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ABSTRACT

This multi-method study investigated the relationship between the dimensions of organizational learning, organizational innovation and organizational climate in the Australian Hotel Industry.

The hotel industry was chosen as it is highly labour intensive and serves as a suitable environment to test the three dependent variables that are closely employee related.

Data was collected from a total population sample of 800 respondents, employed in 50 hotels, which included 45 from a large International Brewery Group located in Melbourne and 5 independent hotels. The response rate was 75%.

Organizational learning was measured using, the 34-item Organizational Learning Profile (OLP) scale (Pace et al, 1997) containing the four dimensions of OL (Achievement Mindset, Learning Practices, Information Sharing Patterns, and Inquiry Climate) was used.

Organizational Innovation was measured using the 24- item Workplace Innovation Scale (WIS) (McMurray and Dorai, 2002) containing the four dimensions of Innovation (Organizational Innovation, Innovation Climate, Team Innovation and Individual Innovation).

Organizational Climate (OC) was measured using the 40 item Koys and DeCotiis (1996) scale containing the eight dimensions of support, autonomy, pressure, cohesion, recognition, fairness, innovation and trust.
Statistical analysis was carried out using SPSS (v.10) and qualitative data was analyzed using theme-category analysis.

This study contributes to the management literature and extends the existing knowledge on learning, innovation and climate.

Specifically the results show that the dimensions of organizational learning, innovation and climate are predictors of one another and it establishes a significant relationship between the dimensions of learning, innovation and climate.

Furthermore, this study found that Workplace Survey is a valid and reliable scale to measure learning, innovation and climate.

The recommendations made in this study will help management understand the importance of learning and innovation in the workplace. In turn, this will improve the organizational climate by facilitating learning and innovation among hotel employees.
ACKNOWLEDGEMENTS

Dedication
To my wonderful parents who have inspired me to undertake this challenging journey.
To my loving husband Dorai, and son Rohit, who have shared and held my hands throughout this journey. This study would not have been possible without their continuing support and patience.
To my sisters who have been my soul mates and have been a constant source of encouragement throughout this journey. Their reminder that “Sis, you can do it” has given me the strength to complete this study.

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With eternal gratitude to Associate Professor Adela McMurray, my supervisor, friend philosopher, and guide who continually reminded me that muddy waters are a valuable learning experience.
In the course of this journey she has been a tower of strength and provided critical feedback whenever I sought her opinion. I am indebted to her for her academic guidance throughout this study.
Thanks are due to the Management of the Carlton United Group provided me with the raw data for this study.
Thanks are due to Edward Krysinski statistician who taught me how to grow with numbers and showed me that relationships between numbers are fascinating.
Student Declaration:
This thesis contains no material which has been accepted for the award to the candidate of any other degree or diploma, except where due reference is made in the text of the thesis;
To the best of my knowledge this thesis contains no material previously published or written by another person except where due reference is made in the text of the thesis;
Where the work is based on joint research or publications, it discloses the relative contributions of the respective workers or authors.

Signature______________________
Date:
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Chapter One

1.0 Introduction

1.1 Objective

The objective of this chapter is to describe the rationale and structure of the thesis. It explains the theoretical background and the justification for the study. It identifies the research questions and the hypothesis.

1.2 Objective of this study

The primary objective of this study is to establish the relationship between multidimensional employee constructs-organizational learning, organizational innovation and organizational climate within the Australian Hotel Industry. The secondary objective of this study is to examine the relationship between demographic variables such as country of origin, nature of employment, area of employment with the three dependent variables – organizational learning, organizational innovation and organizational climate.

1.3 Introduction to the Australian Hospitality Industry

The Australian Tourism and Hospitality industry (AHI) is undergoing turbulent changes influenced by current economic, political and social conditions. Therefore, in order to survive and be competitive AHI needs to engage in innovative practices that includes learning as an industry (Nankervis, 1997).

Australia’s tourism industry in which, the hospitality industry plays a significant role, is now recognized as one of the country’s biggest income earners (Faukner, 1998).
The hotel industry is a distinct part of the broader hospitality industry because it includes the provision of accommodation in addition to eating and drinking facilities (Baum, Amoah and Spivack, 1997).

Guerrier and Deery (1998) traced the growth of hospitality research through a survey of books and journals in areas of human resource management and organizational behaviour in the hospitality industry. They found defining the boundaries of hospitality research was problematic due to the complexity of the industry. Furthermore they found that sociologists and management researchers traditionally focused on production workers and ignored service workers (Ashness and Lashley, 1995; Blum, 1996).

An international and national review of the hotel industry literature identified gaps in research in the areas of learning, innovation and climate in the Australian context. These dependent variables are employee related and have been researched individually across different disciplines by various researchers. However, to understand their complexity and their influence on organizations, a cross-disciplinary literature review was conducted. In addition, as the dependent variables were employee related constructs, it was preferable that their relationship be examined in an industry that is highly diverse and labour intensive. Hence the Australian Hotel Industry (AHI) was chosen due to its diversity and labour intensity and would provide a suitable context to study the dependent variables such as learning, innovation and climate.

Furthermore, it was found that previous studies viewed learning from a cultural and a social interaction perspective (Cooke and Yanow, 1997), whilst others viewed learning as an outcome (Shrivatsava, 1983).
These different perspectives influence definitions and approaches to the measurement of learning, innovation and climate.

There are contradictions in the innovation literature by management researchers where studies have used the term interchangeably with creativity at the individual level. This has generated a variety of definitions and created ambiguity in the scales of measurement.

Similarly, climate has often been confused with culture. This diffusion of the distinction between climate and culture has influenced the definitions and the measurement of these variables.

These observations indicated that a gap existed in the literature that did not address learning, innovation and climate in general, and gaps existed in the context of the Australian hotel industry.

With reference to the above findings, the present study examined the relationship between organizational learning, organizational innovation and organizational climate in the AHI.

1.4 Research Questions and Hypotheses

The gaps in the literature review in learning, innovation and climate in AHI, led to the following six research questions and formed the study’s six hypotheses.

1. What is the relationship between organizational learning and organizational innovation in the Australian hotel industry?
2. What is the relationship between organizational learning and organizational climate in the Australian hotel industry?

3. What is the relationship between organizational climate and organizational innovation in the Australian hotel industry?

4. What is the relationship between the demographic variables (e.g. area of employment, nature of employment and the country of origin of employees) and the dependent variables – (organizational learning, organizational innovation and organizational climate)?

5. What are the relationships among organizational learning organizational innovation and organizational climate in the Australian hotel industry?

6. Can the dimensions of organizational learning; organizational innovation and organizational climate predict one another?

The above six research questions led to the formulation of the following six hypotheses:

- H1: There is a significant relationship between organizational learning and organizational innovation in the Australian hotel industry.

- H2: There is a significant relationship between organizational learning and organizational climate in the Australian hotel industry.

- H3: There is a significant relationship between organizational innovation and organizational climate in the Australian hotel industry.

- H4: There is a significant relationship between the demographic variables (area of employment, nature of employment and country of origin) and the dependent variables.
• H₅ There is a significant relationship between organizational learning, organizational innovation and organizational climate in the Australian hotel industry.

• H₆ The dimensions of organizational learning, organizational innovation and organizational climate predict each other.

In addition, the present study adopted a secondary focus in attempting to establish the relationship between demographic variables such as area of employment, nature of employment, country of origin, of the respondents and the three dependent variables: learning, innovation and climate. This was addressed because the review of the literature did not locate any studies that included all of the above demographic variables in the hotel industry in Australia.

1.5 Research Method

Empirical research is based on positivistic paradigms of social research. Positivism and social construction theory provided the theoretical framework for this study. While the positivistic approach to social science research deals with quantitative techniques, the literature states that this approach is complemented by qualitative research approaches (Hussey and Hussey, 1997; Neuman, 2000).

The theoretical framework for this study was designed to minimize contamination in data collection and to enhance reliability and validity in the analysis and the interpretation of data. The scales utilized to measure organizational learning, organizational innovation and organizational climate were pre-tested using random sampling and survey method in the service and manufacturing environments to ensure
their reliability and validity. The Cronbach Alpha scores obtained for the three scales ranged from $\alpha = 0.89$ to $\alpha = 0.91$ indicating high reliability (Hair et al, 1998)

The present study used a multi-method approach, which includes a combination of quantitative (survey) and qualitative (interview) methods to collect the primary data. Secondary data were collected using management journals, encyclopedias and textbooks. Information about the organizations was sought from annual reports, company brochures, and HR policy manuals.

To obtain a diverse population sample, quantitative data were collected from 50 hotels located in Melbourne. Of these 50 hotels, 45 belonged to an International Brewery Group and the remaining were independents. The rating of these hotels ranged from a two and a half to five star rating. The organizational structures of these hotels ranged from being flat to hierarchical and were complex in terms of work allocation.

The significant difference between the hotels that belonged to International Brewery Group and the independents was that the majority of the independents were family businesses while the head office controlled the hotels that belonged to the International Brewery Group.

Eight hundred questionnaires were distributed resulting six hundred usable responses yielding a response rate of 75 percent.

Analysis of quantitative data was conducted using Factor Analysis, Pearson’s Correlation, One-Way ANOVA and Multiple Regressions of the dependent variables. Qualitative data was analysed using theme category analysis.
Fig. 1.1 The Research Process

Fieldwork (establishing contacts with hotels)

Defining the research question
Identifying the context for the study

Preliminary data gathering (review of Literature)

Developing the theoretical framework for the study

Generation of hypotheses
Defining the variables

Instrument development
Items and scaling
Pre-test
Pilot study
Reliability and Validity of the instrument

Conducting the workplace survey
Interviews and observations

Analysis and findings of the Research

Discussion on findings

Conclusion and revisit the Literature

Source: Author
Figure 1.1 shows the research process adopted for this study. The figure uses a hypothetico-deductive mode (Sekaran, 1992) and has distinct aspects: the process of developing the conceptual framework and the hypothesis for testing, and the design that involves the planning of the actual study dealing the aspects such as location, sampling and data collection.

1.6 Structure of the Thesis

The research process illustrated in Fig.1.1 helped the researcher to structure the thesis as follows:

Chapter One: Introduction
This chapter explains the rationale and background to the study including overview of the topic.

Chapter Two: Literature review
This chapter provides a comprehensive and multi-disciplinary review of literature on which the study was based. This chapter uncovered gaps in organizational learning, organizational innovation, and organizational climate in the Australian hotel industry literature.

Chapter Three: Research methodology
This chapter includes both the rationale for the methodology and the outline of the methodology adopted for the study.

Chapter Four: Construct development
This chapter describes the development of questionnaire or instrument used for data collection in this study. It clearly explains the process involved in the development of the instrument and the justification of the scale used to collect the primary data.
Chapter Five: Data Collection and Fieldwork

This chapter addresses the methodology adopted to collect primary and secondary data for the study, including the pilot and the main study.

Chapter Six: Data analysis

This chapter identifies qualitative and quantitative techniques used to analyze the primary data in this study. It includes statistical factor analysis techniques such as Factor Analysis, One Way ANOVA and Multiple Regression used to analyze the Quantitative data. Theme category analysis was used in the analysis of the qualitative data.

Chapter Seven: Discussion, Findings and Conclusions

In this chapter the findings of the qualitative and quantitative data are discussed. The findings are related to the review of the literature and conclusions are drawn about organizational learning, organizational innovation and organizational climate and their relevance to AHI management research.

1.7 Justification of Research

There are many justifications for this study. 1) It established the relationship between three employee related variables -learning, innovation and climate which were studied simultaneously in the AHI thereby closing a gap in the literature. 2) An international review of literature revealed that although extensive research is conducted on learning, innovation and climate till date no research had been conducted in the context of the Australian hotel industry. 3) Most of the empirical research in the hotel primarily addressed customer satisfaction, productivity and performance. One of the reasons for limited research in the hotel industry can be attributed to its high attrition
rates and high percentages of casual employees. Further, the skill levels of the workforce in the hotel industry are limited to semi-skilled or unskilled, which restricted the scope of research (Barak, Cherin and Berkman, 1998).

4) The review of literature was predominantly conducted in the manufacturing industry, with a few studies conducted in the service sectors such as finance, insurance and health industries.

5) This study is unique in that it examines the relationship between the dimensions of learning, innovation and climate. Such an attempt has not been carried out in the previous empirical researches on learning, innovation and climate.

6) This study extends previous studies on learning, innovation and climate and contextualizes to the Australian hotel industry. Earlier researches on organizational learning, innovation and climate were limited to manufacturing sectors and research in the hotel industry was restricted to customer satisfaction, room occupancy with hotel performance.

1.8 Definitions

The definitions of the three key concepts operationalized in the study are as follows:

Organizational Learning: Learning by encoding inferences from history into routines that guide behaviour (Levitt and March, 1988)

Organizational Innovation: The process of interaction between individuals, organizations and the environment (Becker and Whisler, 1967)

Organizational Climate: A relatively enduring characteristic of an organization which distinguishes it from other organizations and (a) embodies members collective perceptions about their organization with respect to such dimensions as autonomy, trust and 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 values and attitudes of the organization’s culture and (e) acts as a source of influence for shaping behaviour (Moran and Volkwien, 1992).
1.9 Limitations of Scope and Key Assumptions

This study is restricted to the Australian hotel industry in Melbourne and hence the findings and conclusions drawn from this study will be representative of the Australian hotel industry in Melbourne only. This study is cross-sectional and therefore takes a snapshot of organizational learning, organizational innovation and organizational climate in the Australian hotel industry.

1.10 Contribution to the Literature

This study investigates the three employee related variables of organizational learning innovation and climate simultaneously and thereby contributes to the literature by demonstrating that learning, innovation and climate complement each other in the AHI.

Therefore, this study makes a significant contribution to the existing body of AHI literature where the statistical analysis showed a high correlation between dimensions of organizational learning with organizational innovation ($r= 0.738$). The significant relationships ($r=0.688; r=0.654; r=0.738$) among the three dependent variables learning, innovation and climate establishes that there is a relationship between in learning, innovation and climate in the hotel industry and thereby makes a significant contribution to the existing body of literature. In addition, this study shows that organizational climate is an essential component for organizations in fostering innovation and learning.
The findings will assist the hotel sector to improve their performance by creating a climate that will foster learning and innovation. It was found that the achievement mindset dimension of organizational learning had high correlation ($r = 0.700$) with organizational climate.

One-Way ANOVA results showed that organizational learning had high correlation with the country of origin with $p$ values ranging from 0.054 to 0.000. The findings from this study add value to the existing body of knowledge in learning and employee ethnicity as understanding the ethnicity of employees is important for employee productivity, as it enables organizations to understand the needs of employees from diverse cultural backgrounds.

The findings from this study enable the management of these highly labour intensive hotels to review the training needs of their employees, understand their work environment, and enhance the motivation levels of their work force.

1.11 Summary

This introductory chapter laid the foundation for this study. It provided an overview of this study by presenting the research questions, and the six hypotheses. The chapter justified the rationale for the study. It also included a brief description of the research method and structure of the study report. This introductory chapter provided the reader with an insight into the research problem and the methodology that was adopted in the study and the justification of the methodology of the study. Based on these foundations the thesis may proceed with a detailed description of the study itself.
Chapter Two

2.0 Literature Review

2.1 Objective

The objective of this chapter is to provide a comprehensive and multidisciplinary review of the, organizational learning (OL), organizational innovation (OI), organizational climate (OC) and the Australian hotel industry literature.

The chapter is broadly divided into the following subsections

- The Australian Hotel Industry
- Organizational Learning
- Organizational Innovation
- Organizational Climate

This chapter examines the extent to which the national and international literature addressed organizational learning, organizational innovation and organizational climate. Furthermore, this chapter critically reviews the definitions, and the empirical and theoretical studies, related to each of the above concepts. An in-depth literature review gave researcher an insight into various empirical and theoretical researches that have been carried out in fields of organizational learning, organizational innovation and organizational climate especially in the context of the Australian Hotel Industry.
2.2 Sources of Literature Search

An extensive search of the international and national literature was conducted in the Social Science Citations Index (SSCI). The SSCI includes all journals in the Social Sciences discipline.

A computer search was conducted using various databases such as ABI Inform, Proquest, Informit, Ideal, Emerald and other related databases to ensure the search was multidisciplinary.

An online catalogue search was conducted to access early editions of journals.

Keywords that were used to search the databases included learning, organizational learning, organizational innovation, creativity, organizational climate, organizational culture, hospitality (international) hospitality (Australian), hotel industry (international), and hotel industry (Australian). In reviewing the learning, innovation and climate literature, it was demonstrated that learning, innovation and climate complement each other in a workplace. The three variables are employee related constructs that tend to be psychological and are process oriented. However, empirical studies that establish their simultaneous relationship in the manufacturing or the service sector in the Australian context are limited.
2.3 The Australian Hotel Industry

Earlier in the twentieth century, most travellers to Australia were mostly accommodated by friends and relatives. Today, travellers stay in hotels where people from diverse cultures pay to sleep, eat, drink and interact with the local host culture (Becker and Olsen, 1995).

The Australian tourism industry, in which the hotel industry play a significant role is now recognised as one of country’s biggest income earners (Faukner, 1998, Mallinson, 2000). The hotel industry is a distinct part of the broader hospitality industry as it provides sleeping as well as eating and drinking facilities (Baum, Amoah and Spivack, 1997).

Today, the Australian hotel industry has shifted its paradigm from being a basic provider of food and shelter to being an industry that binds different cultures together based on food and hospitality.

Guerrier and Deery (1998) classified the hotel literature into areas such as labour market trends, industrial relations, education and career destinations. They found that studies on industrial relations issues varied according to industrial regulations of the country within which the industry was researched. Their review found that most international hotel industry studies focused on issues such as industrial relations, legislation on employment and labour costs, and dispute resolution (Brown and Raedler, 1994).
For example, UK based research concentrated on issues such as role of the shop steward and unions (Jameson 2000), and on minimum wages (Lucas, 1995) while North American research placed its emphasis on successful negotiation of contracts, wrongful dismissal, and strategies to improve employee relations.

Other frequent research themes uncovered in the international literature were the interaction between customers and hotel service employees, establishing relationships between performance of hotel employees and customer satisfaction, studying attitudes and satisfaction of hotel employees and how the perceived low status work in the industry impacted on them. The conclusions drawn from these studies was the general perception of hotel jobs was that they were servile, dirty, low skilled, low paid and capable of attracting only the young (Deery and Shaw, 1997; Barron and Maxwell, 1998).

2.4 Structure and Culture of the Australian Hotel Industry

The hotel industry as a single entity does not exist. There are significant structural differences between hotels in different countries. Such structural differences may be legal, financial and economic. It is also said that the countries’ legislation impacts on the ownership, size and operations of hotel businesses. However, this trend is slowly changing in the hotel industry, resulting in the reduction of structural differences in hotel chains all over the world.

In Europe, the creation of a single monetary unit is systematically removing wage and price differential unlike Australia. Research by Okumus and Hemmington (1998) focused on hotel managers, in particular emphasis was placed on unit managers such
as general manager. Furthermore, studies also focused on management activities using Mintzberg’s (1979) classification of management.

In the past, empirical studies examining the influence of structure and culture in the hotel industry were popular and today cross-cultural studies have become more popular in the hotel industry literature (Hales and Klidas, 1998). Organization structural issues and design were studied in relation to multi-unit operations, by researchers with academic background in strategy rather than in organization studies.

Wood (1994) reviewed the history of managerial practices within the US hotel industry, which looked at the shift away from traditional work roles and explored opportunities for multi-skilling and job enrichment.

Hales and Tamangini (1996) explored links between organization structure and managerial work in centralized and decentralized multi-unit hotel organizations. They focused on two themes; firstly to what extent is the work of hotel managers influenced by industry context and secondly to what extent do hotel managers engage in reaction or reflection? Their findings illustrated retail unit managers emphasized reactive customer administration, whereas hotel managers placed emphasis on proactive service quality management.

Literature establishing relationships between national culture and turnover is scarce; the author was unable to uncover any references that established the relationship
between national culture and turnover in the Australian workplace. However the following studies uncovered that national culture has a significant impact on the growth and development of the hotel industry in that the culture of employees contributed towards the organizational culture, which in turn, impacted on the overall performance of these hotels. In other words, national culture of the employees of these hotels and organizational culture were in alignment with each other, to achieve the organization’s goals and objectives.

There has been some investigation about various aspects of organizational culture, by Lundberg and Woods (1990), Wood (1994), Armstrong, Mok and Go (1997), Roper, Brookes and Hampton, (1997) and in particular how culture may be related to turnover in the hotel industry especially where values that are generated through the culture within hotels have a significant impact on employees motivation and hence employees turnover (Armstrong Mok and Go, 1997).

Pizam, Pine Mok and Shin (1997) and Hing (1997) in a cross cultural study of 192 hotel managers in Hong Kong, Japan and Korea, studied the influence of national and industry cultures on managerial behaviour. National culture was measured using Hofstede’s (1993) four cultural dimensions. Findings revealed significant differences existed among managerial practices of hotel managers in Hong Kong, Japan, and Korea, concluding that national cultures have a stronger effect on managerial behaviour than the culture of the hotel industry. Studies addressing culture in the hotel industry is a growing area for research and little or no studies were conducted in the Australian context.
2.5 Management in the Hotel Industry

The literature revealed that hotel industry spans small single unit operations through multi-unit, multi-brand and multinational hotels. It combines both production and service functions.

It is an industry that adopts new management practices, including research into empowerment practices (Jones, 1996; Yeung and Wong, 2001).

Hales and Tamangini (1996) and (Deery and Gerrier, 2001) argued that the emergence of new managerial work assumptions is overstated. According to Hales and Tamangini’s (1996) study of hotel and retail companies in Zimbabwe the nature of managerial work is not radically different in decentralized organizations when compared to centralized organizations. What differs is the tactics used by managers to carry out their responsibilities (Schneider and Bowen, 1993).

Furthermore, they argued that the managers in the decentralized organizations were autocratic for varied reasons, such as their responsibility for unit performance rather than as a reaction to head office regulations.

In their brief review of literature Hales and Tamangini (1996), Enz and Siguaw (2003) found that hotel managers perceptions of changes in the hospitality industry per se, suggest that the hotel industry embraced the philosophy of ‘new managerial work’ and managers adopted a consultative team-based approach to leadership and recognized the need for business and strategic skills.

In the Australian context this approach is still rudimentary in some hotels, however many five star hotels have adopted this shift in their work paradigm. In the present study, during the collection of qualitative data, the HR managers supported Enz and
Siguaw’s (2003) conclusion that best innovative work practices assist in achieving the hotels goals and objectives. For example, employee participation in goal setting and linking it to their own performance achievement was one of the few innovative practices adopted in one of the hotels.

Jones (1999) observed that hotel operations management was considered at two levels: organization level at which strategic operations of management took place, and functional operations at the unit level. He further noted that there were seven strategic concerns: location, integration, affiliation, configuration, organization, implementation, and adaptation. At the unit level, Jones identified seven key result areas: assets, employees, capacity for customers, productivity, service, and income (or control) and quality. On the contrary, Charles and McLeary (1997) identified sixteen African American holding top management positions in the hotel industry in the US. A high proportion of hotel managers in the Asia Pacific Region were expatriate Westerners, as are those in sub-Saharan Africa. Apart from the study by Charles and McLeary (1997), there is little information about the experience of hotel managers whose ethnic or cultural background does not match the industry norm.

Biswa and Casell (1996) believed that women in the hotel industry were breaking the ‘glass ceiling’ effect, however, there is limited empirical support for this belief nationally and internationally as recent literature showed that a typical hotel unit manager is still a white male either a North American or European (Testa, 2001).
2.6 Human Resources in the hotel industry

As has been shown, empirical research in the hotel industry is limited to structure culture, and room occupancy rates and customer satisfaction.

However, Human Resource (HR) issues in the hotel industry have been researched in the last few decades (Hing et al 1998) with the research being evenly divided among key areas with a trend in recent years to concentrate on issues such as training, recruitment, selection and strategic HRM (Maxwell, 1994; Worsfold, 1999, Kemp and Dwyer, 2001).

Research in human resources by Mc Coll-Kennedy and White (1997) described the uniqueness of hotel culture with work. Their research developed mainstream HR research into cultural fit and cultural change in hotel industry. There is a considerable body of literature concerned with design and organization of work roles, especially those of operatives (Dube and Renaghan, 1999; Enz, and Siguaw, 2003).

Furthermore, it has been argued that HR practices such as training, selection and recruitment are linked to increased employee performance (Nankervis, 1993, Hing, McCabe, Lewis and Leiper, 1998).

The training of hotel employees was researched from a wide number of perspectives, ranging from extent of training being given to hotel employees to the effectiveness of training programs. Analysis of the international literature review showed that in UK and Australian literature, the issues of recruitment and selection in hotels have been integrated into the discussion of HR best practice (Nankervis, 1993). Whereas in the North American literature, recruitment and selection processes in the hotels provided the best fit between the organization and the employee (Lee-Ross, 1998, 1999; Iverson, 2000).
The HR literature in the US is more concerned with selection of disabled and minority-group employees. Although empirical research focussed on various aspects of the HR function, empirical research was limited on learning, innovation and climate in the hotel industry.

With the industry being labour oriented, limited focus is given to employee growth, development and learning (McMurray and Dorai 2001). This is due to the fact that many hotels take an ad-hoc approach to the HR function, and as a result employee related constructs such as organizational learning, organizational innovation and organizational climate were neglected and not researched simultaneously.

2.7 Motivation and Attitudes in the hotel industry

There is a considerable body of research addressing motivation and attitudes of hotel employees towards customer satisfaction, job satisfaction consequences of giving service, alternative approaches to job design, impact of technology on job design and on the interface between service and production functions (Hales and Tamagini, 1996; Baum, Amoah and Spivack, 1997, Dube and Renaghan, 1999; Enz and Siguaw, 2003). The motivation and attitudes of restaurant and kitchen workers were extensively researched but little or no research addressed room attendants and receptionists, and no studies were uncovered that addressed pool attendants.

What follows is a comprehensive review of literature addressing organizational learning, organizational innovation and organizational climate in the hotel industry.
2.8 Organizational Learning (OL)

This section reviews the literature on organizational learning. It includes an introduction to OL, growth of OL, growth of organizational learning, theoretical frameworks of OL, OL as a process, definitions of OL, organizational learning and the environment, types and levels of learning, organizational learning and knowledge, organizational learning as learning systems, organizational learning as networks, organizational learning and culture, organizational learning and innovation,

2.8.1 Introduction to Organizational Learning

Seminal work on learning was conducted by Piaget (1929) who developed a stimulus response model of behaviour in children. His theory of learning was based on the concept of human cognitive development, that states human beings construct their world and impose their own order on objective reality.

From the 1950s to 1980s learning was predominantly viewed from the interference theory perspective, with emphasis on rote learning and memorizing in individuals. However, Greenberg and Barron, (1995) shifted the paradigm of learning in the 1990s and defined OL as a relatively permanent change in behaviour occurring as a result of experience. They further classified learning into operant conditioning and observational learning. In operant conditioning individuals learnt to behave in certain ways based on consequences of their actions. Observational learning on the other hand, involved modelling the behaviour of others.
From a broad perspective, The Collins Dictionary (2001) defines learning as ‘knowledge acquired by study’. Several authors defined it as a relatively permanent change in behaviour that occurs as a result of experience and that permeates people’s lives (Greenberg and Baron 1995; Robbins, Millet Cacioppe and Marsh, 1998).

Traditionally, learning has been defined as the process through which an individual acquires knowledge, skills and possibly attitudes and opinions, and professionally is considered to belong to the field of cognitive psychology, together with areas such as senses, reasoning and memory (Illetis, 2004).

Early research by Von Bertnalaffy, (1950) concluded that learning was the highest form of adaptation, which raised the probability of survival in changing environments and was stimulated by a response to an external stimulus.

Weick (2001) classified the psychology of learning into the following two theories: behavioural association theories or stimulus-response explanations and cognitive organizational theories also known as cognitive explanations. Psychologists assumed that conflict is an essential condition for learning, as it acts as the driving force behind the learning process. Psychologists view learning as the highest form of adaptation by individuals in a social environment.

The behavioural or stimulus response theory views, learning as a change in behaviour as a result of an experience in a given situation. The learning process is understood as one of trial and error, leading to a better adaptation to the environment.
Its outcome is new or improved behaviour. On the contrary cognitive learning theories, process information that results in change in the state of knowledge and therefore results in learning (Holmqvist, 1999).

There have been several arguments in understanding the concept of learning. Firstly, it was upheld that learning was fundamentally a social process that occurred as an interaction between two people (Lave and Wagner, 1991) or as a socially constructed process (Gardinare, 1999). Later on the term learning was associated with organizations and the term ‘organizational learning’ was coined.

