in which comments are made if the problems do not seem self explanatory. In the interests of brevity, this table will not be discussed. Rather a matching table of suggested solutions will be presented and lessons for this piece of research highlighted.

Table 2.2 Methodological Problems

Methodological problem	Mentioned by	Detail/Examples/comments
<u>Loose or unrelated definitions of culture</u>	Roberts and Boyacigiller 1984 Redding 1992 Child 1981 Nasif 1991 Triandis 1994	All writers agree that there is no one agreed definition
<u>Research questions</u> Identical or equivalent across cultures? Translation techniques and methods Researcher bias Equally important, relevant, appropriate? Difficulties of rigour Looking for causal relationships necessarily involves a large array of variables	Eggen F 1954 Berrien 1967 Berry 1969 Drenth 1975 Heller 1975 Hepworth 1978 Adler 1983 Sekaran 1983 Nasif 1991 Frijda and Johoda 1966	Hepworth (1978) and others argue that an experimenter is required to be an ethnographer of the cultures in which he conducts experiments. The effect of culture, language on attitudes and behaviour has to be determined in each separate case. Heller (1985) points out how only certain types of stimulus questions seem to generate 'country clusters' as found in Hofstede's and now Trompenaars research.
<u>Sampling</u> Size of sample Mix too often based on convenience and field research limitations, eg. only two cultures Representative vs matched samples Independence of samples Equivalence of samples Accurately describing the characteristics of the samples	Berrien 1967 Adler 1983 Drenth 1985 Sekaran 1983 Nasif et al 1991	As similar factors behave differently in different cultures, demographically similar samples may not be equivalent. Most studies have used students and managers. Important no to control out differences (Berrien 1967) Seemingly separate samples may be 'contaminated' by cultural diffusion and mass communication (Sekaran 1983)
<u>Measurement tools and instrumentation</u> Structured or unstructured research Equivalence issues of Conceptual/ functional, construct operationalisation, language, items, variables, scaling and experimental manipulations Scaling affects answers	Adler 1983 Nasif 1991 Hui & Triandis 1985, 1989 Triandis 1983, 1994 Heller 1985	Stening and Everett 1984 Different cultures responded differently to seven point scales. Hui C H & Triandis H C 1989. Non Hispanics avoided extreme ratings on five point scale but not on ten point scale. Ten point scale reduced Hispanic positive extreme ratings. Yang and Bond 1980, language affected the answers of bilinguals. Different information from interviews than questionnaires Adler 1983

<p>Administration</p> <p>Equivalence of administration Equivalence of response eg. to written vs verbal, familiarity, experimenter, presentation</p>	<p>Adler 1983 Triandis 1994</p>	<p>Bond and Cheung 1984 found the nationality of the administrator affected the results. Difficulty in some cultures of writing down personal information. Perceived status of researcher may alter response Triandis 1994</p>
<p>Analysis</p> <p>Levels, eg.: data collection at one, inference at another Univariate vs multivariate Parametric vs non parametric Qualitative versus quantitative Distinguishing Emic and Etic variables</p>	<p>Adler 1983 Berrien 1967 Sekaran 1983 Nasif et al 1991</p> <p>Galtung 1967</p>	<p>Danger of Emic / Etic biases in analysis Berrien 1967 Quantitative may create etic analysis Galtung 1967</p>
<p>Particular field research issues</p> <p>Messy Settings difficult to conceptualise Different values Expensive, time consuming, operational problems Lack of data Researchers do not build on existing theory Language problems Gaining access Confidentiality and trust Analysis and Communication of results</p>	<p>Wright, Lane and Beamish 1988</p> <p>Munroe & Munroe 1986</p>	<p>Expense and time most often cited reasons for not doing cross cultural field research. Wright et al 1988</p>
<p>Timing</p> <p>Time works differently in different countries</p>	<p>Roberts and Boyacigiller 1984 Nasif et al 1991</p>	<p>Speed at which questionnaires are filled and results remain relevant is very different in different cultures</p>

Table 2.3 Methodological Solutions

Methodological solution	Mentioned by	detail/examples
1. Defining culture Be pragmatic Base it on an existing model	Roberts and Boyacigiller (1984) Bhagat and McQuaid (1984)	
2. Relevant research questions Multiple national research teams Use of local researchers	Triandis 1972 Adler 1983 Sekaran 1983	Triandis et al 1993 Buss et al 1990
3. Sampling Rational selection of cultures, eg.: eight culture sampling on bipolar dimensions Simultaneous factor analysis to establish equivalence In-depth emic sampling Unobtrusive, non reactive methods such as participative observer or structured methods. Developing methodologies that utilise an etic theoretical framework and emic operationalisations of the variables (eg. Thurstone Scaling)	Triandis 1994 Triandis 1983	Triandis et al 1993 Buss et al 1990 Triandis et al 1993
4. Measurement and instrumentation and 5. Administration Multiple methods and in depth knowledge of the cultures being studied	Triandis 1972 Adler 1983 Brislin, Lonner and Thorndike 1973	M Y Brannon 1993

5. Analysis	Sekaran 1983 Adler 1983 Nasif et al 1991	Triandis et al 1993
Multivariate statistics		Leung and Bond 1989
Multidimensional scaling	Hui and Triandis 1985	Wigand and Barnett 1976 Smith, Dugan and Trompenaars 1994

2.4.1.1 The definition of culture

This has been discussed at some length in part one of this literature search. The advice has been to be pragmatic (Roberts and Boyacigiller 1984) and if the research is to use a theoretical approach to culture, to base it on strong theoretical underpinnings such as Triandis's model for subjective culture (1972)

2.4.1.2 Relevant research questions and multinational research teams.

The ongoing analysis between etic and emic factors (eg. Leung and Bond 1989, Triandis et al 1993) will help identify those factors that do have cultural relevance and then allow for more variation around a central theme at the local emic level. Clearly multinational research teams, with members who understand how any one concept is or is not operationalised at the local level, are very helpful in distinguishing meaningless questions from relevant ones.

2.4.1.3 Sampling

As better links are forged between international business schools, and the interest in international research picks up, there is hope that lack of funds and contacts will not continue to limit samples to two or more convenient nationalities. Large sample survey research, such as Hofstede (1990) and Trompenaars (Smith et al 1994) can create a base from to which to choose comparative quadrants of cultures (Triandis 1983) based on a strong theoretical underpinning. The practicalities of access may still create problems for all but the most high status field research.

2.4.1.4 Measurement and instrumentation and Administration

The power of multiple methods, of ethnography (unobtrusive natural, Triandis 1983) combined with questionnaires (obtrusive natural, Triandis 1983) comes out in Brannon's work (1993). Triandis (1983) has long recommended at least building a questionnaire from the data gathered

by local researchers in unstructured interviews. Bond and Yang's findings (1982) discussed later stress the need to be aware of the language being used and the status effect of the experimenter.

2.4.1.5 Analysis

Sekaran (1983) stresses how the use of multivariate analysis techniques can help cross cultural statistical research, such as factor analysis (eg. Hofstede 1980, Leung and Bond 1989), component analysis (eg. Tzeng and Osgood 1976) and multidimensional scaling (eg. Raveed and Sekaran 1979, Smith et al 1994, Wigand and Barnett 1976). For instance, multidimensional scaling can assess the interrelation of different dimensions used by different authors (eg. Smith et al 1994) and some of the effects of non equivalent data and samples.

2.4.2 Implications for this research

The cross cultural methodology literature highlights some of the paradoxes of the field. Recognition of the same methodological problems comes up again and again over the last 40 years and yet the field remains fragmented with no concerted effort to overcome the problems. Certain studies (eg. Wai Ling Young 1982, Triandis et al 1993) highlight the importance of mixed research teams or 'local' people working on reinterpreting findings in their own cultural contexts. However the practical difficulties of expense, language, co-ordination, equivalence and integration of mixed team, mixed method, multiple nationality research remain.

In terms of integrating the field as a whole, there has been virtually no integration of cross cultural management research, intercultural communication research and group research. For instance, it appears that only with the recent synergistic idea of intercultural interaction has the cross cultural management field begun to correlate with some of the intercultural communication research. What this part of the literature study offers is a heightened awareness of all the limitations and difficulties involved in cross cultural research.

The pragmatic advice of Roberts and Boyacigiller (1984) to choose an issue and build the cultural issues into proximal variables seems a useful way to approach setting the theoretical and methodological frame for this study. Furthermore a mixed emic and etic approach with multiple research methods would seem a wise step, given that this researcher is likely to be working alone and vulnerable to researcher cultural bias, using only a structured observational approach to examine the effects of cultural factors on the group process. On the other hand there may be criticism of mixing a grounded theory approach to cultural issues with a quantitative hypotheses testing approach to group process. The complexity of the cross cultural issue and the lack of

established theoretical underpinnings points to the need to remain focused, humble and contained in this initial exploratory study.

2.5 Part Four: Relevant Group Research

2.5.1 Using a process model: Input - Process - Outcome

This last section of the review focuses on the search for clarity on whether or not the five cultural variables that have emerged from the review so far, are comprehensive or sufficient enough to capture the effect of the cultural differences of the individuals on selected processes and outcomes of international teams. The group process model will be laid out in three tables, one for inputs, one for processes and one for outcomes. The relevant parts of the tables will be drawn out and discussed in the search for the appropriate input variables, the most relevant process to measure and the most useful outcomes. The papers or books by the named authors were also categorised into review articles, prescriptive writing, descriptive, experimental and discussive pieces.

Table 2.4 Inputs

Rev = review, Pre = prescriptive, Des = descriptive, Exp = experimental, Disc = discussive

Input factors	Discussed/ researched by
INDIVIDUAL LEVEL	
Personality	Stacey 1993 MBTI (pre) Sampson 1989 (disc) Driskell, Hogan & Salas 1987
Cognitive schema	Triandis 1987 (rev)
Attitudes/beliefs/Emotions/ Motives/goals/Levels of effort	Hackman and Morris 1975 (rev)
Values/ value dimensions	Cox et al 1992
Functional Background	Ancona and Caldwell 1992 (exp)
Age/length of tenure	Ancona and Caldwell 1992 (exp)
Knowledge and skill	Hackman and Morris 1975 as part of performance strategy model (exp)
Best Member	Shaw 1981 (exp) Watson et al 1991 (exp)
Status	Bales (exp) and further studies Cartwright and Zander 1969 (rev,dis)
Gender	Aries (exp) 1976 Hoffman et al 1962 (exp) Hill 1982 (rev)
Cultural background/ethnicity	Katz et al (exp) 1958, 1960 Ling 1990 (exp) Watson et al 1993, (exp)

Preferred patterns of speech/conversational style	Tannen (exp, rev) 1984, 1989, 1991
Preferred group behavioural patterns	Lam 1986 (exp)
Leadership style/role	Bales 1950 (exp) Hollander 1958 (the) Brown 1988 (rev) Triandis 1994 (rev) Chemers et al 1966(exp) Anderson 1983 (exp) Graen and Wakabayashi 1994 (desc)
GROUP LEVEL	
Norms (initial and developed)	Gersick 1989 (exp) Hackman and Morris (1975) (rev) Brown 1988 (rev)
Composition and structure/ Majorities/Minorities	Laughlin 1988 Maass and Clark 1984 (rev) Latane and Wolf 1981 (rev) Nemeth 1986 (exp) Tajfel 1981 (des, rev) Moscovici and Faucheux 1972 (rev) Blau 1977 (disc)
Heterogeneity and Inequality Balance, and skew	Kanter 1977 (disc)
Size	Bales & Borgotta 1955 In Hare et al (exp) Thomas and Fink 1955 in Hare et al.(exp) Hare 1962 (rev) Steiner 1972 (pre)
Nature of the Task	Steiner 1972 (pre, rev) Shaw 1976 (rev,pre) Hackman & Morris 1975 (rev of earlier exp) Laughlin 1980 (rev. exp) Hill 1981 (rev) McGrath 1984 (rev) Jackson 1992 (disc)
'Cohesiveness' (Initial and developed) Sharing professional cultures	Keyton & Springsteen 1990 (rev) Cartwright and Zander 1968 (rev)
ENVIRONMENTAL FACTORS	
Reward structures	Steiner 1972 (pre, rev) Hackman 1990
Organisational culture	Sundstrom et al 1990
Intergroup and lateral relations External networks	Brett and Rognes (1986) Ancona and Caldwell 1988 (exp)
Working together and apart	Bartmess and Cerny 1993 (disc)

2.5.1.1 INDIVIDUAL FACTORS

2.5.1.1.1 Personality

Tannenbaum et al (1992) report that personality variables such as sociability, adjustment and likeability may be related to team performance. Personality is clearly a factor in how any one individual behaves in a group. These differences may be expressed through individuals having preferred ways to process information (eg Myers Briggs Personality Types, Myers and McCaulley M H 1985, Thorne 1987) or preferred group roles (eg. Belbin 1993). As described in part one, the literature shows that there is no clear line between personality and cultural influences, and how a person defines themselves beyond his/her physical body is culturally and contextually dependent (eg. Marsella et al 1985).

There is a range of personality tests. The Myers Briggs Personality Type Indicator (Myers and McCaulley 1985) is based on psychological archetypes, which may travel better across cultures than some of the other more behaviourally oriented questionnaires, despite its limitation as a strictly comparative tool.

Stacey (1993) suggests that the behaviour pattern of groups would be driven by the understanding and misunderstanding generated by the range of temperaments of the people constituting the group. Extrovert- introvert is a main dimension in the Myers Briggs Type Indicator. There is no evidence that extroverts talk more (enact more speech acts) than introverts when people talk in pairs, although the topic focus and content is different (see Thorne 1987). However there is some evidence that extroverts talk more in triads or group situations (Bem and Allen 1974, Shaw 1976).

There is only a small amount of evidence that there are significant cultural norms of MBTI in different countries. Abramson et al (1993) found that Japanese managers were higher on Perceiving, Sensing and Feeling than Canadian managers who preferred Intuiting, Thinking and Judging. They suggest that these findings support the Canadian tendency to seek fast decisions and rush to closure and the Japanese preference to collect large amounts of information before making decisions. While MBTI is as vague a predictor of behaviour in mixed teams as value dimensions, testing the participants before the teamwork may give some indication of individual cognitive preferences.

2.5.1.1.2 Individual antecedents of behaviour: Cognitive Styles, attitudes, beliefs and emotions; values and value preferences

As a result of the discussion in the first part of this chapter, these factors will not be examined in this research. Cognitive styles (eg. Redding 1989), underlying attitudes and beliefs (Adler, Doktor and Redding, 1986 Maruyama 1985) and emotions (Mesquita and Frijda 1992, Eckman et al 1987) have all been shown to differ in different cultural contexts. Researchers have also shown that cognitive maps can change (in mono cultural groups) as a result of individuals working together (eg. Bougon et al 1977, Crossan et al 1991)

These 'within -skin' differences are probably the most profound and yet the most difficult to research, especially in an etic way. The message is that although behaviours may look the same on the surface, their rationale and causal logic may be significantly different. Value dimensions have been discussed at length in part one. The implications of individualism-collectivism has received the most analysis and research (see Smith et al 1994, Triandis 1994, Cox et al 1991) and could perhaps be the most relevant one for international team research.

2.5.1.1.3 Other sources of heterogeneity; functional differences and similarities; differences in age and tenure: knowledge and skills and status

The different effects of different occupational roles has been recognised for some time (eg. Triandis 1977, Cummings et al 1971). There is a developing field of anecdotal and prescriptive work on the inherent diversity, processes, reward systems and advantages of cross-functional teams (eg. McCorcle 1982, Pearson 1983, Kumar and Gupta 1991, Loehr 1991, Meyer 1994, Parker 1994). Accounts of their usefulness (eg. Kumar and Gupta 1991) are balanced with descriptions of the difficult issues (eg. McCorcle 1982, Loehr 1991) and prescriptions for effectiveness and leadership criteria based on different levels of experience (eg. Pearson 1983, Parker 1994,). Presumably functional similarity could act as a source of cohesion despite national differences and a source of dispersion in even homogeneous teams. There is not yet any understanding about whether nationality or functional role has a more powerful influence on team dynamics.

The basis for tenure (Ancona and Caldwell 1992) is likely to be different in different cultures and age is likely to be closely related to status which is conferred differently in different cultures (Trompenaars 1993). Laurent (1983) found evidence that status is more or less dependent on factual knowledge in different cultures. Bales (1950) and subsequent researchers have shown that professional status often affects the amount someone talks and is then subsequently talked to, as

well as how seriously they are taken and the effect on different stages of group development of high status input

The effect of homogeneous and different levels of knowledge and skill has been well researched in teams especially in relation to when a team does better than its best member (eg. Hill 1982). Creative, discretionary, judgmental and problem solving tasks benefit more from heterogeneous levels and types of knowledge and skills than co-ordinative, calculative or intellectual tasks. Knowledge may also be stored and expressed in different ways (see Triandis and Albert 1987, Redding 1990, Nakamura 1964).

2.5.1.1.4 Gender

Measures of gender differences in teams have tended to find differences in the style and length of participation. For example Aries (1983) and Tannen (1991) noted that their all female groups scored higher on team spirit and liking the group than the all male groups. Kanter (1977) looked at the gender issue as a compositional factor of minority /majority balance within teams and the likely resulting sets of coalitions or subgroups. It is also clear that the status and working patterns of women varies from culture to culture, (see Adler and Izraeli 1994) and even between cultures thought to be more similar, such as Germany, Britain and France (eg. Truss 1992).

2.5.1.1.5 Cultural background and ethnicity

The studies in heterogeneous teams which often focus on heterogeneity around ethnicity rather than nationality have been discussed in part one of this survey. What stands out is the point that the effect of the different status of ethnic minorities in different countries, due to different socio - economic histories(eg. Furnham and Bochner 1986, Moghaddam and Taylor 1987, Hewstone and Ward 1985, Taylor and Jaggi 1974) may affect the status of different members and resulting interaction in these teams.

2.5.1.1.6 Preferred speaking patterns and behaviours (verbal and non - verbal)

Back-channelling, overlap, simultaneous sync talk and interruption

Murray (1985) suggests that 'analysts' have separated the act of beginning to talk while someone else is still speaking into 'back-channelling' (a supportive grunt or yeah or even short sentence) and simultaneous speech or overlap. He points out that establishing the difference is an interpretative act on behalf of the researcher. Other linguists (eg. Tannen 1989, Hayashi 1988 and Murray 1985) carry on to suggest that simultaneous talk is again of a logically different type

than interruption (eg. Bennett 1981). Tannen (1989) suggests that overlap is 'etic' and 'one need only ascertain that two voices are going at once'. Interruption on the other hand is 'emic' and is an interpretative not descriptive act.

Tannen (1990) pours scorn on 'researchers who come to their conclusions by recording conversation and counting instances of interruption'. She points out that 'in identifying interruptions they do not take into account the substance of the conversations they studied, what was being talked about, speaker's intentions, their reaction to each other and what effect the 'interruption' had on the conversation.' To know that, Tannen (1990) suggests that you have to know a lot about both the speakers and the situation.

There is a little evidence (see Murray 1985) and some discussion (eg. Tannen 1990, Trompenaars 1993) that different cultures tend to have different patterns of overlap and use of silences between speech (eg. Lehtonon J & Sajavaara K 1985), and counting overlaps should pick this up. However, Tannen (1990) goes on to warn that cross-cultural interruptions (and presumably overlaps) may (or presumably may not) happen as much from the differences in conversational style as from the intention to 'violate someone else's speaking right'.

These observations imply a methodology of video playback and review to determine what each participant considered as supportive or non supportive simultaneous speech in cross-cultural workgroups. The realities of field research may well limit the availability of the participants to do this.

Tannen (1989) points out that previous research findings all support the notion of co-operative simultaneous speech where conversation is not always in all cultures, a fight for the floor. Hayashi (1985) found equal amounts of simultaneous talk between Japanese talking in Japanese and Americans talking in American, but the synchrony of the overlapping was very different in quality. The Japanese speakers talk simultaneously in order to attain a communicative goal such as enjoying conversation in harmonious atmosphere by maintaining and supporting the partner's 'floor'. Therefore their simultaneous talk often creates synchronous talk that makes simultaneous talk a rhythmically coherent communicative behaviour (and body language is used emphatically to support the rhythm). On the other hand, American speakers create much less sync talk, as they are more conscious of the interactional rule of 'one speaker at a time' compared to Japanese speakers. Therefore American speakers' simultaneous talk often occurs in competition to gain the floor.

It is imaginable that Japanese people working in English will not get the same pleasure out of talking at the same time, and therefore may not tend to overlap as they would in Japanese. Furthermore, in some cultures, such as Japan and Finland, speakers prefer not to speak in potentially confrontational situations, since talk is seen as a liability.

There is quite a lot of support for the hypothesis in this literature that people's speech habits are influenced by their situational context (eg. Aries' research on non mixed and mixed male-female groups 1976) and so they need ethno-methodological (eg. emic) analysis as well as a quantitative (etic) analysis.

2.5.1.1.7 Preferred styles of group process

Many of the issues affecting group process, such as discussion style and leadership have already been discussed. Regarding preferences for participation, Lam (1986) found distinct differences between Chinese Americans and American Caucasians' attitudes and behaviour to participative activities. Lam suggests that the Chinese have a desire for individual autonomy and self expression, but expect that to be expressed within the proper framework. Thus, the Chinese preferred using more formal modes of participation and they preferred to wait to be asked for their opinion. She points out that to be accommodating does not necessarily mean losing one's independence, despite the fact that the Chinese capacity to restrain from assertive behaviour, and to show reserve and patience has often been interpreted negatively by those who believe that participation means assertiveness, openness and non - conformity. Lam (1986) ends by putting the onus on supervisors to set up the right environment and to use a variety of methods to involve their employees.

2.5.1.1.8 Leadership style

The attributes and attribution of leadership and the impact and effectiveness of different leadership styles has received an large amount of attention and research in the literature. Leadership has also been looked at as a process (eg. Hollander 1978) and there is much discussion that patterns of leadership need to change towards 'new' leadership, which tends to mean more participative (Triandis 1994, Misumi 1985, Semler 1989), visionary (Senge 1992), intuitive (Vaill 1989), ethically centred (Frost and Egri 1990), collaborative (Limerick 1990), and able to handle diversity (Morrison 1992) and less controlling, normative and autocratic. Hierarchy and hence cultures still demonstrating high levels of power distance (Hofstede 1990) are seen as undeveloped and undemocratic.

Misumi (1985) suggested that leaders who emphasise both performance and maintenance were rated as superior to any other combination on those two factors in many cultures and settings. Anderson (1983) found that five leadership factors, patriarchal consideration, structuring for surveillance, friendship control, egalitarian participation and power aggrandisement were as important for effective leadership of heterogeneous teams as for homogeneous teams. She concluded that the greater communication difficulties made it more difficult for the leader to fulfil his functions and suggested that cross cultural training may be necessary (see Chemers et al 1966). Finding common general threads in what leaders need to do is perhaps understandable but narrowing down to one particular style, i.e. how they should do it, is unhelpful.

For instance, quoting Dobyys et al's (1971) high level intervention in Peru, Triandis (1994) suggests that 'even illiterate peasants can use participative management effectively if they are taught to do so'. Such an evaluative innuendo could create problems in cross cultural teams, where some members may still feel that the best way to operate is to have one person allocating tasks (Trompenaars 1993 pg. 143). His comments also seems to reflect an American desire for universality (Nakamura 1964, Hampden Turner and Trompenaars 1993). He does not consider whether the patterns of so called participative management are the same or different in different cultures (eg. Lam 1986). As described earlier, Lee (1993) found interesting differences regarding participation between the leader / follower relationships in Hong Kong and Australian Banks.

2.5.1.2 Individual inputs particular to international teams

Most of the variance on participation from individual inputs may turn out to be ones of degree around inputs for any team although some receive more attention (eg. value differences) in the cross cultural literature than in the group literature. Some other inputs are particular to international teams.

2.5.1.2.1 Differences in common language usage and fluency

Aside from the obvious point that different levels of fluency will affect levels of participation, there are different conventions and principles that guide how conversational intentions are signalled in different Englishes around the world (Mishra 1982). Behind how someone talks in English as a second language, are the cognitive patterns resulting from the structure of their own language.

Linda Wai Ling Young (1982) describes findings that the preferred Chinese sentence type is the topic-comment utterance, as opposed to the preferred subject-predicate format of many European

languages including English. There is a Chinese preference for the steady unravelling and build-up of information before arriving at the important message. English speakers listening to Hong Kong Chinese businessmen speaking in English, could not distinguish the main points and did not understand how the important information was highlighted. The Chinese discourse also did not provide a thesis or preview statement to orient the listener. Wai Ling Young points out that Brown and Levinson's politeness theory framework would ascribe negative politeness to the Chinese style (Brown and Levinson 1987). However the Chinese said they would be seen as 'rude, immodest, pushy, inconsiderate and that they would lose face for acting aggressively' if they had put the information at the beginning and become 'positively polite'. These observations and examples highlight the possible danger of using frameworks from one culture (such as Bales' Symlog 1989) to interpret any behavioural intentions behind other cultures' usage of English as a second language.

The other important point is that there are many 'second language Englishes' (eg. Kachru 1982, Smith and Nelson 1985) and their structure and content and complex interrelationships depend on the historical context in which English was adopted as well as the structure of the mother tongue of the speakers. Bond and Yang (1982) point out the possible influence of the historical relationship between cultures, in this case the Hong Kong Chinese to the English, on how people express themselves and either adapt or confirm their values in a second language. Chinese people may need to affirm certain aspects of their cultural identity in relation to British culture when asked to use English that they do not feel the need to do when speaking Chinese. They may be happy to adapt other aspects that they do not see as important to their group's continuing cultural identity.

It is not only what English is spoken that will differ between members of international teams, but how it is spoken will also have an impact. Lee and Boster(1992) found Korean listeners attributed credibility to speakers who spoke slowly (if they were male) whereas American listeners attributed credibility to speakers who spoke quickly. They suggest a variety of cultural explanations for their findings, such as in Korea the importance of taking time to ensure nothing you say could cause offence, or possibly the respect for older people who normally speak slower and the fact that women whether they speak slowly or fast are not seen to be as credible as men. Kim (1991) found evidence that suggests that the less fluent a team member, the more they are likely to be excluded from the team.

The additional comparative work between Chinese and other cultures of Singh et al (1962) and Bond (1979) on attitudes and personality, Bond (1986) and Ho (1974) on the concept of face, Yum (1988) on communication patterns, Hsieh et al (1969) and Kuo et al (1979) on Locus of

control, Huang et al (1973) and Meade and Barnard (1973) on conformity, creates a body of evidence which suggests that there will be noticeable difference in the patterns of interaction between Hong Kong Chinese and Anglo- Saxon team members in this research.

In summary, many of the input factors in the group process model are affected by culture. However the literature review has already focused this study on ‘between skin variables such as leader/follower relationships, language fluency and the different uses of English and role related status differences, and away from ‘within - skin’ cognitive and value differences. This part of the literature review strongly supports the fact that these ‘between skin’ input variables are influenced by cultural differences .

2.5.1.3 GROUP LEVEL INPUT FACTORS

2.5.1.3.1 Balance and imbalance in composition

Blau (1977) makes a useful distinction between heterogeneity and inequality. Heterogeneity comes from different kinds of mix and inequality from intrinsic or extrinsic factors that affect the perception and response to someone’s social standing.

Kanter (1977 Pg. 209) gives a useful description of the difference between uniform, tilted, skewed and balanced groups in regards to two social categories, being either male or female. Skewed teams could contain ‘token’ individuals, who are treated according to three perceptual tendencies: visibility, polarisation or assimilation. Li (1994) tested tokenism/skew, balance and homogeneity between American Caucasian and ‘oriental’ males measuring self efficacy, token behaviour and participation. Being a token had a profound effect on participation, which could be mitigated through self - efficacy in communication. Li established that both dispositional and environmental factors affected individual behaviour and participation rates.

Blau (1977) points out that a team of ten with two groups of five from two different cultures is balanced, but not as heterogeneous as a balanced group of ten people all from different nationalities. Such a group is five times more heterogeneous. So it will be important to scale each group in terms of both balance and heterogeneity. In imbalanced groups, the representation of nationalities can be said to be unequal and may affect the dynamics, but the social inequalities may also have a powerful influence.

2.5.1.3.2 Majority, minority; Subgroup dominance of majority and exclusion of minority.

Laughlin (1988) reports Asch's two enduring findings as (a) a lone minority person will conform to the majority, even when what the majority is saying is visibly wrong and (b) conformity is dramatically decreased if there is a minority partner who is speaking the truth despite the majority view.

Moscovici and Faucheux (1972) addressed the reciprocal question of the influence of a minority on a naive majority. This research highlighted the importance of the behavioural style of the minority and suggested that some members of the majority may conform to the majority preference in public, but accept the minority preference in private.

Maass and Clark's (1984) excellent critique of the area found that rigid vs flexible negotiation style, the type of discordance of the minority position with the majority, whether the zeitgeist is favourable or unfavourable (eg. the attitude of the company towards national diversity, Adler 1986, Ling 1990) and the issue of double minority status, (eg. being a woman and a low status national), all affect the influence of the minority on the majority. There is no research on the processes involved but much discussion about them (eg. Maass and Clark 1984, Moscovici 1985, Nameth 1986, Latane and Wolf 1981, Tamfor and Penrod 1984).

There are likely to be majority, minority type issues in the international teams according to the number and status of different nationalities. Qualitatively, this research will be able to state what (in the limited opinion of the researcher) are the main causal factors for majority / minority behaviour and how it affects participation

2.5.1.3.3 Types of task

Some typologies of tasks are based on performance processes, some on the task and knowledge interdependencies of members, some on product differences and product scoring or criterion differences (eg. Shaw 1976, Laughlin 1980, 1988, Steiner 1972, Hackman and Morris 1975). McGrath (1984) integrated these approaches into 'the group task circumplex'. He proposed four general processes, to generate (alternatives) to choose (alternatives), to negotiate and to execute. His types fell into eight categories, two within each of the larger general processes. Planning tasks, creativity tasks, intellectual tasks, decision-making tasks, cognitive conflict tasks, mixed-motive tasks, contest/battles/competitive tasks and performance/psycho-motor task. In McGrath's model, these eight were further aligned along conceptual/behavioural and conflict/co-operative axes. For this study it will be important to note the type of task on McGrath's comprehensive categorisation listed below.

Table 2.5 Task types

Type number	Task type	Purpose
Type 1	Planning tasks	Generating plans
Type 2	Creativity tasks	Generating ideas
Type 3	Intellective tasks	Solving problems w/correct answers
Type 4	Decision making tasks	Deciding issues with no right or wrong answer
Type 5	Cognitive conflict tasks	Resolving conflicts of viewpoint
Type 6	Mixed - motive tasks	Resolving conflicts of interest
Type 7	Contests/ battles/ competitive tasks	Resolving conflicts of power
Type 8	Performance / psycho motor tasks	executing performance tasks

The important question is whether some types of tasks show up the effects of diversity more than others. Some authors (eg. Jackson 1992, McGrath 1984) distinguish between demographic inherent variables 'such as sex and race, values, personality and attitudes' and task related attributes such as specific skills and knowledge needed to perform the job. The work on majority /minority influence was almost all done on judgmental type tasks, (McGrath's decision - making tasks). The work on heterogeneous vs homogeneous teams has used a greater variety of task types eg. Watson et al (1993) used decision - making tasks, Triandis et al (1965) creative tasks and Kirchmeyer and Cohen (1992) mixed motive tasks, but no comparisons can be drawn.

This work has also consistently used uniform homogeneous vs balanced heterogeneous teams (Watson et al 1993, Kirchmeyer and McClellan 1991, Katz et al 1958, 1960) or dyads (Triandis et al 1965). As many 'natural' multicultural teams are 'skewed' or 'tilted', there is still virtually no predictive power in the findings to distinguish how different task types will change the influence of demographic and psychological variables or levels of knowledge and skills.

One might surmise that knowledge and skills play a larger role in performance/psychomotor tasks and intellective tasks and that mixes of demographic variables would have more influence in

decision making and creativity tasks. There have been no empirical studies to begin to assess the validity of such types of models. So although in this study, the task type of each group studied can be noted, its influence on the way the diversity of the group will or will not develop, is unknown, as will be its exact effect on the outcomes.

In summary; balance, skew, minority and majority subgroups are all likely to affect the balance of participation in the teams. Moreover the type of task is likely to affect the extent that the different cultural backgrounds will influence on the process of the task.

2.5.1.4 Environmental Factors and their Cross Cultural Role

The four main environmental factors that can affect participation in teams are reward structures (Hackman 1983, Steiner 1972, Parker 1994, Snow et al 1993, Tannenbaum et al 1992), the organisational culture (Ling 1990, Sundstrom and Altman 1989), the external boundaries and networking (Gladstein 1984, Ancona and Caldwell 1988, 1990a 1990b, Tannenbaum et al 1992) and the geographical distance (Bartmess and Cerny 1993). Organisational culture and the prevailing attitude towards diversity as discussed in Part Two of this chapter are likely to have the most significant influence on the teams in this study. Extrinsic reward structures are unlikely to affect training teams, but may affect the operational teams in this study. There may be quite different types of intrinsic rewards that affect the motivation (Erez and Earley 1993) and subsequent participation of the teams in this study. These can be examined by looking at the team member's expectations before starting the team work.

2.5.2 Part Two: Process

The main choice to be made as a result of the next part of the review is deciding which particular aspect of the teams' interactive process should be the focus of this study. McGrath (1984) defines group interaction process as 'all of the behaviour of all of the members of an acting group, in relation to each other and in relation to the task/environmental aspects of the setting, while that group is in action' He further categorises the communication process, the task or action process which results in a task performance pattern and the attraction or acquaintance process which result in an interpersonal relationship patterns. These three patterns will in turn affect the interaction and the participants and create the influence process. The table below summarises some of the key aspects of these three aspects of the interaction process that have been categorised.

Table 2.6 Group Processes

Rev = review, Pre = prescriptive, Des = descriptive, Exp = experimental, Disc = discussive

Interaction / process developments in teams	Discussed and researched by
Communication Process	
Content Free - Paralingual Communication patterns	Chapple 1940, 1942, 1953 (exp) Dabbs and Ruback 1987 (exp) Leavitt 1951 (exp)
Content free - Patterns of behavioural and emotional categories	Bales 1953 Hare 1976 Hackman and Morris 1975 Dunphy 1972 Watson and Michaelson 1988 (exp) Hirokawa 1982 1983 (rev, exp)
Content Analysis/Data reduction	Gersick 1988 (exp) Lee 1993 (exp)
Action process	
Impact of performance review and Performance strategies	Tannenbaum et al 1992 (rev) Hackman and Morris 1975 (rev, exp)
Process patterns over time	Bales 1950 Dunphy 1964 Schutz 1958 Tuckman 1965, 1977 (Rev) Gersick 1988 Drexler and Sibbett (Pre)
Timing	Gersick McGrath & O'Connor 1995
Effects of tasks on group interaction	Hill 1982 (rev) Morris 1966 (exp) Sorenson 1971/2?
Effects of interventions	Hill 1982 (rev) Hackman et al 1976 (exp) Tannenbaum et al (1992) (rev) Watson et al 1993 (exp)
Attraction process	
Psychodynamic factors Socialisation over time/ new members	Schutz 1989 Moreland and Levine 1982 (rev) McGrath and O'Connor 1995 (disc)
Patterns of political power	Stacey 1993 (disc)

As described, heterogeneous teams can have greater communication difficulties (see part one; Kirchmeyer et al 1991, Watson et al 1992) than homogeneous teams yet none of the research describes what those difficulties are. There is little mention of whether heterogeneous teams approached tasks in a fundamentally different way than homogeneous teams, or have fundamentally different patterns of attraction. The communication processes would seem an

important place to focus and observational data may lead to some comment on what the difficulties are.

2.5.2.1 Communication processes

A review of the literature shows that there are three levels of communication process to be considered; participation, interaction and behavioural coding. These in turn can be analysed by content free analysis at the paralingual level (eg. Chapple 1940, 1942, 1953, Dabbs and Ruback 1980), content analysis data (eg. Gersick 1989, Lee 1993) and analysis of the type of speech act in terms of behavioural categories and emotional inputs (eg. Bales et al 1979, Polley et al 1988) respectively.

2.5.2.1.1 Defining participation, interaction and group process

The shorter Oxford English Dictionary (1973 edition) defines participation as 'the action or fact of partaking, having or forming a part of...a taking part (with others) in some action or matter'. Participation focuses on the actions of each individual and not necessarily on the effect that that action has on others. It could be measured by the number of times and length of time a person acts or partakes in the action of the meeting. The essence of teamwork is to increase the participation of employees in the organisation (Katzenbach and Smith 1993, Hackman (ed.) 1990). It is therefore a relevant starting point to analyse the effect of cultural differences on the interaction processes and outcomes of international teams. It also has the advantage of being open to minimum researcher bias as there will be little room for cultural interpretation in counting how many times and for how long each team member speaks.

Interaction, on the other hand, involves 'reciprocal action; action or influence of persons or things on each other (1832 in The Shorter Oxford English Dictionary 1973 edition). Both Chapple (1942) in dyads and Dabbs and Ruback (1987) in larger teams, measured content free interaction. The advantage of measuring interaction is that it can show up the pattern of who most often responded to whom as described in Katz et al's (1958) work in section one. Without interviewing team members, it will be difficult to interpret the reasons behind the emergent patterns.

Despite McGrath's (1984) broader definition, 'group process' is often used to be define the patterns of categorised behaviour, and is different from interaction (Polley, Hare and Stone 1988, Bales R.F. & Cohen S P 1979). Previous discussions in this chapter pointed out that cross culturally, this method would be most open to researcher bias and interpretation. The fact that people may adapt their behaviour to that particular mix of nationalities means it would be hard to

ascribe any pattern of behaviour to cultural conditioning or separate it from personality. The definitions given of interaction and participation at first sight offer a more objective measurement approach of counting actions and inaction regardless of how that behaviour may be interpreted or derived. Because the final decision is crucial to this research, each of the three measures of interactive process will be looked at in more depth.

2.5.2.1.2 Content free paralingual analysis

Chapple's chronometer (1940, 1942, 1953) counts the interaction of dyads; that is speech acts and the pauses or simultaneous talk surrounding them. Dabbs' and Ruback's (1987) highly sophisticated content free 'group talk' model can be seen as an extension of this. They focus on simultaneous talk and floor shifts using high technology recording methods. Dabbs and Ruback (1987) found that when the amount of talking was controlled for, leadership was found to be related positively to vocalising in one own turn's and negatively to emitting simultaneous speech in others' turns. At the group level, subjects rated their groups as having more spirit when there was more vocalisation, more simultaneous speech, more time spent in group turns and more equal distribution of talking among subjects. Dabbs' and Ruback's findings led them to the conclusion that simultaneous speech may be good at the group level (where it is associated with more group spirit) but not good at the individual level (where it is associated with lower ratings of leadership). They found that both interruptive and non interruptive simultaneous speech added to the positive evaluation of a group, but only interruptive speech added to the positive evaluation of an individual.

As content free analysis of participation looks the most promising, the extent of Bales' and others' findings are worth summarising. Bales (1951, 1953) found that some group members talk much more than others (note: all his research was conducted on North American predominantly males). He found distribution of participation in groups resembles a J curve and subsequent attempts to correlate it with a decreasing exponential function have been partially successful (eg. Tsai 1977, and see Fisek, Berger and Norman 1991, for extensive list of mathematical modelling Pg. 115). Bales found that those who talk, get talked to and so reply (Bales 1952). Tsai (1977) hypothesised an emergent pecking order in which people wait to see if the person above them is going to talk before talking themselves. If Chinese prefer to wait to be asked to talk (Lam 1986), one can expect steeper curves in a predominantly Hong Kong Chinese team than an Anglo-Saxon dominated team.

Bales (1951, 1953) also found that:

As the size of the group increases above five, the top man tends to get talked to more and the other members less and less up to an upper ceiling of 50% of the time.

Any given individual's rate of interaction will also be affected by the individual's 'position' in the group. Position can refer to any physical, psychological, social or environmental factors that create differences and status within that particular group.

The person who talks the most (the top initiator) addresses most of his or her communication to the groups as a whole (Aries (1976) found that this is also more true of men than women) .

Individuals seem to have relatively consistent rates at which they would interact if they were under hypothetical 'free running conditions'. Any given task-time situation seems to set an upper limit on the total communication of the group as a whole during that time period.

Bales (1953) suggests that groups with no designated leader tend to have more equal participation than groups with designated leaders of higher status. He and others (Norfleet 1948, Bass 1949) also found that the order produced by ranking individuals according to their 'basic initiating rank' on total amounts of participation is fairly highly correlated with the order produced by their own ratings of each other as to productivity: i.e. 'who has the best ideas and who does the most to guide the discussion effectively'.

Taking the last point first, one can imagine that there are particular cross national status issues in international teams, especially in large 'old colonial' multinationals where one or two nationalities perhaps of headquarters, industrialised countries tend to be given higher status than nationalities representing regional subsidiaries in developing countries. Only a field study within actual organisations will pick up this perhaps important 'position' variable. Stereotypes about the value of education in different countries, the expected levels of expertise, experience or breadth of knowledge and language abilities are also likely to affect people's 'position'.

Looking at some of Bales' other findings, it is also possible to imagine that there are different culture norms about speaking to the whole group or individuals and different degrees of expected formality and rates of preferred interaction. There is little discussion about the relationship of the participation rates of each individual and satisfaction with the group process.

Before closing this part of the discussion on content free analysis, it is worth noting that another important feature of interaction is rhythm and synchrony, not just at the non-verbal level

(Gudykunst and Ting-Toomey 1989, Hall, Chapple 1982, Condon 1982). Condon (1982) found that a speaker's movement was precisely synchronous with the articulatory structure of his own speech and that the listener's body also modulates in frequency, at least within 50 milliseconds, to the incoming sound structure of the speaker's speech'. He found the body rhythms associated with the consonant- vowel- consonant patterns of speech to be a common pattern across nationalities and languages at that level of analysis.

Working at a grosser level of analysis, Lomax (1982) found cultural differences in conversational style and rhythms, with the more 'industrialised' cultures losing a lot of the supporting rhythm of speech to express meaning. He suggests that 'in Northwestern Europe the relative infrequency of high pitch, alteration of voice quality, of emotional ejaculations, of fast tempo and of overlap lend a more sober tone to most conversation' (than for instance African or deep-south American).

2.5.2.1.3 Content free -analysis of behavioural categories

Both Bales (1958) and Philips and Dunphy (1959) drew up a list of the types of behaviours that fitted under either 'task' behaviours or under 'maintenance behaviour'. Both authors consider task behaviours as the underlying driver of the processes. Bales went on to develop Symlog (System for Multiple Level Analysis of Groups) (Polley, Hare and Stone 1988, Bales R.F. & Cohen S P 1979) which codes behaviour along three polar vectors as well as the content of evaluative statements. Noticeably factual statements about the 'task method' are omitted. This has been developed using multiple raters and computer technology into the Group Analyzer at Michigan (Losada 1990).

Hirokawa (1982, 1983) does an excellent critical review of this type of behavioural categorisation, illustrating some of the reasons why it has been difficult to link it with effectiveness. For instance, asking 'where shall we go for lunch?' could have a very different impact from 'do we have all the information we need to complete the task?'. However under the behavioural rating system, they are both equally coded as 'asking a question.' Hirokawa also points out that effectiveness is probably established when there is a high fit between the types of behaviour and the task's demands at that stage of the task. Despite flaws in his own arguments (Hirokawa 1983), his idea of task-relevant communicative behaviours' seems the best step forward in trying to link behavioural categories to different stages of the task and to effectiveness.

Polley (1988, 1989) uses Symlog type models to make cross cultural comparisons between group polarisations, coalition formation, mediation and scapegoating. However it is difficult to conceive of the situation where enough equally mixed teams, doing the same task in the same circumstances could be created to measure the interaction as a function of each individual's nationality rather than personality. There also seems a very limited use in being able to say that for instance British people ask more questions in international teams than Hong Kong Chinese, especially without asking the team members for the underlying reasons. Furthermore, the concept of synergy suggests that individuals are unlikely to adhere to their 'national' behaviour, but may collectively create something new (see Adler 1986, Redding 1992).

2.5.2.1.4 Content analysis

McGrath's (1984) summary of interaction processes ends with discussion of new technologies for studying interaction and mentions data analysis techniques. In 1988, Gersick took the verbal transcripts of groups over time and coded their statements according to action, content and process, reducing the overall dynamics of the teamwork to a concentrated pattern over time.

With further work and theorising, Gersick (1989, 1990) discovered that most groups settle into a pattern of interaction within the first three minutes of getting together and that this is often only challenged at the half time point in a group's overall time frame. In fact, this half time transition point was a crucial moment of reorientation towards success. Gersick (1990) underpinned her findings with a discussion of the punctuated equilibrium theory found in different disciplines to describe patterns of more static activity interspersed with time of dramatic change rather than a more linear process as described by Tuckman (1965) and others. Lee (1993) demonstrated how important this type of socio - linguistic data analysis is for analysing participative decision making processes.

In summary, participation curves yield data about the relative status and position of team members. Combined with observational data, it would give a rich picture of what is happening in these teams. While observational data is open to researcher interpretation, coding participation appears open to the least researcher bias of the three types of analysis. Measuring content free interaction would add in who responds to whom, but could not go deeper into the effect or influence of the speech acts without further interpretation or consultation with the participants. Methodologically, it is very much more difficult to code than participation. There seems little added value in categorising behaviours. This technique is open to the most researcher bias, not yet well connected to effectiveness and is most likely to lead to further national

stereotypes or generalisations at the individual level. Coding participation rates and illustrating the results with observational data emerges as the best course of action.

2.5.2.2 Action and Attraction processes

As described in the table, there is a body of research that covers McGrath's other two processes; action and attraction. In action processes, only the impact of performance review and interventions and process patterns over time processes, will be briefly discussed.

2.5.2.2.1 Performance review and patterns over time.

In their excellent review Tannenbaum et al (1992) comment that 'improvements in process may only yield improved performance if process problems existed, although they usually enhance perceptions and attitudes'. As international teams are likely to have greater process problems than most national teams, presumably reviewing the team process is more likely to affect performance in these teams. It will be interesting to observe the effect if some of the teams either attempt to review their own process, or are in a training situation where team process review is facilitated.

The literature on processes through time (Bales 1950, Hare 1976, Tuckman 1965, McGrath 1984) tends to agree that teams focus on different activities and types of interaction in different phases of the task. Different descriptions would predict maximum conflict from cultural differences at slightly different points. Tuckman (1965) in the second of four phases and Drexler et al (1988) in the middle at times of maximum constraint (eg. prioritising, arguing through and decision making.) around decision making points. In homogeneous teams, Watson et al (1988) found that organisation and communication were important early facilitators to be replaced by leadership and cohesiveness with expectancy and integration remaining throughout. There is also some discussion that the processes over time are in fact best described by non-linear models (eg. Gibbard, Hartman and Mann 1974, Gersick 1991) rather than linear ones (eg. Bales 1950, Hare 1976, Tuckman 1965, McGrath 1984).

Before leaving action processes, it should also be mentioned that Watson and Kumar (1992) found heterogeneous teams to be more conservative in their decision making processes than all American teams. They attribute this to the related findings that the same diverse teams had lower level of integration and cohesion and higher levels of fight or flight.

2.5.2.2.2 Attraction processes

Attraction processes relate to issues such to psychodynamic factors, such as Schutz’s inclusion, control and affection (Johansen et al 1991), the socialisation of new members over time (eg Moreland and Levine 1982, McGrath and O’Connor 1995) and patterns of political power (eg Stacey 1993). These will not be discussed further for this research.

2.5.3 Outcomes and effectiveness

Tannenbaum et al (1992) stress how team effectiveness is different from individual effectiveness (eg. Yetton & Botger). Clearly there are team dynamics and processes that affect performance as a whole that would not affect an individual working. Hill (1982) began the work to establish when a team is better than the best individual. How to measure team effectiveness is a constant problem for researchers. As Keyton and Springsteen (1990) point out ‘researchers have counted for quantity, judged for quality (eg. Watson et al 1991) and yet still have not clearly identified effectiveness’. They found a lack of parallelism between internal group processes and externally judged outcome effectiveness.

A group may feel that they have performed effectively even though their results are judged ineffective by others (see for example Gladstein 1984) and vice versa. Keyton and Springsteen (1990) suggest that the next generation of group effectiveness research may be enhanced by asking group members to define group and personal effectiveness: ‘perhaps we have been too long in assuming that external observation and measurement can determine what makes a fulfilling group experience.’ M. Brimm of Insead anecdotally reports watching that teams that thought they had had a difficult time, reinterpret their experience when they superiors praised their output very highly. With this in mind, the commonly used criteria are tabled below.

Table 2.7 Outcomes and effectiveness

Performance outcome	Mentioned/ researched by
Level of task completion Quality: eg. no of alternative solutions, level of problem analysis. Quantity, Time, Error Costs	Hackmann 1990 Salas et al
Group process	Watson et al 1993
Individual satisfaction	Hackmann 1990
Ability of the group work together again next time	Hackmann 1990
Increased knowledge and skills	Dunphy

Increased cohesiveness	Bougon et al 1977 Crossan et al 1991 Keyton and Springsteen 1990
Equal /balanced participation	Bales
Influence of interaction on members	Many authors, eg. reviewed in McGrath 1984, Latane and Wolf 1981 attempted integration

There is a common view in the literature that objective measures of task performance are far more effective than self reporting done by the participants themselves. In this regard, studies such as Watson's et al's (1991) may be considered exemplary in having three external judges mark the output of teams. This may be meaningful in laboratory studies where comparable teams can be asked to do the same task, or where a company has a number of similar teams doing similar things (eg. Gladstien 1984). However as the number of operative international teams is still quite low in many companies, there is a low possibility of finding comparable teams doing comparable tasks which the company will have or allow to be objectively measured.

As Hackmann (1990) and Keyton and Springsteen (1990) point out, performance on the task is not everything. While some companies may be very task oriented, there is little value in having teams that perform highly, but never want to work together again because they experienced high levels of discomfort and negativity in achieving the task. Hackman (1990) therefore adds in two people oriented criteria concerning the future well being and viability of the team. Firstly that participants should experience a sense of well being at having been a team member and secondly that the team should be able to work better together next time.

This last criterion suggests that the team should have thought consciously about how their working process and would know in future how to improve it. It would be very difficult to assess these factors objectively without asking the team members and watching the same team do a similar task again. This suggests that the best way of measuring effectiveness is subjectively on the personal and interpersonal outcomes and objectively on the task performance.

Although the vast majority of small group research has been aimed at seeking to find the interaction patterns that improve performance there is not a lot of progress in developing a coherent theory or generalisable results. For instance Leavitt H J (1951) looked at the effect of different communication patterns on amount of communication, timing, errors and enjoyment. As mentioned earlier Hirokawa (1982a, 1982b) has given a cogent critique of why the research on behavioural categorisation has so far been ineffective in linking certain patterns of behavioural sequencing to increased performance. Lanzetta and Roby (1960) suggest that groups performed

better when information was volunteered rather than solicited. 'Leadership' and participation was well distributed and 'leadership' was congruent with ability differentials.

In summary the literature on outcomes and effectiveness recommends combining both objective measures of the task and subjective measures of the process.

2.5.4 Summary of the literature review

1. The group process model provided a good theoretical foundation for the research.
2. Four input variables emerged from the research on international and heterogeneous teams. There were culturally influenced leadership style, language fluency, being a member of the dominant national group and being a member of a larger national subgroup. It also revealed a gap in the description of why heterogeneous teams have greater communication difficulties.
3. An in-depth discussion showed that culture can not presently be used as an antecedent to predict individual behaviour in international teams and that a better course of action is to focus at the level of team interaction.
4. Discussion on cultural adaptation and organisational diversity revealed a fifth variable of international experience and reinforced the importance of the organisational context.
5. Previous lessons from cross-cultural methodology suggested at least multi-method research, e.g. quantitative coding, questionnaires and observational techniques and if possible mixed research teams.
6. A cross-cultural look at common group inputs suggested the Myers-Briggs Type Indicator as a possible personality measure, reinforced the issue of dominant or majority status and highlighted the subtle consequences of using English as a second language.
7. Measuring participation emerged as the most appropriate measure of team process combined with observational analysis and objective task outcome measures and subjective team process measures were recommended.

In the following two chapters, these findings will be incorporated into a revised group process model for international teams, hypotheses will be developed and a methodology described.

3. CHAPTER THREE: HYPOTHESES AND OBJECTIVES

3.1 Extending the group process model for multinational teams.

The literature survey (Chapter 2) revealed that there is currently no suitable method for assessing the cultural antecedents of individual behaviour in multinational teams. Even if there was, this type of approach may well lead to making stereotypical generalisations and would lose sight of the complexity of interaction taking place in these teams. The literature survey did show that much of the group research has been based on the practical group model of Input - Process - Outcome (Maznevski 1994, McGrath 1984, Hackman and Morris 1975) which can provide a good basis for looking at certain input factors and their effects on the processes and outcomes of the teams. The question here is: which inputs, what processes and what outcomes?

3.1.1 Which Inputs?

The literature review of the individual, group and environmental inputs revealed that many are influenced by cultural conditioning or cultural factors. However at the individual level, many, such as cognitive style, idio/alliocentric behaviour, emotions, preferred conversational style are difficult to clearly categorise as influenced primarily by either personality or cultural conditioning. At this very early stage of research in the field, it seems wise for this study to focus on less ambiguous externally measurable factors.

Leaders: In all the reported group research, pre-appointed leaders participated more than the team members. However there is likely to be a larger gap between the participation of leaders perceived as autocratic or directive and their team members, than between so called participative leaders and their team members. The literature revealed that different styles can be more effective in different cultures (e.g. Lee 1993, Anderson 1983, Misumi 1985, Triandis 1994).

Language ability: Fluency in the working language is a unique input to international rather than national teams (Kim 1991, Salk 1992).

International experience: International experience may provide the skills for developing the confidence and open mindedness (Church 1982) needed to participate effectively in international teams.

Status: It is also clear from the group level inputs that differences in status which result in the formation of majority and minority groups will have a strong effect on the levels of participation (Shaw 1981, Katz et al 1958, 1960). The dominance of one nationality over another may come

from the dominant nationality of the organisation and the attitude of the organisation towards diversity (Ling 1990, Adler 1986). Hence individual status may be assessed by being a member or not a member of the dominant nationality of the leadership group of the organisation.

Numerical subgroups: An ingroup/outgroup social identification or 'skew' (Kanter 1977) may arise from there being a numerically larger subgroup of one nationality within the teams which may bias the dynamics in favour of individuals within that group (Tajfel 1982, Salk 1992).

The literature review ascertained that there is no clear distinction between culture and personality. However the five predictive variables outlined above have been chosen on the basis that they do have a predominantly cultural content. This is not to say that they will be totally free of personality influences. For instance, the capacity to reach fluency in other languages or the preference to identify with the dominant culture or larger subgroup may be related to personality factors. In order to create a contrast, there is room to choose a variable that is predominantly personality - based.

