Organizational and Group Antecedents of Workgroup Innovativeness in a Service Industry

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A thesis submitted to Victoria University in fulfilment of the requirements for the degree of Doctor of Philosophy

Faculty of Business and Law

March 2008

ABSTRACT

This study tests a model of Workgroup Service Innovativeness that proposes that a workgroup's climate for innovation mediates the relationship between organizational context (using the constructs: Organizational Climate and Task Design) and workgroup context (Group Self-efficacy, Group Citizenship Behaviour, and Market Orientation) on the one hand, and, Workgroup Service Innovativeness on the other.

Drawing upon workgroup innovation literature, six hypotheses were derived. Using the hotel industry as an example of a service industry, quantitative data were collected from 303 participants from four hotels in Melbourne, Australia, through a 64-item questionnaire based on established 7-point Likert scales. This was followed by five in-depth interviews with team leaders from the participating hotels to gauge differences on the variables under study between workgroups perceived to be innovative and those perceived to be non-innovative.

Exploratory and confirmatory factor analyses and structural equation models were employed to test the slightly modified measures' psychometric properties and test the hypotheses. Except for Organizational Climate, results confirmed the proposed model. But, based on a better data-fitting model, it emerged that the direct impact of Organizational Climate on Workgroup Service Innovativeness is stronger than the hypothesized indirect impact through Workgroup Climate for Innovation. Also, except for Task Design, it appears that the other variables have both direct and indirect effects on Workgroup Service Innovativeness. The qualitative data was generally supportive of the quantitative findings.

Several implications for organizational management are explored, including the need for management to convey to all workgroups in the organization that innovation is valued and support is available for workable customer service improvement ideas. They should motivate workgroups to be innovative by focusing on creativity and innovation as important performance outcomes, rather than only on productivity. Overall, management will promote a climate for innovation, by:

- Providing an innovation-supportive organizational climate
- Jobs high on skill variety, task identity, significance, self-management and feedback
- Cultivating group self-efficacy, market orientation and group citizenship behaviours

This eventually should not only promote a climate for innovation, but also promote Workgroup Service Innovativeness itself.

Among the several limitations of the present research, a major limitation is that it suffers from the common deficiency of cross-sectional designs: the inability to draw causal inferences. Longitudinal studies of the workgroup antecedents of service innovativeness are called for. Finally, the sample in this study was limited to one kind of service industry, the 4-5 star hotel industry, thus limiting generalizability. Clearly it is important to check if the model can hold in other service industry contexts.

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DEDICATION

For my late mother

Maria Paka Nsenduluka

ACKNOWLEDGEMENTS

Throughout my work on this dissertation, I have been privileged to have the direction and guidance of a first-class mentor, Professor Michael Muetzelfeldt. From the inception of my PhD research to its completion, Professor Muetzelfeldt has provided invaluable advice on everything from conceptual framework, through research design, implementation, and to the writing process. Even more crucial was his support and faith in me when I was going through some family rough patches and was almost giving it away.

I am also indebted to my first and second co-supervisors, Patrick Foley and Himanshu Shee. Patrick Foley master-minded the quantitative study of the dissertation and helped me develop some invaluable computer skills. Himanshu has been very helpful with the structural equation modelling, which, I was almost abandoning for a 'softer' procedure. His input to the three papers, with 2 submitted for publication, has been invaluable.
I also thank all those individuals who, in one way or another, made the maturation of the dissertation possible.

PUBLICATIONS

1. Nsenduluka, E. and Shee, H.K. (2007) Organisational and Group Antecedents of Workgroup Service Innovation: A study of the Australian Hotel Industry. Published in the proceedings of ANZAM 21st Annual Conference, Sydney, hosted by the University of Western Sydney, 4-7 December, 2007.
2. Nsenduluka, E. and Shee, H.K. (2007) Organisational and Group Antecedents of Workgroup Service Innovativeness. Paper submitted and accepted, subject to minor changes by the Journal of Business Research, February 2008.
3. Nsenduluka, E. and Shee, H.K. (2007) Organisational and Group Antecedents of Workgroup Service Innovativeness. Working Paper submitted in the Schhol of Management, Victoria University, November 2007

DECLARATION

“I, Evaristo Nsenduluka, declare that the PhD thesis entitled Organizational and Group Antecedents of Workgroup Innovativeness in a Service Industry is no more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work”.

Signature Date

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LIST OF ACRONYMS

All study variables are not capitalised when used in the text in a generic manner.

AHS: Australian Hotels Association

GSE: Group Self-efficacy

GCB: Group Citizenship Behaviour

OCB: Organizational Citizenship Behaviour

CBs: Citizenship Behaviours

OECD: Organization for Economic Cooperation and Development

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Appendix A: Ethics approval and consent forms

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CHAPTER 1
INTRODUCTION

1.1 BACKGROUND

Almost two decades ago, West and Farr (1990) lamented two challenges facing us more than ever:

1. How to adapt successfully to change
2. How to bring about change in work environments which are not conducive to our well-being and effectiveness

Part of the answer to these two pressing questions lie in the study of innovation and creativity at work. Some evidence exists that organizational members who are creative and are able to manipulate their work environments are better adjusted and more satisfied than those not having such chances (Nicholson and West, 1988).

Innovation involves developing relatively novel, new and better ways of doing things. It is well known for its role in sharpening organisational competitiveness and effectiveness within rapidly changing and challenging environments. It plays a key role in introducing beneficial change to society, change that is associated not only with economic prosperity but also with tangible advancements in knowledge which improve the general well being of many in the population (West and Farr, 1990).

Other writers have also stressed the importance of innovation, and change, for both organisations and managers (Caldwell and O'Reilly, 2003; Hoegl et al., 2003; Kalling, 2007; Sundgren and Styhre, 2007). It is therefore little wonder that for decades, the study of innovation has attracted scholars of practically every social science discipline, from political science, sociology, psychology, economics, education and administration, to management and organisational science (Clayton, 1997; Westphal et al., 1997). All scholars from these diverse fields share one belief in common: innovation is the engine that fires the environmental adaptation of organizations, adaptation that in turn is crucial

for the organizations' long term survival. Indeed, as it is sometimes said in business circles, organisations must innovate or perish!

Unfortunately, in spite of innovation's theoretical and applied importance, our understanding of the antecedents, processes, and outcomes of innovation, especially at the workgroup level remains wanting (Agrell and Gustafson, 1996; Anderson and West, 1998; Anderson, De Dreu, and Nijstad, 2004; Wolfe, 1994; Choi, 2000; Janssen et. al., 2004), especially in the service industry.

This state of affairs is regrettable because the role of groups in the innovation process cannot be overestimated (Nijstad et al., 2002; Lantz and Brav, 2007). Growing numbers of organisations rely on workgroups or teams (Usage of these two terms is explored in detail in Chapter 2) to perform work (Sumanski and Kolenc, 2007; Chuang et al., 2004; Baker, 1999). This is more so in the present age of rapid change, when organizations are facing greater demand from their environment to be innovative in the creation and delivery of their products and services in order to stay competitive, and to lead the change process itself.

According to Katzenbach and Smith (1993), there are three common types of groups in the workplace: groups that make or do things; groups that recommend things; and groups that run things. The focus in the present study is on workgroups that make or do things, defined as functional groups that perform ongoing tasks, such as service operations, and have mostly static and permanent membership configuration (Scott and Einstein, 2001).

When managed well, groups stimulate creativity and innovation, make an organization more adaptive to market forces, and ultimately tap into the firm’s deep intellectual resources, ensuring that the organization thrives. Workgroups or teams are capable of high levels of productivity by bringing together knowledge, skills, perspectives, experience, and expertise of workgroup members with different functional know-how. They provide ideal conditions for developing and nurturing new and useful products and processes and as Nijstad and De Dreu (2002) point out, in modern organisations, we see an escalating tendency to restructure work from individual-based to group-based

activity. Leavitt and Blumen (1995) pointed out that among the benefits organizations could gain from using groups are improved creativity and innovation.

With groups being so important and omnipresent in the modern workplace, understanding team effectiveness and ineffectiveness is one of the most challenging and crucial questions work and organisational sciences need to address.

As a contribution towards meeting this challenge, this study is to test a general model of Workgroup Service Innovativeness that tries to explain Workgroup Service Innovativeness using both organizational and group contextual variables.

1.2 INNOVATION IN SERVICES

Innovation in the service sector can be described in terms of technological innovation or non-technological ('soft') innovation (Chapman, et. al., 2002). The former typically leads to new products or services of some form, whereas 'soft' innovation focuses, among other things, on organizational issues and processes that: improve management practices, streamline organizational structures, customise services, enhance networking, improve distribution, and advance procurement (Howells, 2000).

Service innovations are often 'soft' in nature, although technology might act as the vehicle that activates and/or drives the process (Chapman et al., 2002). Pilat (2000) notes that, in contrast to the manufacturing industry, these non-technical improvements in services might not necessarily involve or need formal research and development (R&D).

Innovation, in the service context, can be expressed in terms of the new services launched and the rate of improvement in the rendering of service. In this study, focus is on the hotel industry, and, the 'soft' innovation being investigated is workgroup innovativeness, or, broadly put, extent of creation of new ways of customer service improvement.

1.2.1 Importance of innovation in services

The importance of innovation to economic development has long been recognised, but its role in the service industry has been underappreciated partly because innovation research in this sector has been relatively limited (Sundbo, 1997; Windrum and Tomlinson, 199; Sheehan, 2006). Most of the empirical studies on innovation have been conducted in the manufacturing sector (Koys, 2001), partially due to the myth that innovation is technological in nature (Rubalcaba, 2006). This tends to limit the across-setting generalizability of research findings, more so given that the focus in these studies has been mostly on product innovation and less on ideas and procedures, or service innovativeness. Thankfully, innovation consultants and academic researchers are shifting their sights from products to services as the next important area (Jana, 2007). This dearth of research in service innovation provided impetus for the current study.

The second reason for doing research in the service sector came from the realization of the increasing importance of the service sector to economies. There has been enormous growth in services, at least in the Organization for Economic Cooperation and Development (OECD) countries. Tertiary industries now account for more than 70% of employment and added value (Rubalcaba, 2006; Jana, 2007). Oke (2007) also notes that this sector is growing in western economies, and organizations operating in the service sector are major sources of job creation and economic wealth, and account for more than 75 per cent of the GDP of many developed countries (Gray and Hooley (2002). And, as de Brentani (2001) noted, innovations in services have introduced the greatest level of growth and dynamism over the past several years in terms of economic activity.

A good example is Australia, which has been transformed from an economy based on mining and rural industries to a largely service economy (Chapman et. al., 2002). According to the Department of Industry, Science and Resources (2000) and McLachlan et. al., (2002), the service industry in Australia contributes more than 76 per cent of GDP and accounts for four out of every five jobs.

Unfortunately, as pointed out above, in spite of the service sector's importance to economies, there has been little research into service innovation, particularly at the group level of analysis.

One instructive research project undertaken in the last two decades or so is that reported by Sundbo (1997). He reports on a 1993 investigation of innovation in service firms undertaken in France as part of a project for the Ministry of Education and Research. It included the banking, insurance, electronic information services and management consultancy industries, and concluded that innovation was taking place in all of them. It was found that innovation activities were spread throughout each organization. The innovation process was generally unsystematic, but there was an increasing tendency to manage it. Some service firms had special innovation departments, but it was only in electronic information services that they had the character of R&D departments and were connected to science. In management consultancy, the innovation process was a collective one among professionals.

Sundbo (1997) quotes the researchers as emphasizing the service-goods continuum, meaning that it is often impossible to perceive boundaries between intangible services and physical products. It is more useful to think about services and physical products as the extremes on a continuum. John and Storey (1988), quoted by Sundbo (1997) also stress the close relation to customers that characterises service firms. They claim manufacturing firms can learn from that. However, the service firms were not very efficient in establishing and using external networks, or in involving customers in the innovation process. Only electronic information services had extensive and efficient external networks. The researchers concluded, and the present study agrees, that it is not necessary to develop a new, specific innovation theory for services: the innovation concept and the innovation theories from manufacturing studies may be applied to services.

Over the past few years, Sheehan (2006) has noted that a number of studies have made it increasingly clear that service industry organizations are innovative, albeit in a different way from manufacturing industries. He reports that in the third Community Innovation Survey (CIS3) administered in 15 European countries, the share of service

sector companies reporting they had introduced a new product or process between 1998 and 2000 ranged from about 25% in Spain to more than 55% in Germany. The figures for the same period for manufacturing were 40% in Spain and 65% in Germany. Recent innovation surveys in Australia, New Zealand, Japan and Korea show a similar pattern, with between 18% and 40% of service organizations reporting innovation, with comparable figures for manufacturing being between 25% and 50% (Sheehan, 2006).

It is also notable that innovation rates vary considerably across different areas of the service industry. In the same CIS3 survey quoted by Sheehan (2006), more than 60% of service businesses and 50% of financial service organizations indicated they were innovative, compared with only 40% and 30% of companies in wholesale and retail trade and transport and communication respectively. Comparatively, just below 50% of all manufacturing organizations indicated they were innovative. Japan had comparable results: service industries were more likely than manufacturing firms to report they had been innovative. In Australia, too, the manufacturing sector had a lower share of innovative companies than firms in the communication services. A tendency for large service-sector firms to innovate compared to small ones was also detected.

Because of the growing importance of services to economies, Sheehan (2006) argues that service innovation should be included in discussions of national innovation policies. To the degree that future productivity and employment expansion depend on the success of the service sector, more emphasis need to be placed on the service sector of economies. It is increasingly important that service sector industries have the knowledge and skills they need to innovate. This study is a contribution to that direction.

1.2.3 The context: hotel industry

The service sector in which this study was conducted is the Australian hotel industry, specifically the licensed hotels from four-star to five-star establishments.

Choice of this service sector was based on two reasons: The first was a practical one; the industry was more receptive to the study than other service firms. It had also a peak

body, the Australian Hotels Association (AHS) that, from the very beginning, gave its blessing and was supportive.

The second consideration was that the industry has distinct natural workgroups, in the form of individual departments. Other service industries such as retail trade, finance and transport tend not to have as many departments. Since the study had the group as the level of analysis, the hotel industry was deemed ideal for the study. It is emphasized here that focus of this study was on the service industry, with the hotel industry chosen as an example.

The Australian Hotels Association (AHS) defines licensed hotels as 'hotels which provide tourist accommodation, are licensed to operate a public bar, and provide baths or showers, and toilets in most guestrooms….' (AHS, Cat 8635.0, 1986).

According to what is known about the industry during the past decade or so (Bell, 1992; Benson and Worland, 1992; Davidson, M.C.G, 2000, 2003) some generalisations can be drawn. To start with, not only do Australian hotels compare favourably with hotels overseas but also some of the Australian five star establishments are amongst the best in the world. The accommodation business is a key part of the tourism and hospitality industry and, during the early ninties did experience speedy growth mainly due to a general expansion in demand for services, increasing levels of personal income, and other pro-growth factors. However, the past few years have seen occasional slumps in business mainly due to a decline in tourism activity such as air travel partly due to external factors such as the Bali (Indonesia) bombing of 2002 and the September 11 bombing of the New York world trade Centre.

In terms of patronage, industry guests come from abroad, inter and intra state and from the same town/city in which the hotel is situated.

In terms of technological development, hotels generally lag behind other industries with the main developments being in computerisation of administration systems, electronic communications with suppliers, energy usage reduction mechanisms and specialised items of equipment such as beer-cooling systems (Benson and Worland, 1992). Thus, in

this industry, innovation is most likely to occur in procedures and processes rather than in products, more so given that the industry is customer service driven.

Because of the nature of the job requirements and the need for high quality of personal service delivery, the hotel industry is very labour intensive and this may give partial explanation to the relative lag in technological development.

There are no major variations in work systems and processes in the industry and these systems and processes tend to be modelled on overseas approaches. Also, international hotel chains often adopt uniform practices and train senior employees according to these uniformities.

Most major hotels are owned and managed by overseas companies although local management usually has a lot of autonomy. Industry guidelines provide pricing guidelines but the major determinants of price are cost and market forces, and competition in the sector is intense and, the provision of high quality service has become essential to survival.

1.3 LEVELS OF INNOVATION STUDY

In studying innovation, researchers typically use one of three levels of analysis: the individual, the group, or the organization (Staw, 1984; Agrell and Gustafson, 1996; Anderson and West, 1998; Perry-Smith, and Shalley, 2003; Mumford and Licuanan, 2004)). At each of these levels, organizational analysts explore methods and conditions that promote creativity and innovation. The challenge is to try and decipher what makes some individuals, groups, or organizations more innovative than others.

As mentioned earlier, of the three levels of analysis, that of the group has received by far the least attention. While there is a very large research literature on both individual creativity and organizational innovation at work (Kimberly, 1981; Pierce and Delbecq, 1977; Van de ven 1986; West and Farr, 1990; Mumford and Licuanan, 2004; Jan et al., 2004; Pirola-Merlo and Mann, 2004), several authors have noted a paucity of research examining innovation processes at the level of the workgroup (Guzzo and Shea, 1992,

Hackman, 1992; King and Anderson, 1995; Anderson, 1992; Burningham and West, 1995; Scott and Bruce, 1994; Agrell and Gustafson, 1996; West and Anderson, 1996; Choi, 2000) even though workgroups or teams play a major role in originating and implementing many innovations.(West and Farr, 1990; Anderson and King, 1993, Anderson and West, 1998).

This study is a response to the current dearth of research into workgroup innovation in the service industry. In particular the research:

1) Clarifies and deepens our understanding of the antecedents of Workgroup Service Innovativeness.

2) Integrates some important but currently disparate variables related to workgroup innovation into a single model. More importantly, the study:

    - Tests the importance of organizational level variables (previously linked to individual and organizational innovations but virtually ignored at the group level of analysis) in explaining the variance in Workgroup Service Innovativeness.

    - Investigates the organisational and workgroup antecedents of a workgroup Climate for innovation.

3) Suggests ways in which both managers and trainers can act differently in order to facilitate a creative workgroup climate within their Organisation.

4) Suggests some future research directions

The project is primarily important for three key reasons.

First, it helps close the gap between our understanding of innovation at the group level and the other two types, individual and organizational innovations. It is hoped that this study will make it possible to come up with empirically grounded recommendations for practicing managers and team leaders, especially if the model of Workgroup Service Innovativeness being tested proves to be sufficiently robust. Managers will learn how service innovativeness can be cultivated for their benefit.

Secondly, the project is an improvement on previous designs. The majority of innovation studies have been correlational in nature. Results from such research designs are not of much help to the practitioner. We need studies adopting multivariate designs to assess the influence of combinations of factors. These can have more explanatory power and can therefore be of better help to the practitioner.

A third possible significance of this study lies in the fact that the majority of previous studies in innovation have been carried out in the manufacturing environment, making their applicability or relevance to the service industry, probably minimal since the two environments are not quite similar. This study is an attempt to overcome this deficiency. It is hoped that the project will reveal how innovation operates in service industry workgroups.

1.4 SCOPE OF THE RESEARCH

Given the voluminous and diversity of the literature and research on innovation, it is necessary to draw boundaries to the scope of the current study. Firstly, this research excludes the literature on creativity and creative problem solving. It also excludes sociological and systems-based work and the voluminous literature on the diffusion of innovations between organisations (Rogers, 1995).

Secondly, the study will be done in the service sector as opposed to the manufacturing sector in which the majority of empirical studies on innovation have been conducted (Koys, 2001).

Finally, most empirical studies can easily be identified as being at the individual, group or organisational levels of analysis (Staw, 1984; King and Anderson, 1995; Agrell and Gustafson, 1996; Choi, 2000). The level of analysis in the present study will be the group.

1.5 SUMMARY

This introductory chapter introduced and aimed to explain the importance of the concept of innovation. The nature and importance of innovation in services were reviewed and the three levels of analysis, the individual, the workgroup, and the organization were acknowledged. The relative paucity of innovation research at the workgroup level was noted as a key driver for undertaking the present study. Finally, the context and scope of this study were explained. Chapter 2 reviews and critiques the literature on workgroup innovation.

CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of this chapter is to review the terminology used in the study of workgroup innovation. The chapter reviews usage of the workgroup and team terminology, defines innovation and presents an overview of workgroup innovation research over the past decade or so. It ends with a critique of that research, as a way of making the case for the present study. A more detailed literature review is given in Chapter 3.

2.2 WORKGROUPS OR TEAMS?

According to Alderfer (1977) and Hackman (1987), workgroups are defined by the concerted presence of the following characteristics:

- They are social entities embedded in larger social systems, that is, in organisations.
- They perform one or more tasks relevant to their organisation's mission.
- Their task performance has consequences that affect others inside or outside the organisation.
- They are made up of individuals whose work roles require them to be, to some appreciable extent, interdependent.
- They have membership that is identifiable not only to those in the group but also to those outside it.

These attributes can apply not only to groups that provide services such as those in the banking, insurance and hotel industries, but also to groups in manufacturing organisations, and others such as decision making groups, health care groups, and so on.

Workgroups may be formal or informal, the latter being groups which have no formal organisational identity or function but which are nevertheless present and potentially influential in organisations. Formal groups are those which have an identity and set of functions derived from and contributing to the achievement of organisational objectives.

Defining exactly what constitutes a 'group' is no easy task. The boundaries of group membership tend to be rather porous, with new members joining and old ones leaving at a fairly stable rate (Steers and Porter, 1979). Group membership also tends to be multiple with members of one group also being members of several other groups, thereby dividing their loyalties and time. This is one reason why we tend to discuss and define groups more in terms of processes than in terms of specific members and their characteristics. A typical definition of a group would involve the notion of a collectivity of people who share a set of beliefs or norms, who generally have differentiated roles among group members, and who jointly pursue common goals (Sahdra and Ross, 2007; Branscombe et al., 1993; Steers and Porter, 1979).

Group formation happens for a variety of reasons. Some groups are simply a product of proximity. The daily interactions with one's co-workers tend to facilitate group formation. Other groups form out of economic necessity. For instance, where bonuses are paid to employees on the basis of group productivity, motivation exists for being a member. Other groups form as a result of various social psychological pressures. Such groups can satisfy employees' social needs for interaction, reinforce feelings of self-esteem, and provide emotional support in times of stress. Whatever the reason for their formation, they can be a strong factor in the determination of both individual job effort and individual satisfaction.

Since the Hawthorne studies (Parsons, 1974), and the other research they stimulated, we have developed quite a good understanding of the more common characteristics of a group. First, as mentioned earlier, there are shared beliefs (norms) that are held by the group members and that guide their behaviour. Second, various group members often

have specific duties or role prescriptions for which they are accountable. Groups usually have acknowledged control procedures, such as fear of ostracism, to reduce deviant behaviour from their established norms. In addition, they develop their own systems or patterns of communications, which usually include special or technical words (jargon). Also, groups tend to have informal leadership aimed at enforcing the norms and assuring goal attainment. Finally, groups are sources of support for their members. Individual members with little or no job satisfaction from their dull and repetitive jobs may resist the temptation to quit because they really enjoy their co-workers, who provide support, comfort, and satisfaction (Parsons, 1974).

A team may be defined as a 'collection of individuals who are interdependent in their tasks, who share responsibility for outcomes, who see themselves and who are seen by others as an intact social entity embedded in one or more larger social systems (for example, business unit or the corporation), and who manage their relationships across organizational boundaries' (Cohen and Bailey, 1997, p.241).

Cohen and Bailey identify four types of teams: work teams, parallel teams, project teams, and management teams.

Work teams refer to continuing work units, responsible for producing goods or providing services. They are found in both manufacturing industries such as mining and textiles, and in service industries such as hotels, insurance and banking.

Parallel teams handle functions that the regular organization is not equipped to perform well, by pulling together people from different work units or jobs. They are used for problem-solving and improvement-oriented activities. Quality circles, quality improvement teams, task forces, and employee improvement groups are all examples of parallel teams.

Project teams are ad hoc teams brought together from different disciplines and functional units to work on a particular project. They are time-limited and produce one-off outputs. New product development teams are one example of a project team.

Management teams coordinate and provide direction to the sub-units under their supervision. They are responsible for the overall performance of a business unit.

Managers responsible for each sub-unit such as vice presidents of marketing, manufacturing, and research and development exemplify management teams.

Following Guzzo (1996) and Cohen and Bailey1997), the words ‘workgroup’ and ‘team’ will be used interchangeably in the present study. According to these authorities, no real distinction exists between ‘groups’ and ‘teams’. The two share too many dynamics although it can be said that all teams are groups but not all groups are teams. The term group is fairly expansive and can easily accommodate the term team. Cohen and Bailey (1997) point out that some authors have used the label ‘team’ for groups that develop a high degree of ‘groupness’ but they argue that such a convention is not yet widely shared to warrant differentiation in the use of these two terms.

Groups can be classified in various ways. For example, they can be classified as either formal or informal. In a formal group, important objectives and roles performed by organizational members are predetermined, for example, the quality and quantity of output, the requirement to stick to safety standards, and the desired behaviour in dealing with charge-hands and colleagues are either implicit or made explicit. It is also possible to find informal norms and behaviour in formal groups. Informal groups, by contrast, develop in a spontaneous manner, and, the objectives and roles found in this type of group arise from the current interactions of members. Once these objectives and roles are established, members tend to subscribe to them because they consider themselves a group member or wish to be considered as such. A friendship or interest group, which consists of individuals who share one or more characteristics and perhaps meet also outside the place of work, could be classified in this context.

Groups can also be classified as either primary or secondary. A primary group is small in size with frequent face-to-face contact and close and often intimate relationships. A playgroup, sports team, family, or tightly-knit group of accountants in an organization could constitute a primary group. A secondary group assumes more of an impersonal nature and may be geographically distant. A hospital, school or company could fall into this category. This type of group is not necessarily a psychological group, but membership of it could influence a member’s outlook.

Reference groups may possess a certain attraction and, as a result, individuals may wish to join them, or simply to identify with them in some way. Therefore, reference groups can influence a person's outlook without the person being a member of it.

Counteracting groups have opposing aims and compete for scarce resources. In the process, they may engage in a struggle for power and advantage. With regard to what goes on within each individual group, unity of purpose and mode of operation may feature prominently.

According to McKenna (2006), groups are guided by social norms that reflect the groups' values. These are guides or expectations about what behaviour should be, and as such, allow individuals to anticipate other people's behaviour in specified circumstances. They are not necessarily followed in all circumstances. However, they can be enforced, and people are either positively rewarded for complying with them or punished for not complying.

In the present study, focus is on formal groups, or, 'teams' as groups are known in the language of the organisational sciences, especially among practitioners (Guzzo and Dickson, 1996). These formal groups or teams are what Anderson and West (1998) proximal workgroups. They define the proximal workgroup as 'either the permanent or semi-permanent team to which individuals are assigned, whom they identify with, and whom they interact with regularly in order to perform work-related tasks' (1998, p.236). Anderson and West (1998) argue that individuals tend to identify most closely with their proximal workgroup and to be committed to the workgroup's ongoing social structure, although the term, 'workgroup' excludes purely social cliques in the workplace because the prerequisite of task-interdependence is considered an essential component of the definition. People can be members of multiple groups in the workplace, but focus in this thesis is specifically upon the group within which their daily activities at work are undertaken. An example is the hotel reception crew. In other words, the study examines workgroups that do service operations. These are functional groups that perform ongoing tasks (service operations) and have mostly static and permanent membership configuration (Scott and Einstein, 2001). Since the sample is

drawn from the hotel industry, ‘workgroups’ will be synonymous with ‘hotel department’.

2.3 THE CONCEPT OF INNOVATION

According to Zaltman *et al*. (1973), the term *innovation* is usually used in three different contexts. In one context it is synonymous with invention; that is, it refers to a creative process whereby two or more existing concepts or entities are combined in some novel way to produce a configuration not previously known by the person involved. A person or organisation performing this type of activity is usually said to be innovative. Most of the literature on creativity treats the term innovation in this fashion (Zaltman *et al*. 1973).

Myers and Marquis (1969, p.109) use innovation in this fashion and define it as ‘…a complex activity which proceeds from the conceptualisation of a new idea to a solution of the problem and then to the actual utilisation of a new item of economic or social value. (Alternatively) innovation is not a single action but a total process of interrelated sub processes. It is not just the conception of a new idea, nor the invention of a new device, nor the development of a new market. The process is all of those things acting in an integrated fashion’ (West and Farr, 1990, p. 9).

This view of innovation as a process starting with the recognition of a potential demand for, and technical feasibility of, an item and ending with its widespread utilisation is perhaps the broadest use of the term innovation in the existing literature. Barnett (1953) also views an innovation broadly by emphasising objectively measurable qualitative differences. According to Barnett (1953, p.7), an innovation is ‘any thought, behaviour or thing that is new because it is qualitatively different from existing forms’.

In the second context, innovation is used to describe only the process whereby an existing innovation becomes a part of an adopter's cognitive state and behavioural repertoire. Knight (1967, p. 478) defines innovation Thus: ‘An innovation is the

adoption of a change which is new to an organisation and to the relevant environment.' He considers the process of innovation 'as a special case of the process of change in an organisation. The two differ only in the novelty of the outcome' (Knight, 1967, p.479).

In the first usage of innovation, the individual, group or organisation can be innovative without adopting; whereas in the second context he can be innovative without being inventive although it is acknowledged that one could argue that the adoption or internalisation of an innovation might be viewed as an inventive activity because two previously unconnected constructs, the individual or organisation and the innovation, are combined in some novel way Zaltman *et al*. (1973).

In the third context, innovation refers to the idea, practice, or material artefact that has been invented or that is regarded as novel independent of its adoption or non adoption. The emphasis here is on description of why something is novel, whereas invention and adoption involve processes. Zaltman *et al*. (1973, p. 10) define innovation as 'any idea, practice, or material artefact perceived to be new by the relevant unit of adoption'. This position is akin to that taken by Rogers and Shoemaker (1971, p. 19): 'An innovation is an idea, practice, or object perceived as new by the individual. It matters little, as far as human behaviour is concerned, whether or not an idea is 'objectively' new as measured by the lapse of time since its first use or discovery… If the idea seems new and different to the individual, it is an innovation.'

Thus, existing definitions of innovation range from highly specific foci on technical innovations to very broad generalisations, too imprecise to enable operationalisation (West and Farr, 1990). Secondly, as West and Farr (1990) observe, a good number of existing definitions suggest that the value of innovations lies in their contributions to profits. This is too limiting because innovation may not always be economically valuable for an organisation (Kimberly, 1981) and the seeking of profits is not necessarily in the best interests of all those affected by the innovation. West and Farr (1990) also point out that analysis of definitions reveals wide disparity between them but some common themes do emerge such as: novelty, an application component, intentionality of benefit and some reference to the process of innovation. A definition of

innovation encompassing all these and one that will be adopted in the context of the present study is that given by West and Anderson (1996).

West and Anderson, (1996, p. 681) define innovation as:

‘ *the intentional introduction and application within a role, group or organisation of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organisation or wider society’*.

Several aspects of this definition stand out. First, innovation is restricted to intentional attempts to derive anticipated benefits from change. Second, a broad perspective on the anticipated benefits, rather than a sole criterion of economic benefit, is adopted.

Thus, possible benefits might be personal growth, administrative efficiency, better interpersonal communication, improved group cohesiveness, staff well being, etc. This definition also allows for the introduction of a new idea designed not to benefit the role, group or organisation, but to benefit the wider society. Further, the definition is not restricted to technological change but subsumes new ideas or processes in administration or human resource management.

This definition also requires an application component, thus encompassing what many would regard as the crucial social element of the process of innovation. Finally, it does not require Absolute novelty of an idea, simply (following Zaltman et al., 1973) that the idea be new to the relevant unit of adoption. Thus, a team bringing new ideas to an organisation would be considered an innovation within the terms of the definition.

This definition, together with that of innovativeness (elaborated on in Section 3.3 of Chapter 3) given by Daft (1978), and adopted in this study, was deemed the most relevant to the current study, given that in the service industries, such as the hotel industry, adopting, or introducing and applying new or improved ways of customer service, at a regular level (continuous improvement) can be viewed as central to service innovation.

2.4 INNOVATION, CREATIVITY AND CHANGE

How is innovation at work to be distinguished from creativity and organizational change, given that the three concepts overlap?

West and Farr (1990, p.10) cite two definitions of creativity: Rogers (1954) and Amabile (1983). According to West and Farr (1990, p.10), Rogers (1954) defined creativity as '…the emergence in action of a novel relational product, growing out of the uniqueness of the individual on the one hand, and the materials, events, people or circumstances of his life on the other'. Examples Rogers gave included painting a picture, developing a scientific theory, discovering new procedures in human relationships, composing a symphony, devising new instruments of war, and, creating new formations of one's own personality in psychotherapy. West and Farr (1990, p.10) cite Amabile (1983) defining creativity as 'the production of novel and appropriate ideas by one individual or a small group working together'. Amabile brings in the notion of appropriateness to draw the line between the creative and the merely chaotic.

The concepts creativity and innovation are often used interchangeably in research studies, and the distinction between the two terms may be more one of emphasis than of substance (West and Farr, 1990). Nevertheless, attempts have previously been made to distinguish the two terms. Mumford and Gustafson (1988) claim creativity has to do with the production of novel and useful ideas, and innovation has to do with the production or adoption of useful ideas and idea implementation (Kanter, 1988; Van de Ven, 1986). Although creativity is often framed as 'doing something for the first time anywhere or creating new knowledge' (Woodman, Sawyer, and Grffin, 1993, p. 293), innovation also encompasses the adaptation of products or processes from outside an organization.

West (2001) draws the distinction between creativity and innovation by stating that the former can be viewed as the development of new ideas while innovation implementation is the process of applying those ideas. He argues that, by viewing the distinction in this, it becomes clearer that creativity is more a characteristic of individuals, while innovation implementation tends to be accomplished by teams

West and Farr (1990, p. 10) attempt to distinguish creativity from innovation by quoting The Oxford English Dictionary as defining ‘create’ as ‘bring into existence, give rise to’. To innovate is to ‘bring in novelties, make changes’. They argue that it appears the difference between the two concepts is one of emphasis rather than category but creativity seems to be understood more as absolute novelty rather than the relative novelty of innovation. They further contend that innovation is concerned with broader processes of change.