The two similar and closely related terms are “organizational learning” and ‘learning organization’ and are sometimes used interchangeably.

Organizational learning is a concept used to describe certain types of activity that take place while a learning organization refers to a particular type of organization in and of itself (Tsang, 1997). A learning organization is one which is good at organizational learning (Tsang, 1997).

2.8.2 Growth of Organizational Learning

The growth of OL from an individual to an organizational context has its roots in general systems theory of physics and biology. Using the metaphor of living organisms, organizations are seen as complex organisms made up of increasingly complex inter-related parts in order to survive (Miller, 1978; Addleson, 1996; Mirvis, 1996; Blackler and McDonald, 2000).

Early researches in OL maybe traced back to the early 1930s to the works of Guthrie (1935) and Skinner, (1938), and its rapid growth in the 1960s and 1970s in the work
of Cyert and March (1963), Bateson, (1972), March and Olsen, (1975), and Argyris and Schon, (1978).

It was only in the 1980s that OL, as a concept, gained momentum remains fragmented, multidisciplinary, surrounded by consensus and contradictions. Crossan and Guatto (1996) conducted a review of the literature where they found a consistent rise in the popularity of OL in the academic disciplines since the 1990s.

The growth of OL, however, varied with the way the researchers perceived, understood and described the term. For example, Dodgson (1993a, 1993b) outlined the history and growth of organizational learning according to the academic disciplines such as sociology, psychology and anthropology.

On the contrary, Easterby Smith (1997) compared and contrasted the OL literature based on the role of researcher, methodology used in empirical studies, unit of analysis and the focus on learning. Easterby Smith, Crossan and Nicolini (2000) used the metaphor of a ‘volcano’ when summarizing the literature that surrounded OL. However, the metaphor of a ‘volcanic eruption’ on debates and discussions on OL started a few decades ago are still continuing amidst confusion and contradictions (Easterby Smith, 1997).

Despite the vast research attempted to understand the concept of OL, contradictions have emerged where some researchers have viewed organizations as a unit of learning (March and Olsen, 1975) while Fiol and Lyles, (1985) while others have viewed OL as a sum of what individuals learnt in organizations and stress observable behaviour.
change (Argyris and Schon, 1978). There are yet other researchers who view the group as an entity of learning (Parkie, 1991; Lucas and Olgivie, 1999).

Earlier literature on OL was developed on two discernable lines. The first emphasized the notion that people within organizations learn continually and learning occurred as a result of informal practices in a workplace and is shaped by people’s everyday interactions with one another (Huber, 1991, 1998). The second school of thought conceptualized OL as a process concerned with gathering information and diffusing knowledge acquired.

Later studies by Easterby Smith, (1997) are based on earlier theories put forward by researchers such as Cyert and March (1963), Cangelosi and Dill (1965); Argyris and Schon (1978) Levitt and March (1988) and Applebaum and Gallagher (2000), who, through their conceptual framework, based learning on two principles: firstly organizational learning is anthropomorphic, showing a lack of evidence that organizations can learn; and secondly learning in organizations is cyclical.

However, later empirical studies such as those of Easterby Smith (1997) do not support earlier conclusions drawn by Argyris and Schon (1978). Despite contradictions, the literature review uncovered three areas of consensus with earlier studies which included relevance of environmental alignment, distinction between individual and organizational learning, and the presence of four organizational elements, namely culture, strategy, structure and environment. Based on this, organizational learning is perceived as natural as learning amongst individuals as they attempt to adjust and survive in an uncertain environment (Simon, 1991; Srikantia and Pasmor, 1996; Popper and Lipshitz, 2000).
March, Sproull and Tamuz (1991) argued that the degree of learning could vary across time and across organizations. They emphasized the importance of critical incidents as factors that shape learning and advanced distinctions between reliable and valid learning processes. According to them, reliable learning processes enable an organization to develop common understanding of experience and make interpretations public, stable and shared among its members. Valid learning processes allow an organization to understand, predict and control its environment. Organizations need both valid and reliable learning processes.

2.8.3 Theoretical Framework of OL

This section will review popular theoretical frameworks that were used to understand OL.

The absence of a definite paradigmatic theory led OL, as a concept, to be misinterpreted leading to ambiguities and misconceptions. Researchers have put forward many theoretical frameworks on OL, which are briefly analysed below.

The literature review revealed that social systems theory was one of the earlier frameworks that were used by researchers to understand the concept of OL (Emiry and Trist, 1965).

The social systems theory conceptualizes organizations as living organisms and states that inputs of information and energy shape patterns of behaviour in individuals by
diffusing their work boundaries (Morgan, 1986). Much of the later frameworks have adopted the social systems theory.

Early work by Shrivastava (1983) isolated four complementary perspectives on OL based on theoretical assumptions: OL as an institutionalized experience, OL as adaptation, OL as assumption sharing and OL as developing knowledge of action. Fundamentally, the theoretical framework for OL is based on social system theory in the study of formal organizations, where learning in organizations is perceived as a process to survive (Emery and Trist, 1965; Mirvis, 1996; Kloot, 1997, Lee, 1999; Brown, 2000, Brown and Starkey, 2000, Lant 2000). Therefore, learning is more of a social interaction, which involves making sense of data.

However, three major contributions were made on OL. 1) learning as a socially constructed phenomenon (Brown and Duguid, 1991, March, 1991; Easterby Smith et al, 2000, Elsey and Sai-Kwong Leung, 2004), 2) learning as a political process (Coopey, Keegan and Emler, 1997), and 3) learning as cultural artefacts that helps to draw inferences ( Cooke and Yanow, 1993).

Easterby Smith (1997) used technical and social perspective to describe OL. The technical perspective also known as an information processing perspective includes effective processing, interpretation and response to qualitative and quantitative information both inside and outside the organization. From this perspective, information flow in an organization plays a significant role in facilitating the learning process. There appears to have been limited empirical research carried out from this perspective.
The social perspective on the other hand takes a cultural approach and views OL as an inherent part of culture and therefore organizations become repositories of knowledge. From this perspective, OL emphasizes ways in which people make sense of their experiences at work.

While this perspective illustrates that learning is a group phenomenon of shared meanings and highlights the role of organizational culture, it however excludes the role of individuals in the learning process (Schein 1996, Beeby and Booth 2000). It further tends to override the technical perspective by assuming that information may be made sense of only when organizational members interpret what they mean.

Nicolini and Meznar (1995) interpret organizational learning as a social construction that transforms acquired cognition into abstract knowledge. Their claim that their conceptualisation is superior to traditional interpretation of organizational learning is not supported with empirical evidence nor does it illustrate how their constructs can be operationalised in empirical research, their claim is yet to be validated.

The fact that majority of OL studies are based on different perspectives demonstrates divergent views on and lack of consensus amongst researchers. This could be attributable to lack of consensus in the measurement of OL. Many of the theoretical perspectives lacked empirical validity.

### 2.8.4 OL as a process

Cyert and March (1988) developed the process school of OL. The process school combines technical and social perspectives. The theoretical framework for this study
is based on the process school of organizational learning. The process school emphasizes that organizational learning is a process that involves information dissemination through interactions amongst organizational members. The fundamental philosophy of the process school is that learning is embedded in cognitive and behavioural capabilities of individual organizational members and argues that individual learning processes are replicated at a macro level to produce organizational cognition.

Furthermore, the process view argues that learning is a socially constructed phenomenon concluding that learning is determined by the degree of social interaction amongst organizational members at different levels. Social interaction describes different ways members interact and it is these interactions that facilitate the performance of the OL process, and in turn determines style and nature of learning between members. The process school emphasizes learning between members rather than learning amongst members. The behavioural theory of organization steers the process school of organizational learning.

In the literature the process perspective broadly described learning as a hierarchical process that occurs both at macro or organizational level and at individual level. (Lipshitz, 2000, Lipshitz and Popper, 2000).

Firstly, limited empirical studies support the process theory of OL, particularly the hotel industry in general and in Australia. Secondly, the process school does not include the dimensions of learning in the OL process. This study has attempted study the process of organizational learning using the four dimensions-information sharing patterns, learning practices, achievement mindset and inquiry climate.
Di Bella (1995) used four theoretical frameworks to define OL—an outcome or an economic view, developmental view, normative view, and a resource based or capability view. The economic view described learning as a factor of production, and economists supported the learning by doing philosophy (Bell, Whitwell and Lukas, 2000). The economic school did not differentiate between higher and lower order learning.

The developmental view described learning as a process in the evolution of an organization’s life cycle. This perspective determines the learning styles of an organization. This school focuses on higher order learning and states that learning is a linear process with a series of interlinked sequences that provide a basis for moving on to the next stage.

The normative view states that organizational learning is a process, which, at the organizational level, involves transformation of data or un-interpreted information into knowledge or interpreted information. At an individual level, learning occurs through individual members of the organization.

The normative view supports the social perspective proposed by Easterby Smith (1997) Cooke and Yanow, (1993), in that, learning is dependent on shared meanings of organizational members. This perspective emphasizes the role of culture in fostering learning in organizations.

The capability view describes organizational learning as a process that involves collective capabilities of its members.
A close examination of the definitions of OL that are contained in the literature is necessary to arrive at a definition for the purpose of this study.

2.8.5 Definitions of Organizational Learning

Researchers have used many definitions of OL that vary not only depending on the level of analysis but also due to the fact that learning is complex and context specific. The literature discovered many definitions of OL however; there is not a single widely accepted definition (Miller, 1996). This could be attributed to the influence of various disciplines leading to its divergent nature and lack of consensus in understanding or due to learning being portrayed as a haphazard and eclectic activity.

Grammatically speaking, organizational learning as a noun refers to ‘that which has been retained by the organization as a result of the learning process’ (verb). At the organizational level learning is seen as ‘what the organization has learnt up to date’. The verb form of learning denotes activity that engages the subject (individual or organizational unit) in a process of organizational learning.

As mentioned above, no standard definition existed for OL and the concept was defined from different perspectives, such as behavioural, individual, process or outcome perspective. However the review revealed that definitions from process perspectives were popular.

Furthermore, the behavioural and process perspective complement each other, in that, the process view describes learning that occurs at different levels while the behavioural view describes learning as a behaviour modification that occurs at different levels.
For example, some researchers view learning as a change in behaviour in response to an external stimulus (Cyert and March, 1963;) while others suggested that learning required some conscious acquisition of knowledge or insight on the part of organizational members (Argyris and Schon, 1978; Hedberg, 1981; Huber, 1991, Meggison, 1994, Oswick, Anthony, Keenoy and Mangham, 2000).

Levitt and March (1988) perceived organizational learning as a process that built on classical observations drawn from behavioural studies of organizations. The foremost of these was that behaviour in organizations is based on routines that include forms, rules, procedures, conventions, strategies and technologies around which organizations are constructed and through which they operate. The hotel industry is highly formalized and hotels are strongly controlled by rules, procedures and practices to ensure uniformity in customer service. This study extends Levitt and March’s (1988) observations and attempts to understand how learning occurs in Australian Hotel Industry.

On the contrary, Miller (1996) defined organizational learning as acquisition of new knowledge by employees who are able and willing to apply that knowledge in making decisions or influencing others in the organization. He differentiated between learning and decision-making by stating that learning increases one’s knowledge while decision-making involves a sequence of steps in problem solving. He further identified six modes of learning: analytic, synthetic, experimental, interactive, structural and institutional.
According to Miller, different modes of learning can co-exist in organizations. Miller’s assumptions were not empirically tested or validated.

Extending Miller’s definition, Dodgson (1993) defined learning from a process and an outcome perspective. The process perspective described organizational learning as a process, which organizations undertake in order to respond to changes in external environment. Dodgson (1993) defined ‘learning’ as ways or processes by which organizations built and supplemented their knowledge bases about technologies, products and processes, and developed and improved the organizational efficiency and broad skills of their workforce. Dodgson (1991, 1993) further argued that learning is a complex process, which is essential to differentiate between different aims, foci, nature and processes in the workplace. It is particularly important to analyze ways in which learning was disseminated in organizations and argued that organizational learning was not different from individual learning, as individuals were primary learning entity in organizations, and it is individuals who create organizational forms that enable learning in ways, that facilitate organizational transformation. He described learning as ways organizations built, supplemented and organize knowledge and routines around their activities, and within their cultures. According to Dodgson (1993), learning is aimed at achieving organizational outcomes.

While Levitt and March (1988) put forward three classical observations drawn from behavioural studies in organizations. (Huber (1991) supported Levitt and March (1988) and took a behavioural perspective and defined organizational learning as a
process that resulted in behavioural change through processing of information

According to Huber (1991) organizational learning had four attributes-existence, breadth, elaborateness, and thoroughness.

His definition extended earlier behavioural theories by Cyert and March (1988) and highlighted the importance of information sharing in the learning process. From the information processing perspective, Huber (1991) identified organizational learning had four elements which included-knowledge acquisition, information distribution, information interpretation, and storing and retrieving into/from organizational memory.

First, knowledge acquisition, a process by which knowledge is obtained. Second, information distribution as a process by which information from different sources is shared thereby leading to new information or understanding. Third, information interpretation is a process by which distributed information is given one or more commonly understood interpretations. Finally, organizational memory is a means by which knowledge is stored for future use.

His discussion of knowledge acquisition included an action element of learning as well, as he distinguishes experiential learning, vicarious learning, grafting and searching as types of knowledge acquisition. This conceptualisation by Huber is not empirically validated. To some extent the present study supports Huber’s conceptualisation in that it uses information processing as a major element in the process of OL.
There is a considerable similarity between Levitt and March (1988) observations and Huber’s (1991) conclusions, in that, both theories and observations highlighted the importance of information assimilation and distribution, that influences learning in organizations.

Huber’s (1991) conceptualization was further developed by Nevis, Di Bella, and Gould (1995), who described learning as knowledge acquisition and a process of developing new skills, insights or relationships, knowledge sharing of what has been learnt, and knowledge utilization as integration of learning so that it is generalized to new situations.

This school suggests that there are clear and unambiguous facts and insights that employees need to know in order to conduct their jobs effectively.

Kim (1993) supports Dodgson (1993 a) and adds that in the initial stages of an organization’s life cycle, OL is synonymous with individual learning. As the organization grows, a distinction emerges between organizational learning and the system of capturing learning amongst individual members.

Organizational learning as an activity is more readily available for measuring the identity that an organization has (Czegledy, 1996; Bell, Whitwell and Lucas 2000,).

Empirical studies taking a process perspective defined OL as going through different stages when responding to a stimulus. From the process perspective there appears to be a general consensus that OL is a linear process (Argyris and Schon, 1978; McGill

Marengo (1992) concluded that when all members of an organization are involved in a constant learning process, organizational learning is facilitated by ways in which knowledge, information and communication flows are distributed in a system.

Extending Marengo’s (1992) definition, McGill Slocum and Lei (1993) defined organizational learning as a process by which managers become aware of qualities, patterns and consequences of their own experience and develop mental models to understand these experiences.

Dixon (1997, 1999) also takes a social interaction perspective and defined learning as a series of processes, through which organizations construct meaning that guides its action. According to Dixon (1997), meaning may be classified into three categories, which include private meaning as the meaning which the individual constructs but does not make accessible to others. A collective meaning that is shared is common amongst organizational members and occurs in hallways. She defined organizational learning as the intentional use of learning processes at the individual, group and system level to continuously transform the organization in a direction that is increasingly satisfying to its stakeholders. She further notes that learning is construction and reconstruction of meaning and is therefore a dynamic process of interaction amongst individuals.

Using the constructionist view of cognition Dixon (1997) described how individuals build up cognitive maps of their work contexts.
These individual maps may be used to develop the collective meaning structures (or the knowledge base) of the company which starts from the position that learning is an act of interpreting experience, and that interpretation is unique to each individual and is both enabled and constrained by an individual’s process of sense making.

Dixon (1999) divided organizational learning process into four steps: the widespread generation of information, the integration of new information to an organizational context, the collective interpretation of information, and the authorizing of the organizational members to take action based on interpreted meaning. Organizational learning required all four steps to form the OL cycle. Organizational learning is based on the intensity of the individual learning.

Dixon’s assumptions and conclusions support Levitt and March (1988) and Huber’s (1991) conclusions on the importance of information sharing in the learning process.

In contrast to Dixon, Cummings and Worley (2004) defined OL as ‘a response to a change in the environment’ and outlined four steps in a linear process of organizational learning: discovery, invention, production and generalization.

According to Cumming et al (2004) learning starts with discovery when errors or gaps between desired and actual conditions are detected. Invention on the other hand, is aimed at devising solutions to close the gap between desired and current conditions. It includes diagnosing causes and gaps and finding suitable solutions to reduce it. Production processes involve implementing solutions while generalisation includes drawing conclusions about the effects of solutions and applying that knowledge to other relevant situations.
According to Cummings et al (2004) these four learning processes enable members to generate knowledge necessary to change and improve organizations.

Later, Edmondson and Moengion (1999) attempted to label OL as a process in which organizational members actively use data to guide behaviour in such a way as to promote ongoing adaptation by the organization. In other words, it is individual cognition that supports organizational adaptiveness.

William (2001) defined learning as a process in which relatively stable changes are brought about in the way we see things and behave in pursuit of our goals. This definition by William (2001) may be applied to the learning of both individuals and organizations, thus facilitating a link between them. Individuals and social units see or do things as a result of their experience in pursuit of their goals. However, his definition does not include learning as a group phenomenon.

William (2001) supports the social perspective in contrast to the information processing perspective on OL. According to the social perspective, OL is reflected in the construction, modification, and maintenance of beliefs towards stakeholders who assist the organization to achieve goals. Although this perspective emphasizes the importance of culture, it was found that few empirical studies have attempted to study the influence of organizational culture and national cultures on learning processes.

This study has attempted to establish the relationship of the country of origin of employees in the AHI and the organizational learning process. This has filled a gap in the culture literature.
Taking a belief approach, William (2001) put forward a process model of organizational learning that established the relationship of beliefs to organizational learning process. This model takes a holistic approach to OL and is integrated with strategic management process and belief systems adopted by organizational members. The belief system is influenced through reinforcing, modelling, mental models, sense making, and tacit and explicit knowledge.

This supports Bockaerts (1992) earlier definition, where learning is goal directed, and affects behaviour as well as cognitive properties, and that changes brought in by individuals are relatively stable. Organizational learning is a construct used to describe certain types of activity (or processes) that can occur at any one of several levels of analysis (Dodgson, 1993; Crossan, Lane and White, 1999;), or as a part of the organizational change process (Schein, 1993). Goal orientation is a general characteristic and does not mean that the process of learning is continually and consciously being directed to achieve specific goals. Fig. 2.1 gives a summary of OL definitions.
<table>
<thead>
<tr>
<th>Author/Year</th>
<th>Definition of OL</th>
<th>Subject of OL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyert and March</td>
<td>OL is the adaptive behaviour of organizations over time.</td>
<td>Aggregate level of organization</td>
</tr>
<tr>
<td>1963</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cangelosi and Dill,</td>
<td>Organizational learning consists of a series of interactions between adaptation at the individual, or substr group level and adaptation at the organizational level.</td>
<td>Individuals and subgroups in organizations</td>
</tr>
<tr>
<td>1965</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argyris and Schon,</td>
<td>Organizational learning is the process by which organizational members detect errors or anomalies and correct them by restructuring organizational theory in use.</td>
<td>Individual learning in organizations</td>
</tr>
<tr>
<td>1978</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duncan and Weiss,</td>
<td>Organizational learning is defined as a process within the organization by which knowledge about action-outcome relationships and the effect of the environment</td>
<td>The individual is the only entity who can learn. However he/she must be seen as a part of a system of learning with exchanges of what is learnt among individuals.</td>
</tr>
<tr>
<td>1979</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiol and Lyles,</td>
<td>Organizational learning means the process of improving actions through better knowledge and understanding</td>
<td>Organizational learning is not simply the sum of individual learning</td>
</tr>
<tr>
<td>1985</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levitt and March,</td>
<td>Organizations are seen as learning by encoding inferences from history into routine behaviour</td>
<td>Organizational learning is more than individual learning that is there is an emergent component.</td>
</tr>
<tr>
<td>1988</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huber, 1991</td>
<td>An entity learns if through the processing of information the range of its potential behaviours is changed</td>
<td>Concept of entity which includes individuals, groups, organizations, industries and society.</td>
</tr>
<tr>
<td>Weick and Roberts,</td>
<td>OL consists of inter-relating actions of individuals.</td>
<td>Connections between behaviour rather than people.</td>
</tr>
<tr>
<td>1993</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2.1 Definitions of Organizational Learning
Source: Easterby-Smith (1997)
Analysis of the above table reveals some consistent elements and a shift in the paradigm of OL over three decades. One popular element that is common across all definitions is the role of individuals in information processing. The concept of OL seems to have evolved from being an adaptive behaviour of organizations to an interactive process of information sharing in organizations. This has shifted from learning being an individual process to it being a collective one-occurring at a group or organizational level.

Although the basic definitions over the last three decades was useful to conceptualise the term, their value in empirical research is limited. This is observed by the operationalisation of more descriptive definitions in recent research that include the processes, routines, and behaviour of employees in an organization. The definitions of OL put forward by different researchers demonstrated a lack of convergence in understanding the concept.

This study adopted and modified the definition by Levitt and March (1988) and Huber (1991) as they found they were suitable to the Australian hotel industry. The hotel industry depends on customer satisfaction, and to ensure customer satisfaction it is important that information flow within the organization is effective. Huber and Leavitt and March emphasize on structure or routines and information processing – two factors that play a significant role in the hotel industry.

With the exception of (Cooke and Yanow, 1993; Elsey, 2004) who define OL from a cultural perspective, most definitions entail aspects of both cognitive and behavioural changes (Tsang, 1997)
2.8.6 Organizational Learning and Environment

The importance of environment as a factor that impacts upon learning is clearly stated by Dodgson (1993 a), who concluded that greater the uncertainty in an environment greater is the need for learning. Some have emphasized, that learning occurs in response to an external stimulus (Cyert and March, 1963; Daft and Weick, 1984; Levitt and March, 1988). The propensity of organizations to learn is triggered by uncertainty in the environment and a degree of motivation amongst employees (Kamoche, 1998; Jankowicz, 2000). Bain (1998) concluded that organizations respond to changes in the environment by developing social defenses. These social defenses help organizations to cope with changes in the external environment. Social defenses vary with degree and intensity of change in an organization. Bain’s (1998) proposition was empirically tested using qualitative methodology in a hospital setting only, and therefore its application to other industries is questionable.

Using the belief-focused approach William (2001) attempted to understand organizational learning and its relationship to the external environment. The theoretical orientation to his approach is social in that organizational learning is reflected in construction, modification and maintenance of beliefs towards stakeholders who are instrumental in achieving an organization’s mission and strategic goals. The relationship of beliefs to organizational learning is three fold: learning in individuals in terms of beliefs they hold, learning in groups based on their collective beliefs, and how beliefs develop and change. This approach has strong roots in stories that are generated in an organization.
Irrespective of whether OL is called organizational theory of action or organizational knowledge it is the cognitive structures of an organization, which is changed by OL. This change, in an underlying cognitive structure gives rise to new behaviour that should relate to external environments (Argyris and Schon; 1978, Hjalager, 1998, Gardiner, 1999,). William’s belief-focused approach does not yield empirical support and it application is questionable in terms of its relevance to different context.

2.8.7 Types and Levels of Learning

Organizational learning is a multilevel phenomenon that occurs at several levels in an organization (Levitt and March, 1988; Huber, 1991). A number of empirical studies on learning from management studies perspective have differentiated the various types and levels of learning.

Argyris and Schon (1978) developed a three-fold typology of learning, which they described as single-loop, double-loop and deutero-learning, which relates to individual learning.

Single loop learning occurs whenever an error is detected and corrected without questioning or altering underlying values of the system, be it individual, group or inter-group, organizational or inter-organizational (Argyris and Schon, 1978). The concept of double-loop learning is derived from earlier research of Bateson (1972) who found that dolphins had a second layer scanning system that monitored how they translated signals into actions, and checked for defects.

Deutero-learning is learning how to learn. Deutero-learning and double-loop learning compares with Corsini’s (1987) earlier categories of cognitive strategies and attitudes.
How these become translated from individuals to organizations is entirely dependent on the culture of an organization.

Huber (1991) classified learning into four types- congenital learning, experiential learning, vicarious learning, and grafting and searching. Congenital learning refers to the acquisition of knowledge prior to the founding of organizations. On the contrary, experiential learning is learning by doing or learning from experience. Vicarious learning is second hand learning or learning by imitating others. Grafting is bringing new members who possess new knowledge, which they share with the organization, and searching refers to scanning the environment for information and changes.

William (2001) classified learning as emergent or unplanned learning that takes place through an incremental process brought about by a mix of factors. Emergent learning is very much a function of historical context and as such is reflected in the culture of an organization.

Planned or systematic learning is a direct result of intentional and formal action. Planned organization efforts attempt to support or contradict aspects of emergent learning.

According to William (2001), four OD- type organizational initiatives impact significantly on organizational learning. These include exposing individuals, groups and organizations to theory based learning experiences using strategies in selecting right persons with right beliefs, and alliance strategies aimed at establishing
collaborative arrangements within as well as between organizations, such as mergers and acquisitions.

Furthermore, literature uncovered that learning in organizations was linear, yet at the individual level learning was perceived as cyclical which was supported by Crossan et al (1999) and Antonacopoulou (1999) observed interactive processes occur at different levels, which result in a cyclical process of organizational learning. Individuals learn by intuited and interpreting, (this includes perceiving similarities and differences and recognizing patterns, and creating cognitive maps).

At group level, the learning process is integrated when group members develop shared meaning for collective action (Dexter and Turner, 1997; Bushby, 1999; Garavan, 1997; Gardiner, 1999). The above assumptions do not have empirical validation.

Turning to levels of learning, Fiol and Lyles (1985) differentiated higher and lower levels of learning. Senge (1990) identified generative and adaptive types of learning and Dodgson (1993) differentiated between strategic and tactical modes of learning.

Crossan and Guatto (1996) identified a fourth level of learning which they term as inter-organizational learning. Inter-organizational learning is a learning network that takes place in an inter-organizational setting; the learning might be an entity, an individual, a group of individuals, an organization or an inter-organizational network.

Carroll (1995) and Crossan et al (1999) distinguish between three levels of learning, in general, and perceive learning as a generic process that is institutionalized in systems and processes and shared by organizational members.
Woiceshyn (2000) observes that for learning to occur at different levels effort and capability in terms of skills and knowledge is essential. In contrast, Kim (1998) argued that the degree of learning by organizations is dependent on prior knowledge and that organizations possess and the extent to which efforts are made at learning.

Extending Woiceshyn (2000) study Dorai and McMurray (2002) studied the relationship between organizational learning and levels of employees in manufacturing and service sectors. Findings supported that learning at the supervisory level was the lowest and was very high at the manager and at the employee level. It was suggested that supervisors in organizations implement decisions rather than make decisions hence level impact on the opportunity to learn and be creative. Though researchers classified learning into different levels, limited empirical research was uncovered in the literature. The present study extends the above conceptualisations by studying OL at different levels.

### 2.8.8 Organizational Learning and Knowledge

Organizations are seen as learning through a number of processes that create new knowledge or modify existing knowledge. Three processes in particular have found broad attention in the field-encoding where organizations learn by encoding inferences from experiences in organizational routines that guide behaviour.

This focus on knowledge is shared by a number of recent approaches including organizational learning (Levitt and March, 1988; Huber, 1991; Hayes and Allinson, 1998).

Most of the earlier and recent OL theories refer to cognitive perspectives that support knowledge management principles (Argyris and Schon, 1978; Cohen and Levinthal, 1990; Huber, 1991;).

Organizational learning and knowledge management are intertwined with each other. This concept is supported by Weick (1991, 2001) who distinguished the OL phenomena into two distinct conceptualizations. First, it focuses on behaviour where OL is related to change in behavioural responses. Second, it focuses on information processing system of an organization, where learning is seen as the process of disseminating information across different levels in an organization.

From a knowledge management perspective Huber (1991) observed that learning may be unconscious or unintentional, and may be acquired in the process of an unstructured discussion.

Most studies on organizational learning were concerned with acquisition of knowledge, and to a lesser extent with sharing or assimilation process of acquired knowledge. This is the stage at which knowledge becomes institutionally available, as opposed to being the property of select individuals or groups.

Bierley, Kessler and Christensen (2000) refer to organizational learning as changes to organizational knowledge that is induced by information processing and that
enable organizations to find new ways in order to survive and succeed in new situations. He conceptualizes OL as a communication process, that changes organizationally shared mental models. By learning, individuals can overcome previous boundaries of knowledge or ability and learn how to cope with more and more different situations.