There are of course many personality factors which may affect an individual's level of participation in any one team. As the focus of this research is the pattern, rather than content, of interaction, it is relevant to choose a variable that predicts how much individuals speak rather than what they say. There is some evidence that having an extrovert or introvert preference on a Myers Briggs test can affect an individual's level of participation in a team (Thorne 1987). This would seem a relevant personality factor to compare against the cultural factors.

Choosing a limited number of factors that seem to be culturally determined and affect volubility rather than content, implies that this study will not seek to measure or comment on all the factors which affect the processes of international teams, i.e. explain most of the variance of the different participation rates. In spite of what it will not measure, this study can measure how much of the variance in participation rates does depend on these chosen factors and which factors have the most impact.

Teams will be studied within organisations which in general define international teams as teams made up of individuals from different nationalities. As some individuals may have recently changed their passports, e.g. Hong Kong citizens changing to Canadian or British passports, it will be necessary to ask the participants to state their original as well as current nationality.

3.1.2 Which processes?

Watson et al (1993) pointed out the possibility that their group process questionnaire may have been 'insensitive to important behaviour patterns that are unique to, or have a profound impact on, the performance of culturally diverse groups'. There is no further comment on what these patterns might be.

There are two ways to approach Watson et al's (1993) challenge. One can speculate that the more complex mix of people in these teams does unusual things to group processes that have already been observed in homogeneous teams, such as patterns of behaviour (see Bales et al 1979, Hirokawa 1982), patterns of interaction (Dabbs and Ruback 1987) or participation rates (Bales 1951). The alternative approach is to look for a process that is completely unique to international teams. It is still speculation that such a process exists so the only means to take on the second approach is to watch the teams at work. A structured observational technique can pick out key events and incidences. This technique will only be as good as the current discriminatory capabilities of the researcher and will be very open to the cultural biases of the researcher (Adler 1983, Nasif et al 1991).

The last two criticisms of the above technique can be balanced by choosing a second method of analysis that measures an established group process with the minimum cultural bias possible. This means deciding between measuring:

- 1) Participation of each individual regardless of the content and effect on others.
- 2) Group interaction, defined as the alternation of action and inaction;
- 3) Group process defined as a sequence of categorised behaviours;

As noted in the literature review, the very point of teams is to increase participation within the company and so this seems a good place to start. It is also clear that the shape of the j-curve of participation tells us something about patterns of leadership or dominance within teams (Bales 1951).

Measuring interaction as the alternation of action and inaction would be extremely interesting in mixed groups to capture the different verbal patterns and patterns of 'activity, adjustment, and initiative' (Chapple 1942, Dabbs and Ruback 1987). However, the methodologies would be very expensive and impractical for field research. (See Chapter Four).

Categorising behaviours has been shown to be open to cultural interpretation. Further, an individual's behaviour can not accurately be ascribed as the result of their cultural conditioning, personal preferences or as a response to the rest of the group's behaviour (Berkowitz 1966 pg

387). Categorising behaviours may be useful in measuring norms in groups of any one culture, (Losada and Markovitch 1990) but it would be very difficult in mixed groups.

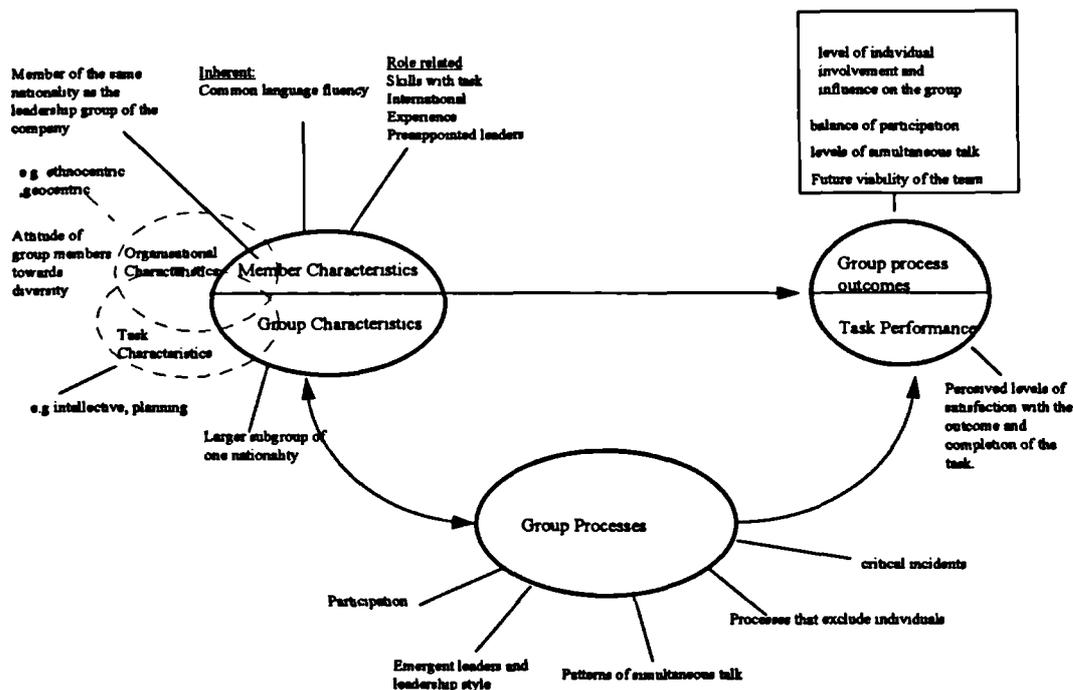
The literature review pointed out that probably the most culturally unbiased assessment of group process is to count the frequency of participation as was done by Chapple (1952), Bales (1951) and Dabbs and Ruback (1987). Participation in this case means the act of speaking, and not its effect on other team members. This would seem to be the most basic and culture free quantitative analysis. As the amount and purpose of simultaneous talk also seems to vary between cultures (Hayashi 1988, Lehtonen and Sajavaara 1985), this would also be a useful variable to quantify, so long as it is not interpreted as interruption (Tannen 1989). Therefore, in order to measure effects of diverse nationalities on team processes, this research can usefully combine a structured observational technique and quantitative analysis of frequency of participation and simultaneous talk.

The input factors chosen are in fact biased in favour of having an impact on the quantity as well as the quality of individual participation. The more cognitive, attitudinal and normative levels of cultural and personal differences are likely to be revealed more in the content of individuals' speech acts than in the volubility (e.g. Thorne 1989, Lee 1993). That said, some cultural norms do directly affect how individuals gain entrance into the group conversational flow (Lehtonen and Sajavaara 1985, Lee 1993).

3.1.3 Which outcomes?

The nature of field research means that comparable objective measures of the team tasks will not be possible. The outcome measures will therefore rely on self reports of both satisfaction with the group process and adequate completion of the task. This is not an ideal approach (Tannenbaum et al 1992); however, there is the opportunity to measure expectations before and after the group work. It would have been preferable to have conducted the qualitative analysis first and then built the hypotheses on the factors that seem most relevant to an international team process model. However, the difficulty of gaining access to the teams and the expense involved in travelling to the various sites means that extensive and varied pilot studies are not practical. Given that there is only one opportunity to gather information before and after the meeting, it seems best to build the model based on the factors chosen deductively above and review them after the structured observation analysis. A revised version of Hackman and Morris's (1975) model was developed.

Figure 3.1 Revised group process model



The objective of the research is to give as full an answer to the research questions as possible. The literature review suggested that multiple methodologies are helpful in cross-cultural research. While a set of hypotheses will be developed from the revised model above (Figure 3.1) and statistically tested, a second structured observational method will also be used that is not based solely on the model or the hypotheses. As pointed out, previous research on heterogeneous teams has reported that diverse teams have greater communication difficulties, but has not reported in any detail what they are (e.g. Watson et al 1993, Kirchmeyer 1991). The aim of the structured observations is to describe the patterns of interaction in these teams, that may or may not be related to the chosen variables.

3.2 Hypotheses

From this model, first an individual set, and then a group level set of hypotheses was developed.

3.2.1 Individual level

The table below outlines the hypotheses developed from the model at the individual level. The table shows that the first set were concerned with input to process and the last set with process to outcomes.

Table 3.1 Individual level hypotheses

Hypothesis No	INPUT	PROCESS	OUTCOMES
1	Team leader	More frequent and greater duration of participation	
2	Mother tongue speaker	More frequent and greater duration of participation	
3	Member of the dominant culture	More frequent and greater duration of participation	
4	Member of a numerically larger national subgroup	More frequent and greater duration of participation	
5	Previous international experience	More frequent and greater duration of participation	
6	More extrovert personality	More frequent and greater duration of participation	
7			Ranking of factors
8	Mother tongue speaker	More simultaneous talk	
9		More frequent and greater duration of participation	Will be perceived to be more involved and to have more influence
10		More simultaneous talk	Will be perceived to be more involved and to have more influence

3.2.1.1 Team Leader

Much of the research on participation shows that the pre-appointed leader or emergent leader will participate more than other team members (Bales 1951, Dabbs et al 1981). It is likely that leaders will be pre-appointed in operational teams in this study and there may be emergent leaders in the training teams. There is no reason to suppose this higher level of participation will be reduced just because the team is international.

Hypothesis 1 - Appointed or acknowledged team leaders will participate a) more frequently and b) for greater duration than other team members.

Null Hypothesis - All team members participate equally.

3.2.1.2 Mother Tongue

As the common language of these teams is English, mother tongue English speakers are likely to be at an advantage over non mother tongue speakers. This advantage is likely to increase the more mother tongue speakers there are in the team. The words of a language are embedded in conversational and stylistic norms (Kachru 1982), so even if someone is fluent in the words, they can be at a disadvantage in picking up fast moving stylistic nuances.

Hypothesis 2 - Mother tongue speakers of the common working language will participate a) more frequently and b) for greater duration than other team members.

Null Hypothesis - All team members participate equally.

3.2.1.3 Dominant Culture

The literature survey shows that one can expect any majority group to have an advantage over other groups within the team. Being a member of a numerically larger subgroup is one way of perhaps having an advantage by creating a small in - group / out group situation within the team itself (Tajfel 1981). Another type of subgroup may be formed by members of dominant national culture within the organisation (Ling 1990). This type of group may be reinforced or diminished by how parochial, ethnocentric or synergistic the organisational culture is (Adler 1986d, Perlmutter 1969). A parochial or ethnocentric attitudinal stance within the organisation would give a higher status to the nationality that is most represented at the top of the organisation. Both these types of sub- group could affect an individual's participation.

Hypothesis 3 -Individuals who are of the same nationality as the majority of the leadership group of the company will participate a) more frequently and b) for greater duration than those from other nationalities.

Null Hypothesis - All team members participate equally.

3.2.1.4 Subgroups

Hypothesis 4 Where individuals from any one nationality form a numerically larger subgroup, they will participate more than those from the other nationalities.

Null Hypothesis - All team members participate equally.

3.2.1.5 International Experience

There is evidence that previous international experience helps individuals to be more effective in diverse and international situations (e.g. Furnham and Bochner 1986, Church 1982, McCall et al 1994). However, if there is a dominant culture effect (Hypothesis 3) one might suppose that in the case of international teams the effect of international experience would be more noticeable for those individuals from non dominant cultures.

Hypothesis 5a - International experience will not affect the participation of a team member from the same nationality as the majority of the leadership group of the company.

Null Hypothesis - All team members participate equally.

Hypothesis 5 b - Where individuals are not from the same nationality as the majority of the leadership group of the company, increased international experience will increase the level of participation.

Null Hypothesis - All team members participate equally.

3.2.1.6 Myers Briggs Personality Types

The five factors tested in Hypotheses One - Five were chosen as cultural factors that were on likely to be explained by personality. That leaves personality as a very large factor affecting the participation of individuals. Controlling for some measure of individual preferences for extrovert or introvert behaviour may be useful. The Myers Briggs Type Indicator was chosen, although the evidence that extroverts are more voluble in groups is not strong (Thorne 1987).

Hypothesis 6 -Extroverts on the Myers Briggs preference indicator will participate more frequently and for longer duration than introverts.

Null Hypothesis - All team members participate equally.

3.2.1.7 Factor Ranking

One of the questions repeatedly asked is how important the impact of different national cultures is on the overall dynamics of an international team. This study does not claim to have captured all the cultural factors possible. It is possible to measure how much of the variance in participation is explained by each of the factors chosen in Hypotheses 1 - 6.

Hypothesis 7 - The level of influence of each factor outlined in Hypothesis 1 - 6 on the frequency of any one team member's participation will be ranked in the same descending order of the hypotheses 1 - 6.

Null Hypothesis - The factors outlined in Hypotheses 1-6 have equal influence on any one team member's participation.

3.2.1.8 Mother Tongue / Simultaneous Talk

As discussed in the literature review, there is ample evidence to suggest that individuals speaking English as a second language will tend to enter into less simultaneous talk than Anglo-Saxon mother tongue speakers (Hayashi 1988, Lee 1993, Lam 1986).

Hypothesis 8 - people who have English as a mother tongue will enter into more simultaneous talk than those who speak it as a second language.

Null Hypothesis - All team members will have equal levels of simultaneous talk.

3.2.1.9 Involvement and Influence

So far the hypotheses have looked at the effect of input factors on the participation of individuals within the team. The resulting level of individual participation can be expected to affect the perceived involvement and influence of each individual.

Hypothesis 9- People who participate more will be perceived to be more involved and to have more influence than those who participate less.

Null Hypothesis - The level of participation of an individual is irrelevant to other team members' perceptions of that individual's involvement and influence.

3.2.1.10 Involvement and Influence / Simultaneous Talk

Dabbs and Ruback (1987) found that the rate at which an individual initiated simultaneous talk was related to others' perception of that individual being a leader. It is therefore proposed that the higher the individual rate of simultaneous talk, the greater will be the perceived involvement and influence on the team of that individual.

Hypothesis 10 - People who more often begin talking when someone else is talking will be perceived to be more involved and to have had more influence on the team than those who begin less often speaking when someone else is talking.

Null Hypothesis - Levels of interruption have no effect on perceived involvement and influence.

3.2.2 Team level

The second set of hypotheses are concerned with the group level of analysis. They propose that certain team compositions will affect the balance of participation and the levels of satisfaction.

Table 3.2 Team level hypotheses

Hypothesis No	INPUT	PROCESS	OUTCOMES
11		Teams that have more balanced participation	will be more satisfied
12	The smaller the team	the more balanced the participation	the more satisfied the team
13	The lower the number of different nationalities represented	the more balanced the participation	the more satisfied the team
14	The more homogeneous the language abilities	the more balanced the participation	the more satisfied the team
15	Teams with no numerically larger subgroups	will have more balanced participation	and will be more satisfied
16	The more homogeneous the corporate status by nationality	the more balanced the participation	the more satisfied the team
17	Teams where the low corporate status members have international experience	will have more balanced participation and	will be more satisfied than those that do not
18	Teams that have an Anglo-Saxon dominated subgroup working in English	will have higher levels of simultaneous talk than other teams.	

3.2.2.1 Participation / Satisfaction

Much of the work on team 'J' curves of participation has focused on trying to fit it with mathematical models (e.g. exponential: Stephan & Mishler 1966, Tsai 1977) and less on its relation to performance and satisfaction outcomes. However the prescriptive literature on integrating diversity and attaining synergy often quotes equal participation as a facilitating factor

(Adler 1986, Anderson 1983, Maznevski 1994). As achieving synergy or integration is supposedly negatively correlated to the increased communication difficulties of diverse teams (Watson et al 1993, Kirchmeyer 1991) then presumably more balanced participation should lead to greater satisfaction.

Hypothesis 11 - The more balanced the participation of the team, the more satisfied the team members will be with the outcome.

Null Hypothesis - Balance of participation has no correlation with team satisfaction.

3.2.2.2 Team Size

As the size of the group increases there is less opportunity for individuals to participate. (Hare 1966, Thomas and Fink). Although people may talk faster and make more tension releasing remarks and suggestions (Bales 1951), there is an upper limit. Bales (1951) found that as the size of the groups increases, the proportion of participants whose inputs is below the mean becomes larger. At the same time, the gap between appointed leaders and others in the team tends to increase.

Hypothesis 12 - The smaller the team, the more balanced the participation and the more satisfied the team members will be with the outcome.

Null Hypothesis - Team size is not correlated with either balance of participation or team satisfaction.

3.2.2.3 Language Ability

The literature suggests that most heterogeneous teams experience more difficulties in communication than homogeneous teams. As most of the teams in this study are unlikely to be available for study over a period of time during which their communication and process may improve, one can presume that the more diverse they are on the chosen factors, the less satisfied they will be with the overall outcomes.

Hypothesis 13 -Groups with homogeneous language abilities will have more balanced participation and be more satisfied than those where there are greater differences.

Null Hypothesis - Homogeneity of language ability is not correlated with participation balance and team satisfaction.

3.2.2.4 Subgroups

Measuring the heterogeneity of the nationalities in the teams is a little more complicated. It is possible that as soon as one nationality constitutes a numerical majority, it may have a different effect than a more balanced mixing of different numbers of different nationalities (Blau 1977). If teams with subgroups have less balanced participation than teams without, they may also be less satisfied with the outcomes.

Hypotheses 14 - Groups within which there are no subgroups (i.e. more balanced national mix) will have more balanced participation and will be more satisfied than those where there is greater imbalance.

Null Hypothesis - The existence of subgroups is not correlated with either participation balance or team satisfaction.

3.2.2.5 Homogeneity

Hypothesis 15 - Groups where there is greater homogeneity of dominant culture individuals will have more balanced participation and will be more satisfied than those where there is an imbalance.

Null Hypothesis - Homogeneity of corporate status is not correlated with participation either balance or team satisfaction.

3.2.2.6 Myers Briggs Personality Types

Hypothesis 16 - Groups where there is a more even mix of extrovert and introvert personality types will have more balanced participation and be more satisfied than those where there is a strong imbalance.

Null Hypothesis - Equal mixes of personality types in a team is not correlated with either participation balance or team satisfaction.

3.2.2.7 International Experience

Hypothesis 5 proposed that international experience will have greater impact for individuals from non dominant organisational cultures. Teams with internationally experienced non dominant culture members are expected to have more balanced participation and be more satisfied than other teams.

Hypothesis 17- Teams where the low corporate status members have international experience will be more satisfied than those that do not.

Null Hypothesis - Prior international experience has no effect on team satisfaction.

3.2.2.8 Anglo-Saxon Subgroup

At the individual level, it was proposed in Hypothesis 8, that mother tongue speakers would have higher levels of simultaneous talk than other team members. This is also expected to be manifested at the team level if there is a numerically larger Anglo-Saxon subgroup.

Hypothesis 18 -Teams that have an Anglo-Saxon dominant subgroup working in English will have higher levels of simultaneous talk than other teams.

Null Hypothesis - Levels of simultaneous talk are not affected by national culture.

4. CHAPTER FOUR: METHODOLOGY

The names of the companies involved in this study have been replaced with references to their sector in this and subsequent chapters. The companies themselves did not ask to be disguised, nor will it be difficult for the reader to deduce which companies were involved without further disguising their sectors. The names are changed to emphasise that the aim of this research is to learn more about international teams and not to comment on particular corporate cultures. The initials of all the team members are fictitious to protect their anonymity.

4.1 Initial choices

4.1.1 Choosing between field or experimental research

One of the underlying dilemmas in group research is that field studies gain realism at the price of low generalisability and lack of precision (McGrath 1984, Hackman and Morris 1975). The table below represents the interrelationship of these factors with different types of research

Table 4.1 Outcomes of different types of research

	Generalisation	Realism	Precision
Field Study	Low	High	Low
Laboratory	Low	Low	High
Survey	High	Low	Low

Field studies lose precision and some generalisability for the benefits of high realism. Laboratory experiments maximise precision of measurement and control of variables at the price of realism and low generalisability. Surveys have high generalisability but give up much realism and much precision.

The important point about international teams is that companies are not creating them as ends in themselves. Snow et al (1993) used the transnational model of Bartlett and Ghoshal (1989) to find that the strategic priority of most of these teams is organisational learning, closely followed by creating greater global efficiency. Increasing team effectiveness per se, or individual international competence is not high on the agenda. If these teams are studied outside the organisational setting, the influence of these organisational factors is lost. The processes of the teams may well reflect the different roles that individuals play within the organisation, or the

roles of different nationalities, more than they reflect the cultural conditioning of each individual as separate from the organisation.

This organisational influence implies that the benefits of these teams working well together go beyond performance of the task at hand. The benefits may be very different with each team. For instance in one Anglo - Dutch company, OILCO, there would be nothing new in English and Dutch working together and the benefits to the organisation may well be measured by the quality of performance on the task. However, OILCO might draw large benefits from the first time that Dutch and Azerbaijanis work together, even if the process was difficult and the result sub-optimal compared with the English and Dutch performance. Measuring the effectiveness of these teams may need to include long range factors such as creating a global network, forging new business relationships and teams which can work better together in the future. Outcomes in experimental teams cannot measure these organisational benefits.

These arguments support the notion of carrying out this research within organisational settings at this early stage of international teams research and accepting the loss of precision and generalisability in order to gain high levels of realism.

4.1.2 Applying cross - cultural best practice

Three important factors have been suggested in the literature for making cross cultural research more effective:

1) To have a mixed team of researchers (e.g. Triandis 1972, 1983)

The reason for a mixed team is to ensure that the questions asked and instruments used are equivalent in each nationality. As this researcher has been working alone, and the research is therefore liable to western female conceptual bias, an effort will be made to triangulate descriptive and interpretative data with quantitative coding that is less subject to bias. Tools such as behaviour rating and cultural dimensions were rejected as they start with in-built emic/etic problems (see Triandis 1993) and cultural biases

2) To use multiple or triangulated methods (Yoko Brannen 1993, Gudykunst 1989)

Multiple methods were employed, namely pre and post questionnaires and coding of videotapes.

The pre and post questionnaires captured the changes between the team members' expectations of what would happen in the team work and the encountered conditions. They also covered questions relating to Hackman's three criteria of effectiveness (1990) outlined in the literature

survey. The pre questionnaire captured a wide range of demographic data about each team member; the post questionnaire included team members' ratings of perceived involvement and influence in the group.

A quantitative coding of the videos for participation was carried out. Measuring participation has been assessed as a result of the literature as relevant to capturing the effects of culture on team processes, as well as being the least culturally biased and accessible way of measuring the participation of each individual. The behavioural and leadership issues within the group are not coded in this approach and so a detailed structured observation of each group was also made to describe the context and the main interaction patterns that took place. This observational approach is most susceptible to bias through the researcher's own cultural lenses, especially as there was no opportunity to do a video recall analysis of apparent critical incidents with the team members themselves. It is felt that a balance between objective measurement and rich qualitative, but potentially culturally biased information has been gained by using the three approaches for analysis; questionnaire data, coding participation and structured observation.

The usefulness of the multi-method approach in cross cultural work is well illustrated by Brannon's work on the Japanese take-over of a US production facility (Brannon 1993). Her ethnographic work produced much rich data to support a construct of 'bi cultural alienation'. The construct had no significance in the aggregated organisational data gathered from a retrospective questionnaire. The discrepancy between the two results led her to re-examine the survey data in which she found pockets of alienation in certain parts of the plant. A re-examination of the ethnographic data was able to explain the likely causes of these pockets.

3) To use multivariate statistical methods (Sekaran 1983, Adler 1983a, Triandis 1983)

Factor analysis and multidimensional scaling are two of the multivariate statistical methods that have helped to improve cross cultural findings. These are useful when seeking to analyse and correlate a large number of variables on aggregate scores of individual questionnaires. The hypotheses in this research are mostly testing two independent variables against one dependent variable such as participation or satisfaction. Multivariate methods will not apply to this data.

4.2 Procedure

4.2.1 Sites and Sample

4.2.1.1 Sites

In large multinational companies, the number of international teams is growing as the companies strive to achieve global efficiency and local responsiveness (Snow et al 1993). As the object of the study is to make a useful contribution to the real life teams that are being formed within large multinational companies, these teams were selected as the direct objects of study. OILCO, EXPCO and CHEMCO were selected as three similar companies accessible from the UK who have a large enough sample of these teams to draw from. Later, BANK, COMMCO and OILCO Singapore were added in East and South East Asia.

4.2.1.2 Selecting the sample

Training or Human Resource Directors were initially contacted by telephone, with a follow up briefing letter about the research and the questionnaires (see Appendix 1). These contacts also determined which teams would be made available for study. The desire to video record the teams working together over a period of the time constrained which teams were offered. It meant that geographically dispersed teams were not generally selected, nor teams where it was felt that either video recording would be a practical inconvenience or the material discussed was too sensitive.

This meant that in OILCO, nine ad hoc international teams on training courses were offered and in CHEMCO, ad hoc teams on their management training course. EXPCO, supported by its new 'open' behaviour programme, (programme designed to promote core behavioural competences to develop a new organisational culture), offered a geographically dispersed real life team working on European harmonisation over three meetings. As the work developed, it became clear that in most of these companies, there was a strong Anglo-Saxon bias in almost all of the teams.

Funding was secured from ICEDR, a consortium of international companies and business schools, to extend this research into multinational companies in Singapore and HongKong. Again, HR professionals in these companies were contacted, briefing materials were sent, and the contacts selected the teams they thought were most appropriate. COMMCO was very open and supportive and offered four meetings being held in a single morning. BANK offered two teams working on a strategic planning exercise as part of a senior management training programme. OILCO Singapore offered a team working on a general management course in the Singapore Training Centre.

As the table in Appendix Two shows, this procedure created a sample of seven operational teams and seventeen training teams with twenty seven nationalities, ranging from teams of three people to thirteen with an average size of seven. An important question at this point, is whether there is a valid distinction between the teams selected and experimental laboratory teams, first in terms of organisational factors and secondly in terms of motivation on the task?

4.2.1.3 Organisational factors

As all the teams were on site, it can be expected that any organisational factors, such as being a member of the dominant culture, will influence the participation rates more than if the teams were off site or individual teams members were part of organisationally mixed teams on an MBA course.

4.2.1.4 Motivation on the task

Overall, there were four ongoing operational teams, one task force over three meetings, and eighteen temporary teams. In seven teams there was the motivation that the task was of some immediate benefit to the organisation; in six teams the task was of long term benefit; in the remaining ten teams there was no benefit for the company except through the individuals being better skilled at their job. This means that more than half the sample differs from experimental teams because the outcome is expected to be of use to the organisation, and the other half, because the task is relevant to the skills they need in their job. However, in order to fully validate the sample, the expectations of these two types of team on what they would achieve through the team work and what they expected to happen as an outcome of the interaction is analysed in depth at the beginning of Chapter Five.

4.2.1.4.1 Training teams

For all the teams in OILCO, except for the OILCO Singapore interpersonal skills course, the tasks were related to relevant technical skills that the participants needed to further their careers. However the motivation levels to complete the task were probably not much higher than in an experimental ad hoc team. In P180 and P181, there were obvious differences between those who thought they already had the skills and those who did not. There was no emphasis on solving the task as a team and in the case of P180 and P181, the presentations were to the course facilitator and all the groups on the course. The outcomes had no significance for the organisation.

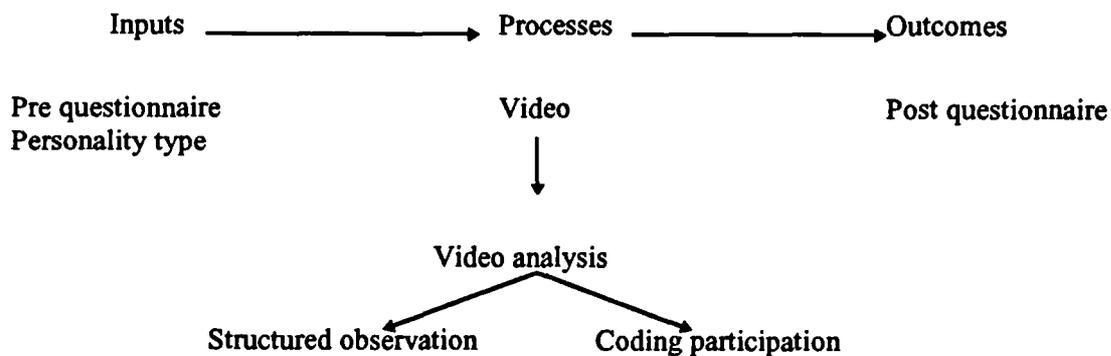
In CHEMCO and the BANK, the team presentations were to board directors and the teams were motivated by the opportunity to give the board feedback, to make practical suggestions and not to look foolish. Much of the discussion was focused on fitting the presentations to the audience and the team members did have some expectations that the organisation might be influenced by the outcomes.

4.2.1.4.2 Operational teams

The EXPCO task force met three times over a six month period, with increasing membership each time and is therefore treated as three overlapping teams. The task was specific to that group and important for the future policy and effectiveness of that department. In COMMCO and PHARMCO, the meetings were on-going meetings of regular teams (except COMMCO 1) so the tasks were centred on information sharing, problem solving and decision making. The benefit to the organisation was long term.

4.2.2 Measuring inputs, processes and outcomes

The methodological procedure for analysing the teams falls into three parts, each measuring the different stages of the input - process - outcome model.



4.2.2.1 Pre group work - Measuring the inputs

Once a group or team had been identified, each group member was given a questionnaire (Appendix 1) and Myers Briggs Type Indicator form to fill out.

4.2.2.2 Design of pre-questionnaire : (see Appendix 1b)

The questionnaire asked for demographic data, in particular self rated language fluency, the participant's cultural identity and international experience. It also asked what the participant thought was the objective of the teamwork, and his/her expectations about the team process and outcomes.

The section on team process was designed to be as factual as possible. It asked only one specific question about national differences. Part of the aim of the study was to see if international teams acknowledged their national differences at the beginning of the teamwork as prescribed by the existing literature (eg Adler 1986). There was therefore a need to make the research as unobtrusive as possible and not to bias a team's awareness by asking numerous questions about the impact of national difference and diversity before the team work started.

On a design note: contrary to recommended best practice (Adler 1983a Nasif 1991, Triandis 1983), neither the pre nor post questionnaire was translated into the mother tongue of the participants and back into English to check the equivalence of the questions asked. As many nationalities are involved, this very expensive and lengthy option was not available to this researcher. As mentioned in the literature review, translating questionnaires is a process fraught with difficulties of meaning equivalence (Adler 1983a, Nasif 1991, Triandis 1983). However an effort was made to keep the sentences short, use plain and frequently used English words and not jargon or idioms and to give an explanation of infrequently used words such as 'hinder'.

4.2.2.3 Choice of MBTI

As discussed in Chapter three, an extrovert preference was seen as a relevant personality measure of how much someone may talk in a team. The Myers Briggs Type Indicator is well validated and has been used around the world with some reliability.

4.2.2.4 Administration

The pre-questionnaire and the Myers Briggs Type Inventory were administered in a number of ways. Where possible, both were sent to the site with a covering letter similar to the brief in Appendix 1 well before the day of filming. For the training teams in CHEMCO, OILCO, OILCO Singapore and the BANK, both were administered as part of the training course by the course tutors just before the team work. This helped to legitimise the research on these programmes and for participants to take it seriously. It also meant a 100% return rate.

Of the operational teams, in EXPCO, the pre-questionnaire and MBTI were sent to the personnel officer organising the meetings and she distributed them with a covering letter from the team sponsor and a request to bring them completed to the first meeting. This worked for the first meeting, but the return rate was lower for the second and third. In COMMCO, the questionnaire was distributed just prior to the meetings and the whole team sat and filled them in and returned them to the researcher before starting. In PHARMCO, the pre-questionnaire and MBTI form

were also sent out and faxed or posted back to the researcher before the first meeting. In all cases they were collected before the filming started.

The post questionnaires described later (see Appendix 1b) were handed out at the end of the meetings by the researcher with instructions to fill them in individually without conferring and on how to return them. In the case of EXPCO and IQACT, pre - addressed envelopes back to the researcher were included. For training teams, in OILCO, they were returned to the course facilitators and then to the researcher. In CHEMCO and BANK they were returned to the researcher directly.

The researcher committed to return the Myers Briggs results directly to the individuals with a very brief write up on the different types. In each case efforts were made to identify someone within the company who could give more in depth feedback and explanation if the participants desired it and this name was given out at the end of the teamwork. For all teams except OILCO P180 and P181, business cards were collected from all the participants and the results were returned to them personally and confidentially by the researcher. In the case of OILCO P180 and P181, a personnel officer offered to distribute the results confidentially to the participants when the researcher became unable to complete the filming in person.

Two specific areas of difficulty not mentioned in the literature on field research(Wright et al 1988, Munroe & Munroe 1986) were:

- 1) Only a few large companies are currently broadly international (rather than regional) and they are often requested to host international research. They therefore preferred the least researcher intervention possible.
- 2) Some companies did not support the team members filling in all the questionnaires, nor would they allow the researcher to view or assess the final presentations and there was no scope for video recall with the participants themselves after the teamwork.

4.2.2.5 Pilot

CHEMCO offered four senior management teams for a pilot study. Forty five minutes were given at the end of the course to discuss the questionnaires and the experience of being video taped. Watching the key patterns in the teams and obtaining responses to the questionnaires proved very useful in refocusing some of the key questions. Two of the microphones turned out to be faulty and much was learnt about setting up and using the video equipment. The team's comments on the importance of personality reinforced the proposal to administer the Myers

Briggs Personality Indicator with future teams, despite the extra burden on the teams. There was a very positive response from the participants on the importance of the research and the need to raise the cross cultural aspects of teamwork. As the questionnaires were changed after this pilot, these teams were not used in the final analysis and the researcher returned on the next course to video four more teams.

4.2.2.6 Response of companies

There was a requirement from OILCO to make the questionnaire as short as possible.

BANK and COMMCO did not encourage their participants to do the MBTI on the grounds that they were already using other personality measures and one more would be too many.

4.2.3 The teamwork - measuring the process

4.2.3.1 The practicalities of video recording the teams

Each team was recorded for the whole duration of its meeting or task. As the table in Appendix Two shows, this varied from 1/2 hours to four days. Remote camera facilities were available in the BANK strategy team 2. In all other cases, the video stood on a tripod in the room where the team were meeting.

Where the teamwork was scheduled to be less than four hours, the researcher usually set the camera running before the participants entered the room and did not enter the room during the meeting time. It was hoped that without the presence of the researcher, the teams would forget about the camera soon after starting. Participants were assured that the tapes would remain anonymous and that the research focused on the interaction patterns and not the content of their work together.

Some of the rooms were too small to get a wide enough angle (a wide angle lens was employed later in the research when the researcher was able to use a smaller camcorder) to cover all the team participants. This means that not all participants are on screen all the time. Initially, the researcher used the cameras provided by the companies or the London Business School. In the cases of OILCO and CHEMCO, usually two and sometimes four teams were filmed simultaneously doing the same task. However, in all the tapes, although not every person may be in the frame, the voices are clear and so the audio coding of utterances and interruptions can still be done effectively. A table plan of names was made for each group so that participants could be matched to their questionnaires for the full analysis.

One other problem which arose is of the team splitting into subgroups. In some cases the group stayed around the same table and talked in subgroups all at once. In these cases it has been possible to rerun the tapes and code each subgroup's interaction. Where the team dispersed into separate rooms or different parts of a small room this was not possible, and so that part of the work was not possible to code effectively. This forced a decision to take all subgroup work out of the final results. Where the rooms were very large (eg EXPCO) a high quality audio tape was also made of the meeting in order to cover people speaking softly far away from the video camera.

4.2.3.2 The response of the teams to being video taped

In the initial OILCO groups, the participants were asked in the questionnaire if the camera had influenced their work. The responses reported that the participants soon forgot about the camera and considered it no hindrance. As a result, the question was dropped from the questionnaire.

Where the teamwork was longer than four hours, the researcher sat with the camera in order to change the tapes or batteries. In CHEMCOA, this reminder of the researcher's presence and purpose prompted comments about remembering inter-cultural sensitivity, but on the whole most groups did not seem affected by the camera.

4.2.4 Video Analysis

Each team was watched twice, firstly to code the participation rates of each individual as well as the simultaneous talk and back channelling, and secondly, to note the key events in a structured observational analysis. It was helpful to see the demographic tables, coded participation patterns and outcomes before doing the structured observation.

4.2.4.1 Structured observation

The following framework was applied to the observation of the teams.

4.2.4.1.1 Inputs : Demographic table

Table 4.2 below was drawn up in advance of observing and recording the patterns of interaction in the teams. Tables of the outputs on the levels of individual participation, involvement, influence and team satisfaction from each team (see accompanying document) were also available at the time of observing the teams. These outputs were later used to create the charts shown at the beginning of each team description in Chapter Five.

Table 4.2 Team demographics

Initials						
Nationality						
Level of Language fluency						
Age						
MBTI						
Sex						
International experience						
International teams						
Job title						
Level of experience with task						

Overall group time: hrs mins Type of task (McGrath 1984)

4.2.4.1.2 The Team Process framework

As the researcher observed the team working on video, each section of the following framework was systematically filled in on a portable computer; not always in exactly the same order, but as the events and patterns of interaction became clear. The video was often stopped and started to recapture events and give time for the interaction to be noted. The comments in each part of the sample framework below described what it was that the researcher was particularly looking for.

Initial feeling

Gersick's (1989) findings suggest that the norms of the group process were often established within the first three minutes and were often not questioned until half way through a meeting.

How the conversation gets started, what is given initial attention

One of the behaviours found to reveal significant cultural differences by Trompenaars (1993) is the extent to which people first focus specifically on the task or more diffusely on the context and interpersonal factors surrounding the task.

Different conversational styles of the speakers

Working in English will alter many second language speakers' conversational style. It may mean that some individuals adopt English norms of conversational style, but it is likely that visible differences will remain. Unfortunately, for the reasons given in the literature chapter, it will not be possible to ascribe these to cultural or personal factors.

Leadership or Authoritarian role /View taken by any one person

In some teams the leaders will be pre-appointed, but their role may be challenged. In other teams the leader may be emergent, either as a facilitator or because of greater skill on the task. In some teams, the leadership issue may not be overtly stated. These different approaches to leadership are likely to lead to different patterns of whole group participation.

The pattern of the discussion: small sentences, simultaneous talk and back channelling

It is important to note whether the discussion is characterised by short or long sentences, high levels of simultaneous talk and whether this gives an advantage to some individuals.

Sub groups/main group patterns and sub group dominance

Subgroup dominance plays an important part in the hypotheses testing who is likely to participate more than others. Some groups may choose to work in subgroups and there may be different ways in which tasks are assigned in different groups.

The ebb and flow of the dynamics over time

Much thought was given to devising a way of illustrating the ebb and flow of the dynamics, and to characterise some of the phases of high and low activities and energies, coming together and dispersion. The researcher found that after watching a group, a flow diagram could be sketched, indicating the key events which changed the pattern of the group. Archetypes formulated for catastrophe theory (Woodcock and Davis 1978), 'special attractors' such as key psycho-dynamic factors (Johansen et al 1991 Pg 107), and Gersick's notion of punctuated equilibrium (1991) all seemed appealing analogies. However it proved very difficult to capture all the events into a single graphic image and so it was decided to give a general verbal description of the changing team dynamics.

Particular critical instances

Some teams more than others seemed to have specific key incidents that created a sustained pattern over time. Having observed the use of stereotypical evaluative remarks leading to

exclusion of some team members, it was important for the researcher not only to focus on critical instances, but to also watch for the more subtle instances in teams where 'nothing much' seemed to happen.

Culture/Personality

This last section depends on a purely subjective assessment made by the researcher. There was a distinct feeling in some teams that some major issues arose from cultural differences rather than personalities and vice versa. While the inferences may be contestable, the process of defining them was helpful in trying to pin down what the inferences were based on

Summarised versions of the qualitative analyses for each team are presented in Chapter Five. The full versions are available in the accompanying document B.

4.2.4.2 Coding the participation

Much thought was given to determining the best measure of interaction and participation. The researcher did start to transcribe some of the team meetings, but could not find a way of effectively showing the amount of participation and simultaneous talk. It was recognised that a clear choice had to be made between content analysis or content free analysis. The reasons for opting for content free analysis are given earlier (Chapters Two and Three). The possibility of capturing the richer picture of interaction rather than simple participation rates was also appealing. Two options given in the literature are Chapple's chronometer (1940, 1942) and Dabbs and Ruback's (1987) sophisticated recording equipment.

Chapple (1940, 1942) used a chronometer with dyad pairs which measured the length of each action and inaction. It is conceivable that a group chronometer could be created and played like a piano with one finger for each group member while watching the video. On groups that worked over a period of a few days an enormously long tape would have been created to capture all the features that Chapple described.

It was decided that the important information would be the length of time and the frequency that anyone spoke, identification of who consistently initiates action in the group, who interrupts and who is interrupted, and who carries on speaking even when interrupted. Clearly the matrix of who talked to who for how long and if they were interrupted or not would be very detailed indeed and create a large database over the working time of the teams. It was also felt that creation of a team chronometer on a computer is possible, but beyond the scope of this research.

The second option of the complex recording apparatus for Dabbs' and Ruback's methodology (1987) would be difficult in organisational settings where there was no facility to prepare the rooms or set up extensive equipment.

Following the decision to focus only on participation, the videos were watched, and each participant's speech acts and instances of simultaneous talk or backchannelling were coded. A form was created (see Appendix 1C) that enabled the researcher to code each individual's participation into short (less than once sentence), medium (one to three sentences), long (more than three sentences) utterances. A cross was put on top of the stroke for an utterance if the person started talking when someone else was still talking and a cross was put at the bottom of the stroke if the person was still talking when someone else started talking. A line with a circle at the top was marked if the person 'back channelled' (ie; grunted acknowledgement). One coded page covered each fifteen minute period throughout the whole teamwork. It was decided to code the whole of the team work rather than five minute snapshots at periodic intervals as these could have been inaccurate. This extensive coding provides the opportunity in future for looking at how individual patterns of behaviour changed in the different phases of the teamwork.

The total number of each type of utterance and instances of simultaneous talk were entered into each participant's line on the database, discounting the time the team worked in subgroups. More detailed information of each individual's participation and outcomes are chronicled in the accompanying working document. Overall team figures of balance of participation (see Chapter Six) and percentage of simultaneous talk (see Chapter Five) were also calculated.

4.2.5 Post teamwork

Immediately after the group had finished its task or meeting, each participant was asked to fill in a questionnaire about the team's process and outcomes (see Appendix 1). This questionnaire was based on a format used by Crossan et al (1990). The questionnaire asked each participant to rate every other participants' involvement, influence and degree of shared views. The rest of the questionnaire then mirrored the pre questionnaire on the purpose of the teamwork, and individual experiences (rather than expectations) of the process and group outcomes. Hackman's (1989) three criteria, one on the task performance and the other two on the future well being and viability of the team were included in a self rating of team effectiveness.

4.2.5.1 Analysis

The pre and post questionnaires and the MBTI scores for each individual were entered into an SPSS database for analysis. The data entered into the database, corresponded exactly to the questionnaire responses, except in the following cases.

1) Nationality: Nationality was taken as the culture which individuals now felt represented their cultural identity as asked in Question 4 of the questionnaire, rather than strictly that of birth.

2) Mother Tongue: Some people from countries where English was not the main language had marked their first language as English. In some cases it seemed that they had not understood the instruction to write their mother tongue first. It was decided that mother tongue speakers would only be marked where the country that they perceived as their nationality spoke English as a main language, eg UK, America, Canada, Australia and New Zealand.

3) Measures of involvement and influence: Each participant marked every other participant on how involved each team member was and how much influence each had on the group. The average score for each person, excluding the participants own self rating, was entered into the database.

Visual charts were created for each team showing the participation curves, the pattern of influence, the amount of simultaneous talk and the main outcomes. These charts and the outcomes of the structured observations for each team are described in the next chapter. The overall team figures are used to test the hypotheses in Chapter Six.

5. CHAPTER FIVE: STRUCTURED OBSERVATIONAL ANALYSIS

This Chapter describes the patterns of participation, influence and simultaneous talk within each team. The results report the structured observations of each team and the key influences on the teams' interactions. The first point to note however, is that the sample consists of two types of teams: training teams (CHEMCO, OILCO P180s, P181s, OILCO P280, OILCO Singapore and BANK teams); and operational teams (EXPCO 1 & 2, PHARMCO and COMMCO). It could be that these teams are so fundamentally different in their expectations of what the main aim of the team is, and in their outcomes, that they cannot be treated together in the analysis. This was tested by separating the results of the pre and post questionnaires and comparing the two types of teams.

5.1 Validating the sample

The first section of the pre and post questionnaires asked the participants about the purpose of the team and the second section about the team processes. A key test for validating the sample is the significance of any differences in the pre- questionnaire expectations. Nine expected outcomes of the purpose of the team working together and thirteen process outcomes were factored and analysed from the pre questionnaires. The results are tabled in Appendix Three.

5.1.1 Different expectations of outcomes between operational and training teams

In seven cases, training teams started with higher expectations than operational teams. However this reduced to five after the teamwork. So overall the operational teams seemed to have lower prior expectations and smaller shifts towards lower outcomes than training teams. The significant differences were that: (1) operational teams had higher expectation of influencing the organisation and creating a team which would work well together again; (2) the training teams had higher expectations of developing new skills and learning how to work in international teams.

There were no significant differences on the other five variables. The greater emphasis of the training teams on skills is to be expected. It can be argued that the possibility of influencing the organisation (as a group) created higher motivation to participate in operational teams than was the case for learning (individual) skills in training teams. It can also be argued that having a higher expectation of creating a team that can work together again better next time means that operational teams will be more likely to be careful to include everyone and pay more attention to

group process than training teams i.e. their expectation of more group oriented goals should create flatter participation curves.

All of the shifts between pre and post questionnaires in both the operational teams and training teams were towards their expectations not being met except 'creating a team that can work together better next time' for training teams. This exception may be explained by the fact that five of the seven operational teams had worked together before, whereas all the training teams were working together for the first time. The 'improvement' of the working relationships was from a position where there were no former relationships was more apparent.

The means scores for the teams give some indication of the rank importance of what the team members expected to achieve. Sharing ideas, completing the task, and getting to know colleagues were ranked highest. The team process issues of learning how to work in international groups, and developing a team that could work together better next time (Hackman 1990) were ranked above the only two issues external to the team: influencing the organisation, and advancing his or her career.

The fact that overall the teams started with higher expectations than were met is a salutary finding, particularly for those people developing training courses. The implication of this finding is reinforced when the largest shift in expectations takes place around developing specific skills, which is presumably the aim of most of the training exercises. It is also surprising that although all of the individuals were working in international teams, their expectations of learning how to work in these teams were not met.

5.1.2 Operational and Training Teams

Only three of the thirteen process variables were significantly different between operational and training teams. There was a significantly higher expectation that a clear leader would emerge in the operational teams, and also that they felt good about working in the team. This is predictable as they would have worked together before more than the training teams. The training teams had a higher expectation that working in English would help the team. Perhaps the operational teams were already aware of the limitations of working only in one language, but this question was ambiguous and difficult to interpret. As English was their only common language, some marked that they had no choice, others that because they all had different languages, it helped a lot; others used it to express their frustration of working in English.

Overall, the highest expectation was that there would be great differences in interactive style. This was followed by the expectation of a friendly atmosphere, expecting to feel good about

working in the team and expecting to be listened to. The lowest expectations were about a clear leader emerging, and the extent to which national differences would help the effectiveness of the group.

Outcomes were higher than expectations in only five of the thirteen variables, and then only marginally so. In both types of teams, the atmosphere was friendlier than expected, the levels of conflict and disagreement were significantly less than expected, and people only felt slightly less good about working in the teams than expected. It is worth noting that the increase in achieving a friendly atmosphere is in parallel to the decrease in achieving a strong team spirit. This could be due to the fact that many of training teams and the ad hoc meeting in COMMCO1 did not see themselves as a team, but as syndicate groups. What is interesting is that the shift to much lower perceptions of clear leadership than expected is greater in operational teams than in the training teams.

So, despite experiencing lower levels of diversity than expected, being satisfied overall with the participation, and experiencing a more friendly atmosphere than expected, these teams did not have the clarity of leadership they expected and did not achieve the levels of cohesion that they expected. A look at the individual variables shows that the negative shift is because national differences were not as helpful as expected, and some individual teams' outcomes showed national differences as hindrances (CHEMCOB, OILCOP181C, OILCO P181D, COMMCO4) and the expected levels of team spirit were not achieved. These findings re-emphasise that harnessing the benefits of diversity and building team spirit (Katzenbach and Smith 1993 Pg. 140 - 142) needs good cross cultural leadership skills (Adler 1986 Pg 139).

As there were some differences between training teams and operational teams in both their perceived purpose and their process, the two sets of teams will be described separately in the structured qualitative analysis. The quantitative analysis in Chapter Six tests the hypotheses developed from the revised team models in Chapter Three. There are different motivation factors in the expectations of team outcomes and different expectations of leadership between training and operational teams. The other process expectations around experiencing diversity and effective participation are similar. So, taking into account that pre appointed leaders are likely to appear in operational rather than training teams, there is no strong reason to split the sample in order to test the hypotheses.

5.1.3 The structured observational analysis

The video recording of each team was observed using a structured format (see description Chapter Four) and key issues highlighted which described the pattern of participation according to the five main hypotheses (1 - 5) that pertain to an individual's attributes and experience. The resulting perceived influences of each team member, the levels of simultaneous talk and the mean outcomes of the teams are all shown in the charts at the beginning of each team description. As shown on the key chart below, the five hypotheses are represented by the five points of a star which represents each individual and is placed on the chart to show the percentage participation in the overall team process. If the first five hypotheses in Chapter Three are supported, the stars should become lighter the lower they are down the participation curve (see example on key chart)

It should be noted that the researcher is aware that this kind of analysis is open to strong researcher bias and so these results should be seen as the observations of a British born female researcher who has lived in India for six years and travelled extensively. Every attempt is made to give an accurate impartial account of the events in these teams. Some of the critical incidents concerning minorities highlighted the fewer number of women compared to men and these imbalances were often further compounded by national status differences. The researcher was not setting out to make particular comment on what happens to women in these teams, but felt it important to note the sex differences. First the training teams were analysed and then the operational teams.

5.1.4 Glossary of terms

Participation = the number of times each team member spoke.

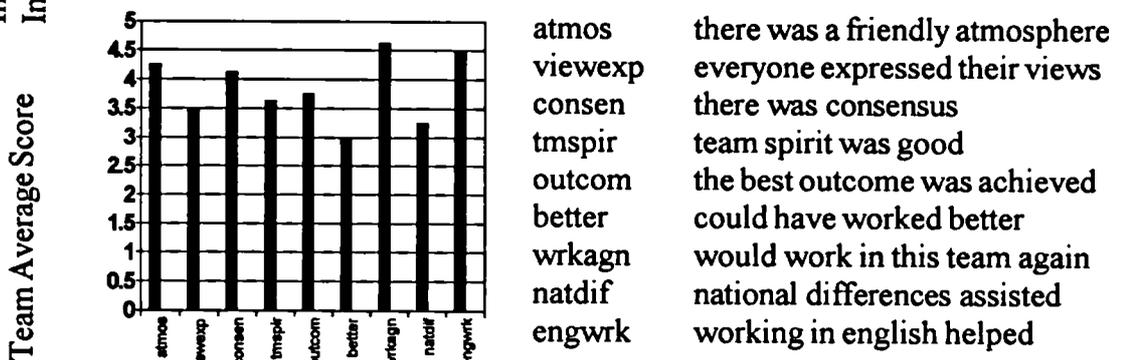
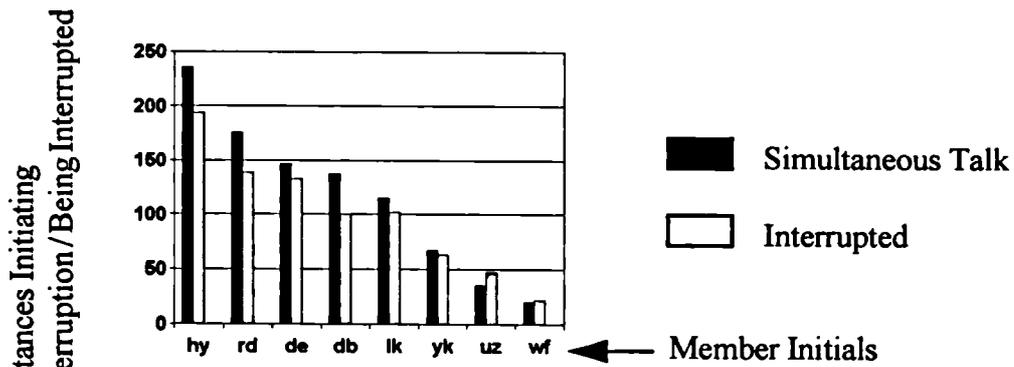
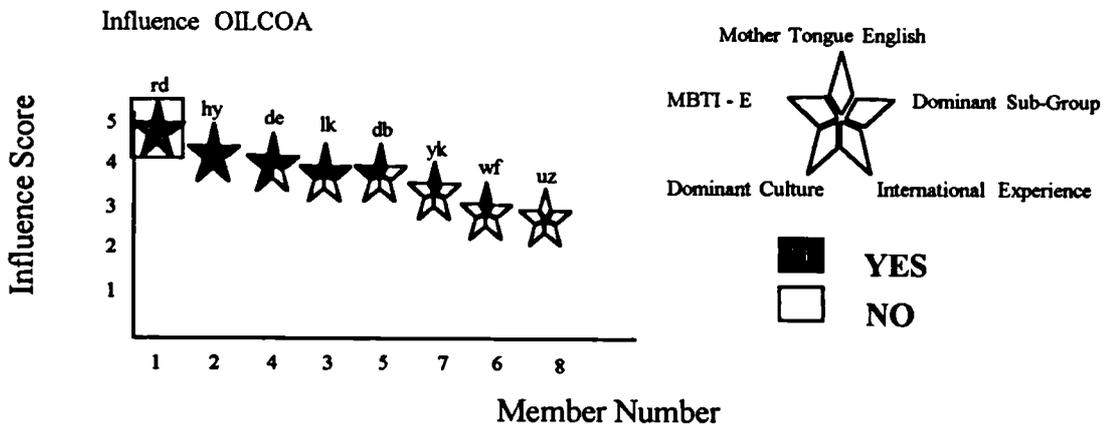
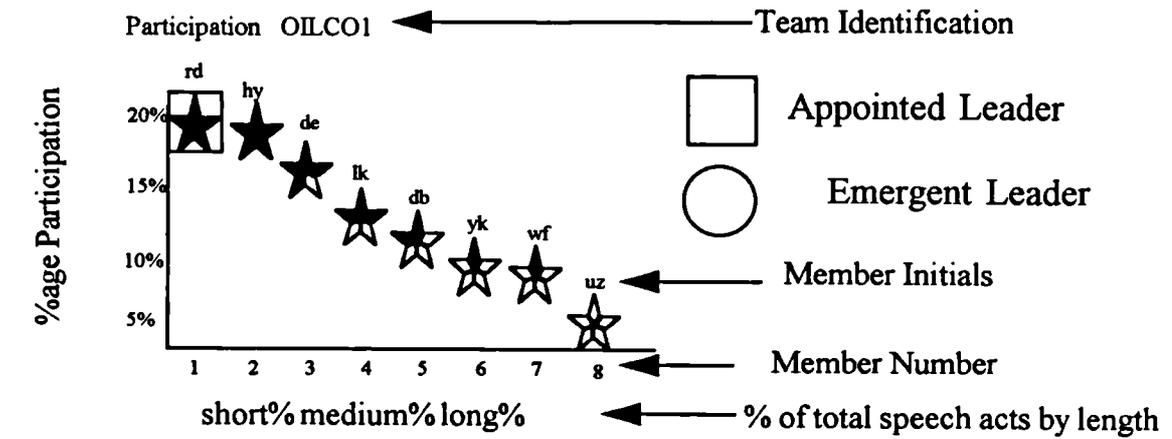
Simultaneous talk = beginning to talk when someone else is still talking.