West and Farr (1990) suggest that another helpful way of distinguishing the concepts is to see creativity as the ideation component of innovation and innovation as encompassing both the proposal and applications of new ideas. Innovation may involve creativity, for example, the discovery and development of a new process for refining oil can be classified as an innovative process that involves creativity. But not all innovations will be creative. West and Farr (1990) gave the example of setting up autonomous teams in the workplace for the first time. Such a move would not be creative simply because the use of such teams is already widespread. But, such a move would be innovative from the perspective that it is new to the unit that adopts it.

As stated in Section 2.3, innovation, according to West and Farr (1990) also involves beneficiary intent. They gave the example of a poet whose writing is creative but with no expectation of benefit apart from the reward inherent in the writing effort itself, as an activity in which there is no intentionality of benefit. They further argue that innovation has a definite social and practical component because it has direct or indirect impact upon other people affected by the role, or other people in the workgroup, firm or larger society. The distinction between innovation and creativity is mostly defined by that social component necessity. The authors also posit that, whereas creativity is a solo mental process in which events occur cognitively within the person, innovation is a social process with the elements of the process being events that happen between people. Finally, they contend that there is interaction between the innovators and those likely to be affected by the innovation, and there is also recognition that the knowledge that one’s action will have impact on others influences that action.

Innovation may also be distinguished from organisational change. According to West and Farr (1990), in organizational terms, all innovation is change, but, not all change is innovative. They gave the example of unplanned or undesired change, such as reducing working hours on an extremely hot summer day would not qualify to be labelled as innovation. Nor, would the routine reduction in hotel staff levels in winter, when business is low. Finally, unlike with innovation, there is no intentionality of direct benefit with the introduction of organizational changes. Many such changes are minor adjustments to routine changes to the internal or external environment.

Although the concept of innovativeness is further elaborated in Chapter 3, its definitional use is similar to that cited above by West and Farr (1990), and, an effort has been made to distinguish it from the two related concepts: creativity and organizational change.

2.5 THE LITERATURE ON GROUP-LEVEL INNOVATION

As pointed out in the introductory chapter, historically, innovation at work was studied only at the individual or organisational levels, but in recent years the importance of workgroup attributes has been emphasised.

In an authoritative review of group performance, Guzzo and Shea (1992) have proposed an input-process-output model of group performance as a plausible overarching framework to guide research on the antecedents of workgroup innovation. At the input level are group variables such as knowledge, skills, and abilities; the composition of the group; and, aspects of organizational context such as the task and associated goals, reward systems, information systems, and training resources.

The process stage comprises of the interactions among group members, information exchange, and patterns of participation in decision-making and social support and sanctions for group-related behaviour.

Outputs refer to products of the group's performance but may also include group viability and the well-being, growth, and satisfaction of group members.

Based on this framework, West and Anderson (1996) have proposed and tested an input-process-output model of group innovation in a longitudinal study of top management teams in 27 hospitals. They examined relationships between group and organizational factors and team innovation. They predicted that group size, resources, team tenure, group processes, and proportion of innovative team members would affect the level and quality of team innovation. The results suggested that group processes best predict the overall level of team innovation, whereas the proportion of innovative team members predicts the rated radicalness of innovations introduced. Resources available to teams do not predict overall team innovation. The quality of team innovation (radicalness, magnitude, and novelty) may be determined primarily by the composition of the team, but overall level of innovation may be more a consequence of the team's characteristic social processes.

The next section explores this model further. It should be emphasized that during the last decade, there has been a comparative absence of research examining the processual dynamics of workgroup innovation. In recent years, however, there has emerged a growing number of published studies demonstrating the influence of various factors upon innovation. It is also pertinent to point out here that whereas most of these studies have taken place in the health and knowledge industries, little, if any, workgroup innovation research has been undertaken in the service industries. This is one of the reasons for undertaking the current study.

2.5.1 Structural Factors

At the Guzzo and Shea's (1992) general model's input stage are structural factors that are purported to influence innovation. Important structural factors include composition, longevity, leadership, cohesiveness, personality, organizational structure, and climate.

2.5.1.1 Composition

The influence of group size has been hypothesised to influence innovation.

Wallmark (1973) studied the importance of size in research groups and found a positive correlation between group size and group productivity. This was interpreted as resulting

from the greater number of possible contacts and consequent intellectual synergy. Stankiewics (1979) examined the innovativeness and productivity of 172 Swedish academic groups. The groups were randomly selected from the fields of natural science and technology and ranged from 2 to 8 in size. The typical group contained 4-5 scientists. A positive correlation was confirmed between group size and productivity in groups high on cohesiveness and with very experienced leaders, but in groups with low cohesiveness, Stankiewics found an optimum size of seven members. Thus, there appears to be an interaction effect between size and cohesiveness, since cohesiveness mediates between size and productivity.

Geschka (1983), in a theoretical article, proposed that specially trained innovation planning teams in organisations should contain 6-8 members from different functional areas and also include opinion leaders who can help in the implementation phase. The combination of a small workgroup and the presence of an opinion leader, who pays attention to dissenting minorities, should especially favour innovation (Geschka, 1983). Avoiding excessive homogeneity of experience and training of individual members has been advocated as a necessary condition for securing a diversity of views, and hence innovation (Geschka, 1983; Kanter, 1983).

The need for 'stimulating colleagues' has also been stressed (Parmeter and Gaber, 1971) but more precise knowledge of how composition of the group can affect innovation is required. King and Anderson (1990) suggest that social psychological research (e.g. Nemeth and Wachtler, 1983; Maas and Clark, 1983) on minority influence in groups may offer pointers here, suggesting that a minority of dissenting members in group decision-making can lead to more possibilities being examined and potentially to better quality decisions. This is in line with Janis' (1982) recommendations for avoiding 'Group Think' which include the presence of an individual who will play a 'devil's advocate' role, ensuring all decisions made are thoroughly questioned. King and Anderson (1990) argue that it would be naïve to presume that the best way to ensure that a group is innovative is simply to ensure that it is composed of highly creative individuals.

2.5.1.2 Diversity in Tenure

There is evidence that new employees who join an organization at the same time develop similar understandings of its events and of its technology (Zenger and Lawrence, 1989). This so called ‘tenure homogeneity’ has been positively related to frequency of communication, social integration within the group and innovation (Ancona and Caldwell, 1992). Ancona and Caldwell (1992) found that differences in tenure diversity had its effect more on internal group dynamics in the sense that it improved task work such as goals clarification and prioritizing. This clarity was also related to high ratings of team performance. These results imply that tenure diversity brings more creativity to problem-solving and product development but that there is less capability for implementing innovation (Ancona and Caldwell, 1992).

2.5.1.3 Longevity

Another variable, which has been discussed as a possible influence on innovation, is group longevity. Lovelace (1986) suggests that research scientists will be more creative if not assigned to permanent groups, and Nystrom (1979) too argues for the advantages of relatively short-lived groups, at least as far as the early stages of the innovation process are concerned. A study by Katz (1982) investigated the performance of fifty R andD teams over several years. An inverse relationship between longevity and innovativeness was reported: the longer groups had been in existence, the less innovative they became. Other authors have, on the basis of these findings, argued for restricting the active lifespan of groups, as a means for maximising innovativeness (Nystrom 1979; Payne, 1990). Work by applied Psychologists into group development and task performance sheds more light upon the relationship between group innovation and development over time. In initial experimental studies Gersick (1989) presented groups of subjects with a simulated project task of one hour's duration, informing subjects in advance of this time limitation. Groups were videotaped and their interpersonal behaviour subsequently analysed. The results show an unequivocal change in subjects' task orientation at roughly the midpoint of the lifespan of the group, whereby individuals reappraised their approach to the task, developed new ideas, and initiated modified work practices. Gersick concludes that groups adhered to a ‘punctuated equilibrium model of group development’, instituting a quantum leap in their work styles at the known midpoint of the group's lifespan. Subsequent field studies

of this effect, e.g. Gersick, 1989, have confirmed the salience of the punctuated equilibrium model in naturally occurring workgroups, and thus hint at the applicability of this model to innovation processes in real-life task groups of fixed-term nature.

2.5.1.4 Leadership

Many writers have concluded that a democratic-collaborative style encourages group innovation (Nystrom, 1979). Farris (1973) showed that in research laboratories, the more innovative groups had more collaboration with their supervisors and with each other than the less innovative groups. Similarly, West and Wallace (1988) found that peer leadership discriminated significantly between highly innovative and less innovative teams in primary health care practices, as reliably rated by independent experts. The highly innovative teams exhibited a higher degree of leadership support, goal emphasis, team building and work facilitation.

Although at all levels of analysis, innovation is held to be encouraged by high levels of discretion (Amabile, 1983; Nicholson and West, 1988), there is evidence from work on scientific research teams that the highest levels of innovation are elicited by leaders who exerted moderate control over the group (Farris, 1973; Pelz and Andrews, 1976). But, as King and Anderson (1990) point out, a major problem with such research into leadership is that group factors have been neglected and research has generally not gone beyond applying individual level concepts directly to groups. They consider that until more is known about the kind of group environment that encourages innovation, it is premature to make recommendations about how leaders may influence groups to be innovative.

Manz et al. (1989) advocate more of a contingency approach, arguing that multiple leadership approaches seem to be ideal in different innovation contexts and at various stages of the innovation process. As Anderson and King (1993) argue, a model of leadership moving from nurturing behaviours at the early stages of group innovation to stimulate and support ideas, through consensus-seeking behaviours during the middle stages of the proposal, to delegation and checking behaviours during and after innovation implementation, is ideal for workgroup innovation. But, they caution that

additional research is needed to examine in greater detail the relation between leadership style and the development of innovations over time.

2.5.1.5 Cohesiveness

The one specifically group level factor which is commonly mentioned as an antecedent to innovation is cohesiveness. However, on the basis of current knowledge of the effects of cohesiveness on group performance, contradictory influences are evident. On the one hand, it is argued that cohesiveness facilitates innovation because it increases feelings of self-actualisation and psychological safety (e.g. Nystrom, 1979). On the other hand, an important factor in producing high cohesiveness is group homogeneity which is likely to be an inhibitor of innovation because it leads to unwillingness to question group decisions, and a focus on relationships rather than tasks in the extreme leading to the 'Group Think' phenomenon (Janis, 1982).

Not surprisingly then, the empirical evidence is ambiguous. Wallace (1988) found that cohesiveness discriminated significantly between health care teams previously identified as high or low in innovativeness by independent expert raters, but that across all the practices there was no significant correlation. Further research is necessary to determine whether a simple linear or some form of curvilinear relationship exists between innovation and cohesiveness. Also, the possibility that the type of relationship varies according to the content and context of the innovation should be investigated.

Nystrom (1979) had earlier attempted to resolve the contradiction by stating the need to alter group characteristics according to the current stage of the innovation process. Early on loosely joined, heterogeneous groups are required to facilitate the production of innovative ideas, while later groups should be cohesive and homogeneous to facilitate implementation. The problem, of course, is how such a structural transition could be achieved in practice, especially as any given group may be involved in the introduction of several innovations at the same time, all at different phases in the process.

2.5.1.6 Personality

The personality or dispositional characteristics of group members will influence the group's innovativeness. At the very least, the extent and quality of group innovation will be determined by the proportion of innovative individuals who constitute the group (Burningham and West, 1995). Here, the assumption is being made that the innovation process starts within individuals. The generation of a new idea is a cognitive process that is located within individuals, albeit fostered sometimes by interaction processes in teams (Mumford and Gustafson, 1988). According to this Hypothesis, a significant proportion of the variance in team innovation will therefore be explained by the proportion of individuals in the team with a high propensity to innovate. In a study of 13 Oil Company teams, Burningham and West (1995) found that individual propensity to innovate was superior as a predictor of team innovation, measured by reports from selected expert observers, to measures of group climate and process. Indeed, individual innovation appears to be influenced primarily by individual personality differences rather than the social psychological context. In a 17-month, three-stage study of 435 health care workers, Bunce and West (1995) found that individual propensity to innovate, conceptualised as a personality orientation, was a better predictor of changes in levels and quality of work role innovation over time than were group climate factors.

2.5.1.7 Group Structure

It has been proposed that group structure influences innovation. Meadows (1980) has attempted to apply Burns and Stalker's (1961) concept of 'organic' organisational structure to small working groups. A highly 'organic' group has characteristics such as an integrative, team-based approach to tasks, blurred boundaries of authority and influence, professional commitment, etc. In a study involving R&D and technical departments in the chemical and telecommunications industries, he found a significant positive relationship between their measure of *organicity* and the perceived innovativeness of group tasks. However, the relationship between these factors and actual innovative performance remains to be tested.

2.5.1.8 Climate

The climate of the organization in support of innovation and teamwork may also be important to workgroup innovation West and Anderson, (1996). Simply put, climate refers to the shared perception of the organization by its members. It looks at the existing connections between individuals, groups, and performance and lends itself more easily to change by management in their attempts to influence the behaviour of workers (McKenna, 2006)

A number of educational and industrially based studies have demonstrated that a climate supportive of innovation facilitates effective innovation (Knapp, 1963; Pelz, 1956; 1963; Torrance, 1965). Kozlowski and Hults (1987) found that climate (including factors such as supervisor support for innovation) is a predictor of factors related to individual innovative behaviour. In a study of 54 manufacturing organizations, Pillinger and West (1995) found that innovative organizations had climates characterised by an emphasis on quality, good communication, teamwork, interdepartmental cooperation, reflexivity, and support for innovation.

To summarise, although existing research has addressed the influence of composition, leadership, cohesiveness, longevity, structure, and climate upon workgroup innovation, it has mostly done so indirectly, and considerable further research is required. In particular, it is surprising how atheoretical is most of the work taking an antecedent approach to group level innovation, given the extensive social psychological literature on groups which could offer much to the development of a theoretical foundation.

2.5.2 Group Processes

An examination of the major reviews of the group performance and innovation literature reveals four group process characteristics that theoretically would be expected to have a strong relationship with levels of group innovation (Agrell and Gustafson, 1996; Anderson and King, 1993; Guzzo and Shea, 1992; King, 1990; Wolfe, 1994). Top of the list of factors determining group effectiveness is the presence of group goals

or objectives (Guzzo and Shea, 1992; Pritchard, et. al., 1998). The clarity or specificity of goals has also been shown to predict group performance outcomes (Weldon and Weingart, 1993). To combine efforts effectively, group members have to understand collectively what they are trying to achieve (West and Anderson;, 1996). Much research also indicates that involvement in goal setting fosters commitment to goals (Latham and Yukl, 1975; Locke, 1968) and consequently better group performance (Weldon and Weingart, 1993). In the context of workgroup innovation, clarity of team objectives is likely to facilitate innovation by enabling focussed development of new ideas, which can be assessed with greater precision than if team objectives are unclear.

However, there is little direct evidence relating clarity of team goals and member goal commitment to the innovativeness of groups. In one rare study looking at such a relationship, Pinto and Prescott's (1987) investigation of 418 project teams, found that a clearly stated mission was the only factor that predicted success at all stages of the innovation process (conception, planning, execution, and termination).

A second important factor in determining group effectiveness is participation. Participation has been shown to have the tendency to foster greater effectiveness and commitment (Bowers and seashore, 1966; Coch and French, 1948; Lawler and Hackman, 1969; Wall and Lischeron, 1977). West and Anderson (1996) provide reasons why participation plays a key role in workgroup innovativeness. Firstly, sharing of information and influence over decision making within groups combined with a high level of interaction among group members is more likely to promote the cross fertilisation of views that can spawn creativity and innovation (Cowan, 1986; Mumford and Gustafson, 1988; Porac and Howard, 1990). Investment in the outcomes of decisions and the offering of new and improved ways of working (innovation) occur when group members participate in decision making through the sharing of information, having influence, and interacting with those involved in the change process (Kanter, 1983; Anderson and West, 1992). Higher levels of innovation have occurred in Europe where schemes to raise participation have been introduced among industrial workers (Duell and Frei, 1986; Fricke, 1975), while there is consensus among organizational researchers that high centralisation of decision making, or, low participation stifles innovation (Anderson and King, 1993; King, 1990).

A central theme in the innovation literature suggests that innovation is more likely to occur in organizational or group contexts in which there is support for innovation or innovativeness is rewarded rather than punished (Amabile, 1983; Kanter, 1983). West (1990), defines support for innovation as the expectation, approval, and practical support of attempts to introduce new and improved ways of doing things in the work environment. Within groups, new ideas may be routinely rejected or ignored, or they may find both verbal and enacted support.

Thus, it appears, on the basis of previous research literature that the four group factors: team objectives, participation, task orientation, and support for innovation are important elements for group innovativeness (West and Anderson, 1996).

Based on these four factors, West (1990) has developed a model of workgroup climate predicting innovation in organisations. The model comprises four climate factors.

2.5.2.1 Vision and Shared Objectives

A vision is an idea of a valued outcome, a higher order goal, which is a motivating force for a workgroup (West, 1990). The concept of vision contains a component of value added to the objective. For example, for a health care workgroup, it might be transferring responsibility for health from professionals back to patients; for staff at a department of occupational medicine, it might be commitment to finding occupational health hazards in the workplace and controlling or eliminating them (Agrell and Gustafson, 1994). The concept of vision and shared objectives has also got the quality of clarity. The clearer the vision, the more effective it is likely to be a facilitator of innovation, since new ideas can be assessed against it (West, 1990). The more the vision is negotiated and shared within a workgroup, the more the group members are committed to the implementation of an innovation. It is also important that visions are realistic and attainable. Otherwise steps towards their attainment cannot be envisaged.

2.5.2.2 Participative Safety

Participation and safety are characterised by West (1990) as a single psychological concept. The contingencies are such that involvement in all the team's work is

motivated and reinforced when occurring in an environment that is perceived as interpersonally non-threatening. This climate factor has a quantitative dimension: the more group members share information and involve each other in decision-making, the higher the likelihood of appropriate innovation. Quality of participation concerns the relevance and importance of ideas exchanged in the group. A feeling of safety in the group climate probably enables the exploration of radical ideas (West, 1990).

2.5.2.3 Task Orientation and a Climate for Excellence

Task orientation in a workgroup would be evidenced by a shared concern with excellence of quality of task performance in relation to shared visions or outcomes (West, 1990). Further, it would be addressed by appraisal of and constructive challenges to the group's performance; a concern for standards of performance; tolerance of diversity; exploration of opposing opinions; and a monitoring of each other's performance. Tjosvold (1982) also has demonstrated positive effects of allowing constructive controversy in decision-making. This implies encouraging diversity of opinions and at the same time ensuring high quality of innovation by careful examination of ideas proposed.

2.5.2.4 Group Norms in support for Innovation

This dimension comprises the expectation, approval and practical support for innovation in groups. Are new ideas routinely rejected or ignored, or do they find both articulated and enacted support in the group? The support might be verbal within and outside meetings. It can also be in the form of co-operation in the development and application of new ideas. It can appear in the form of members providing time and resources to others in trying to implement an innovation (West, 1990). If a climate is supportive in this sense it also implies a tolerance of errors made by an innovator, who knows that he or she will not be penalised when risk-taking does not pay off. Peters and Waterman (1982) found that members of organisations often were encouraged to innovate, but only ‘safe experimentation’ was supported.

West and Anderson (1996) examined relationships between group and organizational factors and team innovation, in a longitudinal study of top management teams in 27

hospitals. The results suggested that group processes best predict the overall level of team innovation.

2.5.3 Group self-efficacy

Group self-efficacy refers to members' beliefs that the group can perform effectively (Bandura, 1986). It is conceptualised as members' judgement of group capabilities, or an assessment of the group's collective ability to perform a job at hand (Little et. al., 1997). After initially focusing on the individual level of behaviour, the research on efficacy has now been extended to the workgroup or team level (Little et. al., 1997). At the group level, self-efficacy is the belief in the effectiveness of the group (Peth, 2002; Guzzo, *et al*., 1993). Since this concept probably is of importance to understanding innovation (Agrell and Gustafson, 1996), it will be argued, in the present study that a workgroup with a strong belief in its potency would be more innovative.

Research has shown that diversity in group composition influences self-efficacy beliefs (Chatman et al., 1998; Simons et al., 1999; Choi et al. 2003). Social characteristics within a group operate as ambient group stimuli that exert cross-level influences on member outcomes, including changes in self-efficacy beliefs. Differences among group members provide conditions for more diverse information and viewpoints, richer discussion, and more complete analysis (Chatman et al., 1998; Simons et al., 1999). For example, job-seekers with differing demographic characteristics in terms of age, gender, race, and education tend to adopt different strategies (e.g. sending curriculum vitae vs. an application, contacting the union vs. the HR manager, using private vs. public employment agencies) and use distinct sources of information (e.g. online vs. offline materials, formal vs. informal network connections) for job search (Kuhn and Skuterud, 2000; Ports, 1993). Thus, membership diversity in these demographic attributes may facilitate an increase in participants' job-search efficacy following group interaction.

There is general consensus that the mechanism by which collective efficacy affects performance is motivational (Cannon-Bowers, Tannenbaum, Sales, and Volpe, 1995). Bandura (1986) has argued that in a context providing sufficient levels of skills/knowledge, incentives, performance opportunity, and task clarity, efficacy judgements serve to mediate the relationship between these contextual factors and

specific performance behaviours. Cognitively, efficacy affects behaviour through visualizing accomplishment through reciprocal determinism of thoughts, actions, and outcomes in the environment. Efficacy beliefs are motivational due to causal attributions made to the self or group rather than to the situation, leading to choice of behaviours and an attitude of resilience.

According to Little et al. (1997), three factors comprise collective efficacy. Factor 1 is the group members' perceptions that they can marshal the effort, direction, and persistence required to carry out their job. Factor 2 is concerned with the members' perception that they possess the social skills necessary to perform their tasks. Factor 3 addresses the members' perceptions of their possession of the technical skills necessary to produce quality work.

Group members' beliefs in the group's capabilities are influenced by the group's prior accomplishments/failures, by comparisons made with other groups, by particular behaviours/attitudes exhibited by group members, and by persuasive leadership (Druckman and Bjork, 1994). Theorized necessary contextual factors for efficacy to have motivational potential include sufficient incentives, possession of skills, task clarity, and shared team goals (Little et. al., 1997). Lepper, Ross, and Lau (1986) found that initial success or failure had a strong, persistent effect on individuals' beliefs about their capabilities. Habitual routines are established very quickly and rely on the group's experience (Gersick, 1989; Ginnett, 1990). The collective sense of efficacy emerges from common exposure of members to objective stimuli, such as outcomes of group performance, and the processes of social influence and social comparison.

Results obtained by Markman et al., (2002) from a random sample of 217 patent inventors showed that general Self-efficacy and regretful thinking distinguish inventors who started a business (i.e., technological entrepreneurs) from inventors who did not start a new business (i.e., technological non-entrepreneurs). Specifically, inventors, who at the time of the survey were actively involved in new business formation, tended to have significantly higher self-efficacy.

In the sports psychology literature (Spink, 1990a; 1990b), collective efficacy has been shown to be positively related to performance. For example, Hodges and Carron (1992)

found that groups categorised as high on collective efficacy demonstrated more persistence after failure in a group physical task. Whitney (1994) found that groups with higher efficacy accepted higher goals more readily and performed better on a nutritional assessment exercise, Lee (1992) explored the relationship between efficacy and performance at three levels of analysis: individual, supervisor-subordinate dyads, and workgroups. He found Group self-efficacy to be distinct from self-efficacy and to be positively related to group members' perceptions of their performance.

In an organisational setting, Campion, Medsker, and Higgs (1993) found that of 19 workgroup characteristics drawn from the literature, only potency (a three-item measure of team confidence) was related to all three measured criteria (productivity, satisfaction, and managerial ratings) for 80 workgroups in a financial institution.

Little and Madigan (1997) discovered that higher efficacy is related to higher levels of performance. They suggested that collective efficacy is a group level phenomenon separate from possession of skills and that there is a positive relationship between collective efficacy and team performance. Collective efficacy was shown to differ between teams, to have shared meaning within teams, and to be related to the performance behaviours of work teams. It has also been found that aggregated team efficacy beliefs are a stronger predictor of team performance than are aggregated player efficacy beliefs, and that past team performance affects team efficacy beliefs to a greater extent than player efficacy beliefs (Feltz and Lirgg, 1998).

It is argued in this study that group self- efficacy (collective efficacy), by virtue of its motivational potential is related to workgroup effectiveness (workgroup performance and workgroup innovation) (Peth, 2002; Agrell and Gustafson, 1996; Guzzo et. al., 1993; Guzzo and Shea, 1992; Farr and Ford, 1990; Shea and Guzzo, 1987). Further support for this argument emerges from the finding that self-efficacy leads to a high need for achievement (Tang and Gilbert, 1994), organizational commitment (Covin et al., 1992; Matheson and Sterns, 1991), and consider quality service delivery more important (Carson, et al., 1997)

2.6 CRITIQUE OF GROUP-LEVEL INNOVATION LITERATURE

More than a decade ago, Wolf (1994) argued that understanding of the precedents, processes, and outcomes of organizational innovation remains very limited, despite its theoretical and applied importance. This situation has not changed much, especially at the workgroup level (Agrell and Gustafson, 1996; Anderson and West, 1998; Anderson, De Dreu, and Nijstad, 2004; Wolf, 1994; Choi, 2000; Janssen et. al., 2004). To be sure, there have been a few studies concerning group innovation, but few researchers have attempted to build an integrated conceptual framework of the determinants of group innovation.

Secondly, a number of methodological shortcomings in the limited range of existing workgroup innovation studies can be discerned. First, a fundamental flaw in several studies is their use of a univariate design, wherein the relationship between a single independent variable (e.g. group size, heterogeneity, leadership style) and group innovativeness as the dependent variable (e.g. magnitude of innovation novelty of innovation radicalness of innovation) is evaluated (Anderson, 1992). In such situations, inference can be confounded because other unmeasured independent variables could have influenced the outcome variable.

Thirdly, as Agrell and Gustafson (1996) noted, among the published research addressing innovation and creativity in groups, very few have studied groups of workers performing tasks on an ongoing basis, such as production or service workers. Most group research has involved concocted groups in the laboratory, and it is not absolutely sure that inferences can be made about natural groups based on this research (Guzzo and Shea, 1992). Other studies appear to have focussed either on management teams, research and development (R&D) teams, or problem-solving groups, again, in laboratory settings Agrell and Gustafson, 1996). Agrell and Gustafson (1996) further noted that much of the research has addressed creativity in groups and not innovation.

Another notable shortcoming has been the tendency to ignore organisational level variables in the prediction of group innovation in spite of the increasing recognition of the role of organisational level variables in group performance (Guzzo and Shea, 1992; Agrell and Gustafson, 1996). It is argued in this thesis that combining organisational

level variables with within-group factors can improve our explanation of the variance in workgroup innovation or, in this case, workgroup pro-innovation orientation.

A fifth criticism has been the tendency to treat 'climate for workgroup innovation' as a first order independent variable (Anderson and West, 1998). Implicit in this approach is the reasoning that such a climate is present in an organisation or it is not. The practitioner would find it more useful if they could be given the conditions under which a positive climate exists or how it can be nurtured.

Finally, it was pointed out in the introduction that most of the research in workgroup innovation has been conducted in manufacturing settings, thereby limiting its generalizability across industry. Understanding group performance, including workgroup innovation, requires careful consideration of the group's organizational context. Indeed, researchers have, for sometime now been pointing toward the role that context plays in determining group effectiveness (Guzzo, 1996; Hackman, 1992).

The present study is both a response to this call and an attempt to address some of the issues in workgroup innovation research raised above. A model of Workgroup Service Innovativeness, taking into account both organisational and group context variables is proposed and tested.

2.7 SUMMARY

This chapter explained some key terms used in this study and made an attempt to distinguish them from similar or related ones. It then briefly reviewed the literature on group-level innovation before presenting a critique of it. The next chapter proposes a model of Workgroup Service Innovativeness to be tested in this study. The chapter also reviews the relevant literature in more detail.

CHAPTER 3
THEORETICAL MODEL AND HYPOTHESISS

3.1 INTRODUCTION

This chapter proposes a model for the study of Workgroup Service Innovativeness based on both organizational and workgroup contexts. Constructs in the model are defined and their literature reviewed. Hypotheses and their rationale, based on the model and relevant literature are then formally stated and then summarised.

3.2 A MODEL OF WORKGROUP SERVICE INNOVATIVENESS

Despite the existence of some studies about group innovation, few writers have tried to build an integrated conceptual framework of the determinants of group innovation.

To accurately map workgroup innovation in the service industry in general and the hotel industry in particular, it appears more useful to conceptualise it as being more than just the simple generation or introduction of new or novel ideas, processes, products, or procedures (e.g. West and Farr, 1990). Innovation in the context of the service industry also implies workgroup members having a pro-innovation orientation in service provision. This is important in enhancing customer satisfaction, thus, leading to greater customer loyalty. Such a continual generation and implementation of new ways of customer service is particularly more important in today's complex and turbulent business environment (Besant, et al., 2001; Baghel and Bhuiyan, 2006). This continuous improvement in customer service also includes the potential for novelty and newness in ideas, processes, products, procedures and services produced. Thus, in this study, a new construct to be called ‘Workgroup Service Innovativeness’ will be created to measure service innovation at the workgroup level.

Since the nineteen nineties, there has been a swing of emphasis in both the academic and corporate arenas from the concept of innovation to that of innovativeness because

of growing recognition that innovativeness promotes a competitive advantage, that is, the relative position of a firm against its competitors (Tajjeddin et al., 2006; Nieto and Quevedo, 2005; Olson, et. al., 2005; Hult et al., 2003; Martins and Terblanche, 2003). As Deshpande et. al., (1993) have stated, an organization must be innovative to gain a competitive advantage in order to survive and prosper. They found that, for a representative sample of Shanghai organizations competing in business-to-business markets, success was linked to innovativeness, together with a high level of market orientation, and outward oriented organizational cultures and climates.

According to Tajeddini et al., (2006), there are some reasons why it is important to study innovativeness (as opposed to a single innovation). First, innovativeness provides a more complete reflection of the number of innovations adopted in a given time period. Second, a single innovative project ignores the fact that organizations adopt many innovations in a given time period. Third, when the number of innovations studied increases, the influence of explanatory variables relevant to any single innovation decreases, enabling generalizations to be more easily made. Fourth, innovativeness embraces a range of innovations that then enables them to be categorised.

Definition of the concept of innovativeness depends on the standpoint the research. Some researchers define it as the uniqueness or novelty of the product (Ali, Krapfel and LaBahn, 1995); or whether individuals are early adopters of innovation (Rogers, 1995). It may be the adoption of an idea or behaviour that is new to the organization (Daft, 1978), or an organizational culture that encourages the introduction of new processes, products, and ideas (Hult et al., 2003, 2004). Since this study is in the hotel service sector, focus will be on innovative customer service. Hence, conceptualization of innovativeness used here, is similar to Daft (1978).

In this study, Mowday and Sutton's 1993 embeddedness perspective (Kostova, 1999) was adopted as a guide in the construction of the Workgroup Service Innovativeness model. Put simply, the model was based on the idea that the extent of Workgroup Service Innovativeness does not occur in a social vacuum but is, rather, contextually embedded (Mohamed, 2002). As Figure 3.1 at the end of this chapter shows, the conceptual model that summarises the research interests and objectives proposes that a

workgroup's climate for innovation mediates the relationship between organisational context (Organizational Climate and Task Design) and workgroup context (Group Self-efficacy, Group Citizenship Behaviour, and Market Orientation) on the one hand, and, Workgroup Service Innovativeness on the other hand. This general hypothesis is consistent with the innovation literature that suggests that both organizational context and individual characteristics influence innovation (Choi, 2004).

It is noteworthy that many organizational phenomena are multilevel in nature (Kozlowski and Klein 2000). In this study classification of study variables into organizational and workgroup contexts is not exhaustive but is based on relevance to the study. It is guided by previous works, such as the authoritative review of group performance by Guzzo and Shea (1992) which proposed an input-process-output model of group performance as a plausible overarching framework to guide research on the antecedents of workgroup innovation. It is also in line with West and Farr's (1990) demarcation of innovation study into three levels: the organization, the workgroup and the individual.

Secondly, the present study emphasizes what Sundbo (1997), citing Gadrey et al. (1993, 1994) refer to, as the service-goods continuum, which means that, in the definition and study of innovation, it is often impossible to perceive boundaries between intangible services and physical products. In other words, manufacturing innovation and service innovation should be construed as a matter of degree, with the former, perhaps more tangible than the latter. Following this perspective, it is argued in this study that the hypothesis presented in the next sections of this chapter can be studied in the service industries context, which in this study was 3 to 5 star hotel industry.

This study contributes to the literature by conceptually extrapolating individual and organizational level innovation to the group level and then integrating and empirically investigating the interplays between workgroup and organizational context factors.

Agrell and Gustafson (1996, P.331) have noted: 'In the research literature on group performance there has been a bias towards looking only for within-group factors, which predict performance only within the group'. This has been the case despite the increasing recognition of the important role of organizational level variables in-group

performance (Shalley and Gilson, 2004; Nijstad and De Dreu, 2002; Chandler, et. al.; 2000 Guzzo and Shea, 1992; Guzzo, 1996; Hackman, 1992). The rationale for including organizational level variables in the present study is twofold.

Firstly, group dynamic factors might actually be of less importance than the conditions offered by the organizational level for workgroup effectiveness and innovation (Guzzo and Shea, 1992).

The second reason is embedded in the observation that although organizational level variables have traditionally been studied with reference to individual and organizational innovations, it is likely that the same variables will also influence group innovation (West and Farr, 1989) and, in the case of the service industry, will lead to Workgroup Service Innovativeness.

The division of the study variables into organizational and workgroup contexts is rather arbitrary, as some of the variables can be categorised under more than one context, e.g. individual, job, group or team, and organizational levels (Mumford and Licuanan., 2004; Oldham and Cummings, 1996; Shalley et al., 2000). The reasoning is that, such a division provides a useful organizing framework (West, 1987; Agrell and Gustafson, 1996).

The number of contextual factors under study is also not exhaustive, for example, organisational structure is an important organizational contextual factor in any organisation while group composition is important at the group level. The research context in this study, dictated, to a large extent, which variables were selected for inclusion.

3.3 ORGANIZATIONAL CONTEXT

Understanding workgroup behaviour requires that we view groups as subsystems embedded in a large system. Researchers have increasingly been pointing towards the influential role that context plays in determining group effectiveness and innovation

(Amabile, 1988; Woodman et al., 1993; Guzzo, 1996). One of the most important organizational variables affecting group innovation is climate.