Klimecki and Lassleben, (1998) studied the process of knowledge flow between parent and subsidiaries located in Denmark and the United States. The study adopted a survey method with a response rate of 17%, which, according to quantitative researchers is quite low.

The findings showed that horizontal and vertical flow of information between parent and subsidiaries varied with intensity of information. This study highlights the importance of information flow in the knowledge management process.

Using a four-year longitudinal study Powell and Koput (1996) established that, when the knowledge base of an industry is both complex and expanding, the locus of innovation lies in the collaborative learning between organizations.

In a cross-cultural study, Elsey and Leung (2004) investigated the changing behaviour of Chinese employees using action research and workplace learning. Using a case study approach they uncovered if process improvement was to have more lasting value, continuous effort had to be made to sustain the changes. This is important finding for it demonstrates that the influence of national culture on employees reduces significantly employees and contributes significant new knowledge to the OL literature.
2.8.9 Organizations as Learning Systems

Nevis et al (1995) describe organizations as learning systems with two characteristics. These include learning orientation such as values, and practices that reflect where learning takes place and nature of what is learnt. These orientations form a pattern that defines a given organization’s learning style. They are descriptive factors that help us to understand without making value judgments. Secondly, facilitating factors are structures and processes that affect how easy or hard it is for learning to occur and amount of effective learning that takes place (Gyanwali, 1999; McGrath, 2001).

Nevis et al (1995) developed seven learning orientations in understanding organizations as learning systems, knowledge source, product-process focus, documentation mode, dissemination mode, learning focus, value chain focus, and skill development focus. Facilitating factors include environmental scanning, performance gap, and concern for measurement, experimental mind-set, climate of openness, continuous education, operational variety, multiple advocates, and a leadership and systems perspective (Lave and Wagner 1991).

Szulanski’s (1996) identification of 122 best practice models in eight companies found that lack of assimilation of knowledge acted as a barrier to organizational learning. This finding supports the view that organizational learning is dependent on the intellectual capital and on the skills and knowledge of organizational members where learning requires a conscious acquisition of knowledge (Argyris and Schon, 1978, Huber, 1991, Crossan, Lane and White, and Djurfeldt, 1995 Brown and Starkey, 2000).
Organizational learning links itself to cognition and action where it is suggested that for learning to take place at the organizational level, two conditions have to be met (Senge, 1990; Dodgson, 1993; Di Bella, 1995; Crossan, Lane and White, 1999). First, information needs to be acquired and processed, and second, an outcome in terms of action has to occur.

2.8.10 Organizational Learning Networks

Learning networks are networks whose purpose is to learn (Dixon, 1999). The social constructionist perspective poses a challenge to the conventional idea that learning takes place within individuals or in organizational systems and processes. A learning network is a network that learns effectively, similar to the concept of a learning organization (Mitki, Shani, and Meiri, 1997; McKenna, 1999; Lane, 2000). Network learning is defined as learning by a group of organizations. The learning entity is a collective network and learning outcomes are indicated through changes to properties of the network such as network levels or network wide routines, strategies, cultures, processes and systems.

This perspective has shifted from the conventional thought that learning is individual based, and occurs mainly through social interactions between people Cooke and Yanow, 1993; Muller and Lyles, 1993).

Nicolini and Meznar; and Miller, (1996) define organizational learning from the network perspective as learning by any level of entity or learning by an organization. They studied the notion of network learning in a large public sector utility in the US and the utility’s relationship with two key suppliers. The core data were obtained by
semi-structured interviews with key personnel in the relationship and in the organization’s central purchasing department. Findings showed that learning was effective at the inter-organizational level, but that a gap existed at the network level. In addition, the findings showed that developing personal capacity entails both individual and organizational learning, as does the development of organizational effectiveness.

2.8.11 Organizational Learning and Culture

The nature of learning and the way in which it occurs are determined by the organization’s cultures or subcultures. The basic assumption is that an organization’s culture leads to learning values that produce a different learning style from a culture with another set of values. Empirical studies on organizational learning have been conducted in different work environments and cultures, yielding different conclusions. It has been found that empirical research on organizational learning is cross-cultural and does not yield any definite conclusions. This demonstrates that the concept is still evolving and researchers are still attempting to understand the learning process adopted by organizations in different cultures.

Czegledy (1996), from a cross cultural and European perspective, describes the process of organizational learning. The European perspective of OL lies not in transferring knowledge but in facilitating the ability of employees to demonstrate their skills in applying themselves to a changing economic environment.

Penn, William, Foster, Heyden and Richardson (1998) studied learning in small organizations in UK that employed 50 or fewer employees.
Five key characteristics of small business were adaptability, planning, information and knowledge, HRD, and growth. Using the interview method to collect data, their findings showed that learning was fostered by a paternalistic culture, an informal approach to planning, an individual’s ideas and character, team-based learning, and a belief in the importance of growth.

Barker and Neely (1999) highlight the importance of team learning from a study conducted in a major UK manufacturing organization. The study consisted of four stages, which started with an individual learning review process through to the whole team. The final stage consisted of communicating the learning to the rest of the organization.

Harvey and Denton (1999) conducted a three-year research study of organizational learning practices and programs in five major manufacturers in Great Britain. Sixty-six interviews were conducted and classified into three groups’ strategy, human resources, and research and development.

Findings showed that there were six antecedents of OL that were influential in procuring a shift in the relative importance of factors concerning production away from capital towards labour, particularly intellectual labour, the ever more rapid pace of change in the business environment; the widespread acceptance of knowledge as a prime source of competitive advantage; the greater demands being placed on all businesses by customers; the increasing dissatisfaction, among managers and employees, with the traditional command and control, management paradigm and the intensely competitive nature of global business.
However, their study showed significant statistical differences between organizations that were of British and American origin.

2.8.12 Organizational Learning and Innovation

Early studies by Ries and Trout (1981) showed that innovation is a form of learning. Innovation is about learning new ways to understand or configure the world around us. This assumption has not been challenged to date, and the present study attempts to establish the relationship between learning and innovation, at the individual, group and at the organizational level. Organizational learning in the innovation literature is usually defined as promoting comparative innovative efficiency. However, this definition examines learning as an outcome rather than a process, which probes into what learning, actually is (Bouwen and Fry, 1991; Dodgson, 1993 b.).

Moch and Morse (1977) innovation studies focused on innovation in various industrial sectors ranging from agricultural to military equipment. Their findings showed that innovation is a form of learning.

Huber (1998) differentiates between a cause and effect relationship between organizational learning and innovation where information rich environments contribute to creativity and innovation. This fact is of tremendous importance to anyone who seeks to increase creativity and innovation in an organization. According to Enz and Siguaw (2003) OL often begins with an individual champion who recognizes a gap between what is and what could be, engages in a process of discovery and data gathering, and develops an idea, often in the form of a new
practice, to produce changes in the organization. Outcomes focus on effects whereas process may include causes.

2.8.13 Summary

The OL literature revealed that it is fragmented and ambiguous. There was no consensus in the definitions of OL found in the literature, which may be attributed to the lack of a common definition and a single unit of measurement.

Many empirical studies on OL were conducted in Europe, UK and the USA, which showed the following limitations. Firstly, there was no common thread found in the unit of measure. Secondly, majority of the studies neglected to carry out pre-tests on pilot studies thereby questioning the quality, reliability and validity of data.

Thirdly, OL has been researched as a variable independently. Its relationship was established with organizational variables such as environment, size, structure and culture, innovation.

Fourthly, no studies examined dimensions of OL from manufacturing or service industry perspective especially in hospitality industry in the Australian context.

Although its relationship to innovation has been explored sporadically, the review showed no empirical studies conducted in the Australian context especially in the service industry and in particular the Australian hotel industry. This creates a vacuum in the literature of OL and hospitality industry.

The present study extends the process school by examining different dimensions of OL.

No studies were attempted to understand the inter-relationship between the dimensions of organizational learning and their relationship between each other.
Finally, the present study attempts to establish the relationship between learning at the organizational, group and at the individual level.

In addition to the gaps in the literature the researcher observed that inappropriate units of measure of OL were operationalised in many studies.

### 2.9 Organizational Innovation (OI)

This section reviewed the literature on organizational innovation. It includes a review of definitions, empirical and theoretical studies related to organizational innovation, from both national and international perspectives.

The literature review on innovation received increased attention from different disciplines such as management, rural sociology, medical sociology, education marketing, and industrial engineering disciplines.

Research studies have examined innovation in terms of four central concepts: new ideas, people, transactions and contexts (Van De Ven, 1986, Mikkelsen and Gronhaug, 1999).

Early literature on innovation concentrated on the adoption of new ideas and practices by autonomous individuals (Slappendel, 1996). Economists examined innovation patterns at the level of industries and national systems that hindered comparisons of empirical findings as well as theoretical development.

During 1960s the first empirical studies of organizational innovation emerged and focused on public sector organizations.

In the 1970s and 1980s, the focus of research shifted to radical process innovation. In the 1990s, studies on administrative innovation slowly gained momentum. Today, innovation studies use different perspectives and dimensions to understand the concept leading inconsistencies and ambiguities.
Wolfe (1994) conducted a review on organizational innovation and found that the literature on organizational innovation was distinguished according to innovation as a unit of analysis, organization as a unit of analysis, and innovation as a process. Extending the work of Wolfe (1994) Hage (1998) reviewed 1500 articles and found literature classified organizational innovation essentially the same way as its antecedents and included the role of complex division of labour and organic structure in facilitating incremental innovation, importance of values or strategy as a factor in adoption of innovation, stages of innovation and radical process innovation, and implications of innovation for organizational performance. The review showed that organizational innovation was as popular as organizational learning and had developed a rich body of literature in the last few decades that contained both consensus and ambiguity (Wolfe, 1994; Hage, 1998).

The organizational innovation literature essentially adopted two broad approaches; innovation as a process and innovation as a product or an outcome. Hage (1998) noted that that studies on innovation predominantly addressed innovation at an individual level rather than at the team or organizational level. Innovation at the individual level was based on innovative behaviour in employees. Early research by Becker and Whisler (1967) explained innovative behaviour in terms of a humanistic perspective, which they defined as the personality characteristics of organizational participants; they devised a four-stage process that included stimulus, conception, proposal, and adoption. The first two steps involve the individual: the third and fourth steps take on a group perspective.
However, the understanding of innovative behaviour in organizations remains relatively embryonic because organizational innovation research has been inconclusive, inconsistent, and characterized by low levels of explanation (Wolfe, 1994).

Wolfe (1994) and Basadur (1995) established convergence among innovation scholars indicating that theories on innovation although originating from different perspectives, had a commonality in terms of understanding the process of innovation. Researchers adopting different school of thought tend to focus on single issues and different explanations, thus contributing to the non-cumulative nature of the literature.

Other factors that contributed towards inconsistencies in innovation research was lack of clarity concerning innovation stages upon which investigations focus, ambiguity and inconsistency concerning innovation stages, inconsistent contributions resulting at times in contradictory results, and minimal consideration given to innovation characteristics.

The review of literature demonstrated that innovation was limited to single organizational type studies with researchers limiting their scope of inquiry. Further theoretical perspectives on innovation led to ambiguity in defining the meaning of innovation.

The literature review uncovered that organizational innovation has gone through changes in definitions, which impacted on empirical studies. Innovation researches attempted to study the concept from a process perspective, in which innovation was perceived as a process of implementing a new idea.
However, the majority of studies focused on technological innovation and innovation at the employee level. Bouwen and Fry (1991) and Hage (1999) argued that innovation is an ongoing phenomenon and needs to be developed at all levels in a work environment and practiced frequently.

Research by Ussman, Almeida, Ferriera, Mendes and Frances (2001) uncovered that organizational innovation was determined by variables such as creativity, problem solving styles, decision-making process as organizational abilities and control.

Earlier studies on innovation research primarily examined incremental innovation, with focus shifting slowly in later studies to radical innovation (Carrero, Peiro and Salanova, 2000).

Hindle (2002) classified innovation into Big I and Small I. The Small I perspective emphasises the creation and development of new knowledge, in contrast to Big I that describes innovation as a lengthy, detailed commercial process.

The most important advancement in innovation research has been the increasing shift from technological innovation that is outcome focussed, usually aimed at improving products, to an awareness by researchers that innovation is essentially a process comprising of different stages, hence the need to take a holistic approach (Alange, Employeesan and Jarnehemmar, 1998; Cooper, 1998; Bender, Cedeno and Kalus 2000, Adame-Sanchez, Escrig-Tena and Chorda, 2001, Ussman et al 2001;)

Although innovation studies increased over several decades in United States and Europe, few studies were undertaken in Asia Pacific region, particularly in Australia.
In many empirical studies, while the process of innovation emphasized different stages of a product outcome, little emphasis was placed on the process of innovation from individual to organizational level supported by an innovative climate. It was also noted that innovation studies were predominantly restricted to manufacturing and health industries, while service industries were seldom used as a context for empirical research.

Despite extensive studies on determinants of innovation, results have often been confusing and inconclusive as there has been no consistent definition of the term ‘innovation’, and there have been no agreed units of measure (Kimberley and Evanisko, 1981, Delbecque and Mills, 1985; Collins, Hage and Hull, 1988; Hage, 1998).

2.9.1 Theoretical Perspectives on Organizational Innovation

Theorists' attention to innovation in organizations can be traced back to the Industrial Revolution (Mastenbrook, 1996). Studies addressing organizational innovation are based on different theoretical perspectives such as economic perspectives, organizational perspectives and technological perspectives.

Theorists supporting the economic perspective view innovation as an important factor for economic growth of a nation. Theorists from an organizational perspective view innovation as a process that permeates through the organization. Innovation from the technological perspective restricts the concept to technological advancement.
The literature showed that studies on innovation were broadly classified into individualist perspective, structuralist perspective, and interactive perspective (Slappendel, 1996), discussed below.

### 2.9.2 The Individualist Perspective on Innovation

The individualist perspective assumes that individuals are a major source of innovation in organizations. The actions of individuals are not constrained by external factors; instead individuals are perceived as self-directing agents in pursuit of their set goals.

The individualist perspective views individual characteristics as antecedents to innovation.

These characteristics include age, sex, education level, values, personality, goals, creativity, and cognitive style (Amabile, 1988; Scott and Bruce; 1994, Drazin and Schoonhaven, 1996; Ibarra, 1996). Creativity is restricted to the development of new ideas while innovation looks at implementation of new ideas through a series of stages.

The individualist perspective took a unitary approach in understanding the process of innovation and contradicted later studies that took a holistic approach where innovation was perceived as an organizational phenomenon. Innovative behaviour was perceived as a unique characteristic in individuals who are born leaders (Siegel and Kaemmerer, 1978; Glynn, 1996; Hage, 1999).

A limitation of the individualistic perspective is based on the assumptions that innovative decisions involve only an individual.
At times, individual characteristics may be overshadowed by the effect of organizational roles and organizational position (Evan and Black, 1967; Baldridge and Burnham, 1975, Znaiden, 1996; Soreson and Stuart, 2000, Thompson and LeHew, 2000).

Anderson and King (1993) defined innovation as a cognitive process that is influenced by social and psychological factors whereas organizational innovation is social process that changes the status quo.

Scott and Bruce (1994) define individual innovation as a process that includes activities and behaviours where individuals can be involved in combination of these at any time.

An individualist perspective on innovation is evident in schools of thought within strategic management field. Five out of ten schools identified tend to assume that individuals are main cause of strategic change and innovation (Mintzberg, 1979). The individualistic perspective highlights importance of employee demographics on innovation process in a workplace. The literature uncovered few cross-cultural studies on innovation that question the validity of the individual perspective.

### 2.9.3 The Structuralist Perspective on Innovation

The structuralist perspective assumes that innovation is based on organizational characteristics that assist in facing environmental change.

The structuralist perspective emphasizes role of organizational structure and routines on the innovation process. Firstly, it assumes that the degree of innovation is determined by the structure of an organization.
In other words, elements of structure such as roles, and job design, influence the innovation process in the workplace. Secondly, it shows that innovation is slower in an organization with a mechanistic structure than in an organization with an organic structure.

This assumption is however not supported by empirical studies. The strength of this perspective is that, it draws attention to inter-relatedness of organization and environment (Kanter, 1988). Its weakness is that there is a tendency to treat organizational features as objective realities.

Organizational psychologists have found that organizations with flat structures and high levels of communication between departments and functions are likely to be more innovative than traditional hierarchical organizations, characterised by predominantly by vertical communication (West and Altink, 1996).

It is an organization type that tends to influence the degree of innovation in a workplace.

Amongst structural characteristics it was found that complexity and centralization were directly related to innovation but formalization was inversely related to innovation.

The individualist and the structuralist perspectives have major disadvantages in that they place undue emphasis on particular causal factors such as, the individual characteristics which can lead to errors of attribution.

Empirical studies linking structural variables to the organizational innovation process are limited.
2.9.4 The Interactionist Perspective on Innovation

The interactionist perspective views innovation as a process of interaction between individuals, organizations and the environment. The interactionist perspective emphasizes importance of organizational environment (both internal and external) on the innovation process.

Hurley and Hult (2001) and Matila (1999) argued that organizations whose cultures emphasize innovation and when resources are made tend to available achieve more innovation and develop competitive advantage. Their conclusions, however, are not supported by empirical findings.

This study is unique in that its perspective encompasses elements of both the structuralist and interactionist perspectives. It views innovation as a process of interaction at different levels in an organization. Furthermore, this study demonstrates that for organizational innovation to occur, individual creativity needs to take place at the first level, which then leads to team innovation at second level and to organizational innovation at third level. The study further shows that for levels of innovation to occur, an innovation climate is necessary supporting the interactionist perspective, by highlighting the importance of climate and culture in the workplace (Brafman and Kerri, 1998; Gassman, 2001).

Furthermore, there is no instrument in the management literature that simultaneously gathers data at the individual, group and the organizational level to measure innovation especially in the hotel industry in Australia. The present study is unique in that it has developed an instrument that measures organizational innovation at the individual, group and at the organizational level.
In essence, the present study attempts to take a holistic approach towards the process of innovation and incorporates all three perspectives-individualistic (role of individual in the innovation process), structuralist (innovation is based on organizational characteristics) and interactionist perspective (innovation is viewed as a process of interaction between individuals, organizations and the environment) thereby filling a gap in the innovation literature.

2.9.5 Definitions of Organizational Innovation

The Collins Dictionary (2001) defines the term ‘innovate’ as ‘to introduce as new or as if new’ and defines the term innovation as ‘the introduction of something new or a new idea, method or device.’

In addressing innovation, several authors utilize terms such as newness; anything perceived by some people something that is different (Mohr, 1969); or as the generation and implementation of new ideas, processes, products or services (Daft, 1978). Others see it as being synonymous with creativity (Jacques and Ryan, 1978, Carrerro, Peiro and Salanova, 2000; Johan Essen, Olsen and Lumpkin, 2001, Sonnenburg, 2004; Vang and Zellner, 2005).

There have been many definitions of innovation and these have varied with not only with the unit of analysis but also have been context specific (Wolfe, 1994). Hage (1993) used the term innovation in two different contexts. Firstly, the term is synonymous with invention. In this context innovation is a creative process whereby two or more existing concepts and entities are combined to produce a new configuration. Secondly the term is synonymous with a new idea.
The term innovation is also used to refer to a process through which new ideas; objects and practices are created, developed or reinvented.

Early studies of organizational innovation defined innovation as a social process, which leads to a major change in an organization’s structure or procedures (Caroll, 1967; Knight, 1967).

For example, the literature defines organizational innovation as an improvement in technology, and covers a wide spectrum of innovation, such as innovation in management practices, in administrative processes or innovation in a formal organization structure (Joahnessen, Olaisen and Olsen, 1997, 1999; Alange et al 1998, Joahnessen, Olsen, and Lumpkin, 2001, Drejer, 2004).

Most share common themes relating to knowledge that can be turned into new products, processes and services to improve competitive advantage and meet changing customer needs (Gianikis and McCue, 1997).

Becker and Whisler (1967) use a goal-oriented approach and defined organizational innovation as first or early use of an idea by one group of organizations with similar goals.

Corwin, (1972) defined ‘innovation’ as a new idea that can be a recombination of old ideas, a scheme that challenges the present order or a formula or a unique approach that is perceived as new by individuals involved. The definition includes technological and administrative innovation. On the other hand, Daft (1978) differentiates between technological and administrative innovation.
Studies on organizational innovation indicates that, although the term innovation is defined in monolithic terms, literature is composed of three discernible streams, which have developed sequentially: diffusion of innovation, organizational innovativeness, and the process theory models.

Kim (1993) describes ‘organizational innovation’ as the rate of technological change in products and processes, measured by the total number of technological changes that occur in products and processes.

Cooper (1998) and Jones (1998) define innovation as something that is new or improved by an enterprise to create significantly added value, either directly for the enterprise or directly for its customer.

Drazin and Schoonhaven (1996) describe innovation as new products or processes that increase value, including anything from patents and newly developed products to creative uses of information and effective human resource management systems.

The term innovation is used to refer to the process through which new ideas; objects and practices are created, developed, or reinvented. In its broadest conceptualization the innovation process embraces periods of design and development, adoption, implementation and diffusion.

Despite the various definitions of innovation there are common themes that emerge: innovation as newness, innovation as a process and innovation as a creative process.
Very few definitions view innovation as a process permeating through different levels in an organization. This is a limitation observed by the researcher in the innovation literature. The present study has attempted to study innovation at various levels in the Australian Hotel Industry, and has therefore made a significant contribution to the innovation literature and the hotel industry literature.

Amabile (1988) and Amabile et al (1996) took an individualistic approach to define innovation, and used the term creativity to refer to constellations of personality and intellectual traits shown by individuals who, when given free rein, spend significant amounts of time engaged in the creative process.

Amabile supports Damanpour (1992) and defined innovation from a creativity perspective and conclude that creativity is the first step in innovation. She notes that some definitions of innovation are quite close to the definitions of creativity, which focus on production of ideas rather than implementation.

Despite several definitions of innovation some common themes evolve. First, the concept of innovation includes newness which may be a new idea in terms of a product or a process. Secondly innovation has to be useful that can lead to economic benefit or problem solving in a workplace. Finally, there seems to be a consensus in the stages of innovation. Ambiguity over the definitions has led to confusion and lack of clarity in the unit of analysis.
This study operationalises the definition put forward earlier by Becker and Whisler (1967) who described innovation from an integrationist and structuralist perspective. The Australian hotel industry is labour intensive and hence interaction amongst employees and with customers is important for the success of the hotels, hence integrationist perspective was adopted.

### 2.9.6 Innovation and Creativity

The importance of individual creativity in organizational innovation process has been adequately emphasized in recent times, although most studies concluded that individuals act as antecedents to organizational innovation (Scott and Bruce, 1994; Amabile et al 1996, 1997, 1998; Groth and Peters, 1999). Amabile’s (1997) studies adopted a micro perspective and restricted innovation processes to individuals, and hence, did not view innovation from an organizational perspective.

Hage (1998) examined all stages of innovation from creativity to the implementation of the innovation process, which enables us to understand why particular factors influence innovative activity within an organization.

Pienaar and Boshoff (1996) and Amabile (1997) use the terms ‘innovation’ and ‘creativity’ interchangeably. According to them, organizational creativity and innovation are defined as the generation and implementation of new ideas, products and services. Similarly, Majaro (1988) and West and Farr (1990) differentiated between creativity and innovation and concluded that creativity is generally regarded as a process that generates novel ideas, whereas innovation may or may not lead to novelty.
If creativity occurs through generation of a potentially valuable idea either at the start of the innovation process or even earlier, then creativity can be said to be the first step in the innovation process. One common thread that runs across all of Amabile’s studies is that the qualities of individuals that influence creativity include personality traits, self motivation, special cognitive abilities, risk orientation, expertise in the area, and qualities of the group, diverse experience, social skills and brilliance. Qualities that inhibit creativity include factors such as lack of motivation to work, and being unskilled, inflexible, externally motivated and socially unskilled.

Amabile (1988) argued that prerequisites for organizational innovation must include the entire process of individual creativity and further added that innovation may exist with individual creativity. In her model the process of individual or small group creativity has a significant role to play in the overall organizational innovation process.

Based on these findings Amabile (1988) developed a model of creativity that included three elements: relevant skills, creativity relevant skills and intrinsic task motivation. Amabile’s model emphasizes the role of individual creativity in the organizational innovation process. According to her, there are three basic components in the organizational innovation process, which include motivation to innovate. The motivation to innovate may be thought of as a corporate vision, which infiltrates through the CEO of an organization down the hierarchy. Here, the overall goal of the innovation is clear, and the general areas of the innovation forms a part of the
innovation statement. This assumption lacks empirical evidence in the manufacturing or the service sector in the Australian context.

Further, for individual creativity and for an organization to be innovative, three components are crucial, resources, techniques and motivation. The greater the overlap between three components greater is the probability of creativity and successful innovation Amabile, 1988)

Not many innovation studies have focussed on innovation at the individual level. It is Amabile’s (1988) studies that add value to this research in that it attempts to understand organizational innovation from the individual and the team perspective. In contrast, Shalley, Gilsons and Blum (2000) did not support Amabile’s conclusion innovation as being adopted by individual decision makers.

Others such as Slappendel (1996) defined creativity according to the process itself. They see creativity as production of novel and useful ideas by an individual or small group of individuals working together. Organizational innovation is the successful implementation of creative ideas within an organization.

### 2.9.7 Innovation Models

Management researchers put forward various models of innovation (Amabile 1988). According to Amabile, (1988), nearly all organizational innovation models are stage models and may be classified into the following five types: 1) departmental stage models- that break down innovation process into a series of stages associated with departments of an organization; 2) activity stage models that identify particular activities performed during innovation; 3) decision stage models that break down
innovation process into a series of decisions with a set sequence of steps that must occur at each decision point; 4) conversion process models that treat innovation as a system in terms of outputs and inputs rather than an orderly logical process; and 5) response models that represent innovation as the organization’s response to some external or internal stimulus.

In contrast, Hage’s model (1998) of innovation proposes the two main stages: 1) initiation and 2) implementation in the innovation process. Initiation consists of knowledge awareness sub-stage, formation of attitude sub-stage and decision sub-stage, while implementation consists of initial and continued sustained implementation sub-stages.

In contrast, Schroeder’s model (1989) as cited in Hage, 1999) consists of a series of six observations: 1) innovation is stimulated by shocks, either external or internal; 2) an initial idea tends to proliferate into several ideas 3) unpredictable setbacks and surprises are inevitable, 4) as an innovation develops, old and new exist concurrently and over time link together; 5) restructuring of the organization occurs, and 6) top management are involved in the process. The findings showed that Schroeder’s model showed greater reliability ($\alpha=0.87$) and Hage’s model showed greater accuracy (89%).

Adopting a case study approach, Bouwen and Fry (1991) studied seven innovation projects in large organizations and six in small or start up organizations. Eight respondents were interviewed three times over a period of eight to eighteen months. Participant observation, minutes of meetings and related documentation provided additional data. Findings showed four distinct innovative paths or action strategies.
led to four innovation models. These were a power model based on authority figures with access to power resources: a sales model dependent on a ‘sales person’ with a smooth approach, expert model dependent on expert knowledge and expert power, and a learning and confrontational model dependent on coach as and facilitative leaders with process knowledge.

The review of literature illustrated critical factors that stimulate or hinder innovation in large organizations relate to the lack of adequate internal and external communication processes, the lack of inter-disciplinary teamwork, bureaucratization, and a culture of standard operating procedures.

Bouwen and Fry (1991) observed that the process of innovation in an organization is reliant on dominant logic and new logic. Dominant logic includes managerial practices, specific skills used by employees, experiences stored within an organization and cognitive styles used to frame problems in a specific way. These assumptions are however, not empirically supported.

In a cross-cultural study Biogness and Perreault (1981) examined the American shoe industry. Fifty organizations were randomly selected and data were collected through personal interviews conducted with top executives who were key decision makers. Innovativeness was measured through a range of products that was currently available to domestic footwear manufacturers and which was potentially representative of innovativeness identified by equipment suppliers, footwear producers and engineering consultants. The presence of a technical engineering group was significantly related to innovativeness in organizations that did not possess technical managerial expertise.
It was found that organizations that had no technical managerial expertise were more innovative than organizations with technical managerial expertise.

The studies discussed thus far focused on product innovation and in doing so, they have ignored individuals as an important factor in the innovation process. Secondly, research methodologies adopted in the above studies do not particularly reflect on the role of individuals in the innovation process. Another observation is that the innovation models proposed by different researchers lack empirical validity. Hence their applicability across different industries is questionable.