Interrupted = this term is used loosely to describe the event when a participant stops talking after someone else has started talking at the same time. It is not necessarily interruption as the word is commonly understood.

Influence = the average of the other team member's assessment of each team members influence on the team.

Back channelling = A word or grunt by one team member to acknowledge a second team member's words, but which in no way interrupts or affects the flow of the second team member's speech.

Figure 5.1 KEY TO CHARTS



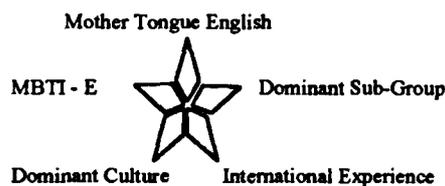
5.2 TRAINING TEAMS

5.2.1 CHEMCO

CHEMCO is the UK's largest chemical company. At the time of the video recording, before the company was split into two, there was a corporate training function. Figures for the percentage nationalities of the top managers were not available. However, the annual report indicates that the board was comprised of 8 UK executive directors, and 6 UK and 1 US non executive directors.

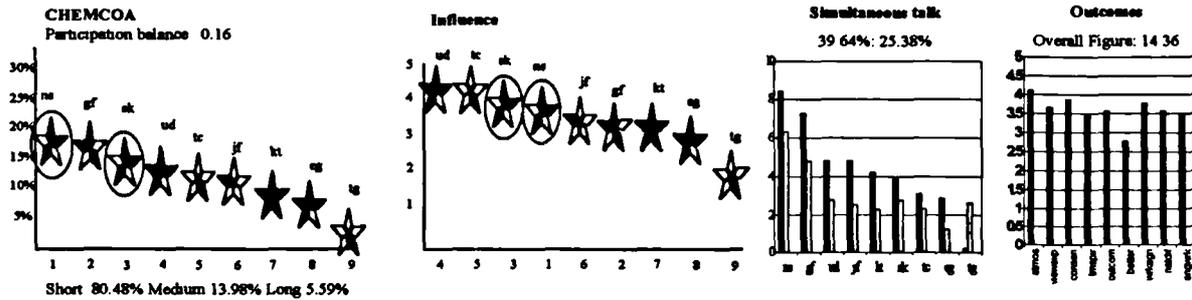
The four groups studied are subdivisions of the whole group of senior managers participating in a week long Senior International Managers programme. The four syndicate groups worked for an average of four hours each, spread over three evenings. The principle task for each syndicate was to present to a director of CHEMCO ideas and proposals to do with one priority area which the syndicate believed could be tackled more vigorously to speed up and/or improve the quality of implementation of the group strategy. The presentations were to be ten minutes long and focused on both individual and group actions.

Reminder of stars



5.2.1.1 CHEMCOA

Outcomes

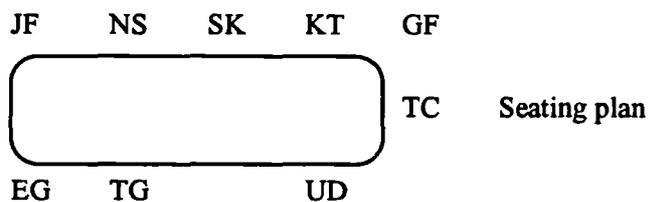


Inputs

CHEMCOA	TC	UD	JF	TG	EG	SK	NS	KT	GF
Nationality	Pakistani	British	Dutch	Brazilian	British	British	British	British	American
Language fluency	Fluent	Mother Tongue	Fluent	Fluent	Mother Tongue	Mother Tongue	Mother Tongue	Mother Tongue	Mother Tongue
Age	36-45	26-35	36-45	36-45	36-45	36-45	46-55	46-55	46-55
MBTI	INSP 21/21/51/1	ESTJ 21/11/5/3	ENSJ 3/11/27/13	INSP 17/23/37/13	ENSP 17/31/43/23	ISTJ 17/35/39/33	ISTJ 37/31/61/53	ESTJ 43/17/47/25	ENSJ 1/15/33/29
Sex	M	M	M	M	M	M	M	M	F
International experience	Yes	No	No	No	No	No	No	Yes	No
Job title	General Manager	Marketing Manager	Works engineer	Financial Controller	Career development Manager	Education Adviser	Senior Pathologist	President CHEMCO Korea	Director Drug Reg. Affairs

Overall time: 4 hours McGrath(1984) Task type 2 : Generating ideas

Seating Plan



Process

Key observations: *Anglo-dominance: high levels of simultaneous talk.*

Initially there is a lot of laughter about the video. There are no introductions, NS and UD go straight into task. Each participant has a different style. The British dominate the interaction

and simultaneous talk, often repeating words until they gain floorspace. JF (Dutch) comes in strongly at the beginning but gradually withdraws as the high levels of simultaneous talk get established. GF (USA) comes in strongly but is often ignored by EG (UK), NS. SK (UK) and JF tend to talk over her and KT cuts across her comments. TC (Pakistan) comes in with the longest detailed inputs, to which people usually listen. TG (Brazilian) remains silent except for a few comments.

While NS takes the lead at the start of the second session, and passes it to SK in the third and fourth, UD tends to pull things together and write on the flipchart.

Two important incidents occur. Early on UD suggests they brainstorm ideas. TC suggests going around the table, which would have involved TG, but UD immediately retorts 'Don't even bother going around the table, just keep throwing them out'. TG does not contribute until much later and his ideas are not taken up.

At the beginning of the second session, RJ's repeated comments about involving people who are working in English for the first time are not heeded and so he persists until he gets agreement that a five minute process review will be done at the end of each session. Both SK and NS do occasionally consciously make room for TG with comments like 'TG, your point now' and NS 'One at a time please' to let TG talk.

They do stop to use the last five minutes of the second session for review, but nobody seems quite sure what to do, so GF summarises the content of their discussion. NS suggests that they use the time to come up with more ideas. SK brought them back to process and started by saying that he is enjoying working in the team although it is very fast. GF immediately brings it back to the task.

The stars show that apart from EG and KT (who was absent for half the time) mother tongue speakers tend to dominate the participation and to a lesser extent members from the dominant culture and the larger UK subgroup. There are high levels of simultaneous talk among the Anglo - sub group. Of the non dominant speakers TC, who would be used to using English as a business language in Pakistan, participates more than the Dutch or Brazilian. The person who dominates the flipchart (UD) gains the most influence and TC comes second due to his bright ideas, the two emergent leaders were elected to manage the process rather than the content and had lower influence than UD and TC who contribute to the task. GF is ignored more than the other men which could be the result of being the 'token' woman (Kanter 1977).

Process

This group starts relaxed and friendly with a few light-hearted comments. Again there are no introductions and NU (UK) starts by asking if they are going to reflect on what they have heard today or carry on. TN (UK) suggests that they should start in a British fashion and spend a couple of minutes each thinking about a topic and then brainstorm. This includes everyone in a highly interactive and questioning way. Again the participants have very different styles. No leader is appointed or chosen, there is never any discussion or review of the process.

The ensuing discussion shifts from patches of very high amounts of overtalk to quieter patches which NU usually picks up to present a summary or give direction. SL takes the flipchart in the second session and creates a model. By the end of the second session, only CX, SL and TN are keeping it going as IEI, IT, KN and NU withdraw. They draw lots for the presenter and there were comments that drawing lots is a very British process.

MT's and HS's disaffection with the light style and lack of organised process set by SL, CX and TN is clear from the post questionnaire. NU commented, 'Group lacked any serious intent. I was totally dissatisfied by the outcome, I tried to get the group back on the rails, but gave up by the third session'. SL himself commented: 'The group worked well, but paid little attention to process. I felt I had a tendency to dominate but, when I tried to let others contribute, (they) became inclined towards disruptiveness.' SL also marked that working in English strongly hindered the group 'in that JM's English meant he could not contribute (or we did not have the patience!). TN commented that 'level of English ability is not the only problem with multicultural groups - some non-English hide behind language as a reason for not getting involved.' This group has the lowest satisfaction outcomes of the four CHEMCO teams.

Aside from CX who has much international experience and is quadri - lingual, the stars show that on the whole, mother tongue speakers participated more than non mother tongue speakers. There was no discussion of process review and the participation curve shows that two people dominated and then drops off steeply. The levels of simultaneous talk were lower than in CHEMCOA. Again the person who dominated the flipchart and shaped the teams ideas into a model, SL, gained the most perceived influence. National differences were perceived to hinder the group's effectiveness and it was felt that not everyone expressed their views.

5.2.1.3 CHEMCOC

Outcomes



Inputs

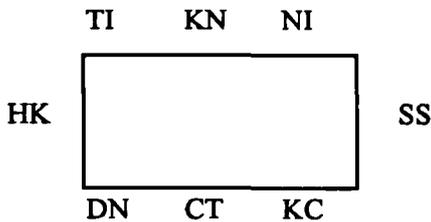
CHEMCOC	KC	NI	TI	HK	DN	KN	SS	CT
Nationality	British	Ireland	American	Germany	British	Zimbabwe/Canada	India	British
Language fluency	Mother tongue	Mother tongue	Mother tongue	Non fluent	Mother tongue	Mother Tongue	Fluent	Mother tongue
Age	46 - 55	35 - 45	36 - 45	36 - 45	36 - 45	45 - 56	36 - 45	36 - 45
MBTI	INTJ 3/9/23/17	ENFP 49/29/23/33	ENTP 29/25/13/55	ISTJ 25/17/45/31	ESTJ 27/43/19/25	INFP 31/31/29/53	ENFP 17/23/23/61	ENFJ 5/35/27/33
Sex	M	M	M	M	M	F	M	M
International experience	Yes	Yes	No	No	No	Yes	No	Yes
Job title	Ast. General Manager	General Manager	Manager, Financial Planning	Accounting Manager	Technology Devel. Manager	Director Compensation	Customer Services manager	Business Manager

Overall time: 4 hours 45 minutes

McGrath Task type 2: Generating ideas

Key Observations: *Structured; clear leader from session two onwards; Some concern with process and attempts to involve everyone.*

Seating Plan



Process

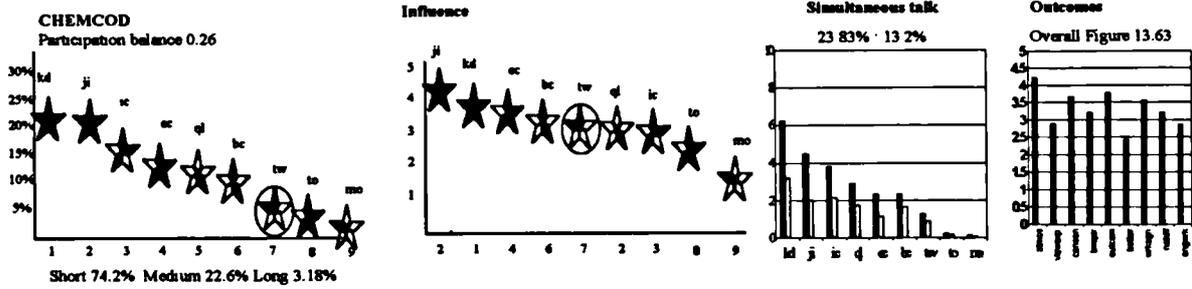
TI starts with some light comments. KC then voices the task and others comment. SS and KN are silent at first. The initial brainstorming has high energy and levels of simultaneous talk. After 45 minutes, NI strongly recommends that they have a leader and agree the process. KC is appointed. From then on the team follows a fairly structured approach to brainstorming an idea, deciding on a topic and working it through. KC and CT make a point of allowing HK to speak and encouraging SS to take over writing on the flipchart from HK. The pace is slow until the end, which allows SS and HK to contribute.

The different personal styles and areas of experience seem to influence this team. E.g. KC comes across very authoritatively from the beginning, NI is very tense and tends to burst in, CT does an enormous amount of supportive back-channelling, TI remains light-hearted and superficial. DN has a soft manner and presents arguments, CT gives lots of examples and KC and DN do most of the in depth questioning. Neither SS or HK do that, which could reflect a cultural or linguistic difference and HK often pushes for clarification and summarising. Later on, SS offers substantive ideas and examples.

With the overall measured pace, and structured process, the group has the highest satisfaction outcomes of all the CHEMCO teams and the flattest influence curve. The stars show five mother tongue speakers dominated the participation and that being an individual from the organisation's dominant culture seems to have an influence beyond that. Again SS from India, who would use English as a business language, participates more than HK from Germany. HK, SS share scribing on the flipchart, however KC acts as the main shaper of the content of the task as well as managing the process. He gains the most influence. There is a large change in the order of participation and influence below the first two who remain the same, showing that it was what people said rather than the amount they spoke that affected the perceived influence in the team.

5.2.1.4 CHEMCOD

Outcomes



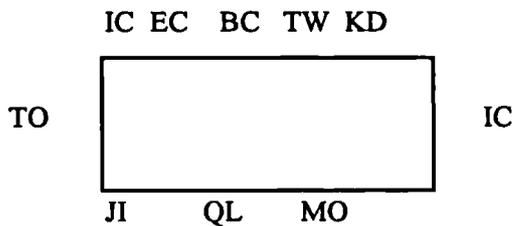
Inputs

CHEMCOD	IC	BC	EC	KD	JI	TO	MO	TW	QL
Nationality	British	Canadian	British	British	British	British	Peruvian	American	Malawi
Language fluency	Mother Tongue	Mother Tongue	Mother Tongue	Mother Tongue	Mother tongue	Mother Tongue	Non fluent	Mother tongue	Fluent
Age	46 - 55	36 - 45	46 - 5	36 - 45	26 - 35	26 - 35	56 - 65	36 - 45	36 - 45
MBTI	ISTJ 45/19/39/ 27	ISTJ 47/41/49/ 29	INTP 7/23/11/ 33	ENTJ 25/19/39/ 19	ESTJ 29/23/51/ 49	INTJ 47/51/9/ 35	ENTP 15/7/53/1	ESTJ 19/15/25/ 11	ENTJ 9/17/39/ 39
Sex	M	M	M	M	M	M	M	F	M
International experience	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Job title	Business Manager	Director/audit	Engineering Manager	General manager	Business Manager	Finance Manager	General Manager	Sales Manager	Country Manager

Overall time: 4 hours McGrath (1984) Task type 2: Generating ideas

Key observations: Anglo-dominant subgroup, British humour, no reference to process after initial structuring of task.

Seating Plan



Process

KD (UK) suggests that they start by reading through their notes. JI suggests that they sort out process and others concur. KD sorts out the timing. KD, and JI (UK) dominate the initial structuring, TO (UK) writes quietly on the flipchart. After eight minutes QL suggests that they appoint a leader. EC (UK) jokes if anyone has straws. QL (Malawi) persists that someone should control things and timing. EC says, 'we have one lady' TW (US) replies, 'yes you do, do you think I could moderate this group?' This is followed by a spate of jokes about the building being a British country club and that they cannot in the circumstances be rude to the one female. TW is appointed and does her best for the first session to get them to speak one at a time. She is ill during the second and third session.

There are many ribald jokes in her absence. MO (Peru) is also absent for two sessions and contributes little as does TO who seems very introverted. KD, JI and IC (UK) dominate the pattern of finishing each others' sentences, of using small repeated phrases to get floor space and of creating bursts of short sentences, where people are building one after another on each others' ideas and words. This seems to be a particularly British trait that excludes second language speakers. It is proposed that the presenter is non Anglo and BC accepts the job once he understands the content of the slides.

When TW returns in the last session, she comments that she understands the verbiage on the walls. The British team members burst out laughing and do not notice her bewilderment, nor again later on when they make a joke about it. Watching, it is clear that 'verbiage' has a different meaning in American English than in UK English, but the Anglo dominant group has no sensitivity towards this.

This team scored quite low on satisfaction. It was interesting to note that in their post questionnaires, the same dominant Anglo-subgroup also thought that not everyone expressed their views and that a strong team spirit was not achieved. However they did nothing to stop the process that was cutting out the other team members and the interaction or process itself was not discussed after the initial points of timing and creating a leader.

The stars show that four mother tongue speakers dominated the participation. Two E's on Myers Briggs spoke the most and the other two spoke the least. They also indicate that being a member of the dominant culture and numerically larger subgroup factor could also have some influence on participation. QL would use English as his business language, and he participated more than MO (Peru) , even if his participation is doubled to account for his absences. JI shaped

the content of the group’s discussion on the flipchart and although KD spoke the most, JI is perceived to have the most influence.

5.2.1.5 CHEMCO TEAMS :Summary of key observations

All these teams had a larger UK subgroup than any other nationality. The stars indicate that in each team except CHEMCOB, some members of these British subgroups had the highest levels of participation. Three of the four emergent leaders were British , the exception was TW in CHEMCOD, who was appointed to manage the process after being singled out as the only female. Other English mother tongue speakers (US and Canada) also participated well. People from former British colonies, India, Pakistan and Malawi, where English has remained a main business language, participate more than fluent and non fluent ‘Continental’³ Europeans and Latin Americans. It appears that one of the main factors affecting an individual’s amount of participation is the capacity to participate in the fast pattern of English and high levels of simultaneous talk created by the British subgroups. The post questionnaires indicated that in CHEMCOD there was an awareness of this pattern excluding other people , but no attempt was made to correct it during the process.

All these teams have high levels of simultaneous talk. Unlike Dabbs and Ruback’s findings (1987) at a first glance, the group levels of simultaneous talk do not at first glance correlate with the team levels of satisfaction. However the levels of satisfaction do seem to relate to the angle of the participation curve and the degree of difference between the highest and lowest levels of participation.

Team	Balance of participation	Difference between highest and lowest % participation	Overall satisfaction figure
CHEMCOC	0.16	16.31	14.62
CHEMCOA	0.16	16.54	14.36
CHEMCOD	0.26	19.37	13.63
CHEMCOB	0.28	22.86	13.06

In this type of team, there is a trend towards flatter participation curves leading to higher levels of satisfaction. Noticeably the two most satisfied teams were also those that paid some attention to involving everyone and managing their interactive process. These trends begin to show initial

³ Europeans excluding British and Irish

support for Hypotheses 11: that teams that have balanced participation will be more satisfied than teams where the participation is very uneven.

The stars in the chart indicate that aside from mother tongue speakers, being a member of the dominant culture or a numerically larger subgroup seem to lead to higher levels of participation. In these four teams, all members of the dominant culture and larger subgroup were also mother tongue speakers; there is no indication as to which variable may be having the most influence. In most teams two of the three higher participation and most influential members have extrovert preferences. However many of the quietest members, including mother tongue speakers, also have extrovert preferences, so it seems inconclusive at this point.

Most of the higher participating members also do seem to have international experience, especially some high participating non mother tongue speakers and non dominant culture members, e.g. CX, GF, TC and QL.

So while the trends seem to indicate support for the main hypotheses it is not obvious that the stars get predominantly darker the higher up the curve they go. This means that the variables chosen may not in the end explain a large proportion of the variance in participation. This would also support the view that the ability and motivation to participate in teams is a complex phenomenon.

One interesting finding is that those individuals who most shaped the content of the task were perceived to have the most influence. In three teams, this was someone other than the emergent leader and who volunteered to use the flipchart most of the time. In all three cases they both wrote up the ideas of the team and volunteered a model within which to frame the team's ideas. In the fourth team, the most influential person was the team leader, who invited other people to scribe while framing the context and process himself.

5.2.2 OILCO

A joint venture between two companies, OILCO Transport and Trading UK (40%) and Royal Dutch OILCO (60%) will here be referred to as OILCO. Its main business is oil and petroleum products exploration and distribution world-wide with 134, 000 employees in 1992. It also has a large share in Petronas, the Malay state oil company.

No data on the nationalities of the boards or top 100 managers were available. A rough estimate by one internal HR consultant was 96 - 97% Anglo Dutch at that time. He comments that since then (1992) a serious internationalisation drive has gone into operation with visible changes, but not yet at the very top. Of the Group managing directors, three appear to be British and three Dutch. At the level of graduate recruitment in 1992, 120 were Dutch, 65 UK, 37 French, 18 German, 14 Belgians, 13 other Europeans.

5.2.3 OILCO P180

Teams A & B were filmed doing different task to C & D. The task for A & B was laid out as six consecutive questions that they had to answer from the data given. They had a set period of two hours to complete the task. In both cases the group chose to remain as a whole to answer the six questions. The task for C & D involved three separate computational tasks on designing the correct rotating equipment and both teams split into subgroups.

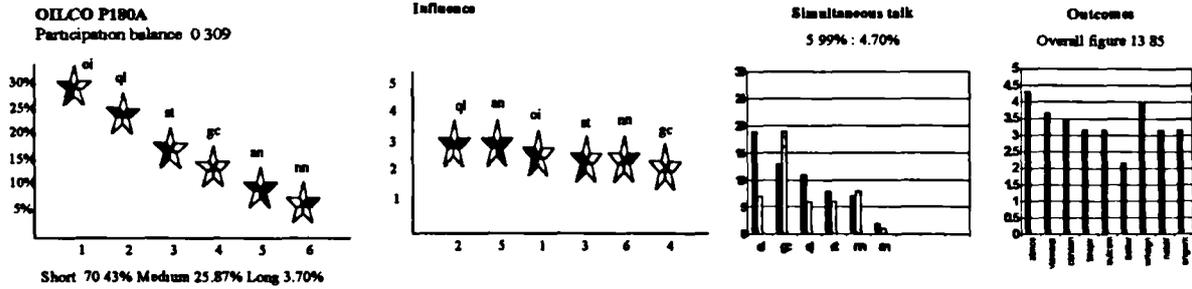
The four teams were created from the whole group as part of a five week surface and development operations course in OILCO. They were assigned different work groups for each week. These teams were filmed in the fourth week of the programme: A & B on the first day of working together in that specific combination and C & D on the third day of working together in that specific combination . Given the organisational structure of OILCO, both the Dutch and UK team members will be regarded as belonging to the dominant culture.

Reminder of star



5.2.3.1 OILCO P180A

Outcomes



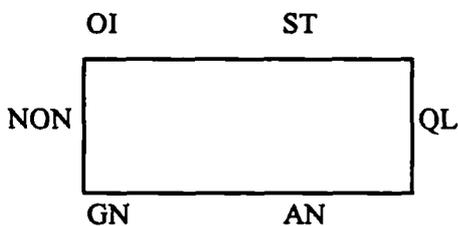
Inputs

P180A	GC	OI	QL	NON	ST	AN
Nationality	Turkish	Dutch	Malay (Indian)	Malay	Dutch	Malay (Chinese)
Language	fluent	non fluent	fluent	fluent	Non fluent	fluent
Age	26 - 35	18 - 25	26 - 35	26 - 35	26 - 35	18 - 25
Sex	M	M	M	M	M	M
MBTI Pref	ISTJ 5/27/23/41	ESTP 5/17/3/43	ESTP 43/13/55/19	ISFJ 33/7/13/27	ENTP 21/15/17/45	ENFP 3/1/1/11
International experience	No	Yes	No	Yes	No	Yes
Job title	Mech Des eng	Jnr Proc. eng	Project Super	Contracts eng	Trainee Jnr Proc Eng	Planning eng
experience with task	Much more than the rest	The same as the rest	A little more than the rest	A little less than the rest	Much less than the rest	a little less than the rest

Overall time: 2 hours McGrath (1984) Task Type 3: Intellective task

Key observations. No Mother tongue English speakers. One person led the discussion at one end of the table. This marginalised the person at the far end.

Seating Plan



Process

The team works as a whole team all the way through. The process of working through the questions is driven by QL (Malay of Indian origin), whose English seems most fluent, and OI (Dutch) who is outgoing and enthusiastic. There is a slight competitive air, especially between QL and GC and little team spirit. On the post-questionnaire, GC (Turkish) reckons that he is the most experienced, his English is slow and his inputs are usually critical of what the others are doing and are delivered in a low heavy voice. After some time, QL and OI do not pick up on his comments and from then on he tends to get ignored. QL listens to and respects AN's (Malay) input. ST (Dutch) asks a lot of questions indicating that he is learning as he often asks OI for clarification in Dutch and they do not seem to be questions that OI feels that the rest of the team would be interested in.

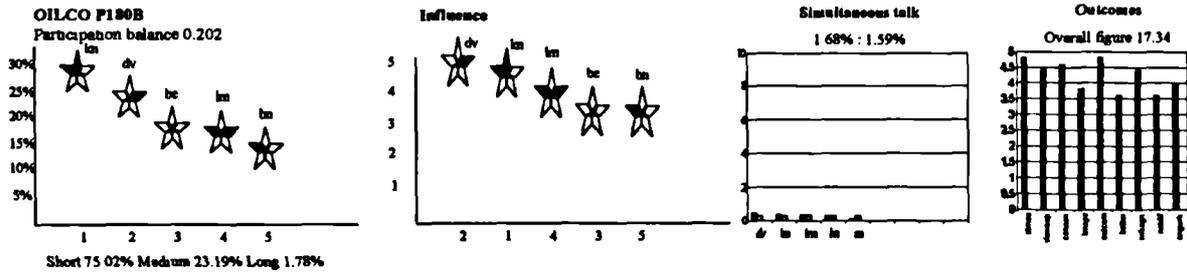
NON (Malay) is quiet at the far end of the table. When papers are put in the middle of the table for everyone to lean over, they are set facing QL and even if NON leans far, it appears that he cannot read them upside down at that distance. There is no attempt to include him and comments that he makes, he directs to OI and GC closest to him.

The larger subgroup of Malays does not seem to make any difference. The three Malays seem to be of very different ethnic origins. QL as the Indian Malay is most fluent in English and is comfortable directing and effectively leading the group through the six questions. AN is Chinese Malay and only proffers his opinion occasionally when it is attentively listened to by QL and OI. NON is darker in appearance than AN but looks neither distinctively Indian nor Chinese. As described he remains quiet and virtually excluded at the end of the table. With no mother tongue speakers, the stars show that one dominant culture and one non dominant culture individual participated the most, that the top three participators had an extrovert preference but that the only person with international experience participated almost the least.

There was no discussion of process apart from QL's time keeping and little sense of cohesion with the exclusion of NON and GC and ST' learning role. This team scores lowest on the outcomes of all four P180 teams

5.2.3.2 OILCO P180B

Outcomes



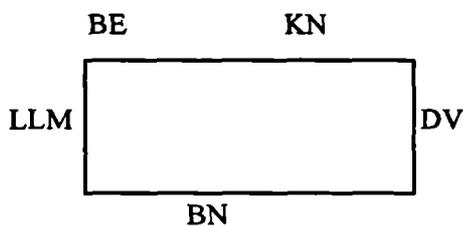
Inputs

P180B	BE	LLM	KN	BN	DV
Nationality	Norwegian	Malay	Australian	Omani	Malay
Language	non fluent	fluent	Mother tongue	fluent	Non fluent
Age	26 - 35	26 - 35	26 - 35	26 - 35	26 - 35
MBTI	ISFJ 31/7/9/19	ESTJ 9/11/11/31	ENTJ 13/21/25/3	ENTJ 43/9/55/1	ISTJ 7/13/39/47
Sex	M	M	M	M	M
International experience	No	No	Yes	Yes	Yes
Job title	Subsea eng	prod eng	process eng	Project eng	Prod Engineer
experience with task	A little less than the rest	A little more than the rest	A little more than the rest	A little less than the rest	Much more than the rest

Overall time 1 hour 50 minutes McGrath (19984) Task Type 3: intellective task

Key observations: *One mother tongue speaker who develops the rationale and explains the logic out aloud. One non dominant culture individual has experience on the task. There is a strong sense of respect and balanced participation in the team.*

Seating Plan



Process

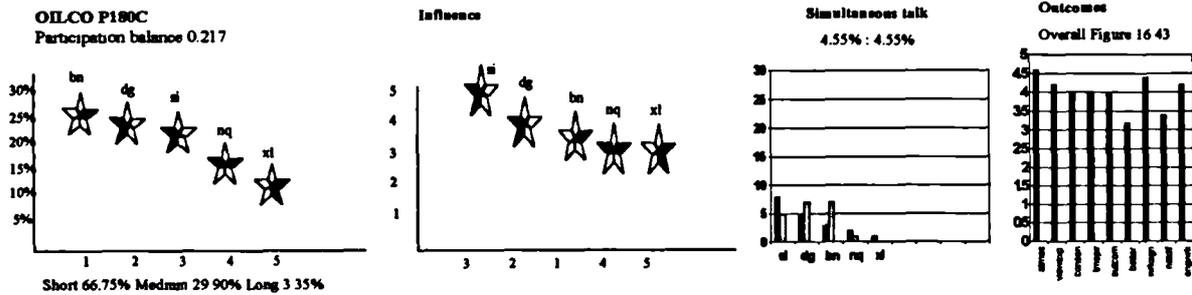
Initially KN (Australian) asks who has experience and DV, (a Malay of Chinese origin) responds. Everyone laughs and after reading through DV explains the problems while KN argues the rationale. There is an immediate air of respect for each other. BN (Omani) is quiet, BE (Norwegian) is learning and often asks KN for clarification. A pattern of interaction is set up by DV and copied by KN; that of the speakers stopping very briefly after every three sentences to check that everyone is clear. This creates a balanced harmonious pattern of participation. There is a quick switch from speaker to speaker.

LLM (Malay of Chinese origin) is quiet at first and after half an hour realises that he has to break into the pattern of speech. He does four successive bits of simultaneous talk and is then established as part of the flow. BN remains quieter throughout. The chart shows that although KN spoke the most, DV's experience had the most influence. This team were the most satisfied that they achieved the best outcome and that they were helped by national differences. Note that although P180A was also led by a Malay, perhaps the different ethnic origins could have influenced the kind of participatory style they set up. This team was inclusive and harmonious, P180A was not.

The stars show that although KN has the highest participation and an extrovert preference, the two other individuals with extrovert preference participate the least. Nobody had any international experience and the one mother tongue speaker did talk the most. There were very low levels of simultaneous talk and like P180A no discussion of the process.

5.2.3.3 OILCO P180C

Inputs



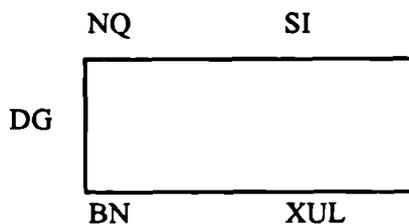
Outcomes

P180C	DG	SI	BN	NQ	XUL
Nationality	Dutch	Dutch	Malay	Malay	Malay
Language	Fluent	Fluent	Fluent	Non Fluent	Non Fluent
Age	26 - 35	26 - 35	18 - 25	36 - 45	26 - 35
MBTI	ESTJ 13/59/61/33	ESTP 1/25/35/13	ISTJ 15/7/33/45	ESTJ 9/51/37/39	ISTJ 27/29/3/25
Sex	M	M	M	M	M
International experience	Yes	No	Yes	No	Yes
Job title	Jn Maint Eng	Process Eng	Maint Eng	Platf. Superv	Eng
experience with task	A little more than the rest	Much more than the rest	The same as the rest	The same as the rest	The same as the rest

Overall time: 3 hours McGrath (1984) Task type 3: Intellective task

Key observations: Dominant attitude of one person. Malay subgroup who maintain a friendly atmosphere in the team.

Seating Plan



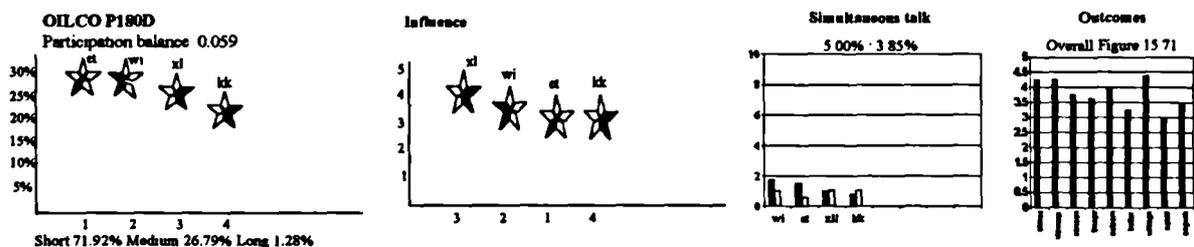
Process

While the team is assembling, SI (Dutch) comes in and says that he knows all the answers and that it is very simple. After ten minutes discussion, he suggests that they split into subgroups and that he works alone. He argues down the alternative suggestions made by BN (Malay) and

DG (Dutch). He then works on his own and acts as the 'teacher on call' to the rest of the group. NQ(Malay) , and XUL (Malay) remain light-hearted and friendly from the beginning and BN works hard to lighten the atmosphere after the initial stalling effect of SI's attitude. DG is very straightforward, outgoing and friendly. SI often talks to DG in Dutch, NQ lightly asks him to speak in English. The ability of the team members to keep the atmosphere positive and friendly despite SI's initial attitude is reflected in high satisfaction. There is very little simultaneous talk and many short speech acts one after the other adding in parts of the calculations. While SI dominates initially, the Malays participate more after the first session of subgroup work. The stars show that there were no mother tongue speakers. Although one Malay talked more than anyone else the other two participated the least. The two dominant culture Dutch were perceived to have had the most influence.

5.2.3.4 OILCOP180D

Outcomes



Inputs

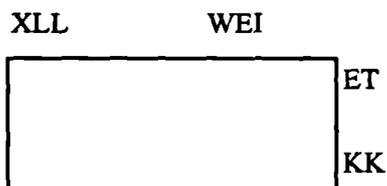
P180D	WEI	KK	XLL	ET
Nationality	Dutch	Malay	Malay	Dutch /Nigeria
Language	Non fluent	Non fluent	Fluent	Non fluent
Age	26 - 35	26 - 35	26 - 35	26 - 35
MBTI	ENTP 39/33/29/11	ISTJ 11/55/25/17	INTJ 17/1/17/25	ISTJ 9/9/35/39
Sex	M	M	M	M
International experience	Yes	Yes	No	No
Job title	Prod. Oper	QA eng	Proj. Super	Struct. Eng
experience with task	The same as the rest	A little less than the rest	A little more than the rest	A little less than the rest

Overall time 2 1/2 hours McGrath (1984) task type 3 : Intellective task

Key observations: Small group, all second language speakers speaking slowly and carefully.

Build up good atmosphere. Very balanced levels of participation.

Seating Plan



Process

The conversation starts informally by ET (Dutch, born in Nigeria) saying 'okay are you finished?' XLL (Chinese Malay) analyses the problem and comes across as being the most

experienced on the task. XLL's English is slow as is ET's and both XLL and KK (Malay) are softly spoken. ET tends to organise the pattern of work and XLL leads on technical knowledge. WEI (Dutch) seems the most outgoing (the only E on MBTI) and with KK contributes to the strong and emphasised debate and questioning that goes on around each item. They spend most of their time in two subgroups except the first 11 minutes and last 30 minutes; ET with KK and WEI with XLL. (I.E.: one Dutch and One Malay in each pair.) so their monitored group time was very short. Particular incidents were based around good humour, e.g. when ET did not understand something XLL was putting forward at the end, he leans forward and asks 'did I sleep at that moment?' XLL and WEI immediately laugh and retort 'Yes, you did'. Overall the slow pace of English seemed to allow XLL to share his higher levels of expertise.

The stars show that there were no mother tongue speakers and that the two dominant culture Dutch talked more than the two Malays. However the pattern of perceived influence shows the effect of WK's expertise. The small team of four has a very high balance of participation almost at zero.

5.2.3.5 OILCO P180A, P180B, P180C, P180D: Summary of key observations

Most of these teams had no mother tongue speakers but did include some people from the dominant culture. Interestingly the team with the highest satisfaction outcome (P180B) had no people from the dominant culture. P180B did not have as balanced a pattern of participation as P180D, but had a very rhythmical and steady participation showing respect for the person with the most experience. In both P180D and P180B a non dominant culture person (Malay) was recognised as having the most experience and combined with everyone's slow English and small group, this led to a very balanced outcome or high level of satisfaction.

These teams had much lower levels of simultaneous talk than the Anglo-dominated CHEMCO teams. In P180A, P180C and P180D, the Dutch tended to start talking when the Malays were still talking rather than vice versa

P180 A and P180 C seemed to be dominated by the people who decided to lead the group: SI by his attitude that he was far more knowledgeable than anyone else and QL on his desire to organise and push the task. Despite SI's domineering attitude, P180C seemed to succeed because the other four team members did their best to make light of it and incorporate SI's expertise. However in P180A, QL allowed NN to get isolated, perhaps due to the size of the group and the seating, and there seemed to be a common dislike of GC despite his greater experience.

The stars show that there is very little international experience in the group as a whole and it does not seem to have much influence. Although in P180A, three of the four team members with an extrovert preference participated the most, this pattern was not sustained across all teams. Over all the four groups, there did not seem to be any particular pattern of either the Dutch, Malays or other larger national subgroups dominating the participation or influencing the group. One factor that did appear to influence participation and particularly perceived influence was individual level of expertise.

5.2.4 OILCO P181

All four teams constituted the whole group of a five week training programme that focused on subsurface (below the ground) operations . The participants were at the same level and the course was off the same duration as the previous four groups but working on a different content. The teams were slightly larger.

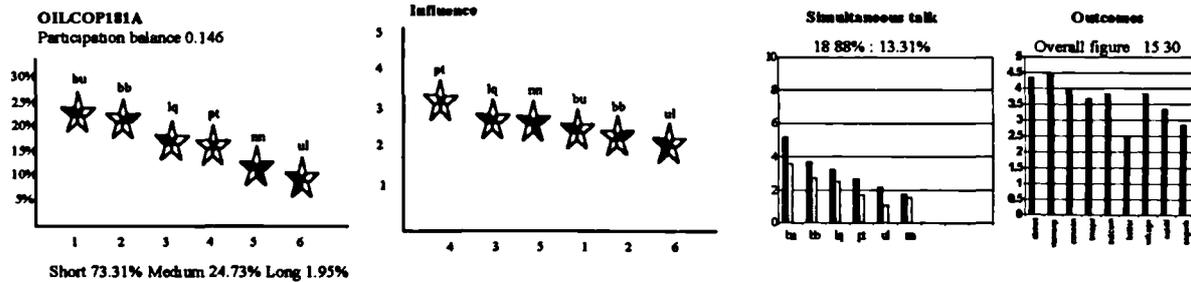
The syndicates were rearranged for maximum national mix every week and all these teams were recorded doing the same task during the second day of the fourth week of their course. The video cameras were set up in the corner of each room. The researcher was not present except to change tapes in the final break. Each team was given a seismic printout and logs and worked for four hours on average to decide whether or not to drill a wildcat site. Most teams elected to work in subgroups for a majority of the time, on different parts of the logs.

Reminder of star



5.2.4.1 OILCOP181A

Outcomes



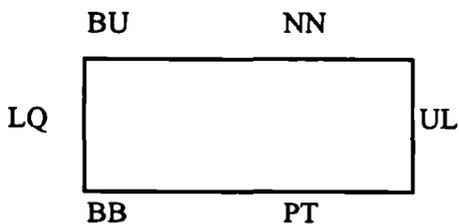
Inputs

P 181A	PT	LQ	BB	BU	UL	NN
Nationality	Norwegian	Dutch	Malay	Nigerian	Dutch	Malay
Language	Fluent	Fluent	Fluent	Fluent	Non fluent	Fluent
Age	26 - 35	26 - 35	18 - 35	26 - 35	26 - 35	26 - 35
MBTI	INTP 1/51/13/39	ESTJ 49/33/29/15	ISTJ 5/29/33/21	ENTJ 13/5/11/47	ESTJ 33/43/31/1	ESTJ 13/9/37/13
Sex	M	M	M	M	M	M
Internt'l experience	No	Yes	Yes	No	No	No
Job title	Production technology	E &P	Petroleum engineer	Well site Driller	Well site Engineer	Well site engineer
Experience with task	A little more than the rest	A little more than the rest	The same as the rest			

Overall time: 3 1/2 hours McGrath (1984) Task type 3 : Intellective task

Key observations: Experience rather than levels of participation creates influence; annoyance shown by particularly on personnel towards a Nigerian's interactive style.

Seating Plan



Process

As this team settles there is an air of estrangement and BB (Chinese Malay) starts straight into the task. BB initiates by suggesting that they plan and decide what they have to do. After 17 minutes, all the attention is on PT's (Norwegian) experience and his clarifying what they need to do. BU (Nigerian) seems to repeat things that are said, as if to clarify, and often comes into the conversation in a slow relaxed style before someone has finished talking. LQ (Dutch) wants to structure and gets impatient with BU's repetitive habits, writing on his post-questionnaire 'the Nigerian way of repeating every point made by either themselves or others hampered the group effectiveness. This also tends to focus time and attention on irrelevant details instead of getting the job done'.

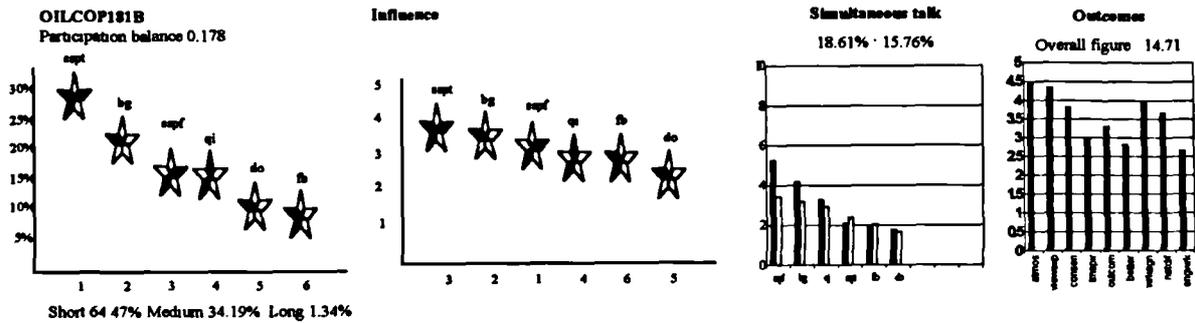
NN (Malay) is very light, BB only speaks at length when he knows something. UL (Dutch) comes across as being there to learn. The discussion pattern is many short inputs into the general calculations going on. The level of simultaneous talk is high, mostly generated by BU, who would be used to speaking English as a business language in Nigeria.

Twice during the groupwork, BU suggests that they work as a whole to solve a part of the problem. Twice LQ rebukes him, first by saying 'don't be ridiculous it would waste four people's time' and secondly by saying that 'there are six of us and we would all end up arguing'. PT is out of the room for 1/3 of the time yet he and LQ are marked as the most influential. BU and BB go from first and second most frequent speakers to fourth and fifth in influencing the group.

The stars show that team members with extrovert preferences are to be found right across the participation curve, there are no mother tongue speakers, the only person with international experience is near the bottom of the curve as is the only individual from the dominant culture. So overall PT's greater experience and UL's lack of experience with the task, BB's outgoing personality and LQ's perception of and annoyance at BU's cultural habits seem to be the factors that influence this team the most.

5.2.4.2 OILCOP181B

Outcomes



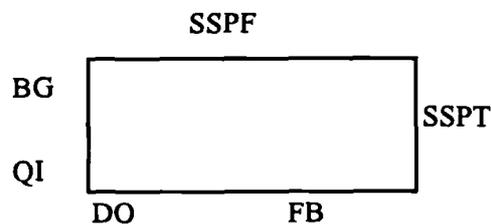
Inputs

P181B	DO	QI	SSPF	SSPT	FB	BG
Nationality	Nigerian	British	Dutch	Dutch	Nigerian	Norwegian
Language	Fluent	Mother tongue	Fluent	Fluent	Fluent	Non Fluent
Age	26 - 35	18 - 25	26 - 25	26 - 25	18 - 25	26 - 35
MBTI	ESTJ 29/33/29/47	ISTJ 25/17/51/21	INTP 1/29/31/25	ENTJ 5/7/49/9	ENTJ 25/1/43/41	ESTJ 1/3/33/3
Sex	M	M	M	M	M	M
International experience	0	0	0	0	0	0
Job title	Trainee Driller	Jr Drilling Engineer	Jr Petro Engineer	Jr Petroleum Engineer	Trainee Driller	Jr Drilling Engineer
experience with task	A little more than the rest	The same as the rest	A little more than the rest	The same as the rest	The same as the rest	Much more than the rest

Overall time : 3 hours 45 mins. McGrath (1984) Task type 3 : Intellective task

Key observations : One person dominates, cultural pairs, marginalised Africans.

Seating Plan



Process

Each person says hello as they come into the room and looks at parts of the task before they all go out for coffee. QI (UK) immediately asks how they are going to split into groups. SSPF (Dutch) takes the flipchart and starts getting ideas from 'everyone' which is basically QI because all the others are settling. SSPF tends to dominate, writing on the flipchart and cutting in on others. SSPT(Dutch) offers quiet arguments which people tend to stop and listen to. QI is logical and quite quiet and tries to keep the group on track occasionally. BG is very talkative when offering parts of calculations.

When it comes to splitting the tasks, BG(Norwegian) says he wants to do a particular bit of the calculation and QI agrees that he would also like to remember how to do it, so they pair up. The two Dutch then pair up leaving the Africans sitting apart at opposite sides of the table. They stay that way until SSPF suggests that DO (Nigerian) and FB (Nigerian) work together on the far side of the table.

The two Nigerians were given the middle section of the logs which the other groups could also cover. When all the subgroups work around the table, there is a lot of cross talk between SSPF, BG and QI. After one hour, it is a case of who shouts the loudest as to who gets entry into the conversation. FB disagrees with running a straw poll for the presenters but SSPF goes ahead anyway joking about it not being the African way.

The stars show that the team members from the dominant Anglo-Dutch cultures tend to dominate and the two Nigerians participate the least. There is no effort to include them by mixing the subgroups, nor tap their expertise although occasionally DO did share an anecdote of his experience. Team members with extrovert preferences are spread across the participation curve, the one mother tongue speaker is in the middle and none of the team had international experience.

Again there were relatively high levels of simultaneous talk, initiated particularly by SSPT and BG. Although the overall satisfaction figure is reasonable, the team scored particularly low on team spirit.

5.2.4.3 OILCOP181C

Outcomes



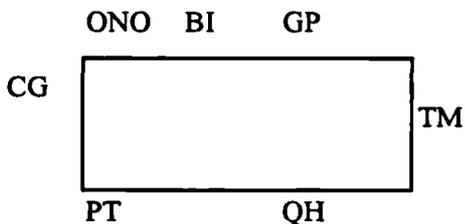
Inputs

P181C	QH	BBI	PT	GP	TM	ONO	CG
Nation-ality	British	Turkish	Omani	Nigerian	British	Malay	British
Language	Mother Tongue	Fluent	Fluent	Fluent	Mother tongue	Fluent	Fluent
Age	18 - 25	26 - 35	18 - 25	26 - 35	18 - 25	18 - 25	26 - 35
MBTI	ESTJ 33/25/55/ 37	ISTJ 19/31/27/ 9	ESTP 7/3/43/5	ESTJ 1/29/13/37	INTJ 29/3/23/5	ISTJ 19//11/29 /35	ESTJ 7/21/43/5
Sex	M	M	M	M	M	F	M
International experience	Yes	No	No	No	No	No	Yes
Job title	Drilling Engineer	Production Geologist	Petroleum Engineer	Drilling Engineer	Jr Drilling Engineer	Production technologist	Drilling researcher
experience with task	The same as the rest	A little more than the rest	The same as the rest	Much less than the rest	N/A	Much less than the rest	A little less than the rest

Overall time 3 hours McGrath (1984) Task type 3 : Intellective task

Key observations: No introductions; Competitive climate; marginalisation of Malay woman, Anglo-dominance.

Seating Plan



Process

QH (UK) and PT (Omani) come in first and talk about what they need to do, others join in as they come in with no sense of inclusion or acknowledgement. The initial feeling is distant. After three minutes, QH asks if they were going to elect a chair early on. PT says 'yes you', BBI (Turkish) grunts approval. CG (UK) asks permission to join, he remains slightly outside the group (e.g. BBI asks his name as they break up four hours later). TM (UK) comes over from writing on the flipchart and QH outlined what they were going to.

In response to a question from QH, BBI establishes his expertise at having done it before. ONO(Malay) actively asks questions and makes suggestions about getting an overview of what they want to achieve and listing actions. Each one of these suggestions is dealt with impatiently by QH. For instance ONO asks if they should divide into subgroups, QH retorted that it would be 'silly to sit and watch one person draw lines on a graph' and turns to ask TM what they should do. ONO asks if they can write up on the flipchart what it is they need to do, QH retorts that it is easy and uses his fingers to outline the three things, TM is qualifying before he finishes so ONO gets a bit of paper and starts writing it out for herself saying it out aloud to get clarification.

When the group divides, QH and PT work together and BBI and GP (Nigerian) form a pair. TM is involved in calculations by himself and asks CG from the other side of the table if he would like to join him. This leaves ONO isolated and she looks over BBI's shoulder, always asking pertinent questions. To the observer, TM's slow tone comes across as if he wants to establish that he knows the answers. QH is more open about organising and pushing the group.

After initially ignoring ONO asking questions over his shoulder, BBI begins to ask her to do manual things, such as getting bits of paper, a ruler and writing things down. Towards the end of the teamwork, QH starts finishing her sentences for her. She initiates structuring the slides, using CG's gentler and warmer humour to help her with the English.

After TM gives a long rationalisation, GP turns to ONO saying 'write that down'. This comes across as supporting her constant push to clarify, question the assumptions they are working on and to write things down, assumptions that the facilitator questions again when he comes in.. She asks TM to repeat the whole discourse, stopping and clarifying as he goes. GP is chosen to make the presentation by drawing lots that ONO objects to, but TM insists on using anyway. GP refuses and the question is left open until the slides are made and BBI volunteers to do it.

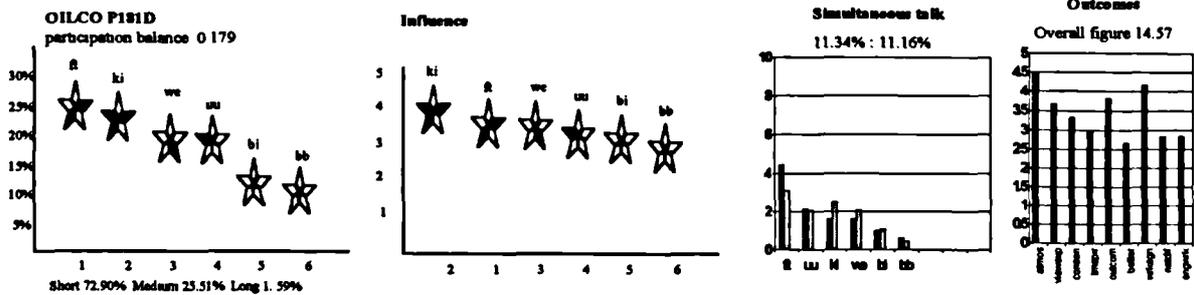
At the very end, ONO seems to gain a little ground. Her persistence shows in the participation and influence marking, e.g. above BBI. By the end, she is prefacing her comments with phrases like ' May I kindly suggest that'. PT stays close and working with QH. TM and CG work on their own at the side most of the time. GP works with BBI.

The stars show the greater participation of three mother tongue, dominant culture, internationally experienced British with ONO' s continued efforts at full involvement paying off. Team members with extrovert preferences are again spread across the curve. There were relatively high levels of simultaneous talk in the team, particularly from the most dominant British member and GP the Nigerian who had a similar habit as AT of quietly coming in when someone else was still speaking.

The process that the stars do not show in this group is ONO's exclusion by QH and TM in particular and to a lesser extent by BBI and PT. She has a double negative minority standing (MBXBs and Clark 1984) as a Malay woman as well as wearing the Islamic scarf.. In her post questionnaire, along with CG who empathised with her, they were the only ones to disagree that everyone expressed their views, that a strong team spirit emerged, and ONO disagrees that she was listened to. In conversation afterwards she was very upset and commented that she did not want to work in such a group again. Despite a reasonable overall outcome score, this team scored the lowest on the effect of national differences, scoring that national differences hindered rather than helped the group process.

5.2.4.4 OILCOP181D

Outcomes



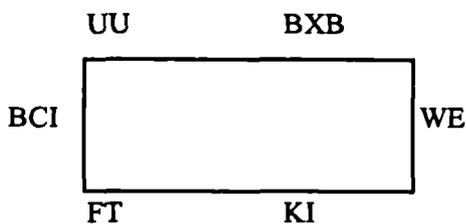
Inputs

P181 D	BXB	UU	BCI	KI	WE	FT
Nationality	Malay	Norwegian	Omani	Dutch	Belgian	Dutch
Language fluency	Fluent	Fluent	Fluent	Fluent	Non fluent	Fluent
Age	18 - 25	26 - 35	26 - 35	26 - 35	26 - 35	26 - 35
MBTI	ISTJ 17/23/27/13	ENTP 15/7/27/3	ISTP 9/5/19/21	ENTJ 11/31/17/19	INTJ 7/7/43/23	ISTP 19/15/47/3
Sex	M	M	M	M	M	M
International experience	No	No	No	No	Yes	No
Job title	Production technology	Wellsite Technology	Petroleum Engineer	Petroleum Engineer	Jr Driller Engineer	Jr Drilling Engineer
experience with task	Much less than the rest	little more than the rest	The same as the rest			

Overall time: 3 hours 30 minutes McGrath (1984) Task type 3; Intellective task

Key observations: *Steady pace, sense of working as whole team using voluntary subgroups to speed up calculations. One dominant personality wanting to think through the logic out aloud.*

Seating Plan



Process

This team starts off very light, KI (Dutch) joking that they should speak something other than English so that the tape would be unintelligible. The pace is steady and methodical. There is little difference in the pattern of communication and little simultaneous talk. BXB (Malay) and BCI (Omani) tends not to participate if KI and FT (Dutch) are speaking faster. They seem to only participate when they have something specific to say. KI wants to argue out the logic out aloud and dominates the long speech acts within the group. UU's (Norwegian) experience comes through when he speaks, but he is quiet and softly spoken. WE (Belgian) takes up a strong facilitatory role admitting that he has little experience on the task. At one point BI makes a suggestion straight after one of KI's long speeches, KI comes back to him very strongly arguing against it in such a way that it must have been difficult not to interpret his aggressiveness as a personal attack. BCI becomes quieter after that incident, although towards the end he starts telling good jokes. This leaves FT trying to respond to KI's long and heated rationale between them they take up 94% of the speech acts of more than three sentences, and 47% of the speech acts between one to three sentences.