3.3.1 Organizational climate

Jaw and Liu (2004) have pointed out that organisations need a self-renewal organizational climate to improve their competitive positioning. It is well known that behaviour is a function both of an individual's characteristics and the nature of his or her environment. The important environmental aspects of work settings have sometimes been brought together under the general heading of 'climate', usually captured through individuals' perceptions of their organisation's policies and practices (e.g. Ashkenasy, Widerom, and Peterson, 2000; Schneider, 1990).

Simply put, organizational climate refers to the perceptions of organisational members of their work environment, including member's tasks. As Patterson et al. (2004) put it, climate represents all-important environmental features in work settings.

Perhaps the most comprehensive definition of climate is that by Moran and Volkwein (1992, p. 20). They view climate as

'….a relatively enduring characteristic of an organisation which distinguishes it from other organisations; and (a) embodies members' collective perceptions about their organisation with respect to such dimensions as autonomy, trust, cohesiveness, support, recognition, innovation and fairness; (b) is produced by member interaction; (c) serves as a basis for interpreting the situation; (d) reflects the prevalent norms and attitudes of the organisation's culture; and (e) acts as a source of influence for shaping behaviour'.

Others have provided similar definitions. For example, Reichers and Scheneider (1990, p.22) view organizational climate as the 'shared perceptions of organisational policies, practices, and procedures, both formal and informal'.

A related construct to organizational climate is organisational culture. The latter represents the internalised beliefs and values of organisational members and it resides at a deeper level of people's psychology than does climate (Schneider and Brief, 1996). While the things that constitute climate such as policies, practices, and rewards are

observable, the beliefs and values of culture are not so directly observable. Climate is a more limited concept and focuses on how organisations function while culture focuses on why they behave in a certain way (Schneider, 1982). Climate is best described as a manifestation of organisational culture, a surface level indicator of culture (Schein, 1985).

Glick (1985) draws the distinction between organizational climate and culture on the basis of their methods of analysis. Climate research adopts a nomothetic approach and uses quantitative methods of analysis while culture research tends to be idiographic and usually uses qualitative methods (Glick, 1985; Xenikou and Furnham, 1996).

Both climate and culture are important concepts because they have been proposed to be determinants of innovation (Jung et al., 2003; Mavondo, F. and Farrell, M., 2000; Steensma et al., 2003; Jassawalla, A.R. and Sashittal, H.C., 2002; Chandler et al., 2000; Schneider and Brief, 1996; Kanter, 1983).

The need for an organizational climate supportive of innovation is stressed quite frequently in the literature; less common are precise prescriptions as to what constitutes such a climate. Burns and Stalker (1961) describe a working atmosphere favourable to innovation as requiring participation and freedom of expression, but also demanding performance standards. It should be noted that their recommendations are not based on empirical work but on their practical experience as a change agents.

Zaltman et al., (1973) cite a 1972 study by Duncan in which he identified three important dimensions of climate for organisational change: need for change, openness to change and potential for change. He found a significant positive correlation between openness to and potential for change, but significant negative correlations between need for change and the other two variables. Thus the greater the perceived need for change, the less the perceived openness to, and potential for change. They explain this somewhat counterintuitive finding by suggesting that high perceived need for change creates anxiety, which leads to the organisational personnel feeling that they cannot make the necessary changes.

Jung et al., (2003), using a multisource approach to collect survey data from 32 Taiwanese companies in the electronics/telecommunications industry, found a significant and positive relationship between organizational climate and organisational innovation. Other researchers (e.g. Jassawalla and Sashittal 2002; Jaw and Liu; 2003; Sala, 2003) have arrived at similar results

Although the above evidence for relationships between climate and innovation is reasonably convincing, the nature of these relationships, as in most other climate-innovation studies, is less clear, since most of the previous studies have been cross-sectional in design. An improvement in design comes from a study by West and Smith (1998) in which they investigated a possible link between university departmental climate and research excellence rating. A longitudinal design was used which involved gathering climate data from academics in 46 departments in 14 universities in 1992 and again in 1994. These climate measures were related to external Higher Education Funding Council ratings of research excellence made in 1989 and 1992. These departmental ratings predicted subsequent departmental climate, particularly in members' descriptions of degree of formalisation, support for career development and support for innovation. Dimensions of climate, however, did not predict as strongly subsequent research excellence rating. It appears that climate may be an outcome as much as a cause of rated effectiveness, at least in this context.

Since the early eighties a shift of interest from climate to culture in the study of innovation can be discerned, with recommendations for a ‘pro-innovation’ culture (Steensman et al., 2003; West and Farr, 1989; Chatman and Cha, 2003; Gudmundson et al., 2003; Alder, 2001; Kanter, 1983).

Handy (1985) suggests that a ‘task culture’ is most favourable to innovation, that is a culture that emphasises performance, minimises style and status differences within teams, is flexible, adaptable and sensitive to its environment. However he stresses that such a culture is not appropriate for all functions of an organisation and argues for intra-organisational diversity of cultures. Amabile and Conti (1996) discuss six stimulants and two obstacles to creativity. The stimulants are workgroup supports, challenging work, organisational encouragement, supervisory encouragement, freedom, and

sufficient resources. The obstacles are workload pressure and organisational impediments.

Amabile and Conti (1999) speculate that employees may develop beliefs about the intrinsic value of projects that they have undertaken based upon the level of resource allocation. A lack of resources such as time, materials, information, and so on can lead to reduced commitment to assigned goals. Perceptions of the level of resource allocations in support of innovative activities may thus influence the degree to which employees perceive the organisational culture to be supportive of innovation.

Chandler, et al. (2000) investigated whether the constructs which are associated with innovation are also associated with the perceived degree to which an organisation's culture supports innovation. A sample of 429 employees in 23 small to medium-sized manufacturing firms was used to identify constructs associated with an innovative culture. Supervisory support and reward system support were found to be positively related to an innovative culture while perceived work overload was negatively related to an innovative culture. Companies with cultures supportive of innovation tended to be smaller, had fewer formalised human resource practices, and less munificent resources. There was no relationship between an innovative culture and firm performance; however, when the competitive environment was changing rapidly firm earnings were enhanced by an innovative culture.

More recent studies have demonstrated the importance of a supportive culture for innovation (de Jong and Hartog, 2007; Patterson, et al., 2005; Steersman, Jansen and Vonk, 2003; Mavondo and Farrell, 2003; Gudmundson et al., 2003; Jassawalla and Sashittal, 2002). For example, Patterson et al., (2005) examined whether the Innovation and Flexibility and Reflexivity climate scores provided by a sample of 6869 employees across 55 manufacturing organizations were associated with researcher ratings of organizational innovation. They found a significant relationship between the scores and the researchers' ratings of innovativeness in products.

Thus, from the preceding Section, it can be concluded that both climate and culture are important associates of innovation. However, overlap and a lack of consistency in the usage of the two terms persist (Denison, 1996).

Schneider and Brief (1996) have proposed that by focusing on climate, an organisation's culture can be changed. They reason that climate reflects the tangibles that produce a culture, that is, the types of things that occur to and around organisational members that they can describe. They contend that organisational change and its sustainability are achievable only after the everyday policies, practices, procedures, and routines that impact on the beliefs and values that guide employee actions are changed.

The present research, in line with most previous empirical studies of organizational climate adopts the approach taken by Schneider (1990), because it makes more sense for researchers to focus on the influence of specific types of climate on specific measures of organizational outcomes, such as 'organizational innovation' (e.g. Matocchio, 1994; Blau, 1995; Hoffman and Stetzer, 1996). Section 4.5.1 of Chapter 4 elaborates on this point.

Given the recognition of the importance of organisational level variables, particularly climate, in group performance (e.g. Mavondo and Farrell, 2003; Chandler, et. al.; 2000; Guzzo and Shea, 1992; Hackman, 1992), in the successful implementation of hotel service quality initiatives (Davidson, 2003), and specifically the role of organizational climate in determining innovation (e.g. Patterson, et al., 2005; Jung et al., 2003; Jaw and Liu, 2003; Sala, 2003; Chandler, Keller, and Lyon, 2000; Schneider and Brief, 1996), it is argued here that a supportive or pro-innovation organizational climate in service firms such as the hotel industry, just like supportive organizational climates in manufacturing industries, should positively impact the innovation climate at the workgroup level by providing a context that determines the level of workgroup innovativeness via its impact on team inputs and team processes (West, 2003). The service-goods continuum (Sundbo, 1997) introduced in Chapter 2 further provide support for this hypothesis. More formally stated, it is proposed that:

Hypothesis 1: The more favourable the Organizational Climate, the higher the Group Climate for Innovation.

3.3.2 Task design

The design of jobs has long been considered an important contributor to employees' motivation to engage in innovation (Axtell et al., 2000; Hackman and Oldham, 1980; West and Farr, 1990). Job and/or task design have been shown to be related to workgroup innovation (West, 2003; Lantz and Brav, 2007).

Three approaches to job design provide powerful frameworks for examining the effects of work design upon workgroup innovation (West, 2003). The first is Action Theory (Frese and Zapf, 1994; Tschan and von Cranach, 19996; West, 2003), which describes tasks in relation to their hierarchical, sequential and cyclical process requirements.

Tschan and von Cranach (1996) argue that tasks should be deconstructed into their hierarchical requirements (goals and sub goals); their sequential demands; the restrictions that are imposed on the order in which sub-tasks are carried out; and the cyclical nature of information processing (orienting, planning, executing, evaluating). Tschan and von Cranach also point out that the nature of communication will vary considerably according to whether the group task element is low level or high level, requiring considerable communication, creativity and innovation. However, as West (2003) observes, despite its potential, Action Theory has not been used widely to inform studies of the effects of task characteristics on workgroup functioning.

Sociotechnical theory (Trist and Bamforth, 1951; Emery, 1959; Cummings, 1978; Cooper and Foster, 1971; Pearce and Ravlin, 1987; Cohen, 1994; West, 2003) provides another framework for looking at the effects of task design upon workgroup innovation.

According to this theory, autonomous workgroups provide a structure through which the demands of the social and technical sub-systems of an organization can be jointly optimised. Sociotechnical theory proposes that the technical subsystems of any work unit must be balanced and optimised concurrently with the social subsystem, that is, technological and spatial working conditions must be designed to meet the human demands of the social system. The two subsystems are connected by team members' occupational roles and by co-operative and interdependent relationships. The key to effective performance is then whether the workgroup can control variation in quality

and quantity of task performance at the source (Cordery, 1999). Such variance control implies innovation, since the workgroup will come up with new and improved methods of working or technologies in order to achieve control of variance in task performance appropriately.

According to West (2003), the joint optimisation of the two subsystems is more likely when workgroups have the following characteristics:

- The team is a relatively independent organizational unit that is responsible for a whole task.
- The tasks of members are related in content so that awareness of a common task is evoked and maintained and members are required to work interdependently.
- There is a 'unity of product and organization' that is, the group has a whole task to perform and group members can 'identify with their own product' (Ulich andWeber, 1996).

These characteristics, according to theorists, will produce 'task orientation', which is a state of interest and engagement produced by task characteristics (Emery, 1959). This condition is very similar to the concept of intrinsic motivation that Amabile contends is so fundamental to creativity and innovation at work (Amabile, 1983; Amabile and Conti, 1999).

According to sociotechnical theory therefore, the task is the central focus of a psychological view of activity (Hacker, 1986). Because it represents the intersection between the group and the organisation, it is the most psychologically relevant element of the working conditions (Volpert, 1984). Blumberg (1988, p.6) echoes this view and proposes that the task is

'the point of articulation between the social and technical systems, linking the job in the technical system with its correlated role behaviour in the social system.' .

To the degree that the three conditions of autonomous workgroups described above are present therefore, the more likely the group is to develop ideas for, and implement new and improved products, processes or procedures.

According to sociotechnical theory,'task orientation' or intrinsic motivation (and therefore innovation), are said to be evoked' by completeness (i.e., whole tasks); varied demands; opportunities for social interaction; autonomy; opportunities for learning; and development possibilities for the task.

Gulowsen (1972) suggests that the degree of autonomy of the workgroup can be assessed in relation to group influence over the formulation of goals – what and how much it is expected to produce; where to work and number of hours (when to work overtime and when to leave); choice about further activities beyond the given task; selection of production methods; internal distribution of task responsibilities within the group; membership of the group (who and how many people will work in the group); leadership – whether there will be a leader and who will be the leader; and how to carry out individual tasks.

There is some evidence that the value of autonomy is not straightforward. Cohen and Bailey's (1997) review of work team effectiveness suggested that autonomy, contrary to a widely held view, was not necessarily a predictor of effectiveness or innovation in project teams. They cite Henderson and Lee's (1992) study of 41 information systems design teams which showed that the most effective teams were those in which managers assigned tasks to team members and controlled how the jobs were done.

An important prerequisite for considering the more dynamic influences of other psychological, social psychological and environmental factors upon group innovation is the recognition that task requirements and the relationship between the technical and social subsystems have a major influence on levels of group innovation

In summary, the degree of group autonomy (in an innovation-supportive organisational context) and the task requirements of completeness, varied demands, opportunities for social interaction, opportunities for learning, and development opportunities will predict group innovation**.**

The third and perhaps currently best-known framework for studying the work design-innovation relationship is the job characteristics model (Hackman and Oldham, 1976; 1980; Hackman, 1987; Oldham and Cummings; 1996; Spreitzer and Ledford, 1999). To be sure, this framework is similar to the sociotechnical approach in that both propose a

link between work or task design and innovation. An important rationale for researching this relationship in the present study is that there is a paucity of studies investigating the relationship at ***the group level*** (Campion et al., 1993; West, 2003).

One characteristic of job design, of relevance to the present study, is 'self-management', which is the group analogy to autonomy at the individual job level. It is central to many definitions of effective workgroups (e.g. Cummings, 1978; Hackman, 1987; Pearce and Ravlin, 1987). A related characteristic is 'participation'. Regardless of management involvement in decision-making, workgroups can still be distinguished in terms of the degree to which all members are allowed to participate in decisions (McGrath, 1984; Porter, Lawler et al., 1974). Self-management and participation are presumed to enhance group effectiveness including propensity for innovation by increasing members' sense of responsibility and ownership of the work.

Other characteristics include 'task variety', which involves giving each member the chance to perform a number of the group's tasks; 'task significance'; the degree to which the job has a substantial impact on the lives or work of other people, whether in the immediate organisation or in the external environment. Members should believe that their group's work has significant consequences, either for others inside the organisation or its customers (Hackman, 1987). Finally, According to Hackman (1987), group work should have 'task identity', which is the degree to which the group completes a whole and separate piece of work. Identity may increase motivation because it increases a group's sense of responsibility for meaningful piece of work.

Both Hackman and Oldham's job characteristics theory and sociotechnical theory suggest that workgroup task design is critical for employee motivation, satisfaction, performance and innovation (Guzzo and Shea, 1992; West, 2003; Lantz and Brav, 2007). Both theories suggest that to positively impact employee reactions, the task should be designed so that a variety of skills are required, it should be designed so that a variety of skills are required, it should be a whole and identifiable piece of work so that members can see the outcome of their efforts, the task should be perceived to have significant impact on the lives of other people, the team should have considerable autonomy and independence in determining how the work will be done, and regular and

correct feedback should be given such that the team can understand how it is performing.

It is argued, in this study that, potentially, most service organization work units, including those in the hotel industry, can experience the above characteristics, that, according to the literature (e.g. West, 2003) create a workgroup climate for innovation that leads to Workgroup Service Innovativeness. The rationale is that task orientation, intrinsic motivation, and, innovation are said to be evoked by autonomy or self-management (at the group level), participation, task variety, significance, identity, and by completeness (whole tasks) and by learning and development opportunities (West 2003; Amabile 1983). As the level of analysis in this study is the group, the foregoing task characteristics will be treated as workgroup concepts (Spreitzer et al., 1999).

Hypothesis 2: The more favourable the Task Design, the higher the Group Climate for Innovation.

3.6 WORKGROUP CONTEXT

Group factors play an important role in facilitating or hindering innovation (West, 1990). In Chapter 2, it was stated that a number of workgroup characteristics have previously been linked to innovation. However, the majority of these studies have been correlational in design and have focussed more on leadership, workgroup composition (size, heterogeneity, and matching roles) (Anderson, 1992; King and Anderson, 1995; Guzzo and Shea, 1992; Payne, 1990) and less on other potential antecedents of innovation such as workgroup self-efficacy (Farr and Ford, 1990; Agrell and Gustafson, 1996), market orientation (Jaworski et al., 2000; Connor, 1999; Slater and Naver, 1994,1995), workgroup group citizenship behaviour (GCB) (Podsakoff et al., 1997; Koys, 2001; Kuehn, K and Busaidi, Y., 2002), and workgroup climate for innovation (West and Farr, 1990; West, 1990; Anderson and King, 1993; King and Anderson, 1990). Moreover, the unit of analysis tended to be more at the individual and organisational levels and less at the workgroup level. Thirdly, few attempts have been made to systematise the research at the workgroup level. There is a theoretical vacuum

at this level and a need for a framework to draw existing knowledge together in a way that promotes research and guides practice.

The present study attempted to make a contribution to the rectification of this state of affairs by investigating the role of workgroup self-efficacy and other potential group factor precursors of service innovativeness, i.e. market orientation, workgroup climate for innovation and group citizenship behaviour.

3.6.1 Group Self-efficacy

In the relatively more extensive review of self-efficacy in Chapter 2, it was pointed that collective or group self-efficacy shares a certain similarity with the individual motivational construct of self-efficacy (Peth, 2002; Cannon-Bowers et al., 1995; Bandura, 1986). In that chapter, research linking self-efficacy to performance effectiveness, including innovation was reviewed.

The point can be made that some theoretical models have assumed that efficacy beliefs operate similarly (i.e., homologous) across levels of analysis (e.g. Lindsley et al., 1995). Thus, in the conceptualization of self- and group self or collective efficacy, both involve beliefs regarding capability to accomplish particular tasks, although the referent of self-efficacy is the individual or self, whereas the referent of workgroup self-efficacy is the collection of individuals in a group, working together toward some common goals (Lindsley et al., 1995). Group self-efficacy is

'*a collective belief in the capability of the group to meet a task objective*' (Gibson, et. al., 2000, p.71).

Group beliefs about the workgroup's performance have been found to be a strong predictor of group effectiveness in previous research (Shea and Guzzo, 1987). In Chapter 2, It was argued that group self-efficacy, by virtue of its motivational potential is related to workgroup effectiveness (workgroup performance and workgroup innovation) (Peth, 2002; Agrell and Gustafson, 1996; Guzzo et. al., 1993; Guzzo and Shea, 1992; Farr and Ford, 1990; Shea and Guzzo, 1987). Further support for that argument emerged from the finding that self-efficacy leads to a high need for

achievement (Tang and Gilbert, 1994), organizational commitment (Covin et al., 1992; Matheson and Sterns, 1991), and consider quality service delivery more important (Carson, et al., 1997)

In the service industry, or indeed in any organization, it is likely that a climate for innovation, and indeed service innovation, is more likely to exist in workgroups that experience overall job satisfaction, have a high need for achievement, value quality performance, and are committed to the organization. Given that overall job satisfaction, need for achievement, organizational commitment, and, quality performances are precipitated by self-efficacy (Wei and Albright, 1998; Tang and Gilbert, 1994; Covin et al., 1992; Matheson and Sterns, 1991; Carson, et al., 1997), innovation is more likely among self-efficacious workgroups. Further, group self-efficacy, as pointed above, by virtue of its motivational potential is related to workgroup effectiveness (workgroup performance and workgroup innovation) (Peth, 2002; Agrell and Gustafson, 1996; Guzzo et. al., 1993; Guzzo and Shea, 1992; Farr and Ford, 1990; Shea and Guzzo, 1987). Therefore, it is proposed that:

Hypothesis 3: The greater the Group Self-efficacy, the higher the Group Climate for Innovation.

3.6.2 Group Citizenship Behaviour (GCB)

Organizational effectiveness is influenced by both positive employee attitudes, such as job satisfaction, and behaviours, such as organizational citizenship behaviour (OCB) (Organ, 1988).

Since OCB in this study is being studied at the workgroup level, it will be referred to as group citizenship behaviour (GCB). GCB includes those behaviours exhibited by employees that are characterised as extra-role, or discretionary in nature, and thus, not formally defined or rewarded by one's employer. According to Bolino and Turnley (2003), organizational citizenship behaviours (herein referred to as group citizenship behaviours) generally have two common characteristics: they are not technically required as part of one's job, and hence, not directly enforceable; secondly, they are

representative of the special or extra efforts that employers need from their employees in order to be successful.

Research evidence suggests that GCB may be an important factor in employee and organisational effectiveness, including innovation (Hunt, 2002; Karen, 2002; Carol et al., 2003; Koys, 2001; Alotaibi, A.G. 2001; Karambayya, 1990; Podsakoff and MacKenzie, 1997; Podsakoff, Aherne and MacKenzie, 1997; Walz and Niehoff, 1996). It is, therefore, important that we understand not only the factors that produce citizenship but also its consequences.

Employee citizenship researchers have come up with a list of factors that promote citizenship:

3.6.2.1 Satisfied workers

Organ (1994) has proposed that although job satisfaction may only be weakly related to how productive employees are in carrying out their official duties, satisfied workers would be more prone to undertake activities that are not formally required by the organization but that ultimately benefit it. This relationship between job satisfaction and what Organ later referred to as citizenship behaviours (CBs) has been confirmed in various studies. The relationship has been shown to be more than twice as strong as the relationship between job satisfaction and productivity (Organ, 1994).

3.6.2.2 Transformational and supportive leadership

Transformational leaders, by virtue of their charisma, act as role models for their subordinates who tend to identify with them emotionally (Bolino and Turnley, 2003). They create and communicate a vision for the organization that brings employees together to accomplish organizational goals by emphasizing the interests of the organization more than those of the individual. Research has demonstrated a relationship between transformational leadership and CBs: employees who work for transformational leaders are frequently motivated to go the extra mile for the benefit of their organization (Podsakoff, et. al., 2000). Employees who have developed a close and

supportive relationship with their managers also tend to exhibit higher levels of CBs than those who perceive their managers as rather distant, or feel ignored by them.

3.6.2.3 Interesting work and job involvement

Meaningful, interesting work can result in job involvement. Job involvement, although weakly related to productivity, has been associated with CBs. Employees who are highly involved in their work are more likely to engage in CBs (Diefendorff, J.M., et al., 2001).

3.6.2.4 Organizational support

There is a significant relationship between CBs and the degree to which employees believe that their organization values their contributions and cares about their well being (Bolino and Turnley, 2003). For example, employees were more willing to go beyond the call of duty when they worked for organizations that offered support which enabled them to more easily balance their work and family responsibilities, assisted them through difficult times, provided them with benefits they could not afford, and helped their children do things they would not have been able to do otherwise (Lambert, 2000).

3.6.2.5 Trust, organizational justice, and psychological contract fulfilment

Research has demonstrated that employees are more willing to go beyond the call of duty (engage in CBs) when they believe that: I) important outcomes (e.g. promotions or pay increases) are fairly distributed by the organization; 2) the procedures used to make critical organizational decisions are just; and 3) their direct supervisors are truthful, consider employees' point of view, and show concern for the rights of employees.

This means that the degree to which employees believe that the organization is characterised by high levels of what have been called distributive, procedural, and interactional justice determines the levels of citizenship behaviour displayed (Moorman, 1991).

Psychological contracts are unwritten agreements between employees and employers that consist of the obligations that each party believes the other party owes them. Psychological contract fulfilment occurs when individuals perceive that their organization has kept the promises that have been made to employees. Conversely, psychological contract breach arises when employees perceive that their organization has failed to fulfil its obligations or keep its promises. Employees in this situation often respond by decreasing their citizenship behaviour.

3.6.2.6 Employee characteristics

While some determinants of citizenship are under the control of managers and organizations, research also indicates that some people may simply be more predisposed to engage in citizenship than others (Bolino and Turnley, 2003). For example, individuals who are conscientious are generally more likely to engage in citizenship behaviours. Also, employees who are outgoing (extroverted) and generally have a positive outlook on life (optimistic) are often more inclined to exhibit citizenship in the work place. People who are team oriented and tend to place the goals and concerns of the group above their own typically engage in more citizenship behaviours, too. Similarly, individuals who are sympathetic and value helping others (i.e. altruistic) may also be more inclined to initiate citizenship behaviours at work. Finally, certain individuals tend to define their jobs more broadly than others. For these types of employees, engaging in CBs is simply seen as an integral part of their jobs. In summary, certain individuals may be more likely to make good organizational citizens than others (Borman, W.C. et al., 2001).

3.6.2.7 Cultivating citizenship behaviours

The foregoing are some of the factors research over the past two decades has identified as determinants of CBs. Bolino and Turney (2003) have suggested two principal avenues by which organizations can create the fertile conditions under which CBs might flourish: formal Human Resource Management (HRM) practices that emphasize good citizenship, and, informal systems that encourage good citizenship. With the first avenue, organizations can elicit more citizenship in their companies by establishing

HRM systems that encourage CBs. Specifically, they can develop recruitment and selection, training and development, and performance appraisal and reward practices that promote CBs. In addition to these formal practices, firms can develop informal processes that make CBs more common place. Informal mechanisms like a strong corporate culture may be helpful in nurturing CBs.

Most of what is known about CBs comes from research conducted at the individual level of analysis (Podsakoff, MacKenzie, Paine, and Bachrach, 2000). Organ and Ryan (1995, p. 797), in a meta-analytic review of the predictors of OCB, called for more research on OCB at other levels of analysis, such as the group level:

'*We know something now about correlates of individual OCB. The significant questions remaining are whether other modes of conceptualisation of OCB and other levels of analysis can further enrich the potential of this and other constructs for organizational theory and human resource management.*'

This call has since been echoed by Podsakoff et. al., (2000); Schnake and Dumler (2003), and Chen, et al., (2005).

The inclusion of GCB in the current study is a response to the same call.

GCB may be conceptualised as a distinct group level phenomenon regarding the extent to which workgroups engage in behaviours that support other workgroups and the entire organisation (Chen et al., 2005). These behaviours are distinct from task performance; they bolster and maintain the social and psychological environment in which task performance occurs. The sales department of a company helping the material department in cleaning out its inventory is an example of GCB.

In one study (Koys, 2001), higher levels of employee citizenship behaviour resulted in higher levels of revenue, customer satisfaction, and quality of service. Further, citizenship behaviours predicted such outcomes even after taking into account the influence of employees' formally required job performance. In another study, employee citizenship within specific restaurant units was measured, and then the profitability of these units was examined at a later date. One year later, those units that had higher levels of employee citizenship were significantly more profitable overall and had a

higher level of profits as a percentage of sales than those units that had lower levels of citizenship (Koys, 2001).

Although citizenship behaviours have rarely been studied at the group level, the existing studies clearly indicate that citizenship can be beneficial to organizations (Bolino and Turnley, 2005).

Research evidence suggests that GCB may be an important factor in employee and organisational effectiveness, including innovation (Karen, 2002; Carol et al., 2003; Koys 2001; Alotaibi 2001; Hunt 2002). However, as is the case with the other variables in the proposed model in this study, GCB has rarely been studied at the group level. It is posited here that, GCB affects service innovation by promoting a workgroup climate for innovation. This hypothesis is in line with previous studies (e.g. Koy, 2001; Chen et al., 2005) and Chen et al's. (2005) observation that a functional analysis of GCB would suggest that, like most of the team mental models (Klimoski and Mohamed 1994), the main function of GCB is to promote coordination among group members, foster group efficiency, and facilitate predictability of individual and group behaviours. It is proposed here that:

Hypothesis 4: Group Citizenship Behaviour is related to high levels of Group Climate for Innovation.

3.6.3 Market Orientation

Organisations operate in complex and turbulent environments, and to survive, they have to anticipate and respond to the changing demands created by markets, consumers, shareholders, legal requirements, economy, suppliers, technology and social trends (Paton and McCalman, 2000). They will only survive if they are sufficiently flexible to respond to these constantly changing demands in their environments, and have the ability to redirect, focus and exploit their resources effectively, appropriately and more quickly than competitors. Market orientation is the vehicle through which this is done.

Firms that embrace the concept of market orientation believe it will encourage appropriate behaviour for the creation of superior customer value and consequently superior business performance (Narver and Slater, 1990).

The concept of market orientation was coined in the early 1990s in two landmark articles by Narver and Slater (1990), and Kohli and Jaworski (1990).

Narver and Slater (1990, p.21) defined market orientation as 'the organization culture that most effectively and efficiently creates the necessary behaviours for the creation of superior value for buyers and, thus, continuous superior performance for the business'. They argued that market orientation is constituted by three behavioural components: customer orientation, competitor orientation, and inter-functional coordination. Customer orientation involves understanding target buyers now and over time in order to create superior value for them (customers). Competitor orientation includes acquiring information on existing and potential competitors such as their short term strengths and weaknesses and long term capabilities. Inter-functional coordination is the coordinated utilisation of company's resources to create superior value for target customers. ***Continuous innovation*** is implicit in each of these components (Narver and Slater, 1999), and the two decision criteria are long-term focus and profitability. This approach represents a cultural perspective on market orientation.

Kohli and Jaworski (1990, p.3) represent a different perspective of market orientation, the behavioural perspective. To them, market intelligence rather than customer focus is the central element of market orientation. 'It includes consideration of exogenous market factors that affect customer needs and preferences and current as well as future needs of customers'.

They suggest the three core themes of customer focus, coordinated marketing, and profitability. Their configuration is consistent with Narver and Slater's (1990) conceptualisation of a unidimensional construct with three behavioural components.

Other authors have put forward definitions of market orientation similar to Kohli and Jaworski (1990). For instance, Ruekert (1992) defines market orientation as the intensity with which firms (a) obtain and use information on customers, (b) develop strategic plans on the basis of that information, and (c) implement these plans, thus responding to customers' wishes and needs.

Lambin (1996), in reviewing market orientation, has suggested a broader definition of the concept. He defines market orientation as a competitive strategy that embraces all functional areas and levels of the organization and involves the various market participants. These market participants or forces are: (a) the final customer, (b) the intermediate customer (distributor), (c) the competitors, and (d) environmental factors. To create and maintain a competitive advantage, firms must (1) analyze and (2) act on each of these market forces with proper coordination between their functions. Consequently, in this theoretical framework, market orientation can be conceptualized as comprising 9 facets:

- Analysis of the final customers
- Analysis of intermediate customers (distributors)
- Analysis of the competitors
- Analysis of the market environment
- Strategic actions on the final customers
- Strategic actions on intermediate customers (distributors)
- Strategic actions on the competitors
- Strategic actions on the market environment, and
- Interfunctional coordination

That market orientation is conceptualized as consisting of nine facets does not imply that market orientation is a multidimensional concept. Lado, Maydeu-Olivares and Martinez (1998) have demonstrated that these facets are well accounted for by a one factor model. The authors argue that the nine facets should be taken as the conceptual elements of a unidimensional construct of market orientation, and a unidimensional measure.

Numerous studies about market orientation have been conducted and most researchers either adopt the definition of Kohli and Jaworski (1990) or of Narver and Slater (1990)

(Atuahene-Gima, 1996; Pelham and Wilson, 1996; Harris and Ogbonna, 2001.), or use them as a starting point (Deng and Dart, 1994). In the present study, Narver and Slater's (1990) approach, with its emphasis on continuous innovation, was deemed the more relevant perspective to the current study, and, was adopted (see Section 4.5.1.5 of Chapter 4).

Although extensive evidence of the positive effect of market orientation on business performance exists (Lado and Maydeu-Olivares, 2001; Deshpande, 1999; Jaworski and Kohli, 1993; Narver and Slater, 1990), it is not yet clear why there is such effect and how it operates (Lambin, 1996). Some have suggested that one of the keys to understanding this phenomenon lies in market orientation's positive effect on businesses' degree of innovation (Atuahene-Gima, 1995, 1996; Gatignon and Xuereb, 1997; Han et al.; Hurley and Hult, 1998). To this end, some elaborate theories and frameworks about the relationship between market orientation and innovation have been proposed (Jaworski, Kohli and Sahay, 2000; Connor, 1999; Han et al., 1998; Hurley and Hult, 1998; Atuahene-Gima, 1996). In one of his most quoted passages, Drucker (1954, p. 34) links innovativeness and market orientation, stating that '*there is only one valid definition of business purpose: to create a customer…It is the customer who determines what the business is…Because it is its purpose to create a customer…any business enterprise has two-and only two basic functions: marketing and innovation*'.

By the very nature of their businesses, it can be said that service industries in general, and the hotel industry in particular, has a lot to gain from being market oriented (and consequently, innovative). Just as an effective competitive strategy is crucial for survival in a competitive environment, so is market orientation. From a market orientation viewpoint, the hotel market is of special interest, as it works, mostly, with intangible products in which service quality and customer orientation are crucial elements. Despite the importance of the innovativeness concept, until now, there have been few empirical studies investigating the relationship between market orientation and innovativeness (Tajeddini, et al., 2006), more so in the hotel service sector.

It is argued here that, although most studies have studied market orientation in manufacturing industries and at the organisational level of analysis, its impact on

innovation can be extrapolated to the service industries and to the workgroup level of analysis. It is proposed that market orientation creates a workgroup climate for innovation that leads to service innovation, as Agarwal, et. Al. (2003, p.68) found, 'the immediate impact of market orientation is to spur innovation….' This is because it promotes group membership, and, as Pulendran et al. (2000) point out, being market-oriented creates an environment for listening, understanding and responding to the market and the competition, important ingredients for a climate for innovation. The proposal is also consistent with the argument in the literature on innovation that the consideration of customers, competitors and market possibilities is usually the point of departure for innovation processes in service firms (Sundbo, 1997). It has also been noted that market orientation is the most important success factor for innovation activities (Scarborogh and Lannon, 1989; Brentani, 1989; Morgan and Sturdy, 1993; Laing, 1993; Jallat, 1993). Further, as it is the case with new product development (Narver and Slater 1990; Wren et al. 2000), market orientation in the service industry involves close and effective cross-functional cooperation. Just as such close cooperation among different functional groups is an important antecedent to new product development (Atuahene-Gima 1996), it is also important to service innovation.

Hypothesis 5: Market Orientation is related to high levels of Group Climate for Innovation.