2.9.8 Factors influencing innovation

Innovation in an organization is influenced by many factors. Ettlie (1983) studied the process of organizational innovation in equipment and package suppliers to food processing industry in Europe and the USA. The study was based on the assumption that organizational context such as size and uncertainty led to development of technological policies in organizations. Technology policy was used as a dependent variable. A stratified random sample was selected for a mailed questionnaire survey. The response rate was 46 %. Technology policy was measured as an eight-item instrument on 5 point Likert type scale. The Cronbach alpha for the instrument was 0.78. The findings demonstrated that primary stimulus for innovation in these organizations appeared to be organizational policies strongly influenced by context. The findings also illustrated that organizational policies were contextual and had an important effect on innovation outcomes of an organization.
Goes and Ho Park Seung (1997) conceptualized various types of inter-organizational links as opportunities for learning and resource sharing in pursuit of innovation. According to them at the organizational level, innovative capability and the adoption of innovation were enhanced by the development of inter-organizational links. The sample for the study included all general acute care hospitals. Using the interview method, year-to-year changes were tracked across all sample hospitals. The changes were classified as six technical innovations and eleven administrative innovations. Findings showed that urbanization, affluence and market concentration influenced the rate of innovation in the hospitals. Furthermore the findings showed that hospitals exhibiting multiple and extensive inter-organizational links were much more likely to be large, and that large hospitals were consistently more innovative than small hospitals. This contradicts Mohr’s (1969) assumption that larger organizations are not innovative. The value of Goes and Ho Park Seung (1997) findings to this study is that large organizations are more innovative than small organizations. This study attempts to look into 2.5 star hotels, which are smaller in size than the five star hotels.

Banazok-Holl and Mohr (1996) using resource dependency perspective studied the impact of market and organizational characteristics on nursing care facility service innovation. Their findings showed that organizational characteristics like size, structure and culture influenced degree of innovation.

Empirical studies have argued that environmental uncertainty triggers innovation (Baldridge and Burnham, 1975; Mathews, 1997, Ollila, 2000).
Another organizational variable linked to innovation is size. Several earlier studies and a few later studies demonstrated that organizational size appears to be positively related to innovation (Mohr, 1969, Baldrige and Burnham, 1975). There is also Damanpour, (1992) McElroy, (2000) established the relationship between the size of an organization and innovation.

Organizational characteristics such as centralization, functional differentiation external integration influences innovation and adoption. Kimberley and Evanisko, 1981) found that environmental and organizational variables, especially industry and organizational size affect organizational innovation. Their findings explained how contextual variables had a positive influence on adoption of technological innovation. Furthermore, they found that adoption of innovation was strongly influenced by those with power and communication. Examining innovation processes at the individual level of analysis, Meyer and Goes (1988) found that managerial or leadership variables were strong predictors of innovation processes.

Researchers found that influence of organizational variables on administrative innovation was considerably weaker than on technological innovation. Contextual variables were also less effective predictors of administrative than technological innovation. It was found that size and culture were the only factors that impacted on administrative innovation (Damanpour 1992).

Pavitt (1991) identified four characteristics of large innovative organizations: differentiated and organization-specific competencies that dictate the direction and range of technological opportunities those organizations are capable of exploiting: an
organizational structure that complements the decentralization required for effective implementations and the centralization required for the exploitation of core technologies: a process of learning that enables organizations to enhance their competencies as a consequence of experience, and methods of resource allocation.

Pienaar and Boshoff (1996) examined the relationship between creativity and innovation and organizational climate in university libraries. Findings showed that size had a direct influence on the level of innovation which seen to be higher in large organizations than in small ones. Although research indicates that organizational size accounts for differences in personnel and management practices as well as innovativeness (Stata, 1989; Stringer, 2000). Some studies have found no significant relationship between size and the implementation of innovation (Vakola and Rezgui, 2000).

Organizational innovation must also incorporate all aspects of organization that influences innovation. It needs to show the major stages of organizational innovation process, and influence of organizational factors on individual creativity. These findings were limited to R&D sector of manufacturing industry; hence their validity in the service industry is questionable.

2.9.9 Types of Innovation

Researchers and theorists classified innovation into various types. Innovation types are based on different approaches taken by researchers.
The first approach is the socio-technical systems approach, which classifies innovation according to systems in which they occur.

The second approach emphasizes on characteristics of innovation and the third it is categorised by their source. For example, Knight (1996) classified innovation into external and internal types. New and different procedural and structural arrangements in an organization are said to be internal. They argued that external innovation is easier to accomplish than internal innovation. They further classified innovation into product, process, structure and human innovation.

March and Simon (1958) differentiated between routine and non-routine innovation. Routine innovations included innovations that were mandatory and were a part of continuous improvement. Non-routine innovations were accidental and not regular in the workplace.

Evan and Black (1967) differentiated between administrative and technical innovation. Administrative innovation included innovations in the administrative process in an organization, while technical innovation included innovations that involved technology in the workplace. Administrative innovation involved process while technical innovations were more outcome based. Majority of innovation research is broadly based on either administrative innovation or technical innovation. Review of literature uncovered no studies that extended beyond these two innovation types.
2.9.10 Levels of Innovation

West and Altink (1996) identified four levels of innovation and they include: individual, group, organizational and socio-cultural levels.

Individual innovation is influenced by two important factors. The first is that individuals are motivated to explore and manipulate their environment, in ways which are essentially creative, and secondly the need to feel safe.

Individual innovation is inhibited by insecure and unsafe workplace (West and Altink, 1996).

Group Innovation on the other hand, is bringing people together in a workplace, with diverse skills, into teams to increase effectiveness, and to promote innovation and creativity. Organizational innovation varies with the size of an organization and is influenced by the degree of centralised control, greater autonomy for individuals, teams and departments. Studies relating structure to innovation have been quite popular in the innovation literature.

Thompson (1965) found that bureaucratic structure can be altered to increase innovativeness, such as increased professionalization, a loose or a more untidy structure, decentralization, freer communication, greater reliance on group processes, modification of the incentive system, and changes in many management practices.

2.9.11 Innovation and culture

A critical part of initiation stage is openness to innovation, that is, whether members of an organization are willing to consider adoption of or are resistant to innovation. In other words, does the culture of the organization foster innovation?
Drawing on Slappendel’s (1996) distinction of initiation and implementation stages of innovation, Hurley and Hult (2001) introduced concepts of innovativeness and capacity to innovate. Innovativeness is the notion of openness to new ideas as an aspect of an organization’s culture. The innovativeness of a culture is a measure of an organization’s orientation towards innovation. They argue that these are antecedents to innovativeness are the various characteristics of an organization’s culture, such as an emphasis on learning, participative decision-making, support and collaboration, and power sharing.

The term capacity to innovate originates from Burns and Stalker(1961) as cited in (Hurley and Hunt, 2001) and is defined as ability of an organization to adopt or implement new ideas, processes, or products successfully. The innovativeness of an organization’s culture acts in concert with various structural properties of a company to affect the innovative capacity of the organization. Innovative capacity is related to what Cohen and Levinthal (1990) call absorptive capacity.

The number of innovations an organization is able to adopt or implement successfully can measure this capacity. The innovativeness of an organization’s culture, when combined with resources and other organizational characteristics, creates a greater capacity to innovate. Organizations that have a greater capacity to innovate are able to develop a competitive advantage and achieve higher levels of performance.

In an empirical study Hurley and Hult (2001) examined the relationship between innovation and culture on 9648 employees from 56 organizations in a large agency of the US Federal Government.
They found that innovation processes were affected by organizational properties such as market orientation, learning orientation, innovativeness and the innovative capacity. Furthermore their findings showed that higher levels of innovativeness in an organization’s culture are associated with a greater capacity for adaptation and innovation. In addition, their findings illustrated that when there is more receptivity to new ideas and innovation, a group’s culture is associated with higher levels of innovation. A higher level of innovativeness is also associated with cultures that emphasize learning, development, and participative decision-making. The value of Hurley and (Hult’s 2001) finding to this study is that it helps in understanding the importance of culture towards innovation and learning.

Using data from seventy-one organizations in seven nations Hoffman (1999) examined the process by which managers from different cultures influence structural and systems innovation in their organizations. Findings revealed that scanning of environment, control and functional specialty influence organizational innovation.

Culture and organizational innovation in the international culture arena has been found to be an important factor affecting management processes. A comparatively small body of research examined innovation across different national cultures. This research stream focused primarily on diffusion rate of innovation across borders or differences in innovative activity (Collins Hage and Hull, 1988; Powell and Koput, 1996, Rockards, 1996).

In a Portuguese study of small to medium sized organizations Ussman et al (2001), viewed innovation from the technological perspective.
Cultural factors, smallness, routines and lack of information contributed to lack of innovation in Portuguese organizations.

Meyer and Goes (1988) examined the assimilation of innovation into an organization’s culture. They defined assimilation as an organizational process that is set in motion when organization members first hear of an innovative development. This then leads to the acquisition of innovation into an organisation’s culture, which sometimes comes to fruition in the acceptance, utilization, and institutionalization of innovation.

According to Shalley, Gilson and Blum (2000), innovation in organizations is not adopted instantly by individual decision makers. It infiltrates into organizations, moving between social units and passes through phases such as awareness, evaluation, adoption, utilization, and institutionalization.

Unlike other studies on innovation Shalley et al (2000) used a quantitative approach while Meyer and Goes (1988) used grounded theory approach and undertook a six-year study to investigate diffusion of medical innovation into community hospitals. Data were collected through field interviews, questionnaires, organizational documents, and secondary sources; until the researchers were satisfied that adequate conceptual categories could be crystallized. Data were collected from physicians, administrators, board members, and nurses affiliated with 25 hospitals. The study examined 300 processes of organizational decision-making.
The assimilation of medical innovation was seen as a process consisting of three primary decision making stages: knowledge awareness, evaluation choice, and adoption implementation stages and nine sub-stages all related to organizational culture.

Kimberly and Evanisko (1981) studied the influence of individual, organizational and contextual factors on the adoption of technological and administrative innovation within a hospital culture and found that adoption of innovation was strongly influenced by those with power and communication linkages.

Hoffman (1999) examined three European cultures (German, Latin and Nordic) to understand the moderating effect of culture on relationships among influence on organizational innovation, strategic management activities and functional specialty. According to him, culture affects organizational innovation processes in two ways: First, culture has a direct effect on management practices that varies with culture. Second, culture can moderate between management practices and innovation influence. Data were collected through a pre-tested, closed questionnaire from a sample of 264 top managers employed in 71 manufacturing organizations located in seven European nations. Two follow ups yielded a response rate of 82%.

The study had two dependent variables: influence of structural and systems innovation, and three sets of independent variables—an environmental scanning set, a planning set, and a functional specialty set. Two control variables were organizational size and industry.
Findings showed that managerial influence process for organizational innovation varied according to whether it was structural or systems innovation.

Limitation of the study was that innovation was restricted to incremental innovation and the study suffered from perception in that it takes a unilateral view of innovation.

2.9.12 Climate and Innovation

Zain, Richardson and Adam (2002) examined innovation initiatives and processes in two subsidiaries of a German multinational company operating in Europe and Asia. The population included employees in each of the two subsidiary organizations Germany (9111) and Malaysia (135)

A sample of 20 interviewees and 60 questionnaire respondents was selected. Inter
dviews conducted used Zain’s interview schedule consisting of 20 open-ended questions investigating fifteen types of innovation. Zain’s Innovation Inventory Questionnaire has 20 structured questions, aimed at various stages, factors and problems involved in the innovation processes. Respondents were further asked to complete Ekvall’s (1983) Creative Climate Questionnaire, which consisted of 50 questions.

This questionnaire investigated ten dimensions of creative climate. Findings showed significant differences between Germany and Malaysia. For example, German employees showed stronger agreement on innovation initiatives and processes than did their counterparts in Malaysia. The findings further showed that Germany had a better creative climate than Malaysia.
However, it was also found that Germany had more technical problems that Malaysia, although Malaysia showed more behavioural problems.

Yamin, *et al* (1999) examined the relationship between organizational innovation and organizational performance in Australian Best Practice companies. Organizational performance was measured against 27 items that included return on investment, return on assets, and market share and performance ratios. With a Cronbach Alpha of 0.89, the instrument was designed to measure organizational innovation, organizational performance, and employee demographics. The findings illustrated that moderate and high innovation companies are significantly more effective in marketing than low innovation companies. The findings also demonstrated that degree of innovation was not related to degree of performance. An organization’s size does not influence the level of innovation. Yamin *et al*’s findings refuted the claim of made by Peinaar and Boshoff (1996) who concluded that size had a direct influence on innovation.

Yamin *et al*’s finding may add value to the present study; however, it is beyond the scope of this research.

Empirical studies on innovation were attempted to understand the concept and its relationship with various organizational variables, however, no studies were attempted that examined learning and climate complementing innovation in any work context.

This study attempts to fill that gap.

**2.9.13 Summary**

This section covered all aspects of organizational innovation and demonstrated firstly, that the concept is still evolving and going through metamorphosis in terms of its understanding and application to empirical research.
Secondly, majority of the empirical research of organizational innovation viewed innovation from the outcome perspective and emphasized technological innovation in the manufacturing sector. Thirdly, very few studies have been conducted in the Australian context.

The review of literature showed no studies existed in the Australian context that establishes the relationship among OL, OI and OC. There is no consensus on the unit of measure for measuring the concept. No well-defined scales were used to measure innovation, which at times led to ambiguity and misinterpretation. Very few studies have explored relationship between demographic variables and organizational innovation.

The present study attempts to address the shortcomings uncovered in the literature review by examining the relationship between organizational learning, organizational innovation and organizational climate simultaneously in the Australian hotel industry. The present study, overcomes the limitation of Hoffman (1999) study by examining innovation from a holistic perspective by integrating innovation at three levels: organizational, team and individual fostered by an innovative climate in a service industry. Furthermore, this study extends the theory put forward by West and Atlink (1996) and provides empirical evidence and establishes the relationship between the dimensions of innovation in a service industry from the Australian perspective.

The fact that majority of innovation literature was conducted in a manufacturing industry is an understandable gap. This is because of general assumption that innovation occurs only from the technology perspective. Studies undertaken from the administrative innovations were restricted to manufacturing sector. Studies in the
service sector were restricted to banks and retail sectors. Studies in the hospitality context were limited.

Zain et al’s (2002) findings add value to present study by highlighting the importance of national culture in the innovation process. The present study extends Zain et al’s (2002) findings and examines the relationship between demographic variables (country of origin, areas of employment and nature of employment) and organizational innovation.

The findings from this study adds a new dimension to innovation literature by using country of origin and levels of respondents as important variables and illustrates their importance and role in the process of innovation.

This study attempts to redress, in that; by examining organizational innovation in the service industry with specific reference to the Australian hotel industry. The adoption of a single perspective limits the scope of a researcher’s inquiry and limits the extent to which a researcher can capture the innovation process- one which is non linear and opportunistic The present study attempts to overcome this limitation.

**2.10 Organizational Climate (OC)**

This section critically reviews the growth, definitions and national and international perspectives of organizational climate, and establishes the difference between climate and culture. In addition organizational climate cross-cultural studies are critically evaluated.
The growth of organizational climate originated from Gestalt psychology from Lewin’s conception of ‘life space’ (Schneider, 1975). Lewin’s (Litwin and Stringer, 1968) classical formulation of behaviour as a function of a person and his/her psychological environment is a cornerstone of this area of research. The strength of the Lewinian perspective is in conceptualizing a particular type of social process involving influence of a work setting on organizational members who are in subordinate positions of power. Organizational climate has been loosely referred to as a broad class of organizational and perceptual variables that reflect individual organizational interactions that affect individual behaviour in organizations. The term organizational climate gained acceptance as describing the perceived social environment in which an individual’s and an organization’s expectations are met.

A review of the organizational climate literature revealed that the term ‘organizational climate’ is used often interchangeably with organizational culture resulting in contradictory and inconclusive findings. Despite this, a concise operational definition of the term is yet to be recognized by researchers. This is in view of the fact that climate is perceived as a psychological construct; in other words, it is defined as the way in which employees perceive their work.

Ekvall (1996) noted that the organizational climate literature reveals two main contradictions. One relates to ontological issues, which include theories of organizational climate Guion (1973), Ekvall (1996), Altman (2000a). The other contradiction relates to theories on values, norms and belief systems in the ‘climate’ concept, and thus makes the term synonymous to organizational culture.
According to Ekvall (1996), this demarcation runs between those theorists who conceive ‘climate’ as a common perception arising from interaction among members of an organization, and those who perceive ‘climate’ as an objective property of an organization.

While the original concept of climate was first attributed to Lewin, the literature credits the first systematic analysis of this concept to Chris Argyris (1978). In his attempt to systematically describe the factors that comprise organizational climate in a study of organizational relationships among bank employees, Argyris saw a conflict between individuals who seek activity and independence through psychological development, and bureaucratic, formalized organization, that keep individuals in an infantile state of passive dependence.

Early researchers perceived ‘organizational climate’ as environmental influence and adopted a theoretical framework that viewed ‘climate’ as mediating relationships and interactions that occurred between organizational contexts and individual employee responses (James and Jones, 1974; Schneider and Reichers, 1983, Ashforth, 1985; Moran and Volkwein; 1992, Bruhn, 1996). Hence, it is understandable that OC is also viewed as individual behaviour and as a property of the organization.

Workplaces are comprised of several climates (Mikkelsen and Gronhaug, 1999). For example, a workplace may have a climate for service, safety or achievement. Similarly, organizations may have a climate, which may facilitate or hinder learning.
The unit of measure in climate research has been contradicted in the last few decades (Guion, 1973; Hellreigal 1974, James and Jones, 1974, Cohen-Vidaver, 1998). According to Glick (1985), organizational climate does not refer to climate of an individual, workgroup, occupation, department, or job climate but is psychological construct that is shared by organizational members.

2.10.1 Definitions of Organizational Climate

Researcher’s defined organizational climate based on different perspectives and as the methodology demanded. One of the widely referenced definitions of organizational climate was provided by Taiguiri (Litwin and Stringer, 1968), who defined organizational climate as a relatively enduring quality of the internal environment of an organization which is experienced by its members, influences their behaviour, and can be described in terms of values, particular characteristics or attributes of the organization.

Definitions of organizational climate frequently refer to how an aggregate of organizational members perceive specific organizational attributes, or the ways in which organizational members interpret and respond to stimuli that are psychologically meaningful to them (Hellriegal 1974). Hence Schneider (1975) described climate as molar perceptions people have of their work settings. These molar perceptions have a psychological unity, being based on actual events, practices and procedures that occur in their daily life. In other words, people perceive climates as frames of reference to attain some congruity between systems, practices and procedures.
From this perspective, Moran and Volkwein (1992) view organizational climate as a dynamic process that involves situational conditions, interacting group members, organizational climate and organizational culture. Situational conditions include context, structure, processes and environmental impact. Early research on organizational climate assumed that, on the basis of perceptions of organizational practices and procedures, individuals form a holistic perception of their work environment. These perceptions, then, have enabled researchers to conceptualize and define the construct (James and Jones, 1974; Mill, 1985, Narasimhan, 1997, Stetzer and Morgeson, 1997).

Similarly for Altman (2000) climate is an employee’s perception of their work environment. These perceptions reflect ways in which an employee describes their workplace. The present definition of organizational climate represents an adaptation of conceptions put forward by social science researchers. It is a set of attributes that can be perceived about a particular organization or its subsystems, and may be induced from ways in which that organization or its subsystem deals with its members and their environment.

2.10.2 Growth of Organizational Climate

Schneider (1975) observed that the majority of early climate studies were based on the following two assumptions. First, that human beings attempt to create order in their environment by creating order through their thoughts and second that human beings
The first comprehension book where climate was seen as a topic of study was by Litwin and Stringer, (1961) who compiled a widely cited collection of essays that presented a variety of approaches, ranging from climate as an objective set of organizational conditions to climate as the subjective interpretation of individual and organizational characteristics.
The second book by Litwin and Stringer published in (1968) focused on the consequences of organizational climate for individual motivation. This supported a theory that climate encompasses both organizational conditions and individual reactions.

James and Jones, (1974) contributed to the early literature by defining a set of dimensions thought to represent the most salient aspects of organizational climate.

Confirming that climate was a topic of study in the 1960s, the review revealed that, at least, twelve meta-analyses and literature reviews of climate appearing during the mid 1960s (Payne and Pheysey, 1971; Hellreigal and Slocum, 1974, James and Jones, 1974; Schneider, 1975; Joyce and Slocum, 1979).

Empirical studies of climate highlighted the importance of perception in both motivational and ‘climate’ approaches to the understanding of behaviour at work. A second advancement in climate research focused on multiple levels of analysis. While researchers on motivation tend to concentrate on explanation of phenomena from an individual perspective, climate research focused on aggregated or group level data to study relationships between perceptions and organizationally relevant outcomes.

Advancement in the organizational climate literature was the clarification between psychological climates and organizational climates. The first distinction was proposed by James and Jones (1974), who defined psychological climate as meanings that
individuals attach to their work context, while organizational climates are average meanings that employees attach to a particular work-setting.

Litwin and Stringer (1968) attempted to define organizational environments in terms of nine climate dimensions: structure, responsibility, reward, risk, warmth, support, standards, conflict and identity.

Ambiguity in climate research increased with attempts to use terms such as individual satisfaction, and organizational satisfaction as synonymous with climate.

However, in the 1970s, researchers minimized this ambiguity by building a consensus around three distinct approaches to the study of climate. The perceptual measurement of individual attributes; the perceptual measurement of organizational attributes and multiple measurements of organizational attributes combining both objective and subjective measurements.

Other researchers (Schnieder, 1972) have taken a social construction approach to the direction of the formation of organizational climate and have provided a persuasive rationale for viewing climates as an outgrowth of the more basic value systems of organizations.

### 2.10.3 Types of Organizational Climate

Fink and Chen (1995) differentiated between psychological, group and organizational climate. According to them, psychological climate is an individual member’s
cognitive representation of an organization. This is composed of a set of attitudes and beliefs that reflects each individual member’s perception of the prevalent values, norms and expectations in his or her organizational environment. Group climate on the other hand is the elaboration of the organizational climate that permits group members to reinterpret the organization in a manner that is related to group reality and goals. Organizational climate is a set of attitudes and beliefs relating to the organization that is shared and collectively held by the organizational members as a whole.

2.10.4 Theoretical Perspectives on Organizational Climate

Schneider and Reichers (1983) considered three perspectives on the formation of climates. The structuralist perspective attributes the formation of climate to the structural characteristics of an organization and places meanings that individuals attach to events, practices and procedures primarily within events themselves. According to this view, climates differ from organization to organization, as a function of differences in organizational structures.

Secondly, the selection, attraction and attrition of individuals produce homogeneous organizational membership, resulting in similar climate perceptions.

In contrast to the structuralist perspective, the selection-attraction and attrition perspective emphasizes on the meanings that individuals attach to events. This view suggests that climates differ across an organization as a function of the different types of people who become members of that organization. Thirdly the formation of climate draws on symbolic interactionism, which views climate as a function of social interaction between individuals in a workplace (Patterson, Payne and West, 1996).
Patterson et al (1996) argued that work groups generate different meanings regarding, events, practices and procedures that can be constant throughout organizations. It can be surmised that all the three perspectives are not complementary but contradict each other.

This places primary importance on interactions that occur during a new Employee’s organizational socialization period and emphasizes the importance of organizational group membership as a determinant of climates that vary from group to group within an organization.

According to Litwin and Stringer (1968) perceived organizational climate is a set of properties in a working environment that can be measured. They see OC as a mediating variable between the organizational system and motivation. In support of this view, Hellreigal (1974) maintain that interpersonal relations may play a key role in influencing climate perceptions and can be perceived as an important environmental variable for determining behavioural change. In other words, organizational climate is an important contextual component for shaping employee behaviour, which includes change related behaviour (Burke and Litwin, 1992).

Tierney (1999) argues that much of the climate literature differentiates between subjective psychological climate, which represents individual employee perceptions, and the more objective climate that may exist. He further adds that climate is a socially constructed phenomenon that influences the manner in which employees respond to define and interpret elements of their situation. According to this view understanding climate perceptions would necessitate understanding meaningful social units to which employees belong, in particular those interactions that are characterized by greater intimacy and frequency.
2.10.5 Empirical Studies on Organizational Climate

Traditionally, organizational climate was researched from an empirical perspective. A number of different types of organizational climate exist. However, early climate studies were based on specific climates that researchers were interested in.

The review of literature on climate further showed that many early instruments that measured climate were more unitary in their approaches.

For example, Litwin and Stringer (1968) measured motivational climate in a work context. Business Organizational Climate Index measured structural climate. One prominent observation in climate studies was that researchers measured climate at the individual level and analysed findings at the organizational level. This two level analysis has resulted in debates and contradictions in meanings of the concept. Litwin and Stringer (1968) based their theory of climate upon the work of Lewin, Lippitt and White (1939 as cited in Litwin in Stringer 1968). Organizational climate was measured using the following dimensions: warmth, risk-taking, role structure, support, standards, conflict, rewards and responsibility.

They argued that organizational climate is a molar concept which describes a cluster of expectancies and represents the characteristics of the environment that are perceived directly or indirectly by the individuals in the environment. Findings showed that the degree of centralization was negatively related to the level of organizational climate. On the contrary, the degree of formalization was positively related to organizational climate.
There was no relationship between size and organizational climate. This study established a relationship between structure and climate.

Most empirical researches investigating the influence of climate on organizational outcomes have used the approach but forwarded by Schneider (1996). For example, Schneider (1996) worked on leadership climate as an attempt to specifically isolate management practices and conditions.

On the other hand, Schneider and Bartlett (1968, 1970) studied life insurance agencies, and explored climate for new employees. The ongoing debate to conceptualize and operationalise organizational climate has generated both objective and subjective measures. Supporters of objective research have derived specific, measurable features of an organization that are relevant to climate.

These include the structure of the climate. Several studies support the view that the structure of an organization can influence the type of work environment of its organizational members. Some empirical studies show that several organizational factors (Patterson et al, 1996) consistently affect organizational climate.

Supporters of the subjective approach describe climate as a subjective impression by organizational members. This approach views climate as an individual or psychological reaction to a particular situation (James and Jones, 1974; Strutton, Choudhry and Pelton, 1997). In other words, individuals perceive the level of ‘fit’
between their personal needs and values and the conditions created by the
organizational environment (Schneider, 1975).

In addition, this approach perceives climate as a set of characteristics or properties
that can distinguish one organization from another, and is assumed to be a major
influence upon individual motivation and behaviour. Research utilizing this approach measures aggregate perceptions of goal levels and
their clarity, affiliation with a group, friendly work atmosphere, autonomy, and the
degree of standardized behaviour created by bureaucratic rules. The literature review
clearly showed that this approach led to a considerable body of research that
attempted to operationalize climate as a psychological construct (Ostroff, 1993,
Ostroff and Rothausen, 1997).

Numerous studies have established relationships between climate and different
organizational variables. Amongst them, organizational structure seems very popular.
These studies use a combination of both objective and perceptual measures of climate.

Fink and Chen (1995) used the Galileo multidimensional scaling model to explain
behaviours of individuals by certain molar characteristics of an organization.
Data were collected from faculty members of two colleges in a large East Coast
University in the United States. Three hundred and fifty seven questionnaires were
distributed with 142 responses yielding a response rate of 39.78% (sic). Cronbach
Alpha for the instrument was $\alpha=0.95$, showing high reliability co-efficient.
Respondents included academics from various levels within the university.
Findings showed that faculty members who communicated more with their colleagues reported less psychological distance between themselves and the university. This study highlighted the role of communication in enhancing the climate in an organization.

The study also illustrated that the organizational climate construct is based on an assumption that individuals within a given subsystem or organization at a given hierarchical level should have similar perceptions about their climate.

Patterson et al (1996) conducted a study on collective climate perceptions based on a sample of respondents drawn from two construction companies. Respondents included employees who worked in the office and on company sites.

Using a multi-method approach, organizational climate was measured by performing a cluster analysis using business organization climate index. The index measured eight attributes of organizational climate: administrative efficiency, rules orientation, egalitarianism, questioning of authority, and management concern for involvement, task orientation, readiness to innovate, and sociability. Findings showed that two climate dimensions indicated that employees in different roles have different experiences that influence climate perceptions. The study supports these findings by McMurray and Dorai (2002) and showed that employee roles influenced climate perceptions, and learning styles of employees in the Australian manufacturing and hospitality industry. From the review, it was found that few empirical studies have established a relationship between quality management and organizational climate.
2.10.6 Measures of Organizational Climate

The review of literature showed that measures of organizational climate are at times contradictory. The review further showed that most research studies have used perceptual measures of organizational climate. Objective measures of climate do not rely on individual perceptions of dimensions in a particular work environment. It was found that measures of organizational climate employ structured perception questionnaires. This is supported by a review of thirty-one studies that utilized organizational climate construct as a key variable (Hellreigal 1974). The studies were reviewed in terms of the following dimensions: author, sources of studies, instrument or means of measuring climate, a brief description of sample population, and the methodology of climate construct.