The whole team works together for the first 50 minutes before splitting into subgroups, UU making sure that everyone is clear about the whole task before they finally do split. The choice of subgroups is done in a very open way with people trying to mix their expertise for each of the three types of calculation. UU and BXB work together, with UU talking more than BXB in the subgroup, KI and BI work together and WE and FT, who resort to using Dutch; mixing the nationalities. Once in the subgroup, BCI admits that he did not understand something about the logs from the beginning.

In the post questionnaires, UU and WE feel that not everyone expressed their views. WE, who did a lot of low key structuring and facilitatory work, seemed the most annoyed by KI's pushiness. He scored team spirit and a clear leader at the minimum on his post questionnaire. Despite the overbearing influence of KI's preferred style, the group did maintain a friendly atmosphere. It is hard to say whether KI's style was more due to personality or culture and perhaps the Omani and Malays had lower comfort levels with this behaviour than FT, the other Dutch person.

The stars show that there were no mother tongue speakers. The two members from the dominant Anglo-Dutch culture participate the most. The two members with extrovert preferences and spread across the curve and international experience does not seem to be important. The levels of

simultaneous talk are lower than in the other three teams and mostly comprises FT talking at the same time as KI and WE.

5.2.4.5 OILCO P181A, P181B, P181C, P181D: Summary of key observations

Two out of four teams had no mother tongue speakers and only in one of those was there a British subgroup. In that team, this subgroup did dominate the participation. In three of the other four teams, those who participate the most were also members of the dominant Anglo - Dutch organisational culture. There was no consistent pattern for international experience, having an extrovert preference or being a member of a larger subgroup except where the subgroup is British and so reinforced by being mother tongue speakers and members of the dominant culture.

These four teams had much higher levels of simultaneous talk than the P180's. Although both tasks were calculative, P181 tasks were longer. This could give more time for people to be comfortable to start simultaneous talk, the level of expertise with the task could have been higher, or it could be a function of the larger group size except in comparison to P180A.

As well as the higher levels of simultaneous talk, the overall outcomes are lower than in the P180's, (except for the larger P180A team which had the lowest outcomes of the P180's). The higher levels of simultaneous talk could mean that people feel they need to cut in to gain entry to the participation more than in smaller groups. The lower outcomes could point to the fact that with the greater communication difficulties, group size will impact international teams to a significant degree.

What is striking in this set of teams is that an ethnocentric set of behaviours (Ling 1990, Adler 1986) is either consciously or unconsciously being played out by the individuals that belong to the two headquarters nationalities in OILCO; the Dutch and British. The exclusion of Africans and Malays was far more apparent in this set of teams than in the P180's. It seems to be more accentuated when there is a numerical subgroup of Dutch (P181B, P181D) or British (P181C) combined with other Northern Europeans (P181A, P181D).

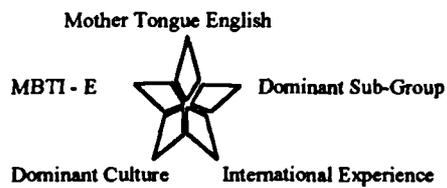
In P181B, and P181D, the Africans and Malays were excluded in both participation and influence. In P181A and P181C, the levels of participation were high, BU being the most voluble in P181A and ONO among the British in P181C. However, their input in both cases was treated with either annoyance (P181A) or evaluative and derogatory comments (P181C). The method of splitting into subgroups seems to be one process that can either aggravate or integrate cultural differences. In P180D it was a very open process that led to mixed groups, in P180B and C in particular it led to further exclusion of the two Africans and a Malay woman respectively. There also seems to be a dislike by individuals from Africa and Malaysia in particular, of the

British habit of drawing lots for a presenter. In each case the straw poll was pushed through despite their objections. In one case, GP (Nigerian) refused to present when elected this way.

5.2.5 OILCO P280 / OILCO Singapore

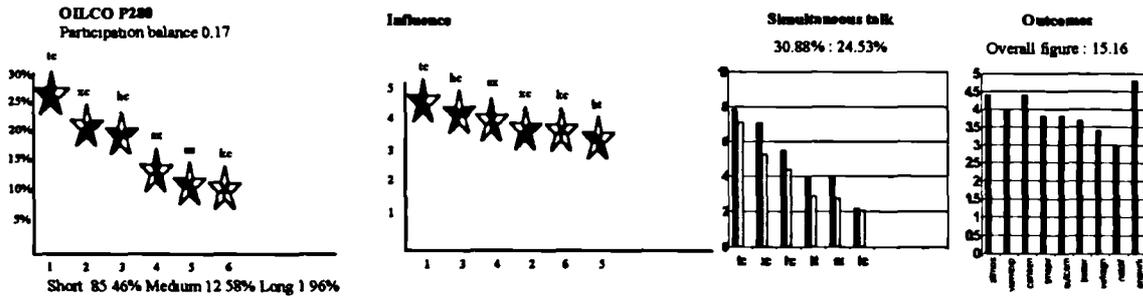
OILCO P280 was one of four syndicate groups selected from the whole course group for maximum mix of nationalities and functions. The course was a week long cross functional course in petroleum economics for senior engineers and managers. This is the first time this team had worked together and this exercise took place during the second week of the course. The task was to propose a base case for the development of a fictitious off shore well site and work through the financial sensitivity of a variety of options. This team worked over four days for a total time of 32 hrs 45 mins as a whole group.

Reminder of star



5.2.5.1 OILCOP280

Outcomes



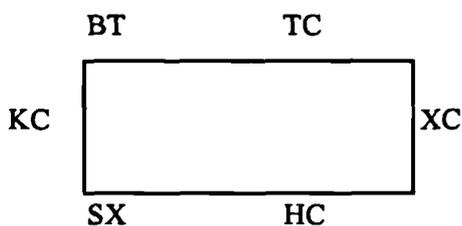
Inputs

OILCO P280	KC	TC	SX	BT	XC	HC
Nationality	Norwegian	British	Australian	Malay	Dutch	Dutch
Language fluency	Fluent	Mother Tongue	Mother Tongue	Fluent	Fluent	Fluent
Age	26 - 35	26 - 35	36 - 45	26 - 35	36 - 45	36 - 45
MBTI	INTJ 7/31/39/31	ENTJ 17/33/43/35	INTJ 9/1/49/31	ESTJ 5/15/15/31	ISTJ 21/21/31/11	ENTJ 21/29/13/5
Sex	M	M	M	M	M	M
International experience	Yes	Yes.	No	No	No	No
Job title	Reservoir Engineer	Joint Ventures Engineer	Production Geologist	Engineer	Economics Engineer	Director EP Computer support
Experience with task	A little less than the rest	A little more than the rest	A little less than the rest	A little more than the rest	The same as the rest	Post questionnaire not returned.

Overall time : 35 hours McGrath (1984) Task type 3 : Intellective task

Key observations: Dominant personality emerges, marginalisation of Malay. Interactive process not mentioned by anyone in the team.

Seating Plan



Process

The team members come in sporadically, the initial feeling is distant and not very personal. The initial conversation is around the task. SX (Australia) turns up last after 20 minutes. He starts the group conversation by asking what everyone's functional role and strengths and weaknesses are. KC (Norwegian) suggests that they go round and each give a brief summary of what they have been doing the last few years. KC starts. They discuss whether they should use their existing expertise, or consciously change roles in order to learn. They decide that if two people work on each task, then one can have the expertise and the other learn.

After 30 minutes SX suggests that there should be a group leader, someone responsible for the product delivery and who should make decisions if the group reaches an impasse. SX suggests that XC should be this person as he 'looks mature'. Others concur. SX suggests that they lay some ground rules for how much emphasis and detail they should put on the different aspects of the problem. They agree that the subsurface issues should be presented as simply as possible.

HC reminds them that they have an interview in a few hours. TA (British) gets up to write a list of actions on the board. SX points out that they will need to split up or they won't get through the calculations. BT (Malay) has not said much except a few back-channels at this point. They soon split into SX, KC and BT working on subsurface and TA, XC and HC working on the surface issues. They work mostly in subgroups, with periods of interchange during the following three days. XC and HC work on the computer logic and have a lot of technical difficulties with the programme. Even when XC pulls them into the whole group to decide something like a time plan, they tend to fall back into subgroup discussion.

There is a lot of simultaneous talk when they are working through the logic of a calculation, or trying to collectively understand what information they have and need. It tends to increase and decrease in waves as they need to focus on an issue together. This group often goes over ground they have already covered, but did not record clearly.

The different personalities come out over the next four days. XC is quiet and accommodating. At first he works hard to play the role of facilitator and brings the group together. Noticeably HC finishes off his first attempt at a group decision on how many people should go to the interview. XC shows maturity facilitating, but tends to give up as TA starts to push and do a lot of the structuring of the task and process as they come under more time pressure. TA often makes comments like 'guys, we need to keep this on track', 'guys we are talking at cross purposes here.

We are faffing around'. SX chides him for writing things up with no discussion or argument. KC seems irritated by TA's pushiness.

HC works with XC, often in Dutch and becomes the focal point for collecting the data for the programme. SX maintains a strong technical subsurface presence as well as arguing the logic of the whole case. KC is quiet and tends to only talk when there is a gap.

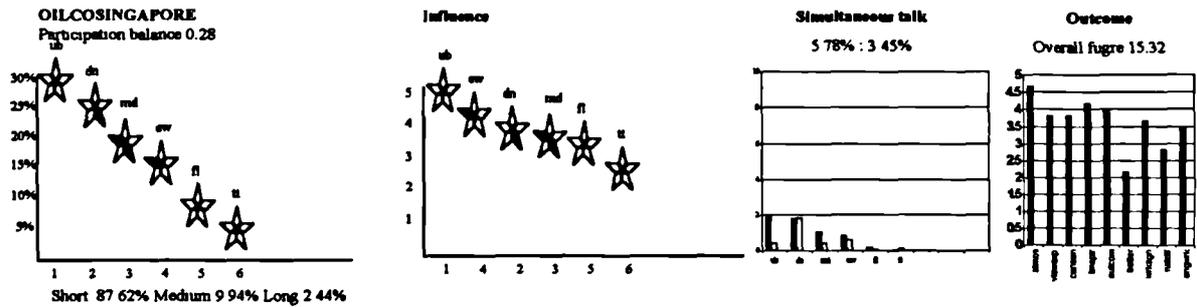
BT does come in making suggestions after a while, but TA tends to put him down or move on and he starts coming in almost too strongly, repeating what others have said. At the end of day one, his longer inputs on suggestions for the base case are listened to; SX argues against them in a non personal way. TA tends to come in with a phrase like, 'shall I explain to you how this works'. When BT's frustration starts to rise, he prefaces a comment with 'I prefer that...'. TA immediately retorts that it is not a question of his preference. At 26 hours he leans over TA on the flipchart exclaiming that 'this is better than that' and 'that is what I have been trying to tell you'. Towards the end when he is out of the room. SX comments that BT is 'not bad for a Malay, he talks'.

BT's exclusion seems to happen because he suggests things that are not in the same pattern of logic as the rest of the group. A suggestion he made at hour six which the group put aside, was brought up again by the facilitator at hour 18. He is not assigned any purposeful task that fits his skills, nor to work something through in detail with another person. SX works alone and KC seemed to find a useful task, TA worked on the overall case and HC and XC on the computer logic. His exclusion is not as blatant as NMN's in P181C, there are no evaluative comments to his face, but it is still very apparent when observed over the 36 hour period.

The stars show that the three highest participators were members of the dominant organisational culture. The two members with extrovert preference are spread across the curve, as are those with international experience. Despite this, the stars do get consistently darker the higher up the curve they are. There were high levels of simultaneous talk. XC was selected as an emergent leader only to manage the process, not the task and he is not perceived to have had much influence on the team.

5.2.5.2 OILCO SINGAPORE

Outcomes



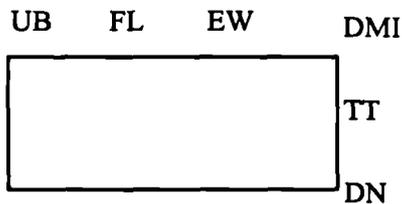
Inputs

OILCO Sing	TT	EW	MID	DN	UB	FL
Nationality	Japanese	Thai	Hong Kong Chinese	Filipino	Malay	Bruneian
Language Fluency	Non fluent	Non fluent	Non fluent	Fluent	Fluent	Fluent
Age	36-45	36-45	36-45	26-35	36-45	36-45
Sex	M	M	M	F	M	M
International Experience	No	No	Yes	No	No	No
MBTI	ISTJ 1/29/57/45	ESTJ 9/13/19/3	ENTJ 5/9/15/5	ISTJ 25/3/49/35	INTP 13/27/39/9	ISTJ 33/33/51/47
Job title	Assistant to Manager crude Section	Head of land development	Polymers Business Development manager	Treasury Assistant	Accounts & Materials Manager	Shift Supervisor

Overall time: 7 hours 45 minutes McGrath (1984) task type 2 Creative task.

Key Observations: *All second language speakers; very little simultaneous talk; Interaction dominated by two personalities; team interaction review focuses on the team's behaviour towards the only woman.*

Seating Plan



Process

This group has worked together on a tower building exercise during the afternoon where they role-played certain parts. In this exercise they build their own company. The video taping starts when they are already involved in the exercise. There are four consecutive evening meetings.

TT (Japanese) is asking what they are doing, UB (Malay) and others are explaining to him. The pace is steady and slow. It quickly speeds up and everyone is participating, there is a lot of head nodding and laughter as they reach agreement on their task. However once TT has clarified he tends to wait for a gap to speak. FL (Bruneian) is also quiet. UB writes up their ideas for their business in the flipchart, he is forthright and leads the team's discussions. EW (Thai) uses a lot of expressive body language and has an easy interchange with MID (Hong Kong Chinese). DN (Filipino) is vocal and emphatic in putting her points across.

There is lively debate as to whether they need an organisational structure or not. At first DN and EW object strongly and then they agree that they do not need a chairman but assign roles of co-ordinator, financial role and marketing/advertising role and one person for each of the three types of businesses that they have chosen. UB assigns the roles within their created company even though DN protests 'no' to being elected to the financial role. She objects to being given so much work and they insist that they will all support her. He increasingly drives the process and suggests the next steps. The rest of the team seem to go along with this and feel that he should be their spokesman if one is needed. They work for about 25 minutes before arguing out the profits and costs of each of their plans. After setting out their master plan, which DN writes, they agree to meet at 5.30 every day.

Sentences tend to be short and staccato with many short interjections. There are small spaces in between so that there is relatively little simultaneous talk. Whenever there is, it tends to be two people explaining something to somebody at the same time, as if filling in each other's words rather than cutting off somebody else's air time. DN contributes the most back channels.

Day 2: UB leads, having appointed himself interim chairman. DN argues a suggestion involving TT. The pattern of participation remains the same with UB and DN participating the most. The atmosphere in the group is very friendly. UB leads from the flipchart so that much of the time the whole group is facing towards him and listening.

Day 3: UB still leading. Although the overall pattern of participation remains the same, everybody looks involved and there is no sense of purposefully excluding anyone. Everybody

joins in working out the figures. There is a slight pushiness between UB and DN. UB comes out with a very sexist remark that DN tries to take well and says 'this guy...'.

Day 4: They start with team feedback. DN's scores are different from the others. When asked to explain, she says there is a lack of clarity of roles, too much of the responsibility is on her, the leadership role is not formal but has been taken up by UB and she disliked the way that he questioned the credibility of her calculations of their costs and profits on Day 3. She particularly did not like it because nobody was volunteering to share some of the work. She goes on to comment that there seems to be no discussion about things that UB seems to pick out of the blue. UB and EW argue back with the Chinese inflection of long low tones on the end of the sentence to express their displeasure. UB says 'you are the centre of our business'.

UB goes on to highlight the issues of the lack of clear leader, lack of initiatives, sexual discrimination and unclear linkages. UB picks out sexual discrimination and asks DN to talk about it. They discuss it a bit as part of their culture, but stress that DN came across as very willing. TT also says his piece. They apologise for being pushy and insensitive to her needs. UB stresses that there is strong personal interaction, unity and congenial atmosphere. DN goes on to write up the latest figures on the flipchart.

Day 5: Very matter of fact wrapping up of the task before making the presentation. There is no change in UB leading the wrapping up and DN being very vocal and everyone else speaking occasionally.

Aside from UB's leadership, a main theme in this team is the overloading of work and sexist remarks directed at DN.. Later on day 3 UB makes an overtly sexist remark directly to her.

A learning point is that the team review tool (Appendix 4) gave DN the opportunity to state her discomfort with a number of factors and for the team to respond and change their working process.

As the researcher was unable to attend, this team was filmed by a professional cameraman and there is a sense throughout of organising things to suit the camera and quite a few remarks made about being on camera. It is unclear how naturally this team was performing.

Of the predictor variables, the stars show that only two had extrovert preferences and two had international experience. Neither of these strongly influenced their position on the curve. Although the overall time was longer, the level of simultaneous talk was similar to the P180's, who also had no mother tongue speakers.

5.2.5.3 OILCO P280 and OILCO SINGAPORE: Summary of key observations

The stars show that the one mother tongue speaker did participate most, along with the three dominant culture individuals. Having international experience and an extrovert preference were spread across the curves. There is a dramatic difference in the level of simultaneous talk between the two groups. This could be due to the difference between mostly Europeans working in English and East and South East Asians working in English, the fact that P280's task was more calculative or that they worked together for a much longer period and had overall higher levels of fluency in English.

In both these teams one person was excluded or overloaded with work. In P280, BT was not included in the work and there was visible tension towards the end. Although no stereotypical evaluative comments were made to his face, one was made at the end of the teamwork when he was out of the room.

In OILCO Singapore DN felt she was being treated differently because she was a woman. At first she joined in the sexist comments, but as they got worse was clearly disturbed by them. The team review tool (see Appendix 4) allowed her to speak openly about these issues in the team and to resolve them with apologies from the group. These process issues were also part of their final presentation.

5.2.6 A comment on all the OILCO teams

It is striking that OILCO Singapore is the only team in OILCO that paid any attention to process or how the team was interacting. It was clear that in the other nine OILCO teams, the focus of the presentations would only be technical. Overall, in seven out of the ten OILCO teams, either stereotypical evaluative comments or poor process tended to exclude or marginalise one or two team members. Only in the last team did the team review questionnaire (Appendix Four) allow these issues to be addressed and corrected while the team was still working.

5.2.7 BANK STRATEGY TEAMS

The BANK is part of a larger holding company whose headquarters are in London. The holding company covers commercial banks, capital market businesses, finance companies, an insurance company, a trustee company and investments. The seven executive directors on the board have Anglo-Saxon names and it appears that at least six are British in origin and one American. Of the thirteen non executive directors, three appear to be of Hong Kong Chinese origin. The BANK Personnel Director commented that they do not have the resources to deploy to gather the statistics of the nationalities of the top managers.

The two BANK teams were created from the whole group of the two week long Advanced Management Skills course. This exercise is a four day exercise in strategic planning at the end of the course. There are two facilitators who intersperse the teams' work with a consensus exercise on project planning, an optional video on creative thinking, and two in depth team reviews. The tasks are to develop a strategy for the BANK in the Middle East and in South America. This team did not complete MBTI as they had already done a learning styles questionnaire showing 'very strong' and 'strong' preferences for theorising, action, reflection and pragmatism. These are marked in place of the MBTI scores .

VSP = Very strong preference

SP = Strong preference

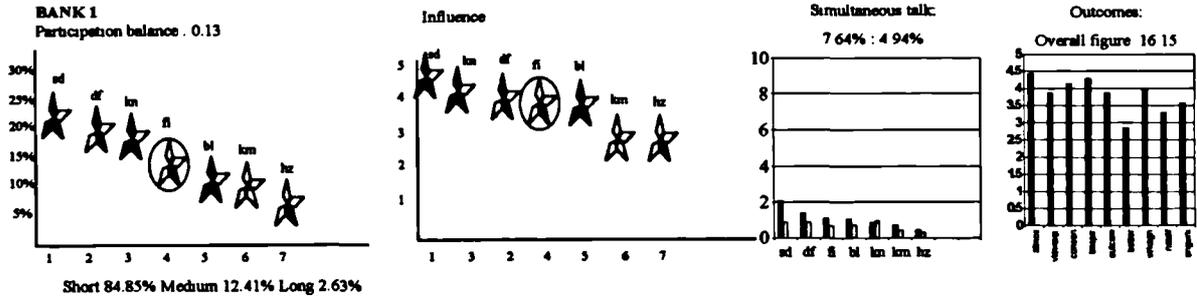
Action = Preference for action; Prg = Preference for pragmatic approach, Theorist = Preference for theorising , Ref = Preference for Reflection

Reminder of star



5.2.7.1 BANK TEAM 1

Outcomes



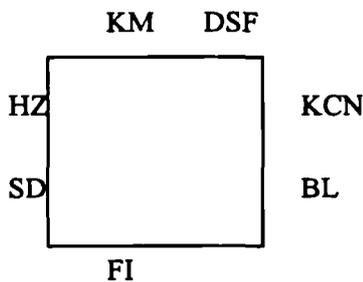
Inputs

BANK1	KM	FI	KCN	DSF	BL	SD	HZ
Nationality	HK Chinese	HK Chinese	British	Australian	British	British	HK Chinese
Language fluency	Fluent	Fluent	Mother tongue	Mother tongue	Mother tongue	Mother tongue	Fluent
Age	N/A	36 - 45	36 - 4	36 - 45	36 - 45	26 - 35	46 - 55
Sex	F	M	M	M	M	M	M
International experience	No	Yes	Yes	Yes	Yes	Yes	Yes
Learning Styles	Theorist/vsp Ref /sp	Ref /sp	Theorist/vsp Ref/ sp	Action/sp	Action/sp	Action / vsp Pragmatic/s p	Theorist/vsp Ref, prg/sp
Job title	Manager R&D, PER HK	Ass. Gen Man Bank. Aus	Man. Corp. Bank. BTA Brunei	CEO, HBIS HongKong	Man. Trust Admin. HK	Mang. Card Centre HK	VP & Man. HBC Canada

Overall group time 26 HRS 30 MINS McGrath (1984) Task type 1: Planning task

Key observations: *Tight and effective team process, status split between 'international' officers (SD, KCN, DSF and BL) and 'regional' officers (KM, FI, HZ). Strong personality (SD) and difficulty for one regional officer to feel listened to or heard (HZ)*

Seating Plan



Process

The initial feeling is moderately friendly with a strong action orientation driven by SD (UK) that creates a sense of having to fight for space. From the start of the project planning exercise, SD is strong and direct and does a lot of the structuring (see very strong preference for action on the learning styles along with DSF (Australian) and BL (UK)). He tends to drive the conversation in dominant and inclusive way. DSF puts forward evidence for points. KCN (UK) has experience in the BBME which he shares, but he also keeps bringing the group back to how they are doing the task. He points out the 'cultural' problem in the group of the dominance of the 'international' managers and spends time coaching KM(Hong Kong Chinese) and HZ (Hong Kong Chinese) to make the final presentation.

BL is absent at the beginning, he comes in with a lot of tense nervous energy, often playing the role of devil's advocate about both the structure and the process of how they are doing things. This tends to irritate the rest of the group although they work through it. FI (Hong Kong Chinese), KM and HZ have very different inflections in English so that their speech seems much more staccato.

FI seems outgoing and experienced and is proposed as the team leader and facilitator by SD, in order to develop his skills. However, having just appointed him, SD then distributes the work of which country each person should research. FI does work hard at keeping the task on track with intermittent agendas, but does less of managing the group process.

KM makes a lot of jokes at the beginning about her inexperience in banking, SD and others reassure her that the whole point of a team is to help her, but she keeps the comments up until the end. She ends up making the presentation with HZ. HZ comes in with lateral suggestions that the group does pick up sometimes.

At a crucial point at half time, when the group is having a very heated debate on which strategy to adopt, HZ suggests they go down the squash courts and shout out options. It works very well to channel the heat of the group and generates eight options for the team to work through in a tight and structured way. After that event, actions are more spontaneous in the group. Overall the dynamics ebb and flow such that the energy is high at the beginning; then they go through a slow patch as they sort their information and try to understand how to organise and argue it. Once they pick a few micro-strategies to argue, the energy picks up again enormously, but excludes KM and HZ: KM through inexperience with technical banking and HZ through the conversational style.

While BL often creates tension with the whole group, it is always resolved and discussed in a friendly way. The main tension remains between HZ and SD. HZ is not comfortable entering into simultaneous talk. FI comments that he learnt to do that when he went to Australia or he would have remained silent. HZ is open in the reviews that he feels that he is not listened to. SD suggests that those who feel that they are not getting their point across should shout out 'stop' as surely they know each other well enough by now. HZ immediately suggests that the facilitator should get people to talk one at a time. The issue is deflected by FI saying he tried twice to stop BL and failed and everyone laughs. HZ never shouts out, but does at one point put his arm across in front of SD. Whilst everyone else agrees they were listened to in the post-questionnaire, he neither agrees nor disagrees.

The stars show that three mother tongue speakers participated more than the others. The fourth was absent for a long period on the first day. These three also had international experience and two belonged to the dominant culture. Despite HZ's reiterations that he did not feel listened to the level of simultaneous talk was low. The teamwork was well structured and argued and on the whole the team were supportive of each other. This probably accounts for the high satisfaction figure.

5.2.7.2 BANK 2

Outcomes



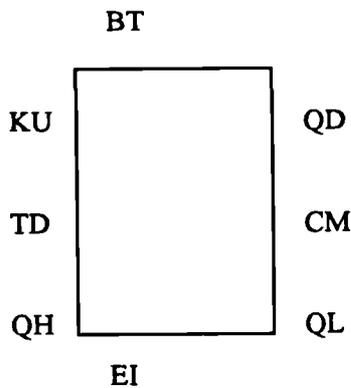
Inputs

BANK2	EI	CM	QH	BT	QD	KU	QL	TD
Initials								
Nationality	British	Sri Lankan	British	Indian	HK Chinese	American	Malay	HK Chinese
Language fluency	Mother Tongue	Fluent	Mother tongue	Fluent	Fluent	Mother Tongue	Fluent	Fluent
Age	36 - 45	36 - 45	36 - 45	26 - 35	45 - 56	36 - 45	36 - 45	36 - 45
Sex	M	M	M	M	F	M	F	F
International experience	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Learning Styles	Action/Theorist/Pragmatist SP	All four medium Preference	Action/Theorist SP	Theorist VSP Action/Pragmatist/SP	Pragmatist VSP Reflective Theorist SP	Action VSP	Reflective Pragmatist VSP	Theorist VSP Reflective/Pragmatist SP
Job title	VP Operations	Senior Hub manager	Manager GIMIS	Manager Treasury	Manager Network Operations	Director Sales/Marketing	Manager Compliance	Manager New Territories

Overall group time 26 HRS 30 MINS McGrath (1984) Task type 1: Planning task

Key Observations: Initial high levels of simultaneous talk and talk of friendliness. Later polarisation on how to approach the task. Two major misunderstandings, especially between two team members. Open discussion of problems .

Seating Plan



Process

The initial feeling in the team is very friendly. They first discuss the task and read their briefs. During the first task, CM (Sri Lankan) more or less self appoints himself the leader. Because of the very high initial levels of simultaneous talk, BT (Indian) suggests that they have rules for working together. CM suggests that they listen and work systematically around the team. QH (British) suggests that part of team work is to have conflict and disagreement. There is a long discussion about the suitable level of formality vs. spontaneity. QL (Malay) expressed fear that high levels of simultaneous talk may mean that they will not get the job done in the form required or time allotted.

The team has very different personalities. KU has a very inclusive warm style which he uses to try and resolve the conflict that emerges in the group particularly between BT and CM. BT likes to resort to argument and debate based on facts and can get quite sharp. CM's tone is somewhat autocratic, he likes to push things to conclusions very quickly and tends to be negative or cut off about other people's ideas. Most of QH's inputs are arguments about the logic they are adopting and he uses a lot of examples from his experience. EI (British) tends to remain quiet and make occasional critical observations. QD (HK Chinese) tends to take an active role in the process and likes to get involved. TD (HK Chinese) and QL (Malay) are quieter.

By the end of the second day, the energy in the group has fallen as they spent a lot of time arguing about how to approach and structure the task. The facilitator suggests due to suppression of interaction and frustration. In their first long team discussion the following day, BT, KU and QH start to discuss the sort of approach to and issues involved in building a South American market. Tension builds up as BT sticks to his intellectual position and QH argues against him. CM cuts them off saying that they have spent half an hour talking without much purpose and outlines what he thinks they should be doing. KU responds by saying that actually what had

been building in his mind in the last fifteen minutes was a matrix of the countries down one side and the different issues that would affect their decisions. QH says 'isn't this a waste of time' and then disengages. Noticeably KU manages to influence the team by sharing what is going on in his mind. CM however, ignores the facilitator's suggestion of starting with questions rather than how he thinks things should be. The result is that the team spends a lot of energy arguing against his proposals.

QL often comes in as worried that they will not meet their targets. A process review reveals that QH had misunderstood what KU and BT were doing with the matrix. QL and TD express discomfort with their low level of banking expertise and KU says how important process expertise can be. QL expresses discomfort at the lack of direction from CM. BT suggests that CM adds to the confusion by adding in his own opinion, rather than standing back and noticing that team members are talking at cross purposes. There follows an in depth discussion on CM's style. KU suggests that CM should not try to be superman and try to lead the group and participate. CM replies that leading and contributing is his natural style and he does not take up KU's suggestion that he should make a choice and pass on the facilitation role when he wants to contribute to the discussion.

The second major misunderstanding happens when BT gets up to write up about the countries and EI comes in saying that they are missing the point. They discuss the misunderstanding and BT accuses EI and QH of not listening. CM then accuses BT of not listening. QD points out that the arguments were not about the content itself but about how to frame and present it. BT highlights the polarisation in the group, between BT, QD and KU and CM and QH. CM suggests that the polarisation may have depended on different styles of thinking. This interesting point is not followed up. Instead KU suggests that they are very strong personalities and used to doing their own thing. He suggests that they fell in the middle of doing well or badly because potentially they had great potential of synergies of ideas but fell into polarisation or lack of team work at crucial moments.

The stars show that although mother tongue speakers apparently did not dominate the team, the top five participation rates include an Indian and Sri Lankan who are used to arguing and interrupting in English. Noticeably the lowest three participation rates belonged to the HKChinese and Malay team members who were also women. They tended to take the decision not to interrupt more seriously and raise their hands to speak. They also mentioned frustration at not coming from main stream banking sections. The two dominant culture team members tended

to stay quiet and disengage if they did not agree with what was happening, whereas KU worked hard to encourage the team and hold it together. The dispersion of energy through polarisation and misunderstanding resulted in a low satisfaction score.

5.2.7.3 BANK STRATEGY TEAMS 1& 2: Summary of key observations.

The stars in Bank 1 show that mother tongue, dominant culture individuals with international experience participated the most. Bank2 is less conclusive. Neither teams reached the high levels of simultaneous talk in CHEMCO but they are higher than the other Hong Kong and Singapore based teams. Probably because of the higher proportion of mother tongue speakers. Both teams have the same balance of participation, but the dispersion of energy through misunderstanding and conflict in Bank 2 led to a lower overall satisfaction score.

On the positive side, both teams seemed to get a lot of understanding from their facilitated reviews, even if they did not always completely cure the difficulties. Bank 1 moved ahead on lateral ideas contributed by the lowest rating participant. The status and participation differences between the regional and international officers was highlighted and effort made to bring the regional officers to the fore. Bank 2 also managed to contain the polarisation and communication difficulties through process review and at least end on a good note despite some major difficulties. They also learnt from each other, eg. BT openly admiring KU's warm and effective team and facilitatory skills.

In terms of difficulties, Bank1 was unable to respond to HZ's continued plea for a slower more inclusive interaction pattern where he would feel listened to. The options given of shouting out clearly did not suit his behavioural preferences. Similarly the polarised argument and misunderstanding in BANK2 led to other team members complaining that their points were not taken up. There was some suggestion that this polarisation was created by different thinking styles. Certainly the misunderstandings arose around how they were proceeding to frame and structure the information, not about the information itself. In other words they arose from the inability to share abstract projections, it is tempting to say that the British mind could not see the Indian mind's pattern of logic and it took a Sri Lankan to see it at this level. Certainly the Briton's argument seemed much more based in practical experience than the more strategic/theoretical Indian argument.

BANK2 is interesting because it struggled with its difficulties, first the high level of simultaneous talk that led to a somewhat autocratic leadership style which resulted in frustration and secondly two personalities from different cultures who were at odds with each other intellectually and

strong personal criticism's were exchanged. Although they worked to openly overcome these problems, they could not recoup the energy lost.

5.3 OPERATIONAL TEAMS

5.3.1 EXPCO

EXPCO is a large UK based Oil and Gas company. At the time of video recording, it was split into four main divisions, EXPCO Exploration, EXPCO Oil Europe, EXPCO Chemicals and EXPCO Nutrition. The following table shows the composition of the nationalities of top management

Nationality	UK	US	Germany	France	Austria	Norway	Other
Board: CEO and 6MD's	7						
Board + external directors and chairman	13	2	1				
Top 92 Managers	58	24	4	1	1	1	3
Staff as a whole	26%	29%	25%				20%
5 top Managers of EXPCO Oil Europe	1		CEO + 1	1	1		
Staff of EXPCO Oil Europe	55%						

The team recorded was a taskforce set up within EXPCO Oil Europe. The team's sponsor was the Director of Human Resources who was based at the divisional headquarters in Brussels. The purpose of the team was to harmonise the discrepancies in the different expatriation policies across Europe. This was to address difficulties caused by managers moving frequently within Europe.

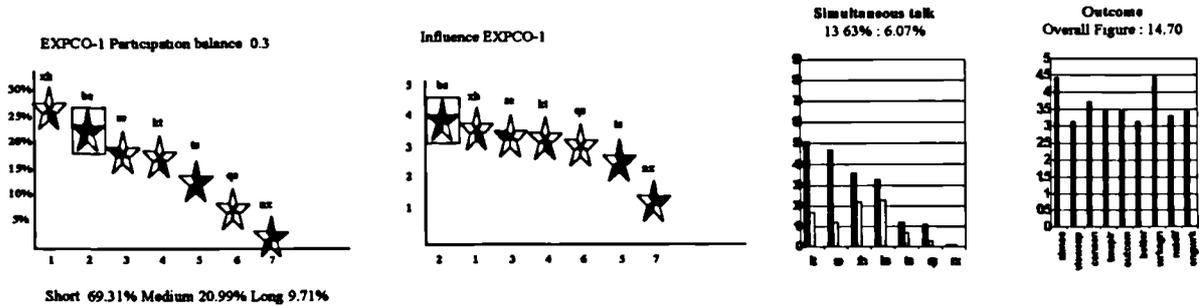
The seven main country managers met for the first time in London along with a supporting UK HR officer, TS and a junior officer NX who was there to learn. The second meeting was in Hamburg where the groups grew with more support staff being present to 10 people. The third meeting was in Paris, where the group grew to thirteen, with two other managers from Greece and Austria and more support staff being present. The support staff tended to have a different level of interest to the managers. However due to poor recording quality, no structured observational analysis was made of EXPCO3.

Reminder of star



5.3.1.1 EXPCO EXPATRIATE HARMONISATION TEAM

Outcomes



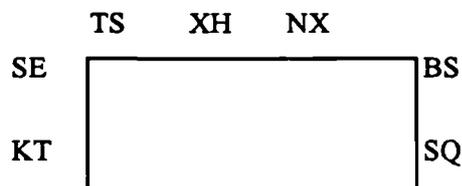
Inputs

EXPCO1	SE	TS	NX	XH	BS	KT	SQ
Nationality	Belgian	British	British	German	British	French	French
Language fluency	Non fluent	Mother Tongue	Mother tongue	non fluent	Mother tongue	Non fluent	Fluent
Age	56 - 65	36 - 45	18 - 25	36 - 45	36 - 45	56 - 65	46 - 55
Status	IA	2A	2B	1A	1A	1A	1A
MBTI	ESTP 3/21/29/7	ISFJ 9/11/5/5	ISFJ 5/45/21/51	ISTJ 33/1/33/39	ENFP 29/41/5/15	ISTJ 9/31/21/21	ISTP 23/11/19/37
Sex	M	F	F	M	M	M	M
International experience	No	Yes	No	Yes	No	Yes	Yes
Job title	Manager Expat. admin	Personnel Officer	Personnel Officer	Manager Staff recr. and dev	Manager expat.group UK	Manager Personnel Admin	Head of expat group France

Overall time: 4 hours Task type: Mixed task type 3 & 6; solving problems with correct answers and resolving conflicts of interest.

Key Observations: *Slow pace; informal leadership style; tendency to stay in cultural groups; different styles of interaction; participation based on status.*

Seating Plan



Process

The initial feeling of this meeting is quite formal and constrained with a little light humour. KT (French), SE (Belgium) and SQ (French) talk together in French before the meeting. BS (UK), the pre-appointed leader, starts in a quiet way by sharing what they discovered over dinner the night before and that they have a large agenda to cover. They check the timing. BS suggests that they address items 1 & 2 on the agenda first and asks what else should be on it. They get straight down to business with BS leading a discussion on what the group's task is and how that incorporates also creating a European network. He takes about 20 minutes to outline this. XH (German) will come in with preambles such as 'well look at it this way BS' and these examples get quite heated with SE and KT giving counter - examples backed by strong emotions. They keep pushing the point that they have between them the most expatriates to deal with. KT does not seem to get satisfaction for his frustration by the end of the day. Noticeably XH only prefaces his comments and names BS when speaking to him, the pre-appointed leader, and not to any other of the group members.

BS is low key and informal. He introduces ideas and immediately asks what the group thinks. XH is slow, methodical and gives long examples. He talks more than anyone else, 43.38% of the long speech acts and speaking almost 29% more in total length than BS. SE speaks fast, sharing a lot of experience, facts and examples. KT argues his points with feeling. His comments about the things that are going wrong in the system are emotionally charged. XH usually takes JS's comments and talks around them in a very flat tone. KT does try to find a constructive framework for his comments but finds it difficult as there are no clear leads about what they are going to do about his examples.

On the whole SQ stays quiet, only putting forward specific points in very slow English, but also some light-hearted jokes. These are often not taken up by XH who likes to tell his own and to seek a response from TS and NX on either side of him. TS speaks clearly and gives the impression of being organised and competent. NX is regarded as being there to learn and observe and hardly says anything at all.

The critical instances in this meeting are subtle. The laboured responses of XH seem to spark strong emotionally charged counter arguments from SE and KT, although SE seems to handle his frustrations better than KT. SE and KT start most of their simultaneous talk when BS or XH are speaking. At one point as KT, SE and TS are animatedly talking about what to do at a wives day in Brussels, XH looks at his watch and comes in loudly to BS saying 'you are spending a lot of time on this thing to which I cannot really contribute'. BS responds by quickly wrapping up

that subject and asking his remaining queries. That leaves a pause and BS returns to the agenda. It comes across as XH trying to challenge and undermine BS's authority as pre-appointed leader. It is interesting to note that the head of this division is also German.

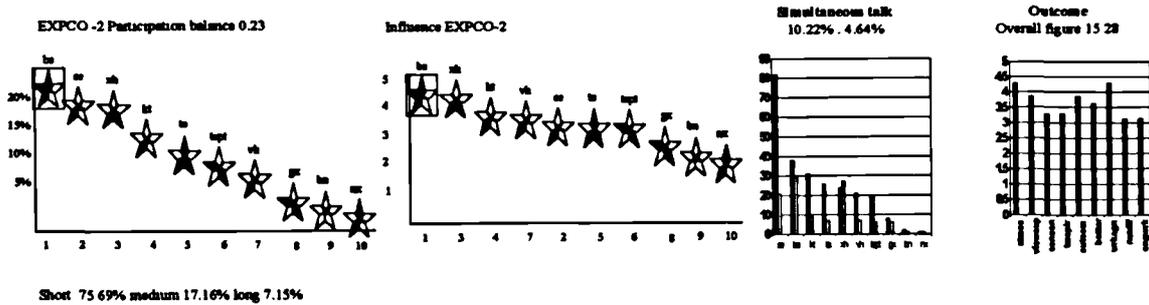
At one point, TS hands out a document that preoccupies them for an hour and BS structures the outcomes by suggesting that a questionnaire is sent around about what is happening on each issue in each country so that they can discuss it in detail at the next meeting. This immediately gives purpose and structure to their process and the previous general discussion and debates.

Aside from BS and SE, who ranked second and third on participation after XH, the rest of the team had an MBTI score that included an introvert preference. The difference in status between TS, NX and the others was apparent and SQ's English was the slowest. On watching the group it was difficult not to be drawn to the stereotypes of a laid back British manager, methodical German and more emotional French.

At this meeting, national stereotypes were more apparent than at later meetings and the difference in status between the male managers and female support staff was apparent in their participation rates. The stars show that the participation of the numerically larger subgroup of dominant culture, mother tongue speaking British team members was spread across the curve, in line with their respective status, which probably also reflects their experience with the task. The two members with extrovert preferences are near the top of the curve, but the three members with international experience are spread out. XH participates the most and fulfils none of the criteria except having had international experience.

5.3.1.2 EXPCO EXPATRIATE HARMONISATION TEAM 2

Outcomes



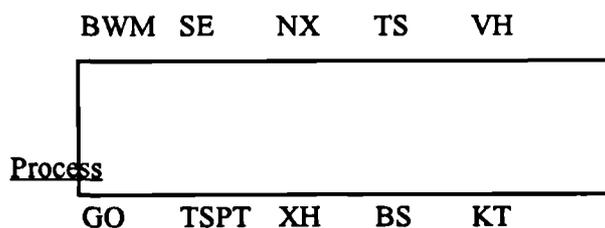
Inputs

EXPCO2	TSPT	XH	NX	KT	TS	BS	SE	BWN	GX	VH
Nationality	French	German	British	French	British	British	Belgian	Belgian	French	German
Language fluency	Fluent	non fluent	Mother tongue	Non fluent	Mother Tongue	Mother tongue	Non fluent	Non fluent	Fluent	Fluent
Age	36-45	36-45	11-25	56 -65	33 - 45	36 - 45	56 - 65	26 - 36	18 - 25	N/A
Status	2A	1A	2B	1A	2A	1A	1A	2A	2B	2A
MBTI	ENTJ 21/35/27/7	ISTJ 33/1/33/39	ISFJ 5/45/21/51	ISTJ 9/31/21/21	ISFJ 9/11/5/5	ENFP 29/41/5/15	ESTP 3/21/29/7	INTP 17/23/1/51	ESFJ 33/23/1/23	N/A
Sex	F	M	F	M	F	M	M	F	F	F
Inter national exp.	Yes	Yes	No	Yes	Yes	No	No	No	Yes	N/A
Job title	Personnel Officer	Manager Staff recr. and dev	Personnel Officer	Manager Personnel Admin	Personnel Officer	Manager expat. group UK	Manager Expat. admin	Expat. Administrator	Personnel Officer	Personnel Officer

Overall time : 4 hours. Type of task: Task type: Mixed task type 3 & 6; solving problems with correct answers and resolving conflicts of interest.

Key Observations: *Large group; slow pace; participation affected by status; low levels of simultaneous talk except from one manager separated from the other managers , on the opposite side of a large table.*

Seating Plan



The meeting starts informally with people coming in over a 13 minute period, chatting, sorting papers and drinking coffee. BS starts by saying 'well I think we should begin'. He mentions that he did not issue an agenda because there was little to put on. This is because between the two meetings TS has produced the full document for them to work through. Again the pace is slow and at this point people are softly spoken.

The first part of the meeting is clearing up actions from the last meeting, listening to GX (French) report on her interview survey. This generates some emotive exchanges with SE and KT sharing and agreeing examples and issues. XH asks specifically for the opinions of the Administrators rather than managers and VH(German) responds a little.

After the break, BS introduces the large document. XH suggests that they take general headings rather than work through it point by point, although they do first work through as a whole group correcting the headings. After the next break, XH has colour coded and written up the main issues. There is a misunderstanding between BS and XH about the colour coding which leaves the group staring at the flipchart. NX gets up to mark the order they should tackle the issues. It takes another hour before they start working through the main issues. After lunch the choice of topics seems to be driven by what the Administrators feel most emotive about. This leads to a slow and inclusive discussion, but which lacks focus. BS comes in a few times to attempt to restructure the process. The rest of the afternoon gets caught between XH wanting to bring in overview policy issues and detailed discussions around specific issues that towards the end creates more subgroup conversations. At one time, XH asks BS to stop his side conversation with KT.

The overall pattern of discussion is slow, allowing for second language English. Noticeably simultaneous talk is lower than in the first meeting, except for SE. This group is sitting around a very large long oval table. SE was on the opposite side and the other end to KT, BS and XH, the other three managers. Many of his simultaneous speech acts come in on BS, XH and JS's comments and may be attributable to the seating arrangements.

The stars show that the mother tongue speakers, dominant culture and numerically larger subgroup are spread across the curve and there is no particular pattern to either those with international experience or extrovert preferences. Instead, the pattern of participation exactly reflects the hierarchy of the four senior managers, then the administrators and finally the two junior members. This is not true of the pattern of influence, where VH's comments about the situation in Germany and the way XH would frequently ask for her opinion, increased her influence above that of SE. There was a slight drop in overall satisfaction from the first meeting.

From a subjective point of view, the behaviour of the four senior managers seemed less stereotyped and more balanced than in the first meeting. The document prepared between the two meetings appears to have focused their inputs and discussions around a common theme.

The return of post-questionnaires was poor, with three missing. VH refused to fill in either the pre or post questionnaire, despite sitting quietly before the meeting started and was hostile towards the researcher. She stressed that she was already too busy and had no time to do irrelevant things.

5.3.1.3 EXPCO TEAM MEETINGS 1 & 2: Summary of key observations.

It appears that status has major influence on participation in these teams. None of the stars show any clear pattern. It was noticeable that the pre-appointed leader tended to speak the most. The participation was more balanced in the second meeting, probably because of the larger size meant that participation was more spread out and the leader spoke less.

While difficult to quantify, the researcher also observed that the behaviour in the second meeting was less identifiable as characteristic of certain nationalities. This would compare with Ferrari's (1972) observations that stereotypes tended to diminish after people work together for a time. An alternative explanation is that because the group was larger, with a steadier pace. Even so, XH did not preface all his remarks, speak so slowly or for so long as in the first meeting, and the French members were less emotive, spread out across a large table and did not gather together in the breaks. In this second meeting, there could also have been a growing feeling of addressing common issues, as opposed to the first meeting, presenting problems that the centre (UK) should be aware of.

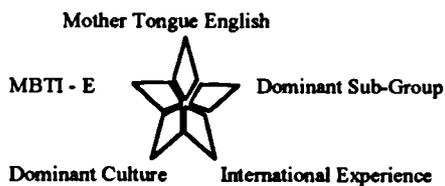
5.3.2 PHARMCO

PHARMCO is a medium size UK based pharmaceutical company. It has a large US subsidiary which generates the largest proportion of the profits world wide. The US subsidiary had its own board and otherwise until recently operated virtually as a separate company. The table below shows the national mix at the top of the corporation

Nationality	UK	US	Other
Board: CEO and MD's	2		
Board + external directors and chairman	majority	2	
Top 100 managers	60%	40%	3
Staff as a whole	60%	20%	20% Local

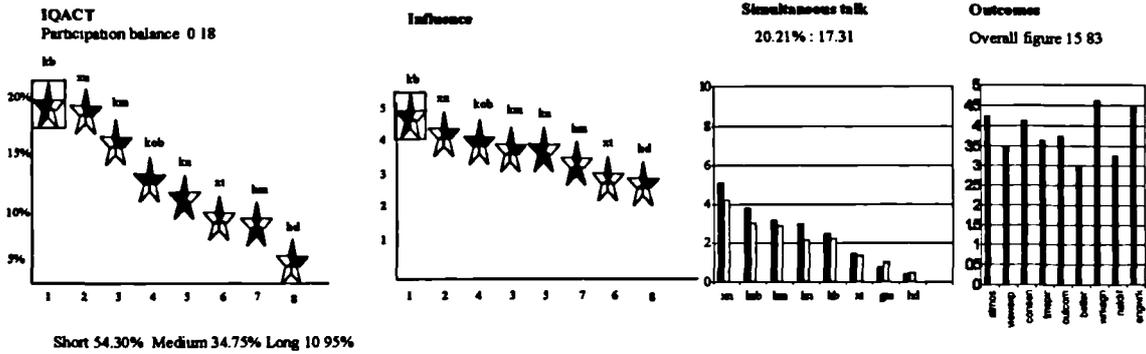
The team observed was the international quality assurance team (IQACT). This meeting was the two day quarterly meeting. KB (UK) is the team leader as all the other members report into her. This team established themselves two years previously as a result of KB's, XT's (Head of QA Canada) and XB's (Head of QA, USA) vision that quality assurance would be more effective throughout the company if it was co-ordinated world-wide. The team was geographically split between XB, KoB, HD and KM in the US, XT in Canada and the others based in the UK. This meeting was held in a Baltimore hotel as a convenient midpoint. The team did not want to be recorded during the first hour where they discussed some personal issues.

Reminder of star



5.3.2.1 INTERNATIONAL QUALITY ASSURANCE CO-ORDINATION TEAM

Outcomes



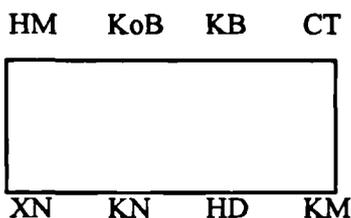
Inputs

IQACT	HM	KB	XN	KN	XT	KM	HD	KoB
Nationality	Australian	British	American	British	Canadian	American	American	American
Language fluency	Mother tongue	Mother tongue	Mother tongue	Mother tongue	Mother tongue	Mother tongue	Mother tongue	Mother tongue
Age	36 - 45	46 - 55	46 - 55	46 - 55	46 - 55	46 - 55	46 - 55	36 - 45
MBTI	INTJ 15/23/5/37	ENTP 15/49/27/21	ISTP 12/41/9/17	ENTJ 17/7/13/3	ISTP 3/13/11/5	ISFJ 11/17/17/7	ISFJ 1/51/5/39	ESTJ 49/11/15/1
Sex	M	F	M	M	M	M	M	F
International experience	Yes	No	Yes	Yes	No	No	No	No
Status	2A	1A	1A	1B	1A (small company)	1B	1B	1B
Job title	Int Project Manager	Group Director QA	Director QA BWG	Head Int. QA	Director QA and Dev	QA Manager	Manager Compliance	Manager QA Microbio.

Overall group time 11 hrs 30 mins Type of task (McGrath) Types 1 / 2 / 4 Generating plans/ generating ideas and deciding issues with no right or wrong answers

Key observations: All mother tongue speakers, participative style of leadership, discussion about process review rather than doing it, very different personal styles.

Seating Plan



Process

When the camera was allowed in, the team was focusing on practical work topics. KM (USA) is leading the discussion on one item. The dynamics then followed a fluctuating pattern. On any one topic, information is shared and as they input different ideas and push towards a decision, the amount of simultaneous talk increases dramatically to the extent that particularly WA (USA), KN (UK) and KoB (USA) will say full sentences out aloud, alongside what someone else is saying even if nobody is listening. Once a decision is made, details and implications are filled in quietly with little simultaneous talk.

During the meeting HM (Australia), KB and KM give long inputs. The two highest and the two lowest contributors to the participation maintain a steady flow over the next two days. Everyone else actively enters in different places. For instance, KoB does not start contributing until the first afternoon and then many of her contributions are supportive comments on what other people are saying while they are saying it. This meant that along with KN and WS, who also tends to comment briefly on others' comments, the greatest proportion of her speech acts were short, as opposed to HM, KB, and KM whose greater proportion were long.

KB's style of leadership is participative and she is the only one who consciously changes the structure of the discussions and names specific people for input. She also works hard to focus the team when the discussion deviates from the issues at hand. Sometimes three or four people can be talking at once. XN, KoB and KM are comfortable to raise their voices and sustain their simultaneous talk when others are also talking. KN and KB also talk simultaneously but it comes across as less strident and forceful and they tend to give up if others are still talking. KB only stopped the simultaneous talk when it split into long sub-conversations. HD (US) was very quiet and waves his hand for floor space rather than start in when others are talking. HM also waited for a gap or to be asked to speak.

There is a high level of both compliments and personal criticism in the team. Certain instances point to high levels of awareness and acceptance of individual differences. The team spends time thinking about what it is to be a team, what team skills should be and what the role of a project leader is. This leads them to consider what their own guidelines for process should be, but these are focused more on structuring the tasks than looking at their patterns of interaction. They do not actively review their own participation.

There were wide fluctuations in the dynamics of the two days, depending on the phase of the task. The stars show that all were mother tongue speakers. The team leader belonged to the

dominant culture, but after that the larger American subgroup dominated the meeting, except for HD who was quiet. Within that subgroup, the US team leader participated the most. From interviews with the members as part of another research project (see Snow et al 1993) , their level of participation reflects their level of personal ambition within the team. Three Americans also initiated the most simultaneous talk, whereas KB was fifth.

The other major influence on the dynamics is the different personalities, although except for one, the Americans did seem more comfortable than the others with high levels of prolonged loud simultaneous talk. Despite discussing process, the process remained fairly loose with KB often having to focus the team. There were high levels of interpersonal interaction and acceptance.

5.3.2.2 IQACT: Summary of key observations

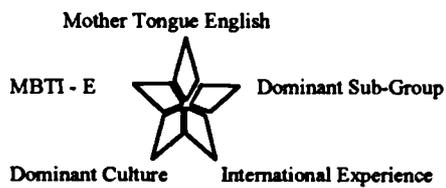
The stars show that the pre -appointed team leaders, UK and US participated the most. International experience, being from the dominant culture and having an extrovert preference had no perceivable effect. There were high levels of simultaneous talk, dominated by the Americans who also continued talking while others were talking, whereas the British and other members tended to stop if they did not gain the 'floor'. Personalities seemed to play an important role, with neither XT, HM or HD entering into much simultaneous talk, preferring to raise their hands or wait for a gap. This team had developed a high level of interpersonal feedback, but while they talked about what they might do to improve their process, they did not act on it.

5.3.3 COMMCO

COMMCO is a telecommunications company in Hong Kong. It is part owned (58.4%) by a British company. The 'Court of directors' of the British company appears from the annual review to be wholly British, though some have had extensive international experience. No figures were available for the nationalities of the top managers in COMMCO.