3.6.4 Workgroup climate for innovation

The link between workgroup or team climate and innovation is well documented (Gosling, et. al., 2003; Gustafson, 1994). Previous reviews of research into both climate and innovation (e.g. West and Farr, 1990; West, 1990; Anderson and King, 1993; King and Anderson, 1995) have shown a consistent pattern of climate factors found across studies to be associated with team innovativeness. Summarising these factors, West (1990) proposed a four-factor model of workgroup innovation, proposing that four major factors of climate are predictive of innovativeness. These four factors are: vision, participative safety, task orientation, and support for innovation.

According to West (1990), workgroup innovations often result from team activities which are characterised by: (a) focussing on clear and realistic objectives in which the

team members are committed (***visio***n), (b) interaction between team members in a participative and interpersonally non-threatening climate (***participative safety***), (c) commitment to high standards of performance and, thus, preparedness for basic questions and appraisal of weaknesses (***task orientation***), and, (d) enacted support for innovation attempts including, for example, cooperation to develop and apply new ideas (***support for innovation***).

According to Bain et al. (2001), team or workgroup climate for innovation may affect innovation in different ways. For example, it may permit the group to be more innovative as a unit or mainly promote individual innovativeness within the group. Effects on innovation may be immediately identifiable in the group's current work or may only show up in the longer term when the workgroup's project is viewed as a whole. Moreover, it may not impact the characteristics of particular innovations but may raise the quantity of innovations produced.

Since the shared perceptions approach (West and Anderson, 1998), described in Section 2.2 of Chapter 2, is applicable to all proximal workgroups, previous work in the health service sector (West and Anderson, 1992, 1996) suggests that the workgroup climate-innovation link might hold in other service industries. Based on previous findings cited above (Gosling, et. al., 2003; Gustafson, 1994; West and Farr, 1990; West, 1990; Anderson and King, 1993; King and Anderson, 1995), we can reasonably expect that workgroups in the hotel service industry, with a high climate for innovation, that is, those high on vision, participative safety, task orientation, and support for innovation, will be relatively higher on workgroup service innovativeness. It is therefore proposed that:

Hypothesis 6: The higher the Group Climate for Innovation, the higher the level of Workgroup Service Innovativeness.

3.7 SUMMARY OF HYPOTHESES

Hypothesis1: The more favourable the Organizational Climate, the higher the Group Climate for Innovation.

Hypothesis 2: The more favourable the Task Design, the higher the Group Climate for Innovation.

Hypothesis 3: The greater the Group Self-efficacy, the higher the Group Climate for Innovation.

Hypothesis 4: Group Citizenship Behaviour is related to high levels of Group Climate for Innovation.

Hypothesis 5: Market Orientation is related to high levels of Group Climate for Innovation.

Hypothesis 6: The higher the Group Climate for Innovation, the higher the level of Workgroup Service Innovativeness.

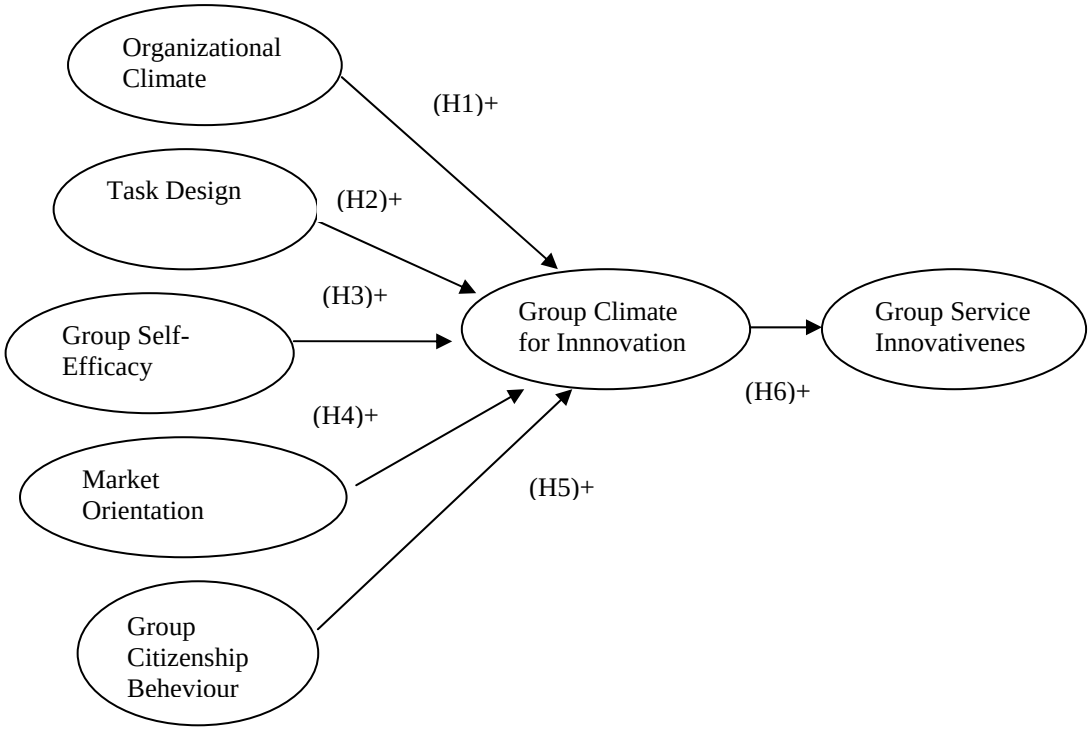


Figure 3.1: Conceptual Model of Workgroup Service Innovativeness

3.8: SUMMARY

This chapter outlined the conceptual model, reviewed the relevant literature, and presented the research hypotheses to be tested. The next chapter outlines the

quantitative research setting, research design, sample, construct measurement, and data collection procedure for this study.

CHAPTER 4
QUANTITATIVE METHODOLOGY

4.1 INTRODUCTION

Chapter 3 outlined the conceptual model and presented the research hypotheses to be tested, along with their rationales. Chapter 4 outlines the quantitative research setting, research design, sample, construct measurement, and data collection procedure for this study.

4.2 RESEARCH SETTING

Most of the empirical studies on innovation have been conducted in the manufacturing sector (Koys, 2001). This practice tends to limit the across setting generalizability of research findings, more so given that the focus in these studies is mostly on product innovation and less on ideas, and procedures. This research will be done in the service sector, using the hotel industry as an example. Therefore, focus of the study was not on the hotel industry per se, but, on the industry as a special case of the service industry. Both service industry practitioners and scholars should benefit from the research findings. The service sector in which this study will be conducted is the hotel industry, specifically the licensed hotels from three stars to five star establishments. The Australian Hotels Association (AHS) defines licensed hotels as 'hotels which provide tourist accommodation, are licensed to operate a public bar, and provide baths or showers, and toilets in most guestrooms….' (AHS, Cat 8635.0, 1986) (See Section 4.4 for standards description). This definition was used to delineate the population from which the sample was drawn.

Four main reasons guided the choice of the hotel industry as the service context for this research.

Firstly, compared with most other service industries, workgroups (defined as the hotel functional departments), the units of analysis in this study are highly distinct in the hotel industry, that is, compared to other industries, the workgroups are more diverse.

Secondly, the population of this particular service industry is relatively high, making it easier to obtain a sample for the study.

Thirdly, the technology, as stated in chapter 1 is highly standardised across the industry thereby limiting the impact of technology on the dependent variable.

Finally, the choice was guided by convenience: the industry was willing to accommodate the study.

Thus, the setting was deemed conducive to testing the conceptual model. Anecdotal evidence about other service contexts may lead one to conclude that they suffer from certain drawbacks such as limited diversity and distinctiveness of workgroups and lack of standardisation of technology.

A good example of a service industry with limited department (and hence, workgroup) diversity would be a typical restaurant. In most restaurants, there are only two departments, typically the kitchen and waiting staff departments. The public hospital system if compared to the private hospital situation, in most countries, can serve as an example of a service industry with a lack of standardisation of technology and services. In that situation, you find a tendency towards more modern and sophisticated technology favouring the fee paying private hospital. This is important in the control of extraneous variables in the study.

4.3 RESEARCH DESIGN

Fundamentally, all organizational survey efforts possess the same broad goal – to collect information from one or more people on some set of organizationally relevant constructs (Rogelberg, 2002). Survey purpose determines survey scope, and, survey scope represents the methodological requirements dictated by the purpose – namely, the number and type of respondents needed, the context areas to be covered, logistical requirements, and the timing of the survey effort. All these factors were weighed in choosing the questionnaire (supplemented by a few in-depth-interviews in the qualitative study) as the principal data gathering instrument The researcher wanted to

reach many respondents in a fixed time period. The expectation that use of other methods, such as the ethnographic approach, can be very time-intensive ruled out their adoption.

The present study employed a cross-sectional design. Although relationships are known to be dynamic and change with time (Halinen, 1996), this design was chosen not only because of time and practical constraints, particularly on the part of the participating hotels, but also because of the disadvantages inherent in longitudinal studies. These include the longer time period required to collect the data, the additional costs in questionnaire printing and postage, the complexity of organising the research, particularly following up respondents for the second and subsequent research stages (Burns, 1994), and high respondent attrition (Harvey et al., 1983; Deeg et al., 2002).

Based on the extant literature, a questionnaire was developed to test the Workgroup Service Innovativeness model summarised in figure 3.1. The specific questions were developed as described below in Section 4.5.

4.4 SAMPLE

The population used in this study covered all sixty-eight licensed hotels in Melbourne classified as 3 star, 3.5 star, 4 star, 4.5 star and 5 star (Australian Hotels Association, 2001) although the final sample comprised of two 4-star, one 4.5 star and one 5-star hotels.

The star rating is allocated on the basis of achieving a specified point score, and in addition, satisfying a list of essential items relevant to the specific star rating. One star establishments offer a basic standard of accomodation. They are simply furnished and have a resident manager. Two stars indicate well maintained establishments offering an average standard of accomodation with average furnishings, bedding, and floor coverings. Three stars indicate well appointed establishments offering a comfortable standard of accomodation, with above average furnishings and floor coverings. Four stars mean exceptionally well appointed establishments with a high level of facilities, plus quality furnishings offering a high degree of comfort. High standard of presentation

and guest services are provided. Five stars indicate outstanding accomodation offering international standards. These establishments offer a high degree of facilities, outstanding appointments, furnishings and décor with an extensive range of first class guest services.They offer a number and variety of room styles and/or suites. They have choice of dining facilities, 24 hour room service, housekeeping and valet parking. The additional half star indicates establishments offering similar standards to the appropriate full star rating, but offering more comfort by providing additional features and items. According to the Australian Hotels Association (2001), this conforms to international standards.

The 68 hotels from which the sample came are Accommodation Division members of the Australian Hotels Association who have hotels in the Greater Melbourne Area. All licensed hotels in the population were invited to participate in the study with the aim of including all those responding positively. This sampling structure is consistent with past studies (e.g. Anderson and West, 1998).

The workgroup, defined along functional hotel departments (Reception/Front office; Housekeeping; FoodandBeverage/Banquets/ Functions; Kitchen; Maintenance; HumanResources/Administration; and Concierge) formed the unit of analysis.

Four hotels including one that provided 3 hotels from its chain responded favourably and participated in the study. These four hotels yielded workgroups with a total of 303 members (140 males and 163 females). These figures represent an average organisational response rate of approximately 27% (303/1170). Table 4.1 summarise these and other demographics. The table shows the gender, age group, tenure, workgroup (department) and hotel of the respondents. It also gives the frequencies and percentages of these characteristics.

Table 4.1: Demographic Characteristics of Workgroup Respondents

Characteristics	Frequency	Percentage
Gender		

Male	140	46.2
Female	163	53.8
Age Group		
Less than 25	158	52.1
26-35	107	35.3
336-45	34	11.2
46-55	3	1.0
56 plus	1	.3
Length of Service		
Up to 1 year	174	57.4
2	90	29.7
3	30	9.9
4 plus	9	3
Department (N=7)		
Reception/front office	49	16.2
Housekeeping	75	24.7
FandB/Banquets/Functions	116	38.3
Kitchen	26	8.6
Maintenance	15	5.0
HR/Admin.	7	2.3
Concierge	15	5.0
Hotel		
C	18	5.9
H	109	36
W	80	26.4
CH	96	31.7

4.4.1 Measurement Overview

Two objectives guided measurement based on McGrath's (1986) recommendation for studying workgroups. First, data were collected from multiple sources: workgroup members (quantitative study) and team leaders (qualitative study), ensuring the collection of both self-perceptions and observer perceptions.

Second, the group was the level of analysis. Data were collected from individuals and aggregated to the group level. Aggregation is a controversial issue, but several recommendations have emerged (e.g. Roberts et al., 1978; Van de Ven and Ferry, 1980; James, 1982; Campion and McClelland, 1991; Algera, 1983; Campion, 1988).

One recommendation is that there should be a strong rationale or 'composition' theory to justify aggregation (Roberts et al., 1978, p.84). As in aggregation in climate research (James, 1982, p. 219), this study views the constructs as 'macro perceptions' or shared

views of the group. As others have previously asserted (e.g. West, 1995; Hosking and Anderson, 1992; Campion, Medsker and Higgs, 1993; Anderson and West, 1998), the proximal workgroup represents the primary medium through which sharedness of climates and perceptions will evolve through active social construction and become embedded into the fabric of the organization. Another rationale (Van de Ven and Ferry, 1980) is that the meaning of the characteristic does not change from the individual to the group perspective. For task design, a further rationale is that in the work design literature, it is not unusual to conceptualize and measure design at the incumbent level when examining individual positions, and then aggregate to the job level when examining positions held by multiple people (e.g. Algera, 1983; Campion, 1988; Campion and McClelland, 1991), for example, house keeping or front office reception, in the hotel industry.

Another recommendation is that measures refer to the level of interest (Van de Ven and Ferry, 1980). In this study, virtually all items refer to the group.

4.5 MEASURES

The following subsection describes both the original scales and the modified scales used in this study. It also presents the psychometric properties of both the original and modified scales.

4.5.1 Organizational Climate

Despite the relative paucity of research exploring the organizational climate-innovation linkage, the importance of organisational climate to innovation cannot be overemphasised (Cooper, 1998; Shadur, et al., 1999; Nystrom et al., 2002).

Organisational climate refers to organisational members' perceptions of their work environment. Despite the considerable debate regarding the specific definitions and operationalisation of climate to date, most empirical research investigating the influence of climate on organizational outcomes has adopted Scheneider's (1990) approach, whereby researchers focus on the influence of specific types of climate on specific measures of organisational outcomes (e.g. Martocchio, 1994; Blau, 1995; Hofmann and Stetzer, 1996). This approach is consistent with Agrell and Gustafson's (1996) argument that there is more justification for the assumption of the existence of demonstrable and discriminable climates; with Scheineider and Reichers's (1983) assertion that it does not make sense to apply the concept of climate without a particular referent; and Rousseau's (1988) advocacy for the study of 'facet specific climates'.

Several measures of organizational climate exist (e.g. Jones and James, 1979; Ryder and Southey, 1990; Wallac, 1983; Litwin and Stringer; 1968; Margerison, 1979; Koberg and Chusmir, 1987; Oliver and Anderson, 1994; Fey and Beamish, 2001; Svyantek and Bott, 2003). Few of these measures specifically target innovation as a dependent variable. Those that do so have other defects. For example, the well touted 'organisational culture index (OCI) although it has an innovation dimension suffers from the fact that it really measures organisational culture and not organisational climate (Shadur, et al., 1999).

The present researcher adopted Scheineider and Reichers's (1990) approach and consequently measured Organizational Climate using three scales relevant to innovation and adapted from Francis's (2001) 'Innovation Capability Audit'. The adapted scales had nine items as opposed to the 15 in the original scale.

Apart from meeting the criteria we have in Section 5.4 of Chapter 5, these scales were chosen also because they specifically target innovation and have relatively high reliabilities that range between 0.80 and 0.86. The three scales were: commitment to innovation (sample item: 'Top management take innovation seriously.'), initiatives

welcomed (sample item: 'Personal initiatives are supported, providing people work within guidelines.'), and innovation empowerment (sample item: 'Employees are empowered'). Three items measured each scale.

The original and adapted items are presented in Table 4.2. Note that the changed or added words in each item, in both columns, are *italicised*. Where no modifications were made, the words 'unchanged' are used.

Table 4.2: Measure of Organisational Climate

Original item (Francis, 2001)	**Item for use in the study**
In this *organisation*, new ideas are driven through despite setbacks or difficulties	In this *hotel*, new ideas are driven through despite setbacks or difficulties
Decisions to support or kill an initiative are taken by managers who really understand the issue	Unchanged
Top management take innovation very seriously	Top management take innovation (*that is, new ways of doing things*) very seriously
Most people here welcome change	Unchanged
Personal initiatives are supported, providing people work within guidelines	Unchanged
When it is important, decisions are made quickly	Unchanged
Senior Managers inspire people to be innovative	Senior Managers inspire people to be innovative (that is, being creative in coming up with new ideas)
Once a decision is made initiatives are implemented rapidly	Unchanged
Employees are empowered to take significant initiatives	Employees are empowered (that is, given power) to take significant initiatives

4.5.2 Task Design

Hackman and Oldham's (1976) Job Characteristic Model (JCM), remains one of the most common approaches to work design research to day (Parker, et al., 2001). Existing measures of work/job or task design rely on this model and are rarely different in content. As stated in chapter 3, the general tendency has been to measure the five 'core job characteristics', namely skill variety, task identity, task significance, autonomy, and feedback, using them as independent variables to explain variation in outcomes, such as work satisfaction, internal work motivation, performance and reduced absence and labour turnover (Gambil et al., 2000; Parker and Wall, 1998; Parker, et al., 2001; Liden et al., 2000). Some variations of the original Job Characteristics Survey include the Job

Classification Index (Bhuan, et al., 2002) and the BASAM, a Dutch version of the (JDS).

In line with the criteria for scale selection outlined in Section 5.4, Task Design was measured using a 15-item scale adapted from Campion and Medsker's (1993) scale of workgroup characteristics and effectiveness.

Campion and Medsker's scale met the set criteria for instrument selection and had the added advantage of shortness, in a study looking at several constructs and measures.

The scale has acceptably high reliability (Cronbach alpha = 0.80) and has the added advantage of limited length. As this study was measuring several variables, it was deemed important to use, where possible, short but reliable measures of the variables under investigation.

A shorter version of the original JDS exists (Hackman and Oldham, 1980; Kuehn, 2002) but it has relatively lower reliability (Cronbach alpha = 0.75) and to the best of the researcher's knowledge, unlike the Campion and Medsker (1993) scale, it has yet to be used in an innovation study.

The Task Design construct consists of five characteristics measured by three items each (see Table 4.3). These characteristics are

- Self-management: this is the group level analogy to autonomy at the individual job level. It is the degree to which a group is able to manage its affairs.
- Participation: the degree to which all members are allowed to participate in decisions.
- Task variety: the degree to which each member is given the chance to do a number of the group's tasks.
- Task significance: the degree to which group members believe their group's work has significant consequences, either for others inside the organisation or its customers.
- Task identity: the degree to which the group completes a whole and separate piece of work.

The term ‘Workgroup’ instead of ‘Team’ was used in this study to focus respondents’ attention on the immediate workgroup. This minor but important change can be seen in the *italicised* words in Table 4.3 which show the original scale items and those to be used in this study.

Table 4.3: Measure of Task Design

Constructs	Original item (Campion and Medsker 1993)	Item for use in the Study
Self-management	The members of my *team* are responsible for determining the methods, procedures, and schedules with which the work gets done	The members of my *workgroup* are responsible for determining the methods, procedures, and schedules with which the work gets done
	My team rather than my manager decides who does what tasks within the *team*	My workgroup rather than my manager decides who does what tasks within the *workgroup*
	Most work-related decisions are made by members of my *team* rather than by my manager	Most work-related decisions are made by members of my *workgroup* rather than by my manager
Participation	As a member of a team, I have a real say in how the *team* carries out its work	As a member of a group I have a real say in how the *workgroup* carries out its work
	Most members of my team get a chance to participate in decision making	Most members of my workgroup get a chance to participate in decision making
	My *team* is designed to let everyone participate in decision making	My *workgroup* is designed to let everyone participate in decision making
Task variety	Most members of my *team* get a chance to learn the different tasks the team performs	Most members of my *workgroup* get a chance to learn the different tasks the workgroup performs
	Almost everyone on my *team* gets a chance to do the more interesting tasks	Almost everyone in my *workgroup* gets a chance to do the more interesting tasks
	Task assignments often change from day to day to meet the work load needs of the team	Task assignments often change from day to day to meet the work load needs of the *work*
Task significance	The work performed by my *team* is important to the customers in my area	The work performed by my *workgroup* is important to the customer in my area
	My *team* makes an important contribution to serving the company's customers	My *workgroup* makes an important contribution to serving the company's customers
	My *team* helps me feel that my work is important to the company	My *workgroup* helps me feel that my work is important to the company
Task identity	The *team* concept allows all the work on a given product to be completed by the same set of people	The *workgroup* concept allows all the work on a given service/product to be completed by the same set of people
	My *team* is responsible for all aspects of a product for its area	My *workgroup* is responsible for all aspects of a service/product for its area
	My *team* is responsible for its unique area or segment of the business	My *workgroup* is responsible for a unique area or segment of the business

4.5.3 Group Self-efficacy

Through observational and self-report techniques, researchers have established that Group Self-efficacy is a meaningful and measurable group attribute (Gibson, 1999). Simply put, the characteristic of Group Self-efficacy or potency (Campion and Medsker, 1993) is the belief by a group that it can be effective (Guzzo and Shea, 1992). It is akin to Bandura's (1982) concept of Self-efficacy, Vroom's (1964) variable of (high) expectancy in his expectancy theory, and the layman's term of 'team spirit'.

Few studies looking at the role of self-efficacy in innovation exist (Glor, 2001; Markman, et al.; 2002; Kaine et al., 2003). In the present study, it was decided that Campion and Medsker's (1993) potency sub-scale (Cronbach alpha = 0.80) in their 'workgroup characteristics and effectiveness' scale is the most relevant one to studying innovation. This choice was also based on Bandura's (1986) recommendation that efficacy is not a trait in relation to a specific job in a specific situation and hence, any measure of efficacy should be tailored to the setting in which it will be administered.

Campion and Medsker's 3-item sub-scale is presented in Table 4.4. Items in the left column form the original scale while those in the right were the slightly modified items slated for this study.

As can be observed from the table, the only change was the rewording of 'team' in the original scale to 'workgroup' in the new scale. Note that the changed or added words in each item, in both columns, are *italicised.*

Table 4.4 Measures of Group Self-efficacy

Campion and Medsker's (1993) items	Adapted items
Members of my *team* have great confidence that the *team* can perform effectively	Members of my *workgroup* have great confidence that the group can perform effectively
My *team* can take on nearly any task and complete it	My *workgroup* can take on nearly any task and complete it
My *team* has a lot of team spirit	My *workgroup* has a lot of team spirit

4.5.4 Market Orientation

The link between market orientation and innovation is well documented (e.g. Lado and Maydeu-Olivaires, 2001; Mavondo and Farrell, 2000; 2003; Maydeu-Olivaires and Lado, 2003).

There are two dominant measures of market orientation, namely those of Narver and Slater (1990) and Kohli et al. (1993). Although the Kohli et al. (1993) measure of market orientation has been successfully employed in a number of studies (e.g., Pitt et al., 1996), it has suffered from academic criticism (see Diamantopoulos and Hart, 1993; Oczkowski and Farrel, 1998; Mavondo and Farrell, 2000). For example, Mavondo and Farrell (2000) found that the Narver and Slater model of market orientation is understood equivalently across different populations (i.e. it is more generalizable).

In the present study, the 13-item Narver and Slater (1990) Market Orientation scale (Cronbach alpha = 0.93) was used albeit with minor wording modifications to make it more meaningful to the sample. A sample item is, ('Understanding customer needs is very important in my hotel.'). Table 4.5 presents the original items and those to be used in the present study.

As with the other measures, changed or added words in each item are *italicised.*

Table 4.5 Market Orientation measure

The Narver and Slater (1990) Scale	Adapted items
To what extent does your company place a high priority on the following?	The rating scheme applied to other measures(see Section 3.4) was used
Understanding customer needs	Understanding customer needs *is very important in my hotel*
Focussing on customer commitment	Focussing on customer commitment *is very important in my hotel*
Getting all functions to contribute to customer value	Getting all functions to contribute to customer value is very important in my hotel
Sharing information across departments	Sharing information across departments *is very important in my hotel*
Measuring customer satisfaction	Measuring customer satisfaction *is very important in my hotel*
Setting customer satisfaction objectives	Setting customer satisfaction objectives *is very important in my hotel*
Creating value for customers	We create value for *our* customers
Sharing information about customers	*We share* information about customers
Targeting opportunities for competitive advantage	*We* target opportunities for competitive advantage
Sharing resources across the whole company	*We* share resources across the whole company
Top managers discussing competitors' strategies	Top managers *discuss* competitors' strategies
Responding rapidly to competitors' actions	*We respond* rapidly to competitors' actions
All departments contributing to company strategy	All departments *contribute* to company strategy *in my hotel*

4.5.5 Group Citizenship Behaviour (GCB)

GCB occurs when organisational members think and act in ways that facilitate the creative and efficient achievement of both organisational and personal objectives. It was captured using an adaptation of Koy's (2001) 'Organizational Citizenship' scale. The

items were chosen based on the literature (Podsakoff and MacKenzie, 1994; Walz and Niehoff, 1996; Organ, 1988; Podsakoff et al., 1997; LePine, 2002; Lower, 2002).

One item for each dimension of GCB was included: conscientiousness (‘the workgroup you supervise works to exceed guest’s expectations’), altruism (‘the workgroup members you supervise can count on co-workers when they need help’), civic virtue (‘the workgroup you supervise feels responsible for its success’), sportsmanship (‘ the workgroup you supervise has a ‘can do’ attitude’), and courtesy (‘ the workgroup you supervise treats its members with respect’). The items evoked aggregate judgements to keep with Organ’s statement that OCB (herein, GCB) is a concept that ‘in aggregate, makes for a more effective organisation’ (Organ, 1988, p.6). The mean score of the five items was used as the measure of GCB. The internal consistency of the GCB scale is acceptable with the coefficient alphas ranging between 0.85 and 0 .86.

It can be argued that the five dimensions may be too diverse to justify a single construct of GCB. But, as Koys (2001) found, an examination of several articles on OCB to determine the diversity of the dimensions revealed that the intercorrelations of the five dimensions ranged from 0.15 to 0.86, with a mean correlation of 0.56, which is high enough to rationalise a single measure of OCB Koys (2001).

Table 4.6 shows the original OCB and adapted GCB items. Note that the changed or added words in each item, in both columns, are *italicised*. Where no modifications took place, the words ‘unchanged’ are used.

Table 4.6: Measure of Group Citizenship Behaviour

Koy's (2001) OCB Scale	Adapted GCB items
The employees work to exceed each guest's expectations	*In this hotel*, the employees work to exceed each guest's expectations
I can count on my co-workers when I need help	Unchanged
The employee *team* feels responsible for our success	The employee *group* feels responsible for our success
The people I work with have a 'can do' attitude	Unchanged
The people here treat each other with respect	Unchanged

4.5.6 Group Climate for innovation

The current standard measure of a workgroup's climate for innovation is the Team Climate Inventory (TCI) (Anderson and West, 1994). The development and validation of this instrument is described in Anderson and West (1998) but, it should be pointed out that reliability of the instrument range between 0.80 and 0.94 (Anderson and West, 199; Dunning, Pirola-Merlo, Hirst, Mann, and Atkins, 1998; Bain et al., 2001).

For reasons of parsimony, Group Climate for innovation was measured in this study using Kivimaki and Elovaini's (1999) short 14-item version of the TCI.

The TCI is based on the four-factor theory of innovation (West, 1990) which posit that group innovations often result from team activities which are characterised by (1) Vision, where team or workgroup members focus on clear and realistic objectives in which the members are committed, (2) Participative safety**,** where there is interaction between group members in a Participative and interpersonally non-threatening climate, (3) Task orientation, where there is commitment to high standards of performance and, thus, preparedness for basic questions and appraisal of weaknesses, and (4) Support for

innovation, where there is enacted support for innovation attempts including cooperation to develop and apply new ideas.

The original TCI has demonstrated robust psychometric properties with acceptable degrees of reliability and validity across different occupational samples and countries, such as the United Kingdom, Sweden, Finland and Australia (Agrell and Gustafson, 1994; Kivimaki et al., 1997; Anderson and West, 1998; Bain et al., 2001). But, as Kivimaki and Elovainio (1999) point out, the length of the TCI and wordiness of its 38 items can prove cumbersome in data collection. They have therefore come up with a shortened version, which so far has proved to be just as robust (Cronbach alpha = 0.90) as the full scale and has comparable normality (Kivimaki and Elovaini, 1999).

As indicated earlier, the short version was used in the current study. It was slightly adapted to suit the current sample. Sample items include Vision: ('My workgroup's objectives are worthwhile to the hotel'); Participative Safety:('In this hotel, we have a 'we are together' attitude'); Support for Innovation: ('In my workgroup we take the time needed to develop new ideas'); and Task Orientation: ('The workgroup critically appraises potential weaknesses in what it is doing in order to achieve the best possible outcome').

Table 4.7 shows the original and adapted TCI items. Again, the changed or added words in each item, in both columns, are *italicised*. The bolder terms in brackets show the sub-scale each item belongs to.

Table 4.7: Workgroup Climate for innovation Measure (the TCI short version)

Original TCI item (Kivimaki and Elovaini1999)	Item used in the study
We have a 'we are in it together' attitude (**Participative safety)**	*In this hotel*, we have a 'we are together' attitude
People keep each other informed about work-related issues in the team(**Participative safety**)	People keep each other informed about work-related issues *in my group*
People feel understood and accepted by each other(**Participative safety)**	Unchanged
There are real attempts to share information throughout the *team (***Participative safety*)*	There are real attempts to share information throughout the *workgroup*
In this organisation, team members are prepared to question the basis of what the *team* is doing (**Task orientation)**	*In this hotel, workgroup members* are prepared to question the basis of what the *group* is doing
The *team* critically appraises potential weaknesses in what it is doing in order to achieve the best possible outcomes (**Task orientation**)	The workgroup critically appraises potential weaknesses in what it is doing in order to achieve the best possible outcome
People in my *team* are always searching for fresh, new way of looking at problems (**Support for innovation**)	Members of the *workgroup* build on each other's ideas in order to achieve the best possible outcome
People in my *team* are always searching for **fresh, new ways of looking at problems (Support for innovation**)	People in my *workgroup* are always searching for fresh, new ways of looking at problems
In my *team* we take the time needed to develop new ideas (**Support for innovation**)	In my *workgroup* we take the time needed to develop new ideas
In this organisation, you are in agreement with your team's objectives(**Vision)**	In *this hotel*, you are in agreement with your *workgroup'*s objectives.
My team's objectives can actually be achieved**(Vision**)	My *workgroup's* objectives can actually be achieved)
My team's objectives are worthwhile to the organisation(**Vision)**	My *workgroup's* objectives are worthwhile to the *hotel*
My team's objectives are clearly understood by other members of the team(**Vision)**	My *workgroup's* objectives are clearly understood by other members of the *workgroup*

4.5.7 Workgroup Service Innovativeness

A search of the extant literature revealed that among the existing measures of innovation in general and service innovativeness in particular, (e.g., Maier, 1970;

Amabile, 1983; Agrell and Gustafson, 1994; Burningham and West, 1995; Hertog, 2000; Djellal and Gallouj, 2001; Green et al., 2001 Tether, 2001; Hertog and Segers, 2003), the most relevant to operationalizing workgroup perceived innovativeness in the service industry is Kivimaki's (1996) five-item work unit Innovativeness scale (Cronbach alpha = 0.87). Consequently a slightly modified version of the scale was used in this research.

The scale assesses how encouraging the respondent's workgroup is in doing things in a new and innovative way, whether improvements in how things are done are regularly made, and whether information concerning improvements is spread to everybody in the respondent's workgroup and to other workgroups.

A sample item is, ('Everybody in our workgroup is encouraged to think of ways of doing things better'). Table 4.8 presents the original and adapted. Note that the changed or added words in each item, in both columns, are *italicised*.

Table 4.8: Workgroup Service Innovativeness Measure

Kivimaki's (1996) Innovativeness Scale	**Adapted items**
Everybody in our *team* is encouraged to think of new and innovative ways of doing things better	Everybody in our *workgroup* is encouraged to think of new and innovative ways of doing things better
We regularly make improvements in how we do things in our *team*	We regularly make improvements in how we do things in our *workgroup*
Information concerning the improvement is spread to everybody in our *team*	Information concerning the improvement is spread to everybody in our *workgroup*
Information about the improvements is given also to *other units*	Information about the improvements is give also to *other workgroups*
Overall, your *team*'s innovativeness, that is their ability to come up with new and creative ways of doing their work may be described as excellent	Overall, your *workgroup's* innovativeness, that is their ability to come up with new and creative ways of doing their work may be described as excellent

4.6 DATA COLLECTION PROCEDURE

Figure 4.1 summarises the stages of the data collection process.

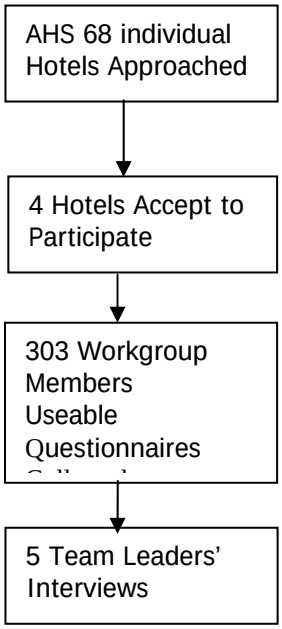


Figure 4.1 summary of the data collection process.

Initial contact to discuss intent of undertaking an innovation study in the Australian hotel industry was made with the Australian Hotels Association (AHA).

The AHA advised the researcher to make direct contact with its members, as they had no power to grant permission for such a study. Subsequent permission for organisational entry to undertake the research was sought during the first part of 2002 by means of a letter drafted by the researcher and signed by him and the principal supervisor (see Appendix B).

The letter explained the objectives of the study, benefits to participating hotels, and promised anonymity. It was printed on Victoria University headed paper.

Following this initial contact, the researcher visited all the 68 hotels forming the population with the view to further explain the purpose, requirements of the study and the likely benefits to those hotels that chose to participate.

In the end, four hotels chose to participate. Reasons for those who declined ranged from disinterest to not-so-ideal timing for the project.