A common thread that was seen in all climate instruments was the use of several common dimensions which included autonomy, structure, reward, consideration, warmth and support, characterized them.

Most instruments used nominal scales. The sample population used in development of climate instruments is generally drawn from middle or lower management. There were other instruments with only a few dimensions of organizational climate (Burns and Stalker, 1961).

Freidlander and Marguiles (1989) studied the multiple impacts of organizational components and individual job values upon worker satisfaction levels. Data were gathered from 95 employees of a research and development organization.
The study used three separate measuring instruments. One measured eight dimensions descriptive of organizational climates, the second measured value or importance to each individual of three major areas of work, and the third measured individual satisfaction with the same three areas of work.

The instrument used in this study was Halpin and Crofts Organizational Climate Description questionnaire (OCDQ). Research in the area of climate was greatly facilitated by the development of the Organizational Climate Description Questionnaire.

The development of the OCDQ led to an increase in the number of studies undertaken by educational researchers who studied climate in the context of education. The OCDQ was originally designed to measure the extent eight organizational climate dimensions in a public school. A revised OCDQ questionnaire was used so that dimensions of climate could be applied to any organizational setting.

Four dimensions were used to describe member behaviour and four to describe supervisor behaviour. One hundred and fourteen questionnaires were distributed to four departments representing the organization. Ninety usable responses yielded a response rate of 83%. Three analyses were performed, and findings proved that organizational climate seemed to have a greater impact on satisfaction with interpersonal relationships than on either of the other two types of satisfaction. Satisfaction with recognizable advancement correlated moderately with organizational climate.
Of the eight dimensions of organizational climate measured, espirit was most highly related to job satisfaction although this relationship differed significantly among the other three types of satisfaction.

Hellreigel (1974) reviewed a range of climate instruments that were used to measure climate.

The number of items used in instruments ranged from one to a high of 254, with a bulk of the instruments consisting of 20 to 80 items. Most instruments have been used in a variety of contexts.

Mylles (1996) studied climate in the Belgian armed forces. Using the Organizational Climate Index (OCI) for military units, data were collected from all levels of armed forces employees. The OCI had 202 items, and climate was measured against two independent bipolar axis (1) orientation towards the realization of goals, (2) orientation towards the human development (3) orientation towards stability and (4) orientation towards flexibility. The combination of four orientations defined four basic types of organizational climate. Findings demonstrated that organizations that were employee-oriented and flexible had supportive climates. The findings further showed that that the armed forces scored well below the average commercial organization on all types of climate. In addition, the study showed that there was no difference between male and female personnel soldiers in the perception of climate.

Shadur, Kiezle and Rodwell (1999) studied relationships between organizational climate and employee perceptions of involvement.
Organizational climate is a key part of organizational context and their study used Organizational Culture Index (OCI). A three-measure dimension of organizational climate was developed based on the works of Litwin and Stringer (1968).

They conclude that bureaucracy, support, and innovation overlapped with practice dimensions such as conventions, habits, and mores in their multi-dimensional model of organizational culture.

According to them, the OCI is a measure of climate, and is a 24 item adjectival trait questionnaire. Each dimension was measured using eight adjectives on a five point Likert scale. Employees working in an information technology company collected data using a self-report survey. The response rate was 81.8 percent. Employee attitude variables included job satisfaction, organizational commitment, and stress.

Involvement variables included communication, participation in decision-making, and teamwork. The results showed that a supportive climate was a significant predictor of three involvement variables: participation in decision-making, teamwork, and communication.

The results further showed that organizational climate, when broken into its various sub-components, can be used to determine the effectiveness and progress of management systems such as employee involvement programs within an organization. The study concluded that organizational climate should be regarded as a complex indicator of organizational perceptions that can be used to better manage an organization and its employee involvement systems.
The importance of climate in the hospitality industry has also been highlighted by a number of theorists who examined the effect of climate in service responsiveness. Organizational climate was measured using a Ryder and Southey’s modified version of the James and Jones (1974) Psychological Climate questionnaire, and adjusted to the hotel context.

The modified instrument had 70 items on a seven-point Likert scale. The survey instrument was distributed with a letter of support from the hotel manager. Findings from this study showed that, within the hotel industry poor levels of customer satisfaction are noticed by employees, prior to formal feedback on the quality of service. The study further explains that employees working in a better organizational climate are more likely to perceive customers as being more satisfied.

Initially, James and Jones (1974) developed the items for their climate survey instrument after an extensive review of the literature. They identified 35 concepts that related to organizational climate. Eleven concepts were related to job and role characteristics, eight related to leadership characteristics, four to work group characteristics, and twelve comprised sub-system and organizational level characteristics. For each of these concepts, between two and seven items were generated. This process produced a 145-item questionnaire.

A pilot study was conducted to administer their instrument to a large sample of 4315 US Navy personnel. Exploratory Principal Components Analysis produced six factors. Jones and James labelled their factor as conflict and ambiguity, job challenge,
importance and variety, leader facilitation and support, work group co-operation, friendliness and warmth, professional and organizational esprit, and job standards. Garavan, (1997) studied the relationships between the organizational climate of school and student creativity.

This study used the OCDQ to evaluate the climate of various schools and the Tortance Tests of creativity. Findings illustrated that creativity was positively related to open climates in schools, and negatively related to closed climates. The intimacy and trust dimensions of the OCDQ were positively related to creativity, while disengagement and production emphasis were negatively related. Hindrance, esprit, aloofness and consideration were not related to creativity.

This study also showed that no significant relationship existed between organizational climate and teacher behaviour. However, a significant relationship existed between the principal’s period of service in a school and its climate. The size of the school was also a variable considered in relationship to organizational climate.

2.10.7 Climate and Culture

Many empirical studies attempted to differentiate between climate and culture. While concepts of climate and culture were perceived to be similar, culture refers to deeper unconsciously held assumptions that help to guide organizational members (Johnson, 2000; Glisson and James, 2002, Isaksen and Lauer, 2002). In contrast, climate refers to shared perceptions of organizational policies, practices and procedures that are both formal and informal (Schneider and Reichers, 1983 Schein, 1985).
Glick (1985) distinguishes between climate and culture based on their methods of analysis. Climate research is usually nomothetic and is measured using quantitative techniques, whereas culture research tends to be idiographic and is usually measured using qualitative methods (Schein, 1996).

Climate is characterized as a manifestation of culture (Schein, 1996) and is a shared phenomenon within a group or community, and due to its embedded nature is difficult to measure whereas climate is regarded as an individual construct that reflects and is based on personal values (Denison, 1996) and although somewhat easier to capture, has its difficulties in measurement and definition.

Denison (1996) differentiated between climate and culture based on methods of study. According to Denison studying culture requires qualitative research methods, where culture researchers are more concerned with the evolution of social systems overtime (Van Maanen, 1979). According to McMurray (1999) climate and culture are inter-subjective.

Climate researchers have been generally concerned with evolution but are more concerned with impact that organizational systems have on groups and individuals (Koys and Decotis, 1991).

Unlike culture researchers, climate researchers typically place greater emphasis on organizational members perceptions of observable work practices and procedures that are closer to the surface of an organization’s life (Guion, 1973).
Another difference between culture and climate is that culture refers to the deep structures of organizations, which are rooted in values, beliefs and assumptions held by organizational members. Climate, on the other hand, portrays organizational environment as being rooted in an organization’s value system, these social environments are presented in relatively static terms.

Guion (1973) chose to name the organizational climate continuum as ‘open’ or ‘closed’. An open climate is characterized by functional flexibility, where esprit, trust and consideration are high disengagement, hindrance, production emphasis and aloofness are low, and intimacy is average. A closed climate is characterized by functional rigidity, where hindrance, disengagement, production emphasis and aloofness are high, esprit, thrust and consideration are low, and intimacy is average.

Altman (2000) identifies different work environments that can be used to assess organizational climate. These included job characteristics, role characteristics, organizational characteristics, leader characteristics and work group characteristics. Johnson (2000) studied differences in supervisor and non-supervisor perceptions of quality culture and organizational climate in a large government agency. Climate and quality were measured using a quality culture and organizational climate survey. The quality culture section of the survey measured the extent to which employees perceived that quality improvement principles and practices were implemented in the organization in which they worked. The organizational climate section of the survey measured various aspects of the work environment that supported the implementation of quality improvement principles and practices. Findings showed that supervisors perceived all aspects of quality culture and organizational climates more positively.
than did non-supervisors. The findings of Johnson’s study are strongly related to the structure of the organization, and the prescribed traditional roles of supervisors and non-supervisors in the performance of their work. Their study contradicts the findings in a study by Dorai and McMurray (2002), which concluded that creativity and innovation occurred more at managerial, and at worker level, but was low at supervisory level. This is because supervisors in organizations implement decisions made at the top and hence have no opportunity to be creative. These findings can also be attributed to employee perceptions of work environment (Sommers, Hyueng Bae and Luthans, 1997).

### 2.10.8 Leadership and Organizational Climate

The relationship between leadership and climate was established by Tierney (1999), who used the leader-member exchange theory of leadership and supervisor-employee relationships. His study looked at how the nature of the relationship, how supervisor climate views influenced employee perception of change. The sample for Tierney’s study included 240 employees from all levels of the hierarchy in human resources, engineering, marketing, and business development and operations departments. Two hundred and forty questionnaires were distributed, with 157 usable responses yielding a response rate of 65.4%(sic). Data were collected through self-administered surveys distributed on site. The quality of supervisor-employee relationship was studied using a seven item LMX instrument, on a five point Likert scale, with a Cronbach Alpha of $\alpha=0.90$. Team relational quality was assessed using an instrument developed for an earlier study with a Cronbach alpha $\alpha=0.82$. Employees provided their perceptions of supervisor-employee and team-employee relationship quality.
Climate was assessed using an 18 item six point scale instrument, consisting of four subscales with Cronbach alpha $\alpha = 0.92$.

The combination of correlation, multiple and moderated regression analysis showed a significant positive relationships between LMX, team quality, team climate perceptions and employee change climate.

Further the findings proved that supervisors climate perceptions were not significantly correlated with those of employees, nor were employee’s hierarchical levels. It was also found that Leader-member exchange was positively associated with employee perceptions of a climate for change ($\beta = 0.29$). The findings further showed that leader climate was not significantly associated with climate perceptions as predicted, with $\beta = -0.01$. This study illustrates the importance of organizational climate and of employees’ and supervisors’ perceptions that their work environment is characterized by risk-taking, open communication, trust, operational freedom and employee development, five necessary conditions and for development of individuals and organizational change.

As mentioned earlier, Ryder and Southey (1990) identified the importance of climate in the hospitality industry with its linkages to an organization’s service responsiveness.

Davidson, Manning and Timo (2001) provide empirical evidence that organizational climate is an under utilized hotel management tool in understanding the relationship between employees perception and hotel performance.
The literature revealed that climate studies in the Pacific Rim, including Australia, are few and limited and that great disparities or gaps in perceptions in the areas of recognition, empowerment and involvement, decision-making, creativity and innovation, and labour management exist. In addition, the literature review identified different units of measure of organizational climate, and very few studies were conducted in the Australian context. Furthermore there were no studies in the Australian context that established the relationship between OC, OI and OL. This has led to the following research questions:

- What is the organizational climate in the hotel industry in Melbourne?
- Is there a relationship between organizational climate and other variables such as learning and innovation?

2.10.9 Summary

The purpose of this section is to review the literature on organizational climate and identify gaps in previous research. The literature reviewed undertaken has led to a number of conclusions. Climate has been researched as an independent psychological construct in educational settings but and research in the hotel industry is limited. In climate literature there has been no accepted measure of climate was uncovered which led to contradictions and misinterpretations. In many studies, climate has been confused with culture leading to ambiguity.

Empirical research on climate has largely been confined to the USA, and individual studies being conducted in Europe and other Asian countries. Climate literature is very scanty from the Australian perspective. The concept has been not been researched with other employee related constructs such learning and innovation in the
Australian context. The present study addresses this gap.

In addition, it uncovered gaps in the literature in the hotel industry nationally and internationally and formed research questions for this study. It was found that little or no empirical research was conducted that established relationships between organizational learning, organizational innovation and organizational climate in the hotel industry in Australia. Therefore, it was appropriate to use the hotel industry as a potential area for management research. Most of the studies in this industry are related to hotel performance and customer satisfaction. This study attempted to fill the gap in the empirical research in the Australian hotel industry.
Chapter Three

3.0 Research Methods

3.1 Objective
The objective of this chapter is to present the research method used to conduct this multi-method study.

3.2 Introduction to the Research Methods
Qualitative and the quantitative methods are based on different research paradigms or approaches in the social science research and are often seen as extreme positions of the same continuum (Suen, 1989; Sekaran 1992; Sarantakos, 1993; Hussey and Hussey1997; Neuman , 2000, Flynn and Research, 2000; Fielding and Schreier, 2001).

Neuman (2001) argued that both methods have the same origin, that is; quantitative methods are a simplification of qualitative methods and can only be meaningfully employed when qualitative methods have shown that simplification is possible.

3.3 Qualitative Approach to Social Science Research
Qualitative research attempts to capture reality as it is perceived by participants and produces descriptive data that describe meaningful human actions (Sarantakos,1993).
Qualitative research relies heavily on interpretive and critical research (Neuman, 2000, Anonymous, 2001).

Supporters of qualitative approach view it as an alternative to positivism, and they accentuate the importance of the social environment in understanding the social world (Marsh, 1982; Hussey and Hussey, 1997; Brower, Abolafia, and Carr, 2000; Neuman 2000).

The meaning of a social statement is dependent on the context in which it occurs. Since the entire process of understanding the research phenomena takes a narrative standpoint, the qualitative approach most often uses case study as a research tool to explore a research question.

Jacob (1984) identifies six domains of qualitative research: (1) the human ecology domain uses the observational technique to study the behavioural patterns demonstrated by people in their everyday life, (2) the ecology psychology domain studies the relationship between people and their environment in order to identify how they shape their lives, (3) the holistic ethnography uses participant observation to study the effects of culture on people, (4) the cognitive anthropology domain employs in-depth interviewing to study people’s perspectives as organized in schemata and categories of meanings, (5) the ethnography or communication domain is related to linguistics and interested in verbal and non-verbal interaction (6) the symbolic interactionism domain which is interested in how people make sense of their world and assign meanings in interaction with others.
Whilst the qualitative approach has many strengths, it has the following limitations in that, it suffers from extreme subjectivity, it is time consuming, has potential danger of collecting meaningless and useless information and has problems of ethics, in entering the personal arena of participants.

For a few writers, the qualitative methodology is perceived as an easy way of doing research, a soft option, while quantitative methodology is seen as very complex and demanding (Deshpande, 1983; Hussey and Hussey, 1997).

Qualitative methodology is less structured than quantitative methodology. In qualitative research, the researcher takes on a more active role than in quantitative research. In this study, this was observed when the researcher conducted personal interviews with employees who were at management levels in these hotels. The interview process involved the use of a semi-structured questionnaire on respondents. The questions were open-ended and were aimed at obtaining different perspectives on issues that employees faced in the work environment.

### 3.4 Quantitative Approach to Social Science Research

Quantitative research is based on positivistic and neo-positivistic paradigms and uses the language of variables, hypotheses, units of analysis, and causal explanations. Structure, process and theoretical background of quantitative research have constituted standards for social science methodology for several decades (Neuman, 1995).
Historically, positivism is based on natural science phenomenon. The origin of this approach is traced back to early nineteenth and twentieth centuries from works of sociologists like Comte and Durkheim (Hussey and Hussey, 1997). Positivism explains causal relationship between variables by establishing causal laws and linking them to deductive or integrated theory.

This study broadly adopted a functionalist paradigm to answer the six research questions.

- What is the relationship between organizational learning and organizational innovation in the Australian hotel industry?
- What is the relationship between organizational learning and organizational climate in the Australian hotel industry?
- What is the relationship between organizational climate and organizational innovation in the Australian hotel industry?
- What is the relationship between the demographic variables (e.g. area of employment, nature of employment and the country of origin of employees) and the dependent variables – (organizational learning, organizational innovation and organizational climate)?
- What are the relationships among organizational learning organizational innovation and organizational climate in the Australian hotel industry?
- Can the dimensions of organizational learning; organizational innovation and organizational climate predict one another?
By using the functionalist paradigm, this research attempted to provide an explanation for the relationship between three variables: organizational learning, organizational innovation and organizational climate. Burrell and Morgan (1994) and Gioia and Pitre (1990) postulate that functionalist paradigm of which positivism forms one aspect, is characterized by a concern for providing an explanation for social phenomena and finding the cause and effect between two variables. In essence it seeks to provide a rationale explanation of social events around us.

The functionalist approach is deeply rooted in sociological positivism. It assumes that the social world is composed of relatively concrete empirical artefacts that can be identified, studied and measured through approaches derived from natural sciences. The quantitative approach is subjected to many criticisms. Some criticisms are that social phenomena do not exist external to individuals but lie in interpretation of individuals, method of research plays a significant role, methodology in this approach is established and determines what is to be studied (De Vaus, 1994; De Leeuw and Mellenbergh, 1996).

The present study uses a multi-method approach. It predominantly uses quantitative methodology supported by qualitative research using theme category analysis.

3.5 Research Design for this Study

The present study is a co-relational research in that it attempts to establish a correlation between organizational learning, organizational innovation and organizational climate in the Australian hotel industry. This study was conducted in
Australian hotels located in Melbourne, Australia. The field study was conducted in the form of a survey.

Sarantakos (1993) states that research design is based on research models that are rooted in the assumption that research is perceived as a sequence of steps closely inter-related, and the success of one step is dependent on completion of preceding step.

Research models help researchers to conduct their research in a systematic way (Cook and Reichardt, 1989; Hussey and Hussey, 1997).

A research design helps researcher draw boundaries for research, by defining study setting, type of investigation that needs to be carried out, the unit of analysis and other relevant issues related to research. Hussey and Hussey (1997) state that research process can be successful, only if the researcher makes the right choices in the research design. In following paragraphs each stage of the research design will be discussed in detail.

This study adopted a research design model developed by Sekaran (1992). The research design adopted for this study was based on the hypothetico-deductive method. This method starts with a theoretical framework, formulates hypotheses and makes logical deductions from the results of the study (Sekaran, 1992). The hypothetico-deductive method broadly divides a research design into a series of steps that lead to answering the research questions (Neuman, 1995). It modified Sekaran’s research model by combining steps to suit the context of the study. The models was
adopted due to its simplicity and at the same time its comprehensive approach to conducting social research.

Having a systematic research design enabled the researcher to clearly define boundaries for research, which assisted in answering the research questions.

Figure 3.1 list the step-by-step process, based on Sekaran’s model (1995) of the research design that was used to conduct the study.
Figure 3.1 Research Design for the Study

- Preliminary data gathering (review of literature)
  - Identifying gaps and defining key concepts

- Generation of hypotheses
  - Defining the variables

- Defining the research question
  - Identifying the context for the study

- Developing the theoretical framework for the study

- Instrument development
  - Items and Scaling
  - Pilot study (Testing the instrument)
  - Reliability and Validity of the Instrument

- Fieldwork (establishing contacts with hotels)
  - Unit of Analysis (Population and Sampling)

- Conducting the workplace survey
  - Interviews and observations

- Analysis and findings of the Research

- Qualitative
- Quantitative

- Discussion on findings and Recommendations

- Future directions for research
The above research design describes the hypothetico-method that leads to answering the research questions and justifies the hypotheses. The research process started with included extensive library research helping the researcher create an awareness of the research topic. This helped to define the research question and generate the hypotheses for the study. Developing the instrument involved a pilot study to check its reliability and validity. Data collection included fieldwork and the implementation of the workplace survey. Qualitative data was analysed using theme category analysis, while quantitative data was analysed using SPSS(v.10). The study concluded with an extensive discussion and findings suggesting recommendations for future research.

3.6 Preliminary Data Gathering

3.6.1 Literature Review

The literature review is a written analysis of findings from studies that have been carried out on a topic of interest and helps the researcher to define and focus the boundaries of research (Sekaran, 1995; Marsden and Littler, 1996; Hussey and Hussey, 1997;).

Findings from a preliminary study influenced research questions and research design for the present study. Other factors that influenced the researcher were Federal Government initiatives in encouraging workplace innovation in Australian organizations.

The literature further revealed that the work environment was assumed to be a contributing factor to learning and innovation. This assumption and findings from a research paper presented by Dorai and McMurray (2001) led the researcher to include organizational climate as another variable for this study.
According to Sekaran (1992), reviewing literature on research topics helps a researcher to define and focus the boundaries of research. The present study achieved the goals of a literature review by familiarizing the researcher with the body of knowledge. The researcher then integrated and summarized what was known in the subject area in order to learn from other empirical and theoretical research (Neuman, 1994).

Literature reviews may be classified into six types: self-study review, context review, historical review, theoretical review, methodological review, and integrative review (Neuman, 1994). The literature review for this study included a combination of all the above types in relation to three dependent variables: organizational learning, organizational innovation and organizational climate.

The above strategies were considered important by the researcher hence both International and Australian literature related to dependent variables was examined. Sources of literature for this study were primary and secondary, including literature from hotel newsletters and documents text-books, academic and business journals in Australia and world wide, international and national conference papers, reports, published statistics, company’s annual reports and accounts, internal records, and electronic databases were accessed world wide.

A computer search was supplemented by manual search that was conducted by visiting libraries and searching through online catalogues. Statistics for the hospitality industry were obtained from seven databases.
They were ABI Inform, EBSCO Host, Proquest, Austats (database of Australian Bureau of Statistics) IDEAL, Emerald and Infotrac.

According to Sekaran (1995) online databases are advantageous such as saving time, accuracy in reviews of references, and relatively low cost. Online searches are thorough in their reviews of references and focus on material that is central to the research effort.

The literature search also included Bibliographical Indexes that gave the researcher access to Psychological Abstracts, Business Periodicals Index, and Dissertation Abstracts (international and Australia wide).

### 3.6.2 Defining the Research Questions

Defining research questions is essential and contributes to an exploratory phase in the research process (Hussey and Hussey, 1997; McPhee, 2002).

The research questions for the present study were based on gaps found in the literature on organizational learning, organizational innovation and organizational climate, in the Australian hotel industry. A positivistic approach to research suggests specific research questions, followed by a number of hypotheses that could be tested regarding the relationships among variables.

The formulation of research questions is considered critical in the process of refining the thesis topic (Sarantakos; 1994).
The fundamental research question in this study was the following:

What are the relationships among organizational learning, organizational climate and organizational innovation in the Australian hotel industry?

3.6.3 Generation of Hypotheses

A hypothesis is defined as a logically conjectured relationship between two or more variables expressed in the form of testable statements (Sekaran, 1995; Sarantakos, 1995). The formulation of hypotheses enabled the researcher to build a clear framework and guide for collecting, analysing, and interpreting the data (Sarantakos, 1995).

Hypotheses should be empirically testable, clear and precise, and should be able to establish the relationship between variables (Sarantakos; 1995)

In this study, the null hypotheses were eliminated, as the primary objective of the study was to establish the relationships among three dependent variables: OL, OI and OC. Hence, the need for the null hypotheses was eliminated (Sekaran, 1992, Hussey and Hussey, 1997.)

From the literature the following six hypotheses were formulated:

- H₁: There is a significant relationship between organizational learning and organizational innovation in the Australian hotel industry.
- H₂: There is a significant relationship between organizational learning and organizational climate in the Australian hotel industry.
• H3: There is a significant relationship between organizational innovation and organizational climate in the Australian hotel industry.

• H4: There is a significant relationship between demographic variables (areas of employment, nature of employment and country of origin) and dependent variables

• H5 There is a significant relationship between organizational learning, organizational innovation and organizational climate in the Australian hotel industry.

• H6 The dimensions of organizational learning, organizational innovation and organizational climate are predictors of one another.

Sekaran,(1995) concludes that hypotheses-testing in studies attempt to explain cause and effect relationships among variables. The formulation of the above hypotheses led to the development of the research design for the study. Sekaran (1995) describes a research design as a series of rational choices in order to conduct the research.

Studies in social science research can be descriptive or exploratory, or conducted to test hypotheses (Sekaran, 1992). This study attempts to uncover and understand the relationship between organizational learning, organizational innovation and organizational climate in the context of the Australian hotel industry.

The objective of this study was to help the researcher understand the ways in which dependent variables work in a particular context (Hussey and Hussey, 1997). Although this study is descriptive it tests the hypotheses and provides an insight into working practices that operate within hotel industry in Melbourne, Australia.
The study endeavoured to answer the research questions by examining the relationship among organizational learning, organizational innovation and organizational climate in the Australian hotel industry.

3.7 Research Context-The Australian Hotel Industry

The hotel industry in Australia is particularly labour intensive and therefore is conducive to quantitative and qualitative research. As Hussey and Hussey (1997) comment quantitative data analysis allows the researcher to recognise and evaluate errors involved in quantifying our experience. As the present study adopts a positivistic paradigm quantitative method seemed appropriate to use to collect data. Neuman, (1995) notes quantitative approaches such as surveys and interviews need to have labour oriented contexts, in which responses help draw definite conclusions for the study.

As organizational learning, organizational innovation and organizational climate are employee related constructs; the hotel industry was found conducive to undertake this study. However, quantitative data was supported with the collection of qualitative data. Qualitative data my also be used in research using a positivistic paradigm. Supplementing quantitative data with qualitative provides richness and gives insight into numerical data (Hussey and Hussey, 1997).
3.8 Theoretical Framework for the Study

The theoretical framework for this study embraced a logically developed, well described and an elaborated network of associations among variables.

Variables are central to quantitative research. A variable is an attribute of an entity that is chosen as a unit of analysis (Sarantakos, 1994; Neuman, 1995; Hussey and Hussey, 1997)

Variables are broadly classified into, independent, dependent and intervening (De Vaus, 1994). An independent variable is one whose values are manipulated to predict the values of the dependent variables. The values or categories of variables are its attributes. The independent variables included demographic variables such as age, gender, areas of work, country of origin and educational background of employees, and levels of employees within the organization. A dependent variable is one whose values are predicted by independent variables. The language of quantitative research is a language of relationships among variables.

Applying Sekaran’s (1992) principles for developing of a good theoretical framework, this study identified three dependent variables: organizational learning, organizational innovation and organizational climate.

Organizational learning is measured along four dimensions: learning practices, information sharing patterns, inquiry climate, and achievement mindset (Pace, 1997).
Organizational Innovation is measured along four dimensions such as organizational innovation, innovation climate, team innovation and individual innovation (Becker and Whisler, 1967).

Organizational Climate is measured along eight dimensions such as pressure, support, autonomy, trust, cohesiveness, fairness, and recognition. (Koys and De Cottiis, 1992).

Based on the literature review, organizational learning was based on Levitt and March’s (1988) definition of organizational learning, from the process perspective. Similarly, organizational innovation was perceived as a process that takes place at different levels in the organization (Slappendel, 1996). Organizational Climate was defined as a psychological construct that is the way employees in the hotel industry perceive the work environment around them (Koys and DeCotiis, 1992).

The integrated model in Fig. 3.2 shows the relationship between the three dependent variables. The model proposes that dimensions of organizational learning, innovation and climate are closely integrated with each other.
3.9 Rationale for Sampling

In an empirical study that uses a positivistic approach, selecting a sample is a prerequisite (Hussey and Hussey, 1997). A population is a body of people or any other collection of items under consideration for the purpose of the study (Hussey and Hussey 1997).

A sampling is a fraction of subjects drawn from a population. It enables the researcher to study a relatively few number of subjects from the population in an attempt to obtain data that are representative of the whole target population.

Sampling in a study offers detailed information and a high degree of accuracy because they deal with relatively small number of units, (Sekaran, 1992; Hussey and Hussey 1997; Neuman, 2000). The advantage of choosing several organizations in a single industry is to minimize significant sample heterogeneity (Chryssochooidis and Wong, 2000).

Homogenous sampling enabled the researcher to minimize demographic biases in terms of respondent skills and experience. Since samples are expected to be representative, they have to be chosen in a systematic way. Sampling for this study went through the following four steps:

3.10 Identifying Population Sample

The population for the study included all employees working in the Australian hotel industry located in Melbourne.
It was decided to restrict the population sample to Melbourne for two reasons: time, and distance.