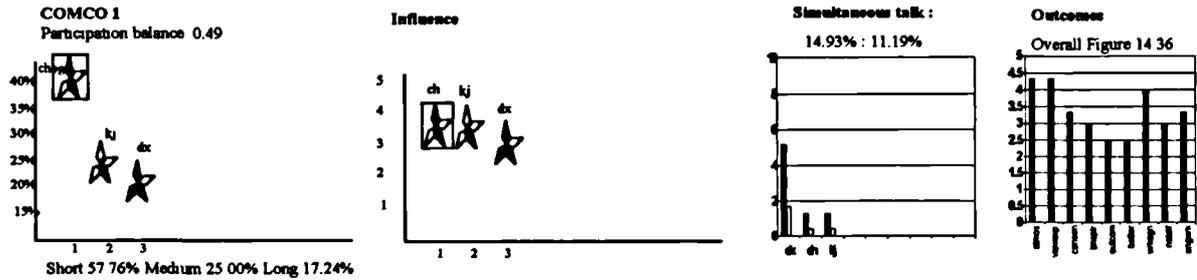
These four operational meetings were meetings of different groups in the company. The timing, the task and composition will be explained for each group. The meetings were the shortest in the whole sample and so the descriptions reflect this by being shorter in length.

Reminder of star



5.3.3.1 COMMCO 1

Outcomes



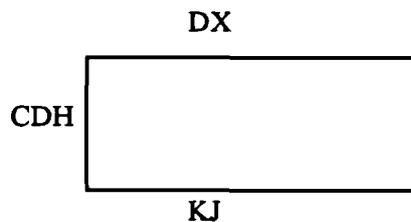
Inputs

COMMCO 1	CKH	KJ	DX
Nationality	Canada	Chinese	British
Level of Language fluency	Mother tongue	Fluent	Mother tongue
Age	46 - 55	26 - 35	26 - 35
Sex	F	F	F
International experience	Yes	Yes	Yes
Job title	Manager Training	Group manager	Unit head

Overall group time: 1 hr McGrath (1984) Task type 4: Decision - making tasks

Key observations: *Most senior person leads. A meeting rather than a team. Very high back-channelling by people listening.*

Seating Plan



Process

This meeting was called because KJ (Hong Kong Chinese), group manager for the media relations department wanted information for her staff about any relevant customer training activities of the training department. CKH (Canadian) is DX's (British) manager in the training department.

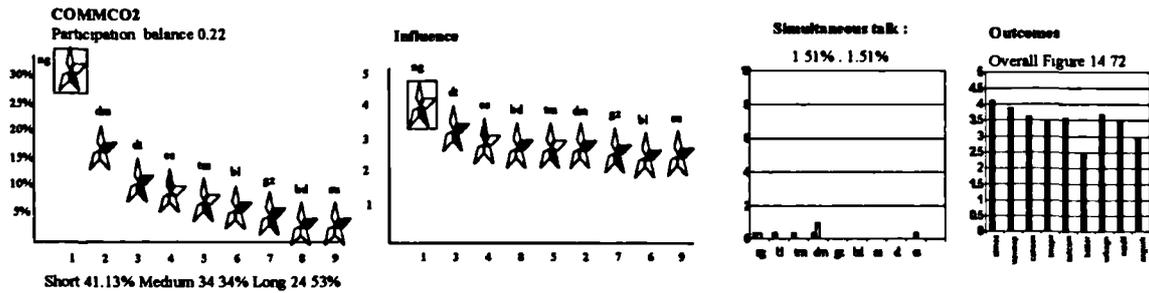
CKH starts the meeting by joking to KJ that she has 30 seconds. The feeling is low key and intimate. CKH and DX lean forward on their elbows. KJ also leans forward in her chair and is expressive with her hands. Her slower speed of English sets the pace. After the first ten minutes, CKH gets up to draw on the flipchart and leads the explanation of what training is needed. KJ nods and mumbles affirmations and DX cuts in with colourful examples. KJ does a lot of back-channelling as does CKH when she is seated (KJ, 100, CKH, 57, DX 30 and over 58% of short speech acts are back-channels) After 30 minutes, a sense of common ground develops and the discussion becomes more candid with more 'in' jokes. KJ brings it to a close by saying 'well I think I have enough.'. Her expertise comes through in her last few questions.

The stars show that the mother tongue speakers are spread, all members had international experience and the one individual from the dominant culture participated the least. DX participated the least, but had the highest levels of simultaneous talk. The participation curve reflects the status of the team members.

On the post questionnaires, DX and KJ's responses showed that they thought that the task was clear and achieved. However CKH did not think that everyone expressed their views, nor that the task was either clear, or that they had achieved the best possible outcome. DX marked N/A the questions of team spirit, finding a better way of working together and the achieving the best outcome.

5.3.3.2 COMMCO MEETING 2

Outcomes



Inputs

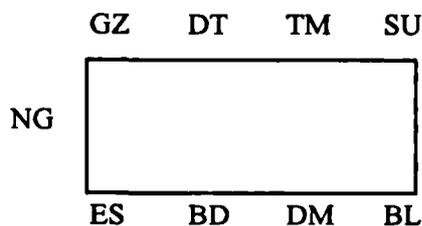
COMMCO2	GZ	NG	BD	BL	SU	TM	DT	ES	DM
Nationality	HK Chinese	Samoa	HK Chinese	HK Chinese	HK Chinese	Austr/East Timor	HK Chinese	Canadian	HK Chinese
Language fluency	fluent	Fluent	Non Fluent	Non Fluent	Fluent	Non Fluent	Non Fluent	Mother tongue	fluent
Age	26 - 35	36 - 45	26 - 35	36 - 45	26 - 35	26 - 35	36 - 45	26 - 35	26 - 35
Sex	M	M	M	F	M	M	M	M	F
International experience	Yes	Yes	No	No	No	Yes	Yes	No	No
Job title	Manager software	Senior Manager	Consultant	SR Sys Analyst	Senior consultant	Senior consultant	Manager software	Senior consultant	Manager

Overall time : One hour 4 minutes McGrath (1984) Task type 4: Decision - making tasks

This is the weekly update meeting of a systems project group. The meeting lasts 75 minutes. The purpose is to share and discuss information.

Key observations: *Very formal. All discussion passes through the chairman. Two most senior males seen to have the most influence. Very large oval table.*

Seating Plan



Process

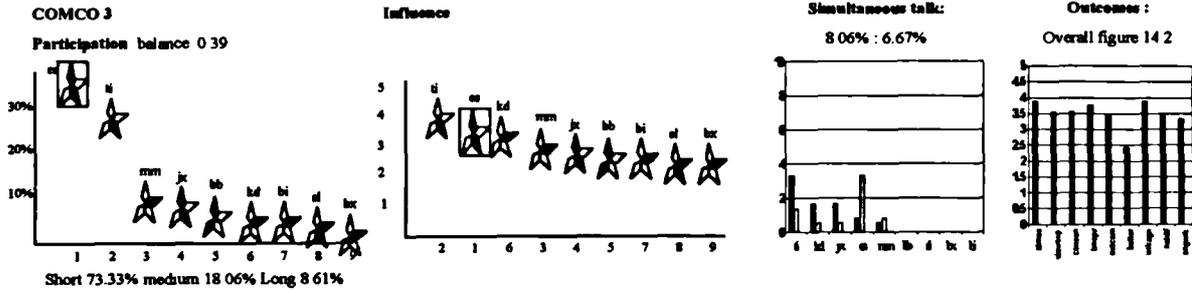
The initial feeling of this meeting is light as they joke about filling in the pre-questionnaire. NG (Samoan) the pre-appointed chair and leader of the project calls the meeting to order. He says 'welcome again, perhaps we should start with the status report, so we will go around the table again and ask about status.' He turns to ES (Canada) on his right and said 'so we will start with you ES'. ES says 'Okay' and talks to the whole group. NG sums up what ES has said and asks the next person around the table and so on. Everyone else speaks to NG rather than to the whole group. This pattern is seldom broken, once when NG asks DT (HK Chinese) for his opinion and very occasionally when others ask questions through NG about what someone else has said.

ES seems uncomfortable with the style of the meeting. BD (HK Chinese) appears to be a stranger to the group as he was unable to name the others on the post-questionnaire. DM (HK Chinese) is very professional and takes comments and questions and comments from DT directly and they interact freely, more as if they are peers. At the end she seems to speak for BL (HK Chinese) who seems to be her subordinate. Even then her influence is marked lower than five other men. Noticeably the two oldest men are marked as having the most influence, perhaps because NG asked DT for his opinion. DT talks into his papers and when his neighbour TM (East Timor/Australia) picks up a comment, looks deeper into his papers and away from everyone else when TM speaks without being asked to speak.

It also has the lowest amount of simultaneous talk, reflecting the highly structured process although noticeably the most vocal woman, DM is the one who is interrupted the most. The stars show that the appointed leader participates the most. Most of the individuals with international experience are at the top end of the curve, which may reflect the different levels of status in the team that are unknown to the researcher. The one mother tongue speaker is in the middle. This very formal structure has the highest level of satisfaction outcome of the four COMMCO teams.

5.3.3.3 COMMCO 3

Outcomes



Inputs

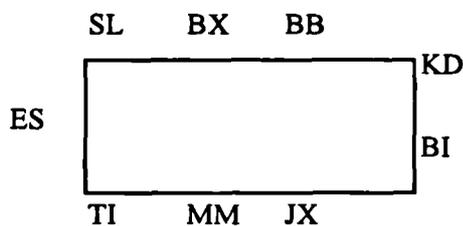
COMMCO3	BI	JX	BB	MM	SL	TI	BX	KD	ES
Nationality	HK Chinese	New Zealand	British	HK Chinese	HK Chinese	Chinese Canadian	HK Chinese	HK Chinese	Canadian
Language fluency	Non Fluent	Mother tongue	Mother tongue	Non Fluent	Non Fluent	Fluent	Non Fluent	Non fluent	Mother tongue
Age	26 - 35	26 - 35	18 - 25	26 - 35	36 - 45	36 - 45	26 - 35	26 - 35	26 - 35
Sex	M	M	M	F	M	F	F	M	M
International experience	No	Yes	No	No	No	Yes	No	No	No
Job title	Consultant	System Software engineer	Trainee Man Acc	Systems specialist	N/a	Mgr Financial Systems	Consul tant	Treasury executive	Senior consultant

Overall group time: 1 hr 15mins: McGrath(1984) Task type 3: Intellective tasks

This meeting was the weekly meeting of the Accounts Payable systems project team. The object was to update the group and particularly ES and the internal client TI on progress and to share and discuss any difficulties arising.

Key observations: *Respectful but informal. Very smooth flow despite halting conversational styles.. Preappointed leader does not retain the most influence.*

Seating Plan



Process

ES (Canada) is the leader of the project group and the meeting. TI (Chinese/Canadian) sits on his immediate right and the others are seated around a small table that just fits everyone on. ES starts the meeting by saying welcome and suggests that they go around the group sharing what has happened in the last week and any problems. He starts arbitrarily with SL (HK Chinese). SL presents, ES asks him questions and after two or three TI cuts across him with a suggestion. ES is forced to explain why he is asking the questions. TI comes in again and JX (New Zealand) also comes in. JX, SL, TI and ES discuss, as it winds down, with ES seeming to have been cornered a bit, he says okay lets move on and passes onto BX (HK Chinese).

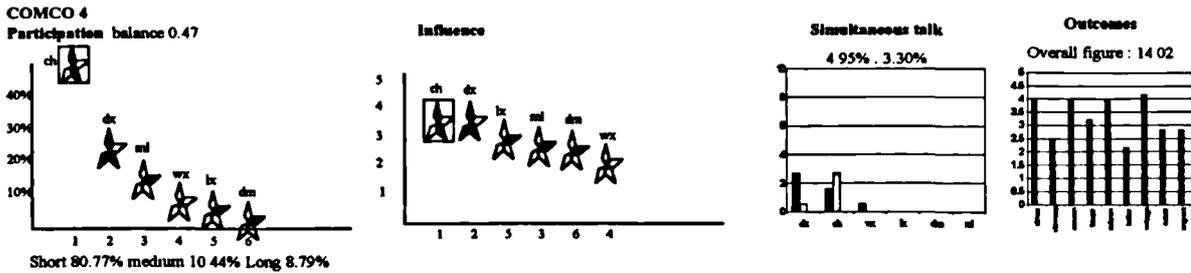
TI is authoritative on the implications of the work that they are doing. She is lively and inclusive. ES's, MM's (HKChinese) , RT's (HKChinese) , JX's and BI's (HKChinese) speech is all quite hesitant with many 'okays' and 'um's. However ES's relaxed style, TI's high level of participation and the high level of attentiveness and listening in the rest of the team, means that the flow remains smooth. It is clear that TI and ES respect each other and the dual cross national leadership works easily. That is despite the fact that most of the simultaneous talk is TI cutting across ES.

Some of the bugs in the IT system are creating ludicrous results and these are met with a lot of inclusive laughter and jokes that seem to create a friendly atmosphere and include some of the quieter members like MM. The stars show that the pre-appointed team leader participates the most but overall the mother tongue speakers do not participate more. The larger HKChinese subgroup is at the bottom of the curve; international experience is spread throughout, with the one dominant culture participant in the middle. It seems likely that status is what separates the ES and IT at the top of the curve from the rest.

This team has the highest levels of simultaneous talk of all the four COMMCO teams and the most joking and informality. This does not change the steep shape of the curve found in these teams.

5.3.3.4 COMMCO 4

Outcomes



Inputs

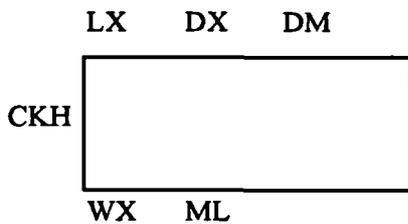
COMMCO4	DM	ML	LX	DX	WX	CKH
Nationality	HKChinese	HKChinese	HKChinese	British	HKChinese	Canada
Language fluency	Fluent	Fluent	Non Fluent	Mother tongue	Fluent	Mother tongue
Age	26 - 35	36 - 45	26 - 35	26 - 35	35 - 46	46 - 55
Sex	F	F	F	F	M	F
International experience	No	No	No	Yes	No	Yes
Job title	Training Officer	Training Consultant	Assistant controller	Unit head	Consultant	Manager Training

Overall group time: 30 MINS McGrath (1984) Task type 4: Decision - making tasks

This meeting was a short weekly meeting of the training team. The purpose was to share what was happening in the department.

Key observations; Short meeting. Dominance of leader. Friendly and inclusive.

Seating Plan



Process

The initial feeling is slightly chaotic, but reserved and formal underneath. CKH (Canadian) is everybody else's senior and starts it by saying that there is a tight schedule. She gets up to write

the agenda on the flipchart. A few people offer some other topics. DX(British) stands up to share information for schedules that she has written up previously.

CKH has a soft style and is careful to explain everything thoroughly if she thinks it is ambiguous. DX cuts in across CKH with graphic examples asking the group how they felt about something. This for instance, lets LX (HK Chinese) come in with another example. CKH would then lift the discussion onto general principles. She answers questions from LX and ML (HK Chinese) in depth, always addresses her answers to the whole group and slows down her English and uses large gestures when speaking to DM(HK Chinese). CKH opens and closes the topics and pushes through the agenda.

CKH seemed to lead by virtue of her position and experience. DX has an outgoing character and looks for light jokes. Together they speak 75% of the time. DM was a new face to the meeting, standing in for her department head and her English seemed less fluent. The others volunteered their information freely, with ML initially and LX coming in quite rapidly with examples. Although the overall satisfaction figure is similar to the other teams, the specific outcomes are more varied. Most agreed that there was a friendly atmosphere, consensus, a good outcome and that they would enjoy working together again. However they did not feel that everyone expressed their views, that there was high team spirit or that they found the best way of working together.

5.3.3.5 COMMCO teams: Summary of key observations

In all these four teams, the pre-appointed leaders are neither members of the dominant culture, nor of the larger subgroup. They all have a much higher percentage of participation than the rest of the team. All except ES also have the highest perceived influence. CKH and NG have been in Hong Kong 20 years and 3 years respectively whereas ES has only been there 8 months.

Although ES also names individuals to speak, he allowed a greater sense of being able to come in any time and also tended to allow a subject to fade out before moving on rather than picking it up, summarising it for the teams and adding comment. TI tended to do this instead. Perhaps this is what earned her higher perceived influence, despite the fact that ES was the team leader. Perhaps CKH and NG are more used to working in the expected Chinese Style.

The shift in ES's influence could also be explained by TI being ES's internal client, there to state her needs which ES had to respond to. She was also very outgoing and would often cut across ES. In COMMCO1 & 4, DX cutting across CKH did not change their levels of influence: the gap between their frequency of participation is greater and DX is CKH's subordinate.

The participation curves in these teams are much less balanced than in all the other teams observed so far, even those with pre-appointed leaders. As Lee (1993) described, HK Chinese employees are much less likely to initiate comments and will tend to wait to be asked. This observation is supported in these teams, even when in COMMCO3, there is a light and joking atmosphere and higher levels of simultaneous talk. In the four CHEMCO teams, the greater the imbalance in the participation curves, the lower the satisfaction outcomes. Apart from COMMCO 1, that pattern is the same for these teams.

Team	Balance	Outcome
COMMCO1	0.49	14.36
COMMCO4	0.47	14.02
COMMCO3	0.39	14.2
COMMCO2	0.22	14.72

However the high rating and greater balance of COMMCO2 was achieved through a very formal ordered process of working always through the team leader. This style is not usually equated with high levels of participation although it fits a style of interaction commonly found in Hong Kong Chinese meetings (Lee 1993, Lam 1986).

There are no other operational short meetings with pre-appointed leaders in the rest of the sample to compare with these teams working in a Hong Kong Chinese environment.

In teams 2, 3, and 4, there were shifts between the order of participation and the ordering of influence. TI is ascribed as having more influence than the team leader ES.

5.4 OVERALL MAIN OBSERVATIONS

The trends in the pattern of stars suggests that being a member of a dominant culture may play an important role in higher participation as may, to a lesser extent, being a mother tongue speaker. Leaders and high participating members in some teams do have international experience but it is difficult to see a consistent trend. There do not seem to be any consistent patterns concerning having an extrovert preference on MBTI or being a member of a larger numerical subgroup. The hypotheses concerning these variables and the results for all teams will be tested in Chapter Six and a full discussion of the results given in Chapter Seven.

What does come through these observations is that the particular interaction patterns and events in the teams were dependent on:

- the organisational context of the team,
- the size of the team,
- the length of the team work and
- the type of task,
- the mix of nationalities in the teams
- whether the teams were training or operational

The organisational context and the resulting mixes of nationalities seemed to change the style of interaction most markedly. In the Hong Kong Chinese context, there were many fewer self-initiated speech acts. On the whole, team members waited their turn or to be asked for their comments. This was the complete opposite in teams composed mainly of Anglo-Saxons. Team leaders of members very rarely asked for someone else's comments by naming them and most speech acts were self-initiated. What was also striking is that stereotypical comments about other nationalities was far more apparent in one organisational context than the others.

The mixes of nationalities also created differences in patterns of action and reaction. The most obvious difference was between teams where the majority were mother tongue speaker and the pace was very fast, which seemed to exclude some team members and teams where the majority were second language speakers and the pace was much slower and the participation rates more even. National differences were apparent in various ways.

Firstly, visible misunderstandings such as using words that someone clearly did not understand. Secondly, one group or individual wanting the group to do something, such as 'work together

as a whole group' or 'draw lots to make decisions' that another group or individual from a different culture strongly disagreed with. These second types of differences almost always led to a portrayal of annoyance or displeasure by the group disagreeing, rather than a creative exploration of different approaches. Evidence for the third type of difference is less firm, but there did seem to be different preferences for ways of arguing through an issue. For instance, in one team a Dutch man wanted to debate the logic of the problem in a very argumentative style. He invited others to argue with him, but only the other Dutch man responded to that more aggressive style of debate. Similarly when a group of British team members entered into heated discussions, a fluent English speaking Hong Kong Chinese member consistently stated that it was impossible for him to participate in that type of discussion where more than one person spoke at a time.

The point of this short summary of some of the items is to point out that there is support in the observational data for the proposition that some of the patterns of action and reaction in international teams can be influenced by 'ethno - linguistic' identification. The number of teams has meant that only the main events in each team have been recorded. The pattern of interaction has been recorded in some detail in those teams where there were particularly overt patterns of interaction around the types of cultural differences or stereotypical cultural identification mentioned above.

It is likely that deeper content analysis of two or three teams would reveal more precisely how the cultural differences and stereotypes can influence the interaction in these teams. This was not pursued in this study for three reasons. Firstly, because research on international teams is just beginning, the aim of the study was to remain broad rather than detailed. Secondly, having decided to look at what is a relatively large sample for qualitative study, there was no impartial basis on which to select two or three teams for further special treatment. Thirdly, there is a real danger of researcher bias and interpretation, and difficulty in ascribing certain behaviours, except for the most overt, as either products of cultural conditioning or personality. In the researcher's opinion, these two factors would combine to make post - team work interviews with the team members almost obligatory before reaching any firm rather than speculative conclusions. The opportunity to carry these out was not made available to the researcher. These three factors combined to limit the use of the observational data primarily to illustrating the variables to be tested in the hypotheses and that discussion takes place in Chapter Seven. The main observational findings are summarised in the table below.

Table 5.1 Table of overall findings

HIGHER NUMBERS OF BRITISH AND OTHER ANGLO- SAXON CHEMCO, COMMCO1, IQACT, BANK1		TEAMS WITH MIXED NATIONALITIES OILCO , EXPCO, OILCO SING, BANK2		HIGHER NUMBERS OF HONGKONG CHINESE COMMCO	
Training CHEMCO, BANK1	Operational IQACT	Training ALL OILCO BANK1	Operational EXPCO1&2	Training Not available	Operational COMMCO
Emergent leaders appointed to manage process seldom participate the most and do have the most influence	Pre - appointed team leaders participate the most and have the most influence	Emergent leaders appointed to manage process seldom participate the most and do have the most influence	Pre - appointed team leaders participate the most and have the most influence		Pre - appointed team leaders participate the most and usually have the most influence.
In four out of five, members of the larger Anglo subgroup/ dominant culture participate the most		Dominant culture individuals participate more	Status overrides all the other factors		Status appears to play an important part although the curves are quite flat below the leader.
Very high level levels of simultaneous talk		Smaller teams reached higher levels of satisfaction and had lower levels of simultaneous talk	Larger (more familiar) team had more balanced participation lower simultaneous talk and higher satisfaction		Steep curves are not affected by level of informality and do not affect reasonable levels of satisfaction.
People from former UK colonies do better than other Europeans and Latin Americans	US have higher levels of sim talk than UK	Experience with the task may supersede the other factors.			

Exclusion through the pattern of participation		Exclusion through stereotypical evaluative statements or sexist comments			
Teams that attempt to review process have more balanced participation and higher levels of satisfaction Facilitated in BANK1	Discussion about process but no enactment during the two days	No discussion of process, except in BANK2 & OILCO Singapore where it was a facilitated part of the course	No attention paid to process		No attention paid to process

6. CHAPTER SIX: QUANTITATIVE ANALYSIS RESULTS

6.1 Raw Data

The raw data for the quantitative analysis were obtained from three sources:

- i) Questionnaires applied to meeting participants prior to meetings
- ii) Questionnaires applied to meeting participants after meetings
- iii) Analysis of video taped recordings of meetings

A detailed description of the pre- and post- meeting questionnaires, and the data derived from the video recordings of the meetings is given in Chapter 5 and the accompanying document.

6.2 Transformation of Key Variables

The raw data are not always suitable for testing hypotheses without some transformation.

6.2.1 Frequency of Participation

It is intuitively clear that both the length of a meeting and the number of people attending a meeting will affect the contribution of an individual in terms of the air-time allowed and the number of speech acts possible. The correlation matrix between meeting length, the number of participants and the total number of speech acts by individuals was determined as below:

Table 6.1 Frequency and length of participation

	Frequency Raw Score	Length	No of Participants
Frequency Raw Score (Fregraw)			
Length (L)	0.85**		
No of Participants (N)	-0.08	0.09	

* = $P < 0.05$ ** = $P < 0.01$ *** = $P < 0.001$

There is a strong linear relationship between the frequency raw score and meeting length. The simplest way to take out the influence of meeting length is therefore to use an individual's participation as a percentage of the total for the team.

The correlation matrix for the variables then becomes:

Table 6.2 Frequency and team size

	Frequency %	Length	No of Participants
Frequency % (Total_f)			
Length (L)	-0.08		
No of Participants (N)	-0.43	0.09	

* = P < 0.05 ** = P < 0.01 *** = P < 0.001

As would be expected, the frequency of participation is negatively correlated with the number of people in a group. Although there is a degree of linearity between the percentage participation and the number of team members, a slightly better fit to the data is obtained if an inverse relationship is assumed i.e. the participation percentage is inversely proportional to the number of team members. Further transformation is therefore required in order to compare individual frequency of participation scores across teams of different sizes. The following transformation has been used to standardise Total_f values:

$$\text{Std}_f = \frac{(\text{Total}_f - m)}{m * (N-1)^{0.5}}$$

where: Std_f = Standardised participation score

Total_f = Individual participation as % age of total

m = mean of Total_f

N = Number of people in team

The correlation matrix then becomes:

Table 6.3 Standardised frequency

	Standardised Frequency	Length	No of Participants
Standardised Frequency (Std_f)			
Length (L)	-0.0001		
No of Participants (N)	-0.001	0.094	

* = P < 0.05 ** = P < 0.01 *** = P < 0.001

The effect of this final transformation is to completely remove the effects of meeting length and the size of the group on individual participation scores. The means of the distributions of Std_f within groups and between groups are always 0.0. The within groups standard deviation is 0.0 if all team members contribute equally to the discussion and 1.0 if one team member dominates completely. The standard deviation can therefore be used as a measure of the Balance of participation in any team.

6.2.2 Length of Participation

In order to simplify analysis of data from the video recordings, the lengths of individual participations were measured in terms of the number of sentences spoken without interruption. Lengths were classed as:

Short	1	sentence
Medium	2-3	sentences
Long	>3	sentences

To convert the above classification into time based lengths, weightings were then applied to the classifications based on the actual length in seconds of samples taken at random across all the team recordings. The number of samples taken for each classification was large enough to ensure that the 95% confidence limits for the mean lengths of each classification were less than 2% of the means. Weightings were determined as below:

Short	1.00
Medium	3.81
Long	12.13

Length of participation was then standardised to remove the effects of the lengths of meetings and the number of members in each team.

6.2.3 Correlation Between Frequency and Length

The correlation coefficient between the standardised measures of frequency (Std_f) and length (Std_l) was found to be 0.9493. On this basis, hypotheses testing the participation of individuals in terms of frequency and length can be reduced to testing for only one or other of these two variables. In the results presented below, Std_f is used in all cases as the measure of participation.

6.2.4 Correlation Between Input Variables

The correlation matrix of the input variables given below shows that the correlation between these variables is low and the variables can therefore be treated as independent.

Table 6.4 Input variables correlations

	Std_f	Leader	Language	Culture	Subgroup	Intexp	Myerb
Std_f							
Leader N = 9	.43***						
Language N = 71	.15	.29***					
Culture N = 88	.09	.14	.12				
Subgroup N = 61	-.04	-.01	-.07	.15			
Intexp N = 65	.26**	-.05	-.08	.05	.13		
Myerb N =	-.07	-.06	.06	-.05	.08	.10	

* = P < 0.05 ** = P < 0.01 *** = P < 0.001

6.2.5 Satisfaction

The hypotheses aimed at testing group outcomes require a measure of satisfaction to be derived from the raw questionnaire data. A factor analysis of variables from the questionnaire resulted in a single factor extracted as shown in the table below. This factor is used as a measure of 'satisfaction'. Although there was a large shift between expectations and outcomes on whether national differences helped or hindered the group, this shift was not correlated to the measure of satisfaction derived. Inclusion of the 'national differences' variable in the analysis generated an additional factor. In hindsight, including a question such as 'we benefited from our cultural differences' may have been more direct than the notion that 'national differences helped the effectiveness of the team'. All the variables except BETER2OK were measured on a scale of 1 (disagree) to 5 (agree). BETER2OK was on a scale 1 (agree) to 5 (disagree).

Table 6.5 Satisfaction outcomes

Variable	Description	Eigen value	% of Variance	Factor
ATMOS2OK	The group atmosphere was friendly	2.82	45.4	0.651
IEWS2OK	Everyone expressed their views	1.02	14.2	0.613
OUTCOMOK	I am satisfied that we created the best possible outcome	0.84	12.5	0.755
BETER2OK	We could have found better ways of working together	0.68	11.2	0.514
SPRIT2OK	We developed a strong team spirit	0.65	8.7	0.758
AGAIN2OK	I would like to work in this group again	0.52	8.0	0.719

6.3 Individual Input Level Results

6.3.1 Hypothesis 1

Appointed or acknowledged team leaders will participate more than other team members

Null Hypothesis - All team members participate equally

The sample was split into four groups.

Group 0 = Team members in teams which had a team leader

Group 1 = Team members in teams with no team leader

Group 2 = Team leaders who emerged during the team work

Group 3 = Team leaders who were appointed by someone other than the team members prior to the team work

The distributions for the four groups have the following characteristics:

Table 6.6 Hypothesis one: Leaders: means

	No. of Members	Mean	Std Dev
Group 0	99	-0.04	0.19
Group 1	44	0.00	0.17
Group 2	8	0.10	0.15
Group 3	7	0.50	0.43

The Levene test for homogeneity of variances indicates that the variances of the groups are likely to be equal. The means from the distributions above can therefore be compared using a one-way analysis of variance procedure. This found significant differences between the means:

Table 6.7 Hypothese one: Leaders: variance

	Group 0	Group 1	Group 2	Group 3
Group 0	no	no	no	no
Group 1	no	no	no	no
Group 2	no	no	no	no
Group3	yes	yes	yes	yes

As shown in the table above, the only significant difference at 95% confidence levels is between appointed leaders and all other groups; there is no significance between the other groups. The null hypothesis can be rejected; appointed leaders participate more than other team members.

6.3.2 Hypothesis 2

Mother tongue speakers of the common working language will participate more than other team members

Null Hypothesis - All team members participate equally

The sample was split into two groups, those who speak English as a mother tongue and those who do not. Teams that had no mother tongue speakers and teams that had all mother tongue speakers were not included in this test. The results are shown below:

Table 6.8 Hypothesis two: mother tongue speakers

	No. of Cases	Mean	Std Dev
Mother tongue English	71	-0.63	0.19
Non- English mother tongue	63	0.07	0.26

Levene's test for equality of variances: $F = 1.569$ $p = 0.213$

T-test for equality of means: 2-tail sig 0.001

The null hypothesis can be rejected. The results show that English mother tongue speakers did participate more than non-English mother tongue speakers across all teams in which both groups were represented.

6.3.3 Hypothesis 3

Individuals who are of the same nationality as the majority of the leadership group of the company will participate a) more frequently and b) for greater duration than those from other nationalities

Null Hypothesis - All team members participate equally

The sample was grouped into individuals who belonged to the dominant culture group in their company and those that did not. Teams where no one was from the dominant culture were not included in this test.

Table 6.9 Hypothesis three: dominant culture

	No. of Cases	Mean	Std Dev
Belongs to company culture	88	-0.03	0.24
Does not belong to company culture	50	0.04	0.03

Levene's test for equality of variances: $F = 0.677$ $p = 0.412$

T-test for equality of means: 1-tail sig 0.037

The null hypothesis is rejected for a one tail test. The alternative hypothesis that people from dominant cultures will speak more than those not from the dominant culture, requires a one tail t-test. Within 95% confidence limits people belonging to the nationality that has dominant status within the organisation participate more than those from other nationalities.

6.3.4 Hypothesis 4

Where individuals from any one nationality form a majority subgroup (of more individuals from one nationality than any other) they will participate more than those from the other nationalities

Null Hypothesis - All team members participate equally

Groups where there were no subgroups were not included in this test.

Table 6.10: Hypothesis four: Subgroups

	No. of Cases	Mean	Std Dev
Belongs to a larger sub-group	61	0.02	0.27
Not in a larger sub-group	57	-0.02	0.19

Levene's test for equality of variances: $F = 0.475$ $p = 0.492$

T-test for equality of means: 1-tail sig 0.166

The null hypothesis cannot be rejected. The result indicates that there is not likely to be a difference in participation between numerically larger subgroups of people from the same nationality and others in the team.

6.3.5 Hypothesis 5

(a) For team members from the same nationality as the majority of the leadership group of the company, those with prior international experience will participate more than those with no prior international experience.

Null Hypothesis - All team members participate equally

Using a t test for independent means, the whole sample was first tested to see if there was any difference between those who have had international experience and those who have not. As shown below, people with international experience participated more than those without.

Table 6.11: Hypothesis Five: International experience

	No. of Cases	Mean	Std Dev
No international experience	93	-0.05	0.19
International experience	65	0.07	0.26

Levene's test for equality of variances: $F = 1.392$ $p = 0.240$

T-test for equality of means: 1-tail sig 0.001

The sample was then separated into people from the dominant national culture within the organisation and others. The impact of international experience on dominant culture people was then tested. In this case, prior international experience appears not to affect the level of participation in the meeting.

Table 6.12: Hypothesis five: Specifics 1

	No. of Cases	Mean	Std Dev
Dominant culture - no int. exp.	26	0.02	0.20
Dominant culture - int. exp.	24	0.07	0.17

Levene's test for equality of variances: $F = 0.379$ $p = 0.541$

T-test for equality of means: 1-tail sig 0.198

The null hypothesis cannot be rejected; it is unlikely that prior international experience for team members belonging to the dominant culture affects participation.

(b) Where individuals are not from the same nationality as the majority of the leadership group of the company, prior international experience will increase the level of participation.

Null Hypothesis - All team members participate equally

Table 6.13. Hypothesis five : Specifics 2

	No. of Cases	Mean	Std Dev
Non dominant nationality - no int. exp.	67	-0.08	0.18
Non dominant nationality - int. exp.	41	0.07	0.30

Levene's test for equality of variances: $F = 4.594$ $p = 0.034$

T-test for equality of means: 1-tail sig 0.003

The null hypothesis can be rejected. These results confirm that prior international experience is likely to increase the participation of team members from other cultures.

6.3.6 Hypothesis 6

Extroverts on the Myers Briggs Personality test will participate more than introverts

Null Hypothesis - All team members participate equally

Using E and I as the distinguishing factors, no significant difference in participation was found between E's and Is. The E and I factors were then scored according to the preference score on this dimension, with E being marked positively and I negatively. A correlation matrix was then run against the frequency of participation.

Table 6.14 Hypothesis six: MBTI

	MBSCORE	STD_F
MBSCORE		
STD_F	0.04	

As can be seen from result, there was still virtually no correlation between the E/I rating on Myers Briggs and the frequency participation. The frequency of the sixteen MBTI types was determined. 12 of the 16 possible types were represented. The most common four were ESFJ 30 (24.2%), ISTJ 20 (16.1%), ENTJ 16 (12.9%), and ISFJ 10 (8.1%). A one way analysis of variance test was run using all 12 types against standard frequency of participation; no two groups were significantly different at the .05 level. Independent t -test analyses were then carried out on the remaining six variables of the Myers Briggs Type, Eg; Judgemental and Perceptive; Sensing and Intuitive; and Thinking and Feeling against the frequency of participation. No significant results were found at the 95% confidence interval. The null hypothesis is accepted; Myers Briggs personality types seem not to affect the frequency of participation.

6.3.7 Hypothesis 7

The level of influence of each of the factors outlined in Hypothesis 1 - 6 on the frequency of any one team members participation will be ranked in the same descending order 1 - 6.

Null Hypothesis - The factors outlined in Hypotheses 1-6 have equal influence on any one team member's participation.

A correlation analysis of all the variables gives the results below:

Table 6.15 Hypothesis seven: variable ranking

	Std_f	Leader	Language	Culture	Subgroup	Intexp	Myerb
Std_f							
Leader N = 9	.43***						
Language N = 71	.15	.29***					
Culture N = 88	.09	.14	.12				
Subgroup N = 61	-.04	-.01	-.07	.15			
Intexp N = 65	.26**	-.05	-.08	.05	.13		
Myerb N =	-.07	-.06	.06	-.05	.08	.10	

* = P < 0.05 ** = P < 0.01 *** = P < 0.001

The null hypothesis can be rejected. The correlation against Std_f gives a rank order of:

- 1 Leader
- 2 International experience

All the other variables can be treated as having equal influence. An analysis of the variances shows that the six factors above explain 26% of the variance in the individual participation scores:

Table 6.16 Sources of variance

Source of Variation	Sum of Squares	%age
Main Effects	0.51	26
Leader	0.10	
Language	0.01	
Subgroup	0.02	
Intexp	0.15	
Myerb	0.02	
Culture	0.03	
Explained	0.51	26
Residual	1.476	74
Total	1.986	100

6.3.8 Effect of Task Experience

Initially a self report measure of experience with the task was included in the questionnaires. (1 = much more experience than the rest of the group - 5 = much less experience than the rest of the

group). Under pressure from the other companies to make the questionnaires as short as possible, it was removed as a not directly cultural factor. It is not therefore included in the analysis of variables affecting participation. However, for the nine teams in Shell which did include task experience as a variable (see Chapter Five) , the effect can be judged from the following correlation matrix:

Table 6.17 Task experience / influence

	INFLUENC	INVOLVE	STD_F	TASKEEXPR
INFLUENC N = 171				
INVOLVE N = 171	.85***			
STD_F N = 158	.54***	.61***		
TASKEEXPR N = 49	-.37**	-.28	-.33*	

N = 171 * = P < 0.05 ** = P < 0.01 *** = P < 0.001

An analysis of the variance of Std_f which includes Taskexpr indicates that this variable may be important in explaining the variance in Std_f. As would be expected it is most highly correlated with perceived influence, then with perceived involvement and least with frequency of participation. Due to the small number of questionnaires which included this variable, no firm conclusions can be drawn.

6.3.9 Hypothesis 8

People who have English as a mother tongue will enter into more simultaneous talk than those who speak it as a second language.

Null Hypothesis - All team members will have equal levels of simultaneous talk.

The number of times each person started to speak when someone else was speaking was noted. These figures were standardised for the number of people in the team in the same way as the standard frequency. This standardised figure was then divided by the standard frequency so that the final figure would represent the proportion of total speech acts that began when someone else was still talking accounting for team size. A t-test for independent means was then carried out. At the 95% confidence level it can be concluded that the mean rate of interruptions by English mother tongue speakers is higher than by non-native English speakers. (Note: the higher mean

for the non English speakers comes about because of the division of two negative standardised numbers)

Table 6.18 Hypothesis eight: Simultaneous talk

	No. of Cases	Mean	Std Dev	Std Err
English as second language	65	1.44	3.01	.381
English mother tongue	52	.22	4.22	.585

Levene's test for equality of variances: $F = .678$ $p = 0.412$

T-test for equality of means: 1-tail sig 0.036

The null hypothesis can be rejected. People with English as their mother tongue will tend to start talking when someone else is still talking more than other team members.

6.3.10 Hypothesis 9

People who participate more will be perceived to be more involved and to have had more influence than those who participate less.

Null Hypothesis - The level of participation of an individual does not affect other team members' perceptions of that individual's involvement and influence.

The results from Hypothesis 7 indicate that participation has a higher correlation with involvement than with influence. One can expect that the influence on the team will depend on the quality of information and ideas contributed by each individual (task experience was more highly correlated with influence than involvement) and the role played by the individual in structuring the information, e.g. shaping the groups ideas on the flipcharts (see Chapter Five).

A one way analysis of variance reveals the features of these relationships. Involvement and Influence were measured on a five point scale. The sample was split into groups according to their scores on the scale and the variance between these five groups and frequency of participation analysed for both involvement and influence.

Variable STD_F By Variable INVOLVE:

Table 6.19 Hypothesis nine: Participation /involvement

Score	Count	Mean	Deviation	Difference Between Means (* indicates significant difference)				
				Grp 1	Grp 2	Grp 3	Grp 4	Grp 5
1	3	-.27	.10					
2	25	-.18	.13					
3	65	-.05	.16		*			
4	62	.12	.24	*	*	*		
5	3	.39	.07	*	*	*		
Total	158	.00	.23					

Groups 1 and 5 are very small and should be ignored. The relatively high correlation between frequency of participation and involvement can be explained in that group 4 is significantly different from groups 2 and 3; group 3 is significantly different from group 2. The null hypothesis can be rejected; increased participation is linked with involvement.

Variable STD_F, By Variable INFLUENC:

Table 6.20. Hypothesis nine : Participation/ influence

Score	Count	Mean	Deviation	Difference Between Means (* indicates significant difference)				
				Grp 1	Grp 2	Grp 3	Grp 4	Grp 5
1	9	-.33	.03					
2	54	-.13	.16					
3	76	.06	.21	*	*			
4	18	.16	.16	*	*			
5	1	.34		*				
Total	158	.00	.23					

The null hypothesis can again be rejected; more participation is associated with greater influence. However, greater participation is clearly a stronger indicator of involvement rather than influence.

6.3.11 Hypothesis 10

People who more often begin talking when someone else is talking will be perceived to be more involved and to have had more influence than those who interject less

Null Hypothesis - Levels of simultaneous talk have no effect on perceived involvement and influence.

The standardised figures for initiating simultaneous talk, and being the person who was still talking when someone else started talking, were correlated against involvement and influence and controlled for the standardised frequency of participation.

Table 6.21: Hypothesis ten: Simultaneous talk/influence

	STD_INT1	STD_INT2	INVOLVE	INFLUENC
STD_INT1 N = 158				
STD_INT2 N = 158	.15			
INVOLVE N = 171	.22**	.01		
INFLUENC N = 171	.01	-.02	.76***	

* = P < 0.05 ** = P < 0.01 *** = P < 0.001

(Figures in parentheses are the same figures controlled in a partial correlation for standard frequency of participation)

The null hypothesis can be rejected within the 95% confidence limits as the figures show a small correlation between the frequency of initiating simultaneous talk and being involved. However there is no correlation between initiating simultaneous talk and being perceived as having influence (a similar finding to Dabbs and Ruback 1987) or between being the person who is talking when someone else is talking and being perceived as being involved or having influence.

6.4 Individual Level: Additional Results

6.4.1 Perceived advantage for dominant culture individuals

In Hypotheses 1-6, the effects of six cultural factors on the frequency of participation were determined. The effects of the same six factors on involvement and influence were also determined to isolate the effects of the frequency of participation on perceived involvement and influence.

It was proposed that team members belonging to the following groups will be perceived to have been more involved and have had more influence than other team members:

- being a pre-appointed team leader

- a mother tongue speaker
- a member of the dominant culture
- having international experience
- being a member of a numerically larger subgroup
- being an extrovert on the Myers Briggs Personality

A set of t-tests for independent means was performed, as in Hypotheses 1-6, with involvement and influence as the dependent variables. Pre-appointed team leaders, mother tongue speakers, members of the dominant culture, and those with international experience were all perceived to be more involved and to have had more influence on the group than other members of the group (to 95% significance level). There were no differences for those belonging to a numerically larger subgroup or having an extrovert preference on the Myers Briggs personality type score. A correlation analysis of all the variables was carried out first, including standard frequency and then controlling for standard frequency.

Table 6.22 Relationships to participation and influence

	std -f N = 158	Involve N = 171	Involve controlled for std -f N = 158	Influence N = 171	Influence controlled for std-f N = 158
Leader N = 171	.43***	.47***	.29***	.36***	.16***
Language N = 171	.15	.32***	.29**	.22**	.17*
Culture N = 171	.09	.11	.08	.27***	.27**
Subgroup N = 171	-.04	.11	.17*	.13	.18*
Intexp N = 171	.26**	.20**	.06	.23**	.12
Myerb N = 124	-.07	-.05	-.01	-.08	-.05
Task experience N = 49	-.33	-.28	-.11	-.37**	-.24

* = P < 0.05 ** = P < 0.01 *** = P < 0.001

Although the correlations are only moderate, the shifts are interesting. Referring to the table above:

Pre-appointed leader:	Is more strongly correlated with involvement than with perceived influence. The correlation levels for influence dropped more than for influence when controlled for frequency of participation indicating the relative influence of participation on involvement and influence.
Mother tongue speakers:	The correlation with involvement is higher than with influence; correlations are lower when controlled for frequency of participation, but still indicate that language capability on its own provides a significant perception of involvement and to a lesser degree of influence.
Member of the dominant culture:	There is some correlation between influence and this factor, indicating that being part of the dominant culture provides an advantage in influencing the team. There is no correlation with involvement.
Member of dominant subgroup:	The correlations with both influence and involvement are small but significant; being part of a dominant subgroup has some effect on the perception of both having influence and being involved.
International experience:	Correlations with influence and involvement are low.
Myers Briggs:	There is no correlation with perceived involvement or perceived influence.
Task experience:	Low correlation with influence; involvement has low correlation with task experience when controlled for participation.

The correlation coefficients between the variables are all below 0.14 except the correlation between leader and language at 0.29***. On the whole, the variables can be said to be behaving independently.

6.4.2 Self Fulfilling Prophecies

It might be suggested that non dominant culture and non mother tongue speakers will expect to be less involved and listened to, and so were the victims of self fulfilling prophecies. A

comparison of the teamwork factors (Chapter 5) before and after the meetings is made to check the differences in the means of the teamwork factors for language and culture:

MT Mother tongue speakers

NMT Non mother tongue speakers

DC Belongs to the dominant culture

NDC Does not belong to the dominant culture

Table 6.23 No self-fulfilling prophecies

		Achieving cohesion	Experiencing diversity	Effective participation	Friendly atmosphere	Clear leadership
NMT N = 75	pre	6.55	3.51	3.11	1.20	2.02
MT N = 55	pre	6.96	3.45	3.25	1.25	2.15
NMT	post	7.43	3.93	3.14	1.36	2.26
MT	post	7.34	3.94	3.40	0.77	2.29
NDC N = 98	pre	6.50	3.63	3.03	1.16	2.11
DC N = 53	pre	7.02	3.55	3.16	1.19	2.19
NDC	post	7.44	4.01	3.16	1.11	2.35
DC	post	7.05	4.07	3.26	0.68	2.33

This table shows no evidence of any self fulfilling prophecies on the part of NMT and NDC. On the contrary, with regard to participation, NMT and NDC expected slightly higher levels of being listened to and expressing their views than MT and DC. MT was more disappointed in the levels of participation overall than NMT. Both groups showed equal falls in their expectations of experiencing diversity within the teams.

Other interesting differences can be noted:

- MT had a far greater positive shift in expectation of a friendly atmosphere than NMT; NDC had no shift at all on that factor as compared with the large shift for DC
- NMT and NDC started with much higher expectations of cohesion than the other two groups; however, NMT ended up as disappointed as MT, but NDC was much more disappointed than DC which had no change in its expectations.

In an attempt to understand how the perception of dominant culture comes into play, independent samples t- tests were performed with the two variables 'expect to be listened to' and 'everyone expressed their views' grouped by dominant or non dominant culture. There was no significant difference at the 95% confidence limits in the expectations of the two groups that each individual would be listened to. However, non dominant culture individuals were more sure that everyone had expressed their views than the dominant culture individuals.

Table 6.24. Equal expression of views

	No. of Cases	Mean	Std Dev
Dominant culture - everyone expressed their views	49	3.31	0.10
Non dominant culture - everyone expressed their views	91	3.74	0.14

Levene's test for equality of variances: $F = 4.890$ $p = 0.29$

T-test for equality of means: 1-tail sig 0.005

The means for both groups fall from initial expectations. The result is surprising as the impression given from the other results is that it is more difficult to belong to a non dominant culture than to be even a second language speaker.

6.5 Results of Group Level Input

This set of hypotheses predicts that the balance of heterogeneity in the composition of the team will directly affect the balance of participation and levels of satisfaction within the teams.

Table 6.25 Group Level results

	Satistm	Partbala
Satistm N = 24		
Partbala N = 23	-.30	
Tmsize N = 24	-.49*	-.12
Langhom N = 24	-.38 P = .06	.16
Subgroup N = 24	.11	-.16
Culthom N = 24	-.16	-.23
Person N = 18	-.10	.19

* = P < 0.05 ** = P < 0.01 *** = P < 0.001

The correlation matrix above shows that there are only relatively low linear relationships between the different types of homogeneity within the team and both the balance of participation and level of satisfaction. This reflects the reality that there are many personal and team factors that will influence the levels of participation and satisfaction in a team. Other points to note are that smaller teams tend to be more satisfied and also result in more balanced participation.

6.5.1 Hypothesis 11

Teams which have balanced participation will be more satisfied than teams where the participation is very unequal

Null Hypothesis - Balance of participation has no correlation with team satisfaction

The result indicates a negative correlation with the balance of participation and the level of overall satisfaction in the team. The balance of participation is measured on a scale 0-1:

- 0 team members participate equally
- 1 one team member dominates the meeting

The null hypothesis can be rejected, however the correlation is low (-0.30). The result indicates a trend that the more evenly spread the discussion is, the higher will tend to be the level of satisfaction in the team.

6.5.2 Hypothesis 12

The smaller the team, the more balanced will be the participation and the more satisfied the team members will be with the outcome.

Null Hypothesis - Team size has is not correlated with either balance of participation or team satisfaction

The null hypothesis can be rejected. The results show that there is a marginal negative correlation (-0.12) in this sample of teams between the size of the team and the balance of participation, i.e. smaller teams tend to have more balanced participation. There is a stronger correlation (-0.49) between the size of the team and satisfaction, indicating that satisfaction levels in smaller teams are higher than in larger teams.

6.5.3 Hypothesis 13

Groups with homogeneous language abilities will have more balanced participation and be more satisfied than those where there are greater differences

Null Hypothesis - Homogeneity of language ability is not correlated with participation balance and team satisfaction

The null hypothesis can be rejected. The results indicate that teams with more homogeneous language capabilities tend to be less satisfied (correlation -0.38), although there is a very weak correlation (-0.16) suggesting that participation is more balanced the more homogeneous the language capabilities.

6.5.4 Hypothesis 14

Groups within which there are no subgroups (i.e. more balanced national mix) will have more balanced participation and will be more satisfied than those where there is a greater imbalance

Null Hypothesis - The existence of subgroups is not correlated with either participation balance or team satisfaction

The null hypothesis can be rejected. However, both correlations are low, indicating that there is no strong relationship between balance or satisfaction and whether the team has a numerically larger group of one nationality than any other. In order to confirm the result, a t-test for independent means of teams with subgroups and those without, was performed against

satisfaction. There was no significant difference at 95% confidence limits that the level of satisfaction differed whether the team had a subgroup or not.

6.5.5 Hypothesis 15

Groups where there is homogeneity of corporate status by nationality will have more balanced participation and will be more satisfied than those where there is an imbalance

Null Hypothesis - Homogeneity of corporate status is not correlated with either participation balance or team satisfaction

The null hypothesis can be rejected. The correlation matrix shows very weak negative correlations between a measure of homogeneity in dominant culture in each team and both balance (-0.23) and satisfaction (-0.16).

Although a negative correlation indicates that a less homogeneous team is more satisfied, the correlation is too small to draw a valid conclusion. No one team had all members from the dominant national culture of the organisation. The correlation with participation balance indicates that greater homogeneity tends to result in more balanced participation. However, the level of correlation is again too low to draw any firm conclusions.

6.5.6 Hypothesis 16

Groups where there is a balanced mix of personality types will be more balanced and be more satisfied than those where there is a strong imbalance

Null Hypothesis - Homogeneity of personality types in a team is not correlated with either participation balance or team satisfaction

A factor (PERSON) based on the relative number of extroverts and introverts was computed for each team. This was then correlated with the measure of satisfaction.

The null hypothesis can be rejected.

The results show a marginal negative correlation between the balance of Extroverts and Introverts in a team and the level of satisfaction (-0.10) indicating greater satisfaction when there is an imbalance i.e. more of one grouping (E or I) than the other. An E/I imbalance tends to make participation more balanced (correlation 0.19). However, in both cases, the correlation coefficients are too low to draw any firm conclusions.

6.5.7 Hypothesis 17

Groups where the low corporate status members have international experience will be more satisfied than those that do not.

Null Hypothesis - Prior international experience in non dominant culture individual has no effect on team satisfaction

The number of non dominant culture participants that had international experience as a percentage of all the non dominant people was calculated in each team. This figure was correlated against participation balance and satisfaction and controlled for the proportion of non dominant culture individuals in the team as a whole.

Table 6.26 Hypothesis seventeen: Non dominants/ satisfaction

	Ndcintex	Partbala	Satistm
Ndcintex N = 23			
Partbala N = 23	.17		
Satistm N = 24	-.18	-.38	

* = P < 0.05 ** = P < 0.01 *** = P < 0.001

The null hypothesis can be rejected.

The result gives a small correlation that the presence of team members from non dominant cultures who have international experience results in lower overall team satisfaction. However the results are not significant.

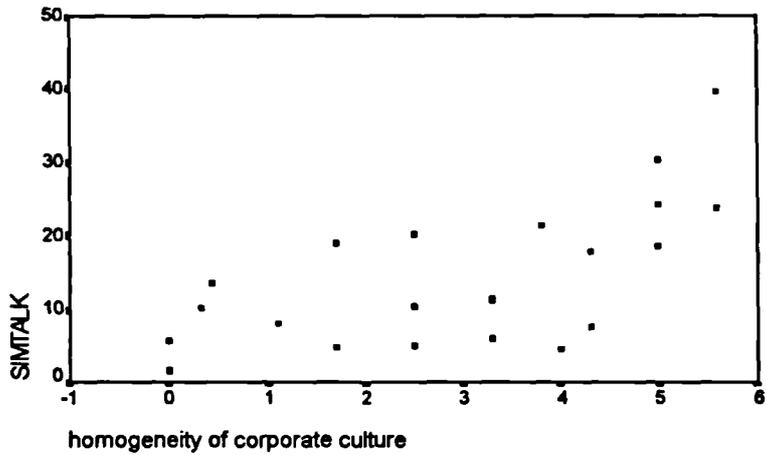
6.5.8 Hypothesis 18

Teams that have an Anglo-Saxon dominant subgroup working in English will have higher levels of simultaneous talk than other teams

Null Hypothesis - Levels of simultaneous talk are not affected by national culture

An initial correlation analysis shows that there is reasonable correlation between there being an Anglo-Saxon dominant subgroup and higher levels of simultaneous talk.

Figure 6.1 Simultaneous talk/ Homogeneity of Corporate Culture



6.5.9 Additional results at the group level

6.5.9.1 Leaderless teams and the balance of participation

Bales (1953) suggests that leaderless teams will have more balanced participation than teams with leaders. Independent sample T-tests were carried out to test this suggestion.