Once times had been agreed on between the researcher and the participating hotels, the actual administration of the questionnaire, involved making multiple trips to the research sites on the part of the researcher at different times of the hotels' work cycles. The survey package contained the covering letter, the questionnaire, and a white, pre-paid university-identified A4 envelope. The promise of anonymity was invariably, verbally stressed during each administration opportunity.

Respondents were encouraged to complete the questionnaire during their breaks, put it in a standard envelope provided by, and addressed to the researcher and then drop the envelope into a special box located in each hotel's lunch room. Alternatively, respondents could choose to seal and post the envelopes. Postage was pre-paid. Questionnaire returns were monitored and several follow-up visits were made.

Between August 2004 and February 2005, a total of 303 useable questionnaires were collected. 80% of the questionnaires were completed at work while the remainder were posted.

4.7: SUMMARY

This chapter presented both the original and adapted measures used in the study and then summarized the data collection procedure

CHAPTER 5
QUANTITATIVE CONSTRUCT ASSESSMENT

5.1 INTRODUCTION

Chapter 4 outlined the quantitative research setting, research design, study sample, measures, and data collection procedure used in this study. This chapter presents the data entry procedure and the results of the construct assessment of reliability and validity, using cronbach alpha, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA) procedures.

5.2 DATA CODING AND EDITING

On completion of data entry into SPSS, range and consistency checks were made to make sure the data was clean. Inconsistencies were checked and, where necessary, discrepancies were corrected, the data was declared missing, or the entire case record omitted from analysis. When conducting CFA, cases with more than one missing value for a given construct dimension were excluded, otherwise the mode score given by the respondent for the dimension of interest was calculated and substituted for the missing value. At the end of this process, there was a sample of 303 useable questionnaires, as indicated in section 4.4 in Chapter 4

5.3 MISSING DATA ANALYSIS

Visual examination of the data revealed that the missing data was scattered randomly throughout the observations, there were no identifiable distinct patterns. A decision was made to replace the missing data with item means (Hair et al., 2002). Mean substitution refers to substituting the mean value of a variable for the missing data point where the

mean is calculated across the other respondents. It is a preferred way of handling the missing data problem, because, unlike the deletion method, it does not lead to loss of analytical power (Rogelberg, 2002).

5.4 CHOICE OF SCALES

An important criterion for choosing a research tool is consideration of the goodness of fit between a given construct and its indicator. Following an extensive review of the extant literature, measures for the constructs under study were chosen on the basis of this fit between construct and indicator, as reflected in the validity and reliability measures. Thus, in this study, all the chosen measures outlined in chapter 4 had established credible psychometric properties.

Another consideration in the choice of measures was their length. Because of the relatively large number of scales used in the study, it was decided that, where possible, shorter but reliable and valid measures be used to avoid putting off respondents with a long questionnaire. Hence were possible, short versions of construct measures were chosen.

Finally as another way of ensuring construct-indicator fit, the 12 criteria proposed by Corcoran et al., (1998) influenced the choice of the scales. These are:

- The scales provided the data needed to answer the research questions
- The scales address the same types of variables that are to be investigated
- The level of measurement was appropriate for the intended statistical analyses
- The format of the items was appropriate to the level of the inquiry
- The scales had known reliabilities and the circumstances in which reliabilities were established were known
- The scales had known validities
- There had been other applications of the scales

- The language of the scales was appropriate for the intended sample
- The instructions were clear and easy to follow
- The items meet standards for item construction
- The flow in each of the scales was logical and easy to follow
- The scales were the appropriate length for the intended respondents, and other circumstances related to the design.

The chosen scales were evaluated and adapted to the hotel context and were also at times slightly modified in a language style to suit a heterogeneous Australian population. These scales are described below. All constructs were represented by multiple items (minimum of 3) under the guiding premise that multiple responses reflect the 'true' response more accurately than does a single response (Hair et al., 2002).

Unless otherwise specified, a five-point Likert scale was used ranging from strongly agree (5) to strongly disagree (1). A zero category to represent 'do not know/not applicable' was placed outside the end of the scale. The whole 67-item questionnaire is given in appendix A. The next subsection describes the data coding and editing procedures, scale evaluation, and scale dimensionality.

5.5 SCALE EVALUATION

Scale evaluation, conducted before the main data analysis was meant to check the psychometric properties of all the scales. Sections 5.5 through 5.7 describe only the evaluation process and provide some indication for interpreting section 5.8. Results from the evaluation process follow in Section 5.8.

5.5.1 Reliability Analysis

This analysis is designed to determine the degree to which measurements are repeated or consistent (Schumaker and Lomax, 1996). The greater the reliability, the lower the

measurement error and the closer the measurement to the 'true' score of the latent variable (DeVellis, 1991). Cronbach's (1951) coefficient alpha is the most widely used statistic to summarise a given scale's reliability. Typically, values of alpha between 0.65 and 0.70 are considered minimally acceptable while those between 0.70 and 0.80 are considered reasonable (DeVellis, 1991). Alpha coefficients ranging between 0.80 and 0.90 indicate acceptable levels (Anderson and West, 1998). Others have been more liberal: Nunally and Bernstein (1994) suggested coefficients alpha of value 0.70 to be considered as good, and a value exceeding 0.60 to be acceptable.

Internal consistency was assessed using reliability, exploratory and confirmatory factor analysis. The items comprising a scale or subscale should display high levels of internal consistency or inter-correlation (Bearden et al., 1993; Churchill, 1979). High inter-item correlations suggest that the items are measuring the same thing (DeVellis, 1991).

Items that contributed least to the overall internal consistency were to be excluded first, that is, items with the lowest item-to-total correlations which were less than 0.3, and items with communalities less than 0.4 (DeVellis, 1991).

5.5.2 Validity Analysis

Validity implies that a variable measures what it is supposed to measure (Bollen, 1989; Carmines and Zeller, 1979). Reliability by itself does not give a guarantee that the latent variable explained by the items is the variable of interest to the researcher. Churchill (1979) argues that a measurement instrument is valid only when the differences in observed scores reflect true differences of the characteristic measured, nothing more and nothing less. Aspects of validity include:

- Content validity, also known as face validity, it is a subjective assessment of the extent to which a measurements scale captures the underlying theoretical basis of the construct (Malhotra et al., 1996).

- Discriminant validity that shows the extent to which constructs are unrelated.

- Construct validity, the extent or degree to which inferences can legitimately be made from the operationalizations in a study to the theoretical constructs on which those operationalizations hinged (Trochim, 2003).

- Criterion-related validity, reflecting whether the instrument behaves as expected (Churchill, 1979; DeVellis, 1991).

Although the variables used in the present study were captured using previously validated scales, both EFA and CFA were conducted on the slightly modified scales to ensure they remained of sound psychometric properties.

5.5.3 Scale Dimensionality: Exploratory Factor Analysis

Factor analysis is a data reduction technique used to reduce a large number of variables to a more manageable set of underlying factors that summarise the essential information contained in the variables (Coakes and Steed, 2003).

Exploratory factor analysis (EFA) was used to evaluate construct validity and dimensionality of the measured constructs and to provide guidelines for item reduction. Variables were free to load on all factors. Where necessary, items with the poorest loadings were eliminated. Before factor analysis is carried out on data, assessment must be done as to the appropriateness of such analysis to the data.

In the present study, the, following assessments, following Coakes and Steed (2003) were made: Firstly, the correlation matrix was inspected to ensure that there were correlations in excess of 0.3. Secondly, the anti-image correlation matrix was examined to assess the sampling adequacy of each variable. The intention was to discard variables with a measure of sampling accuracy that falls below the acceptable level of 0.5. Thirdly, Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were used to determine the factorability of the matrix as a whole. If Bartlett's test of sphericity was large and significant, and if the Kaiser-Meyer-Olkin measure was greater than 0.6, then factorability was assumed.

The factor matrix is a matrix of loadings or correlations between the variables and factors. Pure variables have loadings of 0.3 or greater on only one factor. Complex

variables may have high loadings on more than one factor, and they make interpretation of the output difficult. Rotation was therefore necessary in some cases to improve interpretability. Specifically, varimax rotation, the most frequently used technique (Coates and Steed, 2003) was used. With this technique, factor axes are kept at right angles to each other. This reduces the number of complex variables and enhances interpretability. Higher loading becomes still higher and lower loading becomes still lower with the varimax rotation method indicating a clear loading on various factors.

In this study, factors were only retained if they possessed an Eigen value greater than one, accounted for over 5 per cent of variance and if they were conceptually clear and interpretable (Churchill, 1991; Ogbonna, 2001).

5.6 STRUCTURAL EQUATION MODELLING (SEM)

The following section provides an overview for interpreting the statistics presented in Chapter 6.

SPSS 15 was used for the factor analysis (measurement model) and the analysis of moment structures (using AMOS, version 7) for the regression analysis (path model). The combination of factor analysis and regression analysis is known as causal modelling (Hair *et al*. 2002) or structural equation modelling (SEM).

Ullman (1996, p.709) describes structural equation modelling (SEM) as 'a collection of statistical techniques that allow examination of a set of relationships between one or more independent variables, either continuous or discreet, and one or more dependent variables, either continuous or discreet'. It is used to examine the efficacy of proposed cause and effect relationships between a set of variables. SEM was used because it is able to model latent variables, estimate relationships among dependent variables (DVs), account for measurement error, provide a measure of model fit and therefore allows the comparison of competing models.

SEM is a confirmatory, rather than exploratory, approach to data analysis (Joreskog and Soborm, 1981; Tabachnick and Fidell, 2001; Hair et al., 2002). According to Joreskog

and Soborm (1981), typically, a researcher has a prior theory on how variables are related. These variables are said to be latent, i.e., hypothetical constructs invented by the investigator for the purpose of understanding a research area. Generally, there exists no operational method for directly measuring these constructs. One has to depend on other variables known as measured variables to serve as indicators of the latent variables. When the relation among all latent variables and the relation of these variables to measured variables are specified in mathematical form, one obtains a model having certain structural form and certain unknown parameters. The main statistical problem is one of optimally estimating the parameters of the model and determining the goodness-of-fit (GOF) of the model to sample data on the measured variables. If there is no fit between the model and the data, the proposed model is rejected as a plausible representation of what is happening among the variables in the population. If the model cannot be rejected statistically, it is a plausible representation of the causal structure. Because different models typically generate different obscured data, carefully specified competing models can be compared statistically.

5.6.1 Measurement Models

Confirmatory factor analysis (CFA) seeks to determine if the number of factors and the loadings of measured (indicator) variables on them conform to what is expected on the basis of pre-established theory. Indicator variables are selected on the basis of prior theory and factor analysis is used to see if they load as predicted on the expected number of factors. A minimum requirement of confirmatory factor analysis is that one hypothesizes beforehand the number of factors in the model. CFA with AMOS (5) does routinely and robustly take into account mediating variables (Ullman, 1996; Hair et. al., 2002; Joreskog and Soborm, 1981; Diamantopolous, 1994; Schumacker and Lomax, 1996).

According to Anderson and Gerbing (1988) and Schumacker and Lomax (1996), a two-step model-building approach that sequentially investigates two conceptually distinct models: measurement and structural should be used in the analysis. The measurement model specifies how the latent (unobserved or underlying) variables are measured in terms of the observed variables. The structural equation model specifies the direct and

indirect relationships among latent variables and provides an assessment of nomological (construct) validity. It is important that measurement models are tested before the structural relationships as this allows for inspection of the lack of fit that can be attributed to the measurement alone.

Confirmatory factor analysis represents the measurement model of structural equation modelling, and, through factor loadings and goodness-of-fit indices, it provides an assessment of convergent and discriminant validity of the constructs of interest. The method of reporting is via a path diagram. Path diagrams illustrate how scale items are causally related to a latent variable.

5.6.2 Model Evaluation Overall

There are a number of indices for evaluating the goodness-of-fit of a hypothesised model. However, these fit indices have no single statistical test of significance that identifies a correct model given the sample data. It is therefore recommended that various GOF criteria be used in combination to assess the four broad categories of: model fit, model comparison, model parsimony and model generalisability (Hair et al. (2002).

The chi-square statistic compares the goodness-of-fit between the covariance matrix for the observed data and covariance matrix derived from a theoretically specified structure model (Fornell and Larcker, 1981). By convention, an acceptable model is one where the p-value is greater than or equal to 0.05. Ullman (1996), however, lists a number of problems associated with the use of chi-square as a goodness-of-fit index. First, with small samples the computed chi-square need not have a chi-square distribution. Second, with large samples, trivial differences between estimated population values may be significant. Third, when assumptions underlying the chi-square test statistic are violated, the associated probability levels are unreliable.

Because of the above concerns regarding the chi-square statistic, the greatest attention in this study was given to seven other indices in common use to evaluate the measurement models. These include: The Goodness-of-Fit Index (GFI); the Adjusted Goodness-of-Fit Index (AGFI); the Standardised Root Mean Square Residual (RMSR);

the Tucker and Lewis Index (TLI); the Comparative Fit Index (CFI); the Normed Fit Index (NFI); and the Root Mean Square Error of Approximation (RMSEA). Bentler and Bonnet (1980) values, greater than 0.9, have traditionally been used for GFI, AGFI, CFI, TLI, and NFI as a rule of thumb to indicate that the model provides an adequate fit. Brown and Cudeck (1993) suggest that RMSR and RMSEA values of 0.08 or less indicate adequate fit. Values less than 0.05 indicate a close model fit. Table 5.1 summarizes these indices which are adapted from Schumacker and Lomax (1996) and Hair et al. (2002).

Table 5.1: Goodness-of-fit criteria and acceptable fit interpretation

G-O-F Criterion	Acceptable Level	Interpretation
Chi-Square	Probability Level p>0.05	A non-significant chi-square test provides support for the model
Goodness of Fit Index (**GFI**)	Value close to or > 0.9	0 (no fit) to 1 (perfect fit)
Adjusted Goodness-of-fit Index (**AGFI**)	Value close to or > 0.9	Value adjusted for df, with 00.90 a good model fit
Standardised Root Mean Square Residual (**RMSR**)	Value < 0.08	The lower the value, the better the fit
Tucker-Lewis Index (**TLI**)	Value close to or > 0.9	A low coefficient (closer to 0.50) indicates that the relations amongst variables are more complex than can be represented by that number of common factors
Normed Fit Index (**NFI**)	Value close to or > 0.9	0 (no fit) to 1 (perfect fit)
Comparative Fit Index (**CFI**)	Value close to or > 0.9	0 (no fit) to 1 (perfect fit)
Root Mean Square Error of Approximation (**RMSEA**)	Values up to 0.08 are reasonable	Value less than 0.05 indicates a close model fit.

5.6.3 Measurement Model Respecification

More often than not, an initial model does not fit the data well. Misspecification is an important source of model poor fit (Schumacker and Lomax, 1996). A major reason for misspecification is generally the incorrect inclusion or exclusion of a parameter (Bollen,

1989). Typically, when the model fit indices suggest a poor fit in the first instance, decisions are made regarding how to delete items or modify paths in the model and then subsequently re-run analyses are made. In the present study, there was no reason for item deletion, but, where it was theoretically defensible, changes suggested by modification indices that led to the largest reduction in chi-square estimation were made. These theoretical defences and the resulting respecified model are given in section 6.3 of Chapter 6.

5.7 ANALYSIS SUMMARY

Step 1 of the construct assessment strategy involved running one EFA on all measures at the same time and retaining only those items that had “clean” loadings. This means items showing high factor loadings and those not loading on multiple factors were retained. Principal components factor analysis with varimax rotation was conducted, as a preliminary investigation into the internal structure of the constructs. After this procedure, the resulting set of items in each construct was used for CFA. Results from step 1 are shown individually for each construct in the following section (section 5.8).

5.8 VARIABLE EVALUATION

The exploratory factor analyses were undertaken basically as a matter of standard practice. Although results for some exploratory factor analyses might seem compromised by lower than minimum % of variances explained, attenuation was mitigated by using:

a) Existing measures with well-established psychometric credentials

b) Large sample size

5.8.1 Independent variable 1- Organizational Climate

Reliability analysis of the full Organizational Climate scale yielded a Cronbach alpha of .85. Principal components factor analysis with varimax rotation was conducted to determine the internal structure of the Organizational Climate construct. This procedure yielded a 2-factor solution, instead of the 3-factor solution found by Francis, (2001). Application of the Scree Test (Cattell, 1966; Coates and Steed, 2003) also supported a two-factor solution.

Looking at table 5.2, examination of the five items on which the first factor loaded indicated that they all had something to do with commitment to innovation. Thus, Factor 1 was aptly labelled *Commitment to innovation.* It accounted for 44.9 per cent of the variance and had an Eigen value of 3.98. Cronbach alpha for this factor was established at 0.80

Three of the remaining four items on which the second factor loaded appeared to be referring to support for innovation. Factor 2, was duly labelled *Management support for innovation* and had Cronbach alpha of 0.75**.** It accounted for 14.95 per cent of the variance and had an Eigen value of 1.24.

All factor loadings were above the more common threshold of 0.40 (Anderson and West, 1998).

From step 1 (section 5.7), it was determined that the remaining item (i.e. once a decision is made initiatives are implemented rapidly*)*, cross-loaded over the 0.50 mark on both factors. A decision was made to exclude the item from further analysis. This exclusion dropped the full scale's Cronbach alpha to 0.82, still at an acceptable level. The values of the above alphas, though acceptable (DeVellis, 1991), are lower than those in the original Francis (2001) scale, which ranged between .80 and .86. Table 5.2 summarises these results.

Table 5.2: Organizational climate EFA

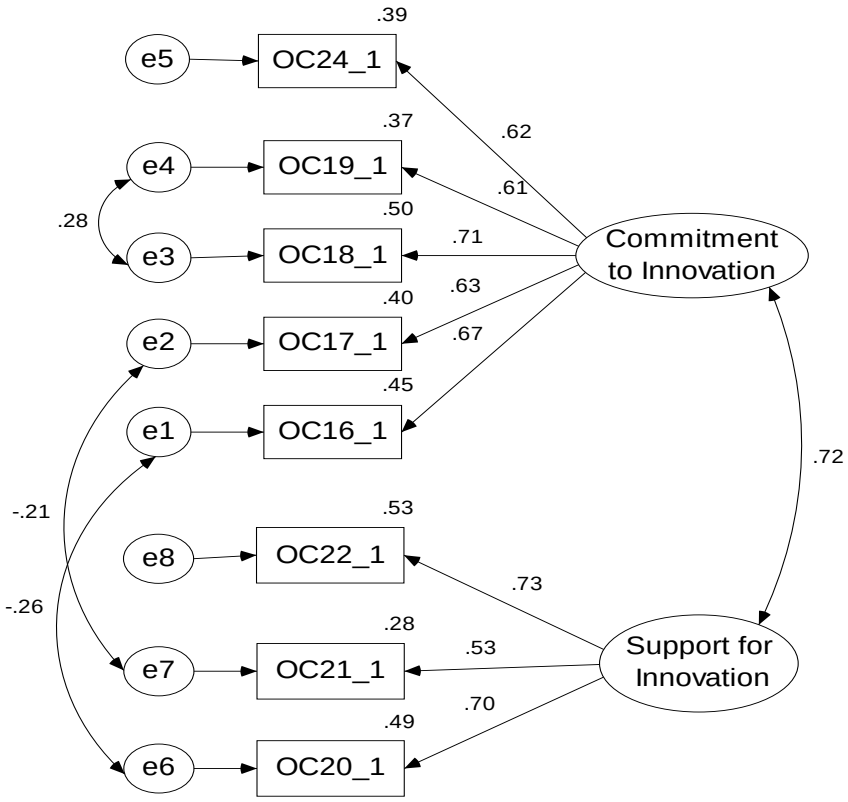
Item	Factor 1 Commitment to innovation	Factor 2 Management support for Innovation
Top management take innovation (that is new ways of doing things) seriously	.80	-
In this hotel, new ideas are driven through despite set backs or difficulties	.77	-
Most people here welcome change	.70	-
Decisions to support or hinder an initiative are taken by managers who really understand the issues	.69	-
Employees are empowered (that is, given power) to take significant initiatives	.63	-
When it is important decisions are made quickly	-	.84
Personal initiatives are supported, providing people work within guidelines	-	.75
Senior managers inspire people to be innovative (that is, being creative in coming up with new ideas	-	.68
Number of cases	303	303
Eigenvalue	3.6	1.2
per cent of variance explained	44.9	14.95
α	.80	.75
Organizational climate Scale α	.82	

A Confirmatory Factor Analysis (CFA) was conducted, where the five items, on which factor 1 loaded, were constrained to the *Commitment to innovation* dimension and the three items, on which factor 2 loaded, were constrained to the *Management support for innovation* dimension.

The initial analysis failed to confirm the hypothesized factor structure. The chi-square value was significant ($\chi^2 = 40.31, df = 16, p < .001$) which indicated that the model did not adequately account for the observed covariation among the variables. Also, some of the fit indices (AGFI and RMSEA) indicated poor fit.

Examination of the modification indices showed that major improvements could be achieved if the errors of the items were allowed to correlate. This produced an

acceptable model fit as given in Figure 5.1. The t-values of the factor loadings were all significant, and all reliability and variance extracted measures of the constructs were near or exceeded the recommended levels of 0.5.



Chi-Square Value	40.31
Degrees of Freedom	16
P value	.001
GFI*	0.97
AGFI*	0.93
RMSR*	.047
TLI*	0.94
CFI*	0.96
NFI*	0.94
RMSEA*	.071

* Refer to Table 5.1

Figure 5.1: Measurement Model and Fit Indices for Organizational Climate 2-Factor Solution.

5.8.2 Independent variable 2- Task Design

An initial reliability analysis of the slightly modified (See table 4.3) Campion and Medsker (1993) Task Design scale yielded a Cronbach alpha of 0.81.

As a preliminary investigation into the internal structure of the construct, a principal components factor analysis with varimax rotation was conducted. As expected, five factors were extracted, but interpretation of this solution was made difficult by cross-

loadings identified from step 1 (section 5.7). Removing the two cross-loading items (i.e. My workgroup helps me feel that my work is important to the company; The workgroup concept allows all the work on a given service/product to be completed by the same set of people) provided a more interpretable three-factor solution that accounted for 50 per cent of the total variance. Out of the total variance, the first factor, *Participative task design* accounted for 20.7 per cent while the second and third factors, *Task significance/identity* and *Self-management*, accounted for 18.3 per cent and 11.8 per cent respectively.

Table 5.3 summarises these findings and includes the factor loadings and Eigen values.

The 13-item Task Design scale yielded a Cronbach alpha of 0.81, same as the original scale. This is comparable to the Cronbach alpha of 0.80 found by Campion and Medsker (1993) but higher than the 0.75 reported in the Kuehn and Busaidi (2002) study.

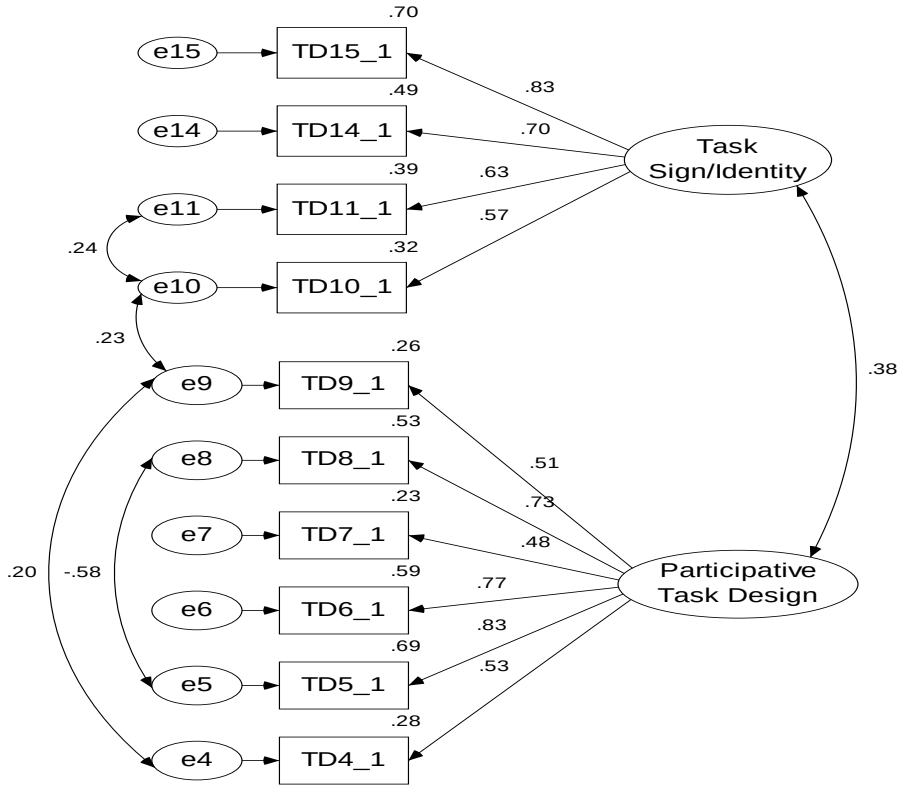
The reliability of the six P*articipative task design* items was acceptable at 0.80, as was the reliability of the four T*ask significance/identity* items also at 0.80. The reliability of the 3 *Self-management* items, at 0.58 was not acceptable. A decision was made to exclude this factor from further analysis. Thus, only P*articipative task design* and T*ask significance/identity* factors were used as the task design unobserved variables at the next stage of analysis. Table 5.3 summarises these findings and includes the factor loadings and Eigen values.

Table 5.3: Modified Task Design EFA

Items	Factor 1 (Participative Task design)	Factor 2 (Task Significance / Identity)	Factor 3 (Self-Management)
Workgroup designed to allow decision-making Participation	.78		
Group members get chance for decision-making Participation	.76		
Group members get chance to do interesting tasks	.73		
I have real say in work scheduling	.64		
Variable task assignments to meet group workload (td9)	.61		
Most get chance to learn various tasks (td7)	.60		
My group makes important contribution to customer service (td11)		.80	
My group is responsible for unique area of business (td15)		.77	
My group is responsible for all aspects of a product in its area (td14)		.73	
My group's work is important to the customer (td10)		.73	
Group decides who does what within group (td2)			.83
My group determines work methods, procedures and schedules (td1)			.62
Most work related decisions by group (td3)			.50
Number of cases	303	303	303
Eigen values	4.26	2	1.44
per cent of variance explained	20.7	18.3	11.8
α =	.80	.80	.58
Scale α =	.81		

A measurement model was then constructed constraining the six items to the *Participative task design* dimension, and the four items to the task significance/identity dimension. Although an assumption is normally made that error terms are generally independent of one another, correlated errors can occur among items proximate to each other on the questionnaire, or, those having similar wording, making it difficult for respondents to distinguish between them (Bollen and Lennox, 1991). Two types of

covariance between error terms include covariance among error terms of items indicating the same construct (within-construct error covariance) and covariance between two error terms of items indicating different constructs (between-construct error covariance) (Hair, et al., 2006). Thus, where theoretical sense and error modification indices suggested covariation, the covariation was installed. Figure 5.2 shows the resultant measurement model for Task design.



Chi-Square Value	86.61
Degrees of Freedom	30
P value	.001
GFI*	0.95
AGFI*	0.90
RMSR*	.06
TLI*	0.91
CFI*	0.94
NFI*	0.92
RMSEA*	.079

* Refer to Table 5.1

Figure 5.2: Measurement Model and Fit Indices for Task Design 3-Factor Solution.

The Chi-square value was significant ($\chi^2 = 86.61, df = 30, p < .001$) which indicated that the model did not adequately account for the observed covariation among the variables. However, all other fit indices indicated a good fit. Further, the t-values of the factor loadings were all significant, and all reliability and variance extracted measures of the constructs exceeded the recommended levels of 0.5. The magnitude and statistical significance of the correlation between *Participative task design* and *Task significance/identity* provided some support that the two factors are distinct, yet probably related dimensions of Task design.

5.8.3 Independent variable 3- Group Self-efficacy (GSE)

Reliability analysis of the 3-item Group Self-efficacy scale provided a Cronbach alpha of 0.78 which, although slightly lower than the 0.80 found by Campion and Medsker (1993), is still respectable (DeVellis, 1991).

An EFA was then conducted on the 3 items. As expected, only one factor was extracted. It explained 69.4 per cent of the total variance and had an Eigen value of 2.1. The factor was labelled *Group self-efficacy* and all three items loaded heavily on it. Table 5.4 below summarises these findings and includes the factor loadings and Eigen value.

Table 5.4: Group Self-efficacy EFA

Items	Factor 1 Group self-efficacy
My workgroup has a lot of team spirit	.88
Members of my workgroup have great confidence that the group can perform effectively	.83
My workgroup can take on nearly any task and complete it	.79
Number of cases	300
Eigen value	2.1
per cent of Variance explained	69.4
Group self-efficacy Scale α	.78

A CFA was conducted where the three items were constrained to the Group Self-efficacy construct. Although the analysis did not yield meaningful statistics to confirm

the hypothesized factor structure, a decision was made to include the construct in further analysis, given its well established psychometric credentials (e.g. Campion and Medsker, 1993; Bandura, 1986).

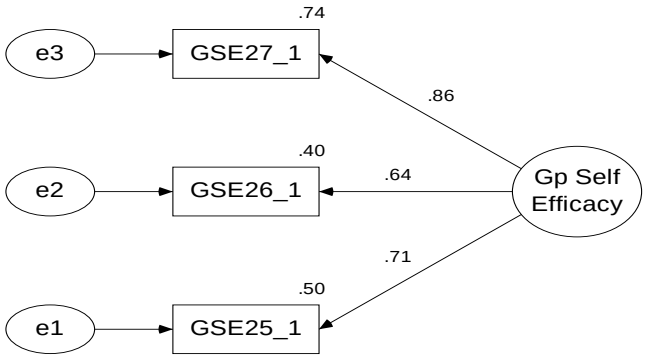


Figure 5.3: Measurement Model and Fit Indices for Group Self-efficacy Factor Solution.

5.8.4 Independent variable 4- Market Orientation

Reliability analysis of the slightly modified Market Orientation scale (Table 5.5) yielded a Cronbach alpha of 0.89 which, although lower than in previous studies (e.g. 0.93 in Narver and Slater, 1990; 0.93 in Harris and Ogbonna, 2001) is still high.

Again, as a preliminary investigation into the internal structure of the construct, a principal components factor analysis with varimax rotation was conducted. As was the case with the other measures, factors were only retained if they possessed an Eigenvalue greater than 1 and were conceptually clear and interpretable (Churchill, 1999; Ogbonna, 2001). Contrary to expectations, the analysis led to the extraction of thee factors. This solution does not support the one-factor solution found by Ogbonna (2001) with a United Kingdom multi-industry sample.

The first factor extracted, loaded heavily on to a vector generating an Eigenvalue of 5.66 and explained 43.66 per cent of variance. The four items that loaded on to this factor appeared to focus on customer service. Consequently, this factor was labelled C*ustomer service*. Reliability analysis of the four items yielded a Cronbach alpha of 0.85.

The second factor extracted also loaded heavily on to a vector, generating an Eigenvalue of 1.59 and explained 12.20 per cent of variance. The four items that loaded on to the second factor seemed to focus on customer affective reaction to hotel service. It was labelled C*ustomer satisfaction***.** Reliability analysis of the four items yielded a Cronbach alpha of 0.80.

The third and final factor extracted loaded heavily on to a vector, generating an Eigenvalue of 1.1 and explained 8.20 per cent of variance. The five items seemed to focus on competitive advantage; therefore the factor was duly labelled C*ompetitive advantage***.** Reliability analysis of the four items yielded a Cronbach alpha of 0.80.

Thus, from these findings, it appears Market Orientation may be a product of three factors:

- Customer service
- Customer satisfaction
- Competitive advantage

Table 5.5 summarises these results.

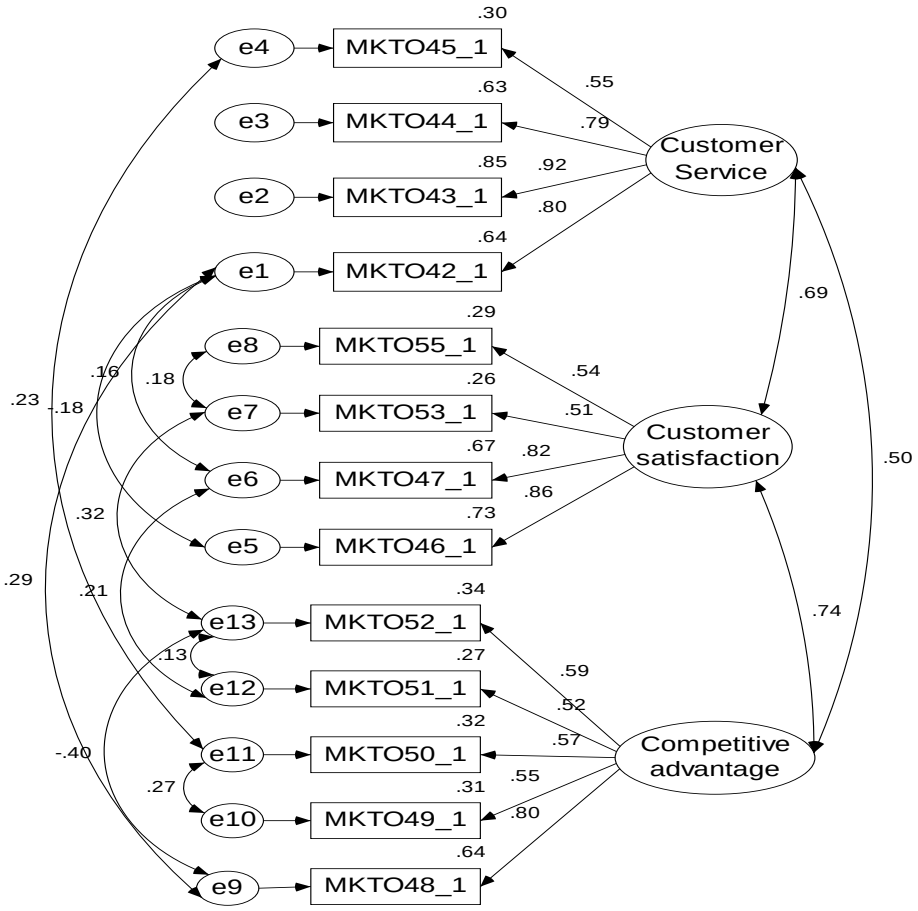
Table 5.5: Market Orientation Scale EFA

Items	Factor 1 Customer Service	Factor 2 Customer Satisfaction	Factor 3 Competitive advantage
Focussing on customer commitment is very important in my hotel	.85		
Getting all functions to contribute to customer value is very important in my hotel	.84		
Understanding customer needs is very important in my hotel	.77		
Sharing information across departments is very important in my hotel	.71		
In this hotel, the employees work to exceed each guest's expectations		.79	
Setting customer satisfaction objectives is very important in my hotel		.69	
Measuring customer satisfaction is very important in my hotel		.65	
We respond rapidly to competitor's actions		.63	
We share information about customers			.82
We target opportunities for competitive advantage			.73
We share resources across the whole company			.58
Top managers discuss competitor's strategies			.56
We create value for our customers			.50
Number of cases	303		
Eigen value	5.63	1.59	1.1
per cent of variance explained	43.66	12.2	8.2
α	.85	.80	.80

A CFA was conducted where the four items loading on the customer service dimension were constrained to that dimension, the four loading on the customer satisfaction dimension were constrained to that dimension, and, the five items loading on competitive advantage were constrained to that dimension.

The initial analysis failed to confirm the hypothesized factor structure. The chi-square value was significant $(\chi^2 = 135.68, df = 52, p < 000)$ which indicated that the model

did not adequately account for the observed covariation among the variables. Also, some of the fit indices (AGFI, TLI, CFI and RMSEA) indicated poor fit. Examination of the modification indices showed that major improvements could be achieved if the errors of the items were allowed to correlate. This produced an acceptable model fit as given in Figure 5.4. The t-values of the factor loadings were all significant, and all reliability and variance extracted measures of the constructs were near or exceeded the recommended levels of 0.5



Chi-Square Value	135.7
Degrees of Freedom	52
P value	.000
GFI*	0.94
AGFI*	0.90
RMSR*	.06
TLI*	0.93
CFI*	0.95
NFI*	0.93
RMSEA*	.073

* Refer to Table 5.1

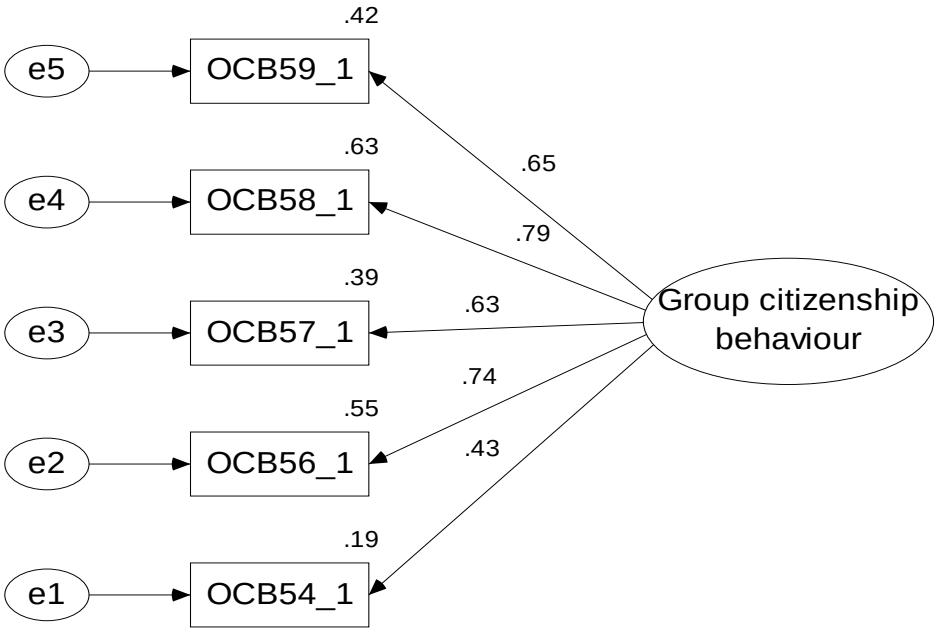
Figure 5.4: Measurement Model and Fit Indices for the Market Orientation Factor Solution.

5.8.5 Independent variable 5- Group Citizenship Behaviour (GCB)

An EFA was conducted on the five GCB items. As expected (Koys, 2001), only one factor was extracted. It accounted for 53.8 per cent of the total variance. However, one of the items (i.e. all departments contribute to company strategy in my hotel) was dropped because the analysis in step 1 (section 5.7) revealed that its communality was less than 0.4. This was done and the EFA rerun. The results are given in Table 5.6.

Table 5.6: GCB Exploratory EFA

Items	Factor 1 GCB
The people I work with have a 'can do' attitude	.84
I can count on my co-workers when I need help	.81
The people here treat each other with respect	.75
The employee group feels responsible for our success	.71
Number of cases	303
Eigen value	2.7
per cent of Variance explained	53.8
GCB Scale α	.78



Chi-Square Value	8.8
Degrees of Freedom	5
P value	.117
GFI*	0.99
AGFI*	0.97
RMSR*	.030
TLI*	0.98
CFI*	0.99
NFI*	0.98
RMSEA*	.050

* Refer to Table 5.1

Figure 5.5: Measurement Model and Fit Indices for the GCB Factor Solution

The parameter estimates in the model appear to be good reflective indicators of GCB. A CFA was conducted where the four items were constrained to the GCB construct. The initial solution produced a good model with no major improvements suggested by the modification indices. Figure 5.5 summarises the Goodness-of-Fit statistics. Even the Chi-Square provided a non-significant result providing support for the model.

5.8.6 Mediating - Group Climate for innovation

An EFA using principal components analysis with varimax rotation was conducted. The results of the shortened Team Climate Inventory did not support a four- factor solution, but a three-factor one. This three-factor solution was labelled Group climate for innovation to distinguish it from the four-factor Team Climate Inventory. From the

initial EFA in step 1 (section 5.7) two items (i.e. tci28 and tci29) were found with cross loadings above 0.5 on the 'support for innovation' and 'participative safety' factors. They were eliminated and the EFA re-run. This raised the total amount of variance explained from 62.3 per cent to 63.3 per cent.

The first factor extracted was *Support for innovation.* It accounted for 39 per cent of the variance and had an Eigen value of 4.67. The second factor extracted was *Participative safety*, which accounted for 13.62 per cent of the variance and had an Eigen value of 1.6. The third factor was *Vision***.** It explained 10.77 per cent of the variance and had an Eigen value of 1.3.

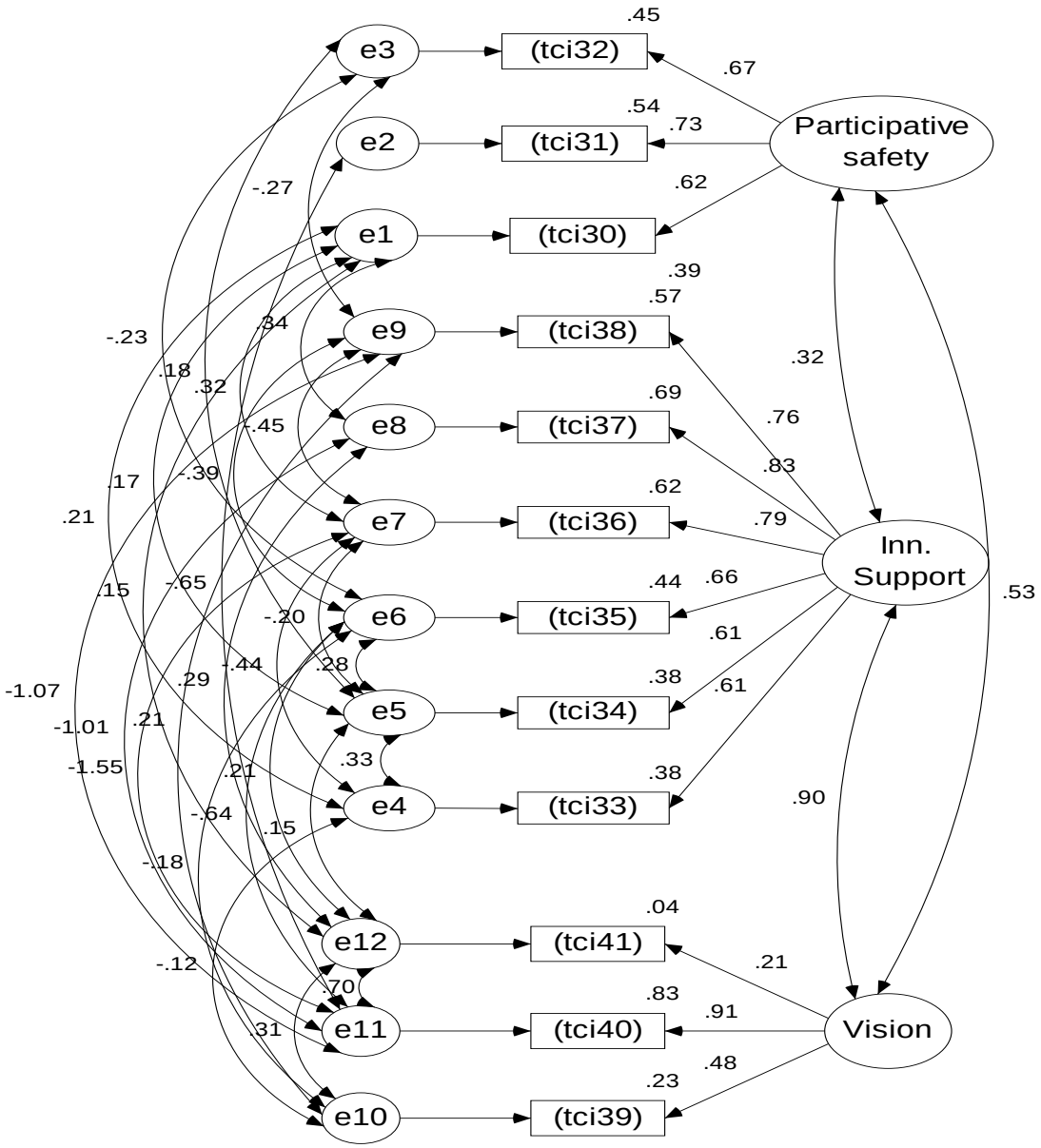
The overall Cronbach alpha attained was 0.81, which was still within the range of past reliability findings for the TCI of 0.80 and 0.94 (e.g. 0.91 in Kivimaki and Elovaini, 1999 study). The subscale Cronbach alphas were 0.85 for support for innovation, 0.72 for participative safety, and 0.71 for vision, still at acceptable level (DeVellis, 1991; Politis, 2001). Table 5.7 below summarises these findings and includes the factor loadings and Eigen values.

Table 5.7: Group Climate for innovation Factor Analysis

Sub scales	Items	Factor 1 Group Innovation support	Factor 2 Participative Safety	Factor 3 Vision
Support for Innovation	People in my workgroup co-operate in order to help develop and apply new ideas	.82		
	In my workgroup, we take the time needed to develop new ideas	.80		
	People in my workgroup are always searching for fresh, new ways of looking at problems	.76		
	Members of the workgroup build on each other other's ideas in order to achieve the best possible outcome	.67		
	In this hotel, you are in agreement with your *workgroup's objectives*	.66		
	The workgroup critically appraises potential weaknesses in what it is doing in order to achieve the best possible outcome	.59		
Participative Safety	There are real attempts to share information throughout the workgroup		.81	
	In this hotel, group members are prepared to question the basis of what the group is doing		.80	
	People feel understood and accepted by each other		.66	
Vision	My workgroup's objectives are worthwhile to the hotel			.80
	My workgroup's objectives are clearly understood by other members of the group			.75
	My workgroup's objectives can actually be achieved			.69
N	303			
Eigenvalue		4.67	1.63	1.3
Variance explained %)		39	13.62	10.77
α		0.85	0.72	0.71
Scale α	Group Climate for innovation	0.81		

CFA was then conducted where six items were constrained to the S*upport for innovation* dimension, three to the P*articipative safety* dimension, and three to the V*ision* dimension. The initial solution produced a poor model fit. The Chi-square value was significant $(\chi^2 = 153, df = 50, p < .000)$ which indicated that the model did not sufficiently account for the observed covariation among the variables. In addition, some

of the key fit indices, including the GFI, AGFI and RMSEA were showing poor model fit. Examination of the error modification indices suggested covariation could lead to major improvements. Hence, covariation was installed. The chi-square test was significant $(\chi^2 = 44.5, df = 24, p < .000)$, the other fit indices improved to acceptable levels (Figure 5.6). The t-values of the factor loadings were all significant and all reliability and variance extracted measures of the constructs were near or exceeded the recommended levels of 0.5.



Chi-Square Value	44.5
Degrees of Freedom	24
P value	.000
GFI*	0.96
AGFI*	0.92
RMSR*	.04
TLI*	0.96
CFI*	0.99
NFI*	0.97
RMSEA*	.053

*Refer to Table 5.1

Figure 5.6: Measurement Model and Fit Indices for Group Climate for innovation Factor Solution.

5.8.7 Dependent variable – Workgroup Service Innovativeness

An initial reliability analysis of the Workgroup Service Innovativeness construct revealed a Cronbach alpha of 0.78.

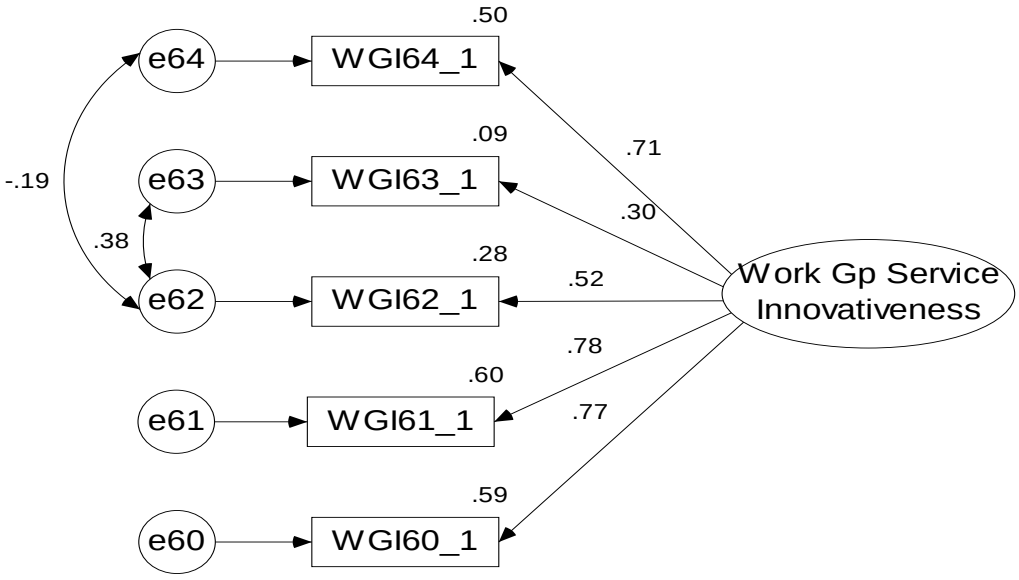
A principal components factor analysis with varimax rotation yielded two factors with Eigen values greater than one, accounting for 66 per cent of the total variance. However only two items loaded on the second factor, instead of the required minimum of three. A decision was made to remove the two items loading on factor 2 and both the EFA and reliability analysis rerun. There was a slight improvement in the size of the scale Cronbach alpha and the factor loadings, although the amount of variance accounted for dropped to 62 per cent. These results are presented in Table 5.8.

Table 5.8: Workgroup Service Innovativeness EFA

Item	Factor Workgroup Service innovativeness
Everybody in our *workgroup* is encouraged to think of new and innovative ways of doing things better	.86
Overall, your *workgroup's* innovativeness, that is their ability to come up with new and creative ways of doing their work may be described as excellent	.82
We regularly make improvements in how we do things in our *workgroup*	.81
The innovativeness of other workgroups in our hotel may also be described as excellent	.68
Number of cases	303
Eigen value	2.5
per cent of Variance explained	62
Workgroup Innovativeness Scale α	.78

A CFA was conducted where the four items were constrained to the *Workgroup Service Innovativeness* factor. This analysis confirmed the hypothesized factor structure (Figure

5.7). The Chi-square value was not significant and the model fit indices were at the expected levels, indicating good model fit (Figure 5.7).



Chi-Square Value	6.1
Degrees of Freedom	3
P value	.107
GFI*	0.99
AGFI*	0.96
RMSR*	.023
TLI*	0.98
CFI*	0.99
NFI*	0.97
RMSEA*	.059

* Refer to Table 5.1

Figure 5.7: Measurement Model and Fit Indices for the Workgroup Innovativeness Factor Solution.

5.8 SUMMARY

This chapter presented the data entry procedure and the results of the construct assessment of reliability and validity, using cronbach alpha, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA) procedures.

The purpose of the construct assessment procedure was to provide a preliminary evaluation and refinement of the main study's survey measures. After this process, a decision was made to retain all the constructs in the main study, with some changes, where deemed necessary, in an attempt to improve their psychometric properties.

CHAPTER 6

QUANTITATIVE MODEL TESTING RESULTS

6.1 INTRODUCTION

The preceding chapter assessed the quality of the construct measures of interest prior to the formation of composite variables. Chapter 6 presents the results of the quantitative analysis and examines whether the a priori hypothesized relationships in the 'Workgroup Service Innovativeness Model' depicted in Chapter 3 are supported by the sample data.

6.2 EMPIRICAL TESTING OF HYPOTHESIZED MODEL

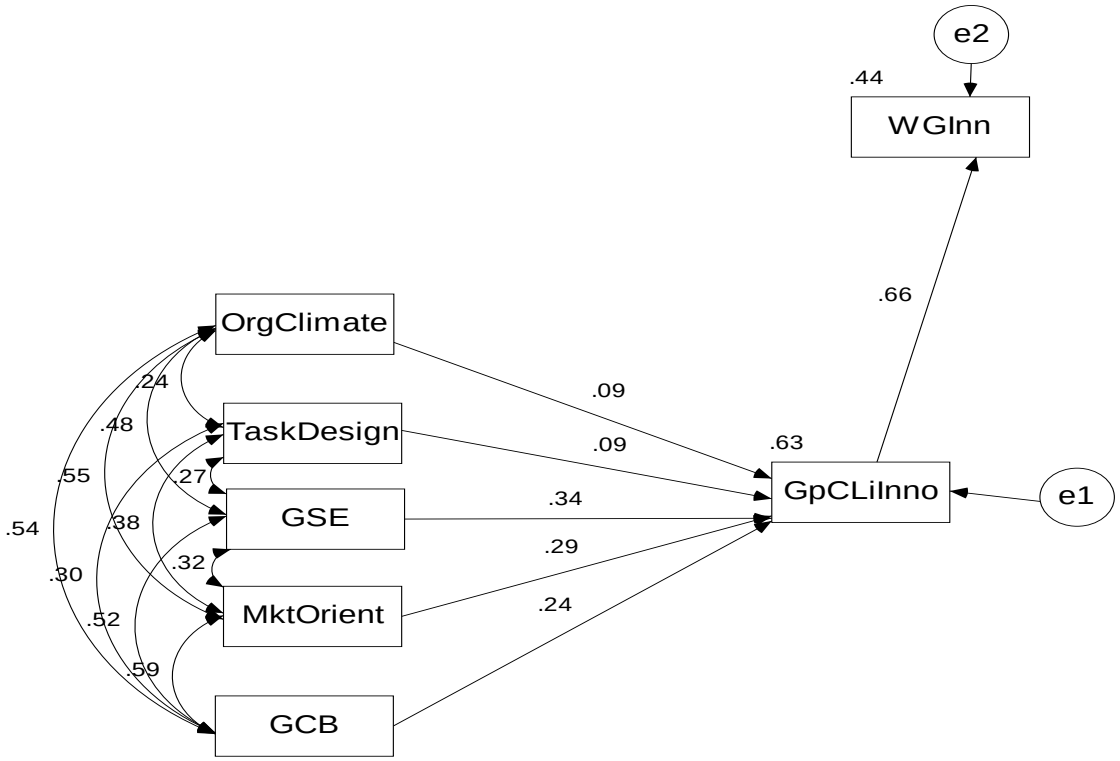
Descriptive statistics and correlation coefficients for all the variables are presented in Table 6.1. Overall the intercorrelations among the variables are high with the highest being between Group Climate for innovation and Workgroup Service Innovativeness and the lowest being between Task Design and Organizational Climate.

Table 6.1: Means, SDs, Cronbach's Alpha, and bivariate correlations of organisational and workgroup variables and Workgroup Service Innovativeness

Variable Name	Mean	SD	1	2	3	4	5	6	7
1.Organisational Climate	3.20	.69	1	.23	.47	.62	.55	.58	.47
2. Task design	3.50	.55		1	.24	.41	.33	.34	.33
3. Group self-efficacy	3.69	.87			1	.44	.50	.68	.64
4. Market orientation	3.66	.68				1	.74	.72	.63
5. GCB.	3.57	.76					1	.71	.70
6. Group Climate for innovation	3.64	.70						1	.74
7.Workgroup Service innovativeness	3.38	.72							1

Significant at p< 0.01, *N= 303.*

The hypothesized model was tested as given in Figure 6.1. Note that AMOS expects the antecedents to be correlated.



Chi-Square Value	130.33
Degrees of Freedom	5
P value	.000
GFI	0.91
AGFI	.50
RMSR	.05
TLI	.49
CFI	.88
NFI	.88
RMSEA	.30

Figure 6.1: The Hypothesized Workgroup Innovativeness Path Diagram.

The chi-square test is statistically significant, and, with the exception of GFI, all fit indices are indicative of a poor fit of the model to the data, although, as Table 6.2 shows, individual hypothesized paths are supported by the data.

According to Kline (1998), standardised path coefficients or parameter estimates, in Structural Equation Modelling indicate the strength and direction of the relationships

among the variables. He offers a guideline to assist in the interpretation of effect sizes, namely that, standardised path coefficients (figures on the model's paths) with absolute values less than 0.10 indicate a 'small' effect, values around 0.30 a 'medium' effect, and absolute values of 0.50 or more a 'large' effect.

Table 6.3 provides the amount of variance explained in each of the two endogenous variables in the model.

Table 6.2: Estimation of Final Model

Hypothesis	From	To	Hypothes-ized Sign	Standardised Estimate	t-Value	Supported
H1	Organizational climate	Group Climate for innovation	+	.085	1.86	No
H2	Task design	Group Climate for innovation	+	.094	2.46	Yes**
H3	Group self-efficacy	Group Climate for innovation	+	.340	70.91	Yes***
H4	Group Citizenship Behaviour	Group Climate for innovation	+	.240	4.84	Yes***
H5	Market orientation	Group Climate for innovation	+	.293	6.15	Yes***
H6	Group Climate for innovation	Workgroup Innovativeness	+	.661	15.29	Yes***

*p=0.05, **p=0.01, ***p=0.001

Table 6.3: Variance Explained for Endogenous Variables

Squared multiple correlations for (SMC):	SMC
Group Climate for innovation	.635
Workgroup Innovativeness	.436

6.3 POST-HOC MODEL RESPECIFICATION

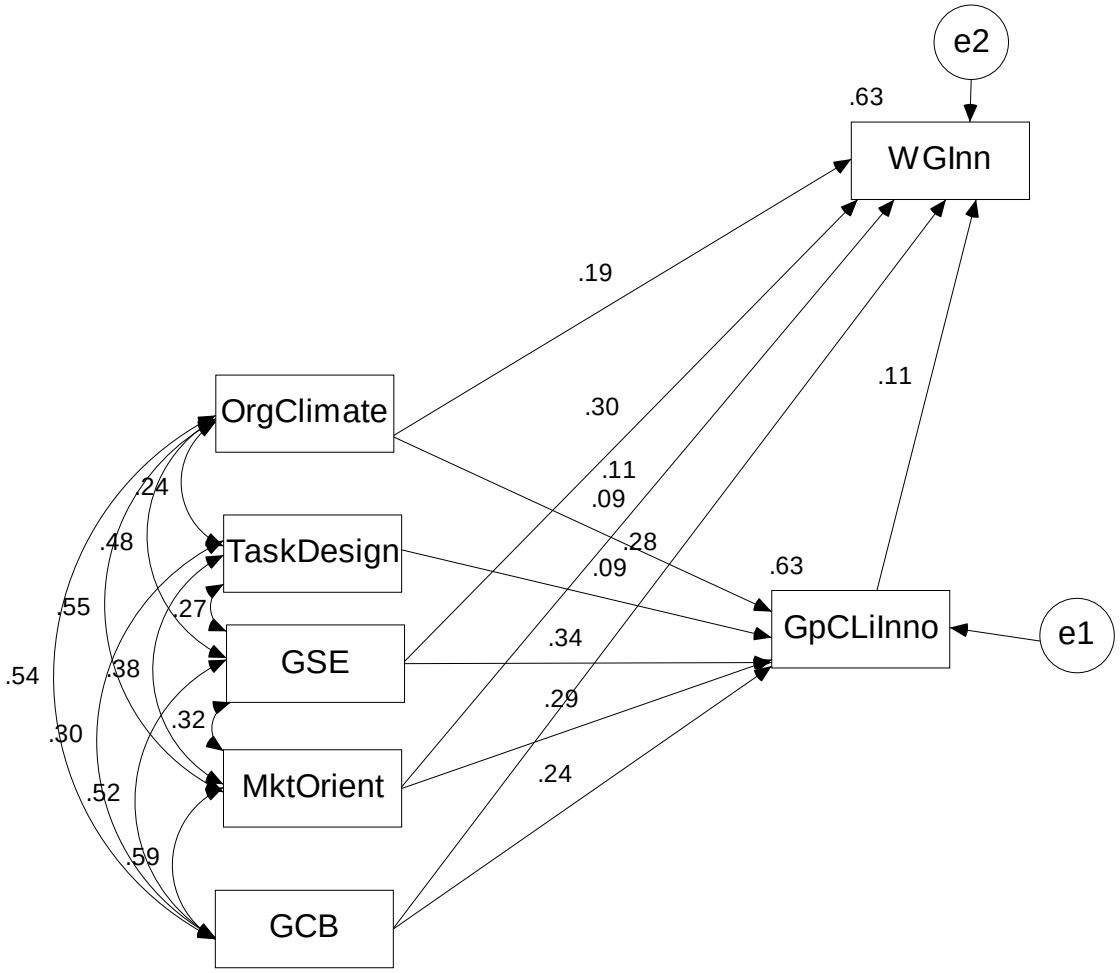
To construct a parsimonious final model, modification indices were examined and theoretically defensible suggested new paths which had the greatest contribution to the reduction of the chi-square value were added to the model. This process was executed incrementally.

First, modification indices suggested a direct path from Organizational Climate to Workgroup Service Innovativeness. This was added and can be justified by the argument given by previous writers (e.g. Schneider et al. (1994; Davidson, 2003) that workgroup climate for innovation is inherently part of the organizational climate. These researchers have shown that service firms, like other companies, have three kinds of organizational climate: a climate for innovation, a climate for service, and a climate for human resources or employees. Section 8.2.1 in Chapter 8 explains this argument further.

Justification for adding the suggested direct path from GSE to Workgroup Service Innovativeness was justified by previous research that has demonstrated a link between GSE and innovation (e.g., Agrell and Gustafson, 1996; Guzzo et. al., 1993; Guzzo and Shea, 1992). The same justification holds for Market Orientation and innovation (e.g. Verbees and Meulenberg, 2004; Atuahene-Gima, 1995, 1996; Han et. al. 1998; Hurley and Hult, 1998). and also for GCB and innovation (e.g. Alotaibi, A.G. 2001; Hunt, S. T. 2002; Karen, M.H. 2002; Carol, C.B. et. al., 2003; Karambayya, 1990; Koys, 2001). The relatively high and significant correlations between GSE, GCB, and Market Orientation on the one hand and Workgroup Service Innovativeness on the other (refer to table 6.1) provided further justification for the direct paths.

The resulting model and fit indices are given in Figure 6.2, while the revised path coefficients are shown in Table 6.4. Table 6.5 provides the amount of variance explained in the two endogenous variables. Although the chi-square test is statistically significant, all model fit indices were indicative of a good fit of the model to the data. Furthermore, the squared multiple correlations of 0.635 for Group Climate for innovation and 0.634 for Workgroup Service Innovativeness, given in table 6.5 suggest that the factors studied explain a significant portion of the variance in the two

endogenous variables. This improved model suggests that, except for Task design, the independent variables (Organizational climate, Group self-efficacy, Market orientation and Group Citizenship Behaviour) impact Workgroup Service Innovativeness directly and indirectly through Group Climate for innovation. These results are discussed in chapter 8. However, before doing that, Chapter 7 describes the qualitative study and findings that add content or face validity (Malhotra et al., 1996) in line with section 5.5.2 of Chapter 5.



Chi-Square Value	0.07
Degrees of Freedom	1
P value	.001
GFI	1.00
AGFI	1.00
RMSR	.000
TLI	1.00
CFI	1.00
NFI	1.00
RMSEA	0.00

Figure 6.2: The Respecified Workgroup Innovativeness Path Model with Modifications.

Table 6.4: Estimation of Final Model With Modifications

From	To	New Path Suggested Sign	Standardised Estimate	t-Value	New Path Confirmed
Organizational climate	Group Climate for innovation	+	.09	1.86	No
Organizational climate	Workgroup Service Innovativeness	+	.19	4.11	Yes***
Task design	Group Climate for innovation	+	.09	2.46	Yes*
Group self-efficacy	Group Climate for innovation	+	.34	6.4	Yes***
Group self-efficacy	Workgroup Service Innovativeness	+	.30	7.91	Yes***
Market orientation	Group Climate for innovation	+	.29	6.15	Yes***
Market orientation	Workgroup Service Innovativeness	+	.11	2.26	Yes*
Group Citizenship Behaviour	Group Climate for innovation	+	.24	4.83	Yes***
Group Citizenship Behaviour	Workgroup Service Innovativeness	+	.28	5.45	Yes***
Group Climate for innovation	Workgroup Service Innovativeness	+	.11	1.99	Yes*

*p=0.05, **p=0.01, ***p=0.001

Table 6.5: Variance Explained for Endogenous Variables

Squared multiple correlations for (SMC):	SMC
Group Climate for innovation	.634
Workgroup Service Innovativeness	.635

6.4 SUMMARY

This chapter investigated whether the a priori hypothesized relationships in the 'Workgroup Service Innovativeness' model depicted in Chapter 3 were supported by the sample data. A Respecified path model (and theoretical justification for it) was then presented as an alternative explanation of the dynamics of Workgroup Service Innovativeness.

CHAPTER 7
QUALITATIVE RESEARCH AND FINDINGS

7.1 INTRODUCTION

The preceding chapter presented the results of the structural equation modelling of the quantitative data. Chapter 7 outlines the qualitative research setting, sample, data collection procedure, analysis, and findings. The qualitative study was undertaken for two main reasons: to provide a realistic framework to the rather cold statistics of the quantitative study; and, to meet one of McGrath's (1986) recommendation for studying workgroups, i.e. the collection of multiple sources of data.

7.2 RESEARCH SETTING

The research setting for the qualitative data collection was the same as that for the quantitative data collection described in Section 4.2 of Chapter 4.

7.3 METHOD

Approximately 6 months after the quantitative data collection exercise, 5 structured in-depth interviews were conducted with 5 workgroup team leaders (2 males and 3 females) from the 4 participating hotels. Respondents were sourced using a convenience sample. The aim of the structured in-depth interview approach was to ensure that each interviewee was presented with exactly the same questions in the same order. This is an open-ended, discovery-oriented method that is well suited for exploring the respondents' point of view, feelings and perceptions (McKenna, 2002). In this study, the interview structure was such that respondents could not simply answer 'yes' or 'no'.

Table 7.1 presents a summary of the respondents' profiles. The respondents interviewed represented a heterogeneous population of workgroup team leaders found in the 4 to 5-star hotel industries although somehow deliberately skewed in departmental

representation towards the coal face of customer service (Housekeeping, Food and Beverage {F&B}, and Front office/Reception). This is because the study was about capturing service innovativeness.

A major deterrence to participation was the reluctance of potential respondents to have their responses recorded. Potential respondents expressed being uncomfortable with a tape recorder, a not unexpected phenomenon (Sutcliffe, 1991).

Of the five respondents, four had a high school education, one had tertiary education and a certificate in hospitality, and, three more had certificates in hospitality on top of their formal education. There were two respondents each from Housekeeping, and F&B and one from Front office. All respondents were full time employees with between three and five years experience as team leader.

The objective of the interviews was to capture Team leaders' perceptions of how innovative workgroups differ from non-innovative ones on six workplace dimensions: Organizational Climate (in terms of workgroup team leader behaviour), Group Climate, Task Design, Group Self-efficacy, Market Orientation, and Group Citizenship Behaviour (GCB).

The six dimensions were operationalized in the following manner:

Organizational climate

- As reflected in the workgroup's leader behaviour at the departmental level

Group Climate

- The atmosphere within the department including within-group relations

Task design

- Work structuring, e.g. daily assignment of tasks, including leader's role and that of the workgroup

Group self-efficacy

- Workgroup's self-esteem or self confidence; its 'can do' attitude

Market orientation

- Awareness of hotel's competition and attuning workgroup activities in light of perceived competition; extent to which workgroup's activities are market-driven

GCB

- Extent to which group puts in extra effort, not for gain, but to better whole hotel; going the extra mile for no reward

Prior to the main study, operationalizations were tested on a group of six undergraduate students in hospitality at Victoria University. The above operationalizations were that group's consensus, after discussion.

Main study respondents were asked to think of TWO workgroups in their department. One of these two workgroups must be one which, in their opinion could be described as creative, eager to come up with new or fresh ideas about customer service improvement, proactive, and generally performing well and on top of things.

They were then asked to think of a second workgroup which was the opposite of the first one, which is a workgroup that they considered not creative, lacking in new or fresh ideas about improving customer service, generally laid back and preferring to leave things to the routine.

Again, these descriptions (representing innovative and non-innovative workgroups) had been tested on the same group of hospitality undergraduates referred to, above.

Respondents were asked to describe up to FIVE examples in which the two workgroups differed in terms of the 6 dimensions listed above (i.e. Organizational Climate, Group Climate, Task Design, Group Self-efficacy, Market Orientation, and, GCB). Dimensions were described one at a time to the respondents who were then asked to

respond to each one separately, on a sheet of paper similar to the one with the researcher (see Appendix C).

The researcher asked all respondents identical questions in a fixed order. In all cases the researcher played a neutral role, never interjecting his opinion of a respondent's answer but simply probing inadequate answers. Fowler and Mangione (1990) suggest that when testing a theory with directional hypotheses, a standardised, structured interview should be used.