To maintain anonymity the hotels were not identified. The population sample included hotels, belonging to the leisure and hospitality arm of the International Brewery Group which owns and operates more than 135 hotels and 100 detached bottle shops in key locations in the populous suburbs of Australia's major cities.

3.11 Sampling Process

The sample for this study included employees from all categories of employment (full-time, part-time and casual), and employed at all levels (managerial, supervisory and employee).

The researcher made contact by telephone with owners and HR Managers of these hotels, and upon receiving a positive response from the hotel management an interview time was organized. For the International Brewery Group, the researcher initially mailed a copy of the questionnaire to the HRM manager.

The HRM manager and the owner managers of these hotels drew samples for this study using a systematic random sample of employees.

This minimized researcher interference in selecting the respondents for the study and helped the researcher in procuring data that could assist in findings and conclusions. One of the limitations of this strategy was the probability of contamination of data by owners and HRM managers.
However, the hotel management involved in selecting the sample size helped the researcher reduce sample bias (Hussey and Hussey, 1997).

The survey was distributed to 800 respondents, with 600 usable responses received giving a response rate of 75 percent. The sample size of 800 was adequate for reducing into sub categories, as it exceeded 30 in number with a demographic profile for each sub category. The sample size of 800 supports Roscoe’s (as cited in Neuman 2000) rule of thumb for determining the size of the sample.

### 3.12 Profile of Population Sample

Demographic data were tabulated using frequencies. 45.3 % of respondents were males and 54.7 % were females. It was found that 20.2 % of the respondents were managers, while 23.1 % of the respondents were supervisors and 56.7 % were employees. Of the respondents 31.8 % worked day shift, 5.7 % worked afternoon shift, 10.4 % worked night shift. More than half (52 percent) worked on rotating shift. The HR Manager stated that Administrative employees worked only in day shifts, while employees in housekeeping, front office and maintenance employees worked on rotating shifts.

The structure of these hotels was divisional and was bifurcated into many areas. Hence, areas were categorized further into five areas based on the similarity of the functions.

This analysis showed that 46.3 % worked in the kitchen and food and beverage area. 28 % of the respondents worked in the Gaming area, Administration (HR and
Finance) area, housekeeping and in front office accounted for 9.7% to 16.8% of the respondents.

Full time workers accounted for 54.9% in the study, 31.5% worked as casual employees and 23.6% were part-time employees.

The qualitative data supported this, on interviewing the HR manager it was found that employees working in the kitchen, especially kitchen-hands were mostly casual. Similarly, room attendants in the housekeeping area were casual employees, too.

It was found that 34.7% of the respondents had 0-3 years of experience, and 32.2% of employees had 4-8 years of experience, 19.9% of the employees had 9-12 years of experience. The findings also showed that 5.4% percent-7.9% of employees had experience between 13-16 years and above.

The study further showed that 62.1% of the employees belonged to the age group between 21-35 years of age, while 24.6% were below 45 years, 13.3% were above 45 years, showing that the hotel industry is made up of a younger composition of the workforce.

62.5% of the respondents were educated below the VCE level, and 19.7% held certificate, trades and diplomas related to the hospitality field. 17.8% held undergraduate and post-graduate degrees. The findings showed that employees in the accounts and finance and human resource areas possessed undergraduate and postgraduate degrees. It was found that 73.2% of the respondents were Australians, New Zealanders and Pacific Islanders, 17% constituted Europeans and 12.5% were
Asians. Percentage distribution of respondents according to gender was 54.7% were females and 45.3% of the respondents were males.

3.13 Conducting the Workplace Survey

Survey research was used within the positivist approach to collect quantitative data. The origin of survey research can be traced back to the ancient form of the census. Survey research grew popular during World Wars I and II, and has gained further momentum since the 1970s (Neuman, 1995, Hussey and Hussey, 1997) due to its convenience of handling. The distinguishing feature of surveys is forms of data collection and methods of analysis, which are often linked to computers.

Surveys are limited by inadequate causal connections amongst variables, and are too restricted because they rely on highly structured questionnaires; survey researches can also be manipulated. Since the present study drew a sample from a cross-section of hotel employees, however it was appropriate to use the survey method. The survey method enabled the researcher to obtain a wide sample from a large population.

3.14 Design of Workplace Survey

As mentioned earlier, the Australian hotel industry is composed of work force that is varied in terms of skills and knowledge. Hence, language used in this survey was kept simple and user friendly in order to maximize response rates. The instrument was titled ‘Workplace Survey’. This title gave a very generic flavour to the entire process of data collection by using a terminology that was relevant to their workplace.
The survey questionnaire was divided into three main sections. The first section included an introductory paragraph, which outlined the purpose of the survey. The management of the hotels and the respondents were made aware that their participation in the study was purely voluntary, instructions on how to complete the survey, were spelt out clearly. The second section of the questionnaire included the scales that measured the three dependent variables.

The variables were put in a sequence with organizational learning, organizational innovation, and organizational climate. The organizational climate scale was placed last as questions in the climate scale were sensitive in that they related to relationships with supervisors.

In order to avoid central tendency error, items in the questionnaire were mixed up so that the respondents at any point could not identify what was being measured.

The third section of the workplace survey consisted of the demographic profile of the respondents. This information was placed in the last section to reduce any inhibition employees might have felt had their personal details been put first.

The demographic profile section included information on levels of employees, their position in the organization, years of experience, gender, age, and educational qualifications and the country of origin of employees. The demographic variables were used as independent variables for this study.
Questionnaires were returned in self-addressed envelopes to the researcher. For the sample drawn from the International Brewery Group, a letter of support that included the researcher’s contact details was given to managers of every hotel. The respondents were given four weeks to complete the questionnaire, after which the researcher made a follow-up call to these hotels. An extension by a week was granted to hotels that provided good responses.

3.15 Qualitative Method of Data Collection

Qualitative data were gathered through semi-structured interviews. This method was adopted because face-to-face interviews provide rich data, offer an opportunity to establish rapport with interviewees, and help to understand the complex issues of learning, innovation and climate (Sekaran, 1995). The interviewees were selected through random sampling to minimize the researcher’s bias. However, position, experience, country of origin, age and gender were used as criteria to select interviewees. An introductory letter that explained the purpose of the interview was sent to the management of the hotels. The management of the selected hotels then chose the respondents for the interviews. Thirty respondents were interviewed. Interview times were based on the shift timings and convenience of the respondents. The researcher then contacted the shift supervisor to confirm the appointment. Each interview lasted twenty to thirty minutes. Although questions were open-ended and structured they were not asked in sequence in order to avoid the respondents giving any preconceived answers.
As the questions were open ended, the researcher was able to elucidate information from the respondents very easily. The researcher sought permission to record the interviews but the management of the hotels did not grant permission. Questions referred to the respondents’ work and their perceptions on learning, creativity, innovation and climate.

For example, questions asked included “Can you describe your relationship with your boss? This question was designed to obtain information about the climate of the work environment.

3.16 Ethical Issues in Social Science Research

In social science research, ethics plays an important role as the research involves human subjects. Neuman (1995) notes that the researcher’s right to conduct research among human subjects is governed by a responsibility on the part of the researcher to guide, protect and oversee the interests of the people being studied.

The Swinburne University of Technology Ethics Committee guided the ethical issues in this study, which adhered to the expectations of the Ethics Committee. According to the Ethics Policy Guidelines of the Swinburne University of Technology, a plain language statement was attached to the questionnaire. The plain language statement was written in simple English and described the purpose of the research in a language that could be understood by the respondents prior to filling in the questionnaires.
The questionnaire also included an Informed Consent Statement, which explains to respondents their rights and obligations on completing the questionnaire. Although signed informed consent statements are optional for most surveys, in this study it was made compulsory by the management of the hotels. Shaskin and Prien (1996) note that in order to avoid ethical absurdity it is important to have support from respondents at all levels.

The management of the hotels was given a copy of the plain language statement. The management of the hotels that participated was assured of privacy, and the anonymity of respondents was ensured in the questionnaire. This was reinforced as all questionnaires were returned to the researcher by mail for processing.

Quantitative data was analysed using the SPSS (v.10). This program was chosen as it was user friendly and flexible and could provide the answers to the research problem. Theme category analysis was used to analyse the qualitative data. This method enables the researcher to categorise the responses from the interviews into themes which will then help the researcher draw conclusions.

3.17 Summary

This chapter described the research method adopted for this study. It also described the method of quantitative and qualitative data collection for the study. Quantitative data were collected through a workplace survey. The qualitative data were collected through interviews with randomly selected employees working in different hotels.
The appropriateness of the methodology adopted to collect the data contributed towards the high response rate of 75% thus providing sufficient responses for sound analysis.

The workplace survey was a structured questionnaire with demographic questions which included age, education, experience and gender.

The data gathering process took five months to complete. The employees of the hotels were given prior notification by management regarding the survey; this enabled the employees to be well prepared. Church and Waclawski (1998) affirm that this is the first step to gaining support for and commitment to the study. The respondents were given four weeks to complete the questionnaire.

Reminders were sent by telephone and email as a follow-up process to increase the response rate. This follow up process was completed in a fortnight.

Eight hundred questionnaires were distributed and six hundred usable responses were obtained, yielding a response rate of 75 percent. Ethical issues were addressed with guidance from the Ethic Committee in the University.
Chapter Four

4.0 Construct Development

4.1 Objective

The objective of this chapter is to outline the development of the constructs for the study. The chapter will describe the process undertaken in designing and modifying the constructs to suit the study.

4.2 Definitions of Dependent Variables

It was important to operationalize definitions of the three dependent variables - organizational learning, organizational innovation and organizational climate in order to answer the research questions for the study. The definitions were based on the literature review that was conducted on the dependent variables.

**Organizational Learning**: is a holistic process that encompasses learning practices, information sharing patterns, an inquiry climate and an achievement mindset of individuals in the workplace. Pace *et al* (1998)

**Organizational Innovation**: Defined as the process of interaction between individuals, organizations and the environment (Becker and Whisler, 1967 p45).
**Organizational Climate:** Is a relatively enduring characteristic of an organization which distinguishes it from other organizations and (a) embodies members collective perceptions about their organization with respect to such dimensions as autonomy, trust and 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 values and attitudes of the organization’s culture and (e) acts as a source of influence for shaping behaviour. (Koys and De Cottiis, 1992). These definitions laid the foundation for this study.

**4.3 Reliability of the Instrument**

The effectiveness of an instrument is measured along two dimensions-reliability and validity.

Reliability deals with an indicator’s dependability. A reliable indicator or measure gives the same result each time the same variable is measured. Reliability means that information provided by indicators does not vary as a result of characteristics of the indicator, instrument or measurement of the device itself.

Reliability may be classified into three types: First is stability and reliability across time. It addresses the question ‘Does the measure deliver the same answer when applied in different time periods? ’ This study is cross-sectional and hence does not attempt to answer the above question. Second type is representative reliability, which addresses the question ‘Does the indicator deliver the same answer when applied to different groups?’ (Neuman, 1995).
The demographic profile of respondents assisted the researcher in testing the representative reliability. The Cronbach Alpha for all three variables yielded high values for different populations, thus supporting this type of reliability.

The third type is equivalence reliability, which is when multiple specific measures are used in the operationalization of the construct.

Reliability is measured through reliability co-efficient. In this study the reliability of dependent variables was calculated using Cronbach Alpha. It is a widely used measure of reliability (Sekaran, 1992). Cronbach Alpha is a test of the consistency of responses to all the items in a measure.

To the degree that the items are independent measures of the same concept, they will be correlated with one another.

In this study the Cronbach Alpha value for the instrument was calculated using SPSS (version 10). The Cronbach Alpha value for the questionnaire or instrument, was $\alpha = 0.91$.

According to Sekaran (1992), an acceptable Cronbach Alpha value for an instrument is $\alpha = 0.60$, hence at $\alpha = 0.91$ the instrument was considered highly reliable.

In addition, reliability was tested for each of the dependent variables- organizational learning, organizational innovation and organizational climate.

The Cronbach Alpha for organizational learning was $\alpha = 0.94$ which showed high reliability, organizational innovation $\alpha = 0.88$, which showed high reliability, and organizational climate $\alpha = 0.91$. 
Alpha values for all the three dependent variables demonstrated that the instrument was highly reliable and could measure what was intended to measure (Sekaran, 1992).

### 4.4 Validity of the Instrument

The validity of an instrument is also known as measurement validity. It is the degree of fit between a construct and its indicators of it (Sarantakos, 1993).

It refers to how well conceptual and operational definitions complement each other (Neuman, 2000). The greater the fit the better is the measurement validity.

It is said that validity is more difficult to achieve than reliability. This can be attributed to the fact that constructs are abstract ideas (Neuman, 1995).

Validity is the extent to which research findings accurately represent what is really happening in the situation. According to Sekaran (1992) a test is valid if it demonstrates or measures what the researcher thinks or claims it does.

According to Hussey and Hussey (1997), when using a positivistic paradigm the focus on the precision of measurement and the ability to be able to repeat the experiment reliably, always results in the risk of the validity being low. In other words, measure does not reflect the phenomena the researcher is claiming to be investigating.

Neuman (1993) classifies validity into four types: Two of these are, face validity, which is the judgment by the scientific community that the indicator really measures the construct and content validity ensures that the measure includes an adequate and
representative set of items that would tap the concept. The more the scale items represent the domain or universe of the concept being measured, the greater the content validity. To summarize, content validity is a function of how well dimensions and elements of a concept have been demarcated.

For the purpose of this study validity was measured in terms of construct and content validity. Construct validity is directly concerned with the theoretical relationship of a variable to other variables. It is the extent to which a measure behaves in a way that the construct expects it to measure in regard to measures of other constructs. According to Sekaran (1992), construct validity proves how well the results obtained from the use of the measure fits the theories around which the test is designed.

The content validity of the instrument was tested using empirical data collected from the hotel industry. This study used three dependent variables: organizational learning, organizational innovation and organizational climate. All three variables were measured using a structured questionnaire.

4.5 Pre-test for Organizational Learning Profile Scale

Organizational Learning was measured using the Organizational Learning Profile developed by Pace et al (1998). The original Pace et al (1998) Organizational Learning Profile that was used to measure Organizational Learning consisted of 34 items. To establish construct validity, the 34-item questionnaire was administered to 169 respondents working in diverse industries ranging from banks to hospitals, Insurance companies, hotels, finance, education and automotive manufacturers.
The responses to the 34-items of Organizational Learning Profile were subjected to a Principal Components Analysis (PCA) using SPSS (Version 10). Prior to performing the Principal Components Analysis, the suitability of the data for Factor analysis was assessed using Kaiser Meyer Olkin Measure of Sampling Adequacy (KM) and Bartlett’s Test of Sphericity. Results showed that the data were suitable for further analysis as the Principal Components Analysis was carried out using Varimax with Kaiser Normalization.

A forced four-factor solution was obtained from data. The Principal Component Analysis with variance rotation yielded a total variance of 64.3 %explained across three factors. The Principal Component Analysis revealed the presence of four factors, with items having Eigen values higher than 1.0. The analysis resulted in factors that were slightly different from the original 34-item Organizational Learning Profile Scale. Comparison between the original OLP factors and the revised OLP factors revealed similarities and differences Adequacy (KMO) and Bartlett’s Test of Sphericity.

They were similar in terms of information storage and memory (items 1-6). They were different in terms of information dissemination and channels of dissemination. The revised OLP scale used in this study had the same number of items (34 items) but varied in their distribution across the four dimensions.

In the revised OLP, both male and female organization members have a role to play in the storage and sharing of information. In addition, this version also highlights the importance of information sharing in creativity and innovation.
The original OLP scale had a skewed distribution of items, with the majority of items loaded on Factor 1 and Factor 2. The revised OLP had an equal distribution of items, thus showing that organizational learning influences learning practices that prevail in organizations, achievement mindset of individuals, information sharing patterns that occur across organizations, and inquiry climate that is created in an organization.

Individual factors of the original OLP and the revised OLP were tested for reliability. Factor 1 of the revised scale, was learning practices demonstrated a Cronbach Alpha (\(\alpha\)) of 0.93. Factor 2, information sharing patterns had 10 items and demonstrated a Cronbach Alpha score of (\(\alpha\)) 0.92. Factor 3, inquiry climate had a reliability score of (\(\alpha\)) 0.88. Factor 4 was labeled achievement mindset and had a score (\(\alpha\)) 0.90. These show that the reliability scores of individual factors were high.

The names of revised factors were refined to account for the new clusters of items that were loaded onto each.

In renaming of the dimensions, Factor 1 was labeled Information Sharing Patterns. The items were analysed in terms of the information patterns they represented. This label is consistent with Huber’s (1991) and Levitt and March’s (1988) definition of organizational learning as the processing of information, with organizations learning if any of their units acquire knowledge that they recognize as potentially useful to the organization.
Factor 2 was labeled Inquiry Climate. Most of the items were related to inquiring and challenging, and experimenting, as elements of organizational climate. This factor is supported by many studies of organizational climate and creativity (Bruce and Scott, 1994, Amabile, 1997).

Factor 3 was labeled Achievement Mindset. The items related to the mindset workers have regarding the desire to achieve. The items were grouped on the basis of how they contributed to achievement.

This factor is consistent with the premise that individuals are the units of learning in the organizational learning process (Argyris and Schon, 1978 Wadell, Cummings and Worley, 1997,).

Factor 4 was labeled Learning Practices. The items all appeared to represent learning practices that contribute to learning.

This factor highlights the importance of organizational variables such as structure and culture and their role in the organizational learning process. Renaming the factors created a more specific view of organizational learning, but at the same time it tended to retain the basic approach visualized when the OLP was originally developed.

The results showed that the factor coefficients appeared to meet acceptable standards (all except one were above .50). The Cronbach Alpha score of 0.95 is high and indicates acceptable reliability. In addition, the Test of Sphericity was significant at the .000+ level of confidence (Coakes and Steed, 2001).
4.6 Pre-Test for the Workplace Innovation Scale

The innovation section of the instrument was developed through three surveys. All three surveys were based on empirical research that helped the researcher to contextualize and validate statistical data.

For the first survey 110 questionnaires were distributed to randomly selected respondents employed within various manufacturing and service organizations. Ninety usable responses yielded a response rate of 82%. The questionnaire comprised 82 items addressing employee demographics, organizational learning and workplace innovation. The questionnaire was supplemented by a structured interview schedule.

The questionnaire was divided into four sections: innovation, organizational learning, and organizational climate and employee demographics. The demographic questions were aimed at developing employee profiles and were anchored to a tick in each category. The questionnaire used for the study was developed to test its validity and reliability for the larger study.

The purpose of the questionnaire was to elucidate responses that would tell the researcher the respondents’ views about workplace innovation.

Hence, the first section of 24 items focused on workplace innovation. Respondents were asked to define innovation in their workplace, as they perceived it. The items were measured on a Likert scale from 1 – (Not at all) to 5 – (consistently and effectively).
Respondents included managers (48%) and supervisors (32 percent), insurance and consulting (29%) retail (28%), manufacturing (19 percent), and workers (11%) from various public and private industries such as education (15%), service and finance.

The organizations were a combination of large (1000-4000 employees) and medium (500-1000 employees). These organizations manufactured compressors, spare parts for automobiles, chemicals, and mobile phones. The manufacturing organizations were machine bureaucracies in structure, in which employees were perceived as factors of production. Structure was rigid, communication flowed downwards and decision-making was highly centralized. Scope for autonomy was limited.

Educational organizations were mainly universities and TAFE colleges. These organizations were bureaucratic decision making was highly centralized, policies were rigid, and communication flowed from top down. The service and retail industries were represented by organizations that sold consumables.

These organizations were highly labour intensive and customer focused. They were bureaucratic in that decisions were highly centralized, policies were rigid, and communication flowed from top down.

The organizations in finance, insurance and consulting industries had bureaucratic structures and procedures and were quite rigid. Insurance companies are like banks, where knowledge management about a range of products being offered to customers
is very important. In all cases, decisions were highly centralized, policies were rigid, and communication flowed from top-down.

The questionnaires were distributed to respondents who were randomly selected from the above industries and functioned at different levels within their organizations.

A series of statistical analyses were carried out using SPSS (version 10). Items were factor analysed using Principal Axis Factoring and Varimax with Kaiser Normalization. This yielded three factors, labeled Organizational Innovation (OI) ($\alpha = 0.91$), Innovation Climate (IC) ($\alpha = 0.78$) and Individual Innovation (II) ($\alpha = 0.77$). Cronbach Alpha values from 0.60 to 1.00 are acceptable according to Hair et al (1998). Therefore, the three factors, OI, IC and II, with Cronbach Alpha values of 0.91 , 0.78 and 0.77 respectively, had acceptable, reliability scores for the workplace innovation scale.

The second survey was conducted using a random sample of full time employees working in the service and manufacturing industries. The questionnaire included 78 items addressing employee demographics, organizational learning and workplace innovation. Factor analysis confirmed that all the three factors yielded high Cronbach Alpha scores (OI $\alpha=0.90$, IC $\alpha=0.77$ and $\alpha= 0.76$ ) The overall $\alpha$ score for the 19 item WIS instrument was $\alpha = 0.89$, indicating a high reliability (Hair et al, 1998). These two empirical studies showed consistency in alpha scores and were anchored to the literature. Hence it was deemed appropriate to be used in this study.
4.7 Pre-Test for the Organizational Climate Scale

Organizational Climate was measured using Koys and DeCotiis (1992) Organizational Climate Scale across eight dimensions of Autonomy, Cohesion, Trust, Pressure, Support, Recognition, Fairness, and Innovation. Of the three scales used in this study, the Koys and DeCotiis Scale is the oldest and has been developed and tested for a longer time. To test the Organizational Climate Scale a survey was administered to 65 hotel employees, of which 50 were returned, yielding a response rate of 77 percent.

The survey population consisted of a cross-section of employees of three Melbourne CBD (named as A, B and C) hotels. The demographics of the surveyed population showed that employees were predominantly female (58 %). Other data included full time employees (72 %), managers and supervisors (64 percent), employed in customer service (78 %), support and administration (22 %).

The Cronbach Alpha coefficient measuring construct validity was computed using SPSS (version.10) for the climate scale, which resulted in a Cronbach Alpha value of $\alpha = 0.91$ respectively. Nunnally (1978) indicates that a reliability reading of Cronbach Alpha values of 0.70 are acceptable. Therefore, the OC Scale with an Alpha value of $\alpha = 0.91$ indicated that the organizational climate scale was highly reliable.

Qualitative data to understand the work climate were collected by interviewing the HR managers. Their opinions and feedback were recorded, which resulted in minor modifications to the survey’s items and instructions.
Questions asked were:

- What is the role of HR in establishing good climate in the organization?
- What strategies are adopted to ensure high levels of employee commitment in your hotels?

This feedback from the HR managers, both collectively and singly, was a powerful validation device (Hussey and Hussey, 1997).

4.8 Operational definition of Organizational Learning

The operational definition of organizational learning was based on the definition put forward by Pace et al (1998). The definition of organizational learning put forward by Pace et al had its underpinnings in the definition put forward by Levitt and March (1988).

According to Levitt and March (1988), learning is defined as a process rather than an outcome. Knowledge acquisition is the process by which knowledge is obtained. Information distribution is the process by which information from different sources is shared, leading to new information or understanding. Information interpretation is a process by which distributed information has a common understanding. Organizational memory ensures knowledge is stored for future use. Knowledge in organizations is stored in policies and procedures and people who are long-term employed in the hotels.

Huber (1991) comments that an organization learns if, through its processing of information the range of its potential behaviours is changed.
The definition proposed by Levitt and March (1988) is more apt for the Australian hotel industry. This is due to the nature of the hotel industry, which is highly labour intensive and operates in a turbulent environment caused by the changes in the political, economic and the social environment, both nationally and internationally. Training is substituted by learning on the job hence knowledge acquisition, or information dissemination interpretation is based on employees and their ability to effectively manage knowledge and information in their workplace on a regular basis (McMurray and Dorai, 2001). Therefore, the definition of organizational learning operationalised for this study was:

Organizational Learning is a holistic process that encompasses learning practices, information sharing patterns, an inquiry climate and an achievement mindset of individuals in the workplace (Pace et al, 1998)

4.9 Operational definition Organizational Innovation

Organizational Innovation was operationalized as a process rather than as an outcome. Most empirical research has attempted to study organizational innovation from the process perspective from the stage of idea creation to the final stage of the innovation of a product or service (Bruce and Scott, 1997; Amabile, 1998,). The literature review revealed that studies measuring innovation were conducted from an organizational, or an individual perspective. No studies have been attempted to measure innovation from the organizational and individual perspectives simultaneously. This study attempted to measure innovation in the workplace from
the organizational, team and individual levels. In addition, the study also attempted to measure innovation climate that facilitates workplace innovation.

Literature on innovation defines the concept from an individual perspective by using the term inter-changeably with creativity (Amabile, 1998) by defining the concept from a structural perspective (Slappendel, 1998). Other measures of innovation have looked at the relationship of organizational innovation to the company performance, which again was measured in terms of financial output.

Firstly most of the empirical studies have looked at the concept in isolation or attempted to study it in relation to other organizational variables.

Secondly, very few studies on innovation from the hotel industry perspective in Australia have been conducted that would assist the researcher. Therefore, it became essential to develop an instrument that would suit this study. This study is unique in that it attempts to look at three different variables in the same context.

Empirical research has studied all three dependent variables in isolation, but thus far no study has attempted to look at the three variables simultaneously. Based on the pilot study findings, the researcher defined innovation as a process that starts at the individual level and culminates at the organizational level.

For the purpose of this study organizational innovation was defined as the process of interaction between individuals, organizations and the environment (Becker and Whisler, 1967).
In other words, OI is seen to occur at individual level, group or team level and then at organizational level. In addition, it was decided by the researcher that innovation climate was essential for innovation to occur.

This conclusion was based on innovation being one of the dimensions in Koys and DeCotiis measure of organizational climate. This definition was thought to be suitable for the hotel industry, as the structure of any hotel in Australia, consisting of teams made up of individuals. Secondly, in the Australian hospitality industry creativity at the individual and the group level is encouraged for customer satisfaction.

**4.10 Operational definition of Organizational climate**

Organizational Climate was operationalized in this research using dimensions put forward by Koys and Decotiis (1991) to define organizational climate.

Organizational climate for this study was defined as a relatively enduring characteristic of an organization which distinguishes it from other organizations and (a) embodies members’ collective perceptions about their organization with respect to such dimensions as autonomy, trust and 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 values and attitudes of the organization’s culture; and (e) acts as a source of influence for shaping behaviour.

According to Koys and Decotiis (1992) organizational climate is made up of eight dimensions: autonomy, cohesion, trust, pressure, support, recognition, fairness and
innovation. The Koys and DeCotiis measure of organizational climate is appropriate in the Australian hotel industry context.

In the Australian hotel industry employee demographics include young employees who are students at the university or high school who look for trust, recognition, teamwork, and autonomy (McMurray and Dorai, 2002).

### 4.11 Scale of the Instrument

The scale of an instrument is developed to measure variables that are not directly seen. Neuman (1995) identifies two purposes for using scales in social science research. Firstly, scales show the fit between a set of indicators and a single construct. Secondly, scaling produces quantitative measures and can be used in combination with the measures of other variables to test the hypotheses. In this study the items were scaled using a Likert type scale.

Rensis Likert developed the Likert Scale in the 1930’s. It provides an ordinal measure of a person’s attitude (Neuman, 1995).

The items were scaled on a 5-point Likert scale where 1 was Strongly Disagree, 2 was Disagree, 3 was Neither, 4 was Agree and 5 was Strongly Agree.

A Likert Scale was suitable for this study as it was simple to use. Secondly, it was found that when several items were combined it was feasible to have a comprehensive multiple indicator measurement.
4.12 Summary

This chapter reports pre-test finding in the development of constructs for the dependent variables. The pre-tests in the development of the constructs included empirical research.

Data collected from different industries showed high reliability of the constructs. The reliability score was high for all the three dependent variables. Reliability was also high for all the dimensions of the dependent variables. The validity of the instrument was measured through construct and content validity. As this study was measuring employee constructs it was deemed appropriate to utilize the most reliable instruments for measuring organizational learning, organizational innovation and organizational climate. The constructs were used to collect quantitative data; questions were modified to collect qualitative data.
Chapter Five

5.0 Data Analysis

5.1 Objective

The objective of this chapter is to analyse and uncover the relationships between independent and dependent variables, and among the dependent variables. This chapter analyses the quantitative data and its relationships to three dependent variables organizational learning, organizational innovation and organizational climate.

Data were analysed using various statistical techniques based on SPSS Version 10. Analysis of the quantitative data included Factor Analysis, Pearson’s Correlation, Multiple Regression and One-Way ANOVA. Analysis of qualitative data was conducted using theme category analysis.

5.2 Analysis of Quantitative Data

Quantitative data were collected from a population of eight hundred employees working in hotels located in Melbourne. Six hundred usable responses gave a response rate of 75 percent.

5.2.1 Factor Analysis of OLP Scale

The 34 items of the Organizational Learning Profile were subjected to Principal Components Analysis (PCA) using SPSS (V.10). Prior to performing PCA, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of 0.3 and above.
The Kaiser-Meyer-Olkin value was 0.96, which exceeded the recommended value of 0.6. The Bartlett Test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix. Table 5.1 shows the Rotated Component Matrix for Organizational Profile.

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Principal Components Analysis revealed the presence of four components with Eigen values exceeding 1, which explained 35.4 %, 4.24 %, 3.76 %, 3.4 % 3.13 % of the variance respectively.
An inspection of the scree plot revealed a clear break after the first component. To aid in the interpretation of the five components a Varimax Rotation was performed. The rotated solution revealed the presence of a simple structure showing a number of strong loadings, and all variables loading on four components. The four factors showed a 46.854 % variance.

5.2.2 Factor Analysis of Workplace Innovation Scale

The 24-Item WIS Scale was subjected to Principal Components Analysis (PCA) using SPSS. Prior to performing the PCA, the suitability of the data for factor analysis was assessed.

Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Olkin value was 0.91, exceeding the recommended value of 0.6. The Bartlett Test of Sphericity reached a statistical significance, supporting the factorability of the correlation matrix.

Principal Components Analysis revealed the presence of four components with Eigen values exceeding 1, explaining 27%, 8.3 %, 6.06 % and 4.67 % of the variance respectively. The scree plot revealed a clear break after the second component. To aid in the interpretation of the four components a Varimax Rotation was performed. Table 5.2 shows the rotated component matrix for the WIS Scale.
Table 5.2 Rotated Component Matrix for the WIS Scale

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Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization  Rotation converged in 9 iterations.
Source: Author

The rotated solution revealed the presence of a simple structure showing a number of strong loadings, and all variables loading on components. The four factors showed a variance of 12.75-2.96 %.

5.2.3 Factor Analysis of Organizational Climate Scale

The 40 item Koys and De Cotiis Organizational Climate Scale was subjected to Principal Components Analysis (PCA) using SPSS (V.10). Prior to performing the PCA, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above.
Table 5.3 Rotated Component Matrix of the Koys and DeCotiis Organizational Climate Scale

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Source: Author

The Kaiser-Meyer-Olkin value was 0.94, exceeding the recommended value of 0.6 and the Bartlett Test of Sphericity reached a statistical significance, thus supporting the factorability of the correlation matrix. Table 5.3 shows the rotated component matrix of the Koys and DeCotiis Scale. Principal Components Analysis revealed the
The presence of seven components with eigen values exceeding 1, explaining 28.67 %, 6.57%, 5.99%, 4.03%, 3.5%, 3.37 % and 2.67 % of the variance respectively.

The scree plot revealed a clear break after the second component. To aid in the interpretation of the seven components a Varimax Rotation was performed. The rotated solution revealed the presence of a simple structure showing a number of strong loadings, with all variables loading on components. The eight factors showed a variance of 12.75-2.96%.

5.3 Correlations among Dimensions of Dependent Variables

Pearson’s Correlation was performed to establish the relationships among the dependent variables. Pearson’s correlation describes a relationship between two variables, this is the most common measure of a linear relationship.

5.3.1 Testing of Hypotheses One

*There is a significant relationship between organizational learning and organizational innovation in the Australian hotel industry.*

To test hypotheses 1, Pearson’s Correlation was performed to establish the relationship between organizational learning and organizational innovation in the Australian hotel industry.
Table 5.4 Pearsons Correlations between organizational innovation dimensions with learning

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<th>OI03</th>
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</table>

Source: Author

Table 5.4 shows a high correlation between the dimensions of organizational innovation and organizational learning. The organizational innovation has a significant correlation (r= 0.760) with organizational learning dimensions.

5.3.2 Testing of Hypotheses Two

There is a significant relationship between organizational learning and organizational climate in the Australian Hotel industry.

Pearsons Correlation was used to uncover the relationship between the dimensions of organizational learning and organizational climate.

Table 5.5 Pearson’s Correlations between organizational learning dimensions and organizational climate.

<table>
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Source: Author

Table 5.5 shows a significant relationship between the dimensions of organizational learning and organizational climate. The Achievement Mindset (r=.688) dimension of organizational learning has a high correlation with organizational climate.
5.3.3 Testing of Hypotheses Three

There is a significant relationship between organizational climate and organizational innovation in the Australian Hotel industry.

Pearson’s Correlation was performed to uncover the relationship between organizational innovation and organizational climate in the Australian hotel industry.

Table 5.6 Pearsons Correlations between organizational innovation dimensions and organizational climate

<table>
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</table>

Source: Author

Table 5.6 shows there is a significant relationship between team innovation (r=.654) and organizational climate.

5.3.4 Testing of Hypotheses Four

There are significant relationships among demographic variables (area of employment, nature of employment, and the country of origin) in the Australian hotel industry.

One-way ANOVA was performed to establish the relationships among the demographic variables and the three dependent variables- learning, innovation and climate.

One-way ANOVA was performed between area of employment and the overall relationships among learning, innovation and climate was calculated.
Areas of employment of the respondents were collapsed into five different categories.

No significant relationship was found between area of employment and the overall values of the dependent variables. The $p$ value for organizational innovation it was $p=.580$; for organizational learning it was $p=.470$; and for organizational climate it was $p=.111$.

However, the mean plot demonstrates a difference, between the mean values of different categories.

Figures 5.1-5.9 show the relationships between demographic variables and the three dependent variables.

**Figure 5.1 shows the mean plot that shows the relationships between areas of employment and organizational learning.**

![Graph showing the mean plot of organizational learning across different collapsed area categories.](image)

Source: Author

It is found that mean plot showed high degree of learning in the housekeeping and concierge area.
Figure 5.2 shows the relationship between area of employment and organizational innovation.

![Graph showing relationship between area of employment and organizational innovation.](image)

Source: Author

There was a significant relationship between innovation and front office, customer service and guest relations area.

Figure 5.3 shows the relationship between area of employment and organizational climate.

![Graph showing relationship between area of employment and organizational climate.](image)

Source: Author

Results showed significant relationship between climate and the customer service, front office and guest relations areas.

One-way Anova was calculated between learning, innovation and climate with the nature of employment of the respondents. Nature of employment was regrouped into three categories: full time, part-time and casual.

One-way Anova showed no significant relationships among the three dependent variables and the nature of employment of the respondents, with p values ranging from 0.285 to 0.784.
The mean plot, however, showed a difference in mean values between casual and full time employees. Figure 5.4 shows the relationship between nature of employment and organizational learning.

Figure 5.4 shows the relationship between nature of employment and organizational learning.

![Graph](image1)

Source: Author

The mean plot showed a significant relationship between organizational learning and full-time employees.

Figure 5.5 shows the relationship between Nature of Employment and Organizational innovation.

![Graph](image2)

Source: Author

The mean plot showed a significant relationship between innovation and full time employees.
Figure 5.6 shows the relationship between nature of employment and organizational climate

![Graph showing relationship between nature of employment and organizational climate](image)

Source: Author

The mean plot showed a significant relationship between organizational climate and part time employees.

One-way ANOVA was calculated between innovation, learning and climate and the country of origin of respondents. The country of origin was divided into Australian and New Zealanders, Asian and European. The \( p = 0.054 \) showed that innovation was closely related to the country of origin of respondents.

Learning was significantly correlated to the country of origin with \( p = 0.022 \); and climate showed a \( p \) value of 0.000 which was significantly related to the country of origin. Figure 5.6 shows the relationship between the country of origin and organizational learning.

Figure 5.7 shows the relationship between country of origin and organizational learning

![Graph showing relationship between country of origin and organizational learning](image)

Source: Author
The mean plot showed a significant relationship between learning and New Zealanders, and Asians.

**Figure 5.8 shows the relationship between country of origin and organizational innovation**

![Graph showing relationship between country of origin and organizational innovation](image)

Source: Author

The mean plot showed significant relationship between innovation and Australians and New Zealanders and Asians.

**Figure 5.9 shows the relationship between country of origin and organizational climate**

![Graph showing relationship between country of origin and organizational climate](image)

Source: Author

The mean plot showed a significant relationship between climate and Australians and New Zealanders.

### 5.3.5 Testing of Hypotheses Five

*There are significant relationships among organizational learning, organizational innovation and organizational climate*
Table 5.7 Pearson’s Correlation between Organizational Learning, Organizational Innovation and Organizational Climate

<table>
<thead>
<tr>
<th>IWPTOT</th>
<th>OLPTOT</th>
<th>OCTOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>IWPTOT</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>OLPTOT</td>
<td>.794</td>
<td>1.000</td>
</tr>
<tr>
<td>OCTOT</td>
<td>.707</td>
<td>.696</td>
</tr>
</tbody>
</table>

Source: Author

Pearson’s Correlation was performed to establish the relationship among organizational learning, organizational innovation and organizational climate. There are significant relationships among all the three dependent variables, with r values close to 1.

Hierarchical regression was performed to identify the dimensions of learning that predicted organizational innovation, and the dimensions of organizational climate that predicted organizational learning and organizational innovation.

5.3.6 Testing of Hypotheses Six

The dimensions of organizational learning, organizational innovation and organizational climate are predictors of one another.

Regression analysis was performed to identify dimensions of organizational learning that predict organizational innovation.

Table 5.8 Regression Analysis between dimensions of OL with OI

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>20.323</td>
<td>1.636</td>
<td>.293</td>
<td>12.419</td>
</tr>
<tr>
<td>OL01</td>
<td>.549</td>
<td>.085</td>
<td>.145</td>
<td>6.495</td>
</tr>
<tr>
<td>OL02</td>
<td>.444</td>
<td>.127</td>
<td>.189</td>
<td>3.491</td>
</tr>
<tr>
<td>OL03</td>
<td>.451</td>
<td>.101</td>
<td>.189</td>
<td>4.478</td>
</tr>
<tr>
<td>OL04</td>
<td>.437</td>
<td>.075</td>
<td>.255</td>
<td>5.846</td>
</tr>
</tbody>
</table>

Dependent Variable: IWPTOT

Source: Author

171
Table 5.8 displays the unstandardized regression coefficients (B) the constant, standardized regression coefficients (β), the semi partial correlations (sr²), and R, R², adjusted R² after the entry of all blocks of variables. R = .57 and was significantly different from zero with F (4,586)=250.994, p< .05.

The information sharing patterns and learning practices predicted organizational innovation. Regression analysis was performed to identify organizational climate dimensions that predict organizational learning.

Table 5.9 Regression analyses for relationship between dimensions of OC and OL

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>21.843</td>
<td>4.622</td>
<td>4.726</td>
<td>.000</td>
</tr>
<tr>
<td>OC01</td>
<td>.618</td>
<td>.180</td>
<td>.117</td>
<td>3.445</td>
</tr>
<tr>
<td>OC02</td>
<td>.852</td>
<td>.190</td>
<td>.164</td>
<td>4.489</td>
</tr>
<tr>
<td>OC03</td>
<td>.693</td>
<td>.230</td>
<td>.142</td>
<td>3.014</td>
</tr>
<tr>
<td>OC04</td>
<td>-4.237E-02</td>
<td>.181</td>
<td>-.007</td>
<td>-.234</td>
</tr>
<tr>
<td>OC05</td>
<td>.441</td>
<td>.223</td>
<td>.094</td>
<td>1.976</td>
</tr>
<tr>
<td>OC06</td>
<td>1.097</td>
<td>.213</td>
<td>.191</td>
<td>5.147</td>
</tr>
<tr>
<td>OC07</td>
<td>-4.919E-02</td>
<td>.233</td>
<td>-.009</td>
<td>-2.11</td>
</tr>
<tr>
<td>OC08</td>
<td>1.413</td>
<td>.215</td>
<td>.266</td>
<td>6.578</td>
</tr>
</tbody>
</table>

Dependent Variable: OLPTOT
Source: Author

Table 5.9 shows the predictability of organizational learning through climate dimensions.

Unstandardized regression coefficients (B) and the constant, standardized regression coefficients (β), the semi partial correlations (sr²), and R, R², adjusted R² after entry of all blocks of variables. R = .71 and was significantly different from zero with F (8,580)=77.247, p< .05.

It was found that the pressure and fairness dimensions of organizational climate contributed the least towards organizational learning.
Table 5.10 Regression analysis for relationship between dimensions OI and OL

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>12.226</td>
<td>2.849</td>
<td>4.292</td>
<td>.000</td>
</tr>
<tr>
<td>OI01</td>
<td>2.653</td>
<td>.153</td>
<td>.525</td>
<td>17.339</td>
</tr>
<tr>
<td>OI02</td>
<td>.461</td>
<td>.192</td>
<td>.083</td>
<td>2.394</td>
</tr>
<tr>
<td>OI03</td>
<td>1.020</td>
<td>.186</td>
<td>.178</td>
<td>5.478</td>
</tr>
<tr>
<td>OI04</td>
<td>1.112</td>
<td>.179</td>
<td>.196</td>
<td>6.196</td>
</tr>
</tbody>
</table>

Dependent Variable: OLPTOT

Source: Author

Table 5.10 displays the unstandardized regression coefficients (B) the constant, standardized regression coefficients (β), the semi partial correlations (sr²), and R, R², adjusted R² after the entry of all blocks of variables. R = .82 and was significantly different from zero with F (4,586)=306.372, p< .05.

Achievement mindset did predict all the dimensions of innovation with p<.05. It was found that inquiry climate did not predict organizational learning in the hotels. In other words, an inquiry climate is not an indicator of employees learning in the workplace.

Regression analysis was performed to identify organizational climate dimensions that predicted organizational innovation.

Table 5.11 displays the unstandardised regression coefficients (B) and constant, standardized regression coefficients (β), the semi partial correlations (sr²), and R, R², adjusted R² after entry of all blocks of variables. R = .73 and was significantly different from zero with F (8,581)=85.215, p<.05.
Table 5.11 Regression analysis for relationship between dimensions OI and OC

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>16.288</td>
<td>2.683</td>
<td>6.071</td>
<td>.000</td>
</tr>
<tr>
<td>OC01</td>
<td>.859</td>
<td>.104</td>
<td>.273</td>
<td>8.245</td>
</tr>
<tr>
<td>OC02</td>
<td>.413</td>
<td>.110</td>
<td>.133</td>
<td>3.746</td>
</tr>
<tr>
<td>OC03</td>
<td>.470</td>
<td>.134</td>
<td>.162</td>
<td>3.523</td>
</tr>
<tr>
<td>OC04</td>
<td>.174</td>
<td>.105</td>
<td>.048</td>
<td>1.656</td>
</tr>
<tr>
<td>OC05</td>
<td>.120</td>
<td>.130</td>
<td>.043</td>
<td>.929</td>
</tr>
<tr>
<td>OC06</td>
<td>.435</td>
<td>.124</td>
<td>.127</td>
<td>3.509</td>
</tr>
<tr>
<td>OC07</td>
<td>-3.372E-02</td>
<td>.135</td>
<td>-.011</td>
<td>-2.49</td>
</tr>
<tr>
<td>OC08</td>
<td>.852</td>
<td>.125</td>
<td>.269</td>
<td>6.834</td>
</tr>
</tbody>
</table>

Dependent Variable: IWPTOT
Source: Author

It was found that the pressure and fairness dimension of climate did not contribute towards organizational innovation.

5.4 Analysis of Qualitative Data

Qualitative data were collected through informal discussions using a semi-structured questionnaire. Open questions were developed to elucidate responses in relation to the dimensions of the dependent variables. Questions were asked of employees and managers at different levels in the organization.

Open questions were used to complement the workplace survey to collect the qualitative data. The qualitative data were collected in a hand written format and transcribed into theme category analysis.

The main themes that emerged were organizational learning, individual learning, organizational innovation, individual creativity, and organizational climate. All of the above themes are relevant to the hypotheses. The responses were classified based on respondents’ perception of their workplace.
Questions related to the nature of information processing, performance management, systems and processes, and rewards and incentives.

Responses to the question “can you describe the process of information sharing in your hotel”? Described the information sharing patterns in the hotel.

“What are some of the incentives that your hotel provides you to enhance your performance”? Responses to this question pertained to the achievement mindset dimension of organizational learning variable.

Another question was’ What systems and processes are in place that helps you to learn on the job in your hotel”? This question related to the learning practices dimension of the OL variable.

Similarly questions were developed for organizational innovation and organizational climate and included the following:

- How does your workplace define innovation?
- Are employees rewarded when they give any creative solution to a problem?
- Does your workplace encourage their employees to be creative?

Similarly questions related to organizational climate included the following:

- Can you describe the climate in your workplace?
- How much support do you get from your boss to do your work?
- Does your boss recognize your work?
- Are employees put under pressure to achieve the unit goals and objectives?
- Are employees encouraged to be creative in your workplace?
5.5 Summary

In summary, the analysis of the qualitative and quantitative data revealed a causal relationship among the three dependent variables. The data analysis included factor analysis of the dependent variables. Pearson’s correlation was performed to establish the relationship between the dependent variables of organizational learning, organizational innovation and organizational climate. The inter-relationships among the dimensions of the dependent variables were also measured using Pearson’s correlation. Regression analysis was performed to identify the predictors of learning and innovation. It was found that information patterns and learning practices predicted organizational innovation.

The pressure and fairness dimensions of organizational climate did not predict organizational innovation. Further, the achievement mindset of organizational learning predicted organizational innovation, while inquiry climate did not impact on organizational innovation.

One-way ANOVA was performed to establish the relationships between demographic variables (areas of employment, nature of employment and country of origin) with organizational learning, organizational innovation and organizational climate. One-way ANOVA showed no significant relationship between area of employment and all the three dependent variables of organizational learning, innovation and climate.
Chapter Six

6.0 Findings

6.1 Objective

The objective of this chapter is to discuss the findings generated from the analysis of the hypothesis reported in the previous chapter. It will examine how the analysis of hypotheses relates to the existing body of knowledge on learning, innovation and climate. It will further demonstrate how the present study extends or fills the gap in previous studies.

6.2 Introduction

In this chapter the analyses of the empirical findings filled several gaps in the literature that related to learning, innovation and climate. The qualitative data are integrated and discussed in relation to the literature. This study for the first time administered a Workplace Survey instrument that measured learning, innovation and climate simultaneously in the hotel industry. It brought together three context specific multi-dimensional constructs and investigated the relationship between them. The literature review on learning, innovation and climate literature revealed that the three dependent variables were used as independent measures or were measured with other organizational variables such as size, structure, strategy, and culture in the international literature; no studies have established the relationship between the three dependent variables.
Therefore, the multi-dimensional approach undertaken in the present study strengthens the relationship between organizational learning, organizational innovation and organizational climate and their dimensions.

Most of the empirical research in the hospitality industry had focussed on customer satisfaction, room occupancy and performance of hotels and empirical studies reporting on employee related constructs such as learning, innovation and climate simultaneously were under represented in the hotel industry both in Australia and abroad.

Furthermore, the review of literature found that studies on learning, innovation and climate focused on the manufacturing sector, and few studies were conducted in the service sector. The hospitality industry and in particular the hotel industry was not used as a context for empirical research in Australia. In addition, majority of empirical studies were carried out in the United States, Asia and Europe. This study fills that gap in the literature.

Previous attempts in areas of learning, innovation and climate-raised issues in units of measurement, cross-cultural influence, lack of uniformity in defining learning and innovation. Instruments used to measure the concepts were not pre-tested. Climate was used synonymously with culture leading to ambiguity in measurement. There was no uniformity in the units of measure in learning, innovation and climate leading to misinterpretations of data analysed.

The findings of this study extends previous researches in organizational learning (Pace et al, 1997), organizational innovation (Becker and Whisler, 1967) and Koys
and DeCotiis, 1992) especially in the units of measure and demonstrates that these variables can be measured simultaneously.

The findings in the present study add to the knowledge of learning, innovation and climate in the Australian Hotel Industry

6.3 Hypotheses One

*There is a significant relationship between organizational learning and organizational innovation in the Australian hotel industry.*

A series of statistical analyses was performed to test this hypothesis. Pearson’s Correlation performed showed a significant correlation between two dependent variables. In addition, hierarchical regression was performed to identify the dimensions of learning that predict organizational innovation.

The findings strengthens the scanty literature that supported the assumption that innovation is a form of learning (Reis and Trout, 1981). In other words, innovation is about learning new ways to understand and configure the world around us. The findings in this study are replicated across two-to-five star hotels and clearly demonstrated that learning was linked to innovation.

The findings from the present study supports the major studies related to learning, innovation and climate and are explained below.

The findings in this study have extended Amabile’s (1996) conclusions on creativity and innovation by establishing that creativity enables an employee to learn on the job, and strengthens the relationship between learning and innovation. This is statistically supported where the *r*-values ranged from 0.683 to 0.738, showing that learning is significantly related to innovation.
This study used Levitt and March,(1988) and Argyris and Schon’s (1988) theoretical underpinning the systems theory of learning that states that inputs of information and energy shape patterns of behaviour of individuals by diffusing their work boundaries and by stimulating and segregating function subsystems.

This is clearly observed in the hotel industry, where structure is divisional and work boundaries are highly diffused. Secondly, since majority of the employees are casual the allocation of work for these casual employees is based on immediate requirements on a particular day.

Perhaps this explains the lack of formal induction employees learn more on the job than from a professional induction.

The findings also support more recent work by Easterby Smith et al (2000) who conclude that learning is socially constructed process that occurs amongst employees in an organization.

Analysis from the qualitative collected from the HRM managers shed further light into the findings.

“*We prefer our employees to be multi-skilled and we strongly believe in job rotation*”.

These comments shed further light and show they are congruent with the empirical findings in the study.

Previous attempts on organizational learning investigated the relationships

The findings do not support Cooke and Yanow (1993) and Easterby Smith and Araujo (1997), who defined organizational learning as a group phenomenon and ignored the individual’s contribution to the learning process.
Their findings took a uni-dimensional approach to learning and did not establish correlations between learning and innovation. For the first time this study provided an insight into the relationship between learning and innovation.

The hotel industry in Australia and worldwide is highly complex and its survival is dependent on customer satisfaction. In the Australian hotel industry, customer satisfaction depends on service provided by individual employees; hence learning is seen from an individual perspective rather than as a group phenomenon. On-the-job training is provided to employees when they start in their employment rather than a formal induction program. This requires an environment that facilitates information flow and continuous learning. The findings support the conclusions in a Canadian study by Woicesyn (2000) draw similarities between learning and innovation by showing that learning is a subset of innovation. This assumption is empirically supported by this study in the Australian context filling a gap in the Australian literature.

The findings in this study support Huber’s assumption that people within organizations learn continually and learning occurs as a result of informal practices in the workplace. In the hotels that were surveyed, HR managers stated that recruitment practice was very informal and that they preferred hiring through word-of-mouth. With no formal induction, employees learnt on the job continuously. Continuous learning at times resulted in taking a creative approach in doing the job.
Secondly, as these hotels had a highly bureaucratic structure, information processing and dissemination was an important aspect of every job. The structure of these hotels supports learning at different levels. These findings supported the conclusions of Crossan et al (1999) and Antonacopoulou (1999) who argued that learning occurred at different levels.

Analysis of the qualitative data from front office employees supported the empirical findings. Responses to the question “Can you describe the process of information sharing in the hotel” included:

- “Employees share information informally”.
- “In addition, formal communication channels are used such manuals and documentation relevant to the employees jobs are regularly updated”
- News bulletin is another source of information sharing.

The present study extends an earlier study by Argyris and Schon (1978), who concluded that learning in organizations was cyclical. The findings from this study show that organizational learning is a multidimensional process occurring at different levels- individual, group and at the organizational level in hotels.

This study further illustrated that the dimensions of learning contributed towards innovation in the workplace. For example, organizational learning had significant correlation with innovation dimensions - organizational innovation ($r=0.760$), innovation climate ($r=0.617$), team innovation ($r=0.630$) and individual innovation ($r=0.585$). The $r$ values demonstrate the significant relationship between learning and
innovation and thereby address an important gap in the literature of learning and innovation. This finding demonstrates that learning and innovation complement each other and clearly shows the importance of learning in the innovation process in the hospitality sector workplace.

In conclusion, this study enriched the literature on learning and innovation in the Australian context, by illustrating that the two variables were inter-related.

6.4 Hypotheses Two

There is a significant relationship between organizational learning and organizational climate in the Australian hotel industry.

Pearson’s Correlation was performed to test the above hypotheses. It was found that the \( r \)-values for learning ranged from 0.427 to 0.578 illustrating a level of relationship between learning and climate.

The negative correlation with the pressure dimension of climate with \( r=0.98 \) illustrated that no learning occurred when employees were under pressure in other words, greater the pressure, lower the learning in the workplace.

This finding adds a new dimension to the learning and climate literature, illustrating that learning is fostered by a positive climate, when employees are given adequate support, autonomy, recognition, treated with fairness, and working as a cohesive team.

Empirical studies on learning and climate do not show any evidence of correlation with pressure and learning especially in the hotel industry in Australia. This study fills this gap with an empirical conclusion, demonstrating pressure as a climate dimension has minimal influence on learning and innovation in the hotel industry.
The dimensions of climate, with the exception of pressure, have a significant relationship with learning. In the hotel industry, autonomy is practised to some extent, especially at the managerial level. With a great degree of autonomy the degree of learning is high.

This finding supports the study by Dorai and McMurray (2002) who studied the relationship between organizational learning and employee roles in several Australian industries, and found that learning was significant at the managerial and the worker level, with little or no learning at the supervisory level. In the hotel industry, managers are given the freedom to make decisions on the spot to ensure customer satisfaction. This was stated by one of the food and beverage manager in one of the hotels, who said “In this hotel as a manager I can make decisions when and where required to provide quality customer service. However, the decisions are made within the boundaries of the budget”.

In the hotel industry, employees’ work in groups, hence cohesiveness plays a significant role in learning. This finding supports the assumption of Easterby-Smith and Araujo (1997) who describe organizational learning as a group phenomenon, this study extends this assumption by illustrating that learning at an organizational level occurs through a series of steps starting from individual to group level and finally to an organizational level.

The findings illustrate that for learning to be successful at the organization’s level it needs the influence of four factors information sharing among organizational
members, an achievement mindset of individuals, the learning practices in the workplace, and an inquiry climate.

Cohesiveness in the hotel industry is also related to the recruitment strategy the hotels adopt. The HR supervisor in one of the three star hotels stated: “In this hotel casual employees are recruited through contacts of the existing employees, to ensure credibility and team camaraderie.”

The findings from this study support the advancement made in climate research, which focuses on group level data to study employee perceptions and the relevant outcomes. The findings in this study enrich the climate literature and extend earlier researches. For example, the study adds to the literature in terms of levels of analysis of climate measurement. It is typical that the results from this study did not support the findings of earlier studies by Litwin and Stringer (1961) or findings in later studies by Patterson et al, (1996), and Johnson, 2000, because those studies were conducted in different cross cultural settings and in different work environments. In summary, these findings have added significantly to the climate and learning literature. This includes examining climate and its influence on organizational learning in an Australian hotel setting. This was achieved by using a well-defined construct that measured both these variables simultaneously.

6.5 Hypotheses Three

There is a significant relationship between organizational climate and organizational innovation in the Australian hotel industry.
Pearson’s Correlation was performed to establish the relationship between climate and innovation in the hotel industry. The $r$ values ranged between 0.454 and 0.549, showing a significant relationship between the two variables. However, the pressure dimension of the climate variable showed a negative correlation ($r = -0.030$) between pressure and innovation. In other words, the greater the pressure the lower is the innovation among employees.

This study has added value to the existing body of knowledge about workplace innovation and climate by concluding no relationship exists between pressure and innovation.

Earlier researches on organizational climate seem to have studied the relationship of this concept with variables such as room occupancy rates, or performance outcomes. This study is unique in that it has examined the influence of organizational climate on employee related constructs such as organizational innovation. The findings in the present clearly show that innovation in the workplace is dependent upon the climate that is provided to the employees. The $r$ values support the empirical findings and have filled a gap not only in the learning and innovation literature but also in the climate literature.

It is not surprising that the present study does not support the findings of Goes and Ho Park Seung (1997) who concluded that adoption of innovation is enhanced by the development of inter-organizational links, because their studies were not conducted in the Australian context and their unit of measure of innovation was one dimensional.
However, the present study extends the findings of the study by Hurley and Hult (2001) who concluded that higher levels of innovativeness in the organization’s culture are associated with a greater capacity for adaptation and innovation. The present findings extend the study by Banazok-Holl and Mohr (1996), who concluded that organizational characteristics like size, structure and culture influenced employee related variables such as innovation. This study demonstrated however, a negative correlation with the pressure dimension of climate. In other words, greater the pressure lower is the degree of innovation.