Balance of participation

Table 6.29 Leaderless teams/balance

	No. of Cases	Mean	Std Dev
Teams with preappointed leaders	7	3.26	1.25
leaderless teams	9	2.05	.77

Levene's test for equality of variances: F = 4.074 p = 0.063

T-test for equality of means: 1-tail sig 0.17

The figures show that leaderless teams have significantly more balanced participation than teams with preappointed leaders. Although teams with emergent leaders had slightly better balance than even leaderless teams, this was not significant at the 95% confidence levels. However, teams with emergent leaders were predictably significantly more balanced than teams with preappointed leaders.

Table 6.30: Pre-appointed/emergent leaders

	No. of Cases	Mean	Std Dev
Teams with emergent leaders	7	1.65	.443
Teams with pre-appointed leaders	7	3.26	1.25

Levene's test for equality of variances: $F = 12.313$ $p = .004$

T-test for equality of means: 1-tail sig 0.004

Although leaderless teams had slightly higher levels of team satisfaction than the teams with leaders, an independent t-test showed that there were no significant differences at the 95% confidence level.

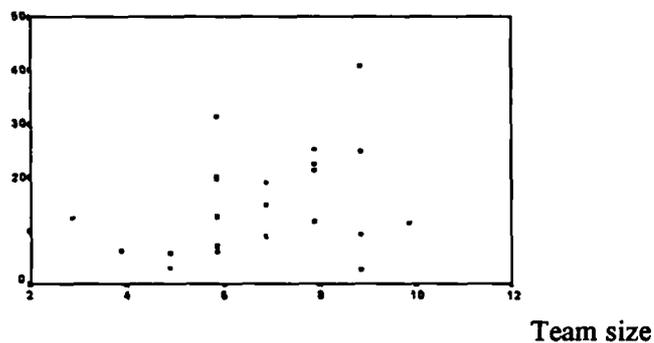
Table 6.31 Leaders/satisfaction

	No. of Cases	Mean	Std Dev
Leaderless teams	9	15.14	1.29
Teams with pre-appointed leaders	8	14.52	.882
Teams with emergent leaders	7	14.46	1.1

6.5.9.2 Team size and levels of simultaneous talk

Simultaneous talk

Figure 6.2 Simultaneous talk / Team size



The low negative correlation of $-.348$ between the levels of simultaneous talk and team size, seems to have been brought about by the low figures in some of the larger teams. This could well relate to the effect of second language pace in some of the larger teams.

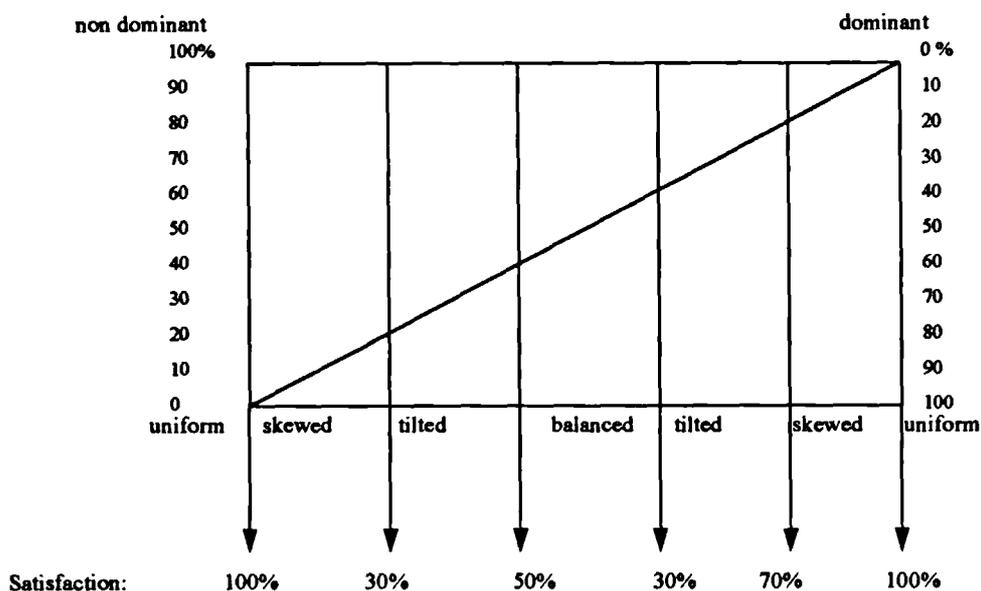
6.5.9.3 The non linear relationship between heterogeneity and satisfaction

It is likely that the relationship of status linked heterogeneity, such as dominant and non dominant culture and satisfaction will be curvilinear (O'Bannon and Gupta (1993)). This next section will explore what the predicted relationship might look like. It can be reasoned that the effect of the different status between dominant and non dominant individuals will be zero in teams of all dominant culture members (especially if they are of the same nationality), and in teams with no dominant culture members. The imbalances arise in the mixtures in between. The proportion of dominant to non dominant members in this sample teams did not exceed 0.56.

6.5.9.3.1 The model

This hypothetical case will assume that there are only two nationalities making up the dominant and non dominant culture subgroups. It is useful here to adapt Kanter's (1977) diagram for two social categories and project the resulting levels of satisfaction from uniform, skewed, tilted and balanced groups with one subgroup having more impact than the other. The subsequent model is pictured below.

Figure 6.3 Model of Heterogeneity/satisfaction

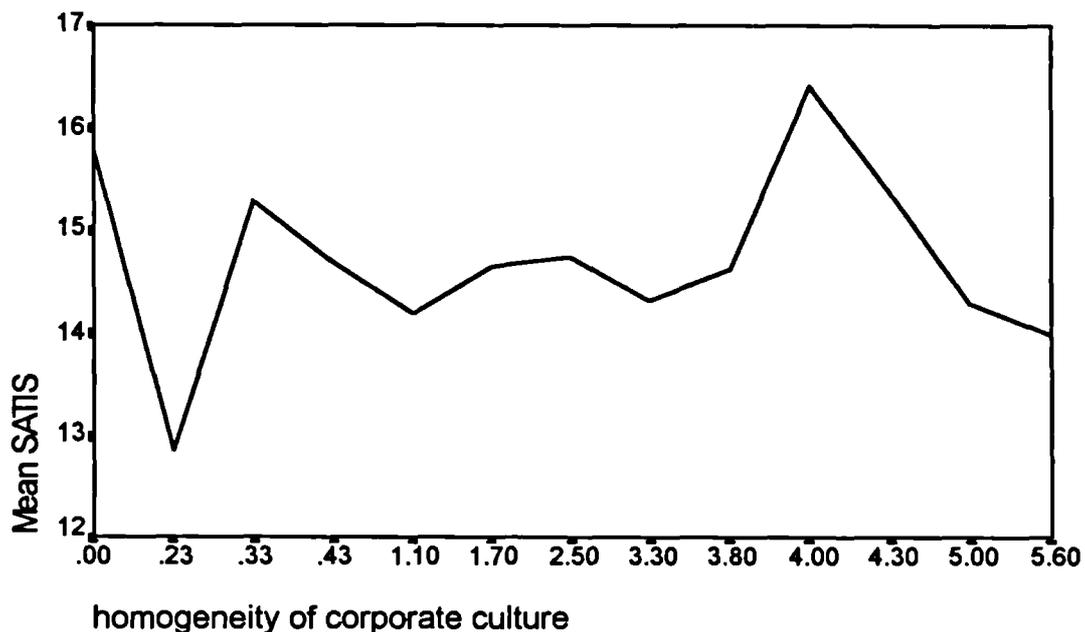


The figure demonstrates the hypothesis that as the percentage levels of dominant culture team members grew the shape of the satisfaction curve would represent a skewed ω . Skewed groups are likely to be more satisfied overall than tilted groups as there is likely to be only one or maybe two, dissatisfied people instead of two or three in tilted groups. In other words, the points of lowest satisfaction would be in the 'skewed and tilted' groups where a team composition of around 20% of dominant culture individuals and 80% of non dominant culture individuals would lead to noticeable and voiced frustration by the dominant culture individual. The balance point would be skewed to 40% dominant and 60% non dominant instead of 50%: 50%. because of the greater impact of dominant culture individuals. There are many 'ifs' and 'buts' around this thinking. For instance, if the non dominant culture individuals were from different nationalities, one can imagine the dominant culture subgroup having more effect earlier. So as described, instead of a curvilinear effect suggested by O'Bannon and Gupta (1993), this model predicts a skewed ω shape.

6.5.9.4 Actual results

The composition of these teams fell between the 0.00 - 0.56 proportion of dominant culture individuals. The expected shape would be a skewed half ω . The results are plotted in the graph below, first as a scatter plot and then as a line of the averages of the satisfaction results on each dominant culture point.

Figure 6.4 Corporate Culture Homogeneity / Satisfaction



The results fit the expected shape quite well, with the highest midpoint being at four instead of five as predicted and the most satisfied team having no dominant culture individuals. The outlier at 0.23 was a large team of 13 excluded from the other statistical and qualitative results because only seven post questionnaires were returned.

The low figures of the original linear correlation can be explained by the hypothesised non linear W relationship. This type of non-linear relationship between satisfaction and levels of heterogeneity can be predicted for all types of status-linked heterogeneity's, as long the team members are uncomfortable with the effect of the status-linked variables. For instance, in cultures that are quite at ease with very different levels of status, one could imagine different proportions of heterogeneity of status-linked issues having very little effect on the levels of satisfaction.

No significant results were found relating the presence of the six different national subgroups as a whole, or the mix of extrovert and introvert preferences in the teams, to the balance of participation or satisfaction.

6.5.9.5 Expectations and outcomes about the amount of diversity

One aspect that this study has not attempted to measure is that of integrating diversity in international teams. However, two questions were included in the pre and post questionnaires: (1) the expectation of very different styles of interaction; (2) very different opinions on how to approach the task. As seen in chapter five, there were higher expectations of diversity than were actually encountered, especially on opinions about how to approach the tasks.

The shift for each individual between the pre and post questionnaires was calculated. No significant differences for these changes were found at the 95% confidence level between members of the dominant and non dominant cultures. The averages of the shifts for each team were then determined. These mean team shifts were then correlated against some of the team outcome factors.

Table 6.32 Types of diversity/satisfaction

	ATMOS	SPIRIT	WRKAGN	EXPVIEW	CONSEN	SATIS	OUTCM
OPINCH	.52**	-.03	.43*	.41*	.54**	.56**	.45*
STYLECH	.24	.46*	.46*	.56**	.47*	.58**	.48*
OPINCH controlled for STYLECH	.50*	-.49*	.19	.08	.35	.30	.22
STYLECH controlled for OPINCH	-.15	.63***	.27	.42	.19	.34	.27

N=24 * = P < 0.05 ** = P < 0.01 *** = P < 0.001

The correlation between the change in expected diversity of opinions and styles is 0.6456, implying that the interaction between the two factors affects the correlation coefficients. The partial correlation coefficients were therefore calculated by controlling for one or other of the shift factors.

The findings show that the shift differences in opinions about the task is negatively correlated to team spirit. The shift was towards finding fewer differences than expected. (ChapterFive and Appendix Three) but positively correlated to achieving a friendly atmosphere. On the other hand, the smaller shift towards finding fewer differences in interaction styles than expected is positively correlated to team spirit and weakly negatively correlated to achieving a friendly atmosphere.

The correlations may not be causally linked, but it is interesting to surmise that teams are build a cohesive team spirit with differences of opinion, a feature of any team, but not with different interactive styles, a more variable feature in international teams. Differences in interactive styles, along with language, could be the major source of the increased communication difficulties found in heterogeneous teams (Watson et al 1993, Kirchmeyer 1991) and so make it harder to develop team spirit. It would be interesting to discover if differences in interaction styles create greater difficulties in communication and decision making than different opinions about how to approach the task; the latter may be useful in creating a richer solution.

6.6 Summary of main findings

In this chapter, evidence was found to support the hypotheses that four out of the six predictor variables at the individual level influence the frequency of participation in international teams. These were being a pre - appointed leader, mother tongue speaker, member of the dominant culture and having international experience. Further analysis showed that having international

experience only had an effect on the participation rates of non dominant culture individuals. There was no evidence to support the hypotheses that being a member of a larger subgroup or having an extrovert preference on the Myers Briggs Type indicator had any effect. An analysis of variance with all the predictors showed that they explained 26 % of the overall variance of the frequency of participation.

At the team level only team size showed a strong negative correlation to overall team satisfaction. The evidence to support the other hypotheses concerning compositional factors and the balance of participation and overall levels of satisfaction was only weak or tentative. The other significant finding was the strong correlation between a team having an Anglo - Saxon subgroup and high levels of simultaneous talk.

7. CHAPTER SEVEN: DISCUSSION OF RESULTS

The purpose of this Chapter is to draw out and develop the significant findings in the last two Chapters. The statistical results described in Chapter Six will be summarised first. Using the descriptions of the teams in Chapter Five, the main implications of these findings will then be explored. The focus will be particularly on the interrelationships between the different variables, their effects on the interaction patterns, and the relationships of both these inputs and processes on the team outcomes. The findings also provide the opportunity to develop some well grounded propositions on the processes and compositional antecedents of 'integrative convergence' or 'inertial divergence' (Salk 1992). Before the results are discussed in detail, they will be framed within the limitations of the study and the methodological contributions and difficulties.

7.1 Limitations of the study and methodological findings

There are three major limitations to this study:

1) The lack of objective measures of the task

The methodology allowed some insights into the relationships between the different sizes and compositions of the teams, critical incidents, the balance of participation, and levels of perceived satisfaction. The satisfaction measures used in the post questionnaire captured two of Hackman's three criteria for effective teams (see Chapter Two) which relate to the future viability of the teams (Hackman 1990). What is missing is his third criteria, an objective measure of performance on the task. Any relationship between objective and subjective effectiveness criteria is so unclear and speculative that it is best to treat them as separate entities and to avoid further speculation (Gladstein 1984, Keyton and Springsteen 1990, Tannenbaum et al 1992).

2) Limited information about what went on inside each participant's mind and feelings

The field research environment limited the availability of the teams. Sometimes there was a strong sense that individuals had more to say than they expressed on the questionnaires. Had there been more time available, video recall analysis with the team members after the teamwork would have shed much more light on what different individuals experienced while working in the teams, as well as reducing the risk of researcher bias.

3) Working only in English and mainly British dominated organisational cultures

Working only in the English language and within British dominated organisational contexts puts a heavy bias on the results. As the researcher is only fluent in English and Hindi, the possible sample of teams is severely restricted. This is the disadvantage of being a sole researcher rather than one of a mixed research team as recommended in the literature (Sekaran 1983, Triandis 1972). Further, working in mainly British dominated cultures did not provide as clear a distinction between the effects of being a member of the dominant culture rather than a mother tongue speaker as might have been hoped for. The fact that five OILCO teams included Dutch individuals but no British members, helped the sample a little. Despite these limitations, the research does show what can happen in teams within a British dominated organisational context. It also demonstrates that although a company may be mostly British owned (COMMCO), the leadership style will be affected by the immediate cultural context of the team as a whole (e.g. Hong Kong) .

Within the context of these broader limitations, the results support the original decision to employ field research in order to draw out the organisational influences. The triangulated approach of using questionnaires, observational data and coding worked well in giving rich pictures of what happened in these teams and in helping to draw out overall comparisons. The questionnaires were a difficult element. It was clear some questions were not understood by everyone or were answered without much thought. Although the mirroring of the pre-questionnaire and post-questionnaire worked well, in retrospect the post-questionnaire could have been more adventurous.

As described in Chapter Four, the pre-questionnaire was designed so as not to pre condition the teams by emphasising national differences. The post questionnaire could have had additional questions about how important the team members felt cultural differences and attitudes towards other cultures had been in the success of the team. However, given the strong pressure from the companies to make the questionnaires as short as possible, additional questions would have been difficult.

A few further methodological points about video recording and coding are elaborated in Appendix 5.

7.2 Summary of the Statistical Results

The richness of observations from the variety of the different sized teams, working on different tasks, in different companies and countries can be used to illustrate the statistical findings. This same variety however, weakens some of the statistical analyses.

The hypotheses which relate to individual measures can be clearly supported or rejected. However the small sample of twenty four teams means that less inference can be drawn from the group level results. For instance, not all six input variables could be compared in all the teams; nine had no leader, six had no mother tongue speakers, one had all mother tongue speakers, three had no members of the dominant culture, and so on. This meant that the sample for Hypothesis Seven for instance, ranking the six variables, was small and the ranking inconclusive. However, within these limitations many of the expected results were confirmed and other unexpected results emerged.

7.2.1 First set of hypotheses; Individual group process

This first set of hypotheses is summarised in the table below

Table 7.1 Results of the individual level hypotheses

Hypo these No	INPUT	PROCESS	OUTCOME	Hypothesis Supported or not supported
1	Team leader	More frequent and greater duration of participation		Supported, but only for pre-appointed leaders. Not supported for emergent leaders
2	Mother tongue speaker	More frequent and greater duration of participation		Supported
3	Member of the dominant culture	More frequent and greater duration of participation		Supported
4	Member of a numerically larger national subgroup	More frequent and greater duration of participation		Not supported
5	Previous international experience	More frequent and greater duration of participation		Supported, but only for non dominant culture individuals
6	More extrovert personality	More frequent and greater duration of participation		Not supported
8	Mother tongue speaker	More simultaneous talk		Supported

9		More frequent and greater duration of participation	Will be perceived to be more involved and to have more influence	Supported. Results show a stronger relationship to involvement than influence
10		More simultaneous talk	Will be perceived to be more involved and to have more influence	Supported for perceived involvement, but Not supported for influence

The results of the first four hypotheses were as predicted; pre-appointed leaders, individuals from the dominant culture, mother tongue speakers and individuals with international experience participated more than other team members. Two of the variables benefited from further analysis.

Pre -appointed leaders participated more than other team members, but not leaders who emerged during the course of the meeting. International experience only increased the frequency of the participation of non dominant culture individuals, not of those from the dominant culture. These results provoke an interesting debate that will be followed up in the discussion part of this Chapter.

Two hypotheses, 4 & 6, were not supported. Independent t-tests showed that being a member of a larger numerical subgroup and having an extrovert preference did not significantly influence the levels of participation.

On the other hand, evidence from independent t-tests and linear correlations supported the proposed interrelationships between mother tongue speakers, simultaneous talk, frequent participation and perceived involvement, and to a lesser extent perceived influence.

7.2.2 Second Set of Hypotheses: Group Process to Outcomes

This set of hypotheses focused on team level results and especially on the effect of different levels and types of heterogeneity in the teams. The hypotheses and the results are summarised in the table below.

Table 7.2 Results of the team level hypotheses

Hypotheses No	INPUT	PROCESS	OUTCOME	Null hypothesis Supported or not supported
11		Teams that have more balanced participation	will be more satisfied	Supported; moderate correlation
12	The smaller the team	the more balanced the participation	the more satisfied the team	Supported; Strong significant correlation
13	The more homogeneous the language abilities	the more balanced the participation	the more satisfied the team	Supported; weak correlation showing more homogeneous teams are balanced, moderate correlation that they are less satisfied
14	Teams with no numerically larger subgroups	will have more balanced participation	and will be more satisfied	Supported. Tentative positive correlations with balance and negative correlation with satisfaction
15	The more homogeneous the corporate status nationality	the more balanced the participation	the more satisfied the team	Supported. Weak negative correlation with balance, low negative correlation with satisfaction
16	Teams where the low corporate status members have international experience	will have more balanced participation and	will be more satisfied than those that do not	Supported. Tentative positive correlation with balance, marginal negative correlation with satisfaction
17	Teams that have an Anglo-Saxon dominated subgroup working in English	will have higher levels of simultaneous talk than other teams.		Supported. Strong correlation showing that 36% of the variance can be explained by the presence of Anglo-Saxon subgroup.

The results were as predicted, however the sample yielded mostly marginal or tentative correlation results except in a few cases. In full recognition that no significant conclusions can be drawn, it was decided to reject the null hypotheses on the basis of these weak correlations in order to allow for some further discussion of the results. The weakness of these results reflects the small size of the sample in relation to the number of factors that are likely to affect the balance and perceived satisfaction of an international team. However, certain compositional factors and interactive processes that affect a team's balance of participation and levels of satisfaction can be illustrated using the observational data from Chapter Five.

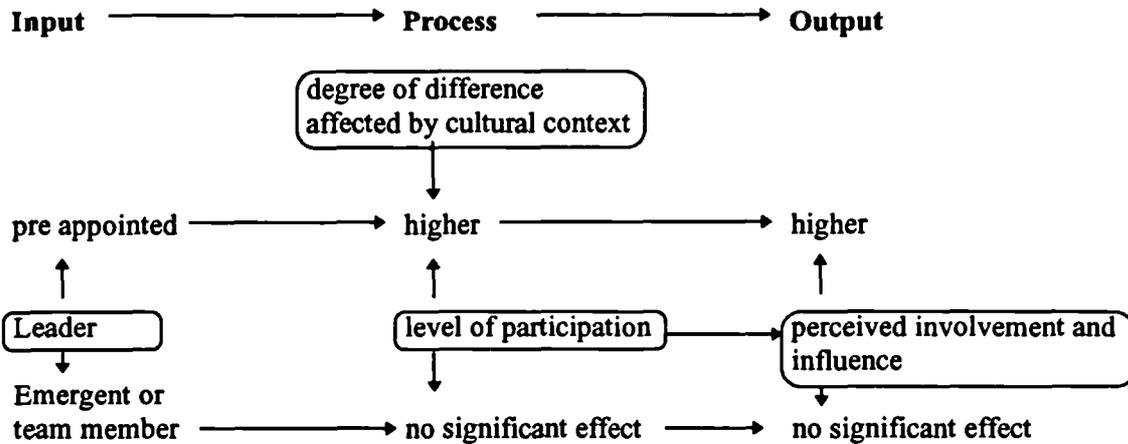
7.3 Discussion of the combined statistical and observational results for the six main predictors.

By combining the individual and group level statistical results with the insights from the team descriptions in Chapter Five, the importance of some of the results becomes apparent. Some of the insights are quite intricate and so diagrams will be used wherever possible to show the interconnections of the variables. These will be pulled together into a working model in Chapter Eight.

In order to access the implications, a summary of the interrelationships of each individual variable with the participation curves and outcomes will be drawn, first, in section 7.3, and following the order of the hypotheses. Group level variables will be pulled into the discussion of each variable where they are relevant to illustrate a point. Section 7.4 then explores the relationship of group level with these variables to the frequency of participation, perceived involvement and perceived influence.

In section 7.5, the remaining group level findings will be explored. Section 7.6 then summarises the noteworthy group processes. At the end of the Chapter, in section 7.7, all the variables are pooled and the implications for international team dynamics described. This section starts by looking at leadership.

7.3.1 Leadership



The model highlights three significant findings:

1) Pre-appointed leaders

Pre-appointed leaders in the operational teams participated significantly more than other team members.

Much previous research has found that, on the whole, pre-appointed leaders participate more than other team members (e.g. Bales 1951,1953). This was the case in all but one team in this sample. All of these leaders assumed the role of introducing and structuring the various tasks in the teams. Apart from the formal teams in Hong Kong, only one western based leader made any effort to manage or change the pattern of interaction. In other words, managing the interaction process was not a high priority. In all cases but one, the pre-appointed leader was also perceived to be the most involved and the most influential.

2) Emergent leaders

Emergent leaders occurred in the training teams. These were individuals who were overtly nominated by the teams. On some occasions, one individual would suggest they appoint a leader to manage the process and the team would say: 'so you do it'. On other occasions this led to a group discussion and election, usually by two or three members with the others voicing or nodding approval or staying quiet. Of the seven emergent leaders, two were appointed by the team to structure the content of the task as well as the team process. These two participated the most and were perceived to have the most influence.

The remaining six emergent leaders were mainly elected to manage the process, not the content of the task. These teams did achieve slightly more balanced participation than most leaderless

teams. However, except for two, the emergent leaders did not participate the most, nor were they perceived to have the most influence. The conclusion, discussed further at the end of this Chapter, must be that structuring and shaping the task is seen to be more influential than managing the process. Many of the recommended best practices for international teams propose ways of managing the process rather than the task (e.g. Adler 1986). However, it appears that this is not a job that will confer influence and so may not be seen as adding value for the individual who undertakes it.

The other noticeable point is that the smaller teams of four or five and some of six with no pre-appointed leader, did not generate emergent leaders. The researcher found no comparable reported data to ascertain if six is also the size at which leaders will tend to emerge from otherwise leaderless homogeneous teams. In his review, Hare (1962) lays the optimal group size at five, but gives no indication if this is also the size beyond which teams feel the need to appoint a leader. Heterogeneous teams in general have been found to have added communication difficulties (Kirchmeyer 1991), and the set of teams in this study had higher expectations that there would be very different opinions about how to achieve the task before they started the group work than they actually found by the end of the group work (see Chapter Five). It is possible that greater communication difficulties mean that expectations are not being met. As a result, depending on how soon team members discover their similarities, one can imagine that all things being equal, leaders will generally emerge in smaller sized international teams than in comparable culturally homogeneous teams. This would be a natural response in an attempt to overcome the discomfort caused by the differences.

3) The influence of culturally different leadership styles on the participation curve

There were large differences between the patterns of participation of leaders in the Hong Kong contexts and leaders in the Western European context. The participation curves in the Hong Kong based COMMCO teams are dramatically steeper than the curves of the UK based EXPCO 1 & 2 and IQACT. This reflects the culturally different Western and Hong Kong Chinese leadership styles well documented by writers like Lee (1993) and Meade (1970) as well as the different preferred participation styles of Hong Kong and Western team members described in the literature survey (Lam 1986, Huang and Harris 1973, 1974, Yum 1988, Hsieh et al 1969). What is interesting in this research is that none of the pre-appointed team leaders in COMMCO were Hong Kong Chinese, and they had been in Hong Kong for varying lengths of time.

Both the American and Samoan who had been in Hong Kong for 20 and 3 years respectively displayed the type of paternalistic style and control of the interaction described for Hong Kong

Chinese leaders by Lee (1993) and others. This consisted of naming speakers and summarising and commenting on any points made before passing on to the next speaker. However, the Canadian who had only been in Hong Kong for eight months, named speakers but did not summarise or comment on the topic at hand after the team had discussed it. He was the only pre-appointed leader who did not also have the highest level of perceived influence in the team. This suggests that the first two leaders were more accustomed to the 'normal' leadership style in Hong Kong than the 'newer' Canadian.

One interesting point is that the COMMCO participation curves fit the previous all American curves described by Bales's (1951) better than any of the Western teams in this sample, whether they had leaders or not. There are at least two possible reasons for this: firstly that there has been a significant change in Western leadership style over the last forty years; or secondly, the differing lengths of the meetings was having a strong effect.

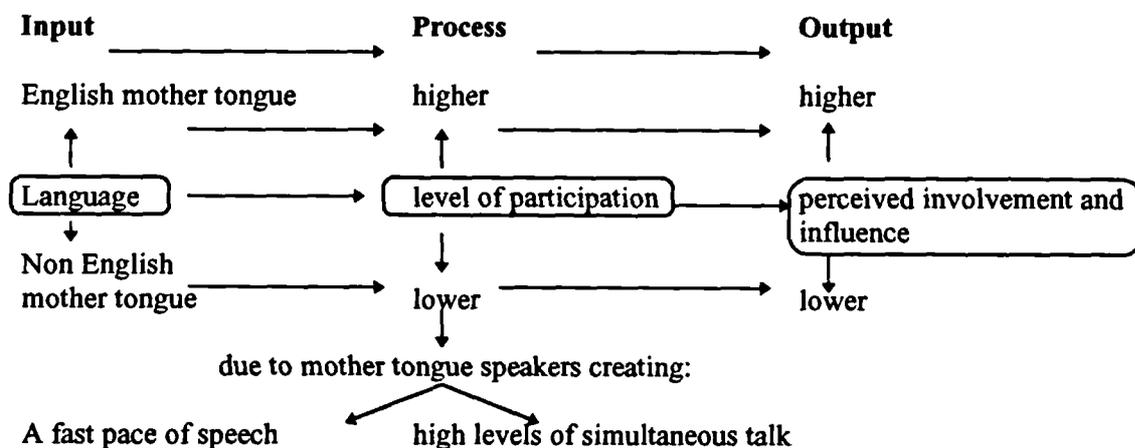
Although the sample is too small for generalisation, the 'Western' smaller size teams of four or five have participation curves very similar to Bales's (1951) findings of the rank ordered series of total acts initiated in groups of three or four. However in teams of six and above, the larger gaps between the 'leader' and the other team members did not manifest, even in the three 'Western' operational teams with pre-appointed leaders. However the Hong Kong Based COMMCO operational teams have as large a gap between the leader and other team members across teams of three to nine as Bales predicts for teams of six and above.

Bales's work was carried out in the 1950's with groups of American males. The notion that effective teamwork means that all team members need to participate fully and so team leadership needs to be participative, has been a strong Western management theme in the last forty years (see Brown 1988 pg. 70, Triandis 1994). Perhaps this accounts for the visible shift between Bales's findings in 1950's and the results in this research in 1994. At the beginning of the 1970's, Hofstede (1980) recorded lower levels of power distance in IBM in America (40), Canada (39) and UK (35) than in Hong Kong (68). If employees who accept that power is distributed unequally (Hofstede's definition of power distance, 1980) also expect not to initiate or summarise speech acts, then this accounts for the visible difference between the two cultural contexts, even with American and Canadian leaders in the Hong Kong context. Informally, the HK Chinese training manager in COMMCO commented that his main interest in sponsoring this research was to get his teams acting as teams, not like committees. He went on to explain how team leaders tended to dominate or create a formal proceeding and team members would not speak up unless asked to (as described by Lee 1993).

The other explanation of why the Hong Kong curves fit Bales' findings of steep curves while the western teams do not is that the meetings in COMMCO were significantly shorter (30 mins - 1 hr 15mins) than the operational meetings in PHARMCO and EXPCO (4 hrs - 11 hr 30 mins). While the frequency of participation was standardised by taking the percentage of the total frequency, it could be that when meetings are relatively short, pre-appointed leaders will be more directive in both the Chinese context and Western context than in longer meetings. Unfortunately it is impossible to make any comparisons about this issue from this sample.

Bales (1951) also proposed that leaderless teams would have more balanced participation than those with leaders. T- tests (at 95% significance level) for independent samples showed that this was only true in the case of the Hong Kong based operational teams. There was no significant difference between the Western based teams with pre-appointed leaders and teams that started the teamwork without leaders.

7.3.2 Use of Language



The diagram above demonstrates the results of Hypothesis Two, that mother tongue speakers spoke significantly more than non mother tongue speakers. The observational analysis showed that this happened because of both the speed of speech and the higher levels of simultaneous talk which excluded even fluent second language speakers. The results of Hypothesis 18 show that teams with Anglo dominant subgroups had higher levels of simultaneous talk than other teams.

The pace of speech, as measured by the number of marks per sheet of the coding, was visibly slower for teams that had an even mix of nationalities, no mother tongue speakers or adopted a formal interactive process of a leader naming speakers. In teams with two or more mother tongue speakers, the pace would sometimes become very fast. The observational analysis indicated that these fluctuations of the amount of simultaneous often coincided with the phase of the task and the levels of simultaneous talk would rise and fall simultaneously.

7.3.2.1 Simultaneous talk and task phases

In the team with all mother tongue speakers, the levels of simultaneous talk rose steeply as the team approached a decision making point in their discussion. Once the decision was made, it would subside as individuals thought through and outlined the implications. This pattern was also visible in some mixed teams. This suggests that second language speakers are most likely to be excluded by simultaneous talk at key decision making times.

7.3.2.2 Simultaneous talk and perceived involvement and influence

The results of Hypotheses 8 and 10 also relate to simultaneous talk. They show that mother tongue speakers initiated simultaneous talk more often than other team members, even when the frequency of participation is taken into account. At the individual level, simultaneous talk had no relation to individual satisfaction or perceived influence but was moderately correlated to perceived involvement. This result is in line with the Dabbs and Ruback (1987) findings that individual simultaneous talk did not lead to increased perceived leadership. As they were measuring interaction as well as participation, they also found that if the simultaneous talk resulted in gaining floor space, it was related to perceived leadership.

7.3.2.3 Simultaneous talk at the team level

The results of Hypothesis 18 show that teams with Anglo dominant subgroups had higher levels of simultaneous talk than other teams. This supports the observations that individuals in the Anglo dominant subgroups would often cut off the end of each other's sentences and that second language speakers were less comfortable or able to do this. Analysis of the post - questionnaires showed that the Anglo subgroup in one team was aware of excluding others through this process. However this subgroup did nothing to change the process during the meeting itself.

Dabbs and Ruback (1987) found that higher team level measures of simultaneous talk were correlated with high levels of team satisfaction. In this sample, however there was a negative correlation between team levels of simultaneous talk and satisfaction. This could well reflect the fact that in international teams, simultaneous talk creates a strong communication barrier for second language speakers that was not experienced in Dabbs and Ruback's all American teams.

When mother tongue speakers were in a minority or all team members were second language speakers, there was far less simultaneous talk and a slower pace. The slow pace in one small team of all second language speakers allowed one individual's expertise to come through. Teams that did make some effort to slow down and involve everyone had good satisfaction results

except for one. In this team, trying to order the very high initial levels of simultaneous talk through creating an autocratic leadership worked, but the team became frustrated with the leadership style.

7.3.2.4 Possible reasons behind the effect of simultaneous talk

Unless individuals can think fluently in a second language, they need the pause at the end of a sentence to translate and think through the reply. In German, Hindi, Japanese and Chinese for instance, important information is either built up to slowly (Wai Ling Young 1982) or saved until the end of the sentence. English sentences on the other hand are 'front - loaded' with the subject, verb and object. This means that mother tongue speakers can second guess the ending and cut in.

This research provides some evidence that pausing to let second language speakers digest and prepare their thoughts is an important interactive pattern to develop. The extended results of Hypothesis Eighteen showed that teams with higher levels of simultaneous talk that allowed no pauses, were less satisfied. At the other end of the spectrum, the most satisfied team in the sample created a pattern of interaction where each speaker made a small pause after three sentences. This pause was just long enough for the speaker to look up to see if the rest of the team of five were understanding and in agreement. The effect was a very smooth and flowing pattern of conversation.

One problem in changing these high levels of simultaneous talk is that the Anglo subgroups seemed to enjoy this pattern of overtalk as a sign of high interaction and found it difficult to stop, even when they were aware of its effects. Dabb's and Ruback (1987) found that higher levels of group simultaneous talk correlated to higher levels of group satisfaction in his all American teams. The literature suggests that Japanese also have high levels of simultaneous talk in Japanese to create a rhythmical pattern of interaction and visible involvement (Hayashi 1985). This implies simultaneous talk may be a source of potential exclusion in many different linguistic contexts, not just English mother tongue cultures.

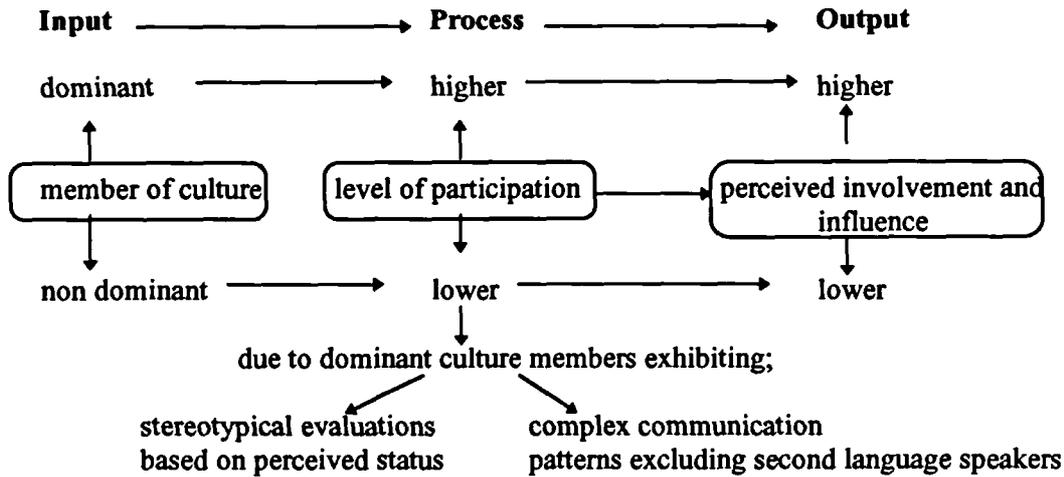
7.3.2.5 Simultaneous talk and listening

The observational analyses also connected high levels of simultaneous talk with low levels of attentive listening. It was common for a team member in teams with high simultaneous talk to stop the group and make them go back two sentences to a good suggestion that was talked over. In one team, a frequent comment on the second day was 'but I thought we had agreed'. As

mentioned, teams with higher levels of simultaneous talk were less satisfied. There is some observational evidence that they may also be less effective.

7.3.3 Dominant culture

Dominant culture was defined as the same nationality as the leadership group of the company. Each company had one or two distinctive dominant cultures.



7.3.4 The existence of dominant cultures in the organisations

The results show that as predicted in Hypothesis Three, dominant culture members participated more than individuals from other nationalities. All the companies in this research had a clear British or Anglo-Dutch majority leadership group in the company. For the British team members, being a member of the dominant culture also meant being a mother tongue speaker and in six teams, a member of the larger subgroup. There were seven teams where Dutch members also belonged to the dominant culture.

7.3.5 Alignment with the dominant organisational culture

The advantage of being a member of the dominant culture could result from an increased alignment with the social realities of the main organisation (Maznevski 1994, Pascale 1985) which in turn can be influenced by the British or Anglo-Dutch influences on the organisational cultures (Adler & Jelinek 1986, Schneider 1988, Jamieson 1982 - 3). This greater alignment, of either the behaviour or values, to the nationally influenced organisational cultures, could result in greater confidence to communicate and act (Maznevski 1994).

Whatever the source of the advantage of being a member of the dominant culture, what was striking is that it manifested itself in very different ways in the different organisations. In two

organisations it appeared to form the basis of stereotypical evaluations of other cultures as different in status. One set of such stereotypes mirrored differences between different levels of national industrial development, and the other the internal ranking between 'international' and 'regional' (local) jobs. In a third company the advantage for dominant culture individuals appeared to come through creating an exclusive pattern of communication.

7.3.6 Dominant culture and the stereotypical evaluation of other cultures

An ethnocentric rank ordering of cultures (Ling 1990, Perlmutter 1976) was most apparent in OILCO, where stereotypical evaluative comments were made about members from non Anglo-Dutch cultures. No stereotypical comments were made about team members from other European countries, only about Malays and Nigerians. The 'in-team' jokes seemed to put Nigeria at the bottom of the list, (e.g. If we have anything left over, we'll send it to Nigeria'). One team member commented how he disliked the habit 'Nigerians have of repeating themselves as it wasted time' when there was only one Nigerian in his team. The direction of these stereotypical comments appears to mirror the common ranking of the 'developed' world (Europe), 'newly industrialised' (Middle East and South East Asia), and 'developing world' (Africa). This resulted in some individuals receiving comments containing stereotypical evaluative statements.

Maas and Clark (1986) review the effect of being a double minority, and note that the effect of stereotypical evaluative comments were most apparent when the recipient was a double or triple minority. In the Western based companies in this research, European Judaic males probably make up the majority of the workforce in the locations where the videos recording took place. This would make the Malay Muslim woman (wearing a head scarf) in one team a triple minority. As described, she was the recipient of stereotypical evaluative behaviour. Maas and Clark (1986) also highlight how the behaviour of a minority person affects the degree of influence they manage to gain. Again, in the case of this female engineer, her tactics of persistence, not showing visible offence, continually seeking to question and clarify what was happening in a constructive manner and 'hedging' her suggestions, paid off well in maintaining her influence within the team.

In discussion with a former OILCO employee, another point emerged which may have a bearing on the attitude of the Europeans towards the Africans and Malays. OILCO has set up a local operating company in both Malaysia and Nigeria. Both of these local OILCO companies have entered into different types of partnership with the locally established state or private companies. Under the terms of agreement, some local company people are often seconded into the OILCO

operating company, and training them is part of the partnership deal. The fact that some of the Malays and Nigerians in these teams may not have been strictly OILCO employees may also have enhanced the ‘them’ and ‘us’ stereotyping.

The second type of stereotypical evaluation occurred in BANK. There was an acknowledged difference in the participation, influence and perceived status of international (mostly from the developed world) as opposed to regional (mostly from the newly industrialised and developing countries) managers. One international manager commented informally to the researcher that international managers have integrity, whereas regional managers are subject to local pressures. When pressed, he clarified that he meant bribes and local politics.

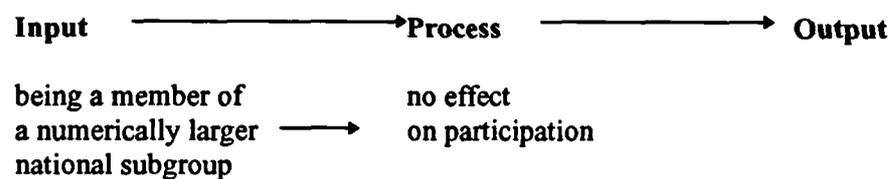
7.3.6.1 Dominant culture and exclusive communication patterns

In CHEMCO, dominant culture individuals made no stereotypical evaluative comments about other nationalities or functions. Instead, the pattern of fast talk with high levels of simultaneous talk described above, created the advantage for the dominant culture mother tongue speakers and excluded other team members.

The difference between this pattern of exclusion and the previous evaluative types became plain as the star charts in Chapter Five emerged. The fast pattern of communication also gave the advantage to the Indian, Pakistani and Malawian team members who used English as a business language in their own countries (and so could probably also think in English), over the Dutch, German and South American participants for whom, however fluent they were vocally, used English less often.

An important comment to make here is that these findings on the impact of the dominant national culture validate the decision to undertake field research. They bring out one of the main points to be discussed further in this research. That is the fact that similarities and differences between nationalities are seldom played out in a context of equal power. Especially in the business environment, cross - cultural interaction usually involves perceptions and manifestations of inequality (Blau 1977, Salk 1992).

7.3.7 Subgroups



An independent T-test of the results of Hypothesis Four showed that there was no significant difference in the frequency of participation of individuals who were members of a larger national subgroup in any one team. In the context of the other data, this result highlights an interesting point about the triggers for in - group identification in international teams.

7.3.7.1 Triggers for creating subgroups

There has been extensive debate on the triggers of in-group out-group identification (e.g. Tajfel 1982, Brown 1986, Salk 1992). The results of this study strongly support the suggestions of Sachdev and Bourhis, reported by Salk (1992) that the previous confusing findings on the relative strength of ethno-linguistic identity as a trigger for self categorisation were due to contextual factors. They suggested that these were:

- 1) relative status of the ethno-linguistic group,
- 2) their demographic strength, and
- 3) their institutional support.

The results of this study support these conclusions. It is clear from the charts that in the five teams with Anglo dominant subgroups, members from that subgroup participated more frequently than other team members.

The charts also show that the Dutch dominant culture subgroups never exceeded a pair. However, except in one team, this pair was always higher in the participation curves relative to non dominant culture individuals and even other similar or larger non dominant subgroups. All these team members had equal status and as reported in this Chapter, no correlation was found between being a member of the dominant culture and having higher (self assessed) experience with the task in these teams. So unless some other variable is creating the skew, the results show that the relative status and institutional support for the dominant culture pairs outweighs the demographic strength of three non dominant culture team members of one nationality.

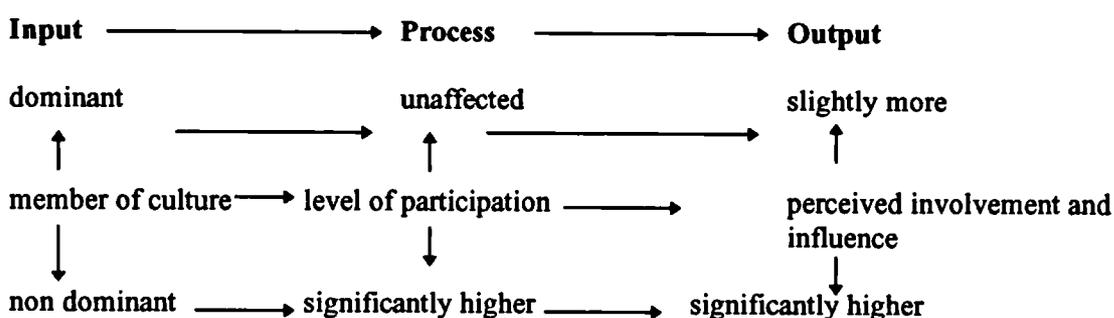
The t-tests only compared the frequency of participation between subgroup members and others in each team which had a subgroup. Given the significant effect of dominant culture, it is surprising that the overall t- test result is insignificant when both dominant and non dominant subgroups are taken into account. One can speculate that in order to achieve this result, being a member of the non dominant Malay, American and Hong Kong Chinese subgroups either had no relationship or a negative relationship to frequency of participation. This is considered in more detail below.

7.3.7.2 'Them' and 'us' in organisational cultures

In the organisational culture literature, there is often discussion of subcultures making up the overall organisational culture. If the teams in this study reflect their organisational cultures, it seems that the organisations still manifest an underlying perception of 'us' the dominant culture(s) and 'them' the other nationalities and lower status subgroups. If this is the case, then it is likely that non dominant culture individuals feel that their careers in such companies are best served by playing down their own national identities and fitting in with the dominant culture to gain some 'cultural capital' (Goffee and Jones 1993). If most of the organisation's cultural capital is strongly aligned with one or two nationalities, then the individuals of those dominant nationalities will gain more from playing out and reinforcing their own identification with that culture than 'decentering' (Maznevski 1994) or empathising with lower status nationalities.

Another explanation for the weak non dominant in-group identification may be that, as emerged from the training teams, there is very little sense of national identity between individuals who do not know each other well and who are not specifically representing their countries. Furthermore, one Malay subgroup seemed to manifest a hierarchy of Indian, Chinese and indigenous Malay ethnicities, suggesting the contextual factors described by Sachdev and Bourhis (reported by Salk 1992) are indeed the contexts of 'ethno - linguistic' rather than 'culturo - linguistic' identities.

7.3.8 International experience



41% of the sample had work experience outside their country of origin. 63% of those individuals were from a non dominant national culture. While the results are not visually apparent from the star charts in Chapter Five, independent t-tests showed that individuals with international experience did participate more than those without. This suggests that using the star charts can

only reveal very clear trends in the variables. Further analysis showed that international experience enhanced the participation, perceived involvement and influence of those from nationalities other than the dominant culture. International experience had no effect on the participation and perceived involvement of those from the dominant culture, and only a slight effect on their influence.

7.3.8.1 Background reasoning from the literature

There is little evidence in the literature that overseas assignments increase international mindedness, but there is some evidence that they do lead to lower stress and increased self reliance and self awareness (Bochner et al 1979, Kealey 1989, Church 1982). Given that the dominant culture individuals are 'on home ground' in these teams, they will in any case have lower stress levels. Increased self reliance in these individuals may in fact lead to more dominant and imperious types of behaviour. On the other hand, for the non dominant culture individuals, any previous experience that lowers the stress levels and gives greater self reliance should be helpful.

7.3.8.2 Explanation one: non dominants gain something through international experience that dominants do not

The first interpretation of these results is that non dominant culture individuals gain something through international experience that dominant culture members do not gain. Church reports that the extent to which previous cross cultural experience is helpful has been correlated with the accuracy of that experience (See Church 1982 pg. 549). Particularly in oil companies, dominant culture expatriates working in foreign countries are often cushioned from different cultures by working (except when on site) and living in company compounds or particular city areas which are designed to replicate home country facilities as far as possible. This can result in an inaccurate cultural experience of the foreign country. However non dominant culture individuals coming into that artificial environment from the outside or transferring to headquarters sites where special areas are less likely, will have a much more accurate exposure to the values and behaviours of the national culture in which the organisational culture is embedded. So non dominant individuals gain an accurate assessment of another culture through international experience which the dominant culture individuals do not. The argument could be that this extra knowledge allows non dominant culture individuals to increase their participation in these teams and has no effect on dominant culture individuals as they have little or no extra knowledge.

7.3.8.3 Explanation two: Non dominants gain something that dominants already have

The second and more persuasive interpretation is based on the fact that regardless of international experience, dominant culture team members participate more than non dominant culture team members. International experience is only helping non dominant culture team members catch up so to speak. So through international experience, non dominant culture individuals gain something that dominant culture individuals already have.

It could be that some overseas assignments increase the fluency of English of some non dominant culture individuals. The previous argument showed that they have also had the opportunity to understand and so adapt to, the norms of the dominant culture. For instance, in one team a Hong Kong Chinese man commented that had he not learnt to interrupt when he moved from Hong Kong to Australia, he would have remained silent. Understanding the organisational norms could lead to greater confidence (Maznevski 1994), just as experience in uncertain settings can lead to greater self awareness and self reliance (see Church 1982)

7.3.8.4 Dominant cultures and adjustment

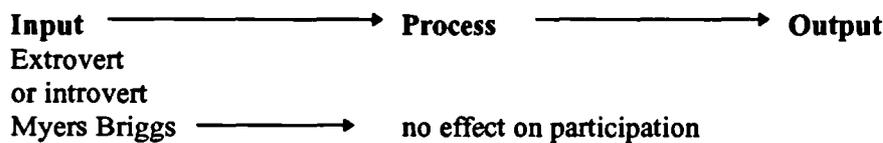
The effect of dominant and non dominant nationalities in organisations is persistent in these findings. What is interesting is that it does not seem to have been taken into consideration in the body of research which has looked for characteristics suitable to international assignments. Cultures have been compared in terms of 'cultural distance' (e.g. Tioborn 1982), but not relative 'cultural status' when talking about adjustment in a foreign culture. Cultural status has been considered when thinking about a person's perception of the host country and the loss or gain of their own self esteem. The two need to be considered together.

This research is not suggesting that, when acting as the dominant organisational culture, British and Dutch are more ethnocentric than any other nationality in the same circumstances (e.g. Salk 1992). A strong Japanese organisational culture may behave the same towards non dominant Koreans, or Hong Kong Chinese towards non dominant Filipinos. In studies of managers, rather than students, one can anticipate that the organisational culture will skew the findings on cultural adjustment so that the perceived relative status between the home and host nationalities as well the characteristics of home nationality (Galtung 1965) may give a reasonable explanation of the response variables.

As pointed out in the literature survey, personal characteristics for effective overseas assignments are divided into two types. The first type includes those factors which affect overseas job performance, such as interpersonal skills, role adjustments, family support and

occupations. The second type are those personality traits which affect cross cultural competence. Within the second type, ethnocentrism was considered an impediment. The observational results show that the teams where ethnocentrism was manifested either through stereotypical evaluations or exclusive communication patterns, were less satisfied than those where there was none. The personality traits that increase cross-cultural competence are: increased personal flexibility, assertiveness, sociability and realistic sojourn goals and expectations (e.g. Cui and Awa 1992, Ruben 1989, Imahori and Lamigan 1989, Bochner, Lin and McCleod 1979, Church 1982). Perhaps measures of some of these would have been more effective than the Myers Briggs Personality Type.

7.3.9 Myers Briggs



There was no evidence, from either the observational or statistical data that having an extrovert preference on the Myers Briggs Type Indicator influences the level of an individual's participation. In the literature, there was no evidence (Thorne 1987) that being an extrovert increased the frequency of participation in pairs and only a small body of evidence that it increased levels of participation in teams. It is noticeable that in teams where certain individuals were particularly pushy, those individuals also had a strong extrovert preference and low participation mother tongue speakers had strong introvert preferences. However the overall pattern in the middle of the sample was not consistent. A measure more directly related to an individual's sociability or assertiveness, rather than the way they process information (as measured in Myers Briggs) might have been more predictive.

7.3.10 Ranking the factors

Aside from the fact that pre-appointed leaders spoke significantly more than other team members, the sample that could compare all six variables was too small to give any conclusive results as to which of the six variables had the most influence on participation.

An analysis of variances showed that together, the six cultural variables explained 25% of the variance in participation. This is a significant amount when considering the creation of high performing international teams. It implies that teams that consciously work to redress any imbalance of the four significant variables in their teams, are more likely to have effective participation than those that do not. Some of the remaining variance will be the result of the

other factors that have been found to create the J curves of participation. There are many unsupported hypotheses about why the J curve comes into being (e.g. Bales 1951, Fisek et al 1991, Tsai 1977, Dabbs and Ruback 1987). However two other factors; experience with the task, (especially on McGrath's (1984) intellectual tasks), and status in the operational teams, had a clear effect on the levels of participation. A t-test of the 49 respondents available showed that there was no relationship between being a member of the dominant culture and perceiving oneself as having more or less experience on the task so this was not a culturally affected variable.

As well as status and experience, it is known that other factors not studied here, such as attitude and motivation (eg. Hackman and Morris 1975, Erez and Earley 1993) also affect participation. The main purpose of this research was to assess the impact of certain culturally related variables, not to explain all the variance in the participation.

7.3.11 Additional individual results

7.3.11.1 Self Fulfilling prophecies

The 'two way mirror' or 'perceptual reciprocity' hypotheses reviewed by Church (1982) suggest that 'low status' nationals will form their attitudes towards a high status other country based on their perception of the high status attitudes towards their country, and by extension towards themselves. Following this train of thought, it would be possible to criticise the discussion of this research by proposing that non mother tongue speakers and non dominant culture individuals participated less because they expected to. A comparison of the pre and post expectations about the team work between dominant and non dominant culture individuals and mother tongue and non mother tongue speakers found no overall evidence to support any self fulfilling prophecies, and by extension no evidence that anyone viewed their own status relative to other members of the team. In two cases where individuals had at least a double minority status, they did mark their expectations of being listened to lower than the team average, but showed no signs of the lower expectation decreasing their participation.

7.3.12 Summary

This concludes the discussion on the six main individual predictors. The rich observational results provided considerable complementary data to explain the statistical findings. The main findings are the importance of the cultural context of leadership and the impact of a perceived dominant nationality or nationalities in the organisational culture.

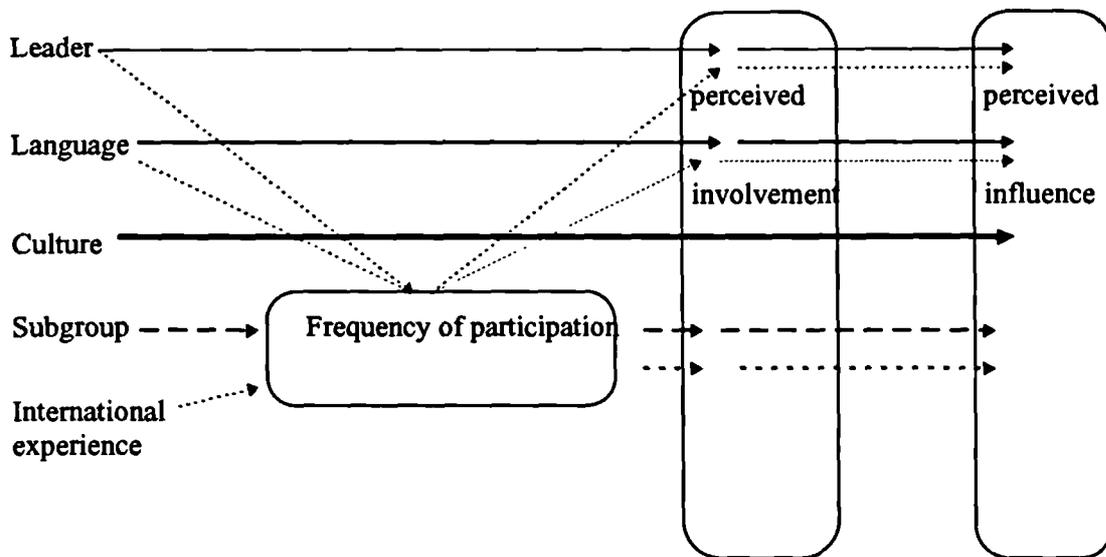
The observational analyses provided the different mechanisms, stereotypical evaluations and exclusive patterns of communication, through which dominant culture individuals and mother tongue speakers excluded other team members. The impact of the dominant culture also determined the usefulness of international experience for increasing participation.

The next section of this Chapter picks up on the interrelationship of the variables and observations of the group processes. The aim is to describe how this pool of cultural variables affects the processes in these international teams. It will focus first on the different ways in which the variables affect perceived involvement and influence, briefly cover the different types of heterogeneity and the way they may be operating, and conclude by looking at aspects of the group processes.

7.4 Relationships between the variables, frequency of participation and perceived influence .

The relationships of the variables to the frequency of participation and perceived influence have been captured in the figure below.

Figure 7.1 The relationship between the variables and perceived influence



Myers Briggs (no relationship)

- Lines: **—————** direct relationship (frequency of participation has no effect)
-** positive relationship (frequency of participation increases relationship)
- negative relationship (frequency of participation decreases relationship)

The relative sizes of the lines indicate the relative strength of the relationship between the variables and perceived involvement or influence that is dependent on or independent of the frequency of participation.

The above diagram attempts to capture the findings concerning different relationships of the variables to the frequency of participation, perceived involvement and influence. It is based on the figures that emerged in Chapter Six when the relationship of the variables to perceived involvement and influence was controlled for the frequency of participation.

7.4.1 Pre -appointed Leaders

These findings suggest that only 50% of a leader's perceived involvement and influence is dependent on the frequency of participation. The rest may be dependent on just the fact that they are pre-appointed or perhaps on what they do. This second suggestion would tie in with the description above of how the Canadian leader in Hong Kong lost influence probably through not summarising and commenting on the points discussed.

7.4.2 Mother Tongue Speakers

In contrast to pre - appointed leaders, almost none of the perceived influence and involvement of mother tongue speakers is the result of frequency of participation despite the fact that they tended to talk more. An important finding in the observational analysis was that second language speakers would often get praised and gain influence for good ideas or for lateral thinking. However, it was mother tongue speakers or members of the dominant culture who tended to unravel or question the logic of the calculations or discussion, even when the second language speakers had more experience with the task.

Perhaps being a little outside the main stream of the interaction allows second language speakers or team members from other cultures to be less involved with the detail and to see the problem from different perspectives. This would support the findings that diverse teams create richer solutions (Watson et al 1993, Kirchmeyer 1991). On the other hand, vocalising and summarising the logic of an argument is probably much harder to do in a second language. Redding (1992) and Triandis and Albert (1987) found that different cultures prefer different types of problem solving techniques and use different levels of abstraction when thinking about problems. This would support the view that language and cognition are strongly linked and it is hard to adopt both the language and the ways of thinking of another culture.

The results show that the remaining predictor variables have quite different relationships to the frequency of participation. The relationship between dominant culture and influence is completely independent of the frequency of participation. The frequency of participation seems to suppress the relationship of being a member of a larger subgroup and being perceived as being involved and having influence. International experience on the other hand has no direct relationship with perceived involvement and influence.

7.4.3 Dominant culture

Additional results showed that there was no correlation between self assessed task experience and being a member of the dominant culture. Dominant culture individuals do not gain their increased influence through knowing more. However there could still be something different in what they are saying rather than how often they are saying it which gives them greater influence. Alternatively, their increased influence may be a pre-judgement made by other team members that is independent of what or how much they say.

7.4.4 Subgroup

The small relationship between being a member of a larger subgroup and perceived involvement may be partially explained by the fact that when the correlation between subgroup and culture is controlled for frequency of participation, the result almost equals the low significant correlation found between being a member of a subgroup and involvement and influence. The figures also allow for the possibility that whether you are a mother tongue speaker or dominant culture individual or neither, members of a larger group have a greater likelihood of being seen to be involved and of having influence than lone members.

7.4.5 International experience

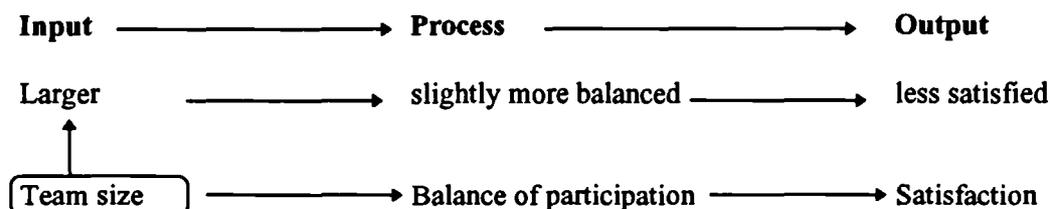
The results in this study suggest that the usefulness of having previous international experience in a multinational team is almost exclusively that it allows you to talk more. Mother tongue speakers and most of the dominant culture individuals were already fighting for airspace, so this is probably why international experience has no enhancing effect for dominant culture individuals. Additional results also showed that there was a low negative correlation between the total amount (dominant and non dominant) of international experience in the team, and both team satisfaction and balance of participation. There is no indication from these results that previous international experience triggered the dominant culture and mother tongue speakers to negotiate a new set of integrated group norms that would include everyone (Brannon 1993), and no sign that it increased the ability of dominant or mother tongue speakers to decentre (Maznevski 1994). It did increase the ability of the non dominant culture individuals to participate in the predominant norms and communication patterns.

7.5 Group Process to Outcomes

Having discussed the relationship of the variables to participation, involvement and influence, this section looks at the group level hypotheses and some of the group processes. The group

level results focused on the effect of different levels and types of heterogeneity in the teams. The results were generally as predicted, but in almost all the cases, the null hypothesis was supported on the evidence of weak and unreliable correlations. This reflects the small size of the sample in relation to the number of factors that are likely to affect the satisfaction of the team.

7.5.1 Size of the team (Hypothesis Twelve)



The strongest result was that larger teams were less satisfied than smaller teams. This concurs with Hare's (1962) finding that the optimal team size was five. The individual results show cultural factors do have an effect on the pattern of participation, and the observational analyses showed that this often results in one or two members becoming excluded. It is not difficult to imagine that the larger the team, the more likely it is that these members continued to be excluded. In other words, because of the increased communication difficulties in diverse teams (Watson et al 1993, Kirchmeyer 1990), one can expect levels of satisfaction to be more sensitive to team size than in national teams. This correlation between team size and satisfaction is the only reliable correlation in this set of results.

7.5.2 Other correlations

The next two highest but still weak correlations imply that teams with more evenly balanced participation are more satisfied than other teams, and that the higher the proportion of mother tongue English team members the less satisfied the team. There was some observational evidence from the star charts that more balanced teams were more satisfied; however the results were not consistent across the whole sample. The correlation between balance and satisfaction of $-.30$ changes to $-.39^*$ when the figures are controlled for team size. This could be because the larger teams tend to have flatter overall curves than the smaller teams.

Mother Tongue Speakers (Hypothesis Thirteen): the overall dissatisfaction of teams with greater homogeneity of mother tongue speakers reflects the dominating effect of these Anglo - subgroups discussed above.

The other correlations in this group are too weak to be conclusive, but as there are many factors that affect the satisfaction of a team, this result is to be expected in a small sample. What the results show is a trend that the greater number of the dominant culture members in relation to the rest of the team (Hypothesis Fifteen), the less satisfied the team. However, these correlations are measuring possible linear relationships. As described in Chapter Six, it is far more likely that the relationship of status linked heterogeneity, such as dominant and non dominant culture and satisfaction will be a 'skewed' W shaped curve.

7.5.3 International experience

One tentative result established in Chapter Six is that the more non dominant culture team members with international experience, the lower the team satisfaction. The result could be spurious or it could indicate that if non dominant culture team members have international experience, they will be more dissatisfied if the team work is unacceptably skewed by dominant culture members within the team. Data from the observational analysis (Chapter Five) shows that this may be true of two of the relevant individuals. However, others were dissatisfied either because their own agendas were not met or for interpersonal reasons.

7.6 Discussion about group processes

This part of the discussion outlines some observations about the group processes within these international teams. It will look at the notion of balanced or equal participation and some of the interactive processes within the teams. The final section after this, will look at the reasons these teams exist, 'integrative convergence' and the case for process review.

7.6.1 Balanced participation and effectiveness

Many of the list of recommended best practices for diverse teams include the notion of equal participation (e.g. Adler 1986, Maznevski 1994). This could easily be interpreted as 'the flatter the J curves the more effective the team will be'.

This study provided no objective measure of effectiveness, but such a measure may be very loosely related to self assessed levels of satisfaction. In these teams the balance of participation is only moderately correlated with satisfaction and then not within the 95% confidence limits. The two training teams in which a small effort was made to include everyone, did lead to flatter curves and higher satisfaction levels than the two that made no effort. Noticeably they all started out with the strong imbalance of Anglo - dominant subgroups. The most balanced team was not the most satisfied.

The results of this study, along with others discussed in the literature survey, (e.g. Lee 1993) suggest that the idea that flatter j curves makes teams more effective is a naive interpretation of effective participation. Lee (1993) showed that thinking of participative decision making as the right to participate and initiate speech acts at any time was a narrow interpretation. In her research, such an interpretation would have missed the fact that self initiated speech acts in Australia were often 'hedged' and that Australian leaders often provided leading or loaded questions for discussion.

This study shows up another danger of interpreting participative interaction as the freedom to create simultaneous talk through self- initiated speech acts. Levels of simultaneous talk and fast speech exclude non mother tongue speakers. This exclusion from the main interaction also robs these often non-dominant culture individuals of the opportunity to diminish the effect of unhelpful status factors or to make use of their broader experience. All this discussion points to meaningful participation being more relevant in the future than equal participation. However, even meaningful participation has to be defined in each context for each team (Mavnevski 1994). Tannenbaum et al (1992) and Keyton and Springston (1990) all suggest that process outcomes are best defined and assessed subjectively by the team members, whereas the task outcomes are best measured objectively.

7.6.2 Interactive team processes

There were two particular processes that recurred and stood out in these teams as serving to reinforce cultural groupings and dominant patterns of behaviour: drawing lots and 'brainstorming'. A third process; introductions seemed to be important in setting the tone and level of involvement in the team.

7.6.2.1 Drawing lots

In four teams a British team member proposed to elect the presenter of the results by folding small bits of paper, drawing a cross on one and having the team each pick one at random. In all three teams, non British members, particularly Malay, African and Latin Americans expressed discomfort and concern with the method. In each case the criticism was dismissed or a joke was made about this being the British way of doing things and the process carried out rather than alternatives found. This was even to the point where one person chosen by this method refused to present.

7.6.2.2 Brainstorming.

The text book method of brainstorming is to ask each person in turn for their ideas. Chapter Five described how in one team a suggestion to go around one by one was countermanded by a British team member who suggested that they do not bother, but just shout out. It was noticeable that neither a Latin American nor Pakistani team member participated.

The research shows that brainstorming methodically at the beginning of international team work involves everyone from the start, even though some British members responded to that method as if it was too mechanical or time consuming.

7.6.2.3 Introductions

As shown in Chapter Five, there was a significant difference in the initial balance of participation when introductions were done one by one rather than in a haphazard way as people came in. The most satisfied team starting by asking who had the most experience of the task and something about each other's backgrounds. In the team that demonstrated the worst case of stereotypical evaluations, individuals were still asking for each other's name as the team was breaking up from the teamwork.

7.6.3 Shaping the task is more influential than managing the interaction

The statistical findings and some observational results concerning perceived influence have been discussed at length in the findings above. However the observational analysis also showed that in teams with emergent leaders, those members who shaped or provided a framework for the content of the discussion, usually with the help of a flipchart were perceived to have the most influence; i.e. more than the emergent leaders elected to manage the pattern of interaction. This suggests that shaping the interaction of the team and the process through which it achieves the task is perceived as being less influential than shaping the content of the task solution.

As mentioned in the literature survey, the current recommended best practices for creating effective international teams focus on process; the so-called soft issues. If enacting them confers little influence on the team, it is not difficult to see why they have not been readily adopted.

7.7 Purpose of teams and integrative convergence

This last section looks at the reason these teams think they exist and the implications for the organisations. The case of 'integrative convergence' (Salk 1992) and process review interventions, mentioned in the last part of the literature survey, will then be explored.

7.7.1 The purpose of these teams.

One part of the questionnaire, discussed at the beginning of Chapter Five (see also Appendix 3) referred to what the team members thought the purpose of the team work was. By ranking the means, the following order appeared.

1	Get the task done
2	Share ideas
3	Create a network within the organisation
4	Get to know other parts of the organisation
5	Develop specific skills
6	Learning how to work in international teams
7	Creating a team that can work better together next time
8	Influence organisational strategy
9	Advance personal career

There were only slight differences in emphasis and changes between the pre and the post questionnaires of the training and operational teams.

These findings support those of Snow et al (1993) that very few teams are set up for the sake of being international rather than national; in other words, as a way of teaching employees intercultural skills. Most teams exist because being international is a by product of the way the company does business and the tasks that need to be performed. The company can take two approaches. As these teams are part of everyday business, companies can use the same team training courses as for other teams, or they can treat them as a special case because they also have cultural factors that affect the team dynamics. The results of this research suggest that the first approach would not account for at least 26% of the variance of frequency of participation explained by the six cultural predictors. Added to the data gleaned from the observational

studies , this study strongly suggests that it is worthwhile for companies to take the cultural differences into account and structuring training accordingly. Before looking at what else can be learnt about what companies should be taking into account and how, one important observation from the questionnaire results needs to be made.

Across the board , all the teams had higher expectations of what they would get out of the teamwork than what they actually achieved. The most striking fall was in the expectation of learning specific skills. Presumably teams have been around long enough for team members to have reasonable expectations about what to achieve and indeed the operational teams had slightly more tempered expectations than the ad hoc training teams. So, assuming that this is not a comment on the quality of overall team training in six large multinationals, one can suppose that the greater communication difficulties reported for heterogeneous teams (Kirchmeyer 1991, Watson et al 1993) are taking their toll. An alternative explanation is that it is a universal phenomenon concerning people's expectations of teamwork, and a real challenge for training departments. Both explanations provide all the more reason for companies to work on the impact of extra cultural factors on an international team's process.

7.7.2 Integrative convergence

The first response of most companies when thinking about international teams is to ask questions. Is there an ideal composition for international teams? Should the team adopt a specific pattern of interaction? Do all teams have to consciously manage their process?

The findings of this study have thrown up a set of observations that answer these questions and they can be explored more deeply by comparing some of the teams. The organisational culture within which these teams operate has been shown to have a strong influence on what happens in the teams. In particular , the organisational context determines the likely mix of nationalities, the relative status of one nationality to another and the culture that is most likely to set the prevailing norms. The composition, approach to the task and patterns of interaction of the most satisfied team, the most balanced team, the most stereotypically evaluative team, (all occurring in the same Western based organisation), and the least satisfied team (also occurring in a Western based organisation) will be compared. All the teams are described in Chapter Five (and also accompanying document B), so only the relevant compositions are described in the table below and the key interactions summarised in short paragraphs.

Type of team	TEAM SIZE	Nation-alites	DC/N DC	MT/N MT	INT EXP	SEX M/F
Most satisfied OILCOP180B	5	2 Malay 1 Omani 1 Nor 1 Aus	0:5	1:4	0:5	5: 0
Most balanced OILCOP180D	4	2 Dutch 2 Malay	2:2	0:4	1:3	4:0
Most Stereotypical evaluative team OILCOP181C	7	3 UK 1 Omani 1 Nigerian 1 Turk 1 Malay	3:4	3:4	2:7	6:1
Least satisfied CHEMCOB	8	4 UK 1 Can 1 Argentine 1 German 1 Brazilian	4:4	5:3	2:7	7:1

DC /NDC = Dominant / non dominant culture individuals

MT/NMT = Mother tongue/non mother tongue speakers

INT EXP = International experience.

7.7.2.1 The most satisfied team

This team began by discovering that the fluent Malay had the most experience. They quickly developed a steady pattern of interaction, with a tiny pause after three sentences in which the speaker would look up to check everyone was following and understanding. As mentioned, it may sound mechanical, but in fact produced a very smooth flow. This led to very low levels of simultaneous talk, the team picked up on each other's ideas, took time to make sure everyone understood the logic, taking care as a team to answer questions. There were no stereotypical comments and the team gave the impression of high levels of mutual respect. There was a steady build up of energy which was not broken.

7.7.2.2 The most balanced team

This team achieved the greatest balance through a very measured pace of English. One Dutch and one Malay had previous international experience and all the team members, except the other Malay marked themselves as non fluent in English. The fluent Malay had the most experience with the task which was able to come through. Another key feature of this team was that when they split into subgroups, they did so in a very open way that ended in mixing up the

nationalities and skills. They also built up a rapport with light humour and self deprecatory jokes as the team work developed.

7.7.2.3 The most stereotypical evaluative team

The team interaction was impersonal. As mentioned, one team member was still asking names as the team work ended. A British man had himself elected leader on one vote before everyone had sat down. He and another British member then directed the interaction. The stereotypical comments made by them towards the one Malay female have been described in these results. Two things were noteworthy; the way they split into their subgroup, and assigned tasks, strongly reinforced her exclusion. Yet despite her disenchantment, she maintained her participation with a frank and courteous style.

7.7.2.4 The least satisfied team

The two lowest scores belong to two groups with incomplete post - questionnaires. Therefore the third lowest team (CHEMCO B) is described here.

The reason for this team's dissatisfaction is that they did not structure their task or roles from the beginning. At the same time a British man and the Argentinean woman created a light hearted, one could say facile, interactive style that both alienated one British man and also excluded the German and Brazilian. No attempt was made to correct this and it could be that the alienated British man did not view the situation as important enough to do anything about it.

These comparisons along with previous observations, throw up key points discussed below about optimal composition, approaching the task and effective interaction and decision making in international teams.

7.7.2.5 Optimal Composition

Size: optimal four or five: that teams larger than five need to consciously manage their interaction through a leader, facilitator or the whole team.

Balance: The optimal team is balanced or homogeneous particularly in terms of dominant and non dominant members and mother tongue/ fluent and non fluent members. However the organisational skew here strongly affects what works and what does not work in between. The findings show that imbalance can work if the lone person is made to conform to non dominant norms, e.g. one mother tongue speaker has to slow down for everyone else. Team three

described above shows that even two dominant culture mother tongue speakers in a team of seven can otherwise create a divisive interaction.

The observations from the same team also suggest that where possible, it is useful to avoid a lone source or 'token' member (Kanter 1977) of other heterogeneity, such as gender, especially if the lone person is seen as being in a lower status category.

These findings imply that imbalanced teams have to consciously work at mitigating the divergence that can result from skewed heterogeneity.

7.7.2.6 Structuring the task and assigning roles and responsibilities.

Structuring and clarifying the task in such a way that everyone agrees and understands the progress being made remains a core issue for international teams as well as national teams (e.g. Dunphy 1972, Adler 1986, Katzenbach and Smith 1993, Johansen et al 1991, Hackman 1990). The most satisfied team (Team 1) clarified the task and related experience at the beginning, the most unsatisfied team (Team 3) never did.

Assigning roles and responsibilities appears to work well if it is done in an open way that involves everyone and mixes their skills and background. It can otherwise, as in Team 3, become the moment when the exclusion of a team member is strongly reinforced.

7.7.2.7 Interactive process

7.7.2.7.1 Inclusive interaction

Inclusive interaction covers a variety of processes:

1a) The pattern of speech: This should give second language speakers and others who prefer not to initiate simultaneous talk, time to think and speak. The rhythmical steady pattern with tiny pauses set up in the most satisfied team came across as ideal. Levels of simultaneous talk need to be managed in a creative and non authoritarian way that maintains the energy of the team, but does not exclude second language speakers, especially in heated debates and the build up to important decisions.

1b) The content of speech: international teams need to (at least) avoid stereotypical comments and behaviours that exclude any one individual. To create real integration, teams will need to look much deeper into who is saying what to whom. There is also more to this point than just avoidance. It also implies watching out for body language cues that suggests something that

seemed straightforward is creating incomprehension, such as the difference between the American and British use of 'verbiage'.

2) Introductions: Introducing each team member breaks the impersonal atmosphere in new teams. The most satisfied and balanced teams quickly asked about people's backgrounds and experience with the task. This immediately shifts the team to accessing relevant and actual skills and influence and away from any stereotypical pre-judgement of available skills based on dominant culture, age, gender etc.

3) Brainstorming: the findings show that brainstorming or collecting ideas and prioritising them needs to be done in a systematic way that consciously asks for everyone's ideas. 'Shouting out' can force the subject down prevailing or skewed paths of interaction .

4) The response to alienation: The final interactive factor that seemed to lead to a difference between moderate or low satisfaction was the response of those who were being alienated or excluded. In some cases, the recipients of stereotypical evaluations retained their participation and influence, whereas in the least satisfied team, the alienated British member disengaged. This is probably a very individual factor and highly dependent on the individual's evaluation of the cost/benefits of remaining involved. Nevertheless, it is tempting to speculate that perhaps more allocentric (group oriented) people tend to remain involved longer than idiocentric (individually oriented) individuals.

7.7.2.7.2 Decision making

International teams need to use decision making techniques that everyone is comfortable with or find alternatives. The British habit of drawing lots caused great discomfort to some members who subsequently refused to respond to the result.

This list of findings answers the three questions posed above on the basis of this particular sample of 24 teams working in English and in British and Dutch dominated organisational cultures. It is not a large enough sample to reliably generalise for other teams. However, the predominant organisational skew is important in understanding the value and limitations of this list.

7.7.2.8 The unequal playing field

Before closing this discussion on 'integrative convergence' and interactive synergy, there are two key points that need re-emphasising as a result of the findings in this research.

Firstly, this set of findings and implications may evoke the comment ‘well that list is nothing new and in any case ideally composed teams rarely occur in real life situations’. However this list emerges because of one key underlying finding in this research. That is: how unlevel the initial playing field is and how different any one individual’s capabilities to play on that field is likely to be. Previous discussions of interactive synergy (e.g. Adler 1986, Redding 1992) tend to underplay this point and so diminish the impact of recommended best practices. Laurent and Van Maanen (1993) put it eloquently:

‘ Our sense is that whatever a Utopia of differences might mean..., it would ultimately depend on the ability of members with differing cultures to enter into a very deep dialogue with one another on an entirely equal footing. ...This, alas, we think highly unlikely to take place anywhere, let alone in an MNC (Multinational Corporation)The MNC operates in different parts of the world for gain, not study...by choice on those who often have no choice. As long as the idea of a common goal originating in some center and moving outward pervades the MNC, differences are likely to continue to be ignored, denied, covered up and otherwise regarded in mostly unfavourable terms.’

It is this dominance of the centre in many organisational cultures that hijacks so many attempts at inter-cultural synergy in operational teams before they even get started. This same dominance creates the need to take some action on the findings listed above, if only as preventative measures against the worst outcomes of unbalanced team compositions.

This leads to the second point that needs to be emphasised: future research needs to be specific about which factors are necessary to achieve states of integrative convergence in international teams and at which subjective or objective levels (eg. cognitive, value dimensions or behavioural) this convergence is expected to come about.

If accessing and using all the relevant skills in the team, building a strong team spirit and avoiding the costs of cultural differences together add up to achieving integrative convergence, then enacting the above list of findings will be a comprehensive response. If it needs to also involve deeper psychological levels, such as integration of psycho-dynamic factors, changes in self understanding or mutual exchange of deeper values, then this research cannot comment on how these may be achieved or how much of the team’s overall effectiveness depends on them.

The list of findings on optimal composition suggested that the negative effects of imbalances have to be consciously managed. This final part of the discussion of the results looks at the results available from this sample on the effect of conscious process review.

7.7.3 The case for process review

Process review here means taking time to review the pattern of interaction and how it is affecting the individual team members. Many practitioners suggest that teams can improve their effectiveness through consciously reviewing their interaction as they go along (e.g. Adler 1986, Katzenbach and Smith 1993). Watson et al (1993) suggest that the fact that their teams carried out three process reviews during their teamwork may have biased their results.

Process review means more than appointing someone to manage the time and summarise the findings. It means going through the team members' thoughts and feelings on many aspects of the team function. The questions are: how much impact does it have?; and is it a necessary procedure for a team to achieve high performance; or a hygiene factor to help difficult teams get out of trouble?

Four of the training teams in this sample had facilitators who consciously intervened to encourage the teams to review their interaction and process. They were not the most satisfied or balanced. The results discussed above show that the most satisfied and most balanced teams achieved these results without consciously discussing their interaction. On the other hand, there is observational evidence that two of the four CHEMCO teams were slightly more balanced and more satisfied than the other two comparable teams because they at least attempted to consciously review their process or ask the quieter members for their opinions by name.

Verbal and written (in the form of team review questionnaires in Appendix 4) facilitator led team reviews did provide the opportunity to discuss imbalances that were affecting the interaction in two teams. In one team, a review aired the imbalance between international and regional officers, and in another gave the team time to resolve interpersonal difficulties and learn from their mistakes. There is quite a strong case for arguing that had one team not filled in a written team review before finishing, a female member would not have voiced her complaints about sexist remarks and her overload of work. Doing this clearly maintained the good atmosphere and high energy in the team. What was striking was how difficult it was for two operational teams to carry out a process review when nobody was driving it as was the case in the training teams. One team immediately switched back to the content of the task and another talked about what they should do, but not about what they were doing.

This study cannot contribute any comparative findings as to whether reviewing the interaction increases team effectiveness as a whole or not. There does seem to be a case for suggesting that larger teams with strong imbalances would be advised to do something to access the real skills of

the team and maintain inclusive interaction. Beyond that there is anecdotal evidence that reviewing the interaction can improve the maintenance and human side of teamwork (Dunphy 1972, Hackman 1990) beyond achieving the task.

One aspect of this study set out to see if teams in organisations were implementing the recommended best practices that include process review (e.g.: Adler 1986, Canney Davison 1993). The answer is: not many. Perhaps there is much room for improvement. It is tempting to say, 'do not judge the value of these teams on the basis of their current performance, but on what they could achieve if time and money were invested in instilling good practice'. However, more evidence is needed before evaluating how much implementing best practices can improve the performance of international teams.

8. CHAPTER EIGHT: CONTRIBUTIONS TO KNOWLEDGE, FUTURE RESEARCH AND APPLICATION.

This final chapter falls into three sections. The first section explores the theoretical contributions that this study has made. It then shines a spotlight on the theoretical areas that still remain unexplored. This process leads to a model combining the different theories already available at the different levels of analysis, which describes different sources of variance of behaviour in international teams.

The second section suggests avenues of future research to develop this increasingly important field. It first covers future research needed to fill the gaps and develop our understanding at the group level of analysis. It then looks briefly at the organisational and individual levels of analysis and combinations of all three.

The final section looks at previous recommended best practices and compares them with the recommendations that have emerged from this study. This leads to suggestions of what companies can do to improve the effectiveness of their international teams.

8.1 Contributions to knowledge

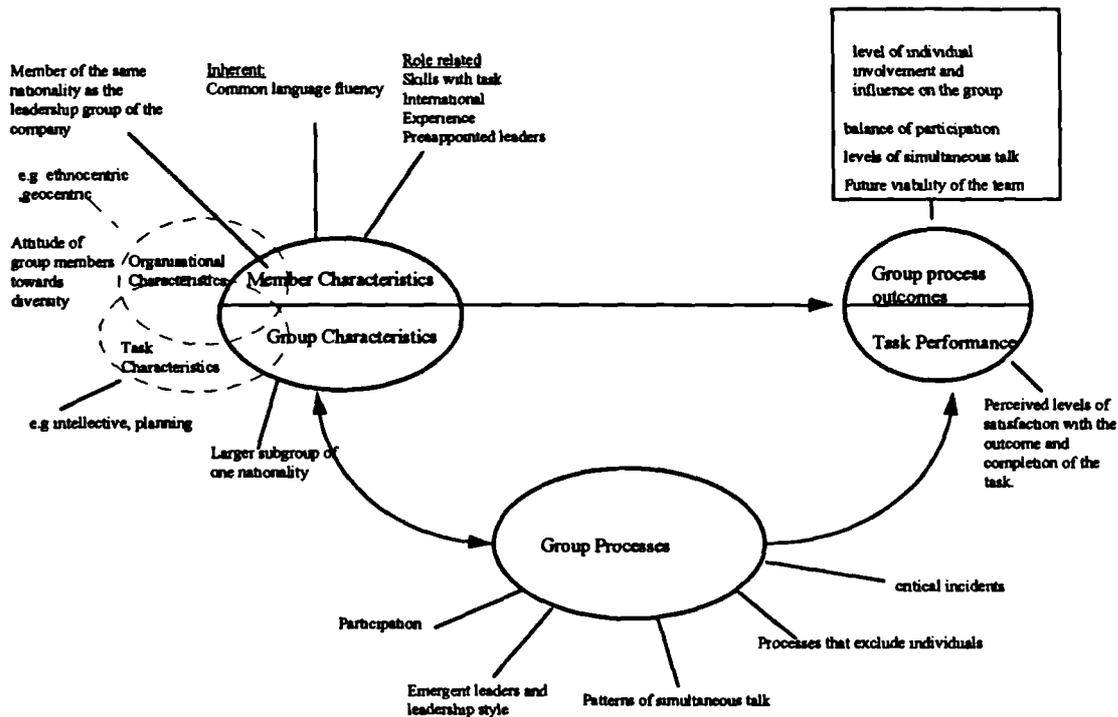
The underlying question in this research was **'what effect do the different cultural backgrounds of the team members have on the interaction, processes and outcomes of these teams?'** As stated in the introduction, there were two major factors which placed the context of the research question. First, a desire to describe what was happening in international teams within the organisational context and to discover if they were applying any of the recommended best practices. Second, to focus on the interaction within these teams in such a way that the results did not generate more stereotypes or generalities about the effect of national identity at the individual level. As the field was virtually unexplored, one other important objective was to create a broad but well defined base from which future research can develop. Adapting an existing group input - process - outcomes model proved a solid foundation. This section will first describe the revisions made to the basic model and then look at a set of questions that can be explored as a result of the study.

8.1.1 Revising the model

This section first looks at what contribution these findings have made to international team theory. The thesis methodology and findings will be very briefly summarised and then the revised model will be revisited.

The research methodology was based on an adapted version of the common model of group process, that of inputs, process and outcomes (Hackman and Morris 1975, Gladstein 1984, Maznevski 1994, McGrath 1984, Hare 1976, Watson and Michaelson 1988, Ling 1990, Salk 1992). This model is outlined below,

Figure 8.1 Revised team model for international teams



The results of this study have provided evidence that four of the chosen culturally influenced predictor variables have a significant influence on the individual and team levels of participation as well as the amount of simultaneous talk in this sample of international teams. These are: the culturally influenced style of leadership; being a member of the same nationality as the leadership group of the company (the dominant culture); being a mother tongue speaker (at least if the working language is English); and having previous international experience (if belonging to a non dominant culture).

Along with a very small contribution from being a member of a subgroup and having an extrovert personality, these variables explain 26% of the variance in the frequency of participation in these international teams. Given the number of possible variables that can affect participation in teams in general, this is a significant amount. So a significant theoretical

contribution of this study is to add these four individual inputs to the combined model for national teams described at the beginning of chapter Two.

At the team level, the results show that national subgroups can have an effect on levels of simultaneous talk, which in turn is a pattern of interaction that needs to be highlighted in the processes of international teams.

The model shows some factors directly related to outcomes and others acting on the group interaction and this was confirmed for international teams. Two of the input factors had a direct influence on some of the outcomes factors. Being a member of the dominant culture meant being perceived as having more influence regardless of the frequency of participation; team size was negatively correlated with team satisfaction. Other inputs, such as international experience, had no clear direct relationship to the outcomes, but affected the frequency of participation which in turn affected the outcomes.

So overall, the main contribution to theory is to have established the nature of some key variables at three levels of the team process: inputs, processes and to a lesser extent, outcomes. These variables may be added to the existing group process model when team members come from different national cultural backgrounds. This contribution is important for two reasons.

There are models of subjective culture (Triandis 1972) and effective communication in diverse groups (Maznevski 1994) that may in future be used to underpin research in international teams. These models start with 'within the skin' predictor variables (Bochner 1986). For example Maznevski has two individual, three relational and one situational predictor variables of effective communication in diverse teams. Her situational variable is 'shared social reality' that she defines as common language and shared perspectives (again 'within the skin'). The results of this study show that there are also powerful 'between the skin' (Bochner 1986) as well as contextual variables that will affect the patterns of communication within international teams. Future theories and models need to take all three levels; 'within skin', 'between skin' and context into account.

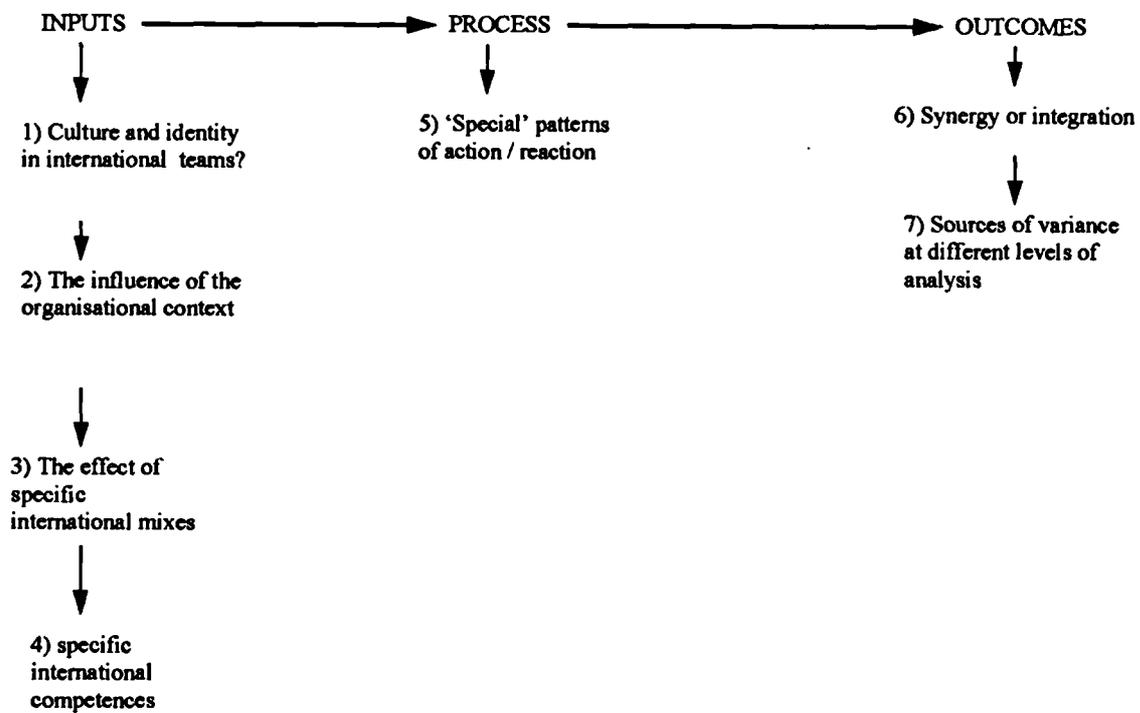
The second important implication of this contribution to knowledge is the affirmation that the dynamics of international teams can be described without resorting to national or regional stereotypes. This is not to say that future research will not develop a much greater understanding of the effects of different mixes of cultures in different organisational and cultural contexts. The important point is that the influence of national culture can continue to be understood as a dynamic that changes in different circumstances, not as an influence that emanates from a fixed

stereotypical point which is to be either confirmed/disconfirmed or measured in greater or lesser degrees. It is likely that only the dynamic approach will yield a deep understanding of patterns of interaction that are unique to international teams and that are still waiting to be observed and described.

8.1.2 Developing the model into different levels of analysis

These implications lead to the second part of this discussion on the contribution to theory. There are issues, touched on tangentially by the results, that need to be explored further at each stage of the input - process - outcome model and these are listed in the figure below

Figure 8.2. Issues at different levels of analysis



8.1.2.1 Culture and identity in teams

8.1.2.1.1 'Us' and 'them' and national culture

The results suggest that in certain circumstances, national culture is a significant source of social 'in-group' identity in international teams. As discussed in Chapter Seven, the extent of significance seems to depend on any one nationality having a relatively high organisational status or a strong normative alignment with that particular organisational culture.

High status in this study was called dominant culture and was measured as the nationality of the majority leadership group of the organisation. Church (1982) suggests that the 'status accorded to the sojourner's home national by the host country can be an important determinant of personal status, self esteem and sojourner adjustment'. If a strong 'them' and 'us' or 'in-group' / 'out-group' identity is generated by the dominant culture individuals, there may be a case for non dominant culture individuals seeing themselves as the 'sojourner' or visitors. Bochner and Perks (1971) demonstrated that sojourners are in fact likely to feel that their hosts perceive them in ethnic terms. So there may be an interesting paradox that takes place in international teams.

In this study, 'in - group' / 'out- group' behaviour (such as stereotypical evaluative comments and creating exclusive communication patterns) was only visibly generated by dominant culture individuals. There was strong evidence in one set of teams that the dominant culture individuals thought of Malays and Africans in ethnic terms, but little evidence in this research to show that they consciously thought about themselves as being seen in ethnic terms (eg. as British or Dutch). Self - reference to being British only occurred when pushing through drawings lots as a 'British way of making decisions' in response to criticism of the method from Africans or Malays. One could argue that because they saw the criticism coming from an 'ethnic' source, they felt compelled to counter it on the level on which they perceived it. Not one of them stopped to question whether there was a better way of making the decision.

Given this type of response, it is not difficult to imagine that the Malays and Africans were aware that they were being identified in ethnic terms much sooner than other (European) nationalities in the teams. It is also not difficult to imagine that they would feel unfairly boxed into a set of stereotypes by a group of people who were not apparently applying the same 'biasing and filtering' effect (Tajfel and Forgas 1981) of similar stereotypes to themselves and as a result, they would feel demotivated or upset.

What this exploration brings home is the importance of the relative position of national identity in relation to other forms of identification such as professional skills, abilities, knowledge, being a member of the team, personality etc. One can imagine that in effective teams, national identity would continue to have less and less significance behind more relevant identities such as being a team member, or skills and experience relevant to the task. The exception may be when national identity is strongly related to one of these other primary factors such as when an Indian's experience of the Indian market is highly relevant to the task. The implication is that actively raising awareness of the effect of identifying someone in ethnic terms before identifying their skills, contributions and personality, will play an important part in increasing the effectiveness of international teams.

Theoretically it implies developing the theories of social identification and group identity (Tajfel 1982, Gudykunst and Gumbs 1989). Personal identity is likely to arise from individual self perception and needs (which are likely to be culturally influenced), the network of relationships and abilities in the team, as well as from seeing oneself or being ascribed as a member of a particular category. What is needed is a theoretical and practical exploration of the circumstances in which different conceptions of self will come to the forefront in international teams and which conceptions are the most effective bases for interaction.

8.1.2.1.2 Language and identity.

The other important factor related to culture and identity in these teams is language. The results show that certain patterns of communication exclude second language speakers because they cannot think and speak fast enough to compete. In addition to trying to think and translate in another language, one can also imagine second language speakers engaged in continuous internal cost/ benefit analysis of the effect on the team if they choose to say something. They know that by speaking they may slow the team down, perhaps not express exactly what they want to say and as a result, be perceived as more of a nuisance than a contribution. This will strongly affect the number of self initiated speech acts. Triandis' model of subjective culture (1972 pg. 23) has two important and very relevant aspects. First a feedback loop from patterns of action that allows learning and adaptation as well as an evaluation of anticipated rewards for action. This part of his model can provide a strong underpinning for what may be happening 'within the skin' of second language speakers.

Beyond just the mechanics of speech, language can be very closely linked to identity and cognitive structures. Bond and Cheung (1984) demonstrate the effect of language choice on ethnic affirmation. The researcher encountered one group of international trainees who always asked for meetings with a difficult superior in English rather than Hochdeutsch (formal German) because her personality became much warmer and accessible in English.

Apart from changing personalities, there is a growing body of observation and research that the structure of different languages has a very strong influence on the subsequent world view and preferred ways of thinking of people from any particular linguistic group (e.g. Redding 1990, Guiora and Herold 1983). It was noticeable in this research that mother tongue speakers would structure and discuss the rationale and thinking behind the approach to the task. Second language speakers, on the other hand, tended to be confined to useful ideas, lateral thinking or sharing their experiences. One can imagine a growing frustration and disenchantment for second

language speakers not only at not being able to speak fast enough, but also feeling a loss of self esteem by not being able to demonstrate their expertise in their own way.

This discussion highlights the fact that while the effects of 'between - skin' patterns of speech on participation can be easily observed, the deeper 'within - skin' causes and effects are worthy of further research and theory development.

8.1.2.2 The influence of organisational culture

This factor has received much attention in this study, which as pointed out, is limited to British and Anglo-Dutch organisational cultures. The importance of this factor arises from three perspectives. First the 'type' of national cultural context of the organisational culture, second the stage of organisational development and third, the group-organisation boundaries within the organisation.

8.1.2.2.1 'Types' of national culture

There may be a case for saying that organisations headquartered in certain cultures are more likely to show the dominant culture effect than others. One can imagine that it is more likely in cultures with large internal markets and relatively little international experience (eg. US), strongly homogeneous cultures (eg. Japan) or as in the case of this research, between cultures where the headquarter nationality previously colonised or invaded countries of the non dominant culture individuals (eg. UK in Africa and Asia, Holland in South East Asia,).

One might, in contrast, speculate that the effect of a dominant culture is less observable in organisations either originating in small countries or national groupings that have had to create high levels of international trade to survive, such as the Overseas Chinese and Scandinavian countries, or companies selling and servicing products that demand high levels of global / local interchange (eg. marine engineering products, international retail banking).

8.1.2.2.2 Stages of organisational development

The second theoretical point that needs developing is the different stages of organisational development outlined in Chapter One and their effect on the attitudes towards diversity in the organisation. Ling (1990) raises this issue in her literature review, but is unable to say much about it from her results. This study also had inadequate measures of ethnocentric or geocentric organisational cultures. This limits the extent to which the organisational culture can be said to explain the effect of the dominant culture in these teams; the few individuals in this sample may

not be representative of the whole. That said, almost all of the companies in this sample would describe themselves as international companies, yet, they all have boards comprised of mainly British and Dutch members. The exceptions are BANK and COMMCO where Hong Kong law legislates the need for local boards. However even on these boards, the CEO is almost always British assisted by one or two key British senior managers. International team research would benefit greatly from a greater theoretical and practical exploration of the how certain organisational structures and histories lead to ethnocentric or geocentric attitudes and behaviour and how these affect behaviour in international teams within that organisation.

8.1.2.2.3 The group - organisation boundaries

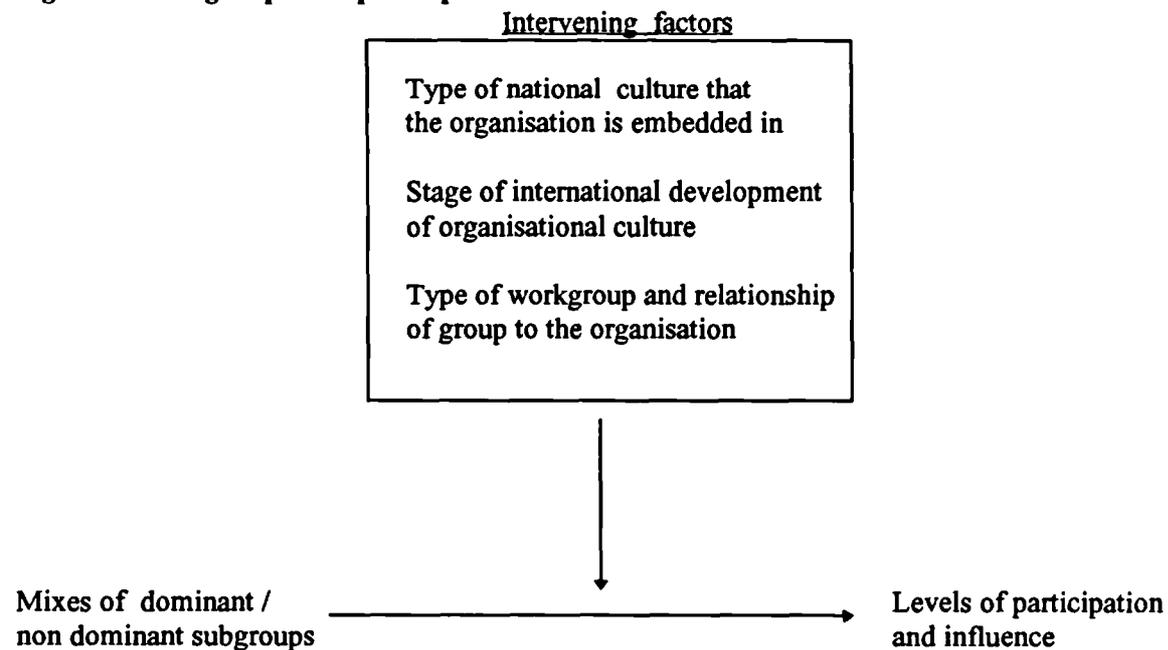
The third issue relating to the stage of organisational development is the nature of the external boundary of the team to the organisation. Factors in the relationship between groups and organisations have been described as dynamic tensions; eg. autonomy vs centralisation (McGrath and Kelly 1986, loosely coupled vs. tightly coupled (Weick 1982) and differentiation vs. integration (Sundstrom and Altman 1989). Sundstrom and Altman (1989) predict that different types of workgroups are predicted to manifest different aspects of the tensions; advice or involvement type groups are low on integration and differentiation whereas action or negotiation type groups are high on both. Each type has different levels of interaction or inherent conflict with the organisation.

All the teams in this study fall into Sundstrom and Altman's (1989) low integration categories. These in turn predict low levels of external interaction with the organisation and little need for standardisation or synchronisation. One would therefore expect that in these teams, there was minimal reinforcement of organisational norms and the effect of dominant culture should be at its lowest. It is therefore even more surprising that it was so apparent in certain organisations. As mentioned, without stronger organisational measures, there remains the outside possibility that the sample just happened to pick up a fair number of strongly opinionated individuals that do not represent the organisation at large. Combining the existing theoretical models of group - organisation interaction (outlined above), with the specific case of international teams in multinational organisations could be a very interesting platform for future thinking and research. It could add a useful contextual insight into the triggers of what aspect of personal identity comes to forefront in certain teams.

8.1.2.3 Specific mixes of nationalities

This issue is difficult to discuss without falling back into the trap of cultural stereotypes. Some discussion came out in the findings that smaller subgroups of dominant culture individuals had more influence than larger subgroups of even the same nationality non dominant culture individuals. This effect is probably strongly linked to the three factors surrounding organisational culture discussed above as illustrated in the model below.

Figure 8.3 Subgroups and participation



Regarding the specific mixes of national cultures rather than dominant/ non dominant cultures, observation of the teams left some objective and some very subjective impressions on the researcher. The first is the issue of language. If the working language is English then nationalities that share it as a mother tongue seemed to have the least visible national differences. In some teams, members from countries previously colonised by the UK were advantaged over other non mother tongue speakers. Such language differences provided the more objective observations about the effect of different mixes of nationalities. The effect of different compositions of dominant culture individuals and mother tongue speakers was described in depth in Chapter Seven.

The researcher was also left with some very subjective impressions about normative cultural behaviour. In two teams, the attitudes of the dominant culture individuals could be described as

stereotypically evaluative and arrogant. In both cases the recipients of the behaviour were Malays. In both cases, maximum effort was made by the Malays not to show offence, to maintain a pleasant atmosphere in the team and to maintain their participation. Coming from a UK culture, this stood out in the researcher's mind as remarkable. The UK expectation would be to become upset or disengage as did a UK team member in another team when he disliked the tone and pattern of interaction. In contrast, the tone and body language of a Canadian in a very formal Hong Kong meeting expressed strong irritation and frustration with the proceedings. The same Canadian was also a leader of another team on the same day and he led a much less formal meeting, clearly his preferred style.

It is interesting to note that Hofstede (1980a) ranked Malaysia as highly group oriented and the highest on power distance, leading to subtle ways of communicating conflict⁴ as opposed to Canada which ranked as highly individualistic and low on power distance. Perhaps value dimensions used in a specific way and combined with 'between - skin' variables will have some limited role to play in helping understand some of the action / reaction patterns found with different mixes of nationalities in international teams in organisational settings.

8.1.2.4 Specific intercultural competences

In the introduction, it was stated that one line of interest of the researcher was the validity and usefulness of the idea of international competences. A 'competence' in this section will be taken to refer to an ability that can be measured at different levels between different individuals. This will be considered as different from skills or best practise that anyone can learn and implement.

The literature chapter showed how many 'international' management competences have little theoretical underpinning and leave themselves open to questions about how to observe and measure them. This highlights the need to look for more contextually specific factors.

For instance, working in an international team in familiar surroundings does not carry the same international adjustment needs as moving with the family to Kazakhstan to manage an oil project. Much of the sojourner adjustment literature has been based on students going to study in another country. This leaves open what specific skills are needed to be an effective international teams leader or member.

⁴ A point noted by Gordon Redding in reviewing this thesis.

Again one further level of analysis is necessary before looking at this issue; that is to decide what category of workgroup as described above, the international team belongs to. There may be very different competences involved in being a member of an international soccer team than a management task force. The focus of the teams in this study was on discussion and communication rather than action. This means that Maznevski's (1994) three competences (that relate to abilities) for effective communication in diverse teams would be relevant, they are:

- * Ability to negotiate and endorse contracts of behaviour
- * Ability to attribute difficulties appropriately
- * Ability to decentre (the opposite of egocentrism)

Aside from the difficulty of observing and measuring these abilities, they do bring out a strong sense that successful international team leaders and members are people who are not wedded to one particular way of doing or seeing things. They have created or have learned a certain psychological distance from their preferred ways of doing things and can make choices to adapt their behaviour when appropriate. These abilities all imply a certain amount of experience with alternative realities.

The results of this research offer two further competences. The most obvious and measurable one is fluency with the working language. The other more speculative one is that knowledge and awareness of the effect of stereotypical pre-judgements and evaluations could have an impact on the effectiveness of the team as a whole. Perhaps these can be added to Maznevski's list of antecedents for effective communication. Beyond these two, there is a list of best practices that can be learnt by any individual given at the end of this Chapter.

8.1.2.5 Special processes in international teams

One way of phrasing this issue is whether international teams are fundamentally different from, or just more complex versions of national teams. Watson et al (1993) left unspecified the idea that perhaps there was something special going on in the interaction of international teams which they had missed. There was nothing found in this study to suggest that international teams are fundamentally different from national teams. The five culturally affected factors analysed: language, dominant national cultures, numerically larger subgroups, team leader and international experience along with the Myers Briggs measure explained 26% of the variance in the frequency of participation. Other factors, common to all teams, such as status and task experience seemed to explain some of the rest and J- curves of participation were found as in previous national

teams. It is therefore hard to say that at this level of analysis that something unique to international teams is going on.

One can however imagine that closer examination of patterns of action and reaction may reveal behaviour centred around the blocking effect of cultural and ethnic stereotypes; for instance both in an individual's refusal to take up some one else's suggestion, or in someone over-accommodating a 'foreign' norm. (Triandis 1985). One instance comes to mind in one of the teams when a frustrated Malay bursting out in what appeared an unnatural way saying emphatically 'I would prefer' and was rebuked by the person dominating him that it was not a question of preferences. However, it is hard to imagine that team members would be clear that their behaviour was clearly influenced by cultural images and not differences in personality.

It could be that at the more subtle level of interpersonal synchrony (Condon 1982), that much more interesting and unique things are going on. However again, given the difficulty of ascribing micro behaviours to personality or cultural differences at the individual level, researching at that level without falling in to the ecological fallacy seems unanswerable at the present time. It seems wise to stay at the team level of analysis until the distinctions between cultural and personality differences become clearer, if they ever do.

8.1.2.5.1 Intercultural synergy and integration

The question here is 'what does integrating diversity' mean, what are its antecedents and benefits? One strong outcome of this research is the realisation that in most circumstances, it is naive to talk about 'integrative convergence' or 'intercultural synergy' from the starting point of a level playing field. The perception of relative status is one of the variables that tends to persist regardless of what happens in the team work. This means that the contextual factors that can create imbalances must be taken into account.

The quest to understand more about synergy was a hidden underlying aim in this research. There is some discussion in the literature about the outcomes of synergy (eg. Salk 1992, Adler 1986, Maznevski 1994) but more creative thinking is needed in order to conceptualise the processes of integrating diversity and the benefits of its outcomes.

Salk (1992) added some useful definitions of integrated convergence (given in the chapter Two) and inertial divergence, but little insight into the interactive processes that led to one or the other. On the other hand, she has provided evidence about some of the contextual and compositional factors that tend to bias the outcome one way or the other. As mentioned in Chapter Two, Maznevski's (1994) model shows great promise as a predictive model at the individual to team

level. However practical ways need to be found to measure her six antecedent attributes for effective communication combined with a methodology that takes 'between skin' variables such as dominant culture and language issues into account. However on outcomes, like some before her (e.g. Alder 1986), she goes no further than suggesting that 'integration is a combining of elements into a unified result' and does not discuss the processes. This leaves important gaps in theorising about such processes of synergy and integration. At present, these can be identified through questions rather than answers.

8.1.2.5.2 Process questions

For instance, once identified, can the processes of integration be learnt and implemented? If not, what are the antecedent factors beyond communication, that allow the re-negotiation or agreement of the processes at critical points of a meeting?

The findings in this research suggest that communication patterns that involve all the team members are an important process in bringing about integration. This does not mean equal participation, but patterns of communication that do not exclude people from being able to participate, i.e. give second language speakers time to think, and which frequently check for understanding and active listening. These patterns can be learnt. It is easier to make them appear natural in small teams of four, five or six than in larger teams.

8.1.2.5.3 Outcome questions

Further questions about the meaning and value of integrating diversity can include: does a 'unified' result mean reaching one common result or allowing many possible outcomes to solve the same problem in different contexts? Does it matter, so long as everyone contributed to something that was greater than what they could have achieved alone?

Clearly each team needs to reach an agreed decision and in such a way that everyone feels that they have contributed their different skills. However, depending on the nature of the task, it would also seem important to allow for different solutions, especially for implementation, in different cultural contexts.

8.1.2.5.4 Analogies

The final set of questions concerning integration concerns analogies. Do analogies of complex systems from other disciplines such as punctuated equilibrium (Gersick 1991), cost-benefit analysis, system dynamics (Senge 1990), chaos theory (Sterman 1988), non linear dynamic

systems (Nicolis and Prigogine 1977) or complexity theory confuse or help our thinking? Is one person's mind capable of creating good theory on synergy, or by definition, does it need to emerge from the synergy of different minds? If so how do we achieve that?

The 'new science' analogies are useful to the extent that they remind us that teams, and especially international teams are non linear dynamic systems and simple linear models inevitably miss some of what is going on. Punctuated equilibrium (Gersick 1991) helped to describe Gersick's findings and to emphasise the role of time, habit and critical incidents in teams. Notions of cost - benefit analysis are useful. Individuals have different levels of expectations about the benefits of teams and are likely to assess the effort or cost of achieving their expectations differently, especially when it concerns levels of accountability, reward etc. Systems dynamics (e.g. Senge 1990) may at some stage help quantify the interrelationship of the different individual, group and organisational influences with different aspects of the task. It may also help identify specific points of dysfunction or facilitatory levers. Concerning chaos theory, Johansen et al (1991) briefly mentions the notion of seeing psycho - dynamic factors and other classic group process models as special attractors.

What is striking is that because of the number of possible variables involved, all these analogies, except maybe systems theory, are likely to stay for quite a while at the level of alluring post facto analogies, rather than tools for predicting what will happen in any one team. They do however point to a new way of looking to relevant concepts of integrating diversity. Adler (1980, 1986) and Maznevski (1994) seem to suggest that integration implies a narrowing down to one particular end point or state. Intuitively that feels limited. Chaos theory (1988) suggests that wherever there is seeming randomness, there is an underlying pattern which can be observed once the tools are developed to see it. No one path around a 'special attractor' is ever the same, but the 'attractor' prevents certain end states from happening by keeping the variables within a certain orbital pattern. If integration is seen as a special attractor, rather than an end state, that allows for many different outcomes within a certain pattern or range. The discussion is focused on describing the nature of the special attractor, rather than a 'unified result' (Maznevski 1994).

This is why Salk's definition (1992) described in Chapter Two is more satisfactory. For instance, her second criterion states, 'there is sufficient commitment to team identity that parental/ national based identities come to play an unimportant role. In other words, the attractor shifts from national to team identity and this will affect the way individuals talk about the team, prioritise their tasks and enact supportive behaviour. In fact, it will affect many things within each team in different ways. So although the individual sequence and pattern of events take place within a bounded landscape or overall shape, the unique routes each team can take is not prescribed. The

question may be asked as to what is the difference between an attractor and a group norm. The word 'group norm' often suffers from the same descriptive limitations as 'unified result' and suggests a pattern to action or thinking that everyone has to fit or be acculturated into. It is more open to think about them as a set of possibilities within which each team can create its own unique pattern.

A brown cloth /team analogy is useful. Brown cloth can be woven from brown threads, it can just as well be woven from bright yellow, blue, green, red, black and blue threads in many different patterns that from a distance looks the same as the cloth with brown threads. If unpicked, the threads of the first cloth will only ever yield brown cloth. The threads from the second cloth can be re-woven into many different colours and shades of cloth. So maintaining distinct individuality through 'appreciation of individual differences and contributions' (Salk 1992) is vital in order to maintain the competitive advantages of flexibility, responsiveness and creativity that these teams can provide for organisations. It is a very important attractor. As seen in this research, new group process norms need to be developed which give space to weave, rather than allowing one pattern and outcome to dominate.

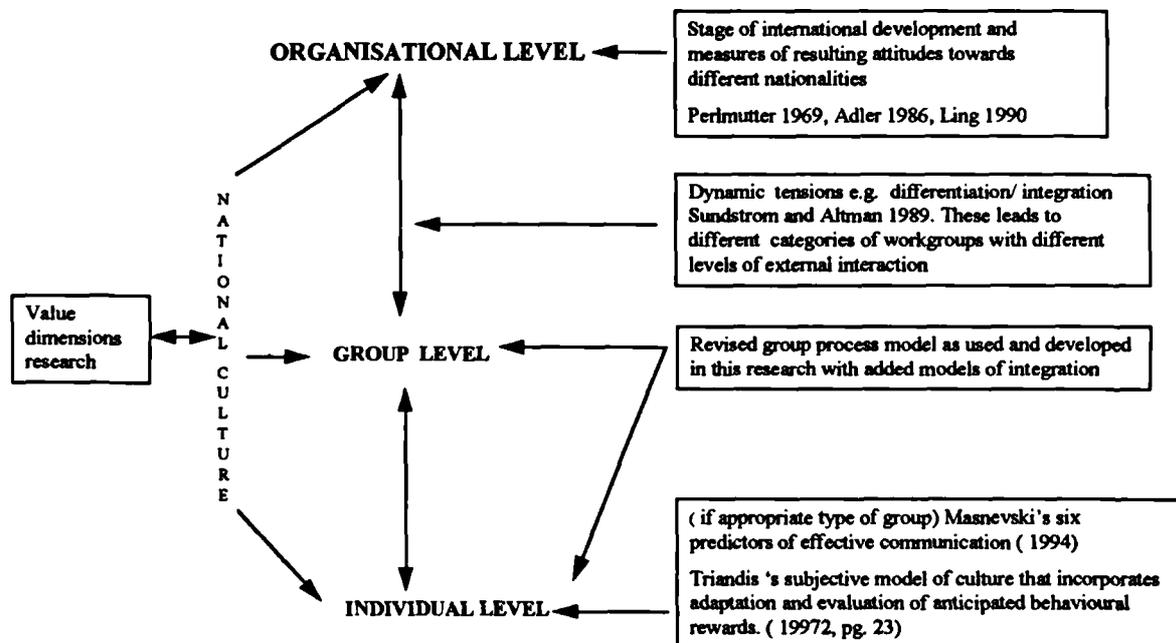
Running behind the argument above is the need for a distinction between allowing individuals to remain distinct and brightly coloured, while at the same time creating a common direction and goal for the task that incorporates everyone's understanding and expectations. This is the crux of the paradox for international teams and the reason for much greater emphasis on process than in national teams. Firstly, different types of tasks impose different sequences of action to solve them. Some may allow greater freedom than others. e.g. calculative tasks are likely to be more restrictive than creative tasks. Secondly, separating individuals from their roles is easier in some cultures than others and thirdly, different types of individual diversity will cause difficulty, while others may not.

The additional results at the end of Chapter Six showed that differences of opinions and differences in interaction styles had different relationships with achieving a friendly atmosphere and achieving a strong team spirit. So, many questions arise. For instance, does maintaining a diversity of values matter if there is enough 'behavioural convergence around certain shared practices and behavioural expectations' (Salk 1992)? It would seem not, but if there is going to be a significant shift away from understanding 'convergence' as narrowing down differences into one 'unified result', then the effects of different types of diversity need to be explored in much greater depth. It is not surprising that currently many international teams resort to a pattern of domination to solve the problem.

8.1.2.5.5 Sources of variance of behaviour at different levels of analysis

The levels of analysis issue is going to be crucial in the future study of international teams. This study has contributed to the 'between - skin' and organisational issues that affect the participation in international teams. As pointed out in the discussions above, this needs to be enriched by models and theory of the organisational contexts and deepened by integrating 'within - skin' theory. Together, these three levels can start to give the whole picture of the sources of behavioural variance in international teams. The summary of the above discussions and the currently available theories and models are captured in the figure below.

Figure 8.4 Integrated theory across three levels of analysis



The model demonstrates that theory is available and is developing to explain and in future integrate the sources of variance at different levels of analysis in international teams. The group - process model provided a starting point on one level and demonstrated that research on international teams and teams of different nationalities does not have to be based in the more static value dimensions research or create more generalisations about specific cultures. By looking at some of the implications of the statistical and observational findings and incorporating parts of existing theory, the model can be extended to the organisational and individual levels.

This leads on to the question of directions for future research.

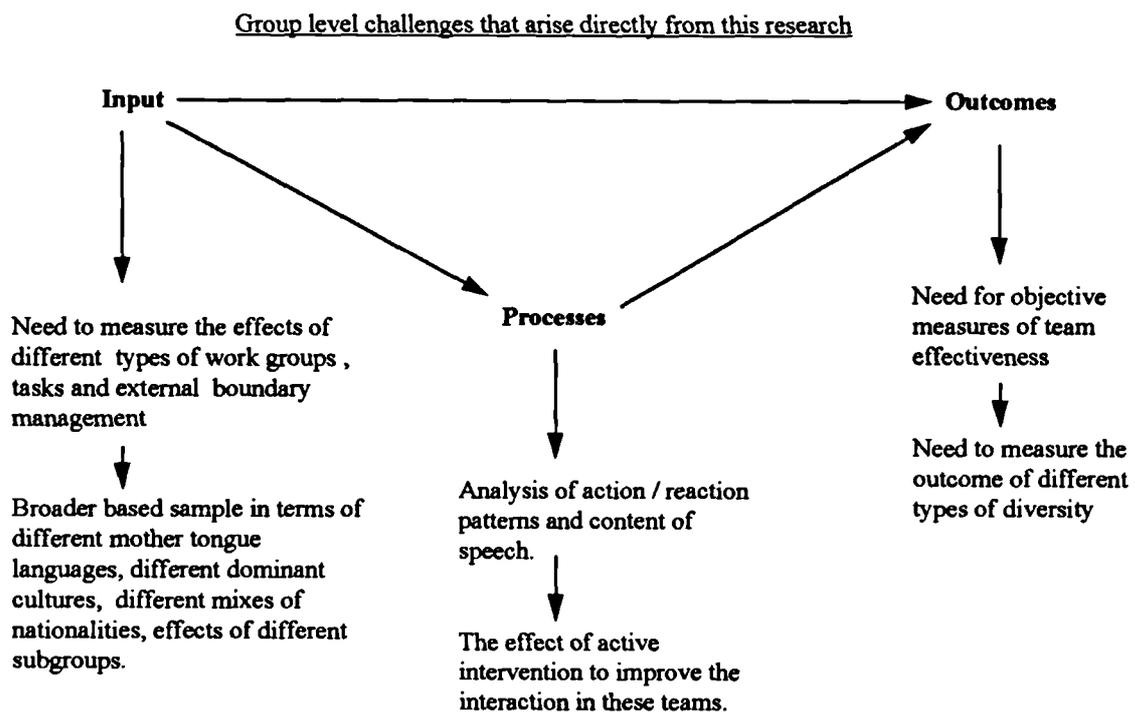
8.2 Future research

In this study, a revised group process model for international teams (figure 8.1) was tested by observational and statistical analysis. Four of the predictor variables were found to have a significant influence on the frequency of participation of team members. One of these variables seemed to be very strongly influenced by the organisational context. Other compositional factors were found to influence the balance of participation, levels of simultaneous talk, perceived influence and levels of satisfaction. These findings suggest that previous models for both homogenous and diverse teams need to be revised in order to be applicable to international teams.

As shown in Figure 8.4, this research has contributed at the individual and group level of analysis. The limitations of the study leave challenges at the group level that can be usefully met by future research. These will be explored first. The second section will look at some of the challenges thrown up by the organisational and individual levels of analysis that need to be incorporated.

The challenges remaining at the group level are drawn out in the figure below.

Figure 8.5 Group level challenges



This section looks first at the input challenges, then the process challenges and finally the outcomes challenges.

8.2.1 Input challenges

8.2.1.1 Different types of workgroups, tasks and external boundary management

A major weakness in this study was that the researcher could exercise little control over the type of teams that became part of the sample. This led to a limited sample. Although there were both training and operational teams, only five out of eight of McGrath's (1984) task types were represented, and the sample fell predominantly into two types. Similarly in terms of the types of workgroups that can occur in organisations, such as those focused on advice, research, production or action (Sundstrom and Altman 1989), only two types were represented in the sample. The type of task is likely to strongly affect the impact or use of diversity in the teams and the type of workgroup is also likely to affect the amount of interaction the team has with the organisation.

Snow et al (1993) distinguished between 'top - down' (eg. created by senior management) and 'bottom - up' teams (self created by lower or middle management), and normal (set up in the regular course of business) and compensatory (set up to carry out special tasks of added value to the company). All of these factors will also affect how much the team is influenced by the organisational norms. For instance, one can imagine that 'top-down normal' teams are likely to manifest organisational norms and stereotypes to a larger degree than 'bottom - up compensatory' teams.

To sum up, future research would benefit from consciously building comparable samples across some of these team types and analysing how the national diversity and organisational norms concerning different nationalities are played out in the different teams.

8.2.1.2 Broader based sample

8.2.1.2.1 Different mother tongues

Lee (1993) showed how stereotypes can be challenged when researchers can analyse teams working in different languages. The present research picked up the importance of the national context of the teams, but was restricted to teams working in English. Studying teams working in other languages would show whether or not exclusive patterns of communication and levels of simultaneous talk is a particularly Anglo - Saxon trait. Hayashi's findings (1988) on high levels

of Japanese simultaneous talk suggest that it is not, but his data were collected on the shop floor, not in operational team meetings.

8.2.1.2.2 Different dominant cultures

It would also be useful to know if the different types of national cultures, eg. homogeneous, previous colonisers etc, described above, will affect whether dominant culture in organisations based in those nationalities will affect participation or not.

8.2.1.2.3 Different mixes of nationalities

Although twenty seven nationalities were represented, the mixes were largely random. Further observation of controlled mixes may reveal more clearly the factors that make it easy or difficult for different nationalities to work together.

8.2.1.2.4 Different sizes of subgroups

If there was a choice of samples, it would be interesting to keep the team size, task and experience the same and observe the effect of incrementally adding individuals from another culture in different dominant cultures and different working languages to see at what point the different numerical subgroups changed the tendencies of certain cultures to dominate or use language patterns that excluded others.

8.2.2 Process challenges

8.2.2.1 Analysis of action/ reaction patterns

The observational data was primarily used to describe how the predictor variables played out across the wide variety of teams. It did not focus on looking for possible, but as yet undescribed, patterns of action and reactions unique to international teams. Grounded theory approaches have usually involved smaller numbers of teams (eg. Salk 1992, three teams and Gersick 1989 eight) whereas larger comparative theoretical studies, like this study (eg. Lee 1993 forty four meetings), have used content analysis or observational analysis to illustrate predictive models.

At this early stage of international team research, there was little basis on which to select one team in this study for deeper analysis over another. Gersick's transcription and data reduction led to the discovery of temporal and habitual patterns over time. In international teams, the interesting data gained from transcription would be the patterns of action and reaction set up

between the different nationalities. However, given the difficulty of ascribing behaviour accurately to either national identification or personality traits, the reasons for certain patterns of action and reaction could only be confirmed through interview data or video recall analysis with the participants themselves. Such research would be a very valuable contribution to the field at this point.

The analysis of transcriptions would also lead to further verification of the observation that mother tongue speakers tend to dominate the rationale and logic of the tasks, while second language speakers are restricted to bright ideas and sharing experience.

To sum up, this study chose to develop broad observations across a larger number of teams, it creates the need for a rich in- depth look at a few carefully selected and comparable teams that could enrich our understanding of unique processes taking place in international teams.

8.2.2.2 The effect of intervention to improve the interaction in these teams

Prescriptive writing (Adler 1986, Maznevski 1994, Canney Davison 1991, 1994) suggests three key procedures that help international teams reach high performance:- Agree common 'superordinate' goals, acknowledge and legitimise differences from the start, and maintain meaningful participation and involvement of all the team members. These need to be tested in interventions research paradigms (see Tannenbaum et al 1992), to see if they have any impact on the effectiveness of international teams.

8.2.2.2.1 Goals

A recent review verified that group goals impact performance (O'Leary Kelly et al 1994) but did not discuss the impact of clear goal - setting on integrating diversity. It would be useful to set up controlled experiments with comparable teams to test whether goal setting significantly aids the management of international diversity and creates more meaningful participation from all members

8.2.2.2.2 Acknowledging and legitimising differences

In international teams where as yet, no emphasis is put on group process or being international, such as the technical training teams in Shell, it would be worthwhile to evaluate the effect on a sub - set of teams of highlighting and acknowledging the implications of cultural differences at the start of the team work. From the researcher's observations, simply acknowledging differences is not sufficient. They need to be used as the basis for agreeing a working process

and incorporated into agreed modes of feedback. One could predict that the teams which underwent this awareness raising exercise should demonstrate fewer stereotypical evaluative comments or responses based on ethnic identity, take care to enact processes which involve everyone and actively seek alternative approaches.

8.2.2.3 Maintaining meaningful participation and involvement

While this research showed a reasonable correlation between balanced participation and satisfaction, there are few grounds for assuming that even more balanced participation would create optimal outcomes and so the concept of meaningful participation was introduced. Perhaps meaningful participation is correlated to interactive synergy. However it is difficult to conceive how either of them can be measured reliably.

One could measure meaningful participation retrospectively in terms of all the team members feeling that they had contributed the best of their skills and experience towards achieving the task and enhanced other team members skills and experience to the maximum possible extent.

Previous research shows that diverse teams have more communication problems (Kirchmeyer et al 1992, Watson et al 1993), although they seldom describe what they are, why they come about or how they are expressed. The present study suggests that at some point the team members actively focusing on how they are interacting, rather than what they are doing to achieve the task, should increase or at least help maintain participation levels and individual satisfaction.

Watson et al (1993) showed that with such 'process review', mixed teams plateaued at the same level of overall performance as homogeneous teams after seventeen weeks, but had no teams without process review to compare these with. A specific case in this research is that the two teams in CHEMCO who did attempt some kind of review of their interaction (CHEMCOa) or keep a check on participation (CHEMCOc) did achieve more balanced participation and higher levels of satisfaction than the two that did not. This effect needs to be confirmed through further research.

As these three factors form the basis of best practices being proposed to companies to improve the performance of their teams, further research comparing teams that consciously implement best practices with those that do not is called for.

8.2.3 Outcome challenges

8.2.3.1 International team effectiveness

The most obvious gap left by this research is whether the satisfaction and participation outcomes measured are related to objective rather than subjective assessments of team effectiveness and performance on the task (Tanennbaum et al 1992, Gladstien 1984). Filling this gap would ideally mean finding comparable teams within organisational settings, which probably limits the research to training teams.

The other drawback is that experimental testing of task performance may miss other contributions that a team may make to an organisation's overall long term effectiveness beyond performance on the task. A very mixed national team, drawn from many parts of the world may initially perform worse on a specific task than a bi-national team of nationalities who are used to interacting. However the long-term contribution to increased global as opposed to regional efficiency or creativity of the company could be far greater. This implies that useful measures of international team effectiveness need to be taken over a long time frame.

Specific effectiveness criteria can be established within each organisation. As described in the introduction, there is a shift in companies to integrate regional operations in order to meet the needs of new global customers, reduce duplication and increase global efficiency. For instance in Wellcome, a medium sized UK pharmaceutical company, transatlantic teams have been created in the global research and development division. Each of these teams has been assigned a facilitator, familiar with the recommended best practices for these teams. Because they are production teams, a set of organisational effectiveness criteria have been established, such as cutting the time to peak sales for each successful drug by a significant number of years, licensing drugs in more than one country simultaneously etc. After some years, it will be possible to say whether these targets are being met, and compare the teams who used facilitators with those who did not. One drawback may be that many other companies regard themselves as having only loosely networked international working groups where the word team implies something too strong. Identifying effectiveness criteria and appropriate interventions for these teams will be far harder.

This summarises the future research needed to overcome the limitations of this study at the group level and develop the existing findings further. Figure 8.4 showed how future research is also needed at the organisational and individual levels to assess the sources of variance in behaviour in international teams.

8.2.4 Future research on different levels of analysis

8.2.4.1 Organisational level

As mentioned, the measures of ethnocentric or geocentric organisational cultures were very poor in this research. The existing models (Perlmutter 1969, Adler 1980, Bartlett and Ghoshal 1989) need to be revisited and structural variables or questionnaires developed to measure the stages of international development as well as the attitude within the company as a whole towards diversity. Only then can stereotypical behaviour in international teams in multinational companies be clearly correlated to the manifestation of organisational norms as a whole, rather than the personal attitudes of a few people who happened to be part of the sample.

8.2.4.2 Individual level

There are three avenues for future research at this level.

Firstly, to test Maznevski's (1994) model in international teams (not just ethnically diverse teams) to see if her six predicted antecedents are indeed strongly correlated to effective communication and which ones are most important.

Secondly, to simplify Triandis' model of culture and test adaptation and internal evaluation of expectations and actions that affect an individual's participation.

Thirdly, to work with the value dimensions at the individual level in a meaningful way. As so far strong reservations against doing this have been expressed in this monograph, this suggestion will be briefly developed.

8.2.4.2.1 Working with value dimensions.

The outcomes of personal satisfaction in teams over time will also have implications for the company. If, in some companies, non dominant culture individuals are repeatedly faced with evaluative stereotypical behaviour, they are likely to become demotivated. This means that a useful route for future research is to create a greater sensitivity towards the effects of and outcomes of particular national mixes without resorting to stereotypes.

This could be done for example by taking the seven dimensions used by Trompenaars (1993) and developing a pre and post questionnaire that embeds the dimensions in team issues.

Data could be developed to show the differences between personal preferences and perceptions of organisational reality, the differences between 'self' and 'other' perceptions before and after

the team work and comparisons between the pre and post questionnaires to yield some indication of cultural adaptation.

One could predict that dominant culture individuals would adapt their preferred styles less than non dominant. The pattern of company ratings would show whether or not there was a common perception about what happens in the company and if some team members are more aligned with it prior to the team work than others.

8.2.4.3 Research across the three levels

One piece of research that would involve all levels is clarifying the three different sources of personal identity and discovering what triggers ethno - linguistic identification of self or others to come to the forefront or alternatively to become a much less significant source of identity. It would need to include a way of measuring the types of personal identification that are most effective in international teams. Everything currently points to identifying with skills and knowledge as being much more effective than emphasis on ethnic identification. Such information is key to understanding how international teams can become more effective.

8.2.5 Summary of future research

This summarises the suggestions for future research that arise from this study. There are two overriding messages that emerge. The first is that while future research may focus on one particular level of analysis, it needs to consider how identified variables at the organisational and individual levels can also influence the interaction in international teams. The second message is that future research in international teams will benefit from mixed research teams looking at multiple levels by using multiple methods of data collection and analysis. This researcher felt hampered by being restricted to one interpretation of the observational analysis, but has seen the benefit of using different methods of data collection and different types of analysis.

8.3 Implications for best practice in organisations

This chapter ends with some suggestions for best practices that arise from the findings within the companies. Perhaps the most important point is that if these teams are there to increase the efficiency of global operations, they need to be trained and facilitated; leaving them to 'get on with it' may not have the desired outcome. For some people however, the first question may be 'are they in anycase worth the effort and cost?'

8.3.1 The value of international teams

The results of this study are limited by having no objective measures of performance on the task or measures of the value of the team work to the organisation. However the question can be approached from another angle.

Chapter One described the market forces that are creating these teams as normal entities in the development of multinational organisations. Their inception is seldom brought about by the choice to create them for their own sake. So, while researchers may compare the effectiveness of international teams with national teams on specific tasks in laboratory settings, this is not measuring the actual benefit of the teams to the companies.

Experience with these teams in companies shows that team members always see the advantages as primarily advantages for the company (eg. greater market share, rationalisation of resources, faster global response times, broader access to knowledge etc). The personal benefits of access to more resources, broadening of experience and travelling and having fun come second. However, when asked to list and prioritise the disadvantages, they are more personal; eg. managing across geographic distance, lack of clarity of roles, misunderstandings, extra stress etc. These are not issues that senior managers often take into account when looking for global growth and profitability. The point is that the organisational disadvantages are not perceived by senior managers to outweigh the advantages. Furthermore, they assume that all the current disadvantages are curable or at least manageable through awareness, training, learning from experience and communicating with state of the art information technology. The assessment of the decision makers is, (if it is even thought about in that way); 'they are worth it'. What is very clear from this research is that action is needed if these teams are to create the expected advantages and facilitate the process of changing these companies into effective global networks. They may otherwise reinforce old national patterns through exclusive and stereotypical behaviour.

8.3.2 Training the teams

The research showed that the intuitively predictable issues such as language and dominant culture are affecting individual participation and satisfaction and on the whole, little conscious attention was paid to their impact in these teams. Two thirds of the sample were in a training environment. As the purpose of many of these teams was technical training of some sort, no attention was given by the companies, to the way the teams were working together. The message to the organisations is that this is wasting an opportunity. Further, by not paying any

attention to how the team is working together, some people are being negatively treated. It would be very simple for course instructors to provide some input on how teams can learn as a unit and how to include everyone. The next step would be to build in some reward for doing so.

The other powerful message to the organisations is that individuals' expectations are not being met about what can happen in these teams and the skills they will learn. They expect more out of training in teams than they are getting.

This research started from the premise that the recommended best practices (Adler 1986, Canney Davison 1991) may not be being implemented nor seen to be useful. Three companies were implementing them on their training courses and one team was talking about implementing them in practice. This research has indicated that critical variables bias participation and satisfaction in different ways and that consciously managing the process is the only way to counteract their effect. Organisations can use available team process tools to structure and speed up process as well as introduce techniques to clarify agreements and involve everyone. One of the most common phrases on the second day of one team was 'but I thought we had agreed'. In fact it seems to be a common phrase in many international teams. Taking time to clarify and check understanding, particularly when face to face, pays off.

There is some indication that balance does help satisfaction as well as some indication that balance can be evened out through paying attention to process. This can be achieved through training teams to set a few groundrules at the beginning of their teamwork. Simple things like watching the speed of English (or other language) and levels of simultaneous talk, checking for understanding, summarising visually at frequent intervals and inviting participation from all team members. In some teams, it is useful to appoint a facilitator to maintain the ground rules, especially if a pre-appointed team leader is very involved in the content of the task.

The list of useful practices for specifically international teams that has emerged is:

At the beginning of the teamwork

- * Systematically introduce each team member and assess the expectations and levels of expertise on the task.
- * Make sure that the purpose of the task, goals, objectives and targets are clearly understood by all the team members.

- * Analyse the inherent strengths and weaknesses of their composition, especially in terms of size, subgroups, the balance of input variables and the distribution of power that it represents.
- * Set agreed groundrules for how the team is going to work to redress any imbalances and enable the team to be effective. These need to focus on leadership style, communication style and speed, checking for understanding, visibly writing up progress or decisions, and a workable decision making process.

During the teamwork

- * Seek different perspectives and ideas on the task early on and respond to lateral ideas that arise from these different perspectives.
- * Address and discuss any use of stereotypical evaluative statements or patterns of interaction that are excluding some team members.
- * Actively maintain participation and active listening.
- * Keep summarising and checking the progress and direction of the task in line with the agreed initial targets.
- * Review the progress of the team, perhaps through a written team review questionnaire if open verbal feedback is culturally sensitive.
- * Work towards building mutual respect and appreciation of individual differences.

At the end of the teamwork

- * Review both the performance on the task and the interactive process. Learn from mistakes and pass on best practice through future role modelling or by describing them to the rest of the organisation.

The final important message to organisations is that creating international teams is not a neutral event. If these teams then run badly, they are damaging the development of the organisation. It is not advisable to create them and let them run for a while until the organisation decides to invest some energy to get the claimed 'competitive edge' from maximising diversity (e.g. Cox 1993, Morrison 1992, Fernandez 1993) or constructive conflict (Pascale 1986). Especially in the more established international companies, where they may be taken for granted, they can become

forums for reinforcing old stereotypes as much as they can become forums for broadening employees' perspectives and increasing cross border effectiveness.

With more field studies, organisations can begin to anticipate possible outcomes of different types of heterogeneity and cultural differences and the inequalities inherent in organisational teams that will affect the team effectiveness, individual contributions and satisfaction. They then need to act swiftly to implement the kind of training and interventions mentioned above to prevent predictable losses in effectiveness and growth. As Van Maanen and Laurent (1993) and Schein (1986) point out, no one is suggesting that this is easy.

' There may be ways to manage these differences more respectfully and with perhaps greater appreciation as to what they may contribute to the organisation as a whole. However without confronting and altering the deep sense of self and other that runs deep and virtually everywhere in the MNC, such differences will not be understood' (Van Maanen and Laurent 1993)

'The ultimate challenge of global organisations might well lie in discovering how to reproduce inside their management processes some of the vitality that cross cultural dialogue produces outside the organisation. To experiment with such internal diversity will take a new kind of leader with a more global vision, more tolerance for individual and cultural differences, more process skills in managing the inevitably more complex dialogue and the ability to creatively distil out what may initially be chaos as a more viable and competitively more adaptive posture for the organisation. The organisation that can invent, create and tolerate such leaders may well have the competitive edge in tomorrow's turbulent world.' (Schein 1986)

This study suggests that something has to be actively done to break down 'us' and 'them' barriers; if not at the level of deeper self understanding suggested by Van Maanen and Laurent (1993) than at least at the level of institutionalising best behavioural practices in international teams. It is hoped that this study has alerted companies to some of the dangers and provided some answers as to what they can do about them.

8.3.3 Conclusion

This research has contributed knowledge and theory about international teams in multinational organisations. It aimed to take a broad and innovative look at the group level of analysis. However the results demonstrate the importance of considering, and if possible including, the organisational and individual levels of analysis into research on international teams

The fields of cross-cultural management research and to a lesser extent, group research have both suffered from a lack of theoretical and practical coherence that limits their usefulness and impact. In the field of international teams' research, there is an opportunity for researchers to

build on each others' work, to mix ethnoscience with positivism and to incorporate and develop 'universal as well as micro theory' (Redding 1992). It would be a shame to create another 'hodge podge' (Berry 1969) of theory and research, which like cross cultural management, could take 'thirty years' (Redding 1992) to achieve some piecemeal coherence.

This research sought to cover enough ground to emphasise that this need not be the case. The number of predicted results from the statistical results, and unpredicted results from the observational analysis, demonstrate that these teams are worthy of study in their own right. Because of the different cultural mixes, there are patterns of interaction taking place in international teams that do not affect national teams (at least not for the same reasons) and they are only beginning to be unravelled. This study is a marker, set in an almost uncharted field that deserves further exploration and which promises new levels of understanding and rich insights.

9. APPENDIXES

9.1 Appendix 1A: letter to companies

THE EFFECTIVENESS OF MULTICULTURAL GROUPS IN ORGANISATIONS

This research is examining the effect of diverse cultural values on multicultural group cohesion and process. I am paying special attention to the dynamics (especially time-pacing) rather than the content of the group discussion. In particular I am hoping to discover the mechanisms that allow a multicultural group to integrate both functionally and emotionally while making use of the diversity of views, knowledge, expectations of process etc. in the group.

The first stage of the methodology is a short pre-groupwork questionnaire asking about the participants international experience and their expectations about the group and the task.

I then need to record on video every meeting that the group holds. Videoing is essential as I regard both the verbal and non-verbal input of the participants to be equal important in measuring the level of integration that is achieved by the group. In order to capture the non-verbal behaviour for analysis. Nonverbal input needs secondary verification and so I am forced into the situation of videoing the group to capture this important aspect. I have for instance also noticed that some important dynamics take place when everyone is talking at once and how that resolves. It is not possible to capture the richness of this on cassette tape and hand notation.

While I understand that some people may initially be uncomfortable with the thought of being videoed, it also provides a powerful post groupwork tool for further analysis. I would like to sit with participants after the meeting to gain their understanding of what is happening at key points during the meeting. Where this is not possible, I shall ask participants to fill in a post-experience questionnaire about their expectations and assessments of the group's performance.

The videoing is as unobtrusive as possible. The dynamics of the individuals in the group are not being judged, nor is the content important to the research findings. The tapes will be treated with complete confidentiality and as the property of the organisations involved. Nothing will be published without clearance of the authorising person concerned.

If there is absolutely no possibility of videoing the group, I would ask that I am allowed to record my observations in other ways. With each individual group, I am learning different aspects of what are the important dynamics in these groups. However audio-taping limits my ability to include the findings of that group in the final analysis.

I am looking for small groups (4 - 12) people which are made up of people from different cultural backgrounds and are working on a time-based project. This might be one group that often works together or it might be a group brought together to perform a specific task. My preference is for an in-house project group but it could also be a group given a project to carry out as part of an in-company training programme.

I intend to build the sample into a comparison of North American / European dominated groups and other groups in HongKong, South East Asia and Japan.

As there has been much interest in this research, I am proposing that the participating companies and bodies may like to attend a seminar on 'Managing in a multicultural environment' in the future where I can share the findings and experience gained.

Sue Canney Davison
2nd Year PhD Programme
London Business School

9.2 Appendix 1b: Pre and post teamwork questionnaires

MULTICULTURAL GROUPS

SECTION ONE

This first part of the questionnaire is asking about your international and cross functional experience. The data collected are solely for the purposes of this research into Multicultural groups and will not be shared with your company.

1) Name _____ 2) Job Title _____

3) Age range

- 1 18-25
- 2 26-35
- 3 36-45
- 4 46-55
- 5 56-65

4a) Which is your country of origin?

4b) Which 'country' would you now describe as your national culture if it is different from

4a)? _____

5) How long have you lived the country 4a)? _____ yrs _____ months
4b)? _____ yrs _____ months

6) Please indicate the approximate total length of time (more than three months) spent in any country other than your country of origin. (If more than six countries please indicate as general regions of the world eg; Asia. Europe)

Country	In your childhood/as a student	adult working life

For the following question, please circle the number that most closely represents your experience.

	A few times a month	Once a month	Once every few months	Once / twice a year	less than once a year
10) I meet and talk to people of different nationalities than myself	1	2	3	4	5
11) I attend international conferences	1	2	3	4	5
12) I read international journals	1	2	3	4	5
13) I travel abroad	1	2	3	4	5
14) Throughout my career I have worked in international groups	1	2	3	4	5

15) In the multicultural groups that you have recently work in most of the time, are the people of your nationality usually

- 1 A clear majority
- 2 A slight majority
- 3 Neither majority or minority
- 4 A slight minority
- 5 A clear minority

16) What nationality is your father? _____

17) What nationality is your mother? _____

18) What nationality is your spouse? _____

19) What nationality is/are your children? _____

20) What languages to you speak and to what level? (Please list your mother tongue first)

Language	Fluent	conversational	can do business	can get by	poor
	1	2	3	4	5

SECTION TWO. This section of the questionnaire asks you about the purposes of the groupwork and your expectations about the interaction.

21) For each question please circle a number to indicate what, for you, are the main purposes of the group work

	strongly agree	agree	unsure	disagree	strongly disagree
a) To complete the task	1	2	3	4	5
b) To get to know colleagues	1	2	3	4	5
c) To share ideas	1	2	3	4	5
d) To get to know other parts of the organisation	1	2	3	4	5
e) To influence organisational strategy	1	2	3	4	5
f) For members to learn how to work in international groups	1	2	3	4	5
g) To advance my career	1	2	3	4	5
h) To develop specific skills	1	2	3	4	5
i) To create a group that can work together again	1	2	3	4	5
j) Any other?	1	2	3	4	5

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree
22) I expect there to be a great difference in individual styles of interaction	1	2	3	4	5
23) I expect there to be great differences of opinion about how to complete the task	1	2	3	4	5
24) I expect the group to have a friendly atmosphere	1	2	3	4	5

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree
25) I expect to be listened to	1	2	3	4	5
26) I expect everyone to express their views	1	2	3	4	5
27) I am clear about the task	1	2	3	4	5
28) I feel good about working in this group	1	2	3	4	5
29) I expect a clear leader to emerge	1	2	3	4	5
30) I expect the group to reach a high level of consensus on important decisions	1	2	3	4	5
31) I expect the group to be under a lot of time pressure	1	2	3	4	5
32) I expect the group to influence my views	1	2	3	4	5
33) I expect to influence other people's views	1	2	3	4	5
34) I expect there to be conflict and disagreement	1	2	3	4	5
35) I expect the group to develop a strong team spirit by the time we finish	1	2	3	4	5
36) I expect us to create the best possible outcome	1	2	3	4	5
37) I expect us to find the best ways of working together	1	2	3	4	5
38) I expect to create a group that will work better together next time	1	2	3	4	5
39) I expect I will want to work with this group again	1	2	3	4	5

40) Do you expect national differences to help or to *hinder the effectiveness of the group?

- 1 Help a great deal
- 2 Help to some extent
- 3 Neither help nor hinder
- 4 Hinder to some extent
- 5 Hinder a great deal

* hinder means to obstruct or interfere with.

41) Do you expect working in English to help or to hinder the effectiveness of the group?

- 1 Help a great deal
- 2 Help to some extent
- 3 Neither help nor hinder
- 4 Hinder to some extent
- 5 Hinder a great deal

Thank you very much for your cooperation

Sue Canney Davison
PhD programme
London Business School

MULTICULTURAL GROUPS

POST GROUP WORK QUESTIONNAIRE

This next question asks you to assess the involvement and influence within the group. For each part please choose the number that most closely represents your view and write it in the appropriate column.

43(i) DEGREE INVOLVED (Column A)

On chart A, please indicate the degree to which each member of your group, including yourself, has been involved in the decision making process. Involvement means active discussion, attentive listening and participation

1 2 3 4 5
 very high high medium low very low
 involvement involvement involvement involvement involvement

(ii) DEGREE INFLUENCED ME/INFLUENCED THE GROUP (COLUMN B/C) On chart A please indicate the degree to which each member of the group has a) influenced you and b) influenced the group during the simulation. Include a rating for yourself for question b). Influence refers to the degree to which someone has affected your thinking about decisions made within in the group.

1 2 3 4 5
 very high high medium low very low
 influence influence influence influence influence

(iii) DEGREE SHARED MY VIEWS (COLUMN D)

c) On chart A please indicate the degree to which each member of the group shared your views .

1 2 3 4 5
 shared most shared many shared some shared a few shared none
 of my views of my views of my views of my views of my views

CHART A	COLUMN A	COLUMN B	COLUMN C	COLUMN D
Group member (surname, initials)	degree involved	degree influenced me	degree influenced group	degree shared my views

44)	strongly agree	agree	unsure	disagree	strongly disagree
a) The task was completed	1	2	3	4	5
b) I got to know colleagues well	1	2	3	4	5
c) I shared ideas	1	2	3	4	5
d) I learnt about new things about other parts of the company	1	2	3	4	5
e) I feel what we achieved will influence organisational strategy	1	2	3	4	5
f) I learnt how to work in international groups	1	2	3	4	5
g) This will advance my career	1	2	3	4	5
h) I developed specific skills	1	2	3	4	5
i) This group would work well together again	1	2	3	4	5
	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree
45) There were great differences in individual styles of interaction	1	2	3	4	5
46) There were great differences of opinion about how to complete the task	1	2	3	4	5
47) The group atmosphere was friendly	1	2	3	4	5
48) I was listened to	1	2	3	4	5

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree
49) Everyone expressed their views	1	2	3	4	5
50) The task was clear	1	2	3	4	5
51) I felt good about working in this group	1	2	3	4	5
52) A clear leader emerged	1	2	3	4	5
53) We reached a high level of consensus on important decisions	1	2	3	4	5
54) The group felt a lot of time pressure	1	2	3	4	5
55) There was conflict & disagreement	1	2	3	4	5
56) We developed a strong team spirit	1	2	3	4	5
57) I am satisfied that we created the best outcome possible	1	2	3	4	5
58) We could have found better ways of working together	1	2	3	4	5
59) I would like to work in this group again	1	2	3	4	5

61) How much did national differences help or hinder the effectiveness of the group?

- 1 Helped a great deal
- 2 Helped to some extent
- 3 Neither helped nor hindered
- 4 Hindered to some extent
- 5 Hindered a great deal

62) How much did working in English help or hinder the effectiveness of the group?

- 1 Helped a great deal
- 2 Helped to some extent
- 3 Neither helped nor hindered
- 4 Hindered to some extent
- 5 Hindered a great deal

Thank you very much for your help and cooperation.

9.3 Appendix 1c: participation coding form

9.4 Appendix 2: Description of Teams

Description of teams

Company & team	Normal or training	No of people	Nationalities	Task	Time of groupwork
ICI					
Group A	Training	Nine	4 British 1 American 1 Dutch 1 Irish 1 Pakistani 1 Brazilian	Preparing a presentation on own chosen strategic topic for board	4 hours
Group B	Training	Eight	4 British 1 Canadian 1 German 1 Argentinean 1 Brazilian	Preparing a presentation on own chosen strategic topic for board	3 hours 15 mins
Group C	Training	Eight	3 British 1 American 1 Indian 1 Irish 1 German 1 Zimbabwean	Preparing a presentation on own chosen strategic topic for board	4 hrs 45 mins
GroupD	Training	Nine	5 British 1 Peruvian 1 Malawi 1 American 1 Canadian	Preparing a presentation on own chosen strategic topic for board	
P180 A	Training	six	1 Turkish 2 Dutch 3 Malaysian	Calculating optimal haz ops	2 hours
P 180B	Training	six	1 Norwegian 2 Malaysian 1 Omani 1 Australian	Calculating optimal Haz ops	1 hour 50 mins
P180C	Training	five	2 Dutch 3 Malaysian	Calculating optimal machinery and pressures	3 hours

P180D	Training	four	2 Malaysian 1 Nigerian 1 Dutch	Calculating optimal machinery and pressures	2 hours 30 mins
P181A	Training	six	1 Norwegian 1 Danish 1 Dutch 1 Nigerian 2 Malaysia	Analyzing a wild cat well site	3 hours 30 mins
P181B	Training	six	2 Holland 2 Nigerian 1 British 1 Norwegian	Analyzing a wild cat well site	3 hours 45 mins
P181C	Training	seven	3 British 1 Omani 1 Turkish 1 Malaysian 1 Nigerian	Analyzing a wild cat well site	3 hours
P181D	Training	six	2 Dutch 1 Belgian 1 Norwegian 1 Omani	Analyzing a wild cat well site	3 hours 30 mins
P280	Training	six	1 British 1 Norwegian 1 Malaysian 1 Australian 2 Dutch	Exploring a hypothetical base case for drilling a well	35 hours
Shell Singapore					
Team 1	Training	Six	1 Japanese 1 Malaysian 1 Filipino 1 Singaporean 1 Brunei 1 Thailand	A variety of team building exercises	7 hours 45 mins
HONGKONG SHANGHAI BANK					
Strategy team 1	Training	Seven	3 British 3 HongKong Chinese 1 Australian	Developing a strategy for the BBME	26 hours
Strategy team 2	Training	Eight	2 British 2 HongKong Chinese 1 Malaysian 1 American 1 Sri Lankan 1 Indian	Developing a strategy for the HKSB in Latin America	26 hours

BP					
Expatriate Harmonisation Team					
Meeting 1	Operational	Seven	3 British 1 German 1 French 2 Belgian	Creating a European expat policy	4 hours
Meeting 2	Operational	Ten	3 British 2 German 3 Belgium 2 French	Creating a European expat policy	5 hours 45 mins
Meeting3	Operational	Thirteen	3 British 2 German 4 French 1 Austrian 1 Greek 2 Belgium	Creating a European expat policy	4 hours
Wellcome Foundation					
IQACT	Normal	Eight	2 British 4 Americans 1 Australian 1 Canadian	Quarterly team meeting	11 hours 30 mins
HONGKONG TELECOM					
Meeting 1	Operational	Three	1 British 1 HongKong Chinese 1 Canadian	Interdepartmental Information Sharing	1 hour
Meeting 2	Operational	Nine	6 HongKong Chinese 1 Samoan 1 Australian/ Timorese 1 Canadian	Weekly meeting of the information systems team	1 hour 4 mins
Meeting 3	Operational	Nine	5 Hong Kong Chinese 1 British 1 Canadian 1 New Zealander 1 Chinese Canadian	Meeting of Systems project team	1 hour 15 mins
Meeting 4	Operational	Six	4 HongKong Chinese 1 Canadian 1 British/American	Departmental meeting	30 mins
Total number	24 teams	172 participants	27 nationalities		

9.5 Appendix 3: Teamwork Expectations

Factor Analysis

A number of questions on the pre- and post- questionnaires relate to people's expectations of the purpose of the teamwork. These variables, all measured on a scale of 1 (agree) - 5 (disagree) are:

CMPTASK	Complete the task set
COLLEAG	Get to know colleagues
IDEAS	Share ideas
KNOWORG	Get to know other parts of the organisation
INFLORG	Influence organisational strategy
WRKGRP	Learn how to work in international groups
ADVCAR	Advance my career
DEVSKIL	Develop specific skills
WRKAGN	Create a group which can work together again

Operational / Training Teams

Variables describing expectations were explored further to look at the differences between operational teams and training teams. The results marked on a scale from 1 (agree) to 5 (disagree) are summarised below:

	Mean Pre-meeting		Mean Post-Meeting		Note
	Op n = 54	Tr n = 104	Op	Tr	
CMPTASK	1.6852	1.4950	2.0893	1.5385	A greater shift to lower outcomes in operational teams than in training teams
COLLEAG	2.0962	1.9340	2.2115	2.2304	Similar shift in both
IDEAS	1.3654	1.5377	1.9688	1.8116	A greater shift lower in operational teams than training teams
KNOWORG	2.2115	2.0000	2.4510	2.6408	Significantly greater shift lower expectations in training teams than operational teams
INFLORG	2.3846*	2.7264	2.6364	3.2135	Training teams start and finish with lower expectations and outcomes than operational teams
WRKGRP	2.7059	2.2667*	2.9074	2.6779	There was a higher expectation within training teams than operational teams but there is also a greater shift towards lower outcomes.
ADVCAR	2.9231	2.8019	3.2593	3.3529	Although training teams start

					with higher expectations, they have lower outcomes than operational teams
DEVSKIL	2.4038	2.0472*	3.2264	2.8077	Again training teams start with higher expectations, but in both cases the teams have the largest shifts of all the variables towards lower outcomes
WRKAGN	1.8462***	2.6934	2.1852	2.2308	Training teams have higher outcomes than their expectations, whereas operational teams have lower.

* = < 0.05 ** = < 0.01 *** = < 0.001 2 tailed significance on independent samples t- test.

In order to reduce the number of variables to be analysed, a factor analysis of the pre-meeting values of the variables was carried out. This gave three factors with weightings:

	Factor 1 Knowledge	Factor 2 Skills	Factor 3 Task and process	Mean Pre-	Mean Post-
CMPTASK			.70231	1.56 (2)	1.73 (1)
COLLEAG	.47702			1.99 (3)	2.22 (3)
IDEAS	.70027			1.48 (1)	1.86 (2)
KNOWORG	.70578			2.07 (4)	2.58 (5)
INFLORG	.74858			2.61 (8)	3.10 (8)
WRKGRP		.82116		2.41 (6)	2.76 (6)
ADV CAR		.68621		2.84 (9)	3.32 (9)
DEVSKIL		.75488		2.16 (5)	2.95 (7)
WRKAGN			.58409	2.41 (6)	2.22 (3)

Pre / Post Teamwork Results: The sample means for the factors derived were compared using t-tests for paired samples; the results are summarised below

Factor		Mean	Std Dev	Difference in Pop. Mean (2 tail sig)
Knowledge	Pre	5.5701	1.462	.000
	Post	6.8067	1.644	
Skills	Pre	5.5403	1.792	.000
	Post	6.7743	2.061	
Task and process	Pre	2.4955	0.896	.779
	Post	2.5224	0.850	

From the results, it appears that expectations of both knowledge to be gained and skills developed were not met. There is no significant differences in task related factor as the changes in the two variables cancel each other out.

Teamwork Process Factors

The teamwork process factors on the questionnaires which compare expectations of how the team will work against feelings after the teamwork are as below. Variables are scored on a scale of 1 (agree) - 5 (disagree), except NATDIF and ENG which were scored Help a great deal (1) - Hinder a great deal (5)

- INTRACT Great differences in individual styles of interaction
- DIFOPIN Differences in opinion about how to complete the task
- ATMOS Friendly atmosphere in group
- EXPLIST People will listen to me
- EXPVIEW Everyone will express their views
- CLRTASK Clear about the task
- FEELGD Feel good about working in this group
- EXPLEAD A clear leader will emerge
- CONSENS The group will reach a high level of consensus
- CONFLIC There will be conflict and disagreement
- TMSPiR The group will develop a strong team spirit
- NATDIF National differences will help the effectiveness of the group
- ENG Working in English will help the effectiveness of the group

Variable	Pre operational n = 54	Pre training n = 104	post operational n = 54	Post training n = 104
INTRACT	2.00	1.86	1.96	2.03
DIFOPIN	2.24	2.33	2.63	2.95
ATMOS	1.89	1.98	1.83	1.71
EXPLIST	2.07	1.96	1.97	1.97
EXPVIEW	1.87	2.14	2.52	2.28
CLRTASK	2.20	2.00	2.32	1.84***
FEELGD	1.81*	2.05	2.00	2.13
EXPLEAD	2.18***	2.72	2.43***	2.89
CONSENS	2.36	2.20	2.32	2.16
CONFLIC	2.20	2.24	3.39	3.38
TMSPiR	2.24	1.98*	2.55	2.54
NATDIF	2.35	2.55	2.71	2.88
ENG	2.64	1.94***	2.61	2.32

* = < 0.05 ** = < 0.01 *** = < 0.001 2 tailed significance on independent samples

t- test.

Factor Analysis

As before, a factor analysis of the pre-meeting values of the variables was carried out.

This gave five factors with weightings:

	Factor 1 Achieving Cohesion	Factor 2 Experiencing Diversity	Factor 3 Effective Participation	Factor 4 Friendly Atmosphere	Factor 5 Clear Leader	Mean Pre-	Mean Post-
INTRACT		.82090				1.91	2.01
DIFOPIN		.84140				2.30	2.84
ATMOS				.75326		1.94	1.76
EXPLIST			.81538			2.00	1.97
EXPVIEW			.71817			2.05	2.36
CLRTASK	.50140					2.08	2.07
FEELGD				.49695		1.97	2.05
EXPLEAD					.83657	2.54	2.73
CONSENS	.58130					2.25	2.20
CONFLIC				-.56040		2.23	3.39
TMSPIR	.56044					2.07	2.55
NATDIF	.72257					2.49	2.82
ENG	.61655					2.15	2.42

Teamwork Results The sample means for the factors derived were compared using t-tests for paired samples; the results are summarised below:

Factor		Mean	Std Dev	Difference in Pop. Mean (2 tail sig)
Achieving	Pre	6.7386	1.702	.005
Cohesion	Post	7.2480	1.540	
Experiencing	Pre	3.4946	1.246	.000
Diversity	Post	4.0462	1.354	
Effective	Pre	3.0910	.987	.964
Participation	Post	3.0962	.847	
Friendly	Pre	1.3192	.894	.039
Atmosphere	Post	0.9137	.865	
Clear	Pre	2.1189	.700	.016
Leader	Post	2.2841	.788	

9.6 Appendix 4: Oilco Team Review Questionnaire

PAGE

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AS ORIGINAL

7. I am personally in agreement with the stated objectives the group was trying to pursue.
- 1 2 3 4 5 6 7
8. The division of labour in our group was conducive to reaching our goals. There was Minimal duplication nor neglect of important functions.
- 1 2 3 4 5 6 7
9. The norms that the leadership of this group exhibited helped its progress.
- 1 2 3 4 5 6 7
10. I felt comfortable threshing out conflicting ideas with anybody in the group.
- 1 2 3 4 5 6 7
11. The benefits I got out of this group was equal, if not better than other groups.
- 1 2 3 4 5 6 7
12. In this group, I am able to get the information that I need to do a good job.
- 1 2 3 4 5 6 7
13. I understood the core purpose and underlying mission of this group very well.
- 1 2 3 4 5 6 7
14. The manner in which work tasks were divided was a logical one.
- 1 2 3 4 5 6 7
15. This group's leadership efforts result in the organisation's fulfillment of its purposes.
- 1 2 3 4 5 6 7
16. My relationship with members of my group was friendly as well as professional.
- 1 2 3 4 5 6 7
17. The opportunity for having my contributions appropriately recognised exists in this group.
- 1 2 3 4 5 6 7
18. This group has adequate mechanisms for binding itself together.
- 1 2 3 4 5 6 7
19. The priorities of this group was clearly understood by its members.
- 1 2 3 4 5 6 7

20. The structure of the group was well designed.
- 1 2 3 4 5 6 7
21. It was clear to me whenever our group leader was attempting to guide my work efforts.
- 1 2 3 4 5 6 7
22. I have established the relationships that I need to do my job properly with my group members.
- 1 2 3 4 5 6 7
23. The satisfaction that I received from being a member of this group was commensurate with the contribution I made.
- 1 2 3 4 5 6 7
24. Other members were helpful whenever assistance was requested.
- 1 2 3 4 5 6 7
25. I knew exactly what we were trying to achieve in our group.
- 1 2 3 4 5 6 7
26. The division of labour of this group helped its efforts to reach its goals.
- 1 2 3 4 5 6 7
27. I welcome our leader's efforts to influence me and the way we carried out our task.
- 1 2 3 4 5 6 7
28. There were no evidence of unresolved conflict in our group.
- 1 2 3 4 5 6 7
29. I felt I got enough incentives (pride) for the tasks that I had to accomplish for the group.
- 1 2 3 4 5 6 7
30. The group's planning and control efforts were helpful to its growth and development.
- 1 2 3 4 5 6 7

[THIS EXERCISE AND THE MATERIALS USED IN CONDUCTING IT HAVE BEEN PUT TOGETHER FOR USE IN THE REGIONAL MANAGEMENT DEVELOPMENT PROGRAMMES OF THE OILCO E. A. REGIONAL TRAINING SCHEME. PLEASE DO NOT USE IN OPCO TRAINING WITHOUT PRIOR CLEARANCE FROM THE ADMINISTRATOR BASED IN OILCO SINGAPORE]

9.7 Appendix 5: Methodological points on video recording and coding

Video Recording

1. Team members referred to the camera whether the researcher was there or not. However the limited presence of the researcher in CHEMCOA due to camera difficulties prompted comments about how they should be interculturally sensitive. So overall it seems less intrusive if the teams can be recorded without a researcher present.
2. Researchers should be equipped to use a wide angle lens.
3. Coding the videos is very tiring and slow work. However this seems to be the trend in modern group research in natural settings. e.g. Gersick 1989, Lee 1993. There is a limit on the amount that can be done on-line and accuracy is difficult to maintain. A rerun over several parts by the researcher and a volunteer showed a 90 - 95 % accuracy rate. It highlighted the need to be very specific about the interpretation of a back channel as opposed to a short participation. It did establish that the methodology can be reproduced.

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