The interviews lasted 15 minutes on average and took place at the respondents' workplace during mutually agreed times.

Table 7.1: Demographic characteristics of respondents

Characteristics	Frequency	Percentage
Gender		
Male	2	40
Female	3	60
Department		
Housekeeping	2	40
Food and Beverage	2	40
Front Office	1	20
Length of Service as leader		
Up to I year	0	0
2	0	0
3	2	40
3	2	40
5 plus	1	20
Education		
Some high school		
Year 12 or equivalent	2	40
Some tertiary education	2	40
Diploma, certificate	1	20
Degree	4	80
	0	0
Employment Status		
Part time	0	0
Full time	5	100
Other	0	0

7.4 QUALITATIVE DATA ANALYSIS

The analysis method employed was predominantly inductive and based on the conceptual framework giving the researcher a focus for the interviews. Respondents were asked to state what distinguished service innovative workgroups from service non innovative workgroups in terms of 6 dimensions drawn from the conceptual model under study. A list of positive and negative descriptives for the innovative and non-innovative workgroups was then compiled, based on themes deemed to be common to the interviewees. Isolated comments were not included. The frequency use of positive and negative descriptives for each of the 6 dimensions was then computed for both groups. This approach is similar to Miles and Huberman (1994).

7.5 FINDINGS

Table 7.2 presents a summary of the labels (descriptives) used by the respondents to describe the innovative and non-innovative workgroups.

Table 7.2: Positive and negative labels describing innovative and non-innovative workgroups

Dimension	Positive Description	Negative Description
Organizational climate (leader behaviour)	Teacher Leads by example Dependable Smart Strong Foresight Supportive Consults Trustworthy Confident	Task master Bull headed Arrogant Knows-it-all Mediocre Hypocritical Callous Over strict Lethargic/sluggish Hands-off
Group Climate	Supportive Trustworthy Genuine Cooperative Unity Committed Family-oriented Welcoming Sharing Friendly	Poor communication, Unsupportive Unfriendly Suspicious Detached Rigid Lost
Task design	Consultative/participative Results-oriented Fair Clear goals Teamwork Initiative Mistakes ok Variety	Rigid/routine Favouritism Individual-driven Standard practice Don't consult Unmotivating No room for initiative
Group self-efficacy	Confident Solidarity/Teamwork Proud 'Can do' spirit Shares ideas Self-starter Competent Competitive	Hesitant Self doubt Blaming games No motivation Afraid to question Argumentative Frustrated Solo tasks
Market orientation	Profit conscious Broader minded Discusses other hotels Innovative Competition minded	Inward drawn Performance apathetic Inward benchmarking Non-innovative
GCB	Helps others Cleans extra Pro active Early start late finish Meticulous Extra effort Greets customers	Strict start-finish 'Creates' overtime Impatient Hates responsibility Don't care about mistakes Self-engrossed

The frequency use of positive and negative descriptives for the innovative and non-innovative work teams is presented in table 7.3.

Table 7.3: Frequency of favourable and unfavourable responses for innovative and non innovative workgroups

Dimension	Positive/negative	Innovative Group (per cent)	Non-innovative Group (per cent)
Organizational Climate	Positive Organizational climate	Favourable 84%*	Favourable 13%*
	Negative Organizational climate	Unfavourable 16%*	Unfavourable 87%*
Group Climate	Positive Group climate	Favourable 70%	Favourable 28%
	Negative Group climate	Unfavourable 30%	Unfavourable 72%
Task design	Positive Task design	Favourable 58%	Favourable 30%
	Negative Task design	Unfavourable 42%	Unfavourable 70%
Group self-efficacy	Positive Group self-efficacy	Favourable 64%	Favourable 34%
	Negative Group self-efficacy	Unfavourable=2/40 36%	Unfavourable=23/40 66%
Market orientation	Positive Market orientation	Favourable 59%	Favourable 39%
	Negative Market orientation	Unfavourable 41%	Unfavourable 61%
GCB	Positive GCB	Favourable 72%	Favourable 21%
	Negative GCB	Unfavourable 28%	Unfavourable 79%

* Per centages were based on total number of positive and negative descriptives for each dimension for both innovative and non-innovative groups

From these results, it is apparent that the workgroup perceived as innovative was described in more positive terms relative to the group perceived as non-innovative. The reverse was the case for when the groups were described in negative terms. The range for positive descriptions

Quotes from the interviews to contextualize these findings are reported in the following Sections.

7.5.1 Organizational Climate

Eighty four per cent of the responses regarding workgroup management behaviour in general (Organizational Climate) were positive for the innovative group while only 13 per cent were positive for the non-innovative group. Descriptive terms like: *leads by example, teacher, smart, strong, foresight, dependable, trustworthy, explains, consults, supportive, and confident* were used for the former while words like: *task master, bull headed, arrogant, knows-it-all, over strict, callous, mediocre, hands-off, hypocritical, and lethargic/sluggish* were used for the non-innovative group.

Sixteen per cent of the responses were unfavourable for the innovative group while 87 per cent was the figure for the non-innovative group.

S from Hotel C described the difference between the two workgroups this way:

….there's a trickle down effect from above, what you see in this stagnant team reflects their team leader's philosophy…they push for productivity but don't provide the necessary leadership. They are aloof, sluggish and generally expect miracles without the necessary leadership. This isn't so for the creative team. They provide leadership, is there for the crew, has a very hands-on approach, supportive and don't mind getting their hands soiled in the process.

7.5.2 Group Climate

Seventy per cent of the responses described the Group Climate of the innovative group in a positive way, such as: *supportive, family-oriented, welcoming, friendly, genuine, and sharing*. For the non-innovative group, only 18 per cent of the responses described the Group Climate in similar positive ways.

Thirty per cent of the responses described the Group Climate of the innovative team in negative terms compared to 72 per cent for the non-innovative group. Words such as: *Suspicious, fearful, unfriendly, detached, unsupportive, rigid, and no communication* were used.

B, a team leader from Hotel CH put it this way:

……..funny that the atmosphere in both camps can be genuinely unsupportive, oppressive or, other times, supportive. There's no pretence to hide the arrogance or friendliness, depending on which crew you look at: the creative team generally is friendly, welcoming and sharing, you know, while you find plenty of bitching, detachment, rigidity, disunity and arrogance in the other team, making it hard to serve the customer to good standards, it pulls everyone down.

D, Hotel W put it this way:

…..W, I can tell you now is a leader in terms of caring for and valuing its workers….it is a very friendly, family-oriented atmosphere, with everyone working as a team, and coming to everyone's help. The atmosphere in the crews that are not so creative in their customer service is one of aloofness, non-committal, fear, each-man-for-himself-God-for-all, and just generally not friendly……..instead of talking to each other within, they expect too much from W and …..… I swear there are groups here where everyone is for themselves and people come so they can look after their mortgage, wife and kids.

7.5.3 Task Design

In the innovative group, 58 per cent of the responses reflected positive perception of Task design while this was true for only 30 per cent of responses for the non-innovative group. Task design perception for the innovative group was characterised by descriptives such as: *consultative/participative, fair, results-oriented, clear goals, teamwork, variety, and mistakes tolerated* while descriptives like: *rigid/routine, standard, individual-driven, don't consult, unmotivating, and no room for initiative* characterised the Task design of the team perceived as non-innovative.

For the innovative group 42 per cent of the responses were unfavourable while 70 per cent was the statistic for the non-innovative group.

SB, Hotel H:

Not only do I ensure participation, I also leave room for individual talent, and without taking my eyes off the ball. …we operate fairly and as a team and don't laugh at individual mistakes. Other groups' work is out of the cookbook, everything is laid out, leaving no quarter for manouvre. ….of course there is boredom as no efforts are made to spice the work.…… the crew lacks individual drive, are not fired and the whole team is stooped in favouritism, routine and non-consultation.

S, Hotel CB:

……...be clear on goals, stay focussed on the results you want and allow some leeway on how they deliver. My observation is that, non performing teams, although they can also have their eyes on good outcomes, don't encourage personal freedom and initiative and generally stick to procedure like the bible……no wonder they find their chores unmotivating, boring.

7.5.4 Group Self-efficacy

For Group self-efficacy, 64 per cent of the responses were positive for the innovative group while the figure for the group perceived as non-innovative was 34 per cent. Terms like: *confident, solidarity/works as team, proud, 'can do' attitude, one spirit, self-starter, competent, and competitive* were used for the innovative group while *hesitant, self doubt, blaming games, afraid to question, argumentative, frustrated, lack motivation, and solo tasks* were used for the non-innovative group.

Thirty six per cent of the responses for the innovative group described group self-esteem in negative terms while the figure was 66 per cent for the non-innovative group.

S, Hotel CB:

The innovative guys are self-starters and have this go-get-it attitude towards their work.……they are a very confident and sometimes argumentative lot, but, they also work closely with each other. You won't find the kind of finger pointing, bitchiness and lack of self-assurance common in poor performing teams.

L, Hotel W:

…….they are a tight, competent, single-spirited and proud team. Ideas are frequently tossed around, we do not shy away from competing with other front office teams.…..…we have a head start because we know they are frustrated, short on motivation and full of self doubt.

7.5.5 Market Orientation

As for Market Orientation, 59 per cent of the responses about the innovative workgroup were positive. Such a workgroup was said to be: *cost-conscious, customer-focussed, ready to market the hotel, and generally knew the hotel's competition*. The figure for the non-innovative group whose Market orientation was described in similar terms stood at 39 per cent.

Negative Market orientation descriptives included: *workgroups leaving the marketing of the hotel to management and generally looking inward rather than outward.*

The per cent of negatives for the innovative and non-innovative groups was 41 per cent and 61 per cent respectively.

SB Hotel H:

The superior, innovative group demonstrates a singular concern for our industry competitors. They show concern at wind that the other hotel's occupancy is going up while ours is slipping. This isn't the case with teams not as creative, they are internally focused and think it's not their business how well the other hotel is doing, they cant connect their job security with room occupancy shrinkage.

7.5.6 GCB

Finally, when it comes to Group Citizenship Behaviour, 72 per cent of the responses were positive for the innovative group and included words like: *extra effort, cleans extra, proactive, helps others, greets customers, early start, meticulous, and stays behind*. The percentage for the non-innovative group was 21 per cent.

Twenty eight per cent of the responses were unfavourable for the innovative group while 79 per cent was the figure for the non-innovative group.

D, Hotel W:

I constantly remind them that the W is like their second home, go the extra mile, vacuum extra, clean bathroom extra, clean mirrors extra……generally be meticulous in every little thing you do. They respond positively compared to other teams, especially late-shift cleaners who have this work-to-rule attitude. They are impatient, rash jobs, don't like responsibility and won't stay behind an extra second beyond knockoff time.

S Hotel CB:

…..I can only speak for my crew, I am not sure how many others are self-starters,…. being creative is not something new in my group…….…they are a suggestive lot and aren't afraid to try something new, be it welcoming Japanese guests in Japanese or helping them with their shoe laces. They believe in extending themselves beyond normal time and doing whatever you throw at them meticulously.

SB Hotel H:

…work that can be done in an hour takes them 2, know why, at the end of the day they want to create overtime…..its always start-to-finish on time, nothing more. The high performers, like my team, are different, you can tell from their pro active approach to work, they don't mind staying behind or helping their colleagues

SB, Hotel H:

Without blowing my own trumpet, I believe my leadership promotes innovation in my team. A leader must be smart, strong but not too strict, forward looking and dependable. Support your charges and they will respect and support you. Help them with their problems, be their confidant and give praise where it's due. If you are bull-headed, arrogant, aloof, over strict and with an all-knowing attitude, you won't get far.

7.6 SUMMARY

This chapter presented the qualitative part of the research. It outlined the research setting, sample, data collection procedure, analysis, and findings.

The data provide support for the quantitative findings which showed that workgroups which were high in terms of Workgroup Service Innovativeness tended to perceive their organizational climate and within-group climate in a positive manner, compared with groups that scored lower on workgroup innovativeness. Team leaders' comments about the nature of the design of tasks for innovative workgroups were also more positive (reflecting group self-management and empowerment, task variety, identity and significance) than their comments about workgroups they considered non-innovative. The same more positive perceptions applied to the other three dimensions: group self-efficacy, market orientation, and group citizenship behaviour for the workgroups perceived as innovative relative to those perceived as non-innovative. The team leaders perceived innovative groups as more confident, self-starters, and generally more fired up than their non-innovative counterparts. In terms of market orientation, the non-innovative groups were seen as relatively inward looking and generally unconcerned about external competition. Innovative workgroups were also seen as more willing to go the extra mile for their hotel than the non-innovative workgroups.

The next chapter, Chapter 8, expands on the relationship between the quantitative and qualitative findings.

CHAPTER 8
DISCUSSION

8.1 INTRODUCTION

This chapter is an attempt to integrate the quantitative and qualitative research findings. It discusses the roles of both the organizational context and the workgroup context in promoting Workgroup Service Innovativeness. The chapter then looks at the managerial and research implications, as well as the study limitations of the findings.

The study empirically tested a model of Workgroup Service Innovativeness in the service industry, using the Australian four and five-star hotel industry as an example. The model hypothesises that Workgroup Service Innovativeness is precipitated by a workgroup climate for innovation which in turn is spawned by both organizational and workgroup variables. Specifically, it was contended that an organisation's context (Organizational Climate and Task Design) and the workgroups' context (Group Self-Efficacy, GCB, and Market Orientation) lead to Workgroup Service Innovativeness by creating a Group Climate for innovation.

The findings were more supportive of the respecified model (Figure 6.2) than the hypothesized model (Figure 6.1). The hypothesized model proposed that all the independent variables impact Workgroup Service Innovativeness indirectly through Group Climate for innovation. The respecified model suggests that, except for Task Design, the independent variables (Organizational Climate, Group Self-efficacy, Market Orientation and GCB impact Workgroup Service Innovativeness both directly and indirectly through Group Climate for innovation. The qualitative findings are generally supportive of the quantitative findings: workgroups perceived as innovative were described in more positive terms, on the six dimensions under study than workgroups perceived as non-innovative.

8.2 ORGANIZATIONAL CONTEXT AND SERVICE INNOVATIVENESS

Organizational characteristics have, for a while now been examined and defined with respect to their impact upon innovation. Numerous parameters such as organizational configuration (Mintzberg, 1980), culture (Kanter, 1983), strategy and leadership (Day, 1992; Dennison et al., 1995) as well as other combinations Jelinek and Schoonhoven, 1990; Van de Ven, 1986) have been variously put forward as explanatory variables for innovation success.

This study, examined the role of two important organizational contextual factors (Organizational climate and Task design) in determining Workgroup Service Innovativeness. As already stated, the findings, in general, supported the proposed Workgroup Service Innovativeness model.

The role played by the two organizational context variables in promoting Workgroup Service Innovativeness in the hotel industry is now examined.

8.2.1 The role of Organizational Climate in the model

Most researchers appear to concentrate on the issues of technology and structure while ignoring the role and contribution of organizational climate to organizational effectiveness (Ali and Ali, 2005). Organizational climate, as perceived by employees is one of the most important drivers not only of both performance and employee affective reactions but also of creativity and innovation (Patterson et al., 2005; Ashkanasy et al., 2000; Woodman et al., 1993; Schneider and Bowen, 1993). As demonstrated in this study, it is such a versatile variable that it drives Workgroup Service Innovativeness directly. A positive organizational climate stimulates the innovation process and contributes to testing and, in some cases, implementation of ideas (Arvisson et al., 2006).

Organizational climate is especially important in the hotel service industry because research has demonstrated a positive relationship between service climate and customer perceptions of service quality (Scheneider, 1980; Scheneider et al., 1980; Scheneider, White, and Paul, 1998). A positive service climate has influence on customer perception of service quality by fostering a climate for innovation which in turn is a direct precursor of service innovativeness.

In the present study, it was hypothesised that:

The more favourable the Organizational Climate, the higher the Group Climate for Innovation.

This hypothesis was not confirmed ($\beta = 0.09, p > .05$)

However, based on the better data-fitting respecified model (Figure 8.1), it appears that Organizational Climate has a direct effect on Workgroup Service Innovatiness ($\beta = 0.19, p < .001$) . This is understandable as organizational climate has been demonstrated to have a strong influence on various types of individual and group behaviours within organizations (e.g., Abbey and Dickson, 1983; Lawler et al., 1974; Moos, 1987; Pritchard and Karasick, 1973).

The result is also consistent with previous studies which have demonstrated a strong influence of organizational climate on innovative behaviour (Patterson et al., 2005; Arvidson et al., 2006; Knapp, 1963; West and Anderson, 1996), and, more generally, on individual and group behaviour within organizations (e.g., Quinn, 1985; Abbey and Dickson, 1983; Lawler et al., 1974; Moos, 1987; Wei and Morgan, 2004) and those that have suggested that organizational climate drives innovation (Jung, D.; Chow, C. and Wu. A., 2003; Mavondo, F. and Farrell, M., 2003; Steensma, H., Jansen, S., and Vonk, C., 2003; Jassawalla, A.R. and Sashittal, H.C., 2002; Chandler et al., 2000; West and Smith, 1998).

A potential explanation for the direct impact of Organizational Climate on Workgroup Service Innovativeness is that workgroup climate for innovation is inherently part of the organizational climate. Research has shown that service firms, like other companies, have three kinds of organizational climate: a climate for innovation, a climate for service, and a climate for human resources or employees (Schneider et al. (1994; Davidson, 2003). A climate for innovation connotes continuous improvement, new things happening all the time. It is a reassessment of how services are delivered, how systems operate, and, overall, how jobs are designed. A major aspect is the devolution of decision making in how things get done, making employees responsible for most

operational decisions and providing a supportive environment in which the workers feel empowered.

The climate for service is readily identified by the hotel industry where employees need to have the right attitudinal approach to the job. Most hotels now look for an attitude for service in new recruits (Davidson, 2003).

The climate for human resources and employee welfare is linked to the climates for service and innovation. For a company to be successful, it must treat its human resources in a strategic manner. This is especially important for all service industries where, like, hotels, the vast majority of its output is characterised by intangibility, heterogeneity, and simultaneous production and consumption (Davidson, 2003).

Service industry firms in general and hotels in particular need to establish a quality climate and culture that is evident throughout the organization. One reason for such a practice is that, a number of studies have claimed there exists a positive relationship between organizational climate and customer satisfaction (e.g. Davidson et al., 2002; Scheneider and Bowen, 1993; Francese, 1993). Existence of a good service climate, climate for innovation, and climate for human resources ensures a good overall organizational climate that provides the best conditions for quality service to occur.

A key aspect of organizational climate's direct influence on workgroup innovativeness is managerial attitude towards innovation. In this study, it was clear from the qualitative data interviews that management at the W-Hotel, which had superior Workgroup Service Innovativeness ratings, was perceived to be more supportive of service innovative ideas than at the other hotels.

The upper-echelon perspective (Hambrick and Mason, 1984) emphasises the role of top managers' backgrounds, values and attitudes in explaining a wide range of organizational outcomes (Glunk et al., 2001). Upper management may carry different attitudes towards innovation. They may be conservative or they may encourage change (Dewar and Dutton, 1986). Managers with favourable attitudes towards change promote an internal climate that is conducive to innovation and the continuous adoption of new ideas (continuous improvement).

According to management literature, the supportiveness of organizational climate may be connected directly with an organization's product and/or service innovativeness for two reasons.

First, a key ingredient of a supportive organizational climate is perceived support from managers, a factor that has been identified as an important predictor of innovation success (e.g., de Jong and Hartog, 2007; Henard and Szymanski, 2001; Montoya-Weiss and Calantone, 1994). Personnel involved in innovative product development who perceive they are being supported by management are more likely to feel comfortable in engaging in the sort of risk taking that has been linked with successful innovation (e.g., Poolton and Barclay, 1998; Sethi et al., 2001).

Further, supportive organizational climates have been associated with increased employee organizational commitment (e.g., Schuster et al., 1997), which can be said to be a prerequisite for pro-innovative behaviours.

When top management values innovation, when it commits resources, provides moral support and encouragement for the adoption of new ideas, and when it facilitates communication in various directions, workgroups are more likely to take advantage of these opportunities to experiment with new ideas, to demonstrate understanding of top management values, and to translate those values into action (Mohamed, 2002).

A second aspect of a supportive organizational climate that is perceived important for innovation success is peer support (e.g., Griffin and Hauser, 1992; Gupta et al., 1986; Song and Parry, 1994). Peer support concerns relationships among employees and their tendency to bond together as a group and help each other (Moos, 1987). Such peer supportiveness within an organization is likely to reduce conflict and promote cohesiveness and communication within product or service innovative workgroups and the rest of the organization, all of which have been found to be related directly to superior innovation outcomes (e.g., Henard and Szymanski, 2001; Sethi, 2000; Sethi et al., 2001).

The foregoing suggests that service industries with an organizational climate in which workgroups view management as supportive of innovation are more likely to be

innovative than those perceived to be unsupportive. Continuous innovation occurs mainly due to top managers appreciating innovation and managing their firms' value system and climate to support it (Quinn, 1985).

In the present study, some of the descriptives used by interviewees in the qualitative part of the study describe the organizational climate of workgroups perceived to be innovative included:

Genuine, family-oriented, welcoming, supportive and promoting sharing.

The climate in the teams perceived as non-innovative was described as

Autocratic, unfriendly, detached, unsupportive, rigid, arrogant, and promoting a culture of fear.

Table 6.1, in Chapter 6 indicates a significant relationship between Organizational Climate and Group Self-efficacy (r=0.68). This finding is consistent with previous studies (Mayer, et al., 2001; Potosky and Ramakrishna, 2002; Taylor and Tashakkori, 1995). And, given prior research findings that, supportive, participative leadership leads to a strong sense of self-efficacy (Taylor and Tashakkori, 1995; Potosky and Ramakrishna, 2002; Mayer, et al., 2001) it seems reasonable to conclude that organizational climate is positively related to group self-efficacy.

Self-efficacy, the social-cognitive theory of self-regulation (Bandura, 1986, 1991) is an important variable in Organizational Behaviour because of the role it plays in fostering innovation, organizational commitment and self-esteem (Covin et al., 1992; Matheson and Sterns, 1991). It also has a positive effect on overall job satisfaction, and, a negative one on intentions to leave (Wei and Albright, 1998).

Organizational Climate had also a significant relationship with Market Orientation (r=0.62). Assuming workgroups can operate as miniature firms, the relatively strong connection between Organizational Climate and Market Orientation in this study, which has also been demonstrated elsewhere (e.g., Wei and Morgan, 2004) is not surprising because the argument that market-oriented companies are characterised by strong intra-organizational connections and communication flows among different functional areas

and the absence of inter-functional conflict in those companies (Jaworski and Kohli, 1993; Narver and Slater, 1990) can be extended to workgroups which are market-oriented. Strong intra-organizational relationships, effective communication flows, and, an absence of inter-departmental rivalries are hallmarks of a positive organizational climate that should have a positive impact on workgroup market orientation, hence the relatively strong path in this study between Organizational Climate and Market Orientation.

Market-oriented groups also are characterised by supportive top managers who empower employees (Jaworski and Kohli, 1993; Wren et al., 2000) and by extension workgroups. Such an environment is likely to impact the workgroups' market information processing behaviours, thereby fostering market orientation.

The correlation between Organizational Climate and Group Citizenship Behaviour is also significant (r=0.55). This result is expected as the relationship between the two variables, especially the 'employee perceived organizational support' component of the Organizational Climate construct, and Group Citizenship Behaviour, is well established (Kaufman et al., 2001; Randall et al., 1999). These researchers, just as in this study, found a significant relationship between the two variables that benefits the organization as a whole and suggested that employees appear to seek a balance in their exchanges with organizations by demonstrating attitudes and behaviours proportionate to the amount of commitment and support they feel the employer has for them. It can be expected that workgroups that perceive their organizational climate in positive terms are more likely to be good organizational citizens. Therefore, engaging in extra-role job activities and generally being effective organizational citizens is one way that these attitudes could be manifested in workgroups.

The two organizational context variables, Organizational Climate and Task Design were relatively, moderately correlated at r=0.23.This finding is consistent with the results found by Wilson et al., (2004). This is consistent with the team leader perceptions, in the qualitative study, of the innovative workgroup having a positive organizational climate and positive task design relative to the non-innovative workgroup.

8.2.2 Task Design

From the work design literature, it can be expected that job characteristics influence the level of workgroup innovation (Axtell, et al., 2000).

In this study, it was hypothesized that:

The more favourable the Task Design, the higher the Group Climate for Innovation.

Results from the hypothesized model (Figure 6.1, Table 6.2) confirmed the hypothesis ($\beta = 0.09, p < .05$). They are consistent with previous findings (e.g. Lantz and Brav, 2007) and are in agreement with those found at the individual and organizational levels of analysis (e.g. Tan and Peng, 1997, Axtell et al., 2000; Dorenbosch et al., 2005; Hackman and Oldham, 1980; West and Farr, 1990). Modifications to the model in the respecified model did not change the confirmed hypothesized relationship much ($\beta = 0.84, p < .05$).

Task Design was also significantly related to Market Orientation (r=0.41), GCB (r=0.33), and Group Self-efficacy (r=0.24).

Out of the three approaches to job or work design outlined in Chapter 3: Action theory, Sociotechnical theory, and Task design, Task design, based on the Job Characteristics Model (JCM) provide the most explanatory power in explaining the influence of Task design on Group Climate for innovation.

The JCM suggests that task design is critical for employee motivation, satisfaction and performance (Hackman and Oldham, 1976). Specifically, Hackman and Oldham outlined three classes of variables and their interaction: (1) the psychological states of employees that must be present for internally motivated work behaviour to develop; (2) the characteristics of jobs that can create these psychological states; and, (3) the attitudes of individuals that determine how positively a person will respond to a complex and challenging job. It appears that work characteristics (e.g. variety, identity, significance, participation, and self-management) cumulatively combine to produce the three psychological states of experienced meaningfulness of the work, experienced responsibility for the outcomes of the work, and knowledge of the actual results of the work. In turn, these psychological states would combine to increase an individual's

internal motivation, work performance, work satisfaction, and decrease their rate of absenteeism and turnover. To the extent that group climate for innovation, like job satisfaction, is a reliable indicator of mood at work, and that the psychological states culminate into psychological empowerment, the task characteristics can logically be said to influence, not only a workgroup's climate for innovation, but also prosocial behaviours, or altruistic citizenship behaviours, self-efficacy, and customer (market) orientation. Perception of favourable work characteristics has a positive effect on the climate for service innovativeness.

The psychological states of empowerment can also arise from influences over and above work characteristics, such as peer helping and supportive customer relationships (Corsun and Enz, 1999). Psychological empowerment of task design also appears to emanate from the interdependence of workgroup members. Group members rely on each other to ensure that the customer receives a complete and satisfactory service. Even those members who work independently at their jobs, such as housekeepers, sometimes require others to provide information and supplies (e.g. at shift change over) to do their work.

Both survey results and interview data from this study suggest that, on average, jobs in the hotel service industry have a sufficient degree of variety, identity, and significance and provide enough allowance for participation and self-management at the workgroup level to foster a climate for innovation. In practice, this means that workgroup members share responsibility, have the autonomy to make decisions, and feel they complete a whole and identifiable task. Group task variety makes the work more interesting and motivates group members to be innovative and generally effective by allowing them to learn and utilise various skills, thereby reducing boredom and monotony (Hackman, 1987), and builds flexibility by permitting group members to substitute for one another (Susman, 1976).

It may be hard to imagine hotel service industry jobs to possess task variety, but it is also true that the average hotel job revolves around customer service, and, since every customer is different from the next one, handling them requires different approaches

and skills. Greater flexibility is required to provide increasingly powerful and demanding customers with seamless service.

A comment from D, an interviewee from Hotel W illustrates this point:

….I'm constantly reminding them (his team) that if it is Asian customers, especially tourists, walking in, better meet them half way, welcome them, ask where they would prefer to be seated, and then ask them whether they would like tea or coffee'.

If the customer is local (Australian), they will most likely head straight and hang around the counter for a drink, before wanting, if at all, to want a Table for a meal……you therefore cannot approach all the customers same way, at least not all the time…..

Market Orientation, GCB, and Group Self-efficacy can also be viewed as being determined by Task Design, under the JCM model.

Self-management is the group analogy to task autonomy in the JCM. It can be speculated that a workgroup that enjoys self-management is likely to be self-efficacious and customer (market) oriented if it is to stay effective. Such a workgroup is more likely to experience a feeling of ownership and a sense of responsibility, driving the workgroup to give it their best shot and therefore motivated to be innovative and effective in their performance (Miles et al., 2000; Spreitzer et al., 1999). It also allows workgroup members to effectively deal with customer demands by making decisions (instead of referring them to top management) in the process of doing the work.

Participation has a similar effect to self-management. It enhances group effectiveness, creates a climate for innovation, and eventually leads to workgroup innovativeness by increasing members' sense of responsibility and ownership of the work (McGrath, 1984; Porter, Lawler, and Hackman, 1987). Indeed, Miles et al. (2000, p. 305) have suggested that self-management is the 'first design principle' for an innovative and collaborative organization.

For GCB, work at the individual level of analysis (OCB) provides further support for its link to task design. Farh et al., (1990), argued for a direct relationship between task

design and OCB, given the concomitant effects task variables have on psychological states such as ‘meaningful of the work’ and ‘sense of responsibility. For example, a worker with job tasks that intrinsically motivate and produce a strong sense of enhanced meaning would be expected to operate in the best interest of the organization at large (OCB compliance) and be considerate of fellow workgroup members who also share in the welfare of the organization (OCB altruism). As hypothesized, they found task variables, measured as task scope, to directly affect OCB in the form of compliance and altruism. Other researchers have arrived at similar results (e.g. Todd and Kent, 2006; Wegge, et al., 2006; Podsakoff et al., 1996; Podsakoff et al., 1993).

Task design was the only independent variable not directly linked to Workgroup Service Innovativeness. A plausible explanation can be found in one of the JCMs tenets, that jobs high on task design create psychological states for internally motivated behaviours. A climate for innovation may be construed as one of such psychological states.

The implication for organizational management is rather tricky because in the area of task design, we are, to some extent, not dealing with job design, but perceptions. The focus is not on the objective features of the job but on whether an individual perceives themselves as empowered. Perceptions of task design do not necessarily reflect job design. Yet, they can influence how workgroup members respond to that job specifications. The least management can do is to try and understand better how their workgroups view their roles and their jobs with the view to moulding those task perceptions into positive ones in order to cultivate group citizenship behaviours, market orientation, self-efficacy and a climate for innovation, all of which should encourage group innovation processes such as group activities designed to invent and implement new and better ways of customer service.

Secondly management should hand over more and more responsibility to workgroups. Experienced responsibility plays an important role in motivating workgroups to be innovative. Also, to function effectively as a workgroup, members must feel responsible not only for their own work but for the work of their fellow group members as well (Vegt et al., 1998).

8.3 WORKGROUP CONTEXT AND SERVICE INNOVATIVENESS

As pointed out in Chapter 1, groups, when managed well stimulate creativity and innovation, make an organization more adaptive to market forces, and ultimately tap into the firm's deep intellectual resources, ensuring that the organization thrives. Workgroups or teams are capable of high levels of productivity by combining knowledge, skills, perspectives, experience, and expertise of members with diverse functional know-how. They provide ideal conditions for developing new and useful products and processes (Blumen and Leavitt, 1999) and as Nijstad and De Dreu (2002) point out, in modern organisations, we see an ever increasing tendency to restructure work from individual-based to group-based activity. Leavitt and Blumen (1995) pointed out that among the benefits organizations could gain from using groups are improved creativity and innovation.

In this Section, the relationship between individual workgroup context variables proposed in the model, and, Workgroup Service Innovativeness is reviewed.

8.3.1 Workgroup Self-efficacy

According to the hypothesized model:

The greater the Group Self-efficacy, the higher the Group Climate for Innovation.

Results from both the hypothesized model (Figure 6.1,Table 6.2) and the respecified model (Figure 6.2, Table 6.4) confirmed the hypothesis: The path, in both models was significant, ($\beta = 0.23, p < .001$) and $\beta = 0.34, p < .001$) (respectively

According to the respecified model, the path from Group Self-efficacy to Workgroup Service Innovativeness was also significant ($\beta = 0.3, p < .001$) .

These findings are consistent with previous results (Markman, et al., 2002; Pescosolido, 2003; Peth, 2002; Agrell and Gustafson, 1996; Guzzo et al., 1993; Guzzo and Shea, 1992; Farr and Ford, 1990) and with Pescosolido's (2003) suggestion that group efficacy has a beneficial effect on group dynamics and overall group effectiveness.

Since group efficacy signals what a group believes it can do, the level of group self-efficacy is often related to how much effort the group expends, and it has been shown to be a determinant of group effectiveness (Campion et al., 1993). It appears that a workgroup's belief in its ability to perform effectively actually translates into good work outcomes.

As in other work settings, group self-efficacy in the service industry, such as the hotel industry, acts as a motivational vehicle for workgroups to come up with innovative ideas of customer service. Mentally, efficacy affects behaviour through visualising success through reciprocal determinism of thoughts, actions, and outcomes in the work environment. Workgroup efficacy beliefs are motivational due to causal attributions to the workgroup rather than to the situation, leading to choice of behaviours and an attitude of resilience.

The desire to be effective as a team is partially explainable by the influence of the team's prior accomplishments/failures, by comparison with other teams, and by supportive and persuasive leadership (Druckman and Bjork, 1994).

Management can help groups in their innovativeness by deliberately talking up workgroups' past accomplishments, citing examples of past innovative behaviours, and refraining from dwelling on failures. Lepper, Ross, and Lau (1986) found that initial success or failure had a strong, persistent effect on individuals' beliefs about their capabilities (self-efficacy). Management, through the regular training of its staff can also influence workgroup's perceptions of their possession of the technical and social skills necessary to produce quality customer service. This is in line with Little et al.'s (1997) factors 2 and 3 of collective efficacy. Factor 2 is concerned with the group members' perception that they possess the social skills necessary to perform their tasks while factor 3 addresses the members' perceptions of their possession of the technical skills necessary to produce quality work.

Social influence and social comparison with other workgroups inevitably makes teams competitive, strengthening their desire to be the most innovative and hence most effective. This point is best illustrated by how Sandy, a team leader from one of the

hotels said during her interview, when asked to differentiate good and poor performing workgroups:

..being creative, wanting to whack the night shift fellas, is not something new in my group. They are a suggestive lot and aren't afraid to try something new, be it welcoming Japanese guests in Japanese or helping them with their shoe lace. ..they are a very confident and sometimes argumentative lot, and they work closely with each other. You won't find the kind of finger pointing, bitchiness and lack of motivation common in poor performing teams.

Supportive and persuasive leadership, task clarity, and shared goals, as already stated elsewhere, are important ingredients for an innovation-supportive organizational climate.

By allowing employee workgroups to participate in the setting out of daily tasks, management provides them with a feeling of ownership and empowerment, and hence commitment to the success of the hotel. This is important because organizational commitment is related to innovation (Eisenberger et. al., 1990).

8.3.2 Market Orientation

According to the hypothesized model:

Market Orientation is related to high levels of Group Climate for Innovation.

Results from the hypothesized model (Figure 6.1, Table 6.2) confirmed the hypothesis ($\beta = 0.29, p < .001$). However, results from the better data-fitting respecified model (Figure 6.2, Table 6.4) showed that market orientation also affects Workgroup Service Innovativeness directly. But, this direct influence was weaker ($\beta = 0.11, p < .001$) than the indirect one ($\beta = 0.29, p < .001$).

These results are generally consistent with previous findings (e.g. Verbees and Meulenberg, 2004; Atuahene-Gima, 1995, 1996; Pelham, 1997; Han et. al. 1998; Hurley and Hult, 1998).

It may be that just as it happens at the organizational level (Pelham, 1997), market-oriented workgroups have superior market information gathering and processing abilities that permit them to learn about marketplace changes quickly and accurately. This provides an incentive for the creation of a group atmosphere for innovation. This in turn equips them with a superior knowledge of their competition and customers' needs, which facilitates the development of innovative service behaviours. As Speed et al., (2000) put it, being market-oriented creates an environment for listening, understanding and responding to the market and the competition.

Second, as it is the case with new product development (e.g., Narver and Slater, 1990; Wren et al., 2000), market orientation in the service industry involves close and effective cross-functional cooperation. Just as such close cooperation among different functional groups is an important antecedent to new product development (e.g., Atuahene-Gima, 1996) it is also important to service innovativeness.

Narver and Slater's (1990) cultural perspective, embracing customer orientation, competition orientation, and interfunctional coordination is relevant to the explanation of the findings.

Customer orientation is a set of beliefs that puts the customer's interest first, while not excluding other stakeholders such as owners, managers, and workers, in order to develop a strategically profitable business (Deshpande et al., 1993). It can be argued that customer orientation improves performance (Deshpande, 1993), by making workgroups more innovative. According to Narver and Slater (1990), customer orientation requires a sufficient understanding to create products or services of superior performance. Gronroos (1982) considered that service industries need to market the customer orientation to employees if they are to reinforce the quality of the enterprise and its services. Customer orientation promotes innovativeness because, as defined by Slater and Narver (1995), it is a culture which not only accentuates the creation of customer values as the overriding organizational goal but also provides norms for organizational development and consensus.

Competition orientation means understanding the strengths, weaknesses, capabilities and strategies of competitors (Narver and Slater (1990). This process is made easier

when there is a prevailing climate for innovation in the workgroup. Baker and Sinkula (1999) argue that new product development (or, in the service industry, service innovativeness) can respond to markets by reacting to customer needs and competitor offerings, or develop a learning orientation environment (climate for innovation) through innovative disruptions of the status quo, or 'thinking outside the box.

The coordinated use of organizational resources and the dissemination of information throughout the firm help the innovation process and create value for the customer. Such coordination is closely linked to customer and competitor orientation. All workgroups or departments should cooperate and be sensitive to each others needs if they are to encourage an innovative culture.

The challenge for managers is to build a workgroup market-oriented culture through the creation of superior value for customers. This can be done, for example, by uncovering latent customer needs and stimulating customers to suggest innovative customer service ideas.

8.3.3 Group Citizenship Behaviour

In Chapter 3, it was stated that GCB plays an important role in the generation and maintenance of organizational effectiveness, including innovation (Podsakoff and MacKenzie, 1997). It was hypothesized that:

GCB is related to high levels of Group Climate for Innovation.

Results from both the hypothesized and respecified models confirmed the hypothesis: ($\beta = 0.24, p < .001$) and ($\beta = 0.24, p < .001$) respectively.

These findings are in line with previous studies that have found that OCB (GCB at the group level) is related to workgroup and organizational effectiveness, including innovation (Alotaibi, A.G. 2001; Hunt, S. T. 2002; Karen, M.H. 2002; Carol, C.B. et. al., 2003; Karamayya, 1990; Koys, 2001; Podsakoff and MacKenzie, 1997).

According to Podsakoff and Mackenzie (1997), one potential reason why CBs, and hence GCBs influence workgroup and/or organizational performance is that, citizenship

behaviours may enhance performance by 'oiling' the social machinery of the organization and increasing efficiency while simultaneously reducing friction. These may be effected through such practices as helping co-workers become more productive by helping them 'learn the ropes,' or, by spreading 'best practices' throughout the workgroup, over time, through helping co-workers.

Figure 6.2, the respecified model also makes the suggestion that GCB affects Workgroup Service Innovativeness directly ($\beta = 0.28, p < .001$). In fact, this direct relationship is much stronger than the indirect one where GCB impacts Workgroup Service Innovativeness through Group Climate for Innovation. It is possible that GCB contributes to Workgroup Service Innovativeness, directly and indirectly by creating perceptions of superior customer service quality (e.g. Morrison, 1996). Podsakoff and MacKenzie (1997) claim CBs (and by extension, GCBs), are essential for superior customer service. If quality customer service is to be achieved, it is important that employees display appropriate behaviour for the role they are performing. Employees displaying CBs are able to deliver innovative, quality service because they go the extra mile in assisting the customer.

Socialization theory also helps in the understanding of this relationship. The individual socialization process within a service organization encourages OCB or GCB dimensions (helping behaviour, sportsmanship, individual initiative, civic virtue, organizational commitment, complacence, and personal development) to become customer oriented behaviours aimed at achieving better service quality outcomes (Netemeyer et al., 1997). OCB and GCB are manifestations of employees' commitment to the organization. Thus, Kelly (1992) identified the link between the socialization process and the affective and behavioural orientation of the employees. Kelley (1992) considered this socialization process to be an essential part of a worker's involvement with their organization. Therefore, if the worker perceives that the organization's working environment is positive, and if the employee's levels of commitment and involvement are high, that employee is more likely to be customer focussed (Williams and Sanchez, 1998). And, a higher customer orientation improves customer perception of the service delivered by the organization (Yoon, et al., 2001).

Table 6.1 shows significant correlations between GCB and Market Orientation (r=.74), and between GCB and Group Self-efficacy (r=.51).

GCB's connection to market orientation is not surprising. According to Podsakoff and MacKenzie (1997), CBs (or GCBs at the group level) can assist to foster an organization's environmental adaptation in several ways. For example, when market oriented employees volunteer information about changes in the market and make suggestions about how to respond to them, it helps the organization to adapt. Or, when employees display their civic virtue by voluntarily attending and actively participating in meetings, it may enhance an organization's responsiveness by helping the dissemination of crucial information. Similarly, when employees show another GCB element, sportsmanship, by demonstrating a readiness to take on new responsibilities or to learn new skills, it may enhance an organization's ability to adapt to changes in the market.

In service management, market orientation may be viewed as synonymous with customer orientation which may act as one of what Podsakoff and MacKenzie (1997) as potential moderators of the relation between GCBs and workgroup effectiveness. Employees engaging in GCBs are able to deliver quality service because they attempt to best assist the customer (Castro, et al., 2004).

The relationship between GCB and Group Self-efficacy is in line with previous findings (e.g. Dussault, 2006; Ronit and Anit, 2004; Ying-Yung, 2003; Choi, et al., 2003). It is possible that engaging in effective customer extra role behaviours (GCBs) leads to instant positive feedback which in turn bolsters confidence and job-related self-efficacy.

CBs (and GCBs), in plain language, are employee efforts that go 'above and beyond the call of duty' (Bolino and Turnley, 2003, p. 60). They include such behaviours as taking on additional assignments, voluntarily helping other people at work, following laid down rules even when others are not watching, skipping one's break to complete an urgent task, maintaining a positive attitude and tolerating inconveniences, and, promoting and protecting one's employer. What the results in this study imply is that workgroups with high levels of GCBs are also more likely to have high levels of market

orientation, Group self-efficacy, and, service innovativeness. Therefore, management's challenge is to cultivate GCBs,

In one of the few studies that have considered the relationship between CBs and service-related outcomes, Bell and Menguc (2005) found a significant relationship between CBs and service quality, leading them to recommend that management should encourage CBs among customer contact personnel. Since CBs (and GCBs) are known to make a significant contribution to overall business performance, managers should spend the appropriate amount of time cultivating them. In the hotel industry, one way of implementing this would be by structuring the reward systems to incorporate both behavioural criteria (e.g. helping work-overloaded workgroups) and outcome criteria (e.g. room or restaurant occupancy rates).

Since job satisfaction is known to be a correlate of organizational citizenship, management should periodically undertake attitudinal surveys to gauge employee levels of satisfaction with the strategic view of improving its levels in workgroups.

The need for an innovation-supportive organizational climate has already been stressed. Transformational and supportive leadership is also important for GCBs. To foster GCBs, and by extension service innovativeness, managers/team leaders should create and communicate a vision of where they want to take the hotel. Organizational support can take several different forms. For example, child care facilities near the hotel premises, providing work-life benefits and other types of employee support is likely to elicit GCBs. Management can also initiate other flexible and family-friendly workplace benefits that show appreciation for employees and make it easier for them to go beyond the call of duty.

Another way the hotel service industry can cultivate group citizenship behaviours is to invest in what is called social capital, that is, strong interpersonal connections among employees (Bolino et. al., 2002). At the level of the workgroup, this would entail willingness of workgroups to exceed their formal job requirements in order to help other workgroups, for example, in the hotel industry, the morning housekeeping staff can continue getting vacated guest rooms ready for occupancy, if the afternoon shift is running late. Another way to build social capital would be to encourage workgroup

members to take part in the hotel's social life. Employees are likely to meet colleagues working in other departments with whom they might not otherwise have contact. Organizations with relatively high levels of social capital are better able to elicit the commitment of their employees (and workgroups), to attract and retain top employees, to be flexible, to manage collective action, and to develop high levels of intellectual capital (Bolino and Turnley, 2005).

Departmental team leaders should also strive to increase the job scope of workgroups by increasing, to the limit of what is possible, the job scope of their workgroups. Increasing task variety and autonomy, having performance feedback systems, and, introducing job rotation within workgroups is one way of making work more interesting and intrinsically satisfying. It is most likely, deducing from the JCM (Hackman and Oldham, 1976), that employees engage in higher levels of GCBs when they have the opportunity to work on intrinsically satisfying tasks and activities that provide them some sense of how they are doing in their jobs.

Other measures management can take to bolster good citizenship can include sponsoring training programs that teach teamwork and cooperation or the importance of taking initiative and exceeding one's designated job description; developing a corporate culture that encourages going the extra mile for customers, colleagues, or the entire hotel; and, placing new employees, whenever possible, into workgroups characterized by high levels of GCBs.

8.3.4 Group Climate for innovation and Workgroup Service Innovativeness

The final hypothesis stated that:

The higher the Workgroup Climate for Innovation, the higher the level of Workgroup Service Innovativeness.

Results from the hypothesized model (Figure 6.1, Table 6.2) confirmed the hypothesis (($\beta = 0.66, p < .001$). However, the strength of this path was greatly reduced ($\beta = 0.11, p < .05$) in the respecified model (Figure 6.2, Table 6.4), due to the introduction of new direct independent-dependent paths. These latter relationships have already been discussed in this chapter.

It is important to also note that the largest correlation in the study was that between the dependent variable, Workgroup Service Innovativeness, and Group Climate for Innovation (r=.74) (Table 6.1).

These findings are consistent with previous results that have found Group Climate for innovation to be a good predictor of Workgroup Service Innovativeness (e.g. Gil, et al., 2005; Pirola-Merlo and Mann, 2004; Pillinger and West, 1995; West and Anderson, 1996; West and Farr, 1990; West, 1990; Anderson and King, 1993; King and Anderson, 1995).

Group support for innovation has been viewed as both a group climate variable and as a group process variable (Gilson, et al., 2005). Viewed as a group climate factor, the emphasis is on *perceived support for innovation.* The basic idea is that when individuals perceive their group to be supportive of creativity and innovation, they will tend to engage more often in creative and innovative acts, which in the present case implies innovative customer service.

In the present study, a supportive climate was described in the qualitative data interviews, in various ways including:

Supportive, trustworthy, cooperative, committed, welcoming, family-oriented, friendly, etc.

These descriptions are consistent with past findings (e.g. Tierney, 1999; West, 1990, Amabile, et al., 1996).

According to West (1990), workgroups are more likely to be innovative if their workgroup vision has clarity, attainability, sharedness, and is visionary in nature. In this study, clarity refers to the extent to which the vision is readily understandable to

members of a hotel workgroup; attainability refers to the degree to which the goals can be reached; sharedness refers to the degree to which the vision gains widespread acceptance by members within the group; visionary nature depicts the extent to which the vision has a valued outcome to workgroup members, thereby engendering their commitment to the group goals.

The psychological construct of participative safety means that the more workgroup members participate in decision-making in an environment they perceive to be free and interpersonally non-threatening, the more likely they are to invest in the outcomes of those decisions and to come up with ideas for novel and improved ways of working (West, 1990).

Workgroup members support for innovation refers to '…the expectation, approval and practical support of attempts to introduce new and improved ways of doing things in the work environment' (West, 1990, p.38). Here we are looking at support from team leaders. In the hotel industry, each workgroup has a team leader, or, more conventionally, a supervisor. Just as at the organizational climate level where management support for innovation is important for innovation (e.g., Henard and Szymanski, 2001; Montoya-Weiss and Calantone, 1994), team leader encouragement of innovative behaviour is crucial for customer service innovativeness to develop and thrive in the hotel industry.

It may be that vision, participative safety, and support for innovation lead to Workgroup Service Innovativeness because group processes provide a social and interpersonal context within which group members are encouraged to propose, or discouraged from proposing, new and improved ways of doing things. What workgroups can also bring to innovation may be a facilitating or discouraging set of processes, such as participation and support for innovation, that influence the expression and manifestation of individual creativity in the form of high-quality innovations (West and Anderson, 1996).

8.4 WORKGROUP INNOVATIVENESS AND SERVICE INNOVATION

Given the centrality of workgroups in organizational performance in general and innovation in particular, it can be suggested that workgroup innovativeness, the key driver of a competitive advantage (Deshpande and Farley, 2000), is the heart of service innovation. Therefore, it has become more imperative for businesses to pay attention to both workgroup innovativeness and the service industry. As others have previously noted, economic growth, higher disposable incomes and technological advances have made a contribution to the exponential growth of the service sector organizations (Chapman et al., 2002). The role of workgroup innovativeness in service innovation is particularly crucial in the hospitality industries, such as hotel enterprises, where the provision of high quality service has become essential to survival. An important element of innovativeness is risk taking: hotel employees should be permitted to experiment (Davidson, 2003). Any management service quality plan must include employee involvement. Employees must have the chance to take responsibility and occasionally take risks in pursuit of service innovation without fear of sanctions. In this process a central plank is freeing up thinking and allowing the redesign of jobs to facilitate service quality. Employees who are service-oriented will often redesign their own jobs to provide a better service even without the formal approval of management. The cornerstone for organizational success is for management to create a climate for innovation in workgroups, in the context of a continuous improvement.

It was stated in Chapter 1 that, growing numbers of organisations rely on workgroups to perform work (Sumanski and Kolenc, 2007; Chuang et al., 2004; Campion, Papper and Medsker, 1996). This is more so in the service industry where the quality of the product (service) typically depends on the input of group members working together. One slip up by one member can easily lead to customer dissatisfaction.

When managed well, groups stimulate creativity and innovation, make an organization more adaptive to market forces, and ultimately tap into the firm's deep intellectual resources, ensuring organizational competitiveness. They also hold the potential for simultaneously increasing productivity and employee satisfaction (Campion and Medsker, 1993), thereby addressing West and Farr's (1990) lamented two challenges in the workplace posed in Chapter 1 of the thesis.

Gronroos (2000) has claimed that organizations now compete on the basis of services, and not on that of manufactured products. Globalization of the market has forced every industry to transform itself into a truly customer-oriented, service-focused firm, irrespective of the goods and services. Given that services are now the recognized value assessment variable for predicting a company's success in the marketplace, most manufacturing companies need to be cognisant of the service aspect of their product-service mix, simply because the service aspect of their products offers the best chance of gaining sustainable competitive advantage, or, put differently, the greatest chance of losing customers comes through reluctance to innovate or substandard levels of service. Therefore, service innovation, and its most effective deliverer, workgroup innovativeness, have never been more critical.

Workgroup innovativeness has become the engine for both product and service innovations mainly because groups provide ideal conditions for developing and nurturing new and useful products and processes (innovation) (Blumen and Leavitt, 1999). It is this realization that has led to an escalating tendency to restructure work from individual-based to group-based activity (Nijstad and De Dreu (2002). Hence, groups have become a foundation building block for many organizations: For at least a decade or so, 68 per cent of Fortune 1000 companies in the United States have been using self-managing teams (Lawler, Morman, and Ledford, 1995) and 84 per cent of over 5,000 European firms relied on semi-autonomous or self-managed teams (Benders, Huijgen, Pekruhl, and O'Kelly, 1999). A key rationale behind this practice has been that groups outperform individuals on a variety of tasks, including problem solving, creativity, and decision making (i.e. 'two heads are better than one'), (Levine and Moreland, 1990).

8.5 MANAGERIAL IMPLICATIONS

Taken as a whole, the present findings indicate that work place innovativeness can be influenced by different factors, some of which are related to the organizational context, while others are related to the workgroup context. These results have several possible implications for management.

As far as workgroup supports are concerned, the perception that management is supportive is crucial in establishing a culture that fosters innovation. The uncertainty and complexity inherent in innovation suggests that employee trust of management is central to the development of an innovation-supportive culture because trust enables people to take risks without fear of undue penalty for failure (Porter, Lawler and Hackman, 1975). There is considerable research on the role of trust in facilitating co-ordination within organisations (e.g., Granovetter, 1985). Innovation is frequently the product of social relationships and complex systems of interaction. Trust is necessary for such systems to work effectively (Thompson, 1967; Granovetter, 1985).

Organisational systems must provide reward and recognition for creative work and performance accomplishments (Amabile et al., 1996). There is a burgeoning literature on organisational control systems such as pay-for-performance that can impact innovative activity by employees. Paradoxically, while pay-for-performance may encourage in-role behaviours (Oliver and Anderson, 1995), it may also discourage behaviours not linked to specific rewards (Morrison, 1996). Hence, the reward system can have a significant impact on innovative activity, both because it can be a tool to increase such activity and because it can discourage innovative activity by rewarding other behaviours. Also, based on expectancy theory (Vroom, 1964), it can be said that the perception that organisational systems support innovative activity is an important component of individual motivation to engage in such activities.

More specifically,

- Management should convey to all workgroups in the organization that innovation is valued and support is available for workable customer service improvement ideas. Encourage workgroups by focusing on creativity and innovation as important performance outcomes, rather than only on productivity. A well-developed communication strategy can cultivate the type of work place environment that is more accepting of creativity and innovation (Clampitt and Berk, 1996). Furthermore, positive reinforcement for group performance should be linked to innovations that have produced positive results. Management can create an ethos within which innovation blooms or is starved of support.

Workgroup members regularly have ideas for improving their workplaces and processes, products or services. Where the organizational climate is characterised by distrust, a lack of communication, limited autonomy and unclear goals, the implementation of these innovative ideas is inhibited.

- Management should implement reward structures that recognize employees when they make service improvement suggestions and get them implemented.

- Management should make workgroup members feel they are working under a supportive organizational climate. Managers should strive to increase the supportiveness of the work context. This applies to how managers interact with group members, how co-workers, group members interact with employees, whether adequate resources are available, how members expect to be evaluated and rewarded, and whether the climate is perceived to be supportive. Managers should work directly on the perceived supportiveness of the organization's Organizational climate because, unlike the deeper-level values and beliefs associated with more abstract conceptualizations of organizational culture, Organizational climate is amenable more directly to management control (Ashkanasy et al., 2000; Denison, 1996).

- Management should not discourage constructive conflict, dissent and group errors. Diversity of viewpoints creates the friction and energy for innovation. Dissent can stimulate team innovation when it occurs in a cooperative environment. Innovation also requires diversity of knowledge bases, professional orientations and disciplinary backgrounds.

- Management should make jobs motivating by encouraging workgroup autonomy, wide participation in group decisions, a variety of task assignments, and interdependence between group members. Create more broadly defined roles for workgroups, and allow workgroups to have control over the methods used. In other words, make devolution of decision-making in task-design a priority by making workgroups responsible for most operational decisions and, again, providing a supportive environment where the workgroups feel empowered.

- Overall, by providing an innovation supportive organizational climate and jobs high on skill variety, task identity, significance, self-management and feedback, management will be laying the groundwork for the germination and growth of workgroup CBs, self-efficacy, and customer-oriented behaviour (market orientation), which eventually should promote both a climate for innovation and innovation itself.

8.6 STUDY LIMITATIONS AND FUTURE DIRECTIONS

Like most research of this type, this investigation has limitations.

Firstly, it did not pretend to analyse all possible variables that might be considered to be antecedents or correlates of workgroup innovation, at both the organizational and workgroup levels of analysis. The model's explanatory power was obviously limited to the variables involved. Explanatory power could further be increased by systematically exploring interaction effects, rather than simply focusing on main effects (Nijstad and Dreu, 2002).

Secondly, the nature of the design, which was cross-Sectional, makes causality difficult to determine. To validate the hypothesized causal chain relationships in the model, future studies should use longitudinal designs and time-series analyses. The cross-Sectional data gives only a snapshot of the dynamics of hotel behaviour in relation to how innovation is managed. Longitudinal and time series designs will extend this snapshot.

Thirdly, the grouping of hotel workers by department failed to acknowledge other significant forms of collective. Workers in the hotel industry are also grouped by labour market status linked with their position in the organization (primary and secondary-core and periphery). These could further be differentiated by tenure-full time, part-time, casual and temporary.

Fourthly, given the large sample size in this study, care must be exercised when interpreting the correlations in Table 6.1 because even apparently small correlations will ‘usually’ show as significant.

Future studies should also try to investigate the role of other potential mediators and moderators in affecting relationships between workgroup and organizational level factors and group innovativeness in order to provide additional explanatory power to the model. In addition, more potential interactions among the predictors should be explored.

In addition, future research should explore the nature of innovation in personal or low skills services such as hotels. Public and private organizations have wrestled with this issue at some length and with limited success. It may be that the search for innovative practices or propensities in this direction within hotel workgroups may be tantamount to chasing a mirage.

Also, it is important to emphasize the limitation of the sample which was limited to the hotel industry. To increase the generalizability of the findings within the customer service industry, further studies should expand the sample to include other service industries such as insurance and banking.

Another limitation was that, some data were collected from individuals and then aggregated to the group. The grouping of hotel workers could have been better-handled. Given the unequal and limited groupings along department lines, it would not be justifiable to provide the recommended ICC or Rwg or WABA analyses. Future research might use a group level of measurement (e.g., have groups give consensus responses).

The qualitative study data was collected from a small sample of willing team leader interviewees, limiting the generalizability of the results. Future studies should broaden the sample of managers taking part in in-depth interviews.

The relationship between OCB and Self-efficacy needs to be investigated further, to determine the causal relationship. As pointed out earlier in this chapter, the finding in this study that OCB generates Self-efficacy is at odds with previous findings.

Another implication for future research is that the proposed and tested model provides an integrated conceptual framework for studying Workgroup Service Innovativeness.. The model was an endeavour to draw the knowledge base of workgroup innovation together and to provide an initial test of a comprehensive model. It is hoped that other studies will test refined and alternative models in this growing area of workgroup innovation.

An area of concern in the area of research looking at Organizational climate and its outcomes is the haphazard nature of knowledge development (Patterson et al., 2005). Studies do not appear to be synergistic or follow through to theory development. Virtually every study measures climate differently, hence, the accruing knowledge is far from cumulative. To make matters worse, many instruments suffer from poor design, level of analysis specificity, and lack of validation, making it hard for management practitioners to draw meaningful conclusions and lessons from the research.

8.7 FINAL REFLECTION

In closing, it is important to stand back and ask some pressing questions facing organizational researchers working in the area of innovation, for example, how frequent is innovation at work? Studies, not only of workgroups but also of individuals and organizations can give indication of how common innovation occurs and the extent of its significance and predictability. Similarly important is more research in identifying the antecedents of innovations at the three levels. What factors bring about innovation at work and which of them have most influence and under what conditions? These are important research-based questions and practitioners can not wait to see to what extent knowledge gained from research can be applied in the work place.

Perhaps more crucial is the question of the extent theorizing in this area allows us to meet the three cardinal research aims of understanding, predicting and controlling innovation. Which theories of innovation assist us most in these tasks and which are the most robust in generating testable hypotheses? To what degree is it possible to generate theories of innovation applicable across various work environments and at the three

levels analysis: the individual, workgroup and organization? These are some of the challenges facing the organizational researcher in work place innovation. This thesis contributes to these challenges in two ways:

(1) By proposing a model of workgroup innovativeness that combines organizational context and group-level variables and testing the model using a multivariate approach to data analysis (structural equation modelling).

(2) By studying innovation, at the workgroup level of analysis and in the service sector. Both the level of analysis and the research context have previously received relatively lesser attention in studies of innovation.

These two approaches combine to make a contribution towards meeting the two challenges posed by West and Farr (1990) and posed at the beginning of Chapter 1. They increase both the explanatory power and generalizability of research findings, thereby adding to knowledge accumulation in innovation research.

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APPENDIX A

Ethics approval and consent forms

APPENDIX B

Covering Letter for Study

APPENDIX C

Qualitative Study Interview Sheet

State up to FIVE examples in which the two workgroups (1 and 2) described below, differ in terms of the 6 dimensions listed in the first column (i.e. Organizational Climate, Group Climate, Task Design, Group Self-efficacy, Market Orientation, and, GCB). Respond to each dimension one at a time.

Dimension	**Workgroup 1** Creative, eager to come up with new or fresh ideas about customer service improvement, proactive, and generally performing well and on top of things.	**Workgroup 2** Not creative, lacking in new or fresh ideas about improving customer service, generally laid back and preferring to leave things to the routine.
Organizational climate As reflected in the workgroup's leader behaviour at the departmental level		
Group Climate The atmosphere within the department including within-group relations		
Task design Work structuring, e.g. daily assignment of tasks, including leader's role and that of the		

workgroup		
Group self-efficacy Workgroup's self-esteem or self confidence; its 'can do' attitude		
Market orientation Awareness of hotel's competition and attuning workgroup activities in light of perceived competition; extent to which workgroup's activities are market-driven		

APPENDIX D

The Workgroup Innovation Questionnaire

(Workgroup Members)

Please circle a number alongside each question that most closely represents your opinion. Feel free to add any comments or reservations about any question in the space provided at the end of the Questionnaire. Circle 0 for any question you feel is outside your expertise or experience that you do not understand, or is not applicable.

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1	**2**	**3**	**4**	**5**	**0**
Strongly disagree	Disagree	Neither Agree nor disagree	Agree	Strongly agree	do not know/ not applicable

Task design

1	The members of my workgroup are responsible for determining the methods, procedures, and schedules with which the work gets done.	**1**	**2**	**3**	**4**	**5**	**0**
2	My group rather than my manager decides who does what tasks within the work team/group.	**1**	**2**	**3**	**4**	**5**	**0**
3	Most work related decisions are made by members of my workgroup rather than by my manager.	**1**	**2**	**3**	**4**	**5**	**0**
4	As a member of a group, I have a real say in how the workgroup carries out its work.	**1**	**2**	**3**	**4**	**5**	**0**

5	Most members of my workgroup get a chance to participate in decision making.	**1**	**2**	**3**	**4**	**5**	**0**
6	My workgroup is designed to let everyone participate in decision making.	**1**	**2**	**3**	**4**	**5**	**0**
7	Most members of my group get a chance to learn the different tasks the workgroup performs.	**1**	**2**	**3**	**4**	**5**	**0**
8	Almost everyone in my workgroup gets a chance to do the more interesting tasks.	**1**	**2**	**3**	**4**	**5**	**0**
9.	Task assignments often change from day to day to meet the work load needs of the workgroup.	**1**	**2**	**3**	**4**	**5**	**0**
10	The work performed by my workgroup is important to the customer in my area.	**1**	**2**	**3**	**4**	**5**	**0**

1	**2**	**3**	**4**	**5**	**0**
Strongly disagree	Disagree	Neither Agree nor disagree	Agree	Strongly agree	do not know/ not applicable

11	My workgroup makes an important contribution to serving the company's customers.	**1**	**2**	**3**	**4**	**5**	**0**
12	My workgroup helps me feel that my work is important to the company.	**1**	**2**	**3**	**4**	**5**	**0**
13	The workgroup concept allows all the work on a given product to be completed by the same set of people.	**1**	**2**	**3**	**4**	**5**	**0**
14	My workgroup is responsible for all aspects of a service for its area.	**1**	**2**	**3**	**4**	**5**	**0**
15	My workgroup is responsible for its own unique area or segment of the business.	**1**	**2**	**3**	**4**	**5**	**0**

Organisational Climate

16	In this hotel, new ideas are driven through despite set backs or difficulties.	**1**	**2**	**3**	**4**	**5**	**0**
17	Decisions to support or kill an initiative are taken by managers who really understand the issues.	**1**	**2**	**3**	**4**	**5**	**0**
18	Top management take innovation (that is, new ways of doing things) very seriously	**1**	**2**	**3**	**4**	**5**	**0**
19	Most people here welcome change.	**1**	**2**	**3**	**4**	**5**	**0**
20	Personal initiatives are supported, providing people work within guidelines.	**1**	**2**	**3**	**4**	**5**	**0**
21	When it is important decisions are made quickly.	**1**	**2**	**3**	**4**	**5**	**0**

22	Senior Managers inspire people to be innovative (that is, being creative in coming up with new ideas)	1	2	3	4	5	0
23	Once a decision is made initiatives are implemented rapidly	1	2	3	4	5	0
24	Employees are empowered (that is, given power) to take significant initiatives.	1	2	3	4	5	0

Group self-efficacy

25	Members of my workgroup have great confidence that the group can perform effectively.	1	2	3	4	5	0
26	My workgroup can take on nearly any task and complete it.	1	2	3	4	5	0
27	My workgroup has a lot of team spirit.	1	2	3	4	5	0

Team Climate Inventory

28	In this hotel, we have a ‘we are together’ attitude.	1	2	3	4	5	0
29	People keep each other informed about work-related issues.	1	2	3	4	5	0
30	People feel understood and accepted by each other.	1	2	3	4	5	0
31	There are real attempts to share information throughout the workgroup..	1	2	3	4	5	0
32	In this hotel, group members are prepared to question the basis of what the group is doing.	1	2	3	4	5	0
33	The workgroup critically appraises potential weaknesses in what it is doing in order to achieve the best possible outcome.	1	2	3	4	5	0
3	Members of the workgroup build on each other's ideas in order to achieve the best possible outcome.	1	2	3	4	5	0
35	People in my workgroup are always searching for fresh, new ways of looking at problems.	1	2	3	4	5	0
36	In my workgroup we take the time needed to develop new ideas.	1	2	3	4	5	0
37	People in my group co-operate in order to help develop and apply new ideas.	1	2	3	4	5	0
38	In this hotel, you are in agreement with your workgroup's objectives.	1	2	3	4	5	0
39	My workgroup's objectives are clearly understood by other members of the group.	1	2	3	4	5	0
40	My workgroup's objectives can actually be achieved.	1	2	3	4	5	0

41	My workgroup's objectives are worthwhile to the hotel.	1	2	3	4	5	0

Market Orientation

42	Understanding customer needs is very important in my hotel.	1	2	3	4	5	0
43	Focussing on customer commitment is very important in my hotel.	1	2	3	4	5	0
44	Getting all functions to contribute to customer value is very important in my hotel.	1	2	3	4	5	0
45	Sharing information across departments is very important in my hotel.	1	2	3	4	5	0
46	Measuring customer satisfaction is very important in my hotel.	1	2	3	4	5	0
47	Setting customer satisfaction objectives is very important in my hotel.	1	2	3	4	5	0
48	We create value for customers.	1	2	3	4	5	0
49	We share information about customers.	1	2	3	4	5	0
50	We target opportunities for competitive advantage.	1	2	3	4	5	0
51	We share resources across the whole company.	1	2	3	4	5	0
52	Top managers discuss competitors' strategies.						
53	We respond rapidly to competitors' actions.	1	2	3	4	5	0

Organisational Citizenship Behaviour

54	In this hotel, the employees work to exceed each guest's expectations.	1	2	3	4	5	0

Market Orientation

55	All departments contribute to company strategy in my hotel.	1	2	3	4	5	0

Group Citizenship Behaviour

56	I can count on my co-workers when I need help.	1	2	3	4	5	0
57	The employee group feels responsible for our success.	1	2	3	4	5	0
58	The people I work with have a ‘can do’ attitude.	1	2	3	4	5	0

59	The people here treat each other with respect.	1	2	3	4	5	0

Workgroup Innovativeness

60	Everybody in our workgroup is encouraged to think of ways of doing things better.	1	2	3	4	5	0
61	We regurlary make improvements in how we do things in our workgroup.	1	2	3	4	5	0
62	Information concerning the improvement is spread to everybody in our workgroup.	1	2	3	4	5	0
63	Information about the improvements is given also to other workgroup units.	1	2	3	4	5	0
64	Overall, your workgroup's innovativeness, that is their ability to come up with new and creative ways of doing their work may be described as excellent.	1	2	3	4	5	0

Other Groups Innovativeness

65	The innovativeness of other workgroups in your hotel may also be described as excellent.	1	2	3	4	5	0

Workgroup Job Performance

66	Your workgroup's overall job performance may be described as excellent.	1	2	3	4	5	0

Other groups Job Performance

67	The overall job performance of other workgroups in your hotel may also be described as excellent.	1	2	3	4	5	0