This study had added to the literature in several ways. Firstly, it has shown that organizational climate impacts on organizational innovation. Secondly, it has illustrated that all dimensions of climate with the exception of pressure fosters workplace innovation. By doing this it has shown that innovation and climate are interlinked, in a service industry such as the hotel sector, in the Australian setting. Lastly, the findings in this study has made a huge contribution towards the service industry and in doing this, the findings have supported the hypotheses.

6.6 Hypotheses Four

There is a significant relationship between the demographic variables such as areas of employment, nature of employment and the country of origin in the Australian hotel industry.

A one-way ANOVA was performed to establish the relationships between some of the demographic variables and the three dependent variables such as area of employment, type of employment (full-time, part-time or casual) and country of origin.
These three variables were included, as the researcher believed that employees in the hotel industry were from different ethnic backgrounds, or the nature of their employment varied, and their ethnic background might influence organizational learning, innovation or climate.

It was found that there was no significant relationship between the area of employment and the overall values of the dependent variables. The $p$ value for organizational innovation was $p = 0.580$; organizational learning $p = 0.470$ and organizational climate $p = 0.111$.

These findings have filled an important gap in the literature of learning innovation and climate.

The earlier studies that have been conducted in relation to each of the dependent variables have not considered the areas of employment and its relationship to the dependent variables simultaneously. This study has opened a new topic for future research.

One way ANOVA showed no significant relationship between the three dependent variables and the nature of employment of respondents with $p$ values ranging from 0.285 to 0.784.

Again, this finding has filled an important gap in the learning, innovation and climate literature in that it has illustrated that organizational learning; innovation and climate are not influenced by the type of employee recruited in the hotel industry.
The mean plot showed a difference in mean values between full time and temporary employees. This difference could be attributed to the higher percentage of temporary employees in the hotel industry.

6.7 Hypotheses Five

*There is a significant relationship between organizational learning, organizational innovation and organizational climate in the Australian hotel industry.*

Pearson’s Correlation was performed to establish the relationship between organizational learning, organizational innovation and organizational climate.

The results show a significant relationship between all three dependent variables, with $r$ value closer to 1.

This finding fills an important gap in the literature of organizational learning, organizational innovation and organizational climate.

Empirical studies by different researchers (Huber, 1991; Easterby Smith, 1997) looked at organizational learning from a process perspective independently, while other innovation studies looked at the concept and its relationship with other organizational variables such as size and educational level. Although Reis and Trout (1981) made an assumption that innovation was a form of learning, their assumption was not supported by empirical evidence. This study extends their assumption by providing empirical findings that establish a relationship between organizational learning and organizational innovation. This study adds to the empirical findings of Goes and Ho Park’s Seung (1997) in a different cultural setting (Thailand) and in a
different organization type (acute care hospitals) Similarly, the climate literature has not looked at the influence of climate on organizational learning and organizational innovation.

This study extends the preliminary findings on learning and climate by McMurray and Dorai (2001), who studied the relationship of these factors in the Australian hotel industry. The sample size was small, however, in comparison to the present study. Secondly, the study took organizational learning from a general perspective rather than studying the impact of dimensions on innovation. The present study is unique in that it attempts to fill that gap in the literature.

6.8 Hypotheses Six

The dimensions of organizational learning, organizational innovation and organizational climate predict one another.

Regression analysis was performed to identify the dimensions of each of the dependent variables that predict each other. Regression analysis was performed to identify the dimensions of learning that predict organizational innovation. The four dimensions of learning showed a significant relationship with innovation. The $r$ value ($r=0.738$) for Information Sharing Patterns showed a significant relationship with innovation. This finding highlights the importance of information dissemination in organizations.
The success of the hotel industry is dependent on customer satisfaction. Information processing by employees is an important aspect in ensuring that employees provide quality service to customers.

Secondly, for organizations to be innovative it is imperative that the culture fosters information dissemination. The findings support the definitions of learning provided by Levitt and March (1988) and Huber (1998).

According to Levitt and March (1988) organizations are seen as learning and encoding inferences from history into routines that guide behaviour. In this instance, in the hotel industry where policies and procedures are laid down to ensure customer satisfaction it is important that policies and procedures are laid down clearly. The findings support Huber’s conclusion that information rich environments contribute to creativity and innovation.

This fact is an important aspect in the hotel industry. Information related to change in processes and procedures that affect customer satisfaction are clearly communicated to the employees below by the supervisors and managers.

A housekeeping supervisor in one of the hotels mentioned that regular weekly meetings were held with employees to pass on information on any changes that were to be implemented in the department.

The $r$ value (0.683, 0.571) of the Inquiry Climate dimension of organizational learning showed a significant relationship with innovation and climate. The importance of climate is strongly emphasized in the climate literature.
The role of climate in learning and innovation was described in a study conducted by McMurray and Dorai (2001) which showed a significant relationship between learning and climate in the Australian hotel industry. The conclusions were drawn from a small sample of employees in five star hotels located in Melbourne. The findings from this study support the conclusions drawn from study by McMurray and Dorai (2001).

The $r$ value for Achievement Mindset (0.700, 0.584) showed a significant relationship with climate and innovation. This finding supports the literature on creativity, especially the conclusions drawn from Amabile’s (1988) research on the relationship between motivation and creativity. In the hotel industry employees need to score high on the achievement mindset dimension.

The HR Manager, in an interview, revealed that employees are given performance bonuses based on their performance and customer feedback survey. Qualitative data uncovered that employee incentive schemes are very strong in the hotel industry.

The $r$ value for the Learning Practices dimension (0.724, 0.688) showed a significant relationship with learning and climate. This dimension relates to the role of systems and processes in an organization.

This finding supports Leavitt and March’s (1988) notion of routines and their role in facilitating learning and innovation in organizations.
The hotel industry is strongly governed by systems and processes, and the philosophy of ‘doing the right things ‘to ensure customer satisfaction.

This finding adds significantly to the gap in the literature of innovation, learning and climate. Previous studies have looked at each of these variables independently of one another and have not established the link between the dimensions of learning with climate and innovation. This finding has filled that gap of learning, innovation and climate in the hotel industry in Australia.

The findings showed that the dimensions of innovation had a strong relationship with learning and climate.

In this study, workplace innovation was studied as a process that occurred at three different levels: organizational, group and at the individual level in an innovative climate.

The $r$-value for organizational innovation (0.760, 0.583) showed a significant relationship. This shows when innovation occurs at the organizational level, learning occurs in a positive climate.

Although a previous assumption of Reis and Trout (1981) stated that innovation was a form of learning this assumption has not been empirically challenged in the management literature.

This study has attempted to empirically challenge that assumption. Previous empirical studies have attempted to study the concept from the product perspective. The finding from this study is unique in that it highlights the importance of learning in the innovation process and the role of climate in the innovation process.
The $r$ value for Innovation Climate (0.617; 0.557) showed a significant relationship with learning and climate. This finding supports the majority of climate studies, especially studies that have used Koys and Decotiis (1992) instrument to measure climate (McMurray, 1999; McMurray and Dorai, 2001).

This finding is relevant to any industry. Employees in order to be creative and innovative need an organizational climate that fosters creativity and innovation. The $r$ value for team innovation (0.630, 0.654) showed a significant relationship with learning and climate. This finding supports the importance of teams in the innovation process. This finding is relevant to the hotel industry as most of the employees work in teams. According to one of the hotel managers, employees are prone to coming up with creative ideas when they work in teams.

For example, the front office employees in one of the hotels regularly meet in order to find creative solutions to customer-related problems. Although teams enhance performance in an industry, based on the earliest Hawthorn experiments, the literature does not show their role in learning and innovation, this study attempts to redress this.

The $r$ value for Individual Innovation (0.585, 0.525) showed that creativity is an important aspect of learning and climate. This finding supports the body of literature that emphasizes the importance of individual creativity in the workplace. The finding supports most of the empirical studies (e.g Amabile 1996, 1998, and 1986) on creativity. The quantitative data indicate that, in the hotel industry, learning and
creativity complement each other. The training function in the hotel industry is replaced with on the job learning (McMurray and Dorai, 2001).

Therefore, employees are rewarded when they put forward creative ideas. This, however, refutes studies that establish a relationship between structure and innovation (Bruce and Scott, 1997). The hotel industry is strongly controlled by policies and procedures; therefore employees are not encouraged to be creative or are not allowed to take risks.

Hierarchical Regression was performed to identify the dimensions of learning that predict innovation. The standardized regression coefficient $\beta$ value showed that Information Sharing Patterns ($\beta=.293$) and learning practices ($\beta=.255$) predict innovation in organizations. This finding supports the earlier theory of Huber (1998), who concluded that information rich environments foster creativity and innovation. In the hotel industry, information processing and systems and procedures play a significant role in fostering innovation and creativity.

However, this is dependent of the climate and structure of the hotels. The findings further showed that the pressure ($\beta= -.007$) and fairness dimensions ($\beta= -.009$) contributed the least towards organizational innovation.

It was found that the achievement mindset dimension predicted all the dimensions of innovation, and also that inquiry climate was not an indicator of employee learning in the workplace.
6.9 Summary

In summary, the above findings, apart from confirming the hypotheses, attempted to fill several gaps in the literature of learning, innovation and climate. Pearson Correlation and Hierarchical Regression established the relationships among all the three dependent variables. The findings have made important contribution to the literature. This study also attempts to add to research of measurement of the variables. It has measured organizational learning and organizational innovation from the process perspectives.

It measured the three dependent variables simultaneously. The relationships between demographic variables and the dependent variables have opened a new area for future research.
Chapter Seven

7.0 Conclusions and Recommendations

7.1 Objective

The objective of this chapter is to interpret the analysis of the six hypotheses that were reported in the previous chapter. In addition, the chapter will draw conclusions from the findings of the hypotheses. It will link the findings to organizational learning, organizational innovation and organizational climate. The following sections discuss the findings and how they addressed the gaps in the literature.

7.2 The Australian Hotel Industry

The findings in this study addressed several gaps in the literature. It showed that the Australian hotel industry is highly labour intensive and is a highly diversified industry with complex organizational structure. The researcher found that the complex structure also impacted on the culture of the workplace, permeating a number of areas and divisions in the hotels. For example, irrespective of the size of the hotels under study, it was found that there were many divisions that carried out different functions in the hotels and that the internal workings of the individual departments were highly centralized and bureaucratic, ensuring a high degree of co-ordination and control. One of the limitations of a divisional structure is that co-ordination and control impact on the performance of employees and the overall performance of the hotels.
To overcome these limitations, the hotels have strict policies and procedures especially in relation to customer service, to ensure uniformity across levels of employees.

The hotel industry, as the researcher observed, promotes creativity at one level to ensure customer satisfaction and on the other hand the industry is highly formalized with strict policies and procedures. This finding could be attributed to the small data set of hotels.

In contrast, since the industry is highly customer focused and labour intensive, it is important that policies and procedures are well defined and consistent across all levels of employees. This leaves no room for creativity and innovation at the employee level in this industry. However, during major events and special occasions such as Christmas, and New Year, the hotels adopt an *ad hoc* structure to meet the special demands of the customers.

During interview with the employees at all levels (worker, supervisory and managerial) one of the responses from the interviewees was that ‘*since we have to ensure that customers are satisfied we have to strictly follow the rules and regulations laid down by the management of the hotels and therefore, have no opportunity to be creative.*’

This finding supports studies on bureaucratic structures and their influence on organizational innovation and creativity (Slappendel, 1996).
In addition, this finding further supports the theory laid by Robbins and Barnwell (1997) who concluded that more formalized the structure, the lesser will be the creativity and innovation amongst employees.

Creativity and flexibility were allowed with certain categories and levels of employees. This was clearly mentioned to the researcher during an interview with food and beverage manager and guest relations’ manager.

Another observation made in this study included a number of positions in the hotel industry. According to the HRM of the international brewery group, job classifications were numerous which at times, led to ambiguity in roles and resulted in role conflicts.

The hotel industry is made up of a high percentage of casual employees and a high percentage of women (54.7 percent). The HRM managers of the hotel reported that a greater percentage of women occupied positions such as receptionists, front office, housekeeping, and administration.

This finding supports similar conclusions drawn by Biswas and Cassell (1996), in the UK hotel industry. Their study concluded that women occupied positions in hotels that involved direct contact with customers. In contrast, the findings from this study as well as the findings of Biswas and Cassell (1996) conclude that men occupy chief positions in hotels. The greater percentage of Australians, New Zealanders and Pacific Islanders (73.2 %) indicates that the hospitality industry is popular in ethnic diversity. Secondly, Australia is seen as a tourist country, of which the hospitality industry
forms a major part; hence, courses relating to tourism and hospitality are quite popular amongst the Australian community.

Another point that may explain this greater ethnic diversity could be that selection criteria in this industry are flexible, and recruitment is based on known contacts rather than through formal channels. The HRM manager of the international brewery group stated that the hotels follow a recruitment process only on a needs basis, and prefer to recruit employees through known channels, especially through their present employees.

According to the HRM manager, recruiting through known contacts ensures reliability of employees and seldom requires training. The HRM manager of one of the hotels stated that their hotel did not follow a formal HR Planning process, and therefore recruitment was done on an *ad-hoc* basis.

The informal approach to the recruitment process tends to have implications on other HR processes such as induction, performance management and training. The Corporate HRM manager of the hotel group under study revealed that the HR function was still evolving professionally. An unprofessional approach to human resource management does not increase employee productivity (Stone, 2000). This finding supports the conclusions drawn by Nankervis (1999) on the role of HR in the hotel industry. This may be explained by the casualization of workforce, and by the nature of the workforce itself, which is a mix of unskilled and semi-skilled employees.
7.3 Conclusions about Workplace Survey

The workplace survey used for this study has shown that variables such as organizational learning, organizational innovation and organizational climate can be measured simultaneously as employee-related constructs. This helps to understand the influence of the dimensions of each of the dependent variables on each another. The holistic approach that this workplace survey takes has established a good understanding of the relationship between the three employees related variables. The questions in the Workplace Survey attempt to study the influence of the variables on each other. The reliability of the survey has been tested across different industries and has shown high Cronbach Alpha value ($\alpha=.095$). While the literature reveals a gap in the simultaneous measurement of all the three dependent variables, the development of the Workplace Survey attempts to fill this gap.

7.4 Conclusions about Organizational Learning

The findings from this study show that organizational learning plays a significant role in the growth and survival in the workplace today. Results from this study show that organizational learning as a concept is evolving, with contradictions amongst researchers.

The significant relationship between organizational learning and organizational innovation shows learning to be positively related to organizational innovation. This is because innovation is a form of learning. What is significant in this research findings show that for learning and innovation are closely related and for both the concepts to exist climate is an important component.
The dimensions of organizational learning play a significant role, in that each of the four dimensions identified impact on the overall learning process at the organizational level.

For example, information-sharing patterns show that for learning to occur, information sharing plays a significant role in learning. Similarly learning practices in the workplace influence learning by organizations. Information and energy shape the patterns of behaviour of individuals. From this it can be concluded that learning can occur as an individual phenomenon or as a group phenomenon. Huber’s (1998) assumption is that people within organizations learn continually, even as a result of informal practices in the workplace. This assumption by Huber is proved in the hotel industry. Employees in the hotel industry are constantly encouraged on the job learning. The HR Manager in one of the hotels mentioned that hotel employees at all levels are constantly provided formal and informal coaching.

The inter-relationship between the dimensions of organizational learning has illustrated the importance of the following in the workplace: information sharing and learning practices complement one another. Hotels must have effective learning practices that will foster knowledge and information sharing. The inert-relationship between the dimensions of OL has filled an important gap in the OL literature.

Although the industry is process driven, work practices are not formally documented. This was evident in the hotels observed by the researcher. This may be attributed to the fact that the turnover of employees is fairly high in this industry; hence there is no
continuity of employees which constantly results in the implementation of new procedures when as new employees take over.

Another reason that may be attributed to this is the influence of organizational structure information and knowledge processing. This impacts on the learning of employees. This conclusion was drawn from a previous empirical study conducted by the researcher.

The roles of employees influence the learning and innovation process in the workplace. For example, managers and functional level employees have more opportunities to learn, as opposed to supervisors, who play maintenance roles in the hotel industry. This was empirically supported by an earlier study by the researcher. It can be concluded that organizational learning occurs at different levels.

The findings help us to conclude that learning by organizations is no longer a cyclical process, or a single or a double-loop process, but by a process that is influenced by various organizational elements, such as information sharing patterns, the inquiry climate, and achievement mindset, and the learning practices prevalent in the workplace. Organizational learning in the hotel sector is a holistic process that is influenced by several factors such as information sharing, achievement mindset, learning practices and an inquiry climate. The findings in this study have taken a different approach to OL in comparison to earlier studies in the literature. Hence this study adds a new dimension to OL as a concept in that the concept has been measure simultaneously and not in isolation, it has been defined from an information processing perspective and has been applied in a service context.
7.5 Conclusions about Organizational Innovation

The findings in the present study have established the importance of organizational innovation at different levels in organizations, especially in the hotel industry. Today innovation in hotels is a compulsory phenomenon that is required for their growth and survival.

Most of the studies on innovation have been outcome based a concept that has been very popular from the manufacturing perspective. However, studies from the process perspective have been limited and organizations have not understood the roles of the individual, the team and the climate, which influences the innovation in the workplace. This study attempts to fill in the innovation literature and in addition it fills the gap in the Australian hotel literature.

Innovation in the hotel industry is process based and is strongly related to the innovative work practices that are being introduced to ensure customer satisfaction. Only employees at certain levels are given opportunities to be creative hence innovation occurs in different areas at different levels. This imbalance in the innovation process may impact on the productivity of the workplace. The findings from this study conclude that organizational innovation may no longer be seen as an outcome but as a process that permeates through different levels in an innovative climate.
7.6 Conclusions about Organizational Climate

Organizational climate is an important variable that impacts on many factors in an organization, such as productivity, performance standards, employee morale and job satisfaction.

The findings in the present study demonstrate that organizational climate is a contributing factor towards learning and innovation. In other words, a healthy climate in the workplace promotes learning and innovation. From this study it can be observed that organizational climate has carved an important place in workplace innovation and organizational learning literature. The study shows that employees, in order to be creative and innovative, need a climate that fosters creativity and innovation. The hotel industry needs to foster that climate so that employees will learn better and be innovative in the workplace.

As the industry is labour intensive it is important that the management of the hotels ensure a climate that will foster productivity in the workplace.

7.7 Contributions to Research

This study filled an important gap in the literature by establishing that organizational learning, innovation and climate are important elements in the Australian hotel industry and are related to one another.

Furthermore, this study for the first time provides an insight into the relationship between learning, innovation and climate. The present study makes an important contribution to management research. The study redefines the concept of organizational learning and organizational innovation from the process perspective in the service industry. The findings have integrated all the three employee-related
constructs of organizational learning, innovation and climate and have shown that they can be measured simultaneously in a service industry. This will validate some of the conclusions drawn from this study. The literature in OL, OI and OC is scanty and ambiguous and would benefit from more empirical research if this study can be replicated into other sectors such as manufacturing.

7.8 Implications for Management

Potentially, the findings from this study will help managers identify employee related issues that can hinder the learning and the innovation process in the workplace. The industry is highly labour intensive, and therefore the findings of this study will directly impact on the recruitment and training strategy of the hotels.

Further studies of employee learning styles and their impact on innovation process would help the management of these hotels design training programs based on individual needs while keeping in view the organizational needs. It is important that organizations understand the importance of human resources to the strategic goals of the organization.

It is imperative to ensure that organizations create a productive climate that will foster learning and innovation thereby enhancing the productivity of the workplace.

Literature has shown that employee productivity is dependent on many variables. The findings of this study emphasize that employee related constructs such as learning; innovation and climate need more attention in workplaces today.
The hotel industry, being an important part of the tourism industry needs to understand that employee productivity may be enhanced through a healthy organizational climate that fosters learning and innovation.

7.9 Contribution to Theory

The present study set out to contribute to the existing organizational learning, organizational innovation and organizational climate literature. The organizational learning literature is consistently evolving amidst controversies of definitions and measurement. The conclusions drawn from this study will assist in uncovering the complexities and ambiguities that surround this concept.

This study added value to bodies of knowledge in organizational learning, organization innovation and organizational climate literature. The finding on organizational innovation added a new dimension to the scant literature on process innovation and shown that innovation may also be seen from a process perspective. The findings highlight the important role organizational climate plays in fostering learning and innovation the workplace. The Workplace Survey, as a tool, contributed towards the limited literature related to measuring employee relating constructs simultaneously.

In addition, the findings contributed to the Australian hotel industry literature especially in relation to organizational learning, innovation and climate in the Australian hotel sector.

By taking a process perspective and exploring the three variables simultaneously, this study synthesizes the process literature on organizational learning, organizational innovation and organizational climate especially in the Australian hotel context.
Figure 5.10 The relationship between organizational learning, organizational innovation and organizational climate—key findings

7.10 Recommendations

The findings in this study add value to the existing body of literature on organizational learning, organizational innovation and organizational climate. The results add a new dimension in understanding the Australian hotel environment in that, the findings have the potential to help management implement changes to work practices that can foster innovation and learning in the Australian hotel context.
Management of these hotels can also improve the climate through attitudinal surveys. This is important for management to link HR practices that foster innovation.

The hotel industry would benefit by shifting its paradigm from being a process and outcome driven culture to a learning culture that fosters innovation. Management needs to note that, unless a learning culture is fostered, it is going to be difficult for management to enhance productivity. This could be achieved by administering regular climate surveys that will assist management assess the learning needs of their employees. In today’s work environment, employee participation is an important factor for the success of an organization.

The management of these hotels must take a holistic approach to their management style and create a climate that will foster learning and innovation. The hotel industry is highly labour intensive; hence employee-related constructs such as organizational learning, innovation and climate need to be given importance.

Most of the organizations offer on-the-job learning as a part of the induction process, but it is important for the management of these hotels to ensure that the induction process is effective, so that new recruits can learn and receive opportunities to be creative.

The dimensions of organizational learning, such as information sharing, need to be maintained by creating a culture that will foster learning. The motivation level of employees can be kept high by offering attractive incentive schemes.
Documentation such as manuals need to be written and updated on a regular basis, workplace practices need to be reviewed and implemented in a systematic way. The Australian hotel industry needs to shift its paradigm from being service-orientated to becoming learning-orientated. Learning has enhanced knowledge management in organizations and is becoming an integral part of organizational growth and productivity. Therefore it is important for hotel management to ensure that their work practices are channeled towards information sharing, innovation and maintaining a healthy organizational climate.

7.11 Summary

This study achieved its objectives by establishing the relationship between three multidimensional variables and their relationship to demographic variables such as the country of origin and areas of employment. In achieving its objectives this study has shed new light on organizational learning, organizational innovation and organizational climate and highlighted the complexity of these variables. The study’s focus may seem limited but the importance of establishing the relationship between learning, innovation and climate is important to the Australian Hotel Industry which is highly labour intensive and by researching into such employee related constructs it would help the industry enhance its labour productivity. The study provides timely recommendations aimed at enhancing the learning and innovative processes in the Australian hotel industry. Few theories have been generated in the Australian context, especially in relation to the hotel industry. The hotel industry is constantly making changes to ensure customer satisfaction and in a
highly labour intensive industry it is important for the management of these hotels to ensure that they keep their work climate healthy.

The scientific finding in this study is two fold: that organizational learning is an important aspect of the Australian hotel industry, which can foster innovation in a healthy climate. On the other hand, climate is an important ingredient in the learning and innovation process of an organization vis-à-vis the employee.
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Appendix One

Coding of Independent Variables

Levels of employees were coded as follows
Managerial = 1
Supervisory = 2
Employee = 3

Shift timings of employees
Day = 1
Afternoon = 2
Night = 3
Rotating = 4

Gender
Male = 1,
Female = 2

Age

17-20 = 1
21-30 = 2
31-40 = 3
41-50 = 4
51-60 = 5
61 and above = 6

Education level completed

Below VCE = 1
Certificates, Trades and Diplomas = 2
Undergraduate Degree = 3
Post Graduate Degree = 4
Professional Qualification (CPA etc.) = 5

Nature of Employment
Full Time = 1
Part Time = 2
Casual = 3
Permanent = 4
Temporary = 5
Years of Experience

0-3 years= 1  
4-8 years= 3  
9-12 years= 3  
13-16 years= 4  
16 years and above= 5

Country of Origin

Australian= 1  
Asian = 2  
European= 3 (Greece, England, Ireland,)  
New Zealand and Pacific Islanders= 4
Appendix Two

Coding of Dependent Variables

The dependent variables were coded as follows:
Organizational Learning was labelled as OLP.
Dimensions of OL were labelled as

OLP1=Learning Practices
OLP2=Achievement Mindset
OLP3=Inquiry Climate
OLP4=Information Sharing Patterns

Organizational Innovation was labelled as OI.
Dimensions of OI were labelled as
OI1=Organizational Innovation
OI2=Innovation Climate
OI3=Team Innovation
OI4=Individual Innovation

Organizational Climate was labelled as OC.
Dimensions of Organizational Climate was labelled as
OC1=Autonomy
OC2=Cohesion
OC3=Fairness
OC4=Pressure
OC5=Trust
OC6=Support
OC7=Recognition
OC8=Innovation
Appendix Three

Coding of departments in hotels

<table>
<thead>
<tr>
<th>Codes</th>
<th>Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gaming, Tab, Events Management</td>
</tr>
<tr>
<td>2</td>
<td>Front Office, Customer Service, Guest Relations Officer, Hotel Reservations</td>
</tr>
<tr>
<td>3</td>
<td>Housekeeping, Concierge</td>
</tr>
<tr>
<td>4</td>
<td>Kitchen, Food And Beverage</td>
</tr>
<tr>
<td>5</td>
<td>Café, Restaurant, Banquet</td>
</tr>
<tr>
<td>6</td>
<td>Bottle Shop, Bar, Bistro</td>
</tr>
<tr>
<td>7</td>
<td>Human Resources, Office Administration</td>
</tr>
<tr>
<td>8</td>
<td>Marketing, Sales, Marketing Communication, Public Relations.</td>
</tr>
<tr>
<td>9</td>
<td>Engineering, Maintenance</td>
</tr>
<tr>
<td>10</td>
<td>Finance, Accounts, Credit Control</td>
</tr>
</tbody>
</table>
## Appendix Four

### Coding of position of respondents

<table>
<thead>
<tr>
<th>Code</th>
<th>Position</th>
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<tbody>
<tr>
<td>101</td>
<td>Gaming manager</td>
</tr>
<tr>
<td>102</td>
<td>Gaming Supervisor</td>
</tr>
<tr>
<td>103</td>
<td>Events Manager</td>
</tr>
<tr>
<td>104</td>
<td>Events Coordinator</td>
</tr>
<tr>
<td>105</td>
<td>Cashier</td>
</tr>
<tr>
<td>201</td>
<td>Front Office assistant</td>
</tr>
<tr>
<td>202</td>
<td>Receptionist</td>
</tr>
<tr>
<td>203</td>
<td>Guest Relations Officer</td>
</tr>
<tr>
<td>204</td>
<td>Hotel Reservations</td>
</tr>
<tr>
<td>301</td>
<td>Housekeeping Supervisor</td>
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<tr>
<td>302</td>
<td>Room Attendant</td>
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<tr>
<td>303</td>
<td>Concierge</td>
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<td>Kitchen Supervisor</td>
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<td>Head Chef</td>
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<td>Chef</td>
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<td>Restaurant Manager</td>
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<td>Restaurant Supervisor</td>
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<td>503</td>
<td>Waitress</td>
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<tr>
<td>504</td>
<td>Retail Assistant</td>
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<td>Bottle Shop Manager</td>
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<td>Barman</td>
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<td>Bar Attendant</td>
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<td>Bistro Supervisor</td>
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<td>Retail manager</td>
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<td>HRM Manager</td>
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<td>Office Administration</td>
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<td>HR Executive</td>
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<td>Clerk</td>
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<td>Administration Officer</td>
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<td>HR Leader</td>
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<td>Sales/Marketing Executive</td>
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<td>Public Relations Executive</td>
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<td>Maintenance Supervisor</td>
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<td>Maintenance Officer</td>
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<td>Accounts Assistant</td>
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<td>Credit Control</td>
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<td>003</td>
<td>Finance Manager</td>
</tr>
<tr>
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<td>Underwriter</td>
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<td>005</td>
<td>Business Systems Analyst</td>
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