

AN INVESTIGATION OF ANTECEDENTS
AND CONSEQUENCES OF
ORGANISATIONAL COMMITMENT AMONG
GOVERNMENT ADMINISTRATIVE
EMPLOYEES IN SAUDI ARABIA

For award of the degree of Doctor of Philosophy

By

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Abstract

Organisational commitment, viewed as a measurable psychological state, is a core variable of interest in Organisational Behaviour research. It has been studied for more than four decades, largely focusing on the identification of its antecedents and consequences. One widely used conceptualisation is Meyer and Allen's (1991) three-component model of commitment, which considers commitment as having three forms: affective, continuance and normative (emotional attachment to an organisation, the perceived cost associated with leaving it and the perceived obligation to remain in it).

This research contributes in three ways to improving our understanding of public-sector work behaviour, with particular reference to organisational commitment. Firstly, it examines the multi-dimensionality of organisational commitment. Secondly, it explores the relationships between Meyer and Allen's three components, modifying the concept of continuance commitment to include two sub-components, high personal sacrifice and low perceived alternatives, thus proposing a four-factor model, Antecedents and Consequences of Organisational Commitment Components (ACOCC). Thirdly, it considers antecedent variables, including Hofstede's (1980) four cultural dimensions (individualism/collectivism, uncertainty avoidance, power distance and masculinity/femininity), as well as selected consequences: in role behaviour, organisational citizen behaviour and employee intention to leave. These selected variables are deemed to be suitable for Saudi Arabian culture and have never been tested before in that context. The study investigates how the commitment components are associated with and mediate relationships with the set of possible work behaviours.

Using a sample of 700 employees from different organisation levels (drawn from 16 Saudi ministries in two cities, Riyadh and Jeddah) the hypotheses were tested through structural equation modelling, which confirmed the fit of the proposed recursive ACOCC model. The regression paths were significant between the antecedents (opportunities for learning, impersonal bureaucratic arrangements and Hofstede's four cultural dimensions) and affective and normative commitment, as well as for continuance commitment for reasons of high personal sacrifice. Intention to leave and organisational citizen behaviour were fully mediated by the commitment components. Thus the findings reveal the level and form of organisational commitment among public-sector employees and of relationships between the antecedents and consequences of that commitment in a non-Western culture, specifically Saudi Arabia. In particular, they highlight the significant mediation role of organisational commitment. The findings also permit exploration of a number of issues pertaining to cultural dimensions impacting on organisational commitment. Noteworthy here, for example, is the high degree of uncertainty avoidance found among Saudi public-sector top-level managers.

These different results have important implications for the nature and management of commitment among government employees in Saudi Arabia and the Gulf Cooperation Council countries as a whole.

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DEDICATION

To my mother Raya Hammad, a great woman, whom I sadly lost during my Ph.D. studies. Without her encouragement and support during my life, I would not be able of achieving anything today. May Allah rest her soul in heaven.

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Legend

OC: Organisational commitment	I/C: Individualism/Collectivism
AC: Affective commitment	PD : Power distance
NC: Normative commitment	UA : Uncertainty avoidance
CC: Continuance commitment	Int : Intention to leave
CCH: High sacrifice	OCB: organisational citizen behaviour
CCL: Low alternative	IRB: In role behaviour
Ler : Training (opportunity of learning)	ACOCC: Antecedent and consequences of organisational commitment components model
Com: Management communication	CFA: Confirmatory factor analysis
Bur: Impersonal bureaucratic arrangements	SEM: Structural equation modelling
M/F: Masculinity/Femininity	

CHAPTER ONE

INTRODUCTION

1.1 Background of the research

Organisational commitment (OC) is an important psychological construct that has been studied over the last forty years (Powell and Meyer, 2004) and is defined as “the strong psychological link between the individual and his or her organisation” (Meyer and Allen, 1991, p.67). Where organisational commitment is evident, there is strong belief in an organisation’s values and objectives, which enhances the readiness of an organisation’s members to do their utmost to represent the organisation; it also increases their desire to continue as members of the organisation.

The existing theoretical and field studies show that a high level of organisational commitment has a considerable influence on both the organisation and its individual members at all levels; employees tend to take more responsibilities and be more productive if they have a stronger commitment to the organisation (Shaw, Delery and Abdulla, 2003; Herscovitch and Meyer, 2002; Abbott, White and Charles, 2005). In addition, low commitment amongst employees is significantly correlated with occupational out flow, excessive absences, stress and other work related problems (Ward and Davis, 1995).

Practicing managers and behavioural scientists have looked more closely at the effects of organisational commitment in recent years (Mowday, Porter and Steers, 1982) and have given it increased attention because of its numerous positive and negative occupational impacts. The consequences of low levels of organisational commitment can be negative, including high turnover, low productivity and absenteeism (Mathieu and Zajac, 1990; Somers, 1993; Meyer, Herscovitch, and Topolnytsky, 2002; Abbott *et al.*, 2005). Organisational scientists strive to understand the nature of commitment in its different forms in order to analyse the relationships between its components and behavioural outcomes in the workplace (Meyer and Allen, 1997; Mayer and Schoorman, 1992; Meyer *et al.*, 2002).

Previous research has found that the nature of these relationships affects not only employees but also organisations as a whole (Meyer *et al.*, 2002; Wu and Cavusgil, 2006). Thus, most practitioners are inclined to associate high levels of commitment with increased productivity and lower employee turnover. However, relatively few studies have adequately dealt with the relationship between organisational commitment and its causes and consequences in the public sector (Vandenabeele, 2009; Steijn and Leisink, 2006). This issue is as vital for public sector human resource managers and scholars as it is for managers and scholars working in the context of private organisations. Thus, a common theme uniting the organisational goals of governmental and private organisations alike is the improvement and enhancement of each employee's level of organisational commitment (Park and Rainey, 2007).

Various empirical studies have used a multidimensional approach (Meyer *et al.*, 2002). One widely used conceptualisation is Meyer and Allen's (1991) three-component model of commitment, which considers commitment to have three forms: affective, continuance and normative. Affective commitment (AC) is conceived as emotional attachment to an organisation. Continuance commitment (CC) is conceived as the perceived costs of leaving an organisation. Normative commitment (NC) is conceived as the perceived obligation to remain in an organisation (Meyer *et al.*, 2002).

Although previous research has indicated the importance of OC, its antecedents and consequences, a definitive or perfect model, of OC to improve possible productive behaviour, cannot be established. That is, there may not necessarily be equivalence between what the literature has identified as the best HR practices and either those that are valued by employees, or those that organisations employ in order to manage the commitment process. Nonetheless, the literature has identified lengthy lists of HR practices that should be adopted by firms seeking to pursue high-commitment strategies (Conway and Monks, 2009). On the other hand, as Miller (2000, p.290) points out, "no system exists that can perfectly settle or reconcile the conflicting self-interest of individuals in an interactive social organisation" and "the failure to find a perfect system is not due to human weakness (frailty), unawareness, or ignorance, but to certain logical impossibilities in social organisation". Therefore, it is vital that

researchers strive to investigate the effect of many HR practices designed to improve employee commitment.

1.2 Importance of the study

In this thesis it will be argued that different aspects of antecedents can be integrated into one multidimensional model for OC. Previous research has typically studied one facet of antecedents, such as HR practices only, cultural dimension(s) only or side-bet indices only, whereas this research argues the possibility of integrating these different facets into one model. This improves our understanding of the development of organisational commitment. In addition, we test the proposed model in the context of Saudi Arabia, as opposed to a Western context.

Despite the importance of OC for the success of organisations, the majority of organisational behaviour literature is confined to the study of OC in developed countries (Suliman and Iles, 2000). As a result, relatively little is known about OC in developing countries in general, and in Saudi Arabia in particular. There is also little understanding of the relationship between OC and employees' intention to leave an organisation, in-role behaviour and organisational citizen behaviour (OCB) (Yousef, 2000a; Al Kahtani, 2004; Alkeireidis, 2003). Little is known about the causes of each component of OC in this context. Additionally, only a few studies have looked at these forms of commitment in different cultures as a way to generalise their findings. Some questions that will be explored in this study are as follows:

- Should OC, originally developed in North America, be viewed as a concept that exists in exactly the same way in Saudi culture?
- Alternatively, should we look for cultural differences that shape and constrain our understanding commitment across different regions?
- Do the factors that enhance and increase the level of each OC component when tested in other cultures have the same significant effect in Saudi culture?
- If not, what are the factors that have caused the differences between cross-national and cross-cultural research?
- Finally, do these components of commitment have the same consequences in different cultures?

This study will open up important questions that have been previously unaddressed and will add significantly to our existing wealth of knowledge on OC.

The breadth of this study will extend to the influence OC appears to have on the conduct of public and private sector employees in terms of performance and efficient delivery of services. Many public sector organisations in developing countries are plagued by low productivity and poor performance among their employees (Al-Yahya, 2009). Organisational commitment appears to be the main cause of this (Shaw, Delery and Abdulla, 2003; Al-Qarioti and Al-Enzei, 2004). This deficiency exists at every level of these organisations. Another interesting facet of the discussion is that managers in the public sector are found to exhibit lower OC than their counterparts in the private sector (Zeffane, 1994; Bourantas and Papalexandris, 1992; Kline and Peters, 1991). Thus, there is a need for a more generalisable research framework that systematically investigates the causes and consequences of the organisational commitment of individuals in Arab cultures. This study ultimately endeavours to understand OC and its nature amongst government administrative employees (public sector) in Saudi Arabia.

Additionally, this study discusses numerous findings from previous studies that indicate the greater success of private sector organisations, compared to public sector organisations, in increasing the commitment of employees (Buchanan, 1974; Park and Rainey, 2007; Steijn and Leisink, 2006). It is worth mentioning that recommendations from earlier studies in public administration literature have called for a greater understanding of the factors and circumstances that have direct effects on levels of OC, because commitment is essential for public officials given that they are the foundation of administrative responsibility (Friedrich, 1940; Miller, 2000; Robertson, Lo and Tang, 2003). In addition, public employees with high levels of OC are expected to build more “social capital”, as is found in relationships categorized by high levels of trust and shared values; this prompts “organisational learning” (Robertson *et al.*, 2003, p.2). As Miller (2000) argued, inherent moral hazard problems cannot be solved in public agencies with penalties and incentives alone (p.290). According to public administration literature, public employees’ commitment to act in the interests of their organisation, and the members of the public their organisation serves, is important to the success of public organisations

(Balfour and Wechsler, 1994; Perry and Wise, 1990; Robertson *et al.*, 2003; Romzek, 1990).

This study will also emphasise the contextual variations that affect employees' OC in the public sector in Saudi Arabia and discuss the impact of these variations. The understanding of this concept in Saudi Arabia remains limited despite the increased emphasis placed on commitment (Al Kahtani, 2004) and the progress made towards establishing a definite interpretation of the OC constructs.

Knowing the level and form of organisational commitment among employees in Saudi Arabia is particularly important in light of the recent trend towards increased productivity and the promotion of standards of service by the public sector, which has necessitated the provision of an environment conducive to a competent and efficient workforce. Through discussion of the issues pertinent to management theory, with a particular emphasis on organisational psychology in the context of Saudi Arabia, this study will endeavour to make a significant contribution to knowledge in the area of organisational behaviour through a detailed examination of the different components of organisational commitment.

1.3 Study aims

In this thesis, the researcher will improve understanding in the area of OC; this research is based on Meyer and Allen's (1991) three-component model. It employs their model with a view to improve prediction and explanation of the components of organisational commitment in public sector agencies in the Kingdom of Saudi Arabia at the three different managerial levels. Furthermore, the research aims to contribute in three ways to improving our understanding of public sector work behaviour. Firstly, it examines the multi-dimensionality of organisational commitment. Secondly, it explores the relationships between the three components, affective (AC), normative (NC), and continuance (including the sub-components of high personal sacrifice (CCH) and low perceived alternatives (CCL)), with selected consequences and practical antecedent variables that are suitable for the Saudi Arabian culture. These include Hofstede's cultural dimensions, opportunity for learning, management communications, impersonal bureaucratic arrangements, organisational citizen behaviour and intention to leave. Thirdly, it investigates how

these components are differentially associated with one another and how they mediate the relationships present within the set of possible work behaviours.

Accordingly, the study aims to identify the level of and types of commitment found among Saudi public sector employees at different managerial levels. Doing so pinpoints the practical steps that lead to an understanding of the nature of organisational commitment in the public sector in the Kingdom of Saudi Arabia. The study also aims to identify the factors that will have positive results for organisations and assist in raising standards for employee performance and productive behaviour. Hence, the influential factors will pave the way for practical steps towards providing a work environment that boosts commitment and reduces negative impacts. Such a meticulous investigation of the reciprocal affect of culture and employee commitment to the organisation on in-role behaviour and organisational citizenship behaviour (OCB) has seldom been carried out in a GCC country's society and represents one of the main contributions of this research.

1.4 Objectives of the Study

The aims of the study will be achieved through the pursuit of the following objectives:

- to examine the multi-dimensionality of organisational commitment in a Saudi sample;
- to investigate the level of commitment of employees in the public sector in Saudi Arabia;
- to explore the correlation between the components of Meyer and Allan's three component model of commitment on different organisational levels in the public sector in Saudi Arabia;
- to explore the effects of antecedent variables (training as an "opportunity for learning" and management communication) on affective commitment and normative commitment;
- to explore the effects of the antecedent variable impersonal bureaucratic arrangements on continuance commitment;
- to explore the effects of the antecedent variable of Hofstede's cultural dimensions (power distance, uncertainty avoidance, individualism/collectivism,

and masculinity/femininity) on normative, continuance and affective commitment;

- to examine the relationship between components of commitment and public sector employees' in-role behaviour and organisational citizenship behaviour (OCB);
- to examine the effect of the three components of OC on employees' intention to leave the organisation;
- to explore the mediating role of the components of organisational commitment between the selected antecedents and work behaviour outcomes;
- to provide recommendations that assist in increasing organisational commitment in Saudi Arabian organisations.

1.5 Research contributions and novelties

This research is groundbreaking in a variety of ways:

Firstly, it is the first study to explore the multi-dimensionality of commitment in the context of Saudi Arabia, making a significant contribution to management research literature by conducting a more culturally based study of OC constructs that yields a new perspective.

Secondly, despite its apparent importance, organisational commitment in the government sector has not been thoroughly explored. No empirical analysis exists that directly addresses the effect of managerial positions on normative commitment. Knowledge about organisational commitment forms and government job behaviour enhances future employee performance. Conducting research and disseminating the findings is important for the management of public sector employees.

Thirdly, this research adds to OC literature and applies Hofstede's cultural dimensions to an Arab culture with new results. It is the first study to empirically explore and use Hofstede's cultural dimensions with individual-level measurement in a GCC country, such that Hofstede's cultural dimensions illuminate the importance of and the affect of these dimensions on each commitment component.

Fourthly, by investigating the antecedents and consequences of commitment among public sector employees, this study can contribute to the identification of important

factors that affect commitment levels and contribute to organisational effectiveness and efficiency in the public sector. Moreover, accumulating evidence in these areas will greatly contribute to our understanding of how, in a crucial economic time, the three-component model can be effective in illustrating employee commitment in public agencies that have deficits in their public budgets.

Fifthly, through a systematic comparison, this study will assess the OC models', antecedents and consequences across a variety of cultures that differ substantially with regard to Hofstede's (1980) cultural dimensions—again, adopting the perspective of a non-Western culture is key, in particular, Saudi Arabia.

Finally, this research will improve academicians' understanding (in a non-Western context) of the potential mediating role that the various facets of organisational commitment might play for HRM practices (i.e., training and management communication), side-bet indexes (i.e., impersonal bureaucratic management), socialisation experiences and, in particular, Hofstede's cultural dimensions in their relationship with productive behaviour (in-role behaviour, extra-role behaviour and intention to leave). Additionally, it will draw practitioners' attention to the different components of organisational commitment, the effects of the selected antecedents, their causes and, consequently, the necessity of employing and driving these selected antecedents in order to improve performance, extra-role behaviour and various facets of organisational commitment.

1.6 Definition of terms

The following definitions were applied to form the foundation of this research:

- A. **Organisational commitment (OC):** “A psychological stabilizing or obliging force that gives direction to behaviour (e.g., binds an individual to courses of action relevant to the target of that force—the organisation)” (Meyer and Herscovitch, 2001, p.301). It is also defined as a “multidimensional psychological state that characterizes the person's relationship with the organisation in question and has implications for the decision to remain involved in the organisation” (Meyer and Allen, 1997, p.11). The multidimensional forms are (1) affective (AC), (2) continuance (CC) and (3) normative (NC) organisational commitment.

- B. Opportunity for learning–training (Ler):** “The creations of an environment in which important information is freely communicated and in which employees are knowledgeable and perceptive of opportunities for further self-development” (Vandenberg, Richardson and Eastman, 1999, p.309).
- C. Management communication (Com):** “The extent to which organisations provide organisation-related information to their employees, such as information about changes in organisational policies and procedures, financial results, employee and group successes and customer feedback” (Riordan, Vandenberg and Richardson, 2005, p.473).
- D. Impersonal bureaucratic arrangements (Bur):** Roles or polices put into place by the organisation to encourage or reward long-term employment (e.g., a seniority-based compensation system) (Powell and Meyer, 2004, p.159).
- E. Culture:** A collective programming of the mind that distinguishes the members of one group or category of people from another (Hofstede, 2001, p.9). Kluckhohn defines culture as a patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional ideas and especially their attached values (1951, p.86).
- F. Cultural Dimensions (CD):**
- (1)Masculinity/Femininity (M/F): Reflects differences among societies in their beliefs about the behaviour that is appropriate for males versus females (House *et al.*, 2004, p.345).
 - (2)Individualism/Collectivism (I/C): Societies may tend to form two distinct, alternative social patterns. Individualism is a “social pattern that consists of loosely linked individuals who view themselves as independent of collectives”, whereas, collectivism is a “social pattern consisting of closely linked individuals who see themselves as a part of one or more of collectives” (Triandis, 1995, p.2).
 - (3)Uncertainty avoidance (UA): Indicates the degree to which people feel threatened by uncertain and ambiguous situations and seek to avoid them (Hofstede, 2001, p.161).

(4)Power distance (PD): Indicates the extent to which an individual accepts the unequal distribution of power in institutions and organisations (Hofstede, 2001, p.83).

G. In-role behaviour (IRB): Behaviours that are recognised by formal reward systems and are considered part of the requirements described in an employee's job description (Williams and Anderson, 1991, p.601).

H. Organisational citizenship behaviour (OCB): OCB represents individual behaviour that is discretionary, not directly or explicitly recognized by a formal reward system and in sum, promotes the efficient and effective functioning of the organisation (Williams and Anderson, 1991, p.601).

I. Intention to leave (Int): Intention to leave an employing organisation is considered to be indicative of current dissatisfaction with one's employment (Rosin and Korabik, 1991, p.319).

J. Confirmatory factor analysis (CFA): A multivariate method for testing measurement models of the relationship between a set of observed variables and a hypothesised set of latent variables (Easterby-Smith, Thorpe and Jackson, 2008, p.327).

K. Structural equation modelling (SEM): A multivariate model representing the hypothesised causal relationships among a set of variables which may include both observed and latent variables (Easterby-Smith *et al.*, 2008, p.333).

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

The aim of this chapter is to discuss organisational commitment literature in general. The chapter commences with theoretical background that explains the nature and definition of organisational commitment, while also addressing the development of theories of organisational commitment, related studies and measurement instruments and models of commitment. Finally, the current trends in commitment research are highlighted. The theoretical background overview will shed light on both the research questions and the methodology of this study.

The review is organised into five sections: (1) Nature of organisational commitment and its role in organisational behaviour; (2) Theories of organisational commitment; (3) Organisational commitment approaches; (4) Multidimensional models of commitment; (5) Current trends in commitment research.

2.2 Nature of organisational commitment

Given the long history of commitment research, it is not surprising that the term has been defined, conceptualised and measured in many different ways. Indeed, it remains a contested construct today which researchers define consistent with their different theoretical backgrounds and their areas of interest. According to Mowday *et al.* (1982), “researchers from various disciplines ascribed their own meaning to the topic, thereby increasing the difficulty involved in understanding the construct” (p.20). Furthermore, a variety of different levels of commitment have been analysed; for example, sociologists use the term commitment in the analysis of both individual and organisational behaviour. Becker (1970, p.262) explained that “sociologists make use of the concept of commitment when they are trying to account for the fact that people engage in consistent lines of activity”, whereas Grusky (1966, p.489) defined organisational commitment “as the nature of the relationship of member to system as a whole”.

This has resulted in great difficulty in arriving at a generalised definition that reflects the true nature of the construct. Although the literature on commitment is extensive, a comprehensive and universally accepted definition of the term and a model for the commitment process that incorporates divergent points of views appear to be lacking. Given this diversity of influences, one of the major challenges for early investigators was to reach some sort of agreement on the meaning of “commitment” (Meyer, Jackson and Maltin, 2008, p.36). Despite various differences of opinion, several issues seem common across definitions. The following sections present a representative sample of the most significant definitions that have emerged in the OC literature over the years.

2.2.1 Affective orientation

Affective orientation is the most widely used definition of commitment. This framework approaches the concept of commitment from a sociological perspective. The genesis of the concept can be traced to the work of Kanter (1968), who defined commitment as “the willingness of social actors to give energy and loyalty to social systems, the attachment of personality systems to social relations which are seen as self-expressive” (p.499) and considered commitment to be “the process through which individual interests become attached to the carrying out of socially organised patterns of behaviour which are seen as fulfilling those interests, as expressing the nature and needs of the person” (p.500).

A considerable number of researchers equate commitment with affective orientation, such as Sheldon (1971), who defined commitment as “an attitude or an orientation toward the organisation which links or attaches the identity of the person to the organisation” (p.143). Conversely, Buchanan (1974) viewed it as “a partisan, affective attachment to the goals and values of the organisation for its own sake, apart from its purely instrumental worth” (p.533).

The widely used definition of Mowday *et al.* (1982) considered commitment as “the relative strength of an individual’s identification with and involvement in a particular organisation”. Conceptually, it can be characterised by three factors: “a strong belief in and acceptance of the organisation’s goals and values, a willingness to exert

considerable effort on behalf of the organisation, and finally, a strong desire to maintain membership in the organisation” (p.27).

2.2.2 Cost-based analysis (Continuance Commitment)

The cost-based analysis perspective regards commitment as a psychological state that develops from an employee’s satisfaction with the rewards they receive. This is often called continuance commitment (Becker, 1960). Commitment emerges “when a person, by making a side-bet, links extraneous interests with a consistent line of activity” (Becker, 1960, p.32). Becker developed the idea that employees make investments, or side bets, in an organisation (including time and effort) that “would be lost or devalued at some cost to the employee, if they left the organisation or occupation”. In other words, Becker suggests that commitment is a type of ‘consistent behaviour’ achieved through making side bets.

Kanter (1968) considered commitment in terms of costs as “profit associated with continued participation and a “cost” associated with leaving” (p.504), whereas Hrebiniak and Alutto (1972) defined commitment as “a structural phenomenon which occurs as a result of individual-organisational transactions and alterations in side bets or investment over time” (p.556).

2.2.3 Obligation or moral responsibility

Approached from an obligation perspective, commitment can be regarded as a set of “socially accepted behaviours that exceed formal and/or normative expectations relevant to the object of commitment” (Wiener and Henschman, 1977, p.48). Wiener (1982, p.421) described commitment as “the totality of normative pressure to act in a way which meets organisational goals and interests”. This view of commitment as moral or normative, as defined by Marsh and Mannari (1977, p.59), states that “the committed employee considers it morally right to stay in the company, regardless of how much status enhancement or satisfaction the firm gives him or her over the years”.

2.2.4 Summary of commitment

In summary, the literature is replete with definitions of organisational commitment. However, consensus about the definition of this term is still lacking (Meyer and

Herscovitch, 2001). Meyer and Allen (1997) noted that a common definition of OC is that “it is a psychological state that characterises the employee’s relationship with their organisation” (p.11). The various definitions reflect three broad themes: affective orientation toward the organisation, a recognition of costs associated with leaving the organisation and a moral obligation to remain with the organisation (Meyer and Allen, 1997, p.11). Whilst all three aspects can be considered as feelings (affective), with respect to an employee’s relation to their organisation, there is a difference between types of feelings; theoretically, these are distinguished. OC is thus the psychological attachment that connects an employee to an organisation, even though the nature of the relationship can vary, as explained in the previous section. Regardless of the adopted definition, “committed” employees are more likely to remain with an organisation than are “uncommitted” employees (Meyer and Allen, 1997, p.11).

2.2.5 The role of commitment in organisational behaviour

Organisational behaviour (OB) theory of commitment emphasises the influence of attitudes on behaviour. By contrast, we note that the social psychological theory emphasises the influence of commitment on attitude. The study of OC has sometimes been considered an attitudinal component of the employee attitude-behaviour relationship.

One definition of OB science reflects the idea mentioned above: “Organisational behaviour refers to the attitudes and behaviours of individuals and groups in organisations. The discipline or field of organisational behaviour involves the systematic study of these attitudes and behaviours.” (Johns, 1996, p.6). Thus, from a practical perspective, OB is the sum of attitudes and behaviours of individuals and groups within an organisation. Doherty (1998) reported that this reveals how employees feel about their pay, their commitment to their workgroup or organisation, their willingness to work overtime or perform extra-role tasks, and job performance. The attitudes and behaviours of employees are significant and may be more important in the context of today’s global financial crisis, when employees are expected to provide more effort for the same or even lower pay. According to Ajzen and Fishben (1980), attitude is the antecedent of behaviour. Attitude consists of

three common components: affective, cognitive and conative (or behavioural) (McGuire, 1985, p.6).

The affective component is linked to one's feelings and emotions about an issue, whether it is an organisation or other individuals, or even ideas and problems. An example is the simple statement, "I like my supervisor". The cognitive component is one's opinions or beliefs and values about some issue, such as when an employee says, "I respect my organisation's goals". The behavioural component of an attitude is the tendency of a person to act in a certain way towards someone or something (e.g., friendly versus unfriendly). Different actions can be measured or assessed to study the behavioural components of attitudes (McGuire, 1985). However, the most important point, as Doherty (1998) noted, is that the "concern of organisations is managing individuals and groups towards organisational effectiveness, based on the ability to explain and predict their attitudes and behaviour" (p.3). Organisational effectiveness is related to goal achievement, acquisition of resources, efficient and effective organisational processes and constituent satisfaction (Chelladurai and Haggerty, 1991).

The public administration literature has long emphasised the significance of public officials' personal commitment to their work as the foundation of administrative responsibility (Friedrich, 1940; Miller, 2000; Robertson, Lo, and Tang, 2003). Critical to success is public employees' commitment to act in the interests of their organisation and the public that their organisation serves (Balfour and Wechsler, 1994; Perry and Wise, 1990; Robertson *et al.*, 2003; Romzek, 1990). We therefore expect that commitment will contribute to organisational effectiveness.

2.3 Theories of organisational commitment

The present section outlines the main theories used to analyse OC over the last forty years. These theories attempt to provide a rational explanation of organisational behaviour that can be construed as organisational commitment. The main issues have been identified and broadly categorised in the available literature. The following subsections will discuss the two main theories, namely exchange theory and role conflict theory, which serve as the basis for explaining how commitment is formed and developed.

2.3.1 Exchange theory

Exchange theory views commitment as a result of encouragement/contribution transactions between the organisation and the employee. It includes a particular emphasis on the instrumentalities of membership as the main determinants of the member's net advantage or disadvantage in the ongoing process of exchange (Stevens *et al.*, 1978; Mowday *et al.*, 1982; Kim and Rowley, 2005). The basic logic can be expressed in terms of 'psychological contracts' (Jeong, 1990). In contrast to a legal contract, a 'psychological contract' is a mild agreement in which obligations and rights are not narrowly defined or clearly distinguished. Another aspect of exchange theory is the mechanism of reciprocation, which is based on the 'reciprocity norm'. The latter notion argues that people ought to return benefits that they receive from a relationship (Gouldner, 1960). From this perspective, employees expend effort in anticipation of the efforts the organisation will make in return (March and Simon, 1958; Hrebiniak and Alutto, 1972), imagining that they will be afforded equitable treatment (Gouldner, 1960; Angle and Perry, 1983).

Social exchange theory, part of exchange theory, is a socio-psychological perspective on relationships that explains social change and stability as a process of negotiated exchanges between people (Emerson, 1976; Stevens, Beyer and Trice, 1978). Social exchange theory (Blau, 1964) suggests that reciprocity is a significant attribute of social relationships. Employees who perceive that they are appreciated and valued are expected to respond with trust and emotional engagement (i.e., affective commitment). Consequently, when organisations display concern for employees by promising them favourable or rewarding agreement "deals", employees are likely to reciprocate with stronger affective sentiments toward their organisations. Alternatively, when employees recognise that employers are self-interested and greedy, they may react by offering less loyalty, trust and involvement to the organisation. Social exchange theory assumes that psychological contracts will immediately affect employees' levels of organisational commitment (Ng and Feldman, 2008, p.269; McInnis, Meyer and Feldman, 2009).

The relationship between an employee and an organisation can be characterised in terms of economic and social exchange. Social exchange emphasises intangible and socio-emotional aspects of the relationship such as feelings of obligation and trust,

whereas economic exchange emphasises the tangible and financial aspects of the relationship (Shore, Terick, Lynch and Barksdale, 2006). Social and economic exchange relationships are characterised by three principal differences. Firstly, social exchanges are conducted on the basis of trust (Emerson, 1976), whereas economic exchanges are more impersonal and therefore require only a minor trust component. Secondly, social exchanges are characterised by investment in the relationship (Eisenberger, Huntington and Hutchison, 1986), but economic exchanges are devoid of any such aspect. In fact, it is not uncommon for investment and trust to be interconnected between exchange relationships. When each party invests in the other, both open themselves to the risk that such an investment may not be reciprocated; therefore, a certain minimum level of trust is required for the relationship to operate for the benefit of both parties (Blau, 1964; Cotterell, Eisenberger, and Speicher, 1992; Eisenberger, Cotterell, and Marvel, 1987). Thirdly, since social exchange is continual and entails unspecified obligations, it requires a long-term orientation (Blau, 1964, p.93).

Economic exchanges, by contrast, do not require a long-term orientation but instead emphasise economic conformity frameworks, such as pay for performance. Those things that critically distinguish the two forms of exchange include employee expectations regarding the length of the exchange: as continual and unconditional (social exchange) or as a narrowly defined financial obligation that is devoid of any long-term implications (economic exchange). Another distinction is an emphasis on the financial aspects of the exchange as compared with the socio-emotional. One particularly evident fact is that employees are involved in both exchanges. Furthermore, these two exchanges can exist in parallel. However, the aim in the research of Shore *et al.* (2006, p.838) was to diverge from several earlier studies that focused on split employee and employer contributions to the exchange (i.e., what is exchange?). They chose to focus on the general structure of the exchange relationship.

Shore *et al.*'s study, 2006, supported the proposition that there are two relatively independent aspects of exchange in the employment relationship, namely social and economic exchange. The researchers measured the exchange between employees and their employers instead of measuring employee and employer contributions to the

exchange independently. This supports the idea that individuals are involved in both aspects of the exchange simultaneously. Also, it is evident that these two aspects may have reasonably separate effects. The nature of the relationship between economic and social exchange and organisational commitment supports the distinction between these two aspects.

For example, a higher level of social exchange has been linked with a higher level of affective commitment (Shore *et al.*, 2006; Eisenberger *et al.*, 1986). Before individuals develop emotional attachments to their employers, they should first feel that their employers are committed to them—they must perceive a two-way relationship. Affective commitment is an indicator of the existence of a social exchange relationship. On the other hand, continuance commitment is an indicator that economic exchange exists. As Ng and Feldman (2008) argued, the best theoretical mechanism to explain how psychological contracts impact employees' organisational commitment is social exchange theory.

Most importantly, social exchange (Blau, 1964) has been consistent with evidence from several studies (e.g., Shore *et al.*, 2006; Eisenberger *et al.*, 1986; Moorman, Blakely, and Niehoff, 1998; Shore and Wayne, 1993; Wayne, Shore and Liden, 1997), in that it has been consistently associated with many measures of performance, including overall performance and altruism citizenship behaviour. This suggests the significance of social exchange in explaining organisational commitment and addresses how this construct enhances and supports employee behaviours that can help the organisation to achieve its goals.

2.3.2 Role conflict theory

The other key theory that potentially explains commitment is role conflict theory (RCT). This theory arises in the context of organisations that are perceived to be made up of many sub-organisations within which individuals have multiple roles with conflicting demands and expectations. To evolve from role conflict to role congruence, individuals go through a continuing socialisation process that induces commitment to their organisational roles, sets standards for their behaviour and provides corrective feedback (Alutto, Hrebiniak and Alonso, 1973; Katz and Kahn, 1966). When multiple roles come into play simultaneously and entail markedly

different characteristics and demands, the result tends to be increased role conflict for individuals (Katz and Kahn, 1966).

The extent of the congruence among the disparate roles that individuals have to perform in an organisation can impact their level of commitment to that organisation. The more (or less) individuals perceive their roles as congruent with accepted roles, the more (or less) they will be committed to their respective organisations. As individuals may belong simultaneously to more than one organisation, and/or because most organisations consist of multiple sub-organisations, role conflict theory can equally explain commitment to a single organisation and commitment to several organisations (Angle and Perry, 1986; Rizzo, House and Lirtzman, 1970; Jeong, 1990).

According to classical organisation theory, the principles of chain of command and unity of command have implications for role conflict in complex organisations (including public sector entities). According to the chain of command principle, an organisation that is based on hierarchal relationships with a comprehensible and unified flow of authority from top to bottom should be more popular with employees and may also result in effective organisation performance and goal achievement. This is consistent with the principle of unity of command, which states that, for any task, an employee should receive direction from exactly one supervisor, and that employees should have one direct manager. Thus, the fundamental nature of these two principles is that the organisational structure should shelter employees from the unsuitable demands or conflicting expectations of more than one manager (Rizzo *et al.*, 1970, p.150).

Both classical organisation theory and role theory deal with role ambiguity. Every position in a formal organisational structure should be linked with a particular set of job responsibilities or with a mission, and these tasks should be accompanied by clear information and communication from management to provide the guidance and direction necessary for the specific performance that it is expected of employees. Therefore, according to role theory, role conflict or ambiguity should increase the likelihood that the employees will be dissatisfied with their role and decrease their commitment resulting in weaker performance.

2.3.3 Side-bet theory [Becker 1960] (behavioural approach)

Many early OC researchers such as Becker (1960) considered commitment to be a form of exchange between the employee and the organisation. Becker's (1960) side-bet theory discussed commitment in terms of exchange theory and developed the notion that an employee makes investments, or side bets, such as time and job effort, in an organisation. The concept of commitment thus develops because of an employee's satisfaction with the resulting rewards (p.32).

As Becker notes, side-bet theory thus represents a "process of linking previously irrelevant or extraneous action and rewards to a given line of action in such a way that the individual loses a degree of freedom in her or his future behaviours" (1964, p.32). According to Becker (1970), "if a person refuses to change jobs, even though the new job would offer him or her a higher salary and better working conditions, we should accept that his decision is the result of commitment, that other sets of rewards than income and working conditions have become attached to his present job so that it would be too painful for him/her to change. He may have a large pension at stake, which he will lose if he moves; he may fear the cost of making new friends and learning to get along with new working associates; he may feel that he will get a reputation for being undependable and unreliable if he leaves the present job. In each instance, formerly extraneous interests have become linked to his present job" (pp.261-273). Becker contends that the greater the number of side bets, the greater the commitment of an individual (1970). We note that commitment made without an individual realising that it is being made—which Stebbins termed "commitment by default"—happens through a series of actions. None of these actions individually will be critical, but when taken together they may constitute a series of side bets of such magnitude that the employee finds them self unwilling to lose the benefits of the side bets (Stebbins, 1970).

Becker's theory was developed in 1960. Since then, a great deal of research concerning this theory has been conducted and has been highly influential in shaping commitment research, for example, that of Alutto *et al.* (1973), Aranya and Jacobson (1975), and Hrebiniak and Alutto (1972). Studies have been interpreted either as supporting or as refuting the side-bet theory on the basis of the strength of the relationship between organisational commitment measures and the above side-bet

indices. Supporting studies conducted by researchers such as Hrebiniak (1974), Luthans, Baack and Taylor (1987), Stevens *et al.* (1978), Meyer and Allen (1984) and Powell and Meyer (2004) concluded that side-bet variables make a statistically significant contribution in explaining organisational commitment.

To date, this voluminous research remains without thorough and scientific analysis and evaluation. Powell and Meyer (2004) made a modest attempt; they reviewed only a small part of the OC literature. They concluded that meaningful relationships do exist between personal or demographic side-bet indices¹ and OC.

Ritzer and Trice (1969) were the first to test and publicise a measurement for the side-bet theory. Finding no relationship between organisational commitment and most side-bet indices, they rejected the side-bet hypothesis. They offered an alternative theory of commitment that emphasised social-psychological factors that impact worker identification. Accordingly, they suggested that organisational commitment is fundamentally a psychological phenomenon and not a structural one as Becker contended. It arises from a realisation by the individual that the occupation, per se, contains little to which they can commit themselves. In order to make their working life meaningful, individuals must commit themselves to something. If the occupation is poorly structured, the organisation remains the major alternative to which they may commit themselves. Another alternative, if it exists, is a union, i.e., a commitment to both occupation and organisation. Ritzer and Trice claim that even if the basic commitment process is psychological, the structural factors discussed by Becker may play a role. When a commitment has been made, a series of structural constraints serve to increase that commitment over time. However, structural constraints are not the major determinants of the commitment; they only reinforce a commitment once it has already been made.

Ritzer and Trice (1969) concluded their study with one significant recommendation. When the occupation is lacking in certain professional characteristics, the personnel manager must supplement occupational commitment with a degree of organisational commitment (p.478). Moreover, Ritzer and Trice and other researchers (e.g., Alutto

¹ The eleven personal or demographic side-bet indices are age, tenure, education, gender, marital status, number of children, level in the organisation, number of jobs held to date in the organisation, skill level, available job alternatives and pay (Becker, 1970).

et al., 1973; Sheldon, 1971) reasoned that side bets should accumulate over time. Therefore, they suggested age and tenure as the best indicators of recorded actions that build up one's stake in the employing organisation.

After Ritzer and Trice, researchers who investigated Becker's theory recommended other variables as side-bet indices. Many researchers, such as Aranya and Jacobson (1975), Shoemaker, Snizek and Bryant (1977), extended the discussion by comparing Becker's structural theory to Ritzer and Trice's alternative social-psychology theory. In comparing the two sets of explanations, they concluded that social-psychological factors were stronger correlates of organisational commitment than the side-bet variables. They reported that all the explanations or sets of variables exerted some influence on commitment. Moreover, they used measures of organisational and occupational commitment, as operationalised by Ritzer and Trice (1969), and Alutto *et al.* (1973). These findings offered partial support for Becker's original side-bet hypothesis, especially in terms of organisational commitment.

Stebbins (1970) presented some theoretical clarifications of and provided a clear statement of the fundamental differences between value commitment (commonly known as affective commitment) and continuance commitment. He argued that Ritzer and Trice, in their extensive and continuing examination of Becker's side-bet theory, failed to distinguish between continuance and value commitment. In addition, he provided empirical evidence that Ritzer and Trice's (1969) and Hrebiniak and Alutto's (1972) side-bet measures assess affective commitment rather than continuance commitment. He also asserted that Becker's side-bet theory is not a theory of value commitment as Ritzer and Trice claim but is rather a theory of continuance commitment. Stebbins defined continuance commitment as "the awareness of the impossibility of choosing a different social identity; because of the imminence of penalties involved in making the switch" (1970, p.527).

Unlike Ritzer and Trice, Alutto *et al.* (1973) supported Becker's theory, considering the concept of side bets as a structural phenomenon that is important to understanding individuals' commitments to organisations or occupations. They conclude that their data offer support for Becker's side-bet theory of commitment, in particular from the perspective of an organisation. They insist that OC cannot be understood as a purely social-psychological phenomenon, contradicting the findings

reached by Ritzer and Trice. Rather, a commitment to organisations and occupations appears to include important structural elements that must be taken into account, even if background or socialisation experiences can indeed affect predisposition (tendency) towards profession and organisation. It seems that individual occupation, individual organisational transactions and the accrual of side bets or investments are crucial to understanding the commitment phenomenon (Alutto *et al.*, 1973, pp.448-453).

One line of research in organisations has emerged that focuses on the implications of certain types of behaviour for subsequent attitudes. Mowday *et al.* (1982) cogently argued that the determinants of commitment and the process through which they can be developed and maintained vary through different stages of one's career. The variability in commitment is arguably due to demographic variables, especially under the side-bet model. Therefore, the result of Cohen and Lowenberg's (1990) meta-analysis is inconsistent. Cohen and Lowenberg's (1990) first conclusion would essentially mirror the arguments of Meyer and Allen (1984), namely that "the instrument used in tests of side-bet theory may not be measuring commitment as Becker conceptualised it" (p.372). A second possible conclusion would mirror another Meyer and Allen (1984) argument, namely that the strategy used to examine side-bet theory was inappropriate. A third conclusion concurs with Ritzer and Trice (1969), who asserted that the "side-bet theory of commitment should be rejected" (Cohen and Lowenberg, 1990). However, despite these disagreements, recent findings by Shore L, Tetrick, Shore T and Barksdale (2000) and Powell and Meyer (2004), which tested Becker's (1960) side-bet conceptualisation of commitment, together offer strong support for Becker's theory.

Taken together, these studies fail to agree on the side-bet theory indices. Some of the studies argued that side-bet variables make a statistically significant contribution to the explanation of organisational commitment. Others concluded that even when correlations exist between side-bet variables and organisational commitment, their impact disappears in multivariate analysis when variables from other categories (such as role-related characteristics and work experiences) are included in the models. Therefore, the research findings make it almost impossible to reach general conclusions about side-bet theory (Cohen and Lowenberg, 1990).

To summarise, attachments to organisations are influenced strongly by side bets (accrued extrinsic benefits that would be lost if membership were terminated). In view of this, employees invest in organisations by risking something of value. The greater the side bet at stake, the greater the commitment. Commitment is considered primarily as a function of cumulative investments. To illustrate, we can imagine that the longer employees stay with an organisation, the older they become, the more significant their pension benefits are, the more limited their inter-organisational mobility is, and so on, all of which make them less likely to leave an organisation (Alutto *et al.*, 1973).

2.3.4 Moral theory [Etzioni, 1961] (attitudinal approach)

One of the early attempts to understand commitment was Etzioni's (1961) moral theory. He suggested that the authority or power that organisations exert over individuals, governs the nature of employee involvement and participation in the organisation. According to Etzioni's theory, participation or commitment can take only one of the three forms: it can be calculative, alienative, or moral. These three forms of involvement can be connected with three forms of power: coercive, remunerative and normative (Etzioni, 1961, p.12). Calculative involvement can create a negative or positive deferential attitude toward the organisation. Alienative power can entail a negative orientation that develops when behaviour is strongly shaped by enforced membership in a society or organisation (such as prison or the military, for example). Finally, moral involvement, which Etzioni argues is linked to high commitment, indicates a strong positive orientation with regard to an organisation.

Moral involvement is of two kinds: pure moral or social moral. Pure moral involvement emerges when employees who behave independently internalise organisational goals and values, whilst social moral involvement occurs when the internalisation is the result of social pressure (e.g., from a work group or management team).

Kanter (1968), agreeing with Etzioni's idea of different forms of involvement, suggested three other forms—continuance commitment, cohesion and control—and disagreed with the idea that one individual will experience just one form; an

employee might experience all three forms, with one or more being dominant. Kanter explained that these forms bind personality systems to social systems and link cognitive and alternative orientations to roles, relationships and norms. Three processes underlie the development of each of the three types of commitment: sacrifice and investment support continuance; renunciation and communion support cohesion; and mortification and surrender support control. On the basis of these processes, a large number of commitment mechanisms or commitment-inducing organisational strategies are initiated (Kanter, 1968). However, the Kanter study helps explain why members of some groups are highly committed while members of others are not. This focuses the problem of commitment onto the structure of groups and the phenomenological impact of their organisational arrangements.

Kidron (1978), like O'Reilly and Chatman (1986), studied work values and organisational commitment. Kidron obtained results that were consistent with the moral-calculative theory proposed by Etzioni (1961). O'Reilly and Chatman (1986) proposed that an employee's psychological attachment to an organisation may reflect varying combinations of three psychological bases: compliance, identification, and internalisation. Compliance is defined as continuing to remain affiliated with an organisation because the costs of changing are substantial or involvement of specific extrinsic rewards. Internalisation is defined as the employee's belief that the organisation's values are very similar to the employee's, thus, for employee's adopting the organisation's mission as their own, identification is defined as an involvement based on a desire for affiliation (O'Reilly and Chatman, 1986, p.493).

On the basis of previous research (e.g., Etzioni, 1961; Gould, 1979; Kelman, 1958), O'Reilly and Chatman (1986) argued that these three psychological bases are independent constructs. Numerous studies have used O'Reilly and Chatman's identification and internalisation measures. Identification and internalisation were shown to be negatively correlated with turnover and positively correlated with prosaic behaviours. Such findings are consistent with the moral-calculative distinction drawn by Etzioni (1961) and others (e.g., Kanter 1968; Porter, Steers, Mowday and Boulian, 1974; Kidron, 1978; Gould, 1979; Penley and Gould, 1988). These studies suggest that strong links exist between commitment based on internalisation, identification, and prosaic behaviours.

Moral and alienative commitments are treated as affective forms of organisational attachment, and calculative commitment is seen as an instrumental form of organisational commitment. With the exception of a significant association with intention to leave, commitment based on compliance is unrelated to extra-role behaviours or actual turnover. It appears from these studies that critical voluntary behaviour not specified by one's job description is largely a function of identification and internalisation rather than instrumental involvement.

Gould (1979) proposed an equity-exchange model for organisational involvement based upon the earlier models first proposed by Barnard (1938) and later revised by March and Simon (1958). The model integrates several frameworks from the literature, including Adams' equity theory and Etzioni's typology of organisational involvement and is based on the argument that "employees exchange their contribution or involvements in organisation for certain rewards or inducement which that organisation can provide them" (Gould, 1979, p.53). Gould's equity-exchange model has implications for managing employees by considering the type of involvement they exhibit. For example, the morally involved person is primarily interested in making a significant contribution and in expressing personal values through work. For the calculatively involved individual, performance-reward expectancies will be important in encouraging an equitable level of involvement, whereas an "alienated employee will require methods for softening the rigidity of fixed inducements" (p.60).

In a similar vein, Salancik (1977) suggested that commitment emerges when individuals are bound to their acts and it can be enhanced by means of three features: "the visibility, the irrevocability, and the volitionality of the behaviour" (p.64). By manipulating these three characteristics, individuals can become more or less committed to their acts and their implications (Salancik, 1977, p.64).

Clearly, the trajectory of organisational commitment over time through positive attitudes toward the organisation in question has begun to dominate the literature. However, Staw (1977) and Salancik (1977) emphasised the need to differentiate between commitment as seen by organisational behaviour researchers and commitment as understood by social psychologists. In the organisational behaviour approach, commitment is viewed in terms of strong identification with and

involvement in the organisation brought on by a variety of factors. This represents a type of attitudinal commitment. Social psychological researchers, on the other hand, use the term to describe the process by which employees come to identify with the goals and values of the organisation, i.e. behavioural commitment.

Cohen and Lowenberg (1990) contended that two dominant views of OC pervade the literature. One view, associated with the work of Porter *et al.* (1974), described commitment as an attitudinal state. Given this perspective, commitment is defined as the strength of individuals' involvement in and identification with a particular organisation. The other view of OC is the side-bet theory; Becker (1960) considers commitment more behavioural than attitudinal and describes commitment as the tendency to remain with an organisation because of the costs associated with leaving (e.g., lost benefits and pensions, perceived lack of other opportunities). Adopting a second view of commitment, Meyer and Allen (1984), acknowledging their importance, labelled them affective and continuance commitment, respectively, and developed scales to operationalise them. This behavioural commitment is made operational with scales developed by Ritzer and Trice (1969).

Commitment was originally viewed as an attachment to the organisation that may lead to specific job-related behaviours. The committed employee, for example, is rarely absent and is less likely to leave the organisation willingly than less committed employees. A line of research has emerged to focus on the "implications of certain types of behaviours for subsequent attitudes" (Mowday *et al.*, 1982, p.43). Employees who freely choose to behave in a certain way and who find their decisions difficult to change become committed to the chosen behaviour and subsequently develop attitudes consistent with their choice. Commitment leads to committing behaviours that subsequently reinforce existing attitudes. In turn, committing behaviours lead to commitment-oriented attitudes and subsequent committing behaviour (Mowday *et al.*, 1982).

Theories that equate commitment with attitudes propose that employees only act as if they are committed because particular activities are regarded as right and proper in their social group or society. However, these theories still have to explain consistently deviant behaviour, which is considered morally wrong. Deviance is often explained as a circular process: a person who initially commits a minor

violation is increasingly alienated from normal society; therefore they commit increasingly serious infractions, and so on. Alternatively, it can be explained as a result of differential associations: the deviant employee is more closely associated with people who consider their deviant act to be proper than with the majority, who think the act is wrong (Alutto *et al.*, 1973).

As a result, theories that explain commitment can be generally divided into two categories: one emphasises the influence of commitment attitudes on behaviours, while the other emphasises the influence of committing behaviours on attitudes (Mowday *et al.*, 1982, p.47). This assumes that commitment attitudes lead to committing behaviours that subsequently reinforce and strengthen attitudes. By contrast, committing behaviours lead to commitment attitudes and subsequent committing behaviour.

Staw (1981) argued that the significant issue is not only the commitment process but also attitudes and behaviours. It is therefore important to recognise that the development of commitment may involve subtle interactions between attitudes and behaviours over time. Mowday *et al.* (1982), confirming this point, stated that the process through which commitment develops may involve self-reinforcing cycles of attitudes and behaviours that evolve on the job and that over time strengthen employee commitment to an organisation .

In summary, the organisational behaviour theory of commitment emphasises the influence of attitudes on behaviour, whereas the competing social psychological theory emphasises the influence of committing behaviour on attitude. Thus, the study of OC has received attention as an attitudinal part of the employee attitude-behaviour relationship (Mowday *et al.*, 1982; Angle and Perry, 1981). However, disagreement among researchers persists as to how best to conceptualise and measure OC (Morris and Sherman, 1981). A summary of OC views is shown in Figure 2.1.

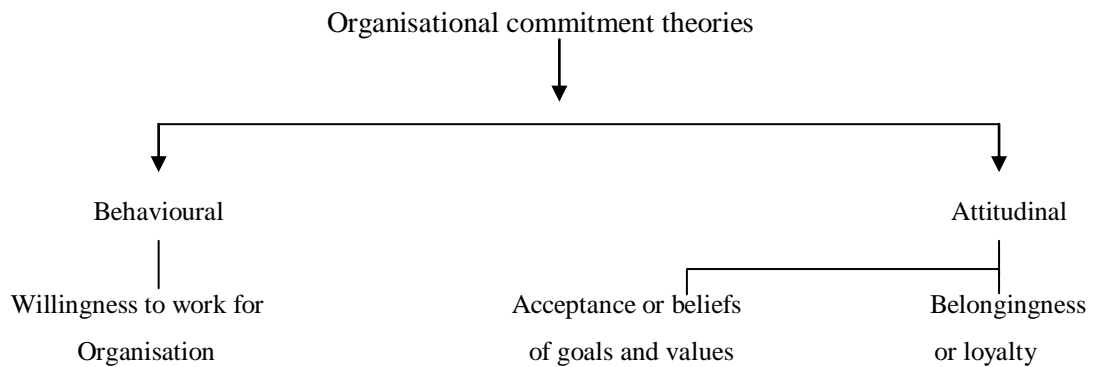


Figure 2.1: Summary of organisational commitment views (source: Kim and Rowley, 2005)

2.4 Organisational commitment approaches

Organisational commitment has been defined in various ways and extensively measured and studied over the last four decades. It continues to receive criticism for a lack of a common theoretical basis and for the associated conceptual confusion. Despite such an apparent lack of consensus, four popular perspectives regarding commitment have emerged in the organisational literature, representing the reasons why employees are committed in the way they are: attitudinal, behavioural, normative and multidimensional.

2.4.1 Attitudinal approach

The roots of this approach lie in the work of Kanter (1968), who defined commitment as “the willingness of social actors to give energy and loyalty to the organisation” (p.499) and “the attachment of an individual’s fount of affectivity to the group” (p.507).

Also, the attitudinal approach, associated with the work of Porter, Steer, Mowday and Boulian (1974) among others, describes commitment as an attitudinal state and defined the attitudinal approach in terms of the strength of certain individuals’ involvement in and identification with a particular organisation (Porter *et al.*, 1974, p.604). Using this approach, commitment can be characterised by three factors:

- a) A strong belief in and acceptance of organisational goals and values.
- b) A willingness to exert considerable energy on behalf of the organisation.
- c) A strong desire to continue one’s membership in the organisation.

Commitment as an attitude can be contrasted with the more commonly studied attitudes of job satisfaction.

Attitudinal commitment, also known as affective commitment, identifies the individual with the organisation; therefore, the individual is committed to maintaining membership in order to pursue the goals at hand. The most widely-used form of psychological attachment to an employing organisation is affective commitment, and many researchers (e.g., Kidron, 1978; Mowday *et al.*, 1982) have adopted this approach (explained in Section 2.3.4: Moral theory).

2.4.2 Behavioural calculative approach

This second view of commitment is linked with the behavioural approach advocated by Becker (1960) and Kanter (1968). This approach emphasises the notion of making investments such as time and effort in an organisation. Becker (1960) describes commitment as the tendency to stay in an organisation because of the costs associated with change (e.g., lost benefits and pensions, perceived lack of other opportunities). Kanter, defines OC as “a profit associated with continued participation and a ‘cost’ associated with leaving” (Kanter, 1968, p.504). Therefore, commitment develops as a result of an employee’s satisfaction with the rewards. The side-bet notion is consistent with exchange theory. This approach has been explained explicitly in the section 2.3.3: Side-bet theory.

2.4.3 Normative approach

According to this approach, a link between employee value and organisational aims results in a sense of obligation on the part of the employee to their organisation. As mentioned in Section 2.2.3, in line with this perspective, Wiener defines OC as “the totality of internalised normative pressure to act in a way which meets organisational goals and interests” (Wiener, 1982, p.421). Therefore, commitment, when viewed from this vantage point, is shaped predominantly by personal dispositions and natural propensities, with situational and organisational factors playing only a marginal role (Wiener, 1982).

To further explain this approach, Wiener (1982) presented commitment in organisation as a normative perspective and characterises the antecedents of

commitment in terms of three groups of studies. The first group relates personal and demographic variables to commitment, the second relates organisational characteristics and relationships to commitment, and the third group is characterised by a person—organisation “fit” approach; the individual’s needs and value orientations match the normative values of the organisation, thus, when a “fit” exists, organisational commitment is enhanced.

This research focuses on work attitudes, distinguishing between the normative and instrumental processes as behavioural determinants. Organisational identification and generalised values of loyalty and duty are viewed as its immediate determinants. Therefore, commitment can be influenced by both personal predispositions and organisational interventions. The role of recruitment, selection, and socialisation in affecting members’ commitment is discussed. The results indicate that several basic features serve to differentiate the suggested model from the traditionally identified view. First, commitment can be understood as a unique construct within a comprehensive motivational-attitudinal system, clearly distinct from processes such as instrumental motivation and job satisfaction. Second, the concept of commitment itself can be broadened to include, in addition to identification, a second immediate determinant: the possession of generalised values of loyalty and duty. This conceptual extension underscores the notion that commitment is viewed as a function of both situational-organisational factors and personal dispositions. Finally, the model allows for the prediction of behavioural outcomes from the simultaneous consideration of both instrumental and normative processes. The inclusion of the normative component should improve the predictability of behaviour (Wiener, 1982).

2.4.4 Multidimensional approach

The final perspective is the multidimensional approach. This framework stipulates that OC develops through the interaction of the three aforementioned approaches: attitudinal, behavioural and normative. The multidimensional approach should be considered the most recent and the most comprehensive OC conceptualisation.

Some early studies contributed to the emergence of the theory of “multidimensionality”. Two important early contributors to the development of the concept are Etzioni (1961) and Kelman (1958). Etzioni’s (1961) moral theory,

which argues that the power organisations exert over individuals can result in moral, calculative or alienative employee involvement, was discussed fully in Section 2.3.4.

In a study of attitudinal change, Kelman (1958) contended that “the underlying process in which an individual engages when he adopts induced behaviour may be different, even though the resulting overt behaviour may appear the same” (p.53). He identified three conceptually distinct processes: compliance or exchange, identification or affiliation and internalisation or value congruence. Compliance occurs when attitudes and behaviour are adopted simply to gain specific rewards rather than because of shared beliefs. In such a case, it is not uncommon for public and private attitudes to differ. Identification occurs when an individual willingly accepts the organisation’s influence in order to establish or maintain satisfying relationships. Such an individual may feel proud to be part of a group, respecting its values and accomplishments without necessarily adopting them as his or her own. Internalisation is the same as identification except that the individual internalises the value of the organisation. Therefore, the basis for his/her psychological attachment to an organisation may be predicated on three independent motives: (a) compliance or instrumental involvement in return for specific, extrinsic rewards; (b) identification or involvement based on a desire for affiliation; and (c) internalisation or involvement predicated on congruence between individual and organisational values. These conceptually distinct processes of attitudinal change may be regarded as separate dimensions of commitment.

Adopting Kelman's three-process approach as a basis for conceptualising OC, O'Reilly and Chatman (1986) suggested that it should be considered a multidimensional construct. This view has not received universal acceptance. It remains unclear whether one should consider compliance as a component of commitment or the antithesis of commitment given that compliance positively affects employee turnover (O'Reilly and Chatman, 1986).

Meyer and Allen (1984), inspired by Becker's (1960) side-bet theory, introduced the concept of continuance commitment in conjunction with the concept of affective commitment that dominated commitment studies. Meyer and Allen (1991) expanded the scope of OC to include normative commitment as a third dimension. They labelled these three components of commitment as affective, continuance and

normative commitment (Meyer and Allen, 1997, p.11). Affective commitment refers to the employee's emotional attachment to, identification with and involvement in the organisation. Employees with a strong degree of affective commitment want to continue their employment with the organisation because they strongly identify with its values. Continuance commitment refers to an awareness of the accrued benefit associated with remaining with an organisation and the incurred costs of leaving it. Employees whose link to the organisation is primary based on continuance commitment often need to remain because they have no better alternative. Finally, normative commitment reflects feelings of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organisation (Meyer and Allen, 1997).

Meyer and Allen argued that it was appropriate to consider affective, continuance and normative commitment only as components rather than actual types of commitment because an employee's relationship with an organisation may reflect all three to varying extents. For instance, one employee might feel both a strong attachment to an organisation and a sense of obligation to remain with that company, while a second employee might enjoy working only for the economic benefits. A third employee might experience a considerable degree of desire, need and obligation to remain with the current employer. Therefore, the totality of a person's commitment to the organisation reflects, in various degrees, each of the three dimensions of commitment (Allen and Meyer, 1990, p.4). Consequently, by considering the strength of all three commitment components together rather than by identifying these as distinct types of commitment, one stands to acquire a better understanding of an employee's relationship with an organisation.

Table 2.1: The four approaches to OC and their theorists.

<i>Organisational commitment Approaches</i>	<i>Developers or Theorists</i>
<p><u>Altitudinal approach or Affective commitment</u> (Based on recognition and belief of organisation goals and values and binding behaviour).</p>	-Etzioni (1961): Moral commitment. -Kanter (1968): Cohesion commitment. -Mowday <i>et al</i> , (1982). -Salancik (1977). -Meyer and Allen (1984): Affective commitment. -O'Reilly and Chatman (1986): Internalisation.
<p><u>Behavioural approach or Continuance commitment</u> (Based on exchange theory, i.e. social economic factors)</p>	-Becker (1960): Side-bets-theory. -Kanter (1968): Continuance commitment. -Meyer and Allen (1984): Continuance commitment. -O'Reilly and Chatman (1986): Compliance.
<p><u>Normative approach or normative commitment</u> (Based on feelings of obligation and loyalty)</p>	-Kanter (1968): Control commitment -Wiener (1982) -O'Reilly and Chatman (1986): Identification or Involvement based on desire for affiliation.
<p><u>The Multidimensional approach</u> (Based on that organisational commitment Develop through interaction of all the above mentioned approaches)</p>	-Kelman (1958) Compliance or exchange, Identification. -Etzioni (1961): Moral, Calculative, and Alienative. -Kanter (1968): Cohesion, Continuance, and Control. -O'Reilly and Chatman (1986): Compliance, Identification, and Internalisation or value congruence. -Meyer and Allen (1991): Affective, Continua and Normative.

The multidimensional approach has been gaining support among commitment theorists and researchers since its inception. We note weakening levels of disagreement and fewer arguments about the nature of the various dimensions. In addition, employees report a mixture of commitment types. Indeed, several researchers (e.g., Meyer and Allen, 1997; Benkhoff, 1997; Jaros, 1997; Caldwell, Chatman and O'Reilly, 1990) have suggested that these developments will bring an end to the inconsistent results often reported in OC research. Table 2.1 lists the four approaches and their proponents.

2.5 Multidimensional models of organisational commitment

The diverse strategies and goals associated with the development of the aforementioned multidimensional frameworks have led to multiple differences between these frameworks. The frameworks were built using empirical findings and are distinct from earlier unidimensional conceptualisations (e.g., Mowday *et al.*, 1982; Wiener, 1982; Brown, 1996) or from multidimensional ones (e.g., Angle and Perry, 1981; Allen and Meyer, 1990, Jaros *et al.*, 1993; Meyer and Allen, 1984). We also note a ground commitment within an established theoretical context (e.g., O'Reilly and Chatman, 1986; Penley and Gould, 1988; Caldwell, Chatman, and O'Reilly, 1990; Mayer and Schoorman, 1992).

Different assortments of multidimensional frameworks can lead to difficulties in developing a general model of OC, with respect to which dimensions should be considered. According to Meyer and Herscovitch (2001), to evaluate the various models, we should consider the results of previous research that employs these models. In sum, the two models that have been most extensively researched to date are Meyer and Allen (Allen and Meyer 1990; Meyer and Allen, 1984, 1991) and O'Reilly and colleagues (O'Reilly and Chatman, 1986; O'Reilly, Chatman and Caldwell, 1991).

Table 2.2: Present dimensions of organisational commitment with multidimensional commitment models.

<u>Angle and Perry (1981, p.4)</u>	
Value commitment	“Commitment to support the goals of the organisation”.
Commitment to stay.....	“Commitment to retain their organisational membership”.
<u>O’Reilly and Chatman (1986, p.493)</u>	
Compliance.....	“Instrumental involvement for specific extrinsic rewards”.
Identification	“Attachment based on a desire for affiliation with the organisation”.
Internalization.....	“Involvement predicated on congruence between individual and organisational values”.
<u>Penley and Gould (1988, p.46-48)</u>	
Moral.....	“Acceptance of and identification with organisational goals”
Calculative.....	“A commitment to an organisation which is based on the employee’s receiving inducements to match contributions”.
Alienative.....	“Organisational attachment which results when an employee no longer perceives that there are rewards commensurate with investment; yet he or she remains due to environmental pressure”.
<u>Meyer and Allen (1991, p.67)</u>	
Affective.....	“The employee’s emotional attachment to, identification with, and Involvement in the organisation”.
Continuance.....	“An awareness of the costs associated with leaving the organisation”
Normative	“A feeling of obligation to continue employment”.
<u>Mayer and Schoorman² (1992, p.673)</u>	
Value.....	“A belief in and acceptance of organisational goals and values and a Willingness to exert considerable effort on behalf of the organisation”.
Continuance.....	“The desire to remain a member of the organisation”.
<u>Jaros et al. (1993, pp.953-954)</u>	
Affective.....	“The degree to which an individual is psychosocially attached to an employing organisation through feelings such as loyalty, affection, warmth, belongingness, fondness, pleasure, and so on”.
Continuance.....	“The degree to which an individual experiences a sense of being locked in place because of the high costs of leaving”
Moral.....	“The degree to which an individual is psychosocially attached to an employing organisation through internalization of its goals, values and missions”.

Source: Meyer and Herscovitch, 2001, p.304.

² Mayer and Schoorman (1992) “tested a 2-dimensional model of OC and theoretically relevant outcomes based on the motivational distinction proposed by March and Simon (1958) between employees’ decisions to participate and to produce continuance commitment (leading to participation), and value commitment, leading to production and performance. Analyses of correlation and partial correlation show that turnover is more strongly related to continuance commitment, whereas, performance is more strongly related to value commitment” (p.671).

2.5.1 O'Reilly and Chatman's model

Building on Kelman's (1958) work on attitude and behaviour change, O'Reilly and Chatman (1986) developed a multidimensional framework based on the notion that commitment symbolises an attitude toward the organisation that develops through different mechanisms. The central idea is that commitment has three different forms: compliance, identification and internalisation.

To support their three-dimensional structure, they presented several psychological attachment instrument measures, using twelve items to describe dimensions of organisational commitment (Sutton and Harrison, 1993). However, this model was complex in distinguishing between identification and internalisation (e.g., Caldwell *et al.*, 1990; O'Reilly *et al.*, 1991; Vandenberg and Scarpello, 1994); the measures were inclined to strongly correlate with one another and exhibited similar correlation patterns with other variables (for explanations, see Becker, Billings, Eveleth and Gilbert, 1996). Accordingly, O'Reilly and his colleagues mixed the internalisation and identification items to create one form that they described as normative commitment.

2.5.2 An analysis of the multidimensional model

Meyer and Allen built on their 1984 research ultimately to define three distinct themes of organisational commitment; namely, affective orientation, cost-based attachment, and obligation or moral responsibility. According to Meyer and Allen (1997, p.109), many factors are implicated in the development of commitment, which consists of five phases: (1) distal antecedents; (2) proximal antecedents; (3) processes; (4) commitment (forms, foci); and (5) consequences.

In the first phase of Meyer and Allen's model (see Figure 2.2), distal antecedents include organisational characteristics, personal characteristics, socialisation experiences, management practices and environmental situations; distal antecedents have an indirect effect on commitment, while proximal antecedents (the second phase) directly impact organisational commitment and include work experiences, role status, and psychological contract. Meyer and Allen indicate through their model

that there are several correlates, such as job satisfaction, job involvement and occupational commitment that commonly occur only with affective commitment³.

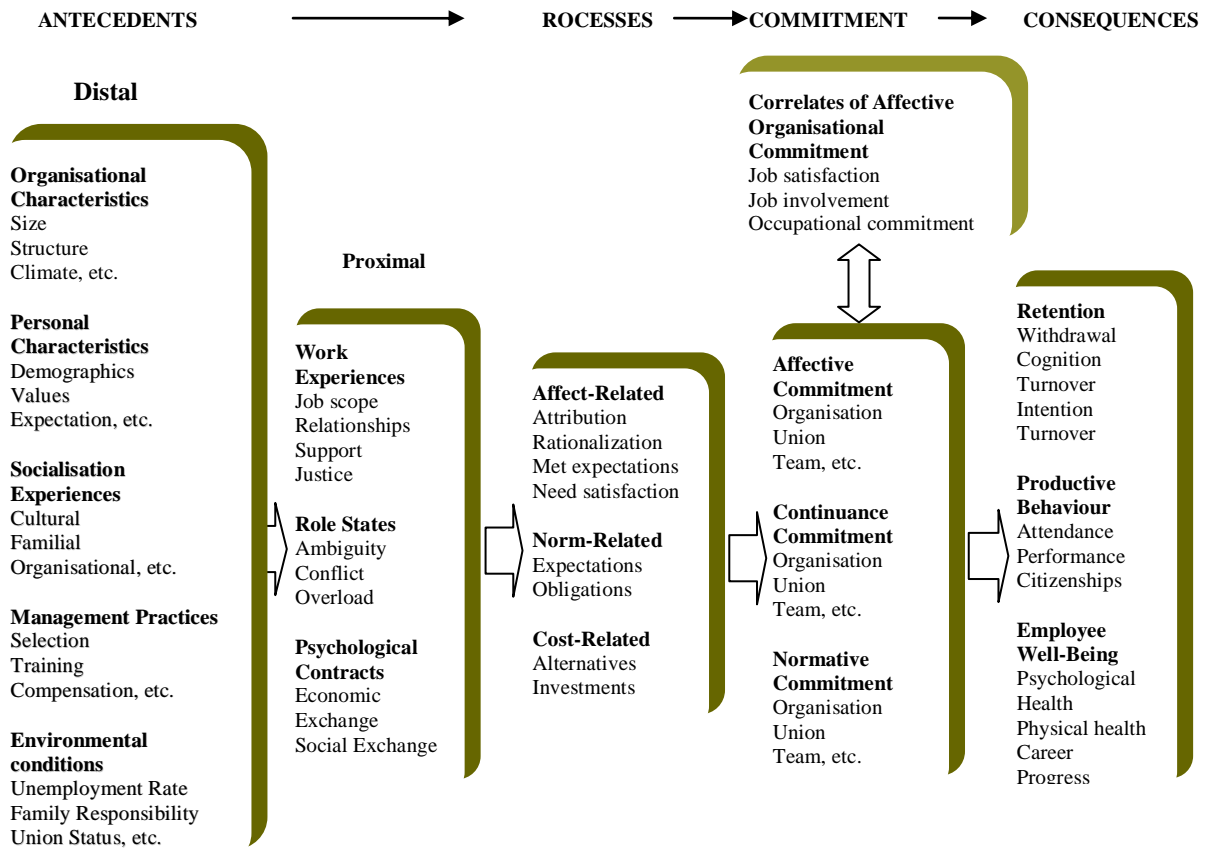


Figure 2.2: Meyer and Allen’s (1991) multidimensional model of organisational commitment, its antecedents, and its consequences (source: Meyer and Allen, 1997, p.106).

The third phase in the development of the Meyer and Allen multidimensional OC model is the process by which the antecedents affect the different components of commitment. Process variables (seen in Figure 2.2) are affective-related, normative-related and cost-related. Examples of affective-related process variables are: met expectations, person-job fit, and need satisfaction. Normative-related process variables include expectation and obligation. Finally, cost-related process variables include alternatives and investments. Comparatively little is known about many of these mechanisms. In addition, some researchers consider the process variables to be mediators or proximal causes and routinely exclude certain process variables from their models. In our view, the commitment process phase is complex, and it is

³ Adopted from Meyer *et al.* (2002, p.22). Correlates of affective OC, although identified, were not included in Meyer and Allen’s original model (1991).

important to be aware that these variables may be linked with commitment (Meyer and Allen, 1997, pp.109-111).

The fourth phase in the model consists of the commitment components, categorised into affective, continuance and normative components. Researchers have suggested that these three components are linked, but are also different from one another. According to Meyer and Allen (1997), “affective commitment (AC) refers to the employee’s emotional attachment to, identification with, and involvement in the organisation” (p.11). Employees remain in an organisation because they want to stay. Affective commitment is the most widely discussed form of employee-employer psychological attachment. Continuance commitment (CC) “refers to an awareness of the costs associated with leaving the organisation” and reflects the degree to which an individual experiences a sense of being “locked in” because of the high costs of leaving (p.11). Meyer and Allen develop the concept of continuance commitment (a component of their attitudinal model of OC) as a formal psychological attachment to an employing organisation. Finally, normative commitment (NC) “reflects a feeling of obligation to continue employment and a belief about one’s responsibility to the organisation”. Employees stay with an employer because they think that they ought to do so (p.11).

Solinger, van Olffen, and Roe (2008, p.71) argued that these three components contribute to a common theoretical foundation. First, all three components are assumed to reflect the “psychological state” (i.e., want, need, ought) of an employee in relation to the organisation. Second, the three forms are assumed to relate to the organisation, presenting the idea that organisational commitment is an attitude which has the organisation as its sole focus. Third, the three forms can exist at the same time, and the resulting “total” organisational commitment should be considered as the “net sum” of these three psychological states. Finally, Meyer and Allen stated that each of these dimensions of organisational commitment are associated with different but related consequences for employee behaviour and that each of the three dimensions of commitment is also affected by different antecedents.

The final phase of the multidimensional model focuses on the consequences of organisational commitment. Retention (withdrawal behaviour and turnover),

productive behaviour (performance) and employee wellbeing are all relevant consequences for this phase. Retention is positively affected by all forms of organisational commitment. Retention in an organisation is based on positive attachment to and identification with the organisation and includes a desire to be a part of the organisation (Meyer and Allen, 1997). Productive behaviour and employee wellbeing are positively impacted by affective and normative commitment, but may be negatively impacted by continuance commitment.

2.6 Current trends in commitment research

In the 1980s and 1990s, there was a significant emphasis on commitment research. A wealth of commitment research in 2000 and beyond suggested that employees may develop multiple work-relevant commitments and, moreover, that commitment itself is a multidimensional construct (Meyer and Herscovitch, 2001). Subsequently, many meta-analytic investigations have tried to take stock of what we do and do not know about commitment (Meyer *et al.*, 2008).

In some of these meta-analyses (such as those of Meyer *et al.*, 2002; Lee, Allen, Meyer and Rhee, 2001; Cooper-Hakim and Viswesvaran, 2005; Riketta, 2002; Riketta and Van-Dick, 2005; Wright and Bonett, 2002), commitment was the main variable of concern, whereas the other meta-analysis studies included commitment only as a prospective antecedent or as the consequence of another main variable (e.g., Colquitt, Conlon, Wesson, Porter and Ng, 2001; Kristof-Brown, Zimmerman and Johnson, 2005; Rhoades and Eisenberger, 2002; Thoresen, Kaplan, Barsky, Warren and De Chermont, 2003). These meta-analytical studies mainly provide strong support for the relevance of commitment theory and research within the broader discipline of organisational behaviour (Meyer *et al.*, 2008, p.42). We note two prominent research avenues today:

- 1) Foci of commitment — representing a shift from the study of organisational commitment alone toward the inclusion of commitment to other foci (e.g., teams, supervisors, careers).
- 2) The analysis of a commitment “profile” — focusing on recent and advanced research in OC theory pertaining to the multidimensionality of OC components and their combined relationship to other work behaviour.

2.6.1 Focus of commitment

The “focus of commitment” perspective refers to those parties to whom the employees are committed within an organisation. These include commitment to supervisors, work groups, occupation and unions. An important development helped us to recognise that employees may adopt multiple work-related commitments that subsequently combine to influence behaviour (Meyer *et al.*, 2008, p.40). This suggestion was introduced by Morrow (1983) and Reichers (1985). According to Meyer and Allen (1997), commitment is considered multidimensional in both form and focus; these two integration approaches are shown in Table 2.3.

Table 2.3: An integration of two multidimensional conceptualisations of commitment.

Nature of Commitment			
Focus of commitment	Affective	Continuance	Normative
Organisation			
Top Management			
Unit			
Unit Manger			
Work Team			
Team Leader			

Source: Meyer and Allen (1997, p.21)

The two-dimensional matrix in Table 2.3 presents the different forms of the commitment model, as described by Meyer and Allen (1991). On the vertical axis are the different foci of commitment, as presented in Reichers’s (1985) multiple constituency models. Reichers (1985) considered commitment to be a form of affective attachment that occurs to varying degrees for specific constituencies within and outside the organisation (Reichers, 1985). Reichers indicated that committed employees are likely to exhibit multiple sets of goals and values (e.g., colleagues, customers and other groups in the organisation). The various cells within the matrix then reflect the varying degrees of different forms of commitment to each of the different foci. However, according to Meyer and Allen (1997), combining the two conceptualisations of Meyer and Allen (1991) and Reichers (1986) results in an incomplete and complex multidimensional construct that becomes impossible to

measure or test. However, we present the matrix to acknowledge the differentiation between commitment forms and foci.

2.6.2 Profiles of commitment (combined effects of OC components on behaviour)

Interest in the development and consequences of 'profiles' of commitment has increased in recent years. The idea that employees have profiles reflecting the relative strengths of affective, normative and continuance commitment was first suggested by Allen and Meyer (1990). Several recent studies have tried to explore the notion of commitment profiles. These studies have focused on the relative level of commitment for each employee, representing distinct groupings of commitment in organisations (Sinclair, Tucker, Cullen and Wright, 2005). Studying commitment variables in terms of their relative importance for individuals opens up a new perspective. The combined influence of AC, CC and NC can now potentially be examined in relation to work outcomes; that is, the possibility that certain patterns of commitment might change the dynamics of the relationship between any given form of commitment and work outcomes can be explicitly tested (Somers, 2009, p.2).

Meyer and Herscovitch (2001) offered a set of propositions regarding commitment profiles. Considering the interactive effects of the three components on focal (staying intention) and citizenship (discretionary) behaviour (OCB), they found that staying intention and OCB were the most pronounced. However, it is very clear that work behaviour does vary among commitment profiles (e.g., Wasti, 2005; Gellatly *et al.*, 2006; Herscovitch and Meyer, 2002; Somers, 2009). Also, commitment profiling has led to a few new and potentially interesting findings; for instance, Gellatly *et al.* (2006) concluded that normative commitment may relate differently to OCB and staying intentions depending on whether it is combined with strong AC (a combination that produced strong intentions to stay and OCB). When combined with high CC in the absence of high AC, NC exhibited only a weakly positive relation to intention to stay and was negatively correlated with OCB. In other words, these effects were most remarkable for normative commitment, and this may offer a new perspective in understanding the NC construct.

Another example from recent research (Somers, 2009) suggests that the most positive work outcomes may be associated with the affective–normative dominant profile, including lower turnover intentions and reduced levels of psychological stress. There were no differences among the commitment groups in terms of late arrival at work, and unexpectedly, the continuance–normative dominant group exhibited the lowest levels of absenteeism. Empirical findings have offered support for these propositions in terms of the behavioural suggestions or implications of commitment profiles (Gellatly *et al.*, 2006; Wasti, 2005). Somers has suggested that future research should focus on the combined influences of commitment on work outcomes.

2.7 Chapter summary

This chapter has explored the nature of commitment and shown that the literature lacks agreement regarding its definition. We have summarised several theories that attempt to resolve these challenges, covering the approaches to commitment as studied over a substantial period of time. We also considered different models and measures of OC, and finally looked at the current trend of OC research. The author has presented the three-component model of Meyer and Allen discussed its antecedents and the consequences of the organisational commitment component. Figure 2.2 displays a model of related antecedents and consequences of organisational commitment. The overall conclusion is that OC is a multidimensional construct that may impact in different ways on productive behaviour. In addition, several antecedents impact each dimension differently. The current commitment research seems to be focused on the development and consequences of “commitment profiling”. We noted two approaches, the first focused on multiple forms or foci of commitment, and the second explored the combined or concurrent influences of AC, CC and NC on work outcomes.

CHAPTER THREE

CONCEPTUAL FRAMEWORK

3.1 Introduction

The aim of this study, as mentioned in Chapter One, is to conduct a systematic analysis of organisational commitment, particularly the antecedent factors that shape and increase organisational commitment in public-sector organisations in the Kingdom of Saudi Arabia. Although the focus of this study is with respect to government administrative employees in Saudi, the author speculates that the conceptual framework outlined in this research could generally be applicable to organisational commitment in a range of countries and cultures, as this work identifies factors that can raise employee productive behaviour. We believe that this study may provide a more nuanced understanding of the contextual or social variations that affect employee organisational commitment in the Saudi Arabian public sector. This work may also help suggest appropriate management policies for workforce optimisation. The research is of particular interest in the Kingdom of Saudi Arabia today, in light of contemporary trends towards increasing productivity and higher standards of public service.

This chapter will discuss the adaptation of the conceptual framework, the proposed research question and development of hypotheses.

3.1 The adaptation of the conceptual framework

The conceptual framework that underpins this study is depicted in Figure 3.1. This research proposes a model termed ACOCC (Antecedent and Consequences Organisational Commitment Components), inspired by Meyer and Allen's three-component (1991) effort, to predict and explain the antecedents and consequences of the organisational commitment components among public sector employees in the Kingdom of Saudi Arabia. The hope is that this work will suggest socialisation strategies to boost employees' self-esteem (Meyer and Allen, 1997, p.110) together with new training programmes to give employees the knowledge that they need to work effectively, thereby enhancing the service quality and effectiveness of public organisations.

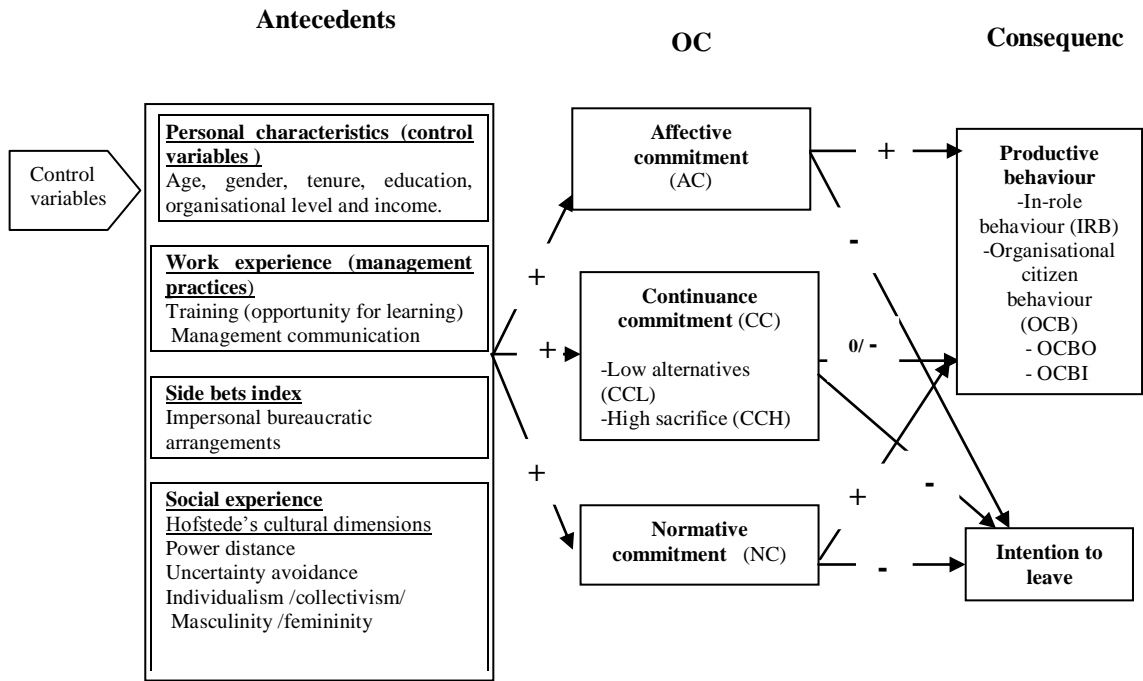


Figure 3.1: The conceptual framework for the proposed model (ACOCC).

This study will explore the relationships between selected variables in the multidimensional model of organisational commitment. It investigates several antecedent variables to organisational commitment, including work experience (training – opportunities for learning; management communication). In general, the availability of on-the-job training is considered a strong factor in employee job attitudes and behaviour (Ng, Butts, Vandenberg, DeJoy and Wilson, 2006).

This study also examines impersonal bureaucratic arrangements, namely, rules or policies put in place by an organisation to encourage or reward long-term employment (e.g., a seniority-based compensation system) (Powell and Meyer, 2004) as an antecedent of continuance commitment. We focus on the sub-component that we term “high sacrifice”. Some theorists and researchers in organisational commitment have suggested that culture is a significant antecedent to organisational commitment (Wiener, 1982; Meyer and Allen, 1991; Clugston *et al.*, 2000; Cohen, 2007a); thus, this study also tests whether individualised measures of Hofstede’s cultural dimensions (power distance, individualism versus collectivism, uncertainty avoidance, masculinity versus femininity) are related to the three components of organisational commitment.

To examine organisational citizenship behaviour, we will include two dimensions of OCB (OCBO, affecting the organisation and OCBI, affecting the individual) in this study. Several research findings indicate that these variables have not been appropriately investigated to date in public-sector contexts within developing countries (Benkhoff, 1997; Al-Kahtani, 2004; Shaw *et al.*, 2003; Yousef, 2000). Additionally, the public sector has a particular role in society which calls most particularly for citizenship behaviour in its employees (Kondratuk, Hausdorf, Korabik and Rosin, 2004).

There is agreement among organisational behaviour researchers that the three dimensions of organisational commitment exhibit significant correlations with other variables, such as turnover intention, in-role behaviour and organisational citizenship behaviour (OCB), which may be outcomes of commitment (Meyer *et al.*, 2002; Cohen, 1996; Dunham *et al.*, 1994; Hackett *et al.*, 1994; Meyer, Allen and Gellatly, 1990; Meyer and Herscovitch, 2002).

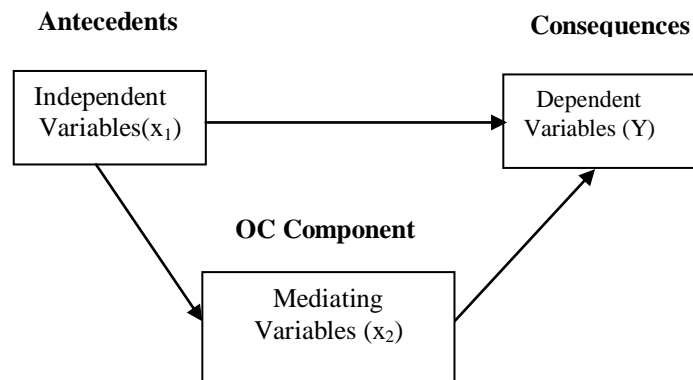


Figure 3.2: Mediation contexts (source: Hair *et al.*, 2006, p.806).

Mediation contexts take into account certain indirect effects. Some variables (depicted as x_2 in Figure 3.2) do have a direct impact on the dependent variable Y but rather modulate the effect of other independent variables x_1 on the dependent variable Y . A perfect fit occurs when the influence of the independent variable x_1 (e.g., work experiences) on Y (e.g., performance) takes place through the mediating variable x_2 (e.g., OCB created by the antecedents). In path analysis, a common technique is to consider the fit of a statistically significant indirect effect (Hair, Black, Babin, Anderson and Tatham, 2006).

Previous research has used structural equation models to explore the mediating effects and roles of affective, continuance and normative commitment in the relationships between the antecedents (job satisfaction, side-bet index, HRM practices) and consequences, such as intent to leave (Clugston, 2000; Powell and Meyer, 2004). Using this approach, Powell and Meyer concluded that the relationships between the side-bet index and turnover intention were fully mediated by commitment. By examining three models (full, partial and non-mediated), Clugston concluded that job satisfaction partially influenced the commitment component, which indicated that a partially mediated model of multidimensional commitment fit the data better than a fully mediated or non-mediated model. Accordingly, the commitment component has a mediating role between the antecedent and consequences, as Meyer and Allen (1991) have suggested with their model. However, this mediation role could be either partial or full.

Numerous commitment research studies have examined the effects of various antecedents and consequences of affective commitment. Affective commitment is comparable to attitudinal commitment; it is also defined as one factor of OC, according to Porter *et al.* (1974). However, a comparatively small number of empirical research studies have explored the effects and relationships between the independent antecedents of normative and continuance commitment in developing countries (specifically, Arab and GCC countries). Thus, this research identifies such antecedents and consequences; the researcher then examines each component and tests for a fully recursive model (see Figure 3.1). The researcher also integrates different exogenous as well as endogenous variables for the four commitment measures. In addition, structural equation modelling (SEM) is used to estimate the mediating effects of AC, CC and NC on the relationship between the selected antecedent variables and the intention to leave, in-role behaviour and OCB. The variables relevant to this study are as follows:

- Organisational commitment components
- Work experience
- Side-bets index
- Hofstede's cultural dimensions
- Productive behaviour

In this research, relevant variables will be examined through respondent data. Several research findings indicate that this approach has not been thoroughly investigated in the public sectors of developing countries (Benkhoff, 1997; Al-Kahtani, 2004; Shaw *et al.*, 2003; Yousef, 2000; Suliman and Iles, 2000). Significant empirical evidence from numerous previous studies (Meyer and Allen, 1991; 1997; Meyer, *et al.*, 1993; Mowday *et al.*, 1982; Mathieu and Zajac, 1990; Cohen, 1996; Meyer *et al.*, 2002) indicates that work attitudes (job satisfaction, job involvement and occupational commitment) correlate with affective commitment. Since the prime objective of this study is to explore the forms of OC that govern Saudi Arabian public-sector employees, these variables will not be considered in this research.

3.3 Proposed Research Question and Development of Hypotheses

The primary research question is as follows:

What is the mediating role of organisational commitment components between the selected antecedent variables (work experience, comprising both training and management communication; impersonal bureaucratic arrangements; and Hofstede's cultural dimensions) among Saudi public-sector employees in the context of their work behaviour (intention to leave, organisational citizen behaviour and in-role behaviour)?

To answer the above question, this research will investigate the following secondary questions:

RQ.1: What are the levels of affective, continuance and normative commitment at the different managerial levels among public-sector employees in Saudi Arabia?

RQ.2: What is the correlation between the commitment components at the different organisational levels?

RQ.3: What are the demographic characteristics (age, educational standard, year of service, social status, gender and income) of Saudi public employees?

RQ.4: Are there any relationships between demographic characteristics and organisational commitment components among public employees?

- RQ.5:** How do training factors (i.e., opportunities for learning) and management communication affect AC and NC?
- RQ.6:** How do bureaucratic arrangements relate to CC and, in particular, to its high sacrifice sub-component?
- RQ.7:** What are the effects of Hofstede's cultural dimensions (power distance, uncertainty avoidance, individualism/collectivism and masculinity/femininity) on the components of organisational commitment?
- RQ.8:** How do organisational commitment components affect in-role behaviour (IRB) and organisational citizen behaviour (OCB)?
- RQ.9:** What is the impact of AC, CC, and NC on employee's intention to leave an organisation?

The research hypotheses were formulated on the basis of these research questions.

3.3.1 Construct validity in the Saudi context

According to Meyer and Allen (1997, p.108), the effect of the various forms of commitment depends on the cultural contexts in which they operate. It is possible that certain forms of commitment play a greater role in some cultures. For example, affective commitment plays a more prominent role in individualist cultures, such as those of the US or Canada, than it does in cultures characterised by a communitarian orientation like those of Japan and China. Normative commitment, by contrast, plays a more important role in collectivist cultures that emphasise strong social ties and communal obligations (Morris and Sherman 1981; Cheng and Stockdale, 2003; Gregersen and Black, 1992; Powell and Meyer, 2004).

The three-component model and its attendant measures have undergone quite extensive empirical evaluation. Through a meta-analytic investigation, Meyer *et al.* (2002) attempted to estimate and compare the strength of the correlations that exist among the variables identified in Meyer and Allen's three-component model of OC. They focused on the model's generalisability beyond the North American context, rather than on the empirical validity of the commitment model. Their findings confirmed the model's generalisability and the importance of the three components of commitment in predicting in-role performance and OCB in the Chinese context. To investigate the cross-cultural applicability of Meyer and Allen's work (1991),

researchers have considered its dynamics in other cultures, including Australia, Belgium, Hong Kong, Korea, Malaysia, the United Arab Emirates and China (Herscovitch and Meyer, 2002).

The research literature appears to contain sufficient empirical evidence to suggest the model's generalisability. Cheng and Stockdale (2003) compared levels of OC between the Chinese sample and other previously published data from Canada and South Korea, finding qualified support for the generalisability of the three-component model to the Chinese context. In the same vein, an evaluation of a three-component model of occupational commitment among UK human resource managers offers support for the three-component model (Snap and Redman, 2003). The authors also provided evidence for the model's generalisability to an occupation that operates across multiple sectors of the economy. Chen and Francesco (2000; 2003) reported significant results, confirming that, under the influence of their traditional national culture, Chinese employees behave differently from their Western counterparts, further reinforcing the generalisability of the model.

Vandenberghe (1996) and Glazer, Daniel and Short (2004) examined the cross-cultural validity of a multidimensional commitment in the European context and tried to evaluate the three-component model of organisational commitment in Belgium; they compared studies with samples drawn from different cultures (e.g., they compare matched samples of American and Japanese manufacturing workers for job satisfaction and OC). Their findings indicated that OC among Japanese employees was higher than OC among their American counterparts. These conclusions have not, however, been without criticism. The differences that result from the application of organisational behaviour models in Japanese and Western cultural environments may be attributable to variation in cultural individualism/collectivism. In general, the results offer good support for the commitment model's cross-cultural equivalence in Europe. Steijn and Leisink (2006) found that Meyer and Allen's three-component model of OC is also applicable to national public-sector employees.

In a noteworthy study, Lee *et al.* (2001) examined the generalisability of the three-component model of organisational commitment to the Korean culture. Their results seemed to suggest that the three organisational commitment constructs (AC, CC, NC) were not only meaningful and measurable in Asian culture but were also likely

to be conceptually and functionally similar (i.e., generalisable) across various cultural contexts. Therefore, the empirical support for the validity of the three-dimensional model in Belgium, Dutch, South Korea and China, would appear to be sufficient evidence in support of our first hypothesis regarding the generalisability of this model to the Saudi context.

Hypothesis 1: The three-component model (AC, NC, and CC) exhibits construct validity in a Saudi context.

3.3.2 Levels of AC, CC and NC at different organisational levels

One issue that concerns many organisational researchers is the level of analysis at which a given study should be conducted. One example of this is whether the research questions should be specific to a particular occupational level (i.e., managerial or non-managerial employees) or whether certain research questions should be handled at the individual level, by categorising respondents according to the type of work they do, or by departments within an organisation. For example, at the individual level, we may ask employees to describe the nature of their work (Bryman, 1995, p.3). However, in this study, we extend these considerations to the level of the organisation; thus, we hypothesise that there are systematic differences in the OC components between organisational levels.

Most organisations are traditionally seen as hierarchies. A hierarchy generally refers to the common pyramidal arrangement of formal authority relationships as a directing and coordinating mechanism, stepwise from the “top” to the “bottom” of an organisation. It also refers to the boxes-within-boxes structure that characterises most organisations (March and Simon, 1993), with more intensive communication between boxes from different levels than between different boxes at a single level. According to March and Simon, hierarchical descriptions are common because it is often more efficient and more suitable, given general cultural norms, to describe social relations in terms of domination and subordination (March and Simon, 1993, p.3). In the Saudi culture, public organisations exhibit a distinctive system of managerial hierarchy because of the dominance of the hereditary monarchy structure and the fact that members of the royal family and educated technocrats control top-

level executive positions in the public sector (Robertson, Al-Kahtib, Al-Habib and Lanoue, 2001). Thus, any assumption concerning the effect of managerial level on organisational commitment suggests that the type of attachment (want, need and ought) may vary between employees throughout an organisation.

As Mowday *et al.* (1982) suggested, in certain kinds of organisations, such as those in the services industry, it may be important to encourage stronger linkages (i.e., improved commitment levels) among more junior employees, because they interact with the individuals who most obviously need the organisation's services. Consequently, strong linkages have a potentially important influence on overall organisational effectiveness. According to Lincoln and Kalleberg (1990, p.80), "the low placed members tend to have less commitment and emotional attachment to the organisation than the higher placed members", given the notion that motivation, commitment and morale increase rapidly with position within the management hierarchy. Nevertheless, it has been suggested that the higher the seniority of employees, the larger the payments received from their organisation and the greater the resulting employee commitment (Angle and Perry, 1983). Buchko, Weinzimmer and Sergeyev (1998) asserted that there may be a significant positive correlation between commitment and job level.

Although the volume of work which has been done in this area to date is insufficient, a number of earlier studies have examined commitment relationships at different organisational levels. For example, Angle and Perry (1981) attempted to relate the organisational commitment of more junior employees to organisational effectiveness. Their data suggested that employee commitment is associated with intent to leave at the organisational level (but not with organisational efficiency). Importantly, they also concluded that the relationship between commitment and behaviour very likely depends on the type of commitment exhibited. Schmitt, Colligan, and Fitzgerald (1980) showed that, at the individual level, there is only a very weak connection between psychological stress, satisfaction and other job attitudes, and physical symptoms. However, associations at the organisational level seemed to be much stronger.

Moreover, a study by Ostroff (1992) investigated the relationship at the organisational level between employee satisfaction, other job-related attitudes (e.g.,

commitment, adjustment and psychological stress) and organisational performance. With data collected from 298 schools, Ostroff's study found that commitment can be combined at the organisational level; the resulting findings support the relationship between employee satisfaction and organisational performance. A non-Western study carried out in Malaysia examined the multidimensional nature of managers' organisational commitment levels. An interesting finding of the study is that managerial position (organisational level) significantly impacts both affective and normative commitment. More senior managers reported higher levels of affective and normative commitment. Moreover, multiple comparisons revealed that the affective and normative commitment of those in upper managerial positions may be significantly different from those in middle and lower managerial positions. There were no significant differences among the groups in terms of continuance commitment (Keong and Sheehan, 2004). These findings are consistent with those of a study of civil managers in Jordan by Awamleh (1996), who reported a weak but positive relationship between managerial position and affective commitment. Awamleh linked the gap between managers' existing level of commitment and the maximum potential level to the organisational dimensions of certain government departments, rather than to the external environment or to managers' personal qualities (p.72).

In light of traditional assumptions regarding the effect of managerial level on connectedness among public employees, this study intends to examine the differences in the three OC components between different managerial levels. We will focus on the following hypothesis:

Hypothesis 2: There is a significant difference in the levels of AC, CC and NC among public employees according to their organisational job level.

3.3.3 Antecedent variables

In this study, we identify the variables that are likely to be involved in the development of affective, continuance and normative commitment. Thus, in the following sections we present the selected antecedent variables for each commitment component hypothesised to be correlated with OC.

3.3.3.1 Demographic variables

Demographic characteristics include basic personal information, such as gender, age, tenure, income, level of education and job level. Previous research on organisational commitment suggests that “demographic variables [are] viewed as nuisance variables” (Becker, 1992). We measure multiple demographic variables (age, job tenure, seniority in the organisation, education level, marital status and gender) and use them as control variables in the regression analyses. The effect of personal characteristics will be removed from this analysis because previous research has indicated that these variables may confound the effects of other independent variables on organisational commitment (Becker, 1992; Becker *et al.*, 1996; Ng *et al.*, 2006; Clugston *et al.*, 2000). Thus, we will measure this type of information for descriptive purposes only. For exploratory purposes, we will investigate its relationship with the three components of interest.

3.3.3.2 Work experiences

1) Training (opportunities for learning)

Conceptually, one of the mediating mechanisms for the components of OC considers how particular human resource management (HRM) practices (e.g., training) might lead to different levels of commitment (Meyer and Allen, 1997, p.67). Offering opportunities for learning and self-improvement might promote the perception that the organisation values employees as individuals, enhancing a general sense of self-worth and thereby increasing AC. Empirically, correlations with work experience variables have been shown to be much more pronounced and more proximal to affective, continuance and normative commitment (Meyer and Allen, 1997).

The rapid changes in the employee—employer relationship appear to result in a growing trend in respect of part-time employment. Since careers are increasingly precarious rather than stable, employees are unlikely to develop strong and lasting commitment to their organisation (Rousseau, 1998). In addition, because of the growing emphasis on learning within today’s careers, the existence of learning opportunities at work may be an important determinant of employees’ job attitudes and behaviours. However, to date, little attention has been paid to the extent to which participation in training courses is related to organisational commitment as a

multidimensional construct, and published findings suggest that attitudes towards diverse types of work have a different effect on each dimension of commitment.

Some research has explored the links between attitudes to HR practices and commitment, regardless of the fact that relationships between both constructs have demonstrated the HRM-performance association across many models (Conway and Monks, 2009). For instance, Meyer *et al.* (2002) have published a meta-analysis of antecedents, correlates and consequences of the three components of commitment. Their analyses reveal strong correlations with affective commitment in studies that focus outside North America. The work experience variables were found to exhibit the strongest positive correlation with AC, a finding that is consistent with the study by Eisenberger *et al.* (1986), who argued that organisations seeking affectively-committed employees must provide a supportive work environment through a pronounced affective work experience.

Since the beginning of 2000, studies investigating the effects of management communication and learning opportunities on organisational commitment (Niehoff, Moorman, Blakely and Fuller, 2001; Marchiori and Henkin, 2004; Law, 2005; Ng *et al.* 2006) have provided significant evidence that affective work experience variables have a positive effect on organisational commitment. The reasoning is grounded in expectancy theory (Vroom, 1964) and, in particular, the components of expectancy (the effort—performance link and, instrumentality, the performance—reward link). Lowry, Simon and Kimberley (2002) investigated the effects of casual work arrangements on employee job satisfaction and commitment, and their findings suggest that casual employees exhibit varying levels of commitment according to their perceptions of work-related factors such as training and managerial experience. As a result, they recommend that employers provide training opportunities and programming for casual workers, together with career advice.

Another recent study, conducted by Kinnie, Hutchinson, Purcell, Rayton and Swart, (2005), examined the links between employees' satisfaction with HR practices and their organisational commitment. The study suggested that satisfaction with certain HR practices (e.g., reward, recognition, communication and work—life balance) is linked to the commitment levels of all employee groups (professionals, line managers and labourers). On the other hand, they found that other practices are

linked with a specific job group only, recommending that these practices might need to be modified to meet the requirements of certain professional groups. One very recent study (Conway and Monks, 2009) has found that attitudes towards HR practices exerted a greater impact on affective commitment than on either continuance or normative commitment, regardless of organisational context (corporate banking versus retail banking). Bartlett (2001) examined employee attitudes toward training and organisational commitment using the three-component model. The strongest relationship was reportedly linked with the affective and normative forms of commitment.

In a non-Western study, Ahmad and Bakar (2003) investigated the relationship between the three components of commitment and five training variables (availability of training, support for training, motivation to learn, training environment and perceived benefits of training). They concluded that all five training variables were significantly associated with affective and normative commitment, whereas only training availability and perceived benefits of training were significantly correlated with continuance commitment. These results suggest that training generally does seem to influence OC.

This research examines the relationship between opportunities for learning and affective commitment by means of the following hypothesis:

Hypothesis 3a: Training (i.e., opportunities for learning) is more positively related to AC than to CC or NC.

We note that employees who are aware of the costs of training or, as Meyer and Allen (1997) suggested, who appreciate the skills they have obtained, might develop a sense of obligation. This may mean that NC will keep them in the organisation at least long enough to allow them to “reciprocate” (p.68). In other words, as McElroy, Morrow and Laczniak (2001) explained, employees who are aware of the cost of training, or appreciate the expertise they have obtained, might build up a sense of obligation (normative commitment). This will keep them in the organisation and motivate them to stay long enough to reciprocate. Employees might develop a moral obligation to give the organisation its money’s worth (normative commitment), especially if the company has supported and paid for the training. In other words, a

training opportunity is a kind of organisational investment in the employee that could create feelings of obligation to reciprocate, and by this means can foster higher level of normative commitment.

According to Chang (1999), training may influence the psychological outlook of employees. When employees believe that an organisation, in seeking to build a high-quality workforce, provides appropriate training, they feel that the company is concerned with developing their proficiency and capabilities. This can lead to an emotional involvement with their company. If training is perceived as providing organisation-specific skills that contribute to status or economic advantage within the company but will not transfer to jobs outside the organisation, it will lead to continuance commitment (Meyer and Allen, 1997, p.68). Thus, general training should have little effect on continuance commitment and may sometimes exert a negative effect. For example, Lalonde, Paré and Tremblay (2001) concluded that training is negatively related to continuance commitment. Finally, a recent study conducted in Turkey by Wasti and Can (2008) lead to an interesting finding: training opportunities were significantly correlated with affective and normative commitment to co-workers.

In light of this inconclusive evidence, we propose the following:

Hypothesis 3b: Training (i.e., opportunities for learning) is more positively related to NC than to CC.

2) Management communication

Management communication in any organisation is associated with information that may help to improve employees' awareness of organisational membership and, consequently, organisational commitment. This type of information-sharing increases when employees recognise that information about the organisation, including its goals and plans, is being shared with them (Riordan *et al.*, 2005). Such information could include organisation-level changes such as policies and procedures, financial results, and employee and firm-wide successes (Vandenberg *et al.*, 1999). According to O'Reilly and Roberts (1976), communication refers to the degree to which an organisation issues relevant information in a clear and timely manner. Therefore, communication plays an essential role in everyday work routines by providing the

information necessary for employees to perform their jobs efficiently (O'Reilly and Roberts, 1976; Weick, 2005). In today's knowledge-intensive economy, an organisation's available information is becoming an increasingly important resource (van den Hooff and Ridder, 2004).

Organisation-relevant information can be circulated to workers in a number of ways, such as via managers, group meetings, leaflets and information sheets, websites and task reports (Soupata, 2005). Rousseau (1998) has suggested that communicating organisation-related information may enhance employees' psychological attachment to their organisation because it encourages them to see themselves as central components of the organisation and to contribute towards the organisation's goals.

Soupata (2005) studied the success of UPS, the world's largest package delivery company and a leading global provider of specialised transportation and logistics services. The company's success is characterised as depending on a commitment to build trust and to improve employee relationships by focusing on honesty, capability and quality. Transmitting this company's significant strategic imperatives for meeting business goals requires a wide-ranging communications effort. Managers insist that employees should know what the company is doing, why they are involved in different activities and why their individual roles make the business successful. Management communication may increase employees' understanding of how successful learning may contribute to organisational productivity, and it translates into a strong work ethic, with employees engaging with the business and committing to the company's success. In the same vein, van Vuuren, de Jong and Seydel (2007) concluded that communication strengthens commitment by giving employees a clear picture of which values are important, which goals are critical, and how the organisation has been effective in the past.

Communication has been linked to organisational commitment in several ways. As Meyer and Allen (1997) argued, communication is likely to be an important component in any program designed to build commitment within a new organisation (p.86). For instance, Allen and Brady (1998) found that, especially in organisations concerned with total quality management (TQM), up to 59 per cent of the variance in organisational commitment was explained by the communication variable. With respect to illustrate the significance of communication for commitment, Mathieu and

Zajac (1990) concluded that “a supervisor who provides more accurate and timely types of communication enhances the work environment and thereby is likely to increase employees’ commitment to the organisation” (p.180). This is consistent with a study by Putti, Aryee and Phua (1990), the results of which indicated that satisfaction with communication improves employees’ feelings of belonging to the organisation. These findings showed that employees’ satisfaction with the amount of information available to them may enhance their commitment. This is because the information provided by the organisation may encourage a sense of belonging and help employees to identify better with the values and objectives of their organisation (p.50). Young, Worchel and Woehr (1998) investigated the factors associated with organisational commitment among public-service employees. Their results indicated that communication is one of these factors and is positively and significantly related to commitment. They suggested that “employees are more satisfied with their jobs and promotional opportunities when they have input in terms of complaints and suggestions, and when they are kept informed of organisational plans, policies, and development” (p.346).

Yoon and Thye (2002) investigated the affect of management communication on organisational commitment in a large Korean sample, and they concluded that communication was important in producing organisational commitment. Also, Ng *et al.* (2006) investigated the effects of three aspects of the work environment on organisational commitment; management communication was one of these variables. The results of their study revealed that management communication had a significant positive effect on organisational commitment. In other words, the quality of information that employees received from their supervisors and co-workers was positively related to their job satisfaction and organisational commitment (Sias, 2005). Postmes, Spears, Sakhel and de Groot (2001) concluded that there is a substantive connection between communication and organisational commitment, particularly in the case of vertical communication (strategic information and communication with management). A recent study conducted by Landsman (2008) revealed that communication partially affects commitment through perceived organisational support (POS). Therefore, in light of prior research suggesting that this variable is antecedent to affective commitment, we predict that management

communication has a greater positive effect on affective commitment than on normative commitment.

Hypothesis 4a: Management communication is more positively related to AC than to NC and CC.

However, cultural influences can also impact the relationship with other commitment components. We also predict that this variable will affect normative metrics more than continuance ones in Saudi public organisations.

Hypothesis 4b: Management communication is more positively related to NC than to CC.

3.3.3.3 The side-bet index: exploring impersonal bureaucratic procedures

Side bets refer to “anything of importance that an employee has invested in, such as time, effort or money, which would be lost or devalued at some cost to the employee, if he or she left the organisation or occupation” (Wallace, 1997, p.728). As mentioned in Chapter Two Becker (1960) described commitment as “a tendency to engage in consistent lines of activity” (p.33) and suggests that it builds up as a “person finds that his involvement in social organisation has, in effect, made side bets for him and thus constrained his future” (p.36). As explained in Section 2.5, Meyer and Allen (1991) referred to this form of commitment as continuance (cost-based) commitment and include it along with affective (desire-based) and normative (obligation-based) commitment in their three-component model.

The notion of cost-based commitment suggests that employees are aware of costs related to leaving the organisation and therefore stay with their employers because they have to. As Meyer and Allen (1997) argued, conceptually, the development of continuance commitment happens as a result of any action or event that increases the costs of leaving the organisation, provided that the employee recognises that these costs have been incurred (p.56). Meyer and Allen (1991), in their model, categorised these actions and even incorporated two sets of antecedents, namely, investment and alternative constructs.

Over time, employees develop a sequence of side bets that become constant with their employment actions or behaviour and commit them to a particular line of behaviour. The progress and development of side bets may be linked to a number of factors: generalised cultural expectations (e.g., violations involve penalties); impersonal bureaucratic arrangements (e.g., loss of pension and seniority if one were to change organisations); individual adjustment to social positions (e.g., an individual becomes unfit for a new job); self-presentation concerns (e.g., concerns about living up to a social image); and non-work-related concerns (e.g., family and community participation) (Becker, 1960). These five types of side bets constrain an individual's future activity or action and tie the individual more closely to his or her organisation. According to Wallace (1997), "Over time, more investments are made, more costs associated with leaving are accrued, alternate opportunities decline, all of which make it more difficult for the individual to leave either the employing organisation or the chosen occupation" (p.730).

Although the development of continuance commitment has received less research attention than the development of affective commitment (Meyer and Allen, 1997, p.60), studies such as those by Angle and Perry (1983) and Wallace (1997) have attempted to measure side bets more directly (Griffin and Hepburn, 2005). However, because side bets tend to be distinctive; few studies have been conducted to examine correlations with more objective measures of side bets. In more recent studies, Shore *et al.* (2000) and Powell and Meyer (2004) attempt to make available an inclusive measure of each of the five side-bet categories as conceptualised by Becker (1960), with the result that they enumerated five factors consistent with Becker's categories. Both Shore *et al.* (2000) and Powell and Meyer (2004) employed these factors to understand the effects of side bets on Meyer and Allen's (1991) three-component model.

The two studies reached similar conclusions in terms of partial support for Becker's (1960) side bet theory. According to Shore *et al.*, the top two categories that should correlate strongly with traditional measures of side bets are side-bet items that measure impersonal bureaucratic arrangements and adjustments in social position. This is because of their clear focus on prospective economic losses. In contrast, the other three categories are more focused on the social environment and thus are more

closely associated with emotional attachment (AC) and feelings of obligation (NC) than with a more economically-focused or cost-based commitment (CC).

Shore *et al.*'s (2000) principal axis factor analysis revealed that three of the five factors were in line with the predictions of Becker's (1960) categories (i.e., impersonal bureaucratic arrangements, individual adjustments in social position, and non-work-related concerns), but the other two categories (i.e., generalised cultural expectation and self-presentation concerns) did not produce distinguishing factors. Regarding the connection with OC components, the non-work dimension was strongly correlated with NC and AC, while individual adjustment was associated only with CC. Impersonal bureaucratic arrangements were correlated with CC and AC to a similar degree. These findings offer support for the distinctiveness of the side-bet dimensions. Importantly, the majority of impersonal bureaucratic arrangements were items such as seniority, job security and benefits. Impersonal bureaucratic arrangements, which are "rules or policies put in place by the organisation to encourage or reward long-term employment" (Shore *et al.*, 2000, p.159), may be positively correlated with continuance commitment.

Powell and Meyer (2004) tested more specific measures of side bets (Becker, 1960) within the context of Meyer and Allen's (1991) three-component model. Measuring five categories of side bets, they found strong support for Becker's theory. Powell and Meyer criticised Shore *et al.*'s study because they failed to reproduce the theoretical factor structure for measuring side bets. Therefore, they applied a distinction to the measurement of side bets, and they decided that these five categories must be formative. For instance, bureaucratic arrangements are the accumulation of seniority privileges, vesting of pension benefits and retention bonuses, all of which are possibly independent arrangements. Accordingly, if measurements of these arrangements are not associated, they do not present a common factor and cannot be merged to form an internally consistent scale. However, the more that bureaucratic arrangements are assumed to subsist, the more costly it would be for an employee to leave the organisation. Consequently, it is important to sum across items to calculate a meaningful score for bureaucratic arrangements. Powell and Meyer (2004) concluded that all five categories correlated significantly with a revised measure of high-sacrifice continuance commitment.

In light of the previous research results and framework, and consistent with a desire to explore antecedent variables for each commitment component of relevance to the Saudi public sector, we generated the following hypothesis:

Hypothesis 5: Impersonal bureaucratic arrangements are positively related to CC, particularly for the high-sacrifice sub-component CCH rather than for the low alternative CCL.

3.3.4 Hofstede's Cultural Dimension

Every society has its own values, attitudes, thinking, beliefs and behaviour. Its individuals share common goals and meanings which differentiate them from each other; this is called 'culture'. As Mullins (1993) concluded, culture is a difficult concept to identify but may be a significant factor in the study of organisational behaviour. According to Cornelius (2002) culture is: "the determinant that shapes attitudes and behaviour at community, national and organisational levels" (p.367). Mullins (1993) defined it as a "distinctive pattern of values and beliefs which are characteristic of a particular society sub-group within the society" (p.15). However, culture has been defined in various ways; an anthropologically famous definition defines culture as: "patterned ways of thinking, feeling and reacting, acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional ideas and especially their attached values" (Kluckhohn, 1951, p.86). Another definition looks at culture from a cross-disciplinary perspective; Kroeber and Parsons (1958) defined culture as: "transmitted and created content and patterns of values, ideas and other symbolic-meaningful systems as factors in the shaping of human behaviour and the artefacts produced through behaviour" (p.583).

Geert Hofstede (1980) looked at cultural and workplace differences. He carried out a large-scale study of IBM employees from over 50 nations. By focusing on one organisation, Hofstede argued, results would be more obviously correlated with national cultural differences. He suggested that culture is apparent not only in values but also in more superficial ways, such as symbols, heroes and rituals, which are usually derived from the environment. All of these factors shape individuals' values

and affect their behaviour; thus, culture is a “collective programme of the mind that distinguishes one group or category of people from another” (Hofstede, 2001, p.9).

By identifying collective programming, which certainly affects employees’ behaviour, Hofstede initially identified four main collective constructs that differ between cultures and labelled them cultural dimensions: masculinity versus femininity, uncertainty avoidance, individualism versus collectivism and power distance. Later, a fifth dimension of culture was added by Hofstede (1998): long-term versus short-term orientation. This originally came from an instrument developed by Michael Harris Bond from values recommended by groups of Chinese researchers (Hofstede, 2001, p.351). Hofstede’s Value Survey Model (VSM) provides a theoretical framework to measure cultural values, and it may help identify the fundamental distinctions in the way individuals in different countries observe, understand and behave differently. This work represents an effort to understand work-related differences and to explain them in the context of chosen management styles.

Certain researchers have acknowledged that they have undervalued the degree to which culture affects management and practice (Boyacigiller and Adler, 1991). Therefore, these dimensions have been used by many researchers to account for observed distinctions in individual behaviours across cultures and countries (Gelade, Dobson, and Auer, 2008). Thus, the Social Science Citation Index reveals that, from 1987 to 2004, Hofstede (1980; 2001) was cited nearly 2858 times, placing them among the most cited works (Bearden, Money, and Nevins, 2006). Despite the significant contribution of Hofstede’s work, a number of researchers have criticised it. For example, Sondergaard (1994) argued that the sample used in Hofstede’s work is not representative of the nations investigated because he focused on IBM employees and managers only. However, Hofstede’s work has continued to be relevant and is considered the most popular measure of cultural values, holding great promise as a theoretical framework to guide cross-cultural comparisons of organisational commitment (Randall, 1993; Clugston *et al.*, 2000; Kirkman and Shapiro, 2001).

A number of organisational commitment theorists have suggested that culture is an important cause of, or antecedent to, organisational commitment (e.g., Meyer and

Allen, 1991; Wiener, 1982). The most important point in both Wiener's and Meyer and Allen's models of antecedents and consequences of commitment was that the feeling of obligation to stay with the organisation may come from the internalisation of normative pressures that an employee feels on account of societal morals, values or beliefs. In other words, these pressures and norms are acquired prior to the socialisation and development that take place when a person joins an organisation. Meyer and Allen suggested that cultural (i.e., socialisation) experience is antecedent to normative organisational commitment. They emphasise collective values and extensive employer-employee relations as factors that lead to higher total levels of normative commitment. A significant body of research has tested whether individualised measures of cultural dimensions are related to an employee's commitment (e.g., Dorfman and Howell, 1988; Clugston *et al.*, 2000; Cohen, 2007a, 2007b). Dorfman and Howell (1988) have developed and validated a scale that measures individual-level values related to Hofstede's (1980) cultural dimensions.

Clugston *et al.* (2000) tested the theoretical influence of culture on organisational commitment. In particular, the authors attempt to support and expand organisational commitment theory by testing whether individualised measures of masculinity, uncertainty avoidance, collectivism and power distance can influence an employee's three components of commitment to the organisation, as well as commitment to his or her supervisor and workgroup. To date, prior research in this area has largely failed to integrate multidimensional measures of commitment or individualised measures of well-known cultural dimensions to predict the level of commitment.

The majority of previous research, even in Western contexts, has measured commitment using the Organisation Commitment Questionnaire (OCQ) (Porter *et al.*, 1974; Mowday *et al.*, 1982), which only measures affective organisational commitment. Therefore, only a limited amount of research to date has explored the cultural effects in terms of each commitment component (i.e., AC, CC and NC). Moreover, as Randall (1993) argued, OCQ is the most popular approach for measuring OC in different cultures. Furthermore, the most frequently studied regions in terms of OC research are North America and Japan. However, these two countries are highly industrialised, and Hofstede has stated that industrialisation exerts a major influence on cultural values. For example, a country's level of individualism is

highly related to its wealth. Therefore, research needs to go beyond just the industrialised countries. Hofstede's Value Survey Model may be a suitable theoretical framework to introduce consistency in terms of a cross-cultural study of organisational commitment. This has been accompanied by a growth in interest over the last decade in research focused outside North America (Randall, 1993).

Furthermore, not many studies have investigated national variance in organisational commitment as a culturally influenced construct to show that the sources of OC are culturally conditioned and that their effects are predictable in terms of Hofstede's value dimensions (Gelade, Dobson, and Gilbert, 2006; Gelade *et al.*, 2008). Another important point is that the majority of cultural studies have focused on national analyses, comparing aggregated scales of cultural value across countries (Hofstede, 1980; Schwartz, 1999). Thus, only a few studies have examined the impact of personal cultural values on attitudes and behaviours at the individual level. In addition, further research may be necessary to better investigate the nature of the correlation between cultural values, commitment and productive behaviour (i.e., OCB) (Cohen, 2007b).

Accordingly, this research has attempted to understand the cultural impact on organisational commitment in a non-Western culture and to support OC theory by testing whether the Hofstede's cultural dimensions of masculinity/femininity, uncertainty avoidance, individualism/collectivism and power distance affect employees' affective, continuance or normative organisational commitment. In this study, we used Clugston *et al.*'s (2000) individualised measures because it is important, when we consider culture within one country, to understand the degree to which variation within that country persists on cultural dimensions and whether this variation is sufficient for hypothesis testing. Moreover, when culture is an independent variable that affects any individual measures of the dependent variables, then individualised measures of cultural dimensions must be used (Clugston *et al.*, 2000). Even though prior studies have frequently used value scores to determine the characteristics of entire cultures, an increasing number of researchers have acknowledged that value orientations can also be used to reveal the characteristics of individuals. Such a psychological analysis is more responsive to the potential effects of cultural values on the behaviour of just one individual than are analyses that treat

all of the members of a culture as being identical (Tyler, Lind, and Huo, 2000). Two particular causes have been advanced in support of the individual level of analysis, as Cohen and Keren (2008) reported. Firstly, today there exists a within-culture difference in terms of social norms. Treating individuals' reports, about the nature of their culture, as group-level variables, will produce possible misspecification problems. Secondly, the implication that experimental distinctions can be recognised by the clustering variable might be better explained by a more fine-grained analysis conducted at the individual level (Cohen and Keren, 2008).

Most prior research has investigated the moderating effect of culture between independent variables and OC, but not the mediating role of commitment between these dimensions and employees' productive behaviour. The leading research on this issue is that of Dorfman and Howell (1988) and Clugston *et al.* (2000). More recent research (e.g., Cohen, 2007a; 2007b) is also of interest. The findings of Clugston *et al.* (2000) supported the claim by Meyer and Allen (1991) and Wiener (1982) that cultural socialisation is antecedent to OC. Additionally, these data supported Bochner and Hesketh's (1994) idea that distinctions in employees' attitude can be predicated on the source of cultural dimensions even in the context of homogenous work surroundings inside one country. Nevertheless, one must consider not only the culture but also the political orientation and historical background of a people group before their behaviour can be understood (Triandis, 1995). Further, in Chapter Four, we analyse the Saudi environment and concluded that it has a distinctive historical political system that certainly affects employees' behaviour.

3.3.4.1 Masculinity versus femininity

Hofstede's masculinity/femininity dimension is related to the division of emotional roles between men and women. This dimension measures the degree to which social gender roles are distinguished and reflects the balance between male assertiveness and female nurturance. According to Hofstede (2001), masculine society's gender roles are distinct; some of its major values include assertiveness, which is concerned with earnings, advancement and the acquisition of money and material possessions: "Women in masculine societies are supposed to be more modest, tender, and concerned with the quality of life" (p.297). In more feminine societies, "gender roles

overlap, both men and women are supposed to be modest, tender, and concerned for quality of life” (p.297).

Feminine society is concerned with managing relationships, cooperation, friendly atmospheres, empathy and interdependence. The literature is inconclusive regarding how the masculinity/femininity cultural dimension might affect employees’ psychological links to their organisation. Randall (1993) concluded that there were no consistent results in terms of cross-cultural research regarding masculinity; for example, Japan has the highest masculinity score and South Korea the lowest among the countries studied, but both countries exhibited roughly equal OCQ levels. On the other hand, Canada has a medium level of masculinity and a high level of organisational commitment. Still, some research findings have reported that there is no such moderation for this cultural dimension in the antecedent (e.g., Palich, Horn and Griffeth, 1995).

The findings of Clugston *et al.* (2000) rejected the hypothesis that masculinity has a positive relationship with all aspects of commitment, including organisational commitment. On the other hand, other research that uses Hofstede’s conceptualisation of the masculinity-femininity dimension as an affect that contrasts personal goals with social goals, reflected a distinction in terms of societal means between low- and high-masculinity countries (Hofstede, 2001). For example, Tosi and Greckhamer (2004) concluded that masculinity was positively related to the ratio of CEO pay to manufacturing employees. A recent study conducted in 29 nations by Gelade *et al.* (2008) supported the theory that the relationships between OC and its causes and outcomes are moderated by cultural values; their findings confirmed the existence of significant moderating affects of individualism and masculinity (p.613).

Robertson, Al-Katib, and Al-Habib (2002) studied cultural values and work-related beliefs (i.e., organisational commitment and work ethic) from a sample of 365 employees from three of the Gulf Cooperation Council (GCC) countries (Saudi Arabia, Kuwait, and Oman). Using Dorfman and Howell’s (1988) individual cultural dimension metrics, they concluded that the more masculine the individual is, the higher that individual’s belief in organisational commitment. Moreover, Randall (1993) suggested that employees in feminine cultures may exhibit stronger affective organisational commitment, whereas employees in masculine cultures might pursue a

more calculative involvement with a given organisation. Accordingly, we would like to examine the effect of masculinity as a predictor of continuance commitment using the following hypothesis:

Hypothesis 6: Masculinity is positively associated with CCH and CCL.

3.3.4.2 Uncertainty avoidance

Uncertainty avoidance relates to the tolerance for uncertainty or ambiguity and the need to reduce uncertainty. It indicates the extent to which a culture programmes its members to feel either uncomfortable or comfortable in unstructured situations (Hofstede and McCrae, 2004). The definition of uncertainty avoidance as a dimension of national culture is: “the extent to which the members of a culture feel threatened by an uncertain or unknown situation” (Hofstede, 2001, p.161). In high uncertainty avoidance cultures, individuals have little tolerance for uncertainty. Individuals with high uncertainty tend to look for more stability and formal roles and wish to avoid risk; hence, they enjoy longer tenures and exhibit lower levels of intention to leave their organisation. Therefore, organisations in these cultures use formal roles and regulation to reduce internal uncertainty (Hofstede, 2001).

Hofstede claimed that employees who score high on this dimension are psychologically characterised by a tendency to stay with the same employer and display higher average seniority in jobs; organisation loyalty is a virtue. Therefore, individuals with a higher uncertainty score should be more likely to display a high level of commitment to their organisation based on a natural need for job security. Also, they are more tolerant of unfairness and believe more in absolute truths. Some research supports Hofstede’s claim that employees with high uncertainty avoidance scores tend to stay longer and have less desire to leave an organisation (e.g., Chew and Putti, 1995; Hickson and Pugh, 1995); also, in the Globe study, House *et al.* (2004) found a negative correlation between the cultural dimension of uncertainty avoidance and future orientation practices.

Chew and Putti (1995) confirmed Hofstede’s own observation regarding the high uncertainty avoidance score in a Japanese sample. Japanese conservatism is reflected in a high level of faithfulness to rules and greater long-term commitment to

organisations. The authors asserted that individuals who score high in uncertainty avoidance are reluctant to deal with further uncertainty; they avoid risk because of their fears of taking responsibility and of failure. The authors also confirmed that the influence of age on duration of employment with current employers and intention to leave are strongly correlated. Individuals with high levels of uncertainty avoidance are normally more worried about what may occur and do not want to encourage uncertainty by breaking the rules, let alone by leaving the security of their jobs (Hickson and Pugh, 2001). Accordingly, Hofstede maintained that these individuals look for better job stability, avoid risk and exhibit a low level of intention to leave their organisation. This dimension seems to promote continuance commitment because it is based on employee calculations regarding the loss they will experience if they leave. As Cohen and Keren (2008) argued, this desire for stability might lead to an increase in continued organisational commitment. However, this argument, which predicted that high levels of uncertainty avoidance would be related to high levels of continuance commitment, was not supported by their findings, as uncertainty avoidance was positively related to normative commitment but not to continuance commitment. In contrast, Clugston *et al.* (2000) found strong empirical support for this correlation and suggested that uncertainty avoidance is related to continuance commitment across all foci. Also, in the GCC countries, Robertson *et al.* (2002) found that higher scores for uncertainty avoidance relate to a strong commitment to a firm.

Accordingly, we propose the following hypothesis to investigate the relationship between uncertainty avoidance value and continuance commitment with high sacrifice and low alternatives:

Hypothesis 7: Uncertainty avoidance is positively associated with the continuance sub-components CCH and CCL.

3.3.4.3 Individualism versus collectivism

The dimension of cultural value, individualism versus collectivism, is the dimension that is most pertinent for organisational commitment researchers because of its particular significance for OC research. A deeper analysis of this dimension reveals a theoretical link between this dimension and the psychological relationship between the individual and their organisation (Randall, 1993). Hofstede (2001) explained this

dimension in this way: “It describes the relationship between the individual and the collectivity that prevails in a given society. It is reflected in the way people live together (e.g., in nuclear families, extended families or tribes) and it has many implications for values and behaviour” (p.209). Hofstede defined individualism, with its polar opposite collectivism, within the context of a national culture, in the following way: “Individualism stands for a society in which the ties between individuals are loose. Everyone is expected to look after him/herself and his/her immediate family only. Collectivism stands for a society in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty” (2001, p.225).

According to Triandis (1995), individualism is a social pattern that consists of loosely linked individuals who view themselves as independent of in-groups and mainly concern themselves with their own preferences, needs, rights, personal goals, achievements, freedom and autonomy; they emphasise rational analyses of benefits and lose their relationships with others. On the other hand, collectivism is a pattern of strongly linked individuals who “view themselves as a part of one or more collectives (e.g., family, tribe, co-workers)” (p.2). Collectivism is mostly motivated by norms related to interdependence, compulsory duties and group goals (which are given precedence over individual goals); security, in-group harmony and personalised relationships are also important. Most important, Triandis (2006) adds, is the idea that within any given culture there are individuals who are *idiocentric* (those who think, feel and behave like people in individualist cultures) in addition to individuals who are *allocentric* (those who resemble individuals in collectivist cultures). The difference in value orientation is linked to the strength of an individual’s belief in the key cultural values at play.

To keep from conflating the individual level and the national level, Triandis introduced two different terms, allocentrism and idiocentrism, for individual-level behaviour (Felfe, Yan and Six, 2008). The terms collectivism and individualism are used at the societal level, whereas the parallel terms are used at the individual level. Cultures are not homogeneous but instead vary with reference to their individual

scope (Triandis and Suh, 2002). Therefore, it is important to examine differences not only between countries, but also within one country or culture.

Of the four dimensions identified in Hofstede's (1980) research, individualism vs. collectivism are the terms that have since demonstrated theoretical value in OC research (Boyacigiller and Adler, 1991) and, indeed, that have received the most extensive theoretical development and the most validation (Triandis, 1995), both as cultural variables and as individual divergence variables (Wasti, 2002). Although the I/C dimension refers to cultural-level constructs, OC represents individual-level constructs. However, the relationship between individualism / collectivism and OC is direct, while the other three dimensions may be correlated with the level of OC (Randall, 1993). Moreover, the I/C dimension has been found to be a significant explanatory variable, considering divergence in terms of job-related attitudes, HRM practices and organisational group behaviour (e.g., Earley, 1993; Ramamoorthy and Carroll, 1998; Bochner and Hesketh, 1994; Wasti, 2002). In particular, we would expect that employees in collectivist cultures show more commitment to their organisation than do employees in individualistic cultures (Randall, 1993).

As we mentioned before, although few studies have examined the effect of cultural values on commitment, there is some empirical support for each correlation at an individual level. Dorfman and Howell (1988), as we mentioned in the previous section, developed an instrument to measure Hofstede's cultural dimensions at the individual level and establish moderate-sized relationships between collectivism and organisational commitment for a Mexican and a Taiwanese sample. Clugston *et al.* (2000), using the same mode of measurement but studying a North American sample, confirmed that collectivism is associated with work group commitment across all bases of commitment (affective, continuance and normative) within one culture; they also confirmed that collectivism is associated positively with normative commitment across all foci. Also, Clugston *et al.* found collectivism to be significantly associated with affective supervisor commitment.

In a recent study conducted by Felfe *et al.* (2008), collectivism was directly measured at the individual level using data collected in Germany, Romania and China. The results indicated that collectivism as a cultural value orientation is related to commitment within and across countries, and that it exerts a stronger influence on

commitment in collectivistic countries. In a study of GCC countries, Robertson *et al.* (2002) found that the more collectivist-minded individuals tended to believe more strongly in organisational commitment.

The role of normative commitment also raises a number of issues in both Western and non-Western cultures. While both affective and continuance commitment are entrenched mostly in the individualistic society within the organisation, normative commitment occurs both from interaction with the organisation and from the cultural and familial socialisation process, whereby the individual learns appropriate concepts such as loyalty, obligation and self-interest (Meyer and Allen, 1997). Chen and Francesco (2003) recommend a greater significance for normative commitment in collectivist cultures, where group expectations and social performance are relatively more important than individual attitudes and attachments. These findings received some support from a study that investigated organisational commitment in a Turkish context (Wasti, 2003). Chen and Francesco (2003) promoted the argument that “rootedness” or strong NC ties might give rise to organisational commitment.

Meyer and Allen (1997) also suggested that socialisation experiences and reciprocity in organisational investments are two primary mechanisms that operate in the development of normative commitment. Based on the socialisation experiences common within the North American culture, employees might feel pressure (i.e., obligation) to live up to others’ expectations with regard to continued employment in the organisation, and to present a consistent self-image (e.g., as loyal employees). Accordingly, this relationship appears to be theoretically grounded at this point, and the following hypothesis is proposed:

Hypothesis 8: Collectivism is positively associated with NC.

3.3.4.4 Power distance

Power distance (PD) indicates the extent to which a society accepts the fact that power in institutions and organisations is distributed unequally; it is reflected in the values of the less powerful members of society, as well as in those of the more powerful (Hofstede, 2001). This dimension is concerned with the issue of equality and inequality in a nation and with the way inequality is generally accepted (Randall, 1993). The basic issue of this dimension, according to Hofstede (2001), which is

dealt with differently amongst and within societies, is “human inequality” (p.79). Hofstede states that “inside organisations, inequality in power is inevitable and functional. This inequality is usually formalised in boss—subordinate relationship” (p.79). Thus, within the organisation as a unit of society, power inequality is necessary for control, and the distribution of power is formalised in hierarchies; pyramid-like power structures are built to solidify the relationship between managers and their subordinates.

Hofstede attempted to describe the general societal norms that create the low and high power-distance patterns. There are two particular themes at play, along with their work-related power-distance values. Some of the high power-distance countries’ work-related values and characteristics are as follows: more employees consider that subordinates should participate more in the decision-making process; there are centralised decision structures; tall organisation is visible; managers depend on formal roles; subordinates generally behave passively toward their managers and are frightened or reluctant to oppose them; and subordinates often prefer more autocratic or paternalistic supervisors. In low power-distance countries, in contrast, employees prefer a more participative or consultative manager. In terms of work organisation in low power-distance countries, dominant characteristics include a decentralised decision structure, flat organisation pyramids, and managers who depend on personal experience and on their subordinates.

In general, as Bochner and Hesketh (1994) described it, high power-distance countries are more task- and less people-orientated because the role of a manager is to initiate structure, that is, to tell employees what to do rather than to take their opinions into account. Individuals tend to behave in a way that more completely resembles McGregor’s (1960) Theory X regarding the relationship between manager and subordinate in terms of decision-making, work ethic, and psychological contracts. Theory X states that people are naturally lazy and dislike work. Thus, managers presume that subordinates are lower, which causes subordinates to expect an exchange based on security and economic relationships more than on self-development (Clugston *et al.*, 2000). Prior research provides adequate support for the power-distance construct (e.g., Bochner and Hesketh, 1994); those with high PD were less open with their superiors, were more task-orientated and showed a greater

tendency to believe in Theory X, which shows that some people are inherently lazy and find work unappealing (p.248).

Continuance commitment employees need to stay, either because they are afraid of economic losses or have a low supply of job alternatives. Because the power-distance dimension seems to enhance economic-exchange, dependency-based relationships (Bochner and Hesketh, 1994; Hofstede, 2001; Chew and Putti, 1995), these reliant relationships are visible at organisational levels. The results of Clugston *et al.* (2000) showed that power distance is significantly related to continuance commitment across all foci of commitment (organisation, supervisor and workgroup levels). Thus, power distance is shown to promote continuance commitment.

Hypothesis 9a: Power distance is positively related to CC (CCH and CCL).

However, Chew and Putti (1995) and Clugston *et al.* (2000) showed that employees in high power distance situations feel a duty-bound loyalty in all their relationships (all foci of commitment). The idea of obligation and loyalty suggests that employees in a high power distance context value normative commitment. Accordingly, for the Saudi public sector, we hypothesise the following:

Hypothesis 9b: Power distance is positively related to NC.

3.4 Productive behaviour

Previous research supports the idea that organisational commitment is significantly linked to job behaviour. Therefore, there is manifest agreement among organisational behaviour researchers that the three dimensions of organisational commitment have significant correlations with each other and with other job outcome variables such as attendance, performance and extra-role behaviour, which are considered to be outcomes of commitment (Mathieu and Zajac, 1990; Cohen, 1996; Dunham *et al.*, 1994; Hackett *et al.*, 1994; Meyer *et al.*, 1990; Herscovitch and Meyer, 2002; Angle and Perry, 1981; Blau and Boal, 1989; Mowday *et al.*, 1982; Meyer, Paunonen, Gellatly, Goffin, and Jackson, 1989; Goffin and Gellatly, 2001; Jaramillo, Nixon and Sams, 2005; Riketa 2002; Gellatly, Meyer and Luchak, 2006).

Some of these studies (i.e., Young and Worchel, 1998; Reid, Allen, Riemenschneider and Armstrong, 2006; Albrecht, 2005) considered the public sector.

Consistent with Meyer and Allen's three-component model, organisational commitment has been significantly linked to performance and organisational citizenship behaviour (OCB), conceptualised as a set of beliefs. In addition, studies of commitment, intention to leave and performance have included only one commitment variable and only one dimension of performance. Accordingly, there is a need for further research to investigate the general effect of the three forms of commitment on job performance as multidimensional.

3.4.1 Intention to leave

Comparatively few studies have examined intention to leave in the public sector (Cotton and Tuttle, 1986; Selden and Moynihan, 2000; Tett and Meyer, 1993; Lee and Whitford, 2007). Such studies have revealed general topics like the organisational character of an organisation losing workers (Kellough and Osuna, 1995), the personal characteristics of those who leave (Lewis 1991; Lewis and Park, 1989) and the value of studying voluntary turnover or intention to leave (Lewis, 1991; Lewis and Park, 1989; Kellough and Osuna, 1995; Selden and Moynihan, 2000). According to Stillman (2004), "Public bureaucrats are in reality quite mobile, having turnover rates equal to and sometimes exceeding those of private business" (p.12). This sort of separation has important implications for the long-term performance of public organisations (Lee and Whitford, 2007). Organisations struggle to attract increasingly highly-talented employees (Ingraham, Selden, and Moynihan, 2000). Great numbers of employees move frequently between jobs in the public, not-for-profit and private sectors (Burgess, 1998).

In their meta-analysis, Meyer *et al.* (2002) reported the three bases of commitment (AC, CC and NC) to be negatively associated with employee retention, that is, employees' intention to leave their organisation and actual turnover. However, the correlations were strongest for AC, and the three components were correlated more strongly with actual turnover (-0.17 for AC, -0.16 for NC and -0.10 for CC). According to Meyer and Allen (1997), it might be enticing to conclude on the basis of these findings that, if an organisation's goal is to build up a stable labour force on

whose sustained membership it can count on, any component of commitment will be enough. However, this seems unwise in view of two facts. First, several previous studies have shown that intention to leave is one of the strongest predictors of low OC and an immediate antecedent of employee turnover (Loi, Hang-Yue, and Foley, 2006; Griffeth, Hom and Gartner, 2000). Second, several studies have reported negative correlations between organisational commitment and both employee intention to leave the organisation and the act of quitting a job (Akroyd, Legg, Jackowski and Adams, 2009). Also, intention to leave an employer is conceived as indicative of current dissatisfaction with one's job (Rosin and Korabik, 1991). Granted, as Meyer and Allen (1997) argued, it is now widely recognised that light voluntary turnover is useful rather than damaging to the organisation in that it includes resignations from employees who perform weakly or are disruptive. However, turnover also amplifies the costs of recruitment and training new workers and lowers productivity, if skilled employees must help new ones (Lewis and Park, 1989). Lower turnover signifies a strong and effective organisation (Price, 1977), which is essential when the organisation faces competition or performance-orientated change (Lee and Whitford, 2007).

As argued in Section 2.5.2, Meyer and Allen's findings suggest that commitment components wield an influence on membership decisions through diverse mechanisms. Employees with a strong level of affective commitment stay with their organisation based on the desire to do so, while those with strong normative commitment stay based on their perceived obligation to do so (Vandenberghe and Tremblay, 2008). Meyer *et al.* (2002), in their meta-analysis, reported that the three bases of commitment are employee intention to leave the organisation and actual turnover, although the association is strongest for AC, followed by normative commitment. With reference to the role of continuance commitment in employee retention (intention to leave), one should differentiate between its two sub-components: the perceived sacrifice associated with leaving and the perceived lack of alternatives to staying (McGee and Ford, 1987; Meyer *et al.*, 1990; Somers, 1993; Dunham *et al.*, 1994; Gakovic and Tetrick, 2003; Hackett *et al.*, 1994; Jaros, 1997; Vandenberghe and Tremblay, 2008). Certainly, as reported in Meyer *et al.*'s (2002) meta-analytic review of the three-component model, only the perceived sacrifice sub-

component of continuance commitment appears to be significantly and negatively related to leaving intentions.

On the one hand, the correlation between commitment as a multidimensional construct and intention to leave, remains a topic that has been insufficiently investigated in Arab countries (e.g., Saudi Arabia) (Alkeireidis, 2003). On the other hand, it is important to explore which psychological state has the strongest effect on employee retention when employees are emotionally attached to their organisation, such that they are less likely to intend to leave it (as the non-Western studies revealed). We intend to fill the gap in the literature by testing our hypothesis on our data sample; thus, we propose the following hypotheses:

Hypothesis 10a: AC is negatively correlated with intention to leave.

Hypothesis 10b: CCH is negatively correlated with intention to leave.

Hypothesis 10c: There is no relation between CCL and intention to leave.

Hypothesis 10d: NC is negatively correlated with intention to leave.

3.4.2 Organisational citizen behaviour and in-role behaviour

According to Meyer and Allen (1997), the three components have different consequences for other work-related behaviour (e.g., performance of required duties, “in-role performance”, and willingness to go above and beyond the call of duty, “organisational citizenship behaviour”) (p.24). This concept relies on the variations in the psychological nature of each commitment component. Thus, it is expected that employees with high emotional attachment to their organisation will have a greater desire to participate expressively than employees with low AC. That is not the case with employees with strong CC, because these employees are staying with the organisation as a consequence of the very high costs linked with doing otherwise. Thus, as Meyer and Allen argued, we do not expect employees with high CC to have a strong desire to contribute to the organisation. If this motivation is the only reason they are staying with the organisation, then this could create feelings of frustration or dissatisfaction that could lead to negative work behaviour. On these grounds, Meyer and Allen (1991) predicted that CC will be either unrelated or negatively related to in-role behaviour or extra-job performance.

Normative commitment links employees to their organisation through obligation and duty. Thus, Meyer and Allen predicted that employees with high NC would be motivated to do what is correct for their organisation. Thus, NC will indeed be positively related to work behaviour (e.g., in-role and extra-role behaviour). Meyer *et al.* (2002), in their meta-analysis of the AC, NC and CC antecedents, correlated AC most strongly and favourably with organisation-relevant behaviour (attendance, performance and organisational citizenship). NC was also associated with the same outcome even if it is of a lower strength. CC was unrelated, or related negatively, to those outcomes.

OCB refers to a type of individual discretionary behaviour as that which “is not directly or explicitly recognised by the formal reward system, and that, in the aggregate, promotes the efficient and effective functioning of the organisation” (Organ, 1988, cited in Williams and Anderson, 1991). Two types of OCB behaviours are distinguished: OCBO-behaviours which benefit the organisation in general (e.g., gives advance notice when unable to come to work, adheres to informal rules devised to maintain order) and OCBI-behaviours, which yield immediate benefits for specific individuals and indirectly contribute to the organisation (helps others who have been absent, takes a personal interest in other employees). It is important to differentiate between OCBO and OCBI behaviours because these activities can have different antecedents (see Williams and Anderson, 1991, p.602).

OCB has been studied in depth for the last several years to verify its antecedents and its consequences. The research literature indicates that one of the reliable antecedents of OCB is organisational commitment (Organ and Ryan, 1995). Apparently, cultural context itself may encourage or discourage OCB performance. However, the applicability of OCB to other cultures has not been thoroughly studied (Paine and Organ, 2000). National culture might influence OC in relation to OCB (Paine and Organ, 2000). In other words, an organisation’s human resources department must handle the affects on OCB of the different values and norms in each culture.

Research on cultural differences lays the groundwork for an investigation of how specific cultural variables might affect the meaning of OCB. Hofstede’s (1980) dimensions of culture include individualism versus collectivism and power distance. According to Katz and Kahn (1966, p.369), an “instrumental individual motivation”

would be expected. This analysis implies that in individualistic cultures (e.g., North America), OCB could be encouraged as potentially having a positive effect on the evaluation of one's performance and thus leading to some benefit or reward, whereas in collectivist cultures, the assumption is that one eventually gets the best benefits and rewards through the fortification of loyalty to the in-group. Thus, it is probable that the level of organisational commitment, as seen by Steers and Porter (1983), can affect the type or the amount of OCB.

Redding, Norman and Schlander's (1994) study of Korean society revealed that a high level of organisational commitment is related to blood relations and that all other relationships or memberships are secondary. Korean employees' level of organisational commitment was lower than the commitment levels found among Japanese and American employees. This indicated that Korean individuals not only are more unlikely to strive for alternative job opportunities than Japanese individuals but also have increased levels of OCB performance.

Organisational citizenship behaviour as stated above is one sample of discretionary behaviour that has been identified as being correlated with OC. OCB is considered to be a positive outcome of a committed workforce, categorized by a voluntary reward system (Organ, 1988, cited in Gautam, van Dick and Wagner, 2005). Meyer and Herscovitch (2001) considered OCB to be discretionary. OCB components have attracted research in recent years. Some researchers propose a five-factor OCB model that includes altruism, civic virtue, sportsmanship and courtesy (Organ and Ryan, 1995). Other models are comprised of two main factors: altruism and compliance⁴. The two-component model is the more dominant one in the research literature. The concept of OCB has been tested in a Western socio-economic context because it is believed that OCB might have different effects in different cultural contexts or that underlying cultural values could lead to more or less emphasis being placed on the appropriateness of organisational citizenship behaviour.

Meyer *et al.*'s (2002) meta-analysis found that AC was more correlated than NC with both one-dimensional measures of OCB ($\rho = 0.32$ for affective commitment, and $\rho = 0.24$ for normative commitment). Continuance commitment was unrelated to OCB (ρ

⁴ Altruism represents those forms of OCB that provide aid to a specific person. e.g., direct team member, whereas compliance pertains more to impersonal contributions to the organisation as a whole (Organ and Ryan, 1995).

= 0.01). As a result, the present research also expects to find strong positive relations between OCB and affective and normative commitment and negative or zero correlations between OCB and continuance commitment. These research findings could be extended in the future to examine the relationships between the components of OC and the components of OCB in a specific cultural context (i.e., Saudi Arabia). However, we will confine our focus to measuring the effect of the OC components on OCB.

The general relationships between OC and OCB are relatively well acknowledged in Meyer *et al.*'s (2002) meta-analysis. AC had the strongest and most favourable correlations with organisation-relevant outcomes (attendance, performance and OCB). NC was also associated with those outcomes but not as strongly as was AC. CC was unrelated or related negatively.

Cheng and Francesco (2003) demonstrated the generalisability of the three-component model of commitment in the Chinese context. They examined the relationship between the three components of commitment and performance, which have been defined as in-role performance and OCB (extra-role performance), as well as the moderating effects of NC on the relationship between AC and performance. They found that AC was related positively to in-role performance and OCB, whereas CC was not associated with in-role performance but was negatively correlated with OCB. NC, however, moderated the relationship between AC and in-role performance and OCB. The linear relationship between AC and in-role performance/OCB was stronger for those employees with lower NC. This indicated that NC, unlike the other two components of commitment, had no primary effect on performance. NC played a significant role in tempering the relationship between AC and performance. For employees who were committed to the organisation out of a sense of obligation (high NC), emotional attachment (AC) was not associated with performance outcomes. A positive AC performance relationship was present when such an obligation was no longer felt (low NC). The results also revealed that AC was related to in-role performance and two dimensions of OCB (altruism and magnitude). CC was less likely to be related to either dimension of OCB, though altruism and conscientiousness were related negatively to CC. Those employees who displayed higher levels of commitment to the organisation based on the maintenance of "side

bets” (CC) were less likely to possess either dimension of OCB. In sum, the findings confirmed the importance of the three components of commitment in a Chinese setting.

In a study of the structure of OCB and its relation to OC in Nepal (Gautam *et al.*, 2005), exploratory and confirmatory factor analyses revealed two factors of OCB, altruism and compliance, thus replacing Western models of extra-role behaviour. Structural equation analysis showed a positive relation between two forms of commitment (AC and NC) and both citizenship factors, whereas CC was negatively related to compliance and unrelated to altruism. Despite the controversial nature of these studies, there is strong support for the correlation between forms of commitment and performance, whether strong, weak or non-existent. Accordingly, for the Saudi public sector, we hypothesise the following:

Hypothesis 11a: AC relates more positively to IRB and OCB than do NC or CC.

Continuance commitment ties employees to their organisation because of their awareness of the cost of leaving and the availability of alternatives. Given such an underpinning, there is little reason to expect that continuance commitment will be linked to organisational citizenship behaviour. Francesco and Chen (2004) explored the role of collectivism as moderators of the relationship between organisational commitment and employee performance in a Chinese setting. They found that relationships were weaker between OC and both in-role and extra-role performance for collectivists. These weaker relationships have been thought to be attributable to feelings of obligation toward the organisation that may have been stimulated in collectively-orientated individuals who consider the organisation as an in-group.

In general, an appreciable number of researchers have found that OC is positively related to in-role performance (Allen and Meyer, 1996; Mathieu and Zajac, 1990; Meyer *et al.*, 2002). In Western studies, there exists evidence of a positive relationship between OC and extra-role behaviour (Becker, 1992; O’Reilly and Chatman, 1986; Podsakoff, Mackenzie, Paine and Bachrach, 2000). Preston and Brown (2004) examined the relationship between commitment and individual performance in a social service, non-profit organisation in California. Commitment

was assessed using Meyer and Allen's three-component model of commitment. The findings revealed that the strongest relation was between affective commitment and performance board roles. Board members reported more involvement and were perceived by the executive to be more valuably engaged. Despite the fact that normative commitment is appropriate for volunteer board members, the relation between NC and executive-perceived participation was found to be weak. In addition, no relation between CC and board member performance was found.

In the early investigations (Allen and Smith, 1987; Meyer *et al.*, 1989; Shore and Wayne, 1993), commitment was related to performance and organisation citizenship behaviour. Meyer *et al.* (1989) examined the relationship between the performance of first-level managers in a large food company and affective and continuance commitment. They also examined the relationship between employees' commitment to the organisation and supervisors' evaluations of their performance. Predictably, AC was positively correlated and CC was negatively correlated with all measures of performance⁵. Moreover, the results indicated that AC and CC interact in their effects on performance. In general, the results of this study provide empirical support to the notion that the AC of employees in the food services organisation was positively related to their measured job performance, while their CC was negatively related to it. The value of the commitment concept is different in the two forms. In the case of AC, it reflects identification with and involvement in the organisation. The organisation could benefit in terms of a decreased turnover rate and increased effective performance. However, when commitment is based on a dispassionate, rational calculation of the potential costs associated with leaving, as analysed by Becker (1960), the benefit of reduced turnover may only be attained at the price of reasonably decreased performance.

In another early study, Shore and Wayne (1993) presented the social exchange view of commitment as presented by Eisenberger *et al.* (1986). This perspective on commitment suggests that employees' perceptions of an organisation's commitment

⁵ Performance measures "each district unit manager on six performance dimensions as well as on overall performance. The six dimensions were effectiveness in (a) customer, client, and public relations, (b) administration and accounting practices, (c) preparation of written reports and verbal communication, (d) training and management of unit personnel, (e) following of operational policies and procedures and, (f) conducting of routine job task". These six specific performance dimensions correlated significantly with one another "(Meyer *et al.*, 1989,p.153).

to them (perceived organisational support, POS) create feelings of obligation to the employer. Positive organised support tends to enhance employees' work behaviour. Shore and Wayne (1993) addressed the question of whether POS or the more common and established commitment view of AC and CC is a better indicator of employee behaviour (organisational citizenship and impression management). They found both AC and POS to be positively related to organisational citizenship, and CC to be negatively related to organisational citizenship. These findings are consistent with the prior research of Meyer *et al.* (1989) on job performance.

These results suggest that employees who feel bound to side bets are less willing to be involved in extra-role behaviours that support organisational objectives and the idea of economic (Becker, 1960) or social (Blau, 1964) exchange. The results also suggest that employees who espouse the notion of economic exchange (i.e., side bets) are less likely to be helpful citizens and that those who feel bound by social exchange are expected to be stronger in their citizen behaviour. This is similar to the view expounded by Shore *et al.* in their recent research in 2006. They examined economic and social exchanges between employees and employers with a model in which perceived organisational support and affective and continuance commitment served as predictors of performance and altruism citizenship behaviour. According to the study, only social exchange directly predicted the performance outcome. Economic exchange, in contrast, failed to provide such a prediction. In addition, these results presented the significance of perceived exchanges between employers and employees. Thus, we put forth the following hypothesis:

Hypothesis 11b: There is no relationship, or there is a negative relationship, between the subcomponents CCH and CCL with regard to IRB and OCB.

In the studies of both Cheng and Stockdale (2003) and Chen and Francesco (2003), NC played a significant role in the prediction of behavioural elements such as intention to leave, attitude and performance. Of more specific importance is the fact that NC moderated the relationships between CC and job satisfaction and between CC and turnover intention. In a related vein, NC was found to moderate the relationship between AC and in-role performance, altruism and conscientiousness (Chen and Francesco, 2003). High levels of NC tempered the positive relationship

between CC and job satisfaction, the negative relationship between CC and turnover intentions as well as the positive relationships between AC and performance outcomes.

Very few studies using the three-component model have investigated the moderating effects on relationships of commitment components and work outcomes (for exceptions, see Jaros, 1997; Somers, 1995). It is remarkable that one component of commitment, NC, was associated with such effects in both the Cheng and Stockdale (2003) and the Chen and Francesco (2003) studies. Of more interest is the fact that NC provided moderating effects for either AC or CC and what Meyer and Herscovitch (2001) called focal behaviour and discretionary behaviour. Focal behaviour refers to “the behaviour to which an individual is bound by his or her commitment” (Meyer and Herscovitch, 2001, p.311), whereas discretionary behaviour refers to “any behaviour that is not clearly specified within the terms of the commitment (as might be agreed upon by neutral observers), but can be included within these terms at the discretion of the committed individual” (Meyer and Herscovitch, 2001, p.312).

In the Cheng and Stockdale (2003) study, high levels of NC were associated with a reduced affect of CC on leaving intentions. Hence, NC was central to the prediction of CC’s focal behaviour and decisions to stay in the organisation. In the same study, high levels of NC constrained the relationship between AC and in-role performance (focal behaviour), as well as the relationship between AC and altruism and AC and conscientiousness (discretionary behaviour). Overall, this suggests that NC might be critical to the determination of the strength of relationships between CC and AC and their focal and discretionary behaviours. Such evidence should be accounted for in commitment research and used to encourage greater effort in exploring similar interactions in other contexts.

The findings reported above lend some credence to the idea that NC plays a pivotal role in the explanation of employee attitudes and behaviour in a collectivist culture such as China. As speculated by Chen and Francesco (2003), an implicit norm might influence the performance of Chinese subjects and, more generally, the attitudes of those who score high on the NC scale. However, in this author’s opinion, even if this norm is found in the collectivist culture of China, it hardly explains the moderating

influence that NC exerts on the relationships between other commitment components and attitudes, intentions and behaviours. One can appreciate that cultural norms and values may influence levels of NC, but it cannot help explain why it is also a significant moderator of the relationship between AC/CC and work outcomes.

From Wiener's (1982) and Meyer and Allen's (1991) original conceptualisation of NC, it appears that this form of commitment is rooted in socialisation experiences encountered both before and after entry into the organisation. It is not unlikely that early childhood influences are shaped by the nature of societal values. In the case of China, and maybe other Asian countries, the salience of collectivist values may strengthen the feeling of moral obligation towards any significant other, including an organisation.

In Western contexts, the self entails independence from the group rather than interdependence with it. Saudi culture is markedly different from Western culture in terms of these citizenship behaviours. Saudi society not only is more collectivist but is also characterised by a formal hierarchical social structure and a mix of populations and social experiences. Family ties play a more prominent role than ties and bonds between employees and their organisation. Thus, the OC of Saudi government employees is likely to affect OCB more strongly because it is derived from cultural expectations, that is, a sense of obligation or duty.

In general, it has been suggested that these contextual factors underpin the development of normative commitment, which gives rise to citizenship behaviours driven by a strong sense of obligation and duty. However, Saudi work values are based primarily on the country's Islamic and nomadic heritage (At-Twajjri, 1989). Saudi managers show a high level of commitment to the Islamic work ethic and a moderate tendency towards individualism (Ali, 1992). Generally, Saudi managers give priority to family ties and friendships (Asaf, 1983) cited in: Hunt and At-Twajjri, 1996). Accordingly, based on the previous argument, we hypothesise the following:

Hypothesis 11c: NC relates more positively to in-role behaviour and organisational citizenship behaviour (OCB) than does CC.

3.5 Chapter summary

Throughout this chapter, an integrated model was proposed. The current ACOCC research model was used to present and explain the selected antecedents and consequences of the organisational commitment components among government administrative employees in the Kingdom of Saudi Arabia.

The main research question was formulated as well as eleven hypotheses. It is important to understand the independent variables that affect the development of the components AC, CC, and NC, of OC and its productive behaviour, as well as the cultural values involved in the study. Throughout the literature, in reports on research hypotheses, we found that the majority of studies have ignored the causes of the relationship between formative OC itself and the level of commitment. However, there are also discrepancies among the research findings, particularly in relation to the associations between specific variables (the cultural dimensions) and the level of the three OC components. Some research has shown that there is a positive relation between them, whereas other studies have shown there is no relationship between the cultural values and employees' attachment to their organisation.

Moreover, the results of recent research support the idea of OC as a higher predictor of employees' intention to leave and turnover than of job satisfaction and performance. Other studies display opposite results; this inconsistency within the research findings may be attributable to national factors, the conditions of the study, or the research context in terms of values and beliefs. In addition, most Middle-Eastern commitment research has focused on particular aspects of OC and neglected others; for instance, some research has focused on personal characteristics that affect commitment and overlooked HRM practices and cultural values. Most importantly, the majority of Middle-Eastern commitment research considers commitment to be one-dimensional (i.e., affective commitment) instead of a multi-dimensional construct. Finally, it is believed that the findings from the concepts of both cultural values and commitment to an organisation in the current study represent a starting point for researchers to deeply investigate these significant variables that are believed to affect employees' commitment and to be associated with productive work behaviour.

CHAPTER FOUR

THE RESEARCH CONTEXT

4.1 Introduction

The second section of this chapter presents an overview of Saudi Arabia's population and reviews the economic development, political characteristics, manpower and employment development of the Kingdom. The third section tackles the public sector in Saudi Arabia, the development of this sector and its organisations. Within the third section we discuss the factors that influence the bureaucracy in Saudi Arabia: political factors and the general social factors. Section three concludes by examining societal change in Saudi Arabia and its affect on OC in employees in the public sector.

4.2 Overview of Saudi Arabia

Saudi Arabia is situated in the south-western part of Asia. The country occupies 2.2 million square kilometres, almost four-fifths of the Arabian Peninsula. It is bordered to the west by the Red Sea; to the east by the Arabian Gulf; to the north by Jordan, Iraq and Kuwait; and to the south by Yemen and Oman.

The eastern part of Saudi Arabia is a plateau that begins with the Great Nafud Desert in the north, continues along the Arabian Gulf, and culminates in the world's largest sand desert, Al-Rub Al-Kahali (Empty Quarter), in the south. To the west of this plateau is the Central Province, which is the heartland of the peninsula. This area is known for its spectacular escarpments, gravel and desert. It is also the location of Riyadh, the country's capital. The western region along the Red Sea contains the holy cities of Makkah, Madinah and Jeddah, the last of which is the largest port city in Saudi Arabia.

The country's diverse geography is matched by the multiplicity of its mineral resources. Crude oil is the dominant mineral resource, with reserves estimated at 250 billion barrels, representing over one-quarter of the world's known resources. The Arabian Shield is recognised to hold a large number of other mineral deposits, for instance zinc, gold, iron, copper, chromium, titanium, tungsten and lithium. These

mineral deposits yield many mineral and construction materials (Alkeireidis, 2003). Moreover, the countries that form the Gulf Cooperation Council (GCC), Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates, are very rich in natural resources, such as oil and gas (Achoui, 2009).

4.2.1 Population

According to recent data released by the Saudi Arabian Monetary Agency (SAMA) in 2008, the latest estimates by the Central Department of Statistics and Information (CDSI) for mid-2007 put the Kingdom's population at 24.24 million. The Saudi population constituted 73.0 per cent of this number (17.69 million), while non-Saudi population constituted 27.0 per cent (6.55 million) (see Table4.1).

Table4.1: The total population of Saudi Arabia (2007).

Population, Nationality and Sex	Year 2007*	Percentage of Total
Saudi Nationals		
Male	8,876,666	36.6
Female	8,814,670	36.4
Total	17,691,336	73.0
Non-Saudis		
Male	4,515,260	18.6
Female	2,035,982	8.4
Total	6,551,242	27.0
Total Population		
Male	13,391,926	55.2
Female	10,850,652	44.8
Total	24,242,578	100.0

*Mid-year estimates. Source: Central Department of Statistics and Information, Ministry of Economy and Planning (2007): cited in SAMA, 2008.

A demographic study indicates that the Saudi society is among the fastest-growing young societies of the world (SAMA, *Forty Fourth Annual Report*, 2008). Estimates indicate that the Kingdom's population grew by more than three-fold over the last three decades, rising from 7.3 million in 1975 to 24.24 million in 2007 (see Table4.2 and Table4.1, respectively).

Comparisons of the Kingdom's population growth rate with the average rates of Arab countries, developing countries, OPEC countries (the Organisation of the Petroleum Exporting Countries) and all countries of the world in general reveal that it exceeds those of other countries. While the annual growth rate of the Kingdom's population during the given period (1975-2005) averaged 3.9 per cent per annum, those for Arab and developing countries amounted to 2.6 per cent and 1.9 per cent, respectively, and those of OECD countries and all countries of the world stood at 0.8 per cent and 1.6 per cent, respectively (see Table 4.2Table4.2). The high growth rate of the Kingdom's population is attributable to remarkable improvements in the economic, health and social conditions.

During the period from 1970 to 2005, Saudi life expectancy increased from 54 years in 1970 to 74 years for males and 82 years for females in 2005. These increases are attributed to the extensive socioeconomic development that has taken place since the early 1970s, given that it significantly impacted the overall health of the Saudi population (see Table4.2). The death rate estimated from health surveys in the country decreased from 23 to 4 deaths per thousand (UNDP, 2006).

Continued development in the economic structure, substantial investments in infrastructure, and additional investments made by the private sector have contributed to the recruitment of a large number of non-Saudi labourers. These labourers constituted 20.9 per cent of the Kingdom's total population in 2007.

The Kingdom's population breakdown by age group in mid-2007 indicates that children aged from 0 to 14 years accounted for 7.89 million persons (32.6 per cent of the total population), persons aged 15 to 39 years amounted to 11.17 million (46.1 per cent), while those 40 years or older stood at 5.18 million (21.4 per cent). Similar analysis of the Kingdom's Saudi population reveals that children aged 0 to 14 years old amounted to 6.6 million persons (37.3 per cent of the total Saudi population), and persons aged 15 years to 39 years amounted to 7.6 million (43.2 per cent), while those 40 years or older stood at 3.4 million (19.5 per cent). These data show that the majority of the Saudi Arabian population is young (SAMA, 2008, p.228).

Table4.2: Comparative demographic trends.

	Year (Period)	Saudi Arabia*	Arab Countries	Developing countries	OECD	The world
Total population (Million)	1975	7.3	144.4	2,972.0	928.0	4,076.1
	2005	23.1	313.9	5,215.0	1,172.6	6,514.8
	2015	29.3	380.4	5,956.6	1,237.3	7,295.1
	1975-2005	3.9	2.6	1.9	0.8	1.6
Annual growth rate of population (%)	2005-2015	2.1	1.9	1.3	0.5	1.1
Urban population (Ratio to total population)	1975	58.3	41.8	26.5	66.9	37.2
	2005	81.0	55.1	42.7	75.6	48.6
	2015	83.2	58.8	47.9	78.2	52.8
Population under 15 years (Ratio to percentage of total population)	2005	34.5	35.2	30.9	19.4	28.3
	2015	30.7	32.1	28.0	17.8	26.0
Population of 65 years and over (Ratio to total % population)	2005	2.8	3.9	5.5	13.8	7.3
	2015	3.3	4.4	6.4	16.1	8.3
Fertility rate (Infant per woman)	1970-1975	7.3	6.7	5.4	2.6	4.5
	2000-2005	3.8	3.6	2.9	1.7	2.6
Infant mortality rate (Per 1000 infants)	1970	118.0	129.0	109.0	41.0	96.0
	2005	21.0	46.0	57.0	9.0	52.0
Child mortality rate under 5 years (per 1000 infants)	1970	185.0	196.0	167.0	54.0	148.0
	2005	26.0	58.0	83.0	11.0	76.0
Life expectancy (years)	1970-1975	53.9	51.9	55.8	70.3	58.3
	2000-2005	71.6	66.7	65.5	77.8	66.0
Percentage living up to 65 years for the period 2000- 2005(%)	Male	73.7	66.4	62.6	80.5	63.1
	Female	82.0	73.5	70.3	89.2	72.0
GDP per capita (in US \$ based on purchasing power parity)	2003	9,745	5,685	4,359	25,915	8,229
	2004	11,111	5,680	4,775	27,571	8,833
	2005	13,645	6,716	5,282	29,197	9,543
	2008**	23,834	-	-	-	-

* Source: Central Department of Statistics and Information, Ministry of Economy and Planning, Human Resources Development Report, 2006, UN Development Program.

** Data for the year 2008 from the International Monetary Fund (IMF), Saudi Arabia GDP per capita estimate (\$ 23,834).

4.2.2 The political system in Saudi Arabia

The Kingdom of Saudi Arabia was officially named and established on 23 September, 1932 by King Abdulaziz Al-Saud. It is an Islamic state and the centre of the Muslim religion. More specifically, it is the homeland of Islam and site of its founding by the Prophet Muhammad. The two holy pilgrimage cities, Mecca and Medina, are located within Saudi Arabia.

The Kingdom is governed by a total monarchy. According to the Basic Law adopted in 1992, Saudi Arabia is a monarchy ruled by the sons and grandsons of King Abdul Aziz Al-Saud. This law further states that the Holy Qur'an is the constitution of the country, which is to be governed on the basis of Islamic law (Shari'ah). Arabic is the accepted national language.

The Council of Ministers, appointed by and responsible to the King, has formulated and overseen the implementation of internal, external, financial, economic, educational and defence policies, as well as the general affairs of the state, since 1953 (Al-Farsy, 1986). This council consists of a prime minister, the first and second deputy prime ministers, 27 ministers (among whom is the minister of defence, who is also the second deputy prime minister), five ministers of state and a small number of advisers and heads of major autonomous organisations. Continuing the reform process in the Kingdom, in 1992, King Fahd issued a royal decree for the establishment of a national Consultative Council, or Majlis Al-Shoura, with appointed members having advisory powers to review and give advice on matters of public interest. In July 1997, the membership of the Consultative Council was expanded from 60 to 90 members and again in May 2001 from 90 to 120 members, and has recently increased to 150 members.

The role of the council is gradually expanding as it gains experience. Members of the Council are able to initiate proposals for new legislation and review the domestic and foreign policies of the government. Any government action not approved by the Council is referred back to the King, who remains the final arbiter of state affairs. The King also retains the power to appoint and dismiss both Ministers and Al-Shoura Council members. He also has the power to dissolve the Council, restructure it, and appoint a new one at any time. Legislation in the Kingdom, which must be compatible with Shari'ah law, is reviewed by Majlis Al-Shoura, established by the Council of Ministers and then ratified by royal decree. Justice in the country is administered by a system of religious courts, ranging from expeditious to Shari'ah courts, and culminating in the Commission on Judicial Supervision (Al-Farsy, 1986). Judges in this system are appointed by the King on the recommendation of the Supreme Judicial Council. The independence of the judiciary is protected by law. The King acts as the highest court of appeal and has the power to pardon.

For administrative purposes, the Kingdom is divided into 13 regions, each of which is governed by a Regional Governor who is appointed by the King. Regional Governors carry the rank of Minister and are responsible to the Minister of the Interior.

Although the government managerial process is centralised in the capital, Riyadh, regional and local government units generally direct internal security issues and administration of the metropolis. The central government combines the judicial, legislative and executive roles through the King, the Crown Prince and the Council of Ministers. As previously mentioned, there is a group of advisory planning organisations that form a consultative council or “Majlis Alshura”. This council is responsible for judicial and theological matters, legal interpretation and educational institutions (Alkeireidis, 2003, p.10). Overall, Saudi Arabia is a politically stable country (Hickson and Pugh, 2001), which is important for sustaining growth and development in both the public and private sectors.

In contrast to previous centuries, when incidents occurring in the Arab peninsula were of little note outside the Islamic world, Saudi Arabia is currently in a position of vital importance. It has the largest share of the world's proven petroleum reserves, plays a dominant role in the Organisation of the Petroleum Exporting Countries (OPEC), and occupies a key political and geographic location in the Middle East. In addition, it has garnered international importance due to its control of the holy cities of Mecca and Medina. In short, the Kingdom of Saudi Arabia is perhaps more significant and relevant to the world than it has been at any time in its history, at least since the lifetime of the Prophet Mohammed during the sixth and seventh centuries (Bowen, 2008).

4.2.3 Economic development in Saudi Arabia

Saudi Arabia has gained prominence in the world in comparison with its status four decades ago, at which time it was almost unknown internationally. In the early 1960s, for instance, its income was less than \$400 million per year, whereas its income reached \$460 million per day 20 years later. Saudi Arabia has risen to claim one of the highest per capita incomes in the world (Lindsey, 1991). This startling increase in income translated to an increased in wealth, which allowed the Saudi

government to implement an ambitious programme of development in 1969. This programme was a well-defined approach to development planning. The adopted methodology's principles are grounded upon the economy and upon the preparation and implementation of medium-term plans. The programme was designed to increase economic growth, develop the Kingdom's natural resources and improve social welfare. The first five-year development plan spanned the period from 1970-1975.

The importance of the development efforts by the government increased in line with the establishment of large projects in 1948. Such projects were the result of increased oil revenues and the need to mobilise existing resources and organise their distribution over the various fields of development, according to the preparation of the Kingdom's first fiscal budget that year (Twenty-third issue, *Achievement of the Development Plans*, Ministry of Economy and Planning, 2006, p.13).

The development period has spanned approximately 40 years (1970-2009), during which eight planned developments have been implemented. During this time, a programme of reform and improvement has been established, new ministries and institutions have been created, old ones have been modified or expanded, new laws have been instituted, and new procedures have been adopted. The five-year development plans were put in place in order to build on the development that was already taking place. Through the five-year development plans, the Saudi government has sought to employ its petroleum-derived income to change its relatively undeveloped, oil-based economy into that of a modern industrial and varied economy, whilst preserving the kingdom's traditional Islamic values and mores. The eight development plans signify the government's investments in development of the infrastructure, human resources and social and health services, along with investments in other economic development projects (Ministry of Economy and Planning, 2006).

Although economic planners have not achieved all of their goals, the economy has progressed quickly. Oil-derived wealth has increased the standard of life for most Saudis. However, significant population growth has strained the government's ability to finance further development in the country's standard of living. Heavy reliance on petroleum-derived income continues, but industry and agriculture now account for a larger share of economic activity (Al-Shammrani, 2009). Based upon the

developments described above, including advanced roads, air transport, medical and educational provision and cities, Saudi Arabia may no longer be recognised as a developing country (Hickson and Pugh, 2001, p.235).

4.2.4 Manpower and employment development in Saudi Arabia

Workforce development is a keystone of sustainable development in the Kingdom. It is important to improve the skills and motivation of human capital in professional fields in order to meet their development needs and the immediate and future requirements of the labour market.

The present global circumstances are marked by growing economic globalisation trends and increased technological growth rates. Improvements in the quality of the labour force and production effectiveness, and the ability to generate and innovate in modern technology have been important means of achieving scientific modernisation and advancing knowledge. These achievements have facilitated integration of the country's economy into the global economy. The ability to gain and create knowledge and to translate that knowledge into improved products is essential to the development and wealth of a nation (SAMA, 2008, p.229).

The Kingdom's Eighth Development Plan has encouraged and supported these efforts in the structure of a knowledge-based economic scheme that is more interactive and more integrated into the global economic system relative to previous development plans. Here, the private sector plays a vital leading role that is based on strategies set for the nationwide development of human capital. Some of the objectives of manpower development under the Eighth Development Plan include the following:

1. Achieving the optimal employment of national workers, and encouragement and motivation of employees in order to contribute to all areas of productive and creative work in a variety of economic sectors.
2. Improvement of the organisation of educational and training programmes and labour market requirements for the country's employees.

3. Increase in the employment opportunities available to the national labour force.
4. Rational recruitment of labour from abroad, linkage of employment to real needs, activation of Saudization⁶ decisions, and restriction of employment in some professions and economic activities to the national labour force.
5. The provision of more jobs for the national workforce, especially women, and the adoption of suitable policies in order to endorse the contribution of women to the labour market, without breach of Islamic Shari'a.
6. Addressing the issue of unemployment with a view to reducing the numbers unemployed.
7. Support of investment in manufacturing and service sectors that use advanced technologies of high added value (SAMA, 2008, p.229).

4.3 The Saudi public sector

In both developed and developing nations, bureaucracy plays an essential part in the formulation, interpretation and implementation of government policy and organisations (Osama, 1987). A bureaucracy is a form of organisational structure that is both formal and hierarchical and is characteristic of a large-scale organisation. This structure is necessary to achieve the ends of a collective effort. It incorporates certain structural features adopted from formal organisations (Mullins, 2007). Despite criticism, whether it be compelling or unjust, it is difficult to imagine how modern large-scale organisations could function efficiently without demonstrating at least some of the features of a bureaucratic structure.

According to Mullins (2007), in the case of public sector organisations, there is a particular demand for the uniformity of treatment, regularity of procedures and operational accountability provided by a bureaucracy. Although adoption of a

⁶ Saudization, "long-term strategy aims at replacing the country's 4.74 million foreign workers recruited mainly (95%) in the private sector with as many qualified Saudis as possible" (Alshammrani, 2009, p. 102).

bureaucratic structure is becoming less of an option, there remains a place for bureaucracy in most organisations, particularly in the public sector. The implementation of previously tested rules and procedures helps to ensure adoption of essential values and ethics, and operation on a consistent and fair basis (p.50). Thus, bureaucracy is important for Saudi public sector organisations to employ large programmes which allow them to efficiently lead a wide range of activities.

4.3.1 Development of the Saudi public sector

The development of bureaucracy in Saudi Arabia can be described in four major stages, outlined briefly as follows:

- **First stage: pre-establishment (1900-1932).** In the first 30 years of the 20th century, Saudi Arabia functioned with an undeveloped system of administration, which was neither comprehensive nor formally structured. King Abdulaziz ruled as an absolute monarchy, making all decisions of national importance. In that stage, the country lacked a comprehensive modern civil service system. In fact, various personnel regulations were far from satisfactory. Saudi Arabia was administratively immature before 1932 (Niblock, 2006).
- **Second stage: establishment (1932-1953).** Saudi Arabia was established in 1932, at which time the Kingdom of the Hijaz, the Najid and its dependencies were renamed the Kingdom of Saudi Arabia, marking the beginning of the Al-Saud State. The first major change was the organisation of the Council of Deputies on December 30, 1931 in Al-Hijaz (Niblock, 2006). During the 1930s, new units were developed in order to provide services to the people of Al-Hijaz (the west part of the Arabian Peninsula, where the two Holy Cities are located). These units were also designed to assist in a far-reaching process of development. Although government and administration in Al-Hijaz continued to modernise, Najad (the middle part of the Arabian Peninsula) remained largely under traditional tribal control. In 1951, when oil revenue had provided Saudi Arabia with substantial additional wealth, two ministries were established, the Ministries of the Interior and of Health; however, the bureaucracy necessary to support them was under-developed.
- **Third stage: pre-development (1953-1970).** In this stage, a central administrative system for the country came into existence, heralding a new era. This change marked

a move from a traditional to a formalised bureaucratic system. From 1953 to 1970, seven additional ministries were created, thus expanding the Saudi bureaucracy. By the end of the 1960s, further expansion had occurred, bringing the number of ministries to 14. In addition, three universities were established to train skilled workers who could then be employed within the public sector. At the same time, administrative reform took place. The Institute of Public Administration (IPA) was established in 1961. This institute was developed to enhance the effectiveness of the public sector. Employees and the bureaucracy in general cooperated to allow public organisations to deal effectively with administrative issues.

●Fourth stage: development (1970 to the present). In this stage, the Kingdom was caught between the desirability of moving towards becoming a modern society and the restraints of traditions. An essential issue both then and now is how to apply the modernisation programme, North American management theories and Western methods in an effective, methodical and practical manner, without abandoning Islamic Shari'a and the Kingdom's cultural values.

4.3.2 Public sector organisations

In the early part of the 20th century, as described in the previous section, Saudi Arabia had a relatively small number of structured public organisations. To date, the public sector can be described by three major types of organisation:

1. Ministries
2. Public enterprises
3. Local government

4.3.2.1 Ministries

Starting with only three ministries, the ministerial system has witnessed dramatic expansion throughout the 20th century due to increased development. Today, the body of the Saudi Arabian governmental bureaucracy administration consists of 22 ministries, 40 independent agencies and 14 provinces (or local governments). The government administrative process is centralised in the capital, Riyadh. Ministers with the public agencies offer most of the basic services to Saudi society and provide essential products. These ministries, with their size and number, are considered the

basic units of the central government and have a major role in Saudi employment in the public sector. They have a political role, which is to apply and achieve the development and implementation of governmental policies that relate to their particular ministry, often exercising discretion (Al Saud, 2008, p.24). These Ministries, each headed by a Minister chosen by the King, are overseen by the Council of Ministers, which is headed by the King.

Table 4.3: Government ministries in Kingdom of Saudi Arabia.

<p><u>Group one: Ministries with sovereignty (supreme power)</u></p> <ol style="list-style-type: none"> 1. Ministry of Defence and Aviation 2. Ministry of Foreign Affairs 3. Ministry of the Interior 4. Ministry of Justice <p><u>Group two: Ministries of production sector</u></p> <ol style="list-style-type: none"> 5. Ministry of Petroleum and Minerals 6. Ministry of Water and Electricity 7. Ministry of Commerce and Industry 8. Ministry of Agriculture <p><u>Group three: Ministries of support services</u></p> <ol style="list-style-type: none"> 9. Ministry of Economy and Planning 10. Ministry of Finance <p><u>Group four: Ministries of services</u></p> <ol style="list-style-type: none"> 11. Ministry of Islamic affairs 12. Ministry of the Civil Service 13. Ministry of Education 14. Ministry of Hajj (Pilgrimage) 15. Ministry of Health 16. Ministry of Higher Education 17. Ministry of Labour 18. Ministry of Social Affairs 19. Ministry of Municipalities and Rural Affairs 20. Ministry of Transport 21. Ministry of Culture and Information 22. Ministry of Communication and Information Technology

Source: AL Saud, S.A., 2008, p.25.

Each Ministry is similarly structured. Each Minister has one or more assistants who serve as a deputy. These deputies are chosen by the Council of Ministers according to the recommendation of the minister or a member of the Council of Ministers. The deputies are a general's director and are generally responsible for most administrative matters (e.g., deputy for human resources or public relations) and act as advisers to the Ministers. This, the Ministerial and Excellency level, is the highest level in the hierarchy of the ministry. Employee status in this high level in the

hierarchy is indicated by grade: grades 11-15. The grade (11-15) is awarded according to the length of service and level of education. Generally, the high or upper level of the organisation is responsible for strategic planning, policy and decision making. The middle-level employees are between grades 6-10. These employees are usually educated up to degree level (Diploma or Bachelor's) and hold managerial or supervisory positions.

The lower-level employees are between grades 1-5 and are known as the functionary level of the civil service system. They hold the lowest-paying positions and are not required to be educated up to degree level. The middle and lower levels represent 97 per cent of the total number of employees from grades 1-15 (Ministry of Civil Service, 2007). These data demonstrate that the vast majority of the ministries' work carried out in the Saudi public sector is accomplished by employees at the middle and lower levels.

The ministries, as shown in Table 4.3 are grouped into four groups according to their activities, as follows:

1. Ministries with sovereignty or supreme power (four ministries).
2. Ministries in the production sector (four ministries).
3. Ministries operating in services (twelve ministries).
4. Ministries offering support services (two ministries).

1) Employees of the civil service sector

The latest statistics of the Ministry of the Civil Service (Table 4.4) indicate that the number of employees in the government (Saudis and non-Saudis) was 829,985 at the end of 2007. Saudis represented 91.7 per cent and non-Saudis 8.3 per cent. The number of Saudi male employees totalled 508,000, while that of Saudi female employees reached 253,000. The number of Saudi employees in the government sector amounted to 761,000 at the end of 2007 (an increase of 3.7 per cent over the preceding year), while non-Saudi workers stood at 69,000 (a decline of 1.2 per cent) (SAMA, 2008, p.230). The latest data released by the Ministry of Labour indicate that the number of employees (Saudis and non-Saudis) in the private sector was 5.8 million at the end of 2007.

The public sector is not only a major employer of the Saudi workforce, but also is an influential economic planner and social insurer (Al-Shammari, 2009). Government employment was obtainable by the Saudis despite their qualifications, as they tended to pursue theoretical literary majors over scientific and technical degrees. The number of employees in the private sector is 5.4 million. According to the SAMA (2008), Saudis accounted for only 11.63 per cent of the employees in this sector. The majority of employees in the private sector are expatriates. Most Saudis prefer to work in government sectors, such as the ministries of education and health, in addition to oil-related industries. These jobs are preferred because they are more secure, present a good image and have high salaries. Ironically, the private sector in Saudi Arabia prefers to employ expatriates to nationals (Saudis) (Achoui, 2009).

Table 4.4: The government sector’s employees by gender and nationality until the end of 2007.

Nationality	Type	Public sector employees	Education	Health	Academic staff in universities	Judges	Members of investigation commission and public prosecutor	Total	Labour	Total incl. labour
Saudis	Male	191802	198322	41325	9819	1320	15050	444103	63903	508006
	Female	13295	207528	17597	6227	0	0	244647	8343	252989
	Total	205097	405850	58922	16046	1320	15050	688750	72245	760995
Non-Saudis	Male	3658	9090	18811	5107	0	0	36666	185	36851
	Female	2078	960	27795	1293	0	0	32126	13	32139
	Total	57360	10050	46606	6400	0	0	68792	198	68990
	Total	3608330	415900	105518	22446	1320	15050	757542	72443	829985

Source: Ministry of the Civil Service⁷, 2007.

2) Women in the workforce

Saudi females in the labour force are considered to be of very low status (Achoui, 2009). However, most Saudi women are employed in the government and private education sector and they exceed males in this sector (see Table 4.4). Thus, the education and health sectors are the two major sectors where Saudi females tend to work.

⁷ This survey includes all the government workforce groups: Saudis and non-Saudis, male and female, working in permanent jobs which are approved and authorized in the general government budget and entitled to a civil service pension. Also included are those jobs in public enterprises that are not publicized mentioned in the general government public budget such as: the Saudi Arabia Monetary Agency, General Organisation for Social Insurance, Saudi Arabia Airline, Saudi Development Fund. Also included are jobs in public enterprises with a special ladder salary such as: Saudi Arabia Supreme Commission for Tourism, Saudi Post Agency, Public Agency for Pensions, (Ministry of Civil Service Report, 2007, p.23).

Al-Sheikh (2001, p.124) reports a number of obstructions and difficulties that contribute to women's low rate of contribution in the Saudi work force:

1. The negative social attitude towards Saudi working women, in conjunction with a number of social and cultural boundaries, decreases women's opportunity to obtain most jobs.
2. The social, cultural and Islamic inappropriateness of some occupations for Saudi women limit their opportunities.
3. The lack of scientific, management and business training programmes for Saudi women limit their participation in the Saudi work force.
4. There is a need of co-ordination and clear vision for the role of women in the future work force.
5. Women in Saudi Arabia are permitted to work only in specified areas of the Saudi labour force (i.e., education and health).
6. Saudi employment law entails employers to provide special environments for female employees. Moreover, employers must take additional security measures to protect the women's working sites.
7. Saudi women cannot expect to work far away from their families (e.g., another city or urban area).

Although there has been a steady increase in the rate of female participation in economic activity, the results at the employment level are still modest. According to the 2006 report of the Ministry of Economy and Planning, the rate of participation of women in the labour force amounted to 52.3 per cent among female holders of post-secondary diplomas, 35.1 per cent among holders of bachelor degrees, and 34.2 per cent among holders of higher qualifications. Furthermore, the report mentioned that Saudi female participation in the labour force reached a peak level of about 21 per cent in the 25-34 year-old age group. In contrast, participation rates among younger and older age groups were relatively lower. The participation rate among female holders of teacher training diplomas has been quite high, with a rate of 78.5 per cent.

4.3.2.2 Public Enterprises

Independent agencies and public enterprises were founded in response to the significant development of schemes and programmes, and with a view to improving

the effectiveness of Saudi bureaucracy in the Kingdom; they are organised in a comparable way to the ministries. There are differences in the number of sections and subdivisions, depending on the size and focus of the different organisations. In addition, some public enterprises are structured in a different way from other public agencies, in order to give them more flexibility and to liberate them from restrictive bureaucracy (Osama, 1987).

These independent agencies are usually led by ministers who have substantial control over their operations and who report directly to the head of the Council of Ministers, although they often are not members of the Council of Ministers (Al-Shalan, 1991). Their employees have certain benefits over those in other public agencies. These include better earnings, bonuses, opportunities for promotion and training and improved working environments (Alkeireidis, 2003).

4.3.2.3 Local government

Local management was officially formed and the Kingdom was separated into “Emirates” in 1963. This transition moved authority from local tribal leaders to the central government and enabled the government to address the needs of its people as a whole. Today, there are 14 provinces (or Emirates), each governed by an “Amir” (generally a member of the royal family) who has a ministerial title and has full authority and power over the affairs of his Emirate. Every province is separated into sub-provinces or cities, called “Mohafadhah”, and villages, called “Markaz”. The distribution depends on the size and population of each Emirate. The organisational structure of each Emirate formally relates to the central government through the Ministry of the Interior. The governor acts as a deputy of the King in an Emirate and usually has one or two deputy governors. The deputy governors themselves have one or two deputy assistants.

The local governments liaise between the central government and the citizens. Governors are accountable for many duties in their Emirate, such as safety and security of local citizens, enforcement of laws and court decisions, assessment of regional needs for development, supervision of development projects, responding to citizens’ requests and needs, allocating development projects to each city and village and following up on the execution of these schemes after approval from the central government (Al-Saud, 2008, pp.34-35).

4.3.3 Factors that influence the bureaucracy in Saudi public organisations

There are several factors of a social, economic and political nature that influence the public sector as a whole and the bureaucracy in particular. These factors have a deep impact on management in the Kingdom (Hakim, 1993). Thus, changes in the environment should certainly cause changes in the bureaucracy itself. In order to determine their impact, an analysis of these factors with consideration of the Saudi context will be presented in the following subsections

4.3.3.1 Political factors

Before evaluating the influence of political factors on the bureaucracy of Saudi Arabia, a brief outline of the political system of the Kingdom seems necessary. The Saudi political system is unlike that of a Western or decentralised system in two major ways. Firstly, the core political process centres on the king, who carries out the responsibilities of head of government and Chairman of the Council of Ministers. As the Custodian of the Two Holy Mosques, he endorses the official law, which provides the foundation for judgment of spiritual and secular issues (Al Saud, 2008). Secondly, in the Saudi political system, there is an absence of constituent groups (e.g., labour unions) or political party systems outside of the decision-making bodies. Political power is restricted to certain groups, which include the Royal family and a few powerful religious and tribal leaders (Koury, 1978).

The system is monarchical, and there is no written Constitution. The legal basis for Saudi political authority is Islamic law or “Al-Shariah”, which is regarded as the only source of authority. Under the umbrella of Al-Shariah, there are four sources of law:

1. The holy book “Quran”.
2. Sayings of the Prophet Mohamed “Al-Sunnah”.
3. Reasoning by analogy “Kiyas”.
4. Consensus “Ijma’a”.

The Quran and Al-Sunnah are the main sources of law in Saudi Arabia; however, if a clear direction fails to emerge from these two sources, the Kiyas and then the Ijma’a

are employed. These four sources are vital to Saudi society and direct the activities of all individuals, as well as those of the social and political systems (Al-Shalan, 1991).

The Saudi Arabian political system is influenced by three main groups:

- a) The Royal family
 - b) The “Ulama” or religious establishment.
 - c) The technocrats.
- a) The Royal family: The Royal family constitutes the most immediate circle around political leadership. The monarch is drawn from the Royal family, whose senior members hold direct responsibility for decision making in many key areas (Wilson, Rajhi, Salamah and Malik, 2004). For instance, foreign policy is concentrated in the hands of a few members of the Royal family; however, in domestic matters, the other two groups also have substantial influence on decisions. Nonetheless, decision making is still highly centralised under the King’s authority and under the authority of a few officials, mostly from the Royal family.

The most esteemed and sensitive of government political positions are occupied by members of the Royal family. The King serves as Prime Minister and the President of the National Guard, while the Crown Prince holds the positions of Deputy Premier and Minister of Defence and Aviation, as well as the second Deputy Premier and Minister of the Interior. Some members of the Royal family also fill other important offices, such as governorships of Emirates, some top civil service jobs and positions within the private sector (Wilson *et al.*, 2004) and non-profit organisations.

- b) The Ulama (religious leaders or constituency): The Ulama are highly influential. They are responsible for ensuring that the Saudi Arabian population remains faithful to Islamic values. The Saudis are considered to be the most conservative people of the Islamic world. Furthermore, they are considered to be the guardians of Islamic principles for two reasons: Saudi Arabia was the birthplace of Islam and it houses the two holy cities of Islam. The Ulama are not simply an arm of the state; their influence over the monarch stems from the monarch’s recognition that

they occupy positions of strength in civil society (i.e., the Institution of the Assembly of Senior Ulama, higher court positions, Ministry of Justice and Ministry of Islamic Affairs). In addition, they are committed to the modernisation of Saudi society under Islamic values. They help determine legal practice, share in decision making and shape social values. They influence decision making through direct access to the highest individuals in the hierarchical system, monopoly over some ministries and social mobilisation stemming from the respect of significant parts of the wider religious community. They can use this respect to influence broad sectors of popular opinion (Wilson et al., 2004).

- c) The Technocrats: This group is far more progressive and liberal-minded than the other groups. They are dedicated to the modernisation of Saudi Arabia. Their influence does not rely on traditional routes to power, such as religion, tribe or family. Instead, it depends on education, expertise, training and skill; most of them study abroad at secular universities. They are considered to be the intellectual elite of the Kingdom (Alkeiridis, 2003, p.48).

Over the past 30 years, the number and power of such individuals have grown in the government institutions of Saudi Arabia. Accordingly, these individuals, who study abroad and have a western education, dominate the administration of the Kingdom. Despite the fact that these technocrats are not as powerful as the Ulama and are still under-represented at the higher levels of decision making, they have an important impact on economic affairs and control some of the more influential ministries, such as oil, communication, information and labour. Their influence and impact are expected to grow rather than decline. The most influential members are the businessmen, known as the commercial class. They are financially and economically powerful. This group plays a significant role in supporting the Royal family (Alkeiridis, 2003; Wilson *et al.*, 2004).

In summary, although the Royal family has full power over decisions in Saudi Arabia, the other two groups maintain some influence, and their impact is growing. Therefore, many decisions must take the responses and recognition by the other two groups into account. Still, any civil legislation must be decided by the Ministry of Justice, which is administered as a religious institution whose members ensure that

there is no encroachment of the Shariah. These members can thus refute or support decisions submitted to them for their endorsement (Alkeiridis, 2003).

4.3.3.2 Social Factors

Society and its social structure have a great influence on bureaucracy in Saudi Arabia. Select social factors, mainly religious, family, tribal and cultural values, affect administration as a whole (Bjerke and Al-Meer, 1993).

1). Religion

Islam influences almost every aspect of life in Saudi Arabia. For Muslims, Islam is a way of life and is a source of spiritual power that sustains and enforces a high moral standing (Ali, 2008, p.3). Its influence ranges from personal relationships and lifestyle to politics and the economy. Values and concepts, ethics and morals, standard institutions and laws, rules and regulations of Muslims, are all influenced by the Islam religion. Islam unified the tribal and communal units into a coherent political structure. It provided rules and principles that articulated the primary features of the initial governance system. A unique kind of governance emerged, which sought to apply the precepts of the Quran. These rules transcended, but did not destroy, tribal customs and traditions (Jabbara and Jreisat, 2009, p.112). Islam produced a large body of ethical teachings and legal injunctions, rules of social behaviour and regulations established on the basis of the structure of Islamic law, the "Shari'a" (Jabbara and Jreisat, 2009).

Islam instructs that God is the creator of all things and is accountable for all incidents and actions. There are, nevertheless, verses in the Quran that accentuate free will and accountability. The stressing of free will and free choice in Islam emphasises the belief that rational persons are able to differentiate between wrong and right and thus are entirely chargeable and accountable for their behaviour (Ali, 1990).

Since the beginning of Islam, Muslims have offered unique perspectives on work and have created detailed conceptualisations of the work ethic. In all probability, their articulation of the work ethic and desired behaviour has reinforced their faith and accelerated social and economic changes that were seldom experienced in Saudi Arabia, the birth place of Islam (Ali and Al-Owaihnan, 2008, p.6). From the early days of Islam, as Ali and Al-Owaihnan argue, Islam has viewed individuals' activities

not only as a divine calling, but also as a necessary aspect of human life, a source of social gratification and psychological pleasure. The Quran teaches Muslims to constantly work at any time and in any place work is offered: “disperse through the land and seek of the bounty of God” (Quran, 62:10) and “God hath permitted trade and forbidden usury” (2:275). The Prophet Mohammed advocates that merchants carry out tasks that were not only morally requested, but were also necessary for society to survive and flourish. He declared, “I commend the merchants to you, for they are the couriers of the horizons and God's trusted servants on earth” and “the honest, truthful Muslim merchant will stand with the martyrs on the Day of Judgment” (Ali and Al-Owaidan, 2008, p.6).

Hard work and commitment are highly valued in Islam. For example, the Prophet Mohammed preached that hard work absolves an individual's sins and that the best food a man can eat is that which results from his own work (Ali, 2008, p.95). Thus, in Islam, achievement in work comes from honest and dedicated work and from commitment to one's job. Commitment to an organisation also involves the desire to improve community and social welfare. There is an emphasis on the specific and relevant, and on the role of man on earth. Moreover, Islam provides detailed regulations of human life and at the same time maintains the spiritual perspectives implied in other religions.

Work in Islam, therefore, has faith at its core and is considered an integral part of life. Furthermore, in Muslim societies (e.g., Saudi society), the sayings of Prophet Mohamed and Quranic text are integral to socio-political discourse. Therefore, use of these sources becomes imperative in any discussion of the Islamic work ethic. During the first six centuries of Islam's Golden Age (since the sixth century), knowledge, trade, industry, agriculture and construction of complex organisations flourished. Work and creativity were honoured in all of their forms. Quranic principles and prophetic prescriptions served as guides for Muslims in their conduct of business and family affairs (Ali and Al-Owaidan, 2008).

Unfortunately, while these Islamic values are advocated in theory, they are often not put into practice. Attitudes and beliefs regarding fatalism and compliance are manifested in organisational behaviour, which has a certain consequence in Saudi institutions. Creativity, innovation and change, which are very important in the fast-

changing environment of today's organisations, unfortunately are undesirable. People may be fearful of change and feel that change may lead to social disintegration, harming religious faith and social norms.

Early research conducted in Saudi Arabia (Al-Nimir and Palmer, 1982) reveals that Saudi bureaucrats indicated a low level of innovation and unwillingness to encourage change. The study shows that 84 per cent of participants were reluctant to espouse programmes that might cause social conflicts and that 90 per cent opposed modernisation programmes that might threaten values, norms and traditions. They also found that, in general, employees tended to avoid innovation, preferring a stable work environment and adherence to policies and group norms. According to Hanifi (1974), such resistance to change stems from the strong conviction that Islam is divine and is therefore perfect and complete. This conviction yields the belief that Islam is final and unalterable and, thus, that changes would imply disagreement with Islam.

Fatalism, the belief that whatever happens is God's will and that there is very little one can do to change the course of events, is dominant in Saudi society (Haniffa and Hudaib, 2007). It has relevant implications for Saudi bureaucracy, as long-term planning is influenced by fatalism (Safranski and Ik-whan, 1989). Such a fatalistic approach has resulted in negative consequences with regard to creativity, authority and the value of time. The insignificance of time is obvious in behaviours such as leaving work early, inactivity during working hours, spending work time on private activities, and unexcused absenteeism (Aba-Alkhail, 1988, cited in Haniffa and Hudaib, 2007). Lindsey (1991, p.335) explains: "Saudis believe that planning is blasphemous, as it is the responsibility of Allah who has preordained every man's destiny." Thus, any attempt to influence or change the outcome of events is considered offensive to Allah. He adds that a number of Saudi proverbs warn about the futility of making plans for the future, such as, "to each moment its decision". These beliefs may lead people to be reluctant to accept responsibility for their own actions and to have little faith in the ability of managers to affect events or outcomes. Consequently, individuals are not intrinsically motivated towards accomplishment, but rather towards preservation of the status quo. The relaxed attitude towards time

may not only affect their productivity, but could also waste resources and slow progress on time-sensitive jobs.

2). Family, tribe and cultural values

In Saudi Arabia, family and tribe are very important. The extended family with blood relationships and the closed family of wife and children are important factors in society. The Saudi people are very traditional in terms of family hierarchy; the authority belongs to the male elder in the family (e.g., grandfather, father and elder brothers), and children are expected to obey and respect their father and elders in general. Overall, Saudi society is a tribal society. The early Arabs who lived in the desert promoted a sense of liberty, despite the hard life and economic scarcity. Survival depended on the unity and defensive strength of the tribe. In this system, tribe members were held responsible for acting on behalf of anyone in need and creating security for them (Jabbra and Jreisat, 2009, p.112). Saudi society is separated into a number of tribal groups. Each tribe has a particular lifestyle and types of behaviour that are considered acceptable. Additionally, any member of a tribe is expected to act and behave for the benefit of the whole group, rather than the individual. A member is responsible for his family first and then the group. These norms are informal; if a member fails in this mission, they will not necessarily be debarred from their tribe, but such behaviour is frowned upon (Al-Awaji, 1982).

The ties and obligations of family, relatives and tribe are central to the establishment of values, ambition and self-image of individuals. Generally, the Saudis are more commonly influenced in their selection of a profession by the approval of their family or friends than by financial profit. For instance, vocational jobs (e.g., plumbing, carpentry) are usually viewed as connotating low status (Palmer, Al-Nimir and Al-Gohofaili, 1984). As a result, most Saudis are disinclined to choose these lines of work, regardless of the necessity of these jobs in the maintenance and growth of modern developed societies. These values and this background explain why Saudis are not willing to have vocational jobs with high financial income and prefer office work in public sector organisations, even if they are at a low level of an organisation (Mackay, 1990). Therefore, up to now, for cultural reasons such as tradition and values, preference for specific professions plays a significant role in the national skilled labour shortage. Saudis still prefer to work in government sectors,

such as ministries of education and health, in addition to oil-related industries. This preference owes much to the stability, job security, prestige and high salaries in these sectors. By comparison, only 11.63 per cent are working in the private sector (Achoui, 2009).

Cultural values robustly influence and affect the way of life in Saudi Arabia with regard to the way that women are treated. In Saudi Arabia, the issue of overpowering importance in the life of every person is honour or “ird”. “Honour” is inseparably correlated with the purity and faithfulness of women in the family. It is noteworthy that the word “honour” (ird) and the words “sister”, “wife”, “daughter” and “mother” are used synonymously. Thus, in a literal sense, a man’s honour is the female in his family, making jealousy a dominant feature of the Saudi character (Beling, 1980; Almaney, 1981).

Unfortunately, this concept affects the labour force and limits female professionals in medicine and education, if indeed they are allowed to work at all. The labour market in Saudi Arabia and other Gulf countries, according to a report issued by the World Bank in 2007, remains unusual in that ‘it has the highest levels of labour force growth, the lowest levels of female participation, and, except for Sub-Saharan Africa, the youngest labour force’ (World Bank, 2007, xvii) cited: Achoui, 2009.

In general, the Saudi culture tends to be hierarchical and have powerful ties to family and tribe. These social rules strongly influence and affect work choices and practice; for instance, occupational mobility is not considered desirable in Saudi society because of familial responsibility. Moreover, society generally judges managers by the level of support that they provide to their family members, relatives and tribe, not by the level of effort that they put into advancement; benefit and promotion, as in Western culture (Ali, 2008).

According to Hofstede (2001, p.5), values “are a broad tendency to prefer certain states over others”. These broad or comprehensive tendencies are ranked hierarchically according to their relative importance. This hierarchy of values, as (Ali, 2008) explains, is called a value system. This value system and analysis help individuals to establish priorities, resolve competing interests and make decisions (p.70). Additionally, relationships are comparatively personal; managers depend on

personal connections to get things done and prioritise efforts for people they know (Hickson and Pugh, 2001, p.237). Therefore, personal relationships affect Saudi bureaucracy. Concern for others is essential in Saudi Arabia, as in all Arab countries. These characteristics are dissimilar from those of Western culture. As a result of these particular concerns in Saudi society, family and society are integral to the functioning of Saudi public organisations and groups, and friendship is an efficient mechanism by which to get work done. As a result, much time is spent socialising. If not, the employee will be viewed as unfriendly or hostile (Al-Hegelan and Palmer, 1985).

Such behaviour, while socially positive and helpful, reduces the efficiency of public agencies. It wastes time and interrupts the work process. This inefficiency is most pronounced at the higher levels of management, where decisions can be made extremely late while informal connections are made, approval is sought, and critics are appeased. Wasting time is not the only downside of this traditional behaviour; it also influences decision making through biased judgments and injudicious or poor decisions. Certainly, this kind of behaviour will affect employees who benefit less as they will be less committed to organisational goals and values (Safranski and Ikwhan, 1989, cited in Alkeireidis, 2003).

The last influential factor in Saudi society is Bedouin pride, which is an important factor in public administration. Bedouins feel that honour is at risk in any conflict and that giving in reflects negatively on their self-respect and dignity. Taking the initiative to resolve a dispute is regarded as a sign of weakness. As a result, conflict is avoided, and direct confrontation is considered forbidden (Muna, 1980). This avoidance negatively affects Saudi bureaucracy as conflict may lead to alternative views and to acknowledgement of new information. While such avoidance does not always have undesirable effects, avoiding conflict can slow development and thus may leave an organisation to replicate its mistakes.

As Ali (1990) explains, the environment in Saudi Arabian bureaucracy has created what has been termed “*sheikocracy*” and “*bedouinocracy*”. These terms represent a conflict between modern values such as clarification of authority and responsibility, and efficient and civil laws as well as traditional values such as strong family, personal relations and tribal ties (pp.6-17). Finally, it is worth emphasising that Saudi

administrations have both structures, resulting in behavioural problems influencing their efficiency and success.

4.3.3.3 The Impact of societal change on Saudi employees

It is essential to consider the possible impact of different external or societal environmental changes on the type and strength of links between employees and their organisations. This sort of consideration allows us to illustrate in greater depth the commitment component types and their antecedents and consequences (Mowday *et al.*, 1982, p.8). Normally, any external societal changes will not directly affect employees' attachment to their organisation; rather, the work environment is changed which, consequently, affects workers' bonds to their organisation.

Despite the previously mentioned social factors, Saudi society has experienced a remarkable change in terms of social and urban aspects of life over the last three and half decades (1970-2005). These achievements elevated the status of the Kingdom in terms of GDP, as well as social standards, such as health and educational services, and technologically advanced industries (Ministry of Economy and Planning, 2006). The noticeably improved standard of citizen education, increased contact with other societies through study abroad, as well as a substantial improvement in national health. In addition, and growth in new technologies and mass media has fundamentally affected society, even individual beliefs about work. Nevertheless, the three main significant changes are socio-normative, economic and demographic.

1). Socio-normative change

Socio-normative change has numerous effects on the work environment. Firstly, each person experiences a socialisation process that emerges in childhood and adult life before they choose a career path. Secondly, the normative-type beliefs that other workers bring to the organisation can have an impact on an individual (e.g., peer group). Finally, the individual's common awareness of what is happening in society, derived from media, travelling, communication, etc., may also have an effect. Instances of socio-normative changes can have an important impact on the work environment, affecting an employee's work ethic, attitude toward authority, aspiration level, trust in their organisation and sex-role stereotyping (Mowday *et al.*, 1982, pp.8-9).

In the same vein, Nisbet (1972) defines social change as “successive differences in time of some social relationships, norms, roles, statutes or structures; e.g., the family, church, nation, property, role of women, status of the father, village community” (p.2). These changes are the result of either external or internal factors. It is often not easy to differentiate between them since the effects are often interrelated.

Social change in Saudi Arabia has been radical and widespread since the beginning of the century, when the Arabian Peninsula was considered to be one of the most backward regions of the Middle East (Nyrop, 1985). At the beginning of the century, it was largely inhabited by tribes whose existence depended on the scarce water in the arid desert. The settled and nomadic tribes were strongly connected to each other, requiring shared support and protection. They were economically reliant upon each other as well (Jabbara and Jreisat, 2009). As a consequence of this connectivity, the Saudi tribes evolved a behavioural code that is deeply instilled with tradition. This code accounts for many of the presumed ideas existing in Saudi society, such as the idea that manual work is humiliating.

In 1932, when the separate parts of the Peninsula were united into a single framework, the political structure changed, as well as the social structure. The government set up villages in all provinces of the country to discourage the mobility of the nomadic tribes (Rashid and Shaheen, 1992), a trend that has increased with time. Such settlement programmes changed the social structure, which caused changes in the patterns of social relations and, therefore, changes in human values. During the second half of the 20th century, people moved into the cities (Nyrop, 1985), a movement which accelerated with the discovery of oil. Those living in the cities flourished and subsequently changed their lifestyles to accompany the rapid developments made possible by the injection of wealth. Cities changed: modern buildings replaced old areas; new roads and motorways, hospitals and airports were built; communication systems were installed; and industrial cities sprang up (Huyette, 1985).

The external environment played a significant role in this development due to the discovery and sale of oil. Oil had a big impact on society, bringing a major influx of foreign workers into the Kingdom. In the early 1970s, fewer than 300,000 foreign workers were in Saudi Arabia. By the mid-2000s, the figure had increased ten-fold in

both professional and menial areas. Development of the economy would have been difficult if not impossible without the influx of foreign workers (The Ministry of Economy and Planning, 2006). This growth and infusion of non-Saudi workers exposed Saudi society to new cultures, beliefs and values (Al-kadi, 1983).

Moreover, the oil revenues enabled many Saudi citizens to travel, for business or educational purposes, to other parts of the world. They returned with new ideas and values obtained from other cultures. This change is expected to have had a significant impact on such a previously closed and conservative country as Saudi Arabia (Rashwan, 1988). The large-scale urbanisation of Saudi Arabia has certainly altered the social structure of the kingdom. The new social groups, such as technocrats, changed attitudes. In other words, the old image of the kingdom has changed, and a whole new style of living has evolved (Anthony, 1982; Al-Saif, 1990). Two examples of these new trends are the greater social acceptance of women's participation in the labour force (Alkeireidis, 2003) and increased awareness of issues concerning physical and mental health. Perhaps it could be argued that the Saudi people are putting less emphasis on material achievement and more on personal fulfilment.

These changes have had a definite impact on the work environment. Attitudes towards authority, expectations, work ethic and aspiration have changed. Workers wish to be respected, trusted, and informed about what goes on in their organisations (Martin and Nicholls, 1987). They are more concerned about working conditions and increasingly wish to have a say in the decision-making process.

It is currently much easier to access varied media resources. As a result, employees are more aware of what is appropriate, which affects how they relate to their organisations. Thus, organisations and managers in particular must be more attentive to the working environment they create for their staff, as this environment affects their commitment and their goals. New values have evolved, which must be taken into account, particularly in organisations in the public sector.

2). Economic Change

The general economic environment in which organisations operate can have powerful short-term effects on the working environment. As Mowday *et al.* (1982)

argued, it can have more subtle and numerous effects (p.11). The Saudi economy has experienced substantial economic change; as mentioned in the section on economic development (4.2.3), this transformation was within the agenda of five-year development plans to lay down the social and physical infrastructure of the country. The plans integrated the infrastructure of important road networks; the construction of bridges, buildings, electricity, airports, seaports and communication systems; and the development of water resources. Extensive funds were also spent on education, health and vocational training programmes, as well as on projects involving the building of schools, colleges, universities and general and specialised hospitals for the civilian and military sectors. In the manufacturing sector, massive funds were invested in founding industrial areas in main cities, including the two well developed industrial cities of Jubail and Yanbu. These were designed to supply lodging for heavy manufacturing, such as basic petrochemical projects (Al-Shammari, 2009).

Throughout the economic growth phase, many Saudis left their jobs to search for more interesting opportunities, which increased the level of wealth of most citizens. This shift also indicates that fewer individuals were reliant on a single employer, as additional opportunities were obtainable. The greater mobility and freedom of choice also meant that employees' commitments to organisations were sometimes destabilised.

Regrettably, this new increase in income has had a negative impact on people's attitudes towards manual jobs (as mentioned in the social factors section, 4.3.3.2), making such vocational work very difficult to fill with national workers (Achoui, 2009). The great affluence, which has benefited Saudi Arabia and allowed it to shift into the modern world, also has had a negative impact resulting in a fragile workforce that is dependent on the generosity of the government, is deficient in challenge and aspiration and is weakening with time. In addition, new wealth has divided the labour force into two categories: jobs and professions for Saudis and those for non-Saudis. For instance, newly graduated Saudi males in the 1980s and 1990s preferred to work in the government and the military, because the jobs require less working hours and the workload is not demanding, giving employees time to run their own companies at the same time. However, in the early 1980s, the Saudi economy entered a period of recession owing to a collapse in oil prices (Soufi and

Mayer, 1991). The recession reduced government revenues and influenced the Saudi public budget.

The decline in resources had a negative impact on public organisations, which were under-budget and struggled financially. Indeed, the annual income of public employees has remained the same since 1982, despite the increased cost of living. After 20 years of static salaries, King Abdullah issued an order raising the salaries of public employees in August 2005. All Saudi civil servants received a 15 per cent raise. In 2008, in the face of rising inflation, the government offered an additional 30 per cent increase in salary. Because of the economic difficulties, many public sector organisations often lost talented employees to private companies. They also struggle to hire and maintain quality personnel. Keeping commitment high under these circumstances is difficult when overtime payments and bonuses are cut. Employers' failure to respond to the needs of their employees causes the employees to look for alternative employment (Alkeireidis, 2003). On the other hand, at times of economic hardship, employees may be more dependent on the organisation that currently employs them. As a result, they may be anxious to remain in their present position (Mowday *et al.*, 1982). This anxiety does not indicate a commitment to the organisation itself, but rather reflects the lack of alternatives.

Overall, the economic situation has a negative impact on the work environment. A strong economy can affect sources of finance that might support an organisation. Such support may come in the form of new technology, training courses, better work environments or new, appropriate systems that encourage employees to work efficiently.

3). Demographic change

Demographic factors include the shifting features of the workforce that have an impact on employees' bond to their organisations. In particular, demographic characteristics include the educational level, the average working age, the percentage of women who work (mainly at managerial levels) and the percentage of multiple wage-earner households. According to Mowday *et al.* (1982), changes in the profile of the workforce can have various impacts. For instance, the continuing increase in educational level of the workforce will affect what employees expect from their work. These changes in prospects or objectives will in turn affect the forms of

motivation that will be efficient and successful. Likewise, an increase in the number of those in the 25-44 year-old age group will affect what workers want, not only from their job, but also from their organisation. The increase in the amount of women in the workforce, especially at the managerial level, will contribute to a much more diverse labour force (p.10).

The most important factor under this heading is likely to be education. Education has changed as a result of a large influx of funds and intensive attention given to the improvement of educational standards. Prior to the establishment of the kingdom, no formal education existed in Saudi Arabia, and people received their education through the family or through institutions, such as mosques. The Quran, Hadith, and the Arabic language were the main components of the curriculum (Al-Qahtani, 1991).

When the Ministry of Education was founded in 1953, official education began, but it was not broadly obtainable until 1960. At first, education was restricted to males. Ten years later, education was provided for females as well (Abir, 1988). The Ministry of Higher Education was founded in 1975. Its main objective was to generate a highly educated society that could participate in a complex, contemporary financial system. The Ministry of Higher Education's mission was to manage universities and plan higher education in the kingdom. Currently, Saudi Arabia has 13 universities. All except two, admit females, and all admit foreign students. There are also a number of independent colleges for females in every main city. Moreover, there exist private international schools and colleges that teach in different languages (e.g., English, French).

Since the beginning of the Kingdom's recent modernisation drive, the development plans laid considerable focus on human development as an extremely significant element of Saudi Arabia's comprehensive socio-economic development strategy. Education is the main pillar of human development in Saudi Arabia. Progress in the field of education and related techniques, seen as a key element of human development, has helped improve citizens' ability to accommodate national and international socio-economic and technological development. In this area, the government educational institutions played a significant role over the past three decades (Ministry of Economy and Planning, 2006).

Since education is considered a human right, it was made compulsory, available to everyone and free of charge. Post-graduate scholarships are also available for students who wish to finish their studies abroad. The government has paid significant attention to increasing literacy among Saudi citizens and to assisting development of the modern economy (Table 4.5 presents the statistics regarding the education by levels in Saudi Arabia in 2006). As a result, the number of male and female students in all general and higher education stages increased from about 547,000 in 1960 to more than 5.37 million in 2005. The number of primary-stage male and female students increased from 397,000 students in 1960 to about 2.42 million in 2005. The number of intermediate- and secondary-stage male and female students increased from 77,000 to about 2.03 million over the same period.

Interestingly, the female graduate growth rate was higher than that of male graduates. The number of females who graduated grew at an average annual rate of 18 per cent, from 369 in 1969 to 121,309 in 2004, whereas the number of male graduates at the secondary stage rose from 2437 in 1969 to 118,070 in 2004, an average annual rate of 11.7 per cent. The remarkable increase in the number of students in the intermediate and secondary stages reveals a qualitative shift in human development, a dramatic change in the cultural background of society and growing attention to the provision of education to the younger generation (Ministry of Economy and Planning, 2006, p.146). Finally, the number of male and female graduates of higher education, both from local and foreign universities, increased from 808 in 1969 to 94,837 in 2006 (See Table 4.5).

This high level of graduation of hundreds of thousands from all education levels has impacted Saudi culture. First of all, it adds to the Saudi labour force. Secondly, education has offered greater scope, choice and experience to thousands of citizens of both genders. In particular, it has affected the position of women who are challenging traditional roles, wishing to participate in the labour force, and trying to fill shortages in many fields currently reserved to expatriate workers (Lindsey, 1991). One of the indicators that education affects Saudi culture is the recent decision of King Abdullah to select an expert on girls' education to become Saudi Arabia's first woman Vice-Minister of female education in February 2009 as part of a wide-

ranging cabinet reshuffle by King Abdullah. In this reshuffle, he swept aside several bastions of ultra-conservatism (Borger, 2009).

Table 4.5: Higher and postgraduate education by levels in Academic year of 2006.

Level	New	Enrolled	Graduate	Teaching staff Male &Female	
PhD					
Male	324	1,293	103	Professor	1,687
Female	287	1,117	125	Associate Prof	2,550
Total	611	2,410	228	Assistant Prof	9,011
Master				Lecturer	6,135
Male	1,792	5,551	812	Teaching assistants	5,682
Female	1,466	4,217	479	Others	2,899
Total	3,258	9,768	1,291	-	-
Higher Diploma					
Male	1,293	1,548	769	-	-
Female	295	405	199	-	-
Total	1,588	1,953	968	-	-
Bachelor					
Male	64,255	187,489	23,538	-	-
Female	99,908	340,857	47,753	-	-
Total	164,163	528,346	71,291	-	-
Intermediate					
Male	37,444	72,199	15,435	-	-
Female	10,717	21,769	5,624	-	-
Total	48,161	93,968	21,059	-	-
Total Male	105,108	268,080	40,657	-	-
Total Female	112,673	368,365	54,180	-	-
Grand Total	217,781	636,445	94,837	-	27,964

Source: Ministry of Higher Education, 2006. (-) Indicates inapplicability.

Despite these advances, finding a job is becoming more difficult. Previously, university graduates obtained a high status and appeared as the main applicants for senior positions in the government. Younger educated generations had a greater chance of having important positions, such as deputy ministers and department heads. In recent years, the chance to have and keep a good position is much smaller. Highly educated employees now occupy middle-level posts and, as education becomes more widespread, competition is greater in the Saudi bureaucracy. Whereas

job mobility was rising in the past, access to many jobs is now much less predictable. Previously, promotion often came within two years, whereas employees now stay for long periods of time in the same position before being promoted. Opportunities for promotion in the public sector are declining with the continuing increase in the educational level of the staff; this trend decreases the chance of being chosen (Alkeridies, 2003).

Previous studies, such as Mowday *et al.* (1982), have argued that this phenomenon has affected people's desires and expectations, not only in terms of their work but also of their employers. Changing prospects may simultaneously influence the kind of motivations and the management approach likely to be successful within an organisation. They must also generate a healthy work environment in order to meet the needs of their workforce. These steps will improve their employees' commitment and attachment to their organisation. In conclusion, a change and development in the education levels of a labour force will consequently change what is needed from the organisation and how jobs will be evaluated (Alkeireidies, 2003).

To summarise, societal changes in the kingdom over the past four decades have impacted the work environment. A strong economy can influence financial resources that might support an organisation. Such support may come in the form of new technology, training courses, better working conditions or inducement systems that encourage employees to work efficiently and stay with their current employers. The influx of wealth in the 1960s and 1970s had a significant impact upon the Saudi bureaucracy, allowing for reform and development. Demographic changes have also impacted the work environment. In particular, education has offered Saudi citizens of both genders new opportunities in the labour force by giving them the option to work, think, question and experience material assets.

In fact, these societal changes influence the links between employees and their organisations. Over time, employees have become more aware of what is acceptable and what is not, which affects how they relate to their organisation. Thus, creating strong bonds between employees and their organisations is not easy to achieve. All of the above changes, economic, socio-normative and demographic, seem to have one common influence: they considerably decrease or dilute the link between employees and organisations.

4.4 Chapter summary

This chapter provided an overview of Saudi Arabia's essential characteristics, population, demographics, economic environment and public sector organisations. It was argued that, in order to understand the Saudi bureaucracy, its development and organisational structure, as well as the political and social environments in which it operates, must be understood. The Saudi political system is very different from Western systems; three main factors have impacted and shaped the Saudi social system: religion, families and tribal and cultural values.

This chapter also discussed changes in Saudi society and the impact that they have had on employees' commitment to their organisation. Throughout the past four decades, Saudi Arabia has changed economically and socially. The changes that have influenced employees' level of commitment to their organisation were categorised into three groups: economic, socio-normative and demographic. Saudi society has changed from a largely itinerant society to a more settled one, which has transformed the Saudi social structure, as well the personal relations, attitudes and motivations.

Saudi citizens have changed the way they regard family, community and work. The changes have affected the work environment, ethics, attitudes and behaviour. Employees are more conscious of what is acceptable and what is not within their organisation. Therefore, increasing their attachment to the organisation is not a simple task. Consequently, it is important to know the factors informing changes in employees' attitudes to their organisation.

CHAPTER FIVE METHODOLOGY

5.1 Introduction

This chapter describes the research design and the methods used to validate empirically the conceptual framework developed in Chapter Three. Development of the research instrument will be described as well as the results from the pilot studies. Translation of the research instrument, the questionnaire which was distributed to validate the proposed conceptual framework, and the population and sample size used in the study will be discussed. The chapter will be concluded by an exposition of the different statistical techniques we used in analysis.

Accordingly, Chapter Five is comprised of ten main sections: (1) Research approaches; (2) Research methods; (3) Questionnaire development and design; (4) Translation of the research instrument; (5) The pilot study; (6) Subjects and sampling; (7) Data collection; (8) Estimating response rate and non-response bias; (9) Data analysis phases; and (10) Construct validity.

5.2 Research approaches

The research philosophy reflects how a researcher considers or thinks about the effects of the approach taken in the development of knowledge; informally, it is the way we go about doing research (Saunders, Lewis, and Thornhill, 2009). However, there are two main philosophical positions that underlie the designs of most management research efforts in the literature: positivism and phenomenology (or social constructionism). These are distinct views about the way in which knowledge is developed, and both have a significant role to play in business and management research. (See Table 5.2, which compares the implications of positivism and social constructionism.)

1. Positivism: The key idea of positivism is that the social world exists externally, and that its properties should be measured through objective methods rather than being inferred subjectively through sensation, reflection or intuition (Easterby-Smith *et al.*, 2008, p.57). The researcher

assumes the role of an objective analyst, serenely building detached interpretations of the data, which have been collected in an apparently value-free manner; this framework also assumes that the researcher is independent of and neither affected by nor influencing the research (Saunders *et al.*, 2009). Basically, this position may be the preferred way to investigate human and social behaviour. Table 5.1 presents the philosophical assumptions that underlie positivism

2. Phenomenology (or social constructionism): The idea behind this framework is that reality is not objective and exterior, but is socially constructed and given meaning by people. Thus, it focuses on the way in which people create logic within their world, particularly through sharing their experiences with others through the medium of language. Proponents of this perspective have criticised the positivist tradition, arguing that the social world of business and management is far too complicated to lend itself to theorising laws, such as generalisations, in the same way that the physical world lends itself to these laws (Saunders *et al.*, 2009). The idea of social constructionism is that reality is determined by people rather than by objective and external factors. The focus should be on what people are thinking and feeling, both individually and collectively. Thus, we should try to understand and explain why individuals have diverse experiences, rather than searching for external causes and fundamental laws to explain behaviours (Easterby-Smith *et al.*, 2008, p.58).

The primary methods of scientific investigation are the hypothetic-deductive methods and the deductive and inductive methods. Hypothetic-deductive methods require starting with a theoretical framework, formulating hypotheses and logically deducing conclusions from the results of the study. Theories based on deductive and inductive reasoning help the researcher to understand, explain or predict phenomena (Sekaran, 2000). One important question is the extent to which the researcher is clear about the theory he or she will use at the beginning of the research effort. If the researcher uses the deductive approach, he or she develops a theory and hypotheses, and designs a research strategy to test these hypotheses (this is our approach in this

research). If the researcher uses the inductive approach, he or she starts by collecting data and develops a theory as a result of the ensuing analysis (Saunders *et al.*, 2009).

Table 5.1: Philosophical assumptions of positivism.

Independence	The observer must be independent from what is being observed.
Value-freedom	The choice of what to study, and how to study it, can be determined by objective criteria rather than by human beliefs and interests.
Causality	The aim of the social sciences should be to identify causal explanations and fundamental laws that explain regularities in human social behaviour.
Hypothesis and deduction	Science proceeds through a process of hypothesising fundamental laws and then deducing what kinds of observations will demonstrate the truth or falsity of these hypotheses.
Operative	Concepts need to be operational in a way that enables facts to be measured quantitatively.
Reductionism	Problems as a whole are better understood if they are reduced to the simplest possible elements.
Generalisation	In order to generalise about regularities in human and social behaviour, it is necessary to select samples of sufficient size from which inferences may be drawn about the wider population.
Cross-sectional analysis	Such regularities can most readily be identified by comparing variations between samples.

Source: Easterby-Smith *et al.*, 2008, p.58.

Table 5.2: Contrasting the implications of positivism and social constructionism

	Positivism	Phenomenology (or social constructionism)
The observer	Must be independent	Is part of what is being observed
Human interests	Should be irrelevant	Are the main drivers of science
Research progress	Must demonstrate causality	Aims to increase our general understanding of the situation
Research progresses through...	Hypotheses and deductions	Gathering rich data to verify new ideas are included
Concepts	Need to be defined so that they can be measured	Should incorporate stakeholder perspectives
Units of analysis	Should be reduced to the simplest terms	May reflect the complexity of whole situation
Generalisation through...	Statistical probability	Theoretical abstraction
Sampling requires	Large numbers selected randomly	Small numbers of cases chosen for specific reasons

Source: Easterby-Smith *et al.*, 2008, p.59.

The deductive approach represents the most common view of the nature of the relationship between theory and research (Bryman and Bell, 2007). According to

Sekaran (2000), the deductive method is suitable if one starts with a theoretical framework, formulating hypotheses and logically deducing conclusions from the results of the study. A research project should be designed to test a hypothesis. This process is shown in Table 5.1.

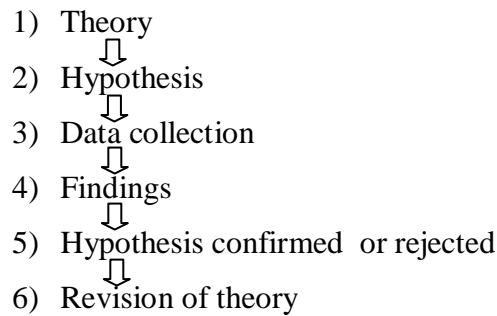


Figure 5.1: Process of deduction approach (source: Bryman and Bell, 2007, p.11).

In the inductive process, researchers observe certain phenomena and arrive at conclusions; the researcher logically creates a general suggestion based on observed evidence or facts. From an inductive standpoint, theory is the result of research, and the processes of induction involve drawing general conclusions from specific observations (Rryman and Bell, 2007). It is helpful to connect these approaches to the aforementioned research philosophies: the deductive approach owes more to positivism while the inductive approach owes more to phenomenology or social constructionism. Table 5.3 presents the major differences between the deductive and inductive approaches.

The most important point to keep in mind when choosing an approach is the nature of the research topic (Saunders *et al.*, 2009). As noted in Chapter One and Chapter Three, the primary purpose of this study is to determine how to increase public sector employees' organisational commitment levels. This research therefore aimed to investigate the antecedent that influences OC. To achieve this aim, we used three components of commitment as conceptualised by Meyer and Allen (1991) in order to examine the validity of this conceptualisation in a Saudi Arabian context.

This study also has four additional research objectives. The first is to examine the dimensionality of the OC construct together with sub-components related to continuance commitment. The second objective is to examine the impact of the variables used in ACOCC that are formulated as latent variables; this is consistent

with the nature of the three-component model. Latent variables are not directly observed but instead are inferred through a mathematical model based on other variables that are observed and directly measured; examples include commitment, cultural values and productive behaviours (Easterby-Smith *et al.*, 2008; Hair *et al.*, 2006). The role of each variable in the model is generally that of a cause (a predictor) or an effect (a dependent variable). The role which the variables play in the model can change over the course of a study (Easterby-Smith *et al.*, 2008).

Table 5.3: Major differences between the deductive and inductive approaches.

Deduction emphasises:	Induction emphasises:
Scientific principles	Gaining an understanding of the meanings that humans attach to events
Moving from theory to data	A close understanding of the research context
The need to explain causal relationships between variables	The collection of qualitative data
The collection of quantitative data	A more flexible structure that permits changes in research emphasis as the research progresses
The application of controls to ensure the validity of data	A realisation that the researcher is part of the research process
Operational concepts to ensure clarity of definition	Less concern with the need to generalise
A highly structured approach	
Researcher independence in respect of what is being investigated	
The need to select samples of sufficient size in order to build generalised conclusions.	

Source: Saunders *et al.*, 2009, p.127

The third objective involves exploring how these components may be associated with different consequences or outcomes (i.e., intentions to leave, in-role behaviour and organisational citizen behaviour). The final objective requires that we determine the levels of the three components (AC, NC and CC) of commitment at different organisational levels among Saudi public sector employees and that we assess the mediation role of the OC component between the antecedent variables and productive behaviour. A supplementary reason for using antecedent variables lies in the fact that it will be applicable to Saudi public sector employees in general. Therefore, the nature of the current research combines both deductive and inductive reasoning. Deductive reasoning helps us to formulate the conceptual model and the

theoretical framework and helps us to test our hypotheses. The inductive approach helps us better understand the behaviour of employees so that we reach good conclusions from the interviews.

The key hallmarks of scientific research are presented by Sekaran (2000), and we apply them in our current research as follows:

1. Purposiveness: We start our research with an exact aim (namely, increasing employees' commitment to their organisation) because this will lead to many positive and productive behaviours (low intention to leave, improved performance and superior extra-role behaviour).
2. Rigour: A clear theoretical foundation and a good methodological design require rigour. For example, an interview with public-sector employees should include two main questions: what would increase their level of commitment and what would decrease it.
3. Testability: We selected a random sample of public-sector employees and validated previous research in the area concerning OC. We also developed hypotheses about how employee commitment would increase.
4. Replication: Based on the results of our research, we concluded that the opportunity for learning and communication may be important factors influencing OC. This conclusion should be supported by data from other studies employing the same methods (Sekaran, 2000, p.22).
5. Precision and confidence: Precision refers to how closely the findings, based on a sample, reflect the characteristics of the phenomenon we wish to study. Confidence refers to the probability that our conclusions are correct. Accuracy alone is distinct from these concepts and is rarely sufficient.
6. Objectivity: The findings should be objective; that is, they should not be based on our own subjective opinions or feelings.
7. Generalisability: This refers to the applicability of our research findings from one organisational setting to different contexts.
8. Parsimony: Simplicity is preferred when explaining a phenomenon. For example, we chose just two work experiences and one side-bet index rather than selecting an unmanageably large number of variables.

Sekaran (2000) stated that scientific methods lead to less erroneous results, with greater confidence in the findings and better rigour. However, in management and behavioural studies, it is not always possible to fully employ the scientific method. For instance, comparability, consistency and the general nature of the research often pose challenges. Nevertheless, we can still design our research to incorporate most of these criteria and thereby ensure that it can be termed a scientific investigation.

5.3 Research methods

This research adopted a “mixed approach” - from a point perspective, the research is thoughtful and explanatory because it describes employee commitment and productive behaviour phenomena in Saudi Arabia. In addition, it can be considered analytical, since it goes further than the phenomenon itself by addressing causality or relationships among antecedent factors and defining the factors that most strongly influence such phenomena in a specific context. Furthermore, this research is predictive because it defines the dimensions and significance of relevant factors for each component of commitment. It is also considered exploratory because of new factors or variables, such as the cultural dimensions.

Our work utilizes quantitative data supported by qualitative data. Quantitative data were used mainly because such data sets are often more objective and focused on the phenomenon of interest. Basically, we used quantitative methods or strategies similar to those recommended by Bryman and Bell (2007, p.28): we used a research strategy that emphasised quantifiable data collection and used a deductive approach which incorporated positivism to reflect a view of social reality as an external objective reality. By contrast, qualitative methods usually emphasise descriptions rather than quantification in the collection and analysis of data that mainly emphasise an inductive approach to the correlation between theory and research.

Figure 5.2 includes the main elements of our methodology. We start with the organisational commitment theory, which tries to explain employees’ commitment and behaviours. From this theory, which was built on Meyer and Allen’s three-component model, then main hypotheses were formulated and tested as explained in Chapter Three. The process of translating concepts (e.g., opportunity for learning)

into operational definitions is called operationalization. In this process, considerable attention must be placed on reliability and validity.

There are two main benefits to employing multiple methods in the current research. First, different methods can be used for different research purposes, such as using several interviews conducted before the pilot study in order to generate feedback on the questionnaire items in terms of factors that best represent the variables. This gives the researcher confidence that the current research focuses only on the most important issues (Saunders *et al.*, 2009, p.146). The second benefit of using multiple methods is that it enables triangulation to take place. Triangulation is the use of different data collection methods in order to check that the data are telling us what we think they are; this strengthens the integrity of inferences drawn from the data. For instance, in this research, semi-structured interviews were conducted after collecting the data, as a means of triangulating the data using other research methods.

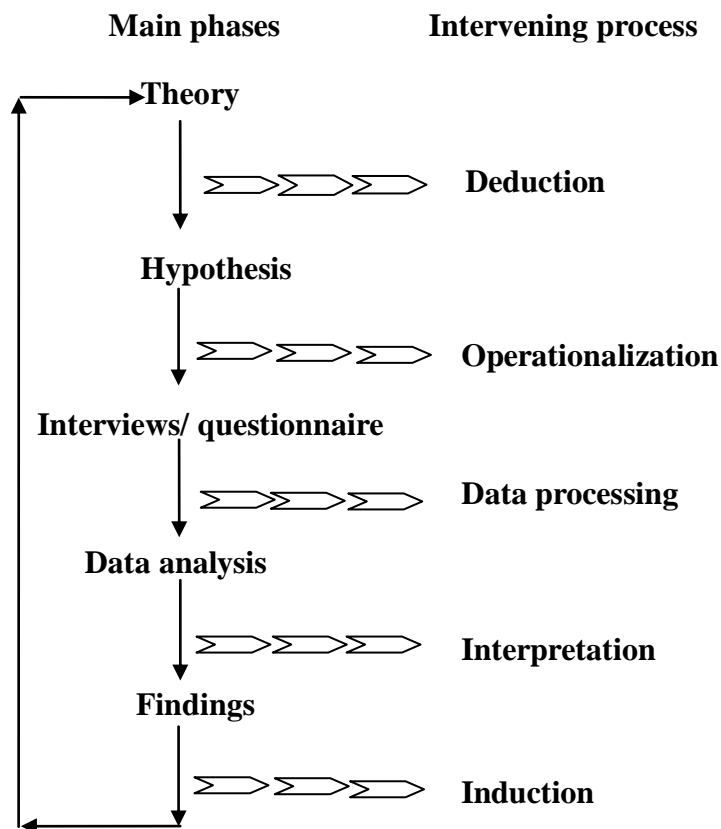


Figure 5.2. The main phases of our research (adapted from Bryman, 1995, p.7).

In social science, triangulation often refers to the claim that comparing findings from two or more different research methods enables the researcher to conclude whether an aspect of a phenomenon has been accurately measured (Moran-Ellis *et al.*, 2006).

Patton (2002) suggested four different categories of triangulation: (1) evaluate data produced by different research methods (e.g., quantitative and qualitative); (2) measure data from different processes using qualitative and quantitative sources (e.g., interviews, questionnaires, observations); (3) use different analysis techniques; (4) investigate data from diverse theoretical viewpoints. The final stage in this research process involves deriving relevant findings. This process often leads to an element of induction that can involve weaving back and forth between data and theory (Bryman and Bell, 2007).

5.3.1 Interviews

In this research, our triangulation approach required the use of several data sets, accomplished through data collection from different public-sector organisations (“source triangulation”). We obtained an intuitive understanding of the observable aspects of the variables and constructed antecedents and consequences of OC in the Saudi context. First, eight in-depth interviews were conducted in Saudi Arabia after developing the final questionnaire and before the pilot study commenced (“method triangulation”). The main goal of these interviews was to ensure that the meaning of the constructs under investigation was perceived similarly in Saudi culture. The interviews also provided a validity check on the meaningfulness of OC antecedents (further explanation is provided in the translation instrument, Section 5.5).

Even though the questionnaire provided sufficient quantitative data, 15 unstructured interviews were conducted after the data had been analysed (method triangulation) to confirm the information obtained from the questionnaire. Basically, the advantage of having unstructured or semi-structured interview questions is that this often yields a greater degree of confidentiality since the replies of the interviewees tend to be more personal in nature (Easterby-Smith *et al.*, 2008). The unstructured interviews were informal, which gave the interviewee the chance to talk freely about events, behaviours and beliefs in relation to what they thought about improving organisational commitment levels. The qualitative interviews conducted by telephone dominated most of our research efforts. Telephone-based approaches offer accessibility, speed and lower cost (Saunders *et al.*, 2009), and are very compatible with Saudi culture. For example, Saudi Arabia is not a mixed society and it is

difficult for females to access governmental organisations, although they are permitted to answer telephone calls.

The researcher conducted interviews with public-sector employees from different organisational levels, namely top management, middle management and entry-level employees. In total, there were 15 interviews lasting approximately 15 to 45 minutes each. All participants were Saudis with university degrees (Bachelor’s or above) and an age and tenure average of 35.8 and 18.6 years, respectively. Telephone interviews were recorded, except for the three interviewees who refused. In-person interviews were transcribed by the researcher. Transcripts averaged one page (c.600 words) in length. All Arabic transcripts were translated into English and verified by bilingual speakers to ensure that the translation was accurate. Table 5.4 shows profiles of the interviewees.

Table 5.4: Profiles of interviewees.

Interviewee	Position (organisational level)	Organisation	Type and duration (minutes)	Interview date
3 (male)	Top management (Assistant Vice Minister for public relations and HRM)	Ministry of petroleum (Jeddah branch) Ministry of Culture and Information (Jeddah branch) Ministry of Commerce and Industry (Jeddah)	Telephone interview (15- 30)	July, 2008
6 (3 male, 3 female)	Middle management (group leader and supervisors)	Ministry of Health Aramco (large governmental petroleum organisation)	Three in-person and three telephone interviews (20-45)	August, 2008
6 (male)	Employees	Ministry of Higher Education (Riyadh) Ministry of Education Ministry of Health	One in-person and five telephone interviews (20 - 45)	July, 2008

The first step was to transcribe the entire interview. A coding scheme that categorised the data for pattern identification was designed, based on the literature and the transcripts (see Table 5.5).

Table 5.5: Major themes covered during interviews.

No	Questions	Main themes
Q1	In your experience, what are the issues that increase employee commitment to their organisations?	Work environment, opportunity for learning, ethics, trust and management communication.
Q2	In your view, what are the issues that undermine commitment in organisations?	Poor communication, unfair treatment, inflexibility and lack of job security.

Based on the interviews that we conducted, the middle and lower levels of organisations generally responded with relatively broad comments about the mere existence of HRM practices such as opportunities for learning and effective management communication systems; they stated that high work ethics were associated positively with and increased OC. Job environments that motivated and rewarded employees’ efforts had a significant effect on employees’ organisational attachment. Moreover, we verified the findings from the questionnaire survey, which helped probe the underlying feelings, values, attitudes and perceptions regarding public-sector employees’ commitment levels; for instance, some interviewees pointed out the following:

“I feel more committed to my organisation when I feel I am getting professional support together with an opportunity to learn from my management, and when my viewpoints and recommendations are taken into account. Also, when I feel that my efforts and accomplishments are acknowledged and appreciated, I develop stronger feelings of commitment to my company. Also, a professional work environment with high ethics standards will secure my commitment.” (Interviewee-1).

“First, an increased commitment level is often based on first impressions. In other words, if an employee joins an organisation that welcomes him/her and promises great opportunities, but also fulfils those promises, this improves commitment levels. Equality occurs when employees at the same level receive the same treatment and assignments. As for management ethics, it is impossible to find perfect upper management, but I think the strong ethics, vision, fairness and humbleness of higher management bolster employee commitment levels.” (Interviewee-2).

A number of interviewees reported that employee beliefs and cultural values play a role in commitment. As one such interviewee point out:

“I think commitment has two sides; one is personal, where the employee has a personality that is hard to please, or is too materialistic, and for whom the only true reward is money. The other side is the environment surrounding the employee; this includes the facilities, the respect given to employees, humanitarian treatment, consideration for employees’ circumstances, training schemes, workplace improvements and effective management communication; these will certainly impact employees’ commitment to their organisation” (Interviewee-3).

In a similar vein, some interviewees pointed out that a shared culture and belief system will influence employee attachment to their organisations; one employee pointed out:

“Personally, I think that commitment comes from the experience or the managerial setup of the organisation. A shared culture and belief system comes from shared responsibilities. Employees feel more connected to their work and organisation if they share the same culture and goals with other employees in the organisation. When the employees are involved in setting targets, goals and plans, they will express extra commitment to their organisations. Fairness is an important factor in commitment—employees in general have feelings about whatever they do and management always has (favourite) employees. This kind of situation can weaken commitment and create a feeling of resentment within the organisation. Also, the smaller the organisation, the higher the commitment, in my opinion” (Interviewee-4).

The interview results should be interpreted in light of the small number of interviewees. However, the interviewed managers (top management) consistently emphasised the importance of building an organisational atmosphere that encourages employee commitment. They pointed out that, even though public-sector administrations have adopted new management practices, this does not necessarily impact employees.

“Regarding poor communication within the organisation, if employees feel that whatever they say is not acknowledged by management, they will be disappointed. Regarding a low level of control and governance, when the company lacks control and top management has full control over the assets of the organisation, this might create an opportunity for them to secure personal gain, to the detriment of the organisation. Public organisations whose goals and policies are determined by the government leave less freedom for employees to take on important roles, which makes them less committed to the job” (Interviewee-5).

Also, with regard to respect from supervisors and colleagues, as well as work ethic in the workplace, one manager pointed out the following:

“I believe that respect and recognition are vital motivational vehicles for the high quality and consistent performance of an employee. Cultivation of objectives and values could not be achieved if an organisation failed to deep-root a feeling of belonging among its employees” (Interviewee-6).

It seems that, in Saudi public administration, HRM management practices play a key role in increasing employee commitment levels. Our unstructured interview with only two main open questions in each interview (asking what respondents believe would increase commitment and what would decrease it) showcased how more attention should be paid to sufficient and effective communication and equality in career development. Further analyses of the interview findings are in the discussion chapter. Most importantly, our overall qualitative results were generally consistent with the quantitative results and the conceptual framework of our research.

5.3.2 Variables and Instrumentation

The survey questionnaire is the most commonly-used research method in empirical organisational commitment research. One important issue regarding this method is the manner in which access to suitable organisations and individuals is obtained. This issue often leads to considerable difficulties (Bryman, 1995, p.2). It is not uncommon for organisations to resist being the subject of a possibly critical study. Even when consent is given, they may be reluctant to grant the researcher access to employees and official information. They may become suspicious about the motives of the

study. Another issue involves employee co-operation in completing the questionnaire with sufficient accuracy and minimal bias (Bryman, 1995). To mitigate these potential concerns, and to encourage employee co-operation, we wrote a cover letter to allay any suspicions regarding the study and to build employee confidence by emphasising the academic nature of the study, highlighting the confidentiality of their responses and underscoring the significance of their participation for the project objectives.

5.3.2.1 Antecedents of organisational commitment and measurements

Selected antecedents of the three forms of commitment are supported by data from earlier studies. For example, Meyer and Allen (1997) proposed that work experiences may correlate more positively with AC than with the other two forms of commitment.

5.3.2.2 Antecedents of (AC)

HRM practices-Work experiences

Management communication

Management communication was measured by using an eight-item scale ($\alpha = 0.91$) adapted from Ng *et al.* (2006) who based their framework on the efforts of Vandenberg *et al.* (1999). Examples include “most of the time, I receive enough notice of changes that affect my work group” and “I can easily obtain information about changes in our company’s processes or procedures that affect me.”

Opportunity for learning (training)

Opportunity for learning was measured using an eight-item scale adapted from Ng *et al.* (2006); this scale was also originally adapted from Vandenberg *et al.* (1999). The reliability test showed that Cronbach’s alpha was acceptable ($\alpha = 0.94$). This scale measures the extent to which employees consider that their organisations provide adequate channels for learning. Examples of opportunity for learning are “my organisation promotes the continuous learning and development of all employees” and “I receive ongoing training that helps me do my job better.”

5.3.2.3 Antecedents of (CC)

Impersonal Bureaucratic Arrangement

Impersonal bureaucratic arrangements are measures or policies that the organisation uses to encourage or reward long-term employment (e.g., a seniority-based compensation system). These were measured using four items on a five-point Likert scale adapted from Powell and Meyer (2004); Cronbach's alpha was 0.63.

5.3.2.4 Antecedent of (NC)

Cultural Dimensions

It is important to investigate the extent to which cultural dimensions may impact individual behaviour (Clugston *et al.*, 2000). The cultural dimension scales adapted from Hofstede's (1980) typology of cultural dimensions and discussed by Dorfman and Howell (1988) were used for this purpose. These scales measure various dimensions of culture, such as orientation towards individualism versus collectivism (six items), power distance, uncertainty avoidance, and dispositions toward masculinity versus femininity (five items for each scale). We used a five-point Likert scale, where a score of one means "strongly disagree" and a score of five means "strongly agree." The reason we used Clugston *et al.*'s (2000) measurements of cultural dimensions, instead of Hofstede's (1980), is because they have been used to test the theoretical influence of culture on organisational commitment. In addition, it is important to use individualised measures, when we consider culture within one country, in order to understand the degree to which variation within that country persists on cultural dimensions and whether this variation is sufficient for hypothesis testing. Moreover, when culture is an independent variable, individualised measures must be used (Clugston *et al.*, 2000).

5.3.2.5 Consequences of commitment

In-role behaviour and organisational citizenship behaviour

In-role behaviour (IRB) was measured using five items, while organisational citizenship behaviour (OCB) was measured with ten self-reported elements. Inspired by the work of Williams and Anderson (1991), we asked respondents to consider the manner in which their supervisor would evaluate their own behaviour on a five-point Likert scale. Self-reports are more suited for studies that involve self-

conceptualisation, while observer reports are more appropriate in organisational settings, where the perceptions of others are critical determinants of feedback, promotion and perceptions of merit (Van Dyne and LePine, 1998).

Intention to leave

The intention to leave measurement was based on three items adapted from Meyer *et al.* (1993). Specifically, we asked employees how frequently they thought about leaving their current employer, how likely it was that they would actually leave the organisation at some point in the future, and how likely it was that they would actually leave the organisation within the next year. Responses were recorded using a five-point Likert scale.

5.4 Questionnaire development and design

To evaluate the variables of interest in this study, scales were required. All of the variables selected are widely documented in the research literature on organisational behaviour.

To explore the reliability and validity of the questionnaire, a framework was adapted from Churchill (1995, p.397). The framework recommends a ten-step procedure prior to an initial pilot study; three additional steps were included in our study. The steps are depicted in (Figure 5.3) and are described briefly below:

1. Specifying what information will be sought: This includes deciding what information is to be sought from whom and specifying which relationships are to be investigated.
2. Deciding the type and form of each question, and method of administration: A decision must be made regarding the structure of the questionnaire (e.g., open-ended or closed). Also, the type of data collection (e.g., by mail, e-mail, phone or in-person) has an important effect on the data to be collected. One important issue that has been considered is the culture of the country under investigation.
3. Determining the content of individual questions: On the basis of the previous steps, the content and purpose of the questions are specified.
4. Deciding on question wording: The language and words used should be appropriate to the level of understanding of the respondents (Churchill, 1995).

5. Deciding on question sequencing: The questions should reflect a logical progression that leads the respondent from easy to difficult questions or from general to specific issues.
6. Determining scales of measurement: It is important to define attitude measurements and review the type of scales that can be used (e.g., nominal, ordinal, interval).
7. Determining general appearance: An attractively-formatted questionnaire with an appropriate introduction, clear instructions and an appropriately-displayed set of questions is preferred.
8. Translation of the research instrument: This is dealt with in more detail in the next section.
9. Re-examine steps 1-7 and revise if necessary.
10. Pre-test questionnaire and revise if necessary.
11. Eight interviews were conducted after developing the final questionnaire and before collecting the pilot study data. This ensured that the questions were clear and unambiguous, and that the questionnaire was easy to complete. (Step added by researcher).
12. Conduct a pilot study. (Step added by researcher).
13. Make appropriate modifications according to the pilot study findings. (Step added by researcher).
14. Conduct the main survey.

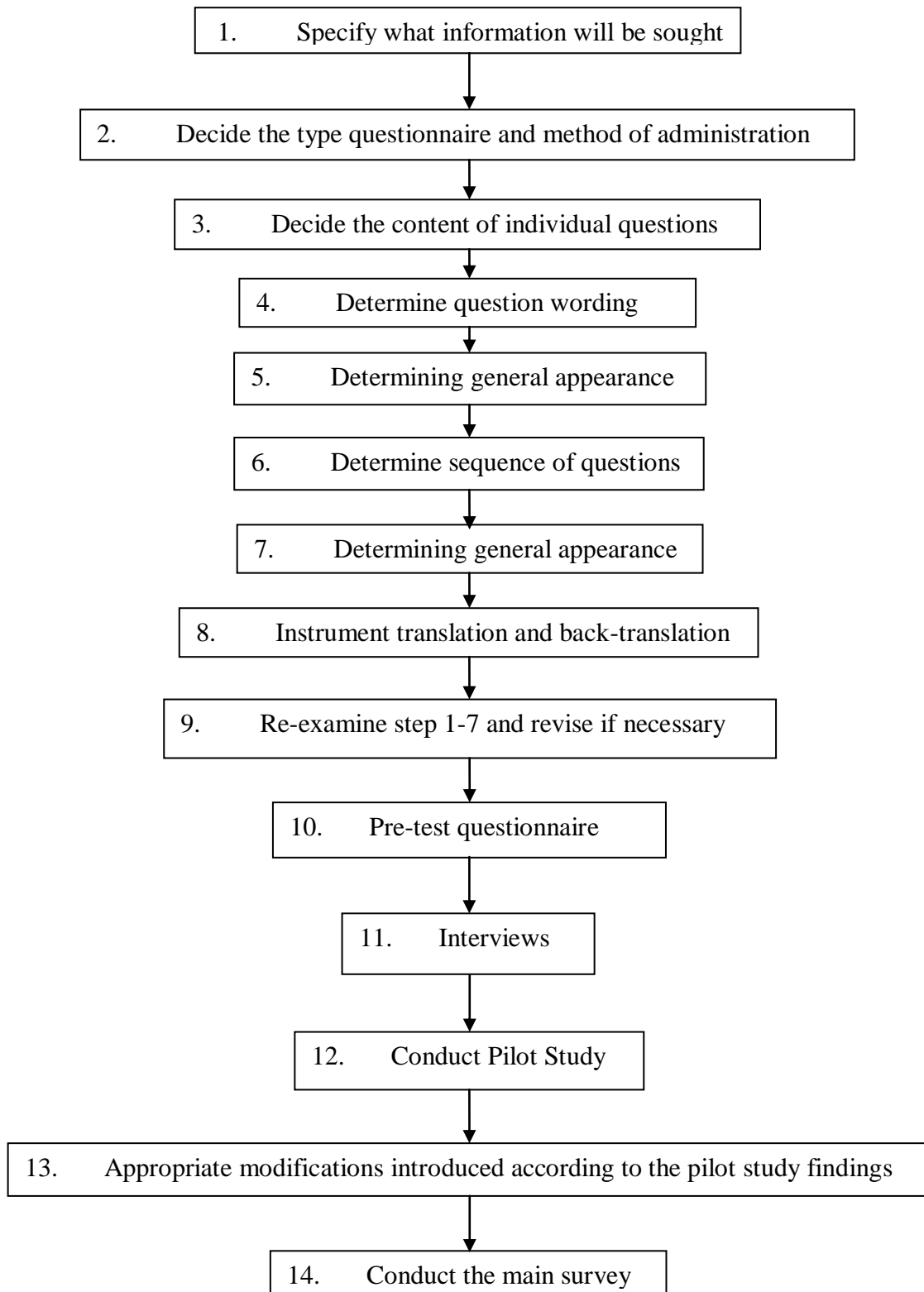


Figure 5.3: Framework for developing the survey questionnaire (adapted from Churchill, 1995, p.397).

5.5 Translation of the Research Instrument

This research is not cross-cultural but the research instrument was originally written in English, and naturally, problems can arise in the process of translation. Throughout the literature documenting cross-cultural studies, few have comprehensively considered the problems resulting from translation or the strategies used to address them (Weeks, Swerissen, and Belfrage, 2007). Brislin (1970; 1980) have stated that some of the problems with translating research instruments from the original language to the research language are caused by the following:

1. Having a bilingual translator translating from the source language to the sample language and maintaining most of the grammatical structure of the source. The grammar used may create translations that are unintelligible for the monolingual respondent because the syntax is that of the source, not the aim.
2. Distinctions in terms of words, phrases and colloquialisms that are easily understood in English may not make sense in another language.
3. The translator may not be familiar with the area of research.

According to previous research (e.g., Brislin, 1970; Campbell, Brislin, Stewart and Werner, 1970), the key translation methods that should be used to translate and reduce errors are: one-way translations, back-translations, bilingual techniques, the committee approach and pre-test procedures (pilot study). These are explained as follows:

1. One-way translations: A bilinguist translates the instrument from the original language into that of the target.
2. Back-translations: These should be done by experienced and qualified translators.
3. Bilingual techniques: A bilingual person completes the instrument in both the original and target language. Thus, problems can be identified through inconsistent responses (Prince and Mombour, 1967).
4. Committee approach: A group of bilinguists translate the instrument from the original to that of the target; committee members can catch each other's mistakes.

5. Pre-test procedures (pilot study): After translation, a pilot study is conducted to ensure that the target subjects will understand the questions. There are two ways to do pre-testing. The first method involves selecting a random sample of questions and asking penetrating questions about them (e.g., what do you mean?). The second method involves evaluating the adequacy of the translation (Mitchell, 1966, cited in Weeks *et al.*, 2007).

These key methods of translation depend on the translator's proficiency, practice and understanding, and often lead to low levels of study validity and reliability (Weeks *et al.*, 2007). The identification and correction of problems in the instrument translation can enhance research quality and validity. The translation of the original English version of the questionnaire into Arabic was accomplished through a multi-stage, back-translation procedure similar to that described previously.

For the first stage, the translation procedures were as follows:

First, because the preferred and recommended back-translation approach (although time-consuming) needed at least two independent translators (Brislin, 1970), a paid translator first converted the English version of the questionnaire into Arabic (one-way translation).

Second, the researcher produced a second Arabic translation of the same questionnaire and compared the two translations from native Arabic speakers for inconsistencies and discrepancies.

Third, the revised Arabic questionnaire was then given to our Saudi research supervisor to compare the English and Arabic versions of the questionnaires (back translations). Then, the revised Arabic version of the questionnaire was translated back into English to examine to what extent it differed from the version produced by the first paid translator.

Fourth, the professionally-translated version was given to an Arabic editor to correct for grammar (bilingual techniques), after which the final professionally-translated version was translated back into English once again. Back-translation using multiple translators allowed us to identify possible misunderstandings (Brislin, 1970).

During the second stage (committee approach), there should be wide-ranging consultation with the original bilingual translators in order to best understand why

certain text elements were and were not translatable. Giving advice to the translators regarding implication, wording and phrasing, and emphasising translation for meaning can help this theoretical correspondence (Weeks *et al.*, 2007). The following steps were undertaken:

First, four members of the academic staff at King Saud University who were fluent in both spoken and written English and Arabic were given the English and Arabic versions of the questionnaire, and their feedback was requested to ensure that the meanings of all items were clear.

Second, together with four academics, the researcher discussed the translated questionnaire items and made any necessary corrections and modifications.

Third, the questionnaire was then taken to an Arabic language specialist for final post-modification validation. This version of the questionnaire was considered ready for pilot-study distribution.

For the final stage, we conducted pre-test procedures (a pilot study). To apply the pre-test approach in the current research, eight interviewees were invited to participate in structured interviews as a means of further investigating the questionnaire; four agreed to participate. Interviewees were asked about most of the items in the questionnaire. Interviewees were asked if they perceived the questions that were related to organisational citizenship behaviour as representing the dimensions of extra-role behaviour and encompassing their understanding of the differences between extra-role behaviour and in-role behaviour.

The pilot study resolved most of the remaining problems and misunderstandings. A perfect translation does not eliminate all threats to conceptual equivalence from constructs, but it should at least reduce spurious findings due to inappropriate translations (Dorfman *et al.*, 1997, p.248).

5.6 The pilot study

Prior to the actual data collection, a pilot study was conducted between 2nd November, 2007 and 15th January, 2008. The pilot study aimed both to evaluate the level of content validity (Jackson, 1970) and to ensure that the instructions, questions and scale items were clear. The pilot test was conducted using public-sector

employees, thereby matching the target population of the main study. Employee responses were obtained using a five-point scale ranging from one (strongly disagree) to five (strongly agree). Thirty copies of the questionnaire were distributed through personal contacts and by e-mail. The respondents worked for different public-sector organisations (e.g., the Ministry of Higher Education, Ministry of Education and Saudi Aramco). A total of 27 individuals completed and returned the questionnaires, representing a response rate of 90 per cent. After collecting the questionnaires, suggestions for possible improvements were discussed with respondents. Appropriate modifications were introduced in order to situate the organisational commitment measures within the Saudi context (See Appendix 1).

5.6.1 Validity

Researchers in social science attempt to measure intangible constructs, such as people's behaviour. The problem is that one cannot know with confidence whether what is being measured corresponds exactly to what one wishes to measure. Thus, social scientists have developed means of validly measuring such concepts. The validity of a scale refers to the degree to which a scale measures what it purports to measure (Bryman and Bell, 2007). A test of validity should be capable of confirming what is already known (Bannister and Mair, 1968). However, no one, clear-cut test of a scale's validity appears to exist. Therefore, the validation of a scale requires the collection of empirical evidence concerning its use (Pallant, 2007).

Four common forms of validity can be applied to any pilot study:

1. *Face Validity*: This indicates that the items that are supposed to measure a concept do, in fact, look as if they measure that concept (Sekaran, 2000, p.207). It can also represent the degree to which a measurement seems to measure what it is supposed to measure. The respondents in our pilot study were asked whether they felt that the questions reflected the purpose of the study as described in the cover letter. All respondents felt that this was true.
2. *Content Validity*: This is used to ensure that the measures include an adequate and representative set of items concerning the concept; the more the scale items represent the domain of the concept being measured, the greater the content validity will be (Sekaran, 2000). This form of validity assesses the

correspondence between the individual items and the concept, using ratings from expert judges (e.g., academic staff) or pre-testing so that the selection of items extends beyond empirical issues alone to include practical considerations (Hair *et al.*, 2006).

3. *Criterion Validity*: This concerns the relationship between scale scores and some specified measurable criterion (Robson, Jones, and Abraham, 2008). The assessed construct can agree or predict using constructs that are external to the construct under study.
4. *Construct Validity*: This is designed to answer the following question: Do the constructs correlate with other related constructs in the anticipated manner? It involves testing a scale not against a single external criterion but in terms of hypotheses derived from theories that concern the nature of the underlying construct. Construct validity is explored by examining its relationship with other constructs using the Pearson correlation coefficient matrix (Pallant, 2007).

The second type of validity is modelled as described in the second stage of Section 5.5.

5.6.2 Pilot study results

The pilot study resulted in the elimination of certain items regarding the impersonal bureaucratic arrangements measurement (Bur) based on correlations between each item and the total score from the questionnaire. According to Field (2005), correlations of less than 0.3 are unacceptable. This means that certain items (namely items three, five and seven) (see Appendix 1 Table 14) were not adequately correlated with the overall scale. Moreover, items three, five, and seven were found to be not applicable in the Saudi public-sector context. Thus, to increase Cronbach's alpha for measurement (Bur), we eliminated these items. The omission of the third item further improved Cronbach's alpha to 0.711. In addition, when translated into Arabic, the results of the structured interviews showed that six of the items from the organisational citizen behaviour measurement had similar meanings that confused respondents; after the pilot study for OCBI, OCBO and IRB we were ultimately left with five items for each construct (see Table 30 in Appendix 1, which provides all research instruments used in the pilot study. Note that underlined questions were omitted from the main survey questionnaire).

5.6.3 Measurement and questionnaire development after the pilot study

This research is based on a paper-and-pencil survey instrument. Organisational commitment (OC) was measured using Meyer and Allen's (1997) instrument, and all variables were measured on a five-point⁸ Likert scale to record employee opinions from one (strongly disagree) to five (strongly agree). The instrument consisted of 18 items and had three subscales, namely affective, continuance and normative. Each subscale then consisted of six items. Meyer and Allen (1997) reduced the number of original item measures from eight to six. Meyer and colleagues (1990) suggested using two continuance commitment subscales, unless these components do not exhibit differential relationships with the outcome variables. Since we observed differential effects associated with the independent variables and the outcome (i.e., the antecedents and the consequences of OC), this study distinguished the two scales for continuance commitment. Four items were reverse-coded (namely, items AC3, AC4, AC6 and NC1). Responses to these items were re-coded before the analyses were conducted.

We chose to use four base scales for organisational commitment for the following reasons. First, the organisational commitment measurement often loads as a two-factor solution; moreover, it is usually focused on affective commitment. Second, two subcomponents of continuance commitment relate differently to the other consequence variables. For instance, CCH is negatively associated with a turnover intention, whereas CCL is positively correlated with intention to leave an organisation (Turner and Chelladurai, 2005). A further test is carried out to evaluate the commitment model, and this will be explained in the analysis chapter.

5.6.4 Reliability

Reliability refers to an agreement between independent attempts to measure the same theoretical concept (Bagozzi, 1994). In a measurement of reliability, "the scale should consistently reflect the construct it is measuring" (Field, 2005, p.666). The internal consistency of the three scales is often estimated by using the coefficient

⁸ A five-point Likert scale was chosen because some scales were modified. These modified scales have exhibited acceptable psychometric properties in other research (Iverson and Buttigieg, 1999).

alpha. Coefficient alpha values for the three scales ranged, respectively, from 0.77 to 0.88 for affective commitment scale (ACS), from 0.65 to 0.86 for normative commitment (NCS) and from 0.69 to 0.84 for continuance commitment (CCS) (Allen and Meyer, 1990; Cohen, 1996; Hackett *et al.*, 1994; Meyer and Allen, 1997; Meyer *et al.*, 1998; Somers and Birnbaum, 1998).

5.6.5 Validity of the factor structure

A great deal of research has examined the factor structure of the three component measures using exploratory and confirmatory factor analysis. Some studies have analysed all three measures, whereas other studies included only ACS and/or CCS items. However, the findings from the confirmatory analysis (Meyer *et al.*, 1990; Somers, 1993; Vandenberghe, 1996) and the exploratory analysis (Allen and Meyer, 1990; McGee and Ford, 1987; Reilly and Orsak, 1991) offered significant support for the notion that three components (AC, CC and NC) are indeed distinguishable constructs. Moreover, Cohen (1999) used confirmatory factor analysis to explain the different validities for affective organisational commitment, career commitment and continuance commitment. Also, confirmatory factor analysis (CFA) revealed that Meyer and Allen's three-component scales were empirically separate from job involvement, career commitment and work involvement (Cohen, 1996).

As explained in the previous section, the CCS has six items; three-items describe continuance commitment of the low alternative; the other three-item sub-scale measures continuance commitment because of sacrifices required to leave the organisation. However, Meyer and Allen (1991) suggested that, in the absence of differential relationships with consequent variables, it is more appropriate to combine everything into one six-item scale.

5.7 Subjects and sampling

The reason for limiting the organisations in this study to public organisations and, specifically, to government ministries, is that they exhibit a similar organisational structure, making them more amenable to systematic study. For this research, only 16 ministries were selected (see Table 5.6). A number of ministries were excluded for various reasons. The Ministries of Defence and the Ministry of the

Interior were excluded for reasons of national security; the Ministry of Foreign Affairs was also excluded because the nature of the jobs and career structures in that ministry are very different from other ministries, as there is a greater diplomatic focus. The Ministries of Communication and Justice declined the invitation to distribute the research instrument unless the researcher agreed to undergo a long process of background checks and clearances. Given the time constraints, these offices were excluded from the study.

5.8 Data Collection

The research was conducted using opportunistic samples of employees from different organisational levels across different ministries. With this approach, each unit of the population had an equal probability of being included in the sample (Bryman and Bell, 2007), even though we could not use a computer to select a comprehensive sampling frame. Targeted employees included senior managers, managers and supervisors, representing top and middle management, as well as staff from lower levels of the organisation, such as administrative assistants or clerical employees.

Seven hundred (pencil-and-paper) questionnaires⁹ were distributed to 16 government ministries located in Riyadh and Jeddah, the two largest cities in the Kingdom of Saudi-Arabia, between 15th January, 2008 and 9th March, 2008. The researcher used the following procedures to collect the data.

1. In every ministry, we called the Director of Public Relations in order to request permission to distribute the questionnaires. He was informed that the survey was only to be distributed to Saudi national government administrative employees. From all organisational levels from the top management (e.g., Vice-Minster) through to the middle management (e.g., head department) and down to clerk staff (lower level), either through their department, personally or by proxy (two assistants were hired to help), questionnaires were distributed.
2. To motivate the public relations director, the researcher explained in the first call that this research could help improve the relationships between employees

⁹ A copy of the Arabic questionnaires can be requested from the author, personally.

and their organisations. We also promised to provide a report of the research findings.

3. To make participants comfortable with filling in the survey, we included a cover letter explaining that their participation was voluntary and that individual responses and personal information would remain confidential. The purpose of the research was explained and they were given “opt-outs” (the option to withdraw from the study at any point without explanation). The letter also insisted that their participation would be used only for the purposes of this research. In addition, the researcher’s address, e-mail address and telephone number were provided, and the participants were encouraged to contact us with questions.
4. A follow-up strategy with non-respondents was also used. Churchill (1995) suggested that a follow-up strategy can sometimes increase the response rate. The researcher called different departments (e.g., human resources, personnel directors, etc...) to remind them about the questionnaire. We also sent the “agents” to every ministry to remind employees about the questionnaire. In line with local and national cultural practice, follow-up strategies were devolved to the “agents” dealing with data collection in these organisations. This procedure was adopted to encourage responses and to avoid potential bias due to perceived coercion. After the participants had completed the questionnaire, they returned it to the head of the Public Relations department and he placed all surveys in a sealed envelope. The researcher collected the envelope personally from him.
5. Four hundred and sixty-five respondents returned the questionnaire, a 66.43 per cent response rate. In the Riyadh branches, we received 35 per cent of the responses in the first week and the rest one week later. In the Jeddah branches, we received all of the responses within two weeks. Such prompt responses were probably due to the official authorisation and support of the research by the head of Public Relations within each ministry.
6. Four hundred and thirty-three completed questionnaires (61.85 per cent) were acceptable for use in the analysis. Thirty-one questionnaires were ineligible because important data were missing, such as entire sections of the questionnaire.

Finally, to further demonstrate engagement with the questionnaire, respondents considered various questions particularly meaningful, adding further points of information (e.g., how their commitment could be decreased or increased), proving further face validity for the questionnaire.

Table 5.6: Number of questionnaires delivered to public-sector employees.

Ministry	Distributed	Returned	Ineligible	Eligible	Valid per cent
Transport (Riyadh)	50	46	3	43	9.9
Health (Riyadh)	50	35	2	33	7.6
Finance (Riyadh)	50	33	-	33	7.6
Planning (Riyadh)	50	27	2	25	5.8
Education (Riyadh)	70	61	3	58	13.4
Civil Service (Riyadh)	50	37	1	36	8.3
Islamic Issues (Riyadh)	50	29	4	24	5.5
Labour (Riyadh)	50	25	4	21	4.8
Petroleum & Minerals (Riyadh and Jeddah)	50	47	2	45	10.4
Commerce & Industry (Riyadh)	50	30	1	29	6.7
Agriculture (Riyadh)	30	16	-	16	3.7
Higher Education (Riyadh)	30	10	4	6	1.4
Electricity & Water (Riyadh)	30	13	1	12	2.8
Culture & Information (Jeddah)	30	15	3	12	2.8
Hajj (Jeddah)	30	18	1	17	3.9
Social Affairs (Jeddah)	30	23	-	23	5.3
Total	700	465	31	433	100.0

The ministries listed in Table 5.6 provide essential services to Saudi society. As such, they are considered to be at the heart of the political, economic and administrative structure of the Saudi Kingdom. They are responsible for development programmes within Saudi Arabia in both a social and economic sense and are the most significant providers of employment in the country.

5.9 Estimating response rate and non-response bias

The most important feature for a sample is that it adequately represents the target population. It is important that the research sample is sufficiently large to give us the necessary confidence in our data. Therefore, we needed to secure as high a

response rate as possible in order to ensure that our sample would be comprehensive. Non-respondents damage sample validity because of the distortion created in representing the population through refusal to be involved in the research. As a result, the respondents will not represent the whole population and the data collected may be biased (Saunders *et al.*, 2009). The causes of non-response include: refusal to respond, ineligibility to respond or contact failure. The most common is the refusal to participate or be involved in the survey, without offering a reason (Saunders *et al.*, 2009). One of the ways to decrease the non-response rate is by using improved data collection methods (e.g., follow-up strategies), as we did for the current research (see Section 5.8).

In order to calculate the response rate, a broad definition and method of calculation for the rates of response and non-response is needed. One way of doing this is the standard definition of response rate as defined by a sample of members from the Council of American Survey Research Organisations (CASRO, 1982) (No eligibility requirement), namely:

$$\begin{aligned} \text{Response rate} &= \frac{\text{Number of completed questionnaires with responding units}}{\text{Number of eligible responding units in the sample}} \\ &= \frac{433}{700} = 61.85\% \end{aligned}$$

The key requirement for accurately calculating the response rate is appropriately identifying eligible respondents if there is no eligibility requirement (Churchill, 1995, p.662). We used the method of response-rate calculation proposed by the CASRO (1982), which assumes that the percentage of ineligible responses among non-respondents will be equivalent to that in the respondent set. Thus, when using an eligibility requirement, one first estimates the number of eligible respondents among the non-respondents. This is done using the eligibility percentage, calculated from successfully screened individuals, and applying this percentage to the non-respondents. In our case, 63.4 per cent was the estimated response rate. Table 5.7 shows the mathematical method of calculating the respondent rate, given the current research and using the eligibility requirements to calculate the response rate.

Table 5.7: Mathematical method for calculating the response rate¹⁰

Eligibility requirement	
Total number of sampling units	700
Total number of respondents	465
Total number of eligible respondents	433
Total number of ineligible respondents	31
Percentage of eligible respondents	$433/465 = 93\%$
Total number of non-respondents	$700 - 433 = 267$
Expected percentage of eligible in non-respondents	$267 * (433/465) = 249$
Respondent rate	$(433 * 100) / (433 + 249) = 63.4\%$

According to Churchill (1995): “Non-response is a problem for any survey, because it raises the question of whether those who did respond are different in some important way from those who did not respond” (p.662). The major sources of non-response bias are: (1) the respondent is not at home or (2) the respondent refuses to answer the survey. Non-response bias arises more commonly in research that uses interviews or telephone/mail surveys to acquire data. In this research, we did not use postal mail to distribute the questionnaire. To address the second source of non-response bias, in addition to our local follow-up strategy, as described in Section 5.8 number 4, we adopted another approach, as Easterby-Smith *et al.* (2008) described:

One of the key ways of judging the representativeness of a sample is to compare the characteristics of the sample to those of the population. It is sometimes possible to get an idea about potential bias due to systematic non-response by comparing those who respond quickly with slow responders on demographic variables; the idea is that the slow responders will be more similar to non-responders than are those who reply quickly. If the slow responders have similar characteristics to rapid responders, then the researcher can have greater confidence that non-responders would also have been similar; this will help to build credibility in a survey (p.213).

We distributed 40 questionnaires to the Ministry of Petroleum’s Jeddah branch and received 35 questionnaires back within four days. The respondents replied quickly, within three days. This group had an average age and tenure of 38.76 and 15.18 years, respectively. A comparison of the respondents was subsequently performed between the main survey and the new data, using Chi-Square tests (see Appendix 2). There were no significant differences between the main survey data and the new

¹⁰ Source: Council of American Survey Research Organisations (1982), cited in Churchill, 1995, p.644.

data; however, with respect to educational level only, the two groups were significantly different. The new data showed that 68 per cent of respondents had only a pre-university education, whereas in the original data more than 51 per cent of respondents reported some higher education. This may be due to the fact that employees with higher levels of education prefer to work at ministry headquarters. Accordingly, because the slow respondents seemed no different from those who replied quickly, we are confident that non-responders have similar characteristics, thereby building credibility for the main survey's responders.

5.10 Data analysis phases

The primary purpose of the analyses undertaken in this study is to answer research questions and to test related hypotheses. The research involved multiple steps to guarantee consistent and valid results. In the next chapter, we will present the results of our statistical tests on the collected data. The data were coded and analysed using the Statistical Package for the Social Sciences (SPSS 15.0) and the Analysis of Moment Structures (AMOS 16.0) software packages. Data were checked twice using the completed questionnaires and exploratory analysis. Descriptive statistics offer a systematic view and summary information for missing data, outliers, and checks for normality of the data. To investigate the latter, data was investigated for kurtosis and skewness. In order to estimate the psychometric properties of the measures, confirmatory factor analyses (CFA) were also conducted using AMOS 16.0.

Before undertaking CFA/SEM analyses, the following steps were performed: First, an instrument adapted for the measurement scale of interest was used to substantiate the validity of the results, and a pilot study was conducted to ensure the appropriateness of the instrument for the collected data. Second, a statistical technique was used to code and analyse the research data. Data from the returned questionnaires were screened using descriptive statistical analyses, which provided information about outliers, invalid data and the distribution of the data; invalid responses or input errors often lead to invalid data. When obvious transcription errors were deleted, the actual questionnaires were checked to correct these errors.

Otherwise, invalid data were excluded from our analysis. In addition, a normality for the data was confirmed through an assessment of the skewness and kurtosis.

Third, although each of the latent variables and associated manifest variables has been taken from extant models, our model attempts to include these in an innovative integrated model. As such, we therefore undertake a full exploratory factor analysis (EFA) to validate this approach before fitting the putative model to the data. Thus, EFA was performed to identify groups of variables with which to evaluate construct validity. Fourth, the three-component model and the multidimensionality of the construct were tested for the model's goodness-of-fit to the data. Fifth, CFA was carried out using AMOS 16.0 to test the measurement model. Finally, SEM and hierarchical regressions were used to test the hypothesised structural model.

Covariance-based maximum likelihood SEM combines factor analysis with path analysis. Reasons for using SEM include the ability to process both latent and manifest variables and independent and dependent variables, and a desire to predict the values of certain variables. The SEM technique determines whether the proposed model fits the data reasonably well and evaluates the contribution of each independent variable relative to each of the dependent variables. Using SEM for analysis also allows us to compare alternative models and to evaluate differences between groups (Hair *et al.*, 2006). According to Byrne (2001, p.39): "With complex models in which there may be more than one level of the latent variable structures, it is wise to visually check each level separately for evidence that identification has been attained."

Therefore, in order to assess the properties of the measures, CFA was conducted using AMOS 16.0. The statistical techniques of AMOS have two major advantages: they both estimate the model and produce structural equation and measurement models. These techniques also add precision to the estimation model by correcting for attenuation in the random measurement errors of manifest variables. Moreover, the default maximum likelihood method employed in AMOS outputs a statistical measure both of goodness-of-fit and of explained variance (i.e., *R*-squared) (Byrne, 2001). Anderson and Gerbing (1988) recommended that any measurement model be assessed independently before the evaluation of a structural model. Accordingly, the second phase of the analysis presents three different CFAs, namely the analysis of

the organisational commitment scales, the analysis of the antecedent measurements and the analysis of the consequence measurements.

5.11 Construct validity

Construct validity “is the degree to which a set of measured items truly reflects the theoretical latent construct those items are designed to measure. Therefore, it deals with the accuracy of measurement. Construct validity presents assurance that measures taken from the sample represent the actual true score that exists in the population” (Hair *et al.*, 2006, p.776).

The validity of these measures was assessed in two ways. Construct validity was evaluated using EFA and, subsequently, CFA, both discussed thoroughly in the analysis chapter. Table 5.8 lists all of the measured variables, means, standard deviations, the Cronbach alphas and the sources of these measures (see also Appendix 3 for a list of research instruments, Mean and Standard deviation).

The validity of the measured variables was assessed in three phases. The first phase involved data exploration using EFA. The second phase employed CFA. According to Hair *et al.* (2006), CFA often reduces the need to combine scales because SEM programs can compute factor scores for each respondent. This process allows the relationships between constructs to be automatically corrected for the error variance that exists in the construct measures (Hair *et al.*, 2006). The third phase, structural equation modelling, SEM, which integrates two types of multivariate methods, namely, measurement models for assessing hypotheses about relationships and models of the causal relationships that link both observed and latent variables (Easterby-Smith *et al.*, 2008). Figure 5.4 presents the analysis phases.

Table 5.8: Overview of variables and scale measures

Variable Name	Variable description	Reliability coefficient α	Mean	S.D.	N/items	Source
AC	Affective commitment	.73	21.61	4.09	6	Allen and Meyer (1997)
CCH	Continuous commitment (high sacrifice)	.71	10.58	2.61	3	Allen and Meyer(1997)
CCL	Continuous commitment (low alternative)	.55	9.99	2.45	3	Allen and Meyer(1997)
NC	Normative commitment	.78	20.27	4.42	6	Allen and Meyer (1997)
Com	Management communication	.91	24.04	7.30	8	Vandenberg <i>et al.</i> (1999)
Ler	Opportunity for learning	.94	22.83	8.29	8	Vandenberg <i>et al.</i> (1999)
Bur	Impersonal bureaucratic arrangements	.63	11.93	2.99	4	Powell and Meyer (2004)
PD	Power distance	.68	13.59	3.98	5	Clugston <i>et al.</i> (2000)
UA	Uncertainty avoidance	.83	20.24	4.42	6	Clugston <i>et al.</i> (2000)
I/C	Individualism/Collectivism	.83	23.21	4.42	6	Clugston <i>et al.</i> (2000)
M/F	Masculinity/Femininity	.87	17.36	4.67	6	Clugston <i>et al.</i> (2000)
IRB	In-role behaviour	.73	20.48	3.11	5	Williams and Anderson(1991)
OCBO	Organisational citizenship that benefits the organisation	.73	19.43	3.03	5	Williams and Anderson (1991)
OCBI	Organisational citizenship that benefits the specific individual	.60	21.15	2.86	5	Williams and Anderson (1991)
Int	Intention to leave	.82	8.05	3.18	3	Meyer, Allen and Smith (1993)

Note: Cronbach's α value is a lower boundary on actual reliability (use CR)

The main research question and all related questions were analysed as follows:

Main question: What is the mediating role of organisational commitment components and the selected antecedent variables among Saudi public-sector employees in the context of their work behaviour? This can be answered using the SEM analysis.

RQ.1: What are the levels of affective, continuance and normative commitment among public-sector employees in Saudi Arabia? This research question was answered using mean scores to determine rank orders for the component

factors of organisational commitment and by comparing the latent variance mean for each commitment type across three organisational levels.

RQ.2: What are the demographic characteristics of Saudi public employees? This question was answered using descriptive statistics, including frequencies and percentage distributions.

RQ.3: What is the relationship between the demographic characteristics (age, educational level, years of service, social status, gender and income) and organisational commitment components? This was addressed using an analysis of MANCOVA, the multivariate version of ANCOVA, which includes one or more continuous variables (age, tenure) as surrogate covariates, as well as at least one categorical/nominal variable (job level, education level) (Easterby-Smith *et al.*, 2008). This was addressed using general linear modelling (GLM).

A significant regression path in the context of SEM and hierarchical regression provided the answer to the following questions:

RQ.4: How does training (i.e., opportunities for learning) and management communication affect AC and NC?

RQ.5: How do impersonal bureaucratic arrangements relate to CC, particularly to the high sacrifice sub-component?

RQ.6: What are the effects of cultural dimensions (i.e., power distance, uncertainty avoidance, individualism/collectivism and masculinity/femininity) on organisational commitment?

RQ.7: How do organisational commitment components affect in-role behaviour (IRB) and organisational citizen behaviour (OCB)?

RQ.8: What is the impact of AC, CC and NC on an employee's intentions to leave their organisation?

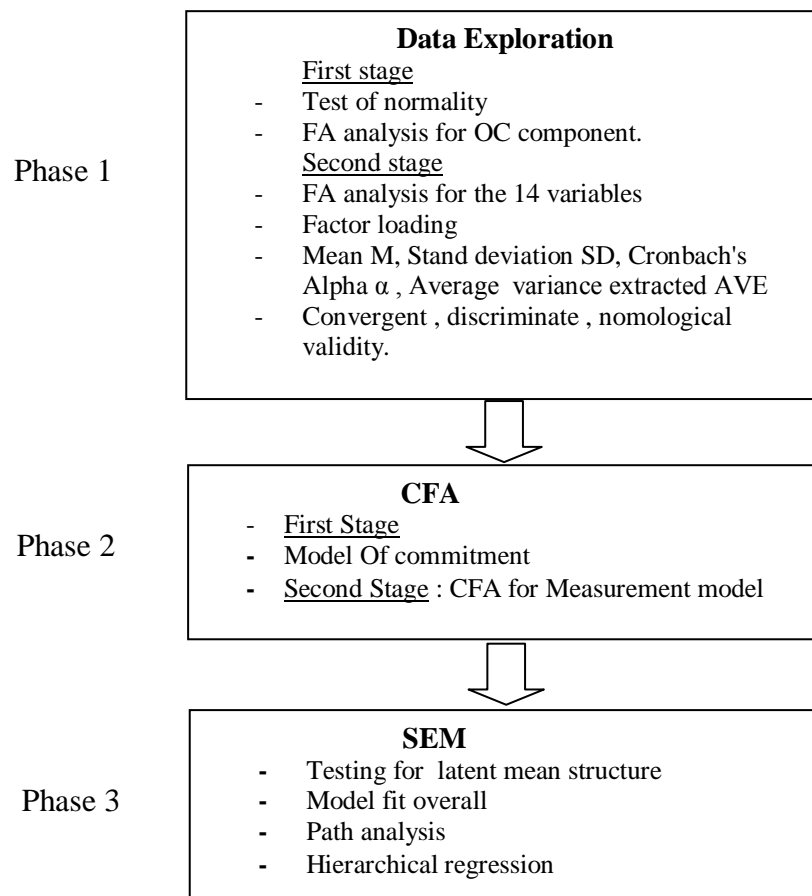


Figure 5.4: Analysis phases

5.12 Chapter summary

This chapter presented the research approaches and methods, as it is absolutely essential for a researcher to illustrate the stages that were used in the data analysis phase of the research.

A pencil-and-paper questionnaire comprising five-point Likert scales were used. To ensure content validity, items were adopted from previous research. The questionnaire items were developed in many stages and translated from English to Arabic and back-translated before the pilot study; the same method as the Brislin back-translation method was used (Brislin, 1980). The scales were translated back and forth between Arabic and English by several bilingual experts, and the procedure was continued until the items written in Arabic and English converged. We used many strategies and approaches to avoid translation error. In addition, a pilot study

was conducted in Saudi Arabia with several interviews to finalise the final questionnaire.

The study's population is drawn from sixteen ministries in two cities in Saudi Arabia. To address non-response bias issues we collected additional data to compare to the main data. No significant major differences were found other than within education. Based on previous research, the sample size exceeded 200 respondents to support a satisfactory SEM analysis.

The current research sample is fairly large, with 433 responses. We calculated the respondent rate using the CASRO (Council of American Survey Research Organisations) approach, and identified reliability values exceeding the common thresholds ($\alpha > 0.6$) for all variables except CCL. The data were subsequently inspected and construct validity analysed. These analysis methods measured and assessed the reliability and validity using FA, CFA, MANCOVA, SEM and invariance analysis. The next chapter analyses the data, describes all of the tests conducted, and then presents the results.

CHAPTER SIX

ANALYSIS

6.1 Introduction

This chapter presents the data analyses results including descriptive statistics, reliability coefficients for the instrument scales and statistical procedures performed to answer the research questions. The reported results include descriptive statistics of the demographic characteristics (including the mean, standard deviation, skewness and kurtosis scores), factor analysis (FA), maximum likelihood, principal component analysis (PCA), confirmatory factor analysis (CFA) of the proposed measurement models, general linear modelling (GLM) and structural equation modelling (SEM). The proposed models were assessed on the basis of overall model fit, validity and reliability. The structural model was assessed using overall model fit. A *t*-test for the path coefficient associated with the causal effect was used to investigate the relationships between the antecedent variables: work experiences; “opportunities for learning”; management communication; impersonal bureaucratic arrangements; cultural dimensions and the relationship between them; affective, continuance and normative organisational commitment; in-role behaviour; organisational citizen behaviour; and turnover intention. Consequently, Chapter Six consists of six sections: (1) Sample description; (2) Data exploration; (3) Confirmatory factor analysis; (4) Structural equation modelling; (5) Testing the mediation role of OC components; and (6) Hierarchical regression analysis.

6.2 Sample description

Analysis of the responses was carried out using SPSS (15.0). Demographic characteristics included basic personal information such as gender, age, tenure, income, education and job level. Table 6.1 presents the demographic information for age and years of service (age and tenure were measured as continuous variables by directly asking respondents for their age and length of service in the organisation). Table 6.2 lists the categorical demographic variables.

The average age was 38.55 years, and the average tenure was 14.09 years. In terms of gender, 91.9 per cent of the respondents were male, and only 8.1 per cent were female. This is not surprising in Saudi Arabia, because only a small percentage of Saudi women of working age actually join the workforce. Most estimates suggest that about 16.7 per cent of Saudi females of working age are actually part of the work force (*The Eighth Development Plan, 2006*).

Table 6.1: Age and length of service

Demographic Profile	Frequencies (N=433)	Valid per cent	Missing Data	Mean	Std. Deviation
Age	416	96.1	17	38.55	9.24
Number of Years of Service (tenure)	402	92.84	31	14.09	9.63

Table 6.2: The categorical demographic variables

Demographic profile	Frequency (N=433)	Valid per cent	Missing
Gender			0
Male	398	91.9	
Female	35	8.1	
Social status			1
Single	84	19.4	
Married	348	80.4	
Education			2
Less than secondary education	24	5.5	
Secondary education	93	21.5	
Diploma	105	24.2	
University degree	174	40.2	
Higher degree	36	8.3	
Job level			11
1-5	107	24.7	
6-9	204	47.1	
>=10	111	25.6	
Monthly Income In (SR)			1
1000-2000	7	1.6	
2001-4000	57	13.2	
4001-7000	111	25.6	
7001-10000	108	24.9	
>10000	149	34.4	

Across all respondents, 80.4 per cent were married and only 19.4 per cent were single. The respondents were also very well educated: almost half (48.5 per cent) had higher education or held a graduate degree, and 24.2 per cent of those who completed the questionnaire had less than a graduate degree but better than a secondary school education (i.e. diploma). In addition, 21.5 per cent of respondents

had completed secondary school (i.e., 10 years of education). Finally, only 5.5 per cent had less than a secondary school education. The respondents came from different organisational levels; almost half (47.1 per cent) were from the middle level of their organisation (Grades 6-9), 24.7 per cent were from the lower level (grades 1-5) and 25.6 per cent of respondents were from the upper level (> grade 10).

Table 6.2 indicates that 64 respondents (14.8 per cent) earned less than 4000 SR per month (less than £700), while almost 50.5 per cent of respondents earn between 4001-10000 SR per month (£700 - £1600). Finally, 34.4 per cent (149 respondents) earn over SR10000 per month (over £1600).

6.3 Phase one: Data exploration

6.3.1 The first stage

Exploratory factor analysis was conducted to verify the scale’s multidimensionality using a well-established multi-item instrument. Maximum likelihood FA with varimax rotation Kaiser normalisation and “eigenvalues over one” were applied to the 18 items that measure commitment components. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which measures whether the distribution of values is adequate to conduct FA, was 0.866. Kaiser (1974) recommended a value between 0.8 and 0.9. Therefore, we are confident that FA is appropriate for these data. In addition, Bartlett’s test of sphericity is highly significant (2072.797, $p < 0.001$) and this result confirmed the multivariate normality of the data (Table 6.3).

Table 6.3: KMO and Bartlett's Tests.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.866
Bartlett's Test of Sphericity	Approx. Chi-Square	2072.797
	df	153
	P value	< .001

The results of our first factor analysis revealed five factors. Normative commitment loaded on the first factor, namely items NC6, NC5, NC4, NC3, and NC2. The second factor is comprised of the reverse-coding (negative wording) factor for affective commitment items AC3, AC4, AC6, and NC1 (the only reverse normative commitment item which has a very low loading, 0.377). The third factor consists of

three items related to continuance commitment high sacrifice (CCH), with loadings of 0.537 and above. The fourth factor involves the positive AC wording items AC1, AC2 and AC5. The fifth factor is the continuance commitment low alternative (CCL) (see Table 6.4). An unexpected result was generated when we excluded AC5 because of the low loading, as the factor analysis revealed 4 factors: AC1 and AC2 loaded on the first factor with the rest of the normative commitment items, and the three reverse AC items together with NC1 loaded on the second factor, while the two CC subcomponents loaded sequentially on the third and fourth factors (see Table 6.5 and Table 6.6).

Table 6.4: First FA.

	Rotated Factor Matrix				
	Factor				
	1	2	3	4	5
NC6	.637				
NC5	.570				
NC4	.564	-.287		.257	
NC3	.520		.299		
NC2	.370				
AC4		.682			
AC3		.639			
AC6		.614			
NC1		.408			
CC2H			.753		
CC3H			.552		
CC1H			.537		
AC2				.573	
AC1	.368			.567	
AC5				.457	
CC4L					.606
CC5L					.576
CC6L					.410

Extraction Method: Maximum likelihood; Rotation method: Varimax with Kaiser Normalisation.

Table 6.5: Second FA.

	Rotated Factor Matrix			
	Factor			
	1	2	3	4
NC6	.706			
NC4	.668			
NC5	.587			
AC1	.533	-.275		
NC2	.347		.344	
AC2	.343	-.280		
AC4		.664		
AC3		.655		
AC6		.613		
NC1	-.281	.397		
CC2H			.756	
CC3H			.552	
CC1H			.536	.291
NC3	.506		.208	
CC4L				.663
CC5L				.536
CC6L				.448

Extraction Method: Maximum likelihood; Rotation method: Vairmax with Kaiser Normalization.

Table 6.6: Third FA.

	Rotated Factor Matrix			
	Factor			
	1	2	3	4
NC6	.696		-.219	
NC4	.642		-.218	
NC5	.585			
NC3	.517	.304		
NC2	.342	.242		
CC2H		.780		
CC3H		.550		
CC1H		.531		
AC3			.677	
AC4			.661	
AC6			.603	
AC2			-.306	
CC4L				.708
CC5L				.508
CC6L				.427

Extraction Method: Maximum likelihood. Rotation method: Vairmax with Kaiser Normalization.

Further statistical factor analysis was conducted across factors, because the size of the factor loading is a very important consideration, with cross-loading indicating a discriminant validity problem. Therefore, items with scores below 0.5 or that exhibited cross-loading (i.e., NC1, NC3, NC2, AC1, and AC2) were excluded from the analyses to ensure the stability of the constructs and related convergent and discriminant validity. However, the reliability estimates of the four factors were

calculated and were found to be acceptable. The Cronbach’s alphas before FA were: for AC, 0.73; for NC, 0.78; for CCH, 0.71; and for CCL, 0.55. Prior research conducted in non-Western cultural contexts (Ko *et al.*, 1997) resulted in a CCL reliability of 0.58 (see more argument regarding this issue in the discussion in Chapter Seven). During this stage of analysis, it was important to show that the OC construct is multidimensional. Note that since FA resulted in a four-factor solution, there is evidence that the OC construct is indeed multidimensional. Items were selected based on the largest factor loading reported for each component (Table 6.7).

Table 6.7: Final FA.

	Rotated Factor Matrix			
	Factor			
	1	2	3	4
AC4	.704			
AC3	.626			
AC6	.611			
NC6		.754		
NC4		.658		
NC5		.555		
CC2H			.835	
CC1H			.555	
CC3H			.531	
CC5L				.656
CC4L				.527
CC6L				.498

Extraction Method: Maximum Likelihood; Rotation Method: Varimax with Kaiser Normalization.

Table 6.7 shows the final factor analysis, which revealed that three main components and two subcomponents of organisational commitment comprised the AC construct (three items: $M = 3.669$; $SD = 0.839$; $\alpha = 0.67$) and the NC construct ($M = 3.585$; $SD = 0.858$; $\alpha = 0.75$). The CC construct was related to two subscales, namely, high personal sacrifice (three items: $M = 3.526$; $SD = 0.870$; $\alpha = 0.71$) and low perceived alternatives (three items: $M = 3.329$; $SD = 0.815$; $\alpha = 0.55$).

6.3.2 The second stage

In the second stage of the investigation, the researcher was concerned only with establishing which linear components existed within the data and how a particular variable might contribute to various components (Field, 2005). The factor analysis

extraction methods (i.e., principal component)¹¹, was conducted for the 78 items that measured the variables in the study. Analysis revealed a 14-factor solution with high loadings of over 0.6. Seven items loaded over 0.5. One construct (manifest/medicate variables) in each of the expected factors featured negligible (less than 0.4) cross-loading on each of the alternative factors. The Kaiser-Meyer-Olkin measure of sampling adequacy, which is a measure of whether the distribution of values is adequate to conduct factor analysis, was 0.845, which falls in the acceptable range according to Hutcheson and Sofroniou (1999) and Kaiser (1974). The Bartlett's test of Sphericity was significant (9726.735, $p < .001$), confirming the multivariate normality of the data (see Table 6.8).

Table 6.8: KMO and Bartlett's Test for 14 factors.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.845
Bartlett's Test of Sphericity	Approx. Chi-Square	9726.735
	df	1378
	P value	< .001

Factor analysis is important in order to decide how factors are extracted. As a default, SPSS uses Kaiser's criterion to retain factors with eigenvalues greater than 1. This rule is appropriate whenever the sample size exceeds 250 and the average communalities exceed 0.6. In this research, the average across communalities is 0.06. Jolliffe's criterion (Jolliffe and Uddin, 2000) recommends retaining factors with eigenvalues greater than 0.7. However, there is little evidence in the available literature that Jolliffe's criterion is more appropriate than Kaiser's. Hence, Kaiser's cut-off is employed for this analysis (Field, 2005). In the initial unrotated solution, the eigenvalues of the first fourteen factors were 8.535, 5.087, 2.963, 2.702, 2.497, 2.171, 1.718, 1.568, 1.498, 1.362, 1.269, 1.182, 1.109 and 1.057, respectively. The eigenvalues and the scree test suggested that fourteen is indeed the appropriate number of factors to extract. The direct Oblimin rotation (Delta = 0) extracted fourteen factors explaining 65.51% of the variance. These factors accurately represent the antecedents and consequences of the organisational commitment construct.

¹¹ Followed by the Oblimin rotation method (Delta = 0) with Kaiser Normalisation, (Eigen values greater than one).

6.3.3 Antecedents

Note the following descriptive statistics for antecedents of commitment:

- Two variables of work experience (HRM work experience, including opportunity for learning (training): Ler (six items: $M=2.779$; $SD=1.089$; $\alpha=0.93$).
- Management communication: Com (four items: $M=3.093$; $SD=.958$; $\alpha=0.86$).
- Impersonal bureaucratic management: Bur (four items: $M=2.982$; $SD=0.749$; $\alpha=0.63$).
- Power distance: PD (four items: $M=2.346$; $SD=0.731$; $\alpha=0.61$).
- Uncertainty avoidance: AU (three items: $M=4.040$; $SD=0.732$; $\alpha=0.82$).
- Masculinity/Femininity: MF (five items: $M=3.473$; $SD=0.933$; $\alpha=0.87$).
- Individualism/Collectivism: I/C (three items: $M=3.714$; $SD=0.862$; $\alpha=0.77$).
- Affective commitment: AC (three items: $M=3.093$; $SD=0.839$, $\alpha=0.70$).
- Normative commitment: NC (four items: $M=3.404$; $SD=0.777$; $\alpha=0.72$).
- Continuance commitment: CC is measured using two subscales, high personal sacrifice CCH (three items: $M=3.526$; $SD=0.871$; $\alpha=0.71$) and low perceived alternative CCL (three items: $M=3.329$; $SD=0.8154$; $\alpha=0.55$).

6.3.4 Consequences of commitment

Note the following descriptive statistics for consequences of commitment:

- Intention to leave: Int (three items: $M= 2.683$; $SD = 1.060$; $\alpha = 0.82$).
- Organisational citizen behaviour: OCB two subcomponents, OCBO and OCBI.
- Note that factor analysis resulted in only one factor for OCB Items (OCBO2, OCB5, OCBI1, OCBO1 and OCB3) and contains elements from both OCBO and OCBI factors. Since our focus is on the relationship between the three components of commitment and OCB rather than on a subscale of OCB and since the aim of the study is not to examine the subcomponent of organisational citizen behaviour, we treat all these items as one factor and exclude cross-loading items and those with low-score factor loadings; this eliminates five items ($M = 3.887$; $SD = 0.607$; $\alpha = 0.73$).

- In-role behaviour: IRB (three items: M = 3.329; SD = 0.663; $\alpha = 0.72$). Table 6.8 shows the factor loading pattern matrix and structure matrix (using principle component analysis PCA), mean, standard deviation, average variance extracted (AVE) and construct reliability (i.e., Cronbach's Alpha) for all fourteen factors.

Table 6.9: Items and factor loadings from the pattern and structure matrixes, including Cronbach's alpha, Mean, Standard Deviation, Average Variance Extracted.

Factor	Factor loading Pattern matrix	Factor loading Structure matrix	Factor	Cronbach's Alpha	Mean	SD	Average Variance Extracted AVE
Training (Opportunity of learning)(Ler)							
Ler8	0.921	0.905					
Ler6	0.902	0.891					
Ler5	0.895	0.889					
Ler4	0.821	0.859	1	$\alpha = 0.93$	2.779	1.089	
Ler7	0.795	0.835					
Ler2	0.756	0.791					84.84%
Uncertainty Avoidance (UA)							
UA3	0.867	0.887					
UA2	0.819	0.819	2	$\alpha = 0.82$	4.04	0.732	
UA5	0.737	0.808					80.76%
Masculinity/Femininity (M/F)							
MF2	0.837	0.839					
MF3	0.816	0.832					
MF4	0.813	0.827	3	$\alpha = 0.87$	3.473	0.933	
MF5	0.807	0.792					
MF1	0.733	0.764					
MF2	0.837	0.839					80.12%
Intention to Leave (Int)							
Int3	0.821	0.839					
Int1	0.798	0.832	4	$\alpha = 0.82$	2.683	1.06	
Int2	0.781	0.829					79.98%
High Personal Sacrifice (CCH)							
CC2H	0.761	0.803					
CC3H	0.703	0.717	5	$\alpha = 0.71$	3.526	0.871	
CC1H	0.608	0.658					69.08%
Power Distance(PD)							
PD6	0.711	0.703					
PD4	0.708	0.683	6	$\alpha = 0.61$	2.346	0.731	
PD5	0.632	0.676					
PD3	0.508	0.546					63.97%
Organisational Citizen chip Behaviour (OCB)							
OCBO2	0.744	0.792					
OCBO1	0.667	0.669					
OCBO4	0.621	0.660	7	$\alpha = 0.73$	3.887	0.607	
OCBO3	0.625	0.649					
OCBO5	0.592	0.635					64.81%

Factor	Factor loading Pattern matrix	Factor loading Structure matrix	Factor	Cronbach's Alpha	Mean	SD	Average Variance Extracted AVE
Impersonal Bureaucratic arrangement (Bur)							
Bur4	0.740	0.717					
Bur1	0.672	0.714	8	$\alpha = 0.63$	2.982	0.749	
Bur3	0.587	0.693					
Bur2	0.561	0.627					64.00%
Management communication(Com)							
Com2	0.843	0.849					
Com4	0.771	0.831	9	$\alpha = 0.86$	3.093	0.958	
Com1	0.764	0.815					
Com5	0.702	0.783					77.01%
Affective Commitment (AC)							
AC4	0.799	0.812					
AC6	0.734	0.751	10	$\alpha = 0.70$	3.669	0.839	
AC3	0.685	0.744					73.93%
Normative Commitment (NC)							
NC5	0.736	0.789					
NC2	0.556	0.658	11				
NC6	0.543	0.593		$\alpha = 0.72$	3.404	0.777	
NC4	0.508	0.538					58.48%
In Role Behaviour (IRB)							
IRB1	0.795	0.831					
IRB2	0.735	0.802	12	$\alpha = 0.72$	4.136	0.663	
IRB4	0.635	0.654					72.01%
Low Perceived Alternative(CCL)							
CC5L	0.709	0.723					
CC4L	0.688	0.702	13	$\alpha = 0.55$	3.329	0.815	
CC6L	0.624	0.643					67.37%
Individualism/Collectivism(I/C)							
IC1	0.792	0.831					
IC2	0.784	0.834	14	$\alpha = 0.77$	3.714	0.862	
IC6	0.642	0.711					73.79%

Table 6.9 continued.

Validity is comprised of the following three components: convergent validity, discriminant validity and nomological validity.

1). Convergent Validity

Convergent validity refers to items that indicate a specific construct converge or share a high proportion of variance. There are several ways to estimate the relative convergent validity:

- *Factor Loadings*: Standardised loading estimates should be at least 0.5 or higher; ideally, they should be 0.7 or higher (Hair et al., 2006). In our research, most factor loadings were over 0.6, with only 7 items between 0.5 and 0.6; see Table 6.9.

- *Average Variance Extracted*: AVE is computed as the total squared (or standardised¹²) factor loadings divided by the number of items. All our AVE values were over 0.6. This indicates adequate convergent validity. AVE higher than 0.5 (50%) indicates adequate convergent validity; see Table 6.9.

- *Construct Reliability*: Reliability is also an indicator of convergent validity. In our research, we use Cronbach's alpha, "one of the most important and pervasive statistics in research involving test construction and use" (Cortina, 1993, p.98), to estimate construct reliability. Kline (1999) stated that even though the generally accepted value of 0.8 is appropriate for cognitive tests such as an intelligence test, a cut-off of 0.7 is more suitable for ability tests. Moreover, when addressing psychological constructs (e.g., commitment), even values below 0.7 may be expected due to the diversity of measured constructs. However, Cortina (1993) points out that "to have a general guideline, alpha needs to be used with caution, because the value α depends on the number of items on the scale, because the top half of the equation for α includes the number of items squared, thus, as the number of items on the scale increase, Cronbach's alpha will increase" (p.102). Alpha values for all our variables were over 0.7. We ran the test again for each factor after excluding the cross-loading items and the items with low-value loadings. Note that the alpha values (0.61, 0.55 and 0.63) for PD, CCL and Bur respectively, are decreasing. In addition, Cronbach (1951) suggests that if a questionnaire contains subscales, the alpha should be calculated separately for those subscales, as is the case for the CC subscales, CCH and CCL. For this reason, we ran the tests separately. As a result, all but one of the loadings were high; the average variance extracted was over 0.5, and the reliability test for most variables exceeded 0.7. This provided sufficient evidence of convergent validity.

2). Discriminant Validity

Discriminant validity is the extent to which a construct is truly distinct from other constructs (Hair *et al.*, 2006). The differences between convergent and discriminant validity reside in the fact that individual items should represent exactly one latent construct. In other words, the existence of cross-loading indicates a discriminant

¹² In our research, we squared factor loading using extraction method "the principle component analysis extraction method, the rotation method varimax with Kaiser Normalisation.

validity problem. Therefore, to assess discriminant validity, we compared the percentage of variance extracted for any two constructs with the square of the correlation estimates between these two constructs. The variance extracted should be greater than the correlation estimate. In our research, the average variance extracted (AVE) was the average squared factor loading. Note that the AVE was larger than any squared correlation of the latent variables (LV) within the context of that factor, which supports discriminant validity (see Table 6.10). Additional evidence for discriminant validity is that estimated correlations among factors were less than the recommended value of 0.85 (Kline, 2005). Therefore, the adapted measurement model appears to exhibit discriminant validity and does not feature any cross-loading among measured variables.

Table 6.10: Squared correlation between factors. The value in italics is AVE.

Component Correlation Matrix														
	Ler	UA	MF	Int	CCH	PD	OCB	IC	Com	AC	Bur	IRB	CCL	NC
Ler	<i>0.84</i>													
UA	0.000	<i>0.80</i>												
MF	0.008	0.032	<i>0.80</i>											
Int	0.024	0.04	0.002	<i>0.79</i>										
CC	0.004	0.016	0.003	0.01	<i>0.69</i>									
PD	0.001	0.00	0.004	0.002	0.00	<i>0.63</i>								
OC	0.008	0.044	0.012	0.00	0.000	0.00	<i>0.64</i>							
IC	0.000	0.036	0.027	0.000	0.00	0.01	0.014	<i>0.73</i>						
Com	0.129	0.09	0.01	0.036	0.000	0.003	0.008	0.022	<i>0.77</i>					
AC	0.048	0.00	0.008	0.036	0.000	0.00	0.012	0.012	0.057	<i>0.73</i>				
Bur	0.024	0.009	0.001	0.002	0.002	0.01	0.009	0.000	0.024	0.004	<i>0.64</i>			
IRB	0.006	0.084	0.022	0.002	0.008	0.004	0.028	0.008	0.004	0.009	0.004	<i>0.72</i>		
CCL	0.000	0.000	0.004	0.000	0.014	0.004	0.002	0.003	0.000	0.006	0.004	0.001	<i>0.67</i>	
NC	0.019	0.008	0.012	0.028	0.022	0.004	0.004	0.01	0.036	0.024	0.001	0.006	0.003	<i>0.58</i>

3). Nomological validity

Nomological validity is based on the construct correlation matrix elements that are expected to be related to one another; in other words, it relates to the extent to which the scale predicts the data according to theory (Hair *et al.*, 2006). According to Cronbach and Meehl (1955, p.291), “To validate a claim that a test measures a construct, a nomological net surrounding the concept must exist.” They recommended developing a nomological network for the measures. Such a network consists of 1) the theoretical framework regarding the construct that the researcher is

trying to measure, 2) the empirical framework for how one measures the construct, and 3) the proposed relation between these two frameworks.

Accordingly, Meyer and Allen (1997) proposed a nomological network of organisational commitment measures to evaluate construct validity. They pointed out that their three-component commitment model (Meyer and Allen, 1991) summarised a set of hypothesised associations between the three commitment variables and other variables believed to be consequences and antecedents of commitment. That is, they demonstrated that their empirical findings matched their hypothesised patterns. The correlations between the factor scores for each commitment component (i.e., AC, NC, CCH and CCL) and the other variables are shown in Table 6.11. The results support the hypothesis that these constructs are related to one another and thus provide evidence of discriminant validity.

Table 6.11: Correlations Matrix between Variables.

	AC	CCH	CCL	NC	Ler	Com	M/F	UA	I/C	Bur	PD	Int	IRB	OCB
AC	1													
CCH	.094* .050	1												
CCL	-.074 .125	.194** .000	1											
NC	.266** .000	.212** .000	-.071 .142	1										
Ler	.286** .000	.146** .002	-.018 .705	.220 .000	1									
Com	.303** .000	.042 .382	.150** .002	.294** .000	.000 1.00	1								
M/F	.075 .118	.081 .092	.085 .079	.123* .011	.000 1.00	.000 1.00	1							
UA	.013 .782	.204** .000	.048 .322	.057 .237	.000 1.00	.000 1.00	.000 1.00	1						
I/C	.184** .000	.110* .023	-.063 .193	.189** .000	.000 1.00	.000 1.00	.000 1.00	.000 1.00	1					
Bur	-.111* .021	-.037 .449	-.074 .126	.062 .200	.000 1.00	.000 1.00	.000 1.00	.000 1.00	.000 1.000	1				
PD	.039 .414	.127** .008	-.079 .100	.173** .009	.000 1.00	.000 1.000	.000 1.00	.000 1.00	.000 1.000	.000 1.00	1			
Int	-.290** .000	-.218* .037	.22* .011	.272** .000	-.185** .000	-.283** .000	.118* .014	.027 .580	-.008** .007	.091 .058	-.129* .007	1		
IRB	.059 .219	.127** .008	-.093 .053	.129 .007	.102* .034	-.033 .498	.141 .003	.375** .000	.225** .000	.003 .951	.087 .071	.000 1.000	1	
OCB	.178** .000	-.218 .000	-.051 .290	.146 .002	.125 .009	.148** .002	.062 .201	.174** .000	.188** .000	-.060 .212	.000 .993	.000 1.000	.000 1.0	1

6.4 Phase two: Confirmatory Factor Analysis (CFA)

The second phase of data analysis consists of confirmatory factor analysis (CFA). CFA is a special type of factor analysis; as such, it is part of structural

equation modelling (SEM). It is different from exploratory factor analysis (EFA) in that the researcher must be able to tell the SEM programme which variables belong with which factors before an analysis can be conducted. CFA not only must provide an acceptable fit, but must also show evidence of construct validity (Hair *et al.*, 2006).

6.4.1 Stage One: The commitment model

This model was tested in two stages. The antecedents of the three types of commitment can be identified in terms of work experience (i.e., training, opportunities for learning and management communication) and side bets (namely impersonal bureaucratic arrangements).

The third category of antecedents consists of cultural dimensions (i.e., power distance, uncertainty avoidance, individualism/collectivism and masculinity/femininity). The second stage involves examining the relationship between each measure of commitment with three effectiveness-related outcomes: intention to leave (Int), in-role behaviour and organisational citizen behaviour (OCB). Both antecedents and consequences were examined simultaneously using the same model. These variables are discussed in terms of hypothesised relationships between the three types of commitment.

6.4.1.1 Confirmatory Factor Analysis

CFA results for the three-dimensional commitment model developed by Meyer and Allen (1991) are reported in Table 6.12. We began by assessing the factor structure of the organisational commitment model. Basically, this method specifies models with different factor structures and then examines the extent to which they fit the data. Hence, we estimated six different commitment models. The first model is a null model, which means that it hypothesises that each item in the scale represents a single factor. Next, five models were specified, developed and evaluated according to the logic of established research (Anderson and Gerbing 1988; Magazine, Williams L. and Williams M., 1996; Iverson and Buttigieg, 1999; Culpepper, 2000; Cheng and Stockdale, 2003). CFAs were used to test general one-factor, oblique two-factor, oblique three-factor, oblique four-factor solutions and oblique five factor solutions.

The one-factor general model hypothesises that only one general factor underlies the commitment construct (i.e., the construct is unidimensional). The two-factor model forces affective and normative items to load onto a single factor as well as conflating both dimensions of continuance commitment into a single construct. Note that discriminant validity for these two scales has been considered in previous studies (Ko *et al.*, 1997). According to these studies, reported inter-scale correlations are generally moderate to strong (e.g., *r* is between 0.34 and 0.50, according to Dunham *et al.*, 1994).

The three-factor model solution corresponds to Meyer and Allen’s (1991) original model. The four-factor solution (i.e., our hypothesised model) reflects a model that divides continuance commitment into high personal sacrifice metrics and low alternatives (Hackett *et al.*, 1994; Meyer *et al.*, 1990). The five-factor model reflects the two sub-dimensions of CC, two sub dimensions of AC (positive wording and negative wording) and one NC dimension (Cheng and Stockdale, 2003; Magazine *et al.*, 1996).

Table 6.12: Goodness of fit of alternate factor model specification of organisational commitment.

Model	χ^2	df	P value	CMIN/DF	GFI	AGFI	RMSEA	CFI	NFI	PNFI
Null	2162.036	153	< .001	14.131	.476	.415	.174	NA	NA	NA
1 factor	829.090	138	< .001	6.008	.782	.730	.108	.656	.617	.556
2 factor	614.050	136	< .001	4.515	.849	.810	.090	.762	.716	.636
3 factor	551.824	133	< .001	4.149	.857	.817	.085	.792	.745	.647
4 factor	443.616	130	< .001	3.236	.901	.869	.072	.844	.806	.685
5 factor	618.413	126	< .001	4.908	.851	.798	.095	.823	.790	.650
Modified 4 factor	99.746	48	< .001	2.078	.964	.941	.050	.954	.916	.666

The CFA results for the three-dimensional Meyer and Allen (1991) scale are presented in Table 6.12. CFA, along with the comparative fit index, was used to assess the model fit. Bollen (1989) has reported several fit measures, such as the ratio of χ^2 to the degrees of freedom or simply χ^2 to measure the absolute goodness-of-fit, as well as several indices such as the GFI, AGFI, CFI and NFI to measure the comparative goodness-of-fit (Bentler, 1990). The GFI measures the relative amount of covariance and variance collectively accounted for by the model. The parsimonious normalised fit index (PNFI) is used to measure parsimonious fit, and

the normalised fit index (NFI) is used to compare the fit of the model to the null model when all variables are assumed to be independent (Bentler and Bonett, 1980).

Browne and Cudeck (1993) suggest that a root mean square error of approximation (RMSEA) value of 0.08 or less would indicate an acceptable model fit. In other words, it would indicate a reasonable error of approximation in the population. Moreover, it is not recommended to employ any model with a RMSEA greater than 0.1 (Browne and Cudeck, 1993). Models with error values less than 0.05 indicate an excellent fit (Jöreskog and Sörbom, 1995); GFI and CFI values of 0.90 to 0.95 or greater are considered indicative of acceptable overall fit (Medsker, Williams and Holahan, 1994). Moreover, Hu and Bentler (1999) recommend that a PNFI value of 0.60 be the threshold for reasonable model fit. However, the normalised chi-square (χ^2/df) is recommended as a measure of model fit because of the sensitivity of χ^2 to sample size (Kline, 2005). Bollen (1989) proposes that NFI values of 2.0, 3.0 and even as high as 5.0 should indicate reasonable fit. It is worth noting that, because there is lack of agreement among researchers about the best goodness-of-fit-index and because some indices are sensitive to sample size, the best strategy is to adopt several different goodness-of-fit indices (Gerbing and Anderson, 1993).

Given that the commitment factors were part of the general commitment construct, we allowed the different factors to be correlated in the parameter specifications. Regarding alternative factor models, the hypothesised four-factor model (including affective, normative and two types of continuance commitment) for organisational commitment offered the best fit with the collected data. According to our comparative analysis and as listed in Table 6.12, among the other five models, the four-factor model presented a significant increase in the goodness-of-fit. As expected, the null model that indicates no relationships among the observed variables featured the poorest fit index; in fact, its fit index was much worse than that of the next most-restricted model, which allowed for only one general factor. In other words, the one-factor model showed a significant improvement in goodness-of-fit over the null model ($\Delta\chi^2(15) = 1332.946, p < 0.05$). The oblique two-factor model, which forced affective and normative commitment items to reflect one factor and both continuance commitment scales to reflect a second, fit the data much better than the one-factor model. This was confirmed by statistical significance in the chi-square

metric ($\Delta\chi^2 (2) = 215.04, \rho < 0.05$) and by the considerable improvements in the GFI, CFI, NFI and RMSEA parameters.

The three-factor model represented a better fit than the two-factor model ($\Delta\chi^2 (2) = 26.226, \rho < 0.05$); moreover, significant differences between the three-factor model and four-factor model ($\Delta\chi^2 (3) = 108.208, \rho < 0.05$) include a normalised χ^2 (χ^2/df) of 3.236 a much higher GFI of 0.901 and a RMSEA of 0.072. Finally, the five-factor model, which includes two sub-components of AC and CC, had a better fit indices than the three- and two-factor models in CFI and NFI but had a higher χ^2/df (4.908) and a RMSEA of 0.095 (see Table 6.12). These results clearly indicate that the four-factor model offers the best fit for the data, as this model exceeded the 0.01 threshold for differences, in accordance with Widaman's (1985) recommendation. In addition, it is consistent with previous studies (Hackett *et al.*, 1994; Meyer *et al.*, 1990; McGee and Ford, 1987; Iverson and Buttigieg, 1999; Culpepper, 2000).

A theoretical model with four separate scales like that proposed in the present study thus exhibits a significant improvement in explanatory capacity (Frutos *et al.*, 1998, cited in González and Guillén, 2008). Moreover, the results suggest that a four-factor model provides the best fit for the data, supporting a two-dimensional CCS structure. To improve this model further, we modified the model's four factors by dropping the items that cross-loaded among commitment latent variables as well as any items with low-factor loading items (see Table 6.6). As a result, the modified model shows a modest improved fit for the Saudi data (see Table 6.12). Thus, this model was used for all subsequent analysis and hypothesis-testing.

The maximum likelihood estimation method was used in all CFA tests, because it assumes multivariate normality. To evaluate the appropriateness of this assumption, the data were examined to determine whether the observed variables were normally distributed, by assessing the skewness and kurtosis associated with each commitment item. According to Kline's guidelines (1998), data with an absolute univariate skewness index greater than 3.0 are considered extremely skewed, while data with an absolute univariate kurtosis index over 8.0 are considered extremely kurtotic. The skewness and kurtosis values for all items ranged from 1.134 to 1.618. Based on Kline's guidelines, all variables in the dataset were concluded to exhibit multivariate

normality. (See Table 6.13 for the relevant factor-loadings, reliability measurements, means and standard deviations for the 18 items.)

Table 6.13: Factor loading, reliability, mean, standard deviation, skewness and kurtosis and the index associated with each commitment item.

	Organisational Commitment Items	Maximum likelihood estimations of factor loading	Cronbach's Alpha if item deleted	Mean	SD	skew	kurtosis
AC1	I would be very happy to spend the rest of my career with this organisation.	.694	.637	3.50	1.05	-.588	-.204
AC2	I really feel as if this organisation's problems are my own.	.530	.644	3.47	1.05	-.695	-.191
AC3	I do not feel like 'part of the family' at my organisation (R).	.538	.692	3.50	0.97	-.621	-.183
AC4	I do not feel 'emotionally attached' to this organisation(R).	.503	.686	2.38	1.01	-.929	1.325
AC5	This organisation has a great deal of personal meaning for me.	.558	.647	3.64	0.96	-.925	.611
AC6	I do not feel a strong sense of belonging to my organisation (R).	.430	.688	2.33	1.07	-1.134	1.618
CCH1	It would be very hard for me to leave my organisation right now, even if I wanted to.	.640	.620	3.56	1.12	-.868	.367
CCH2	Too much of my life would be disrupted if decided I wanted to leave my organisation right now.	.782	.617	3.35	1.18	-.295	-.859
CCH3	Right now, staying with my organisation is a matter of necessity as much as desire.	.582	.639	3.69	0.97	-.676	-.256
CCL4	I believe I have too few options to consider leaving this organisation.	.642	.648	3.29	1.07	-.294	-.816
CCL5	One of the few negative consequences of leaving this organisation would be the scarcity of available alternative.	.622	.655	3.46	1.18	-.415	-.802
CCL6	If I had not already put so much of myself into this organisation, I might consider working elsewhere.	.547	.651	3.29	1.12	-.466	-.568
NC1	I do not feel any obligation to remain with my current employer (R).	.516	.704	2.44	1.01	-.444	-.535
NC2	Even if it were to my advantage, I do not feel it would be right to leave my organisation now.	.430	.647	2.84	1.06	.121	-.658
NC3	I would feel guilty if left my organisation now.	.626	.623	3.10	1.12	-.133	-.780
NC4	This organisation deserves my loyalty.	.776	.642	3.69	1.01	-.721	.152
NC5	I would not leave my organisation right now because I have a sense of obligation to the people in it.	.571	.640	3.48	1.06	-.516	-.379
NC6	I owe a great deal to my organisation	.736	.641	3.61	1.02	-.701	.125

Note: (sample n = 433; R = reverse coded items or negatively coded key items).

6.4.1.2 Parameter estimates

Table 6.14 shows the squared parameter estimates associated with the four-factor model. These values are variance components that reflect the percentage of commitment and error variance associated with each item. In AMOS 16.0, the

squared multiple correlations for each item express both the variance component and the error variance that approximates the variance of each commitment item (see Table 6.14). Parameter estimates should have the correct sign and size in order to be consistent with the underlying theory (Byrne, 2001). Even so, the sample size is reasonable ($n = 433$) for the variables to be statistically significant. The average of the error components for the AC scale was 0.69; for NC, 0.61; for CCL, 0.69; and for CCH, 0.54. There was also a large degree of error associated with many of the items, including high error components for the AC6, NC2 and CCL6 scales. Perhaps item AC6 was negatively worded, in which case this may have created confusion for respondents. Even though these scales as a whole have a satisfactory Cronbach's alpha (see Table 6.13), it is apparent that when the individual items feature high non-commitment variance, greater effects may occur.

Table 6.14: Variance components for the commitment items for the four-factor model.

	Items	Affective Commitment (AC)	Continuance Commitment High sacrifice (CCH)	Continuance Commitment Low alternative (CCL)	Normative Commitment (NC)	Error
1.	AC1	.485				.515
2.	AC2	.286				.714
3.	AC3	.285				.715
4.	AC4	.250				.750
5.	AC5	.315				.685
6.	AC6	.184				.816
7.	CCH1		.414			.586
8.	CCH2		.615			.385
9.	CCH3		.342			.658
10.	CCL4			.417		.583
11.	CCL5			.375		.625
12.	CCL6			.125		.875
13.	NC1				.267	.733
14.	NC2				.185	.815
15.	NC3				.393	.607
16.	NC4				.603	.397
17.	NC5				.326	.674
18.	NC6				.542	.458

However, because standard errors are influenced by the unit of measurement and the magnitude of the parameter estimates, there exist no definitive criteria for small or large values (Jöreskog and Sörbom, 1995). Moreover, the results showed no negative

variance readings and no covariance or correlation matrices that were not positive and definite. In addition, there were no parameter estimates greater than 1.00 and no unusually large (greater than 1.00) or small (less than 0.01) standard errors (Byrne, 2001).

6.4.1.3 Statistical significance of parameter estimates

In the interests of scientific parsimony, non-significant parameters, with the exception of error variances, were considered unimportant in the model. Standardised solutions revealed that all estimates are reasonable and statistically significant at the 0.01 level, and all standard errors are adequate (see Table 6.14).

6.4.1.4 Inter-scale correlations

The inter-correlations of factors in Table 6.15 closely reflect the results of many previous studies (Allen and Meyer, 1990; Hackett *et al.*, 1994). According to exploratory factor analyses, the correlations between AC, NC and the two subcomponents CCH and CCL were moderate to low. The correlation between NC and CCL was not significant (-0.004), whereas the correlation between AC and CCL was significant and negative ($r = -0.249$, $p < 0.01$). However, the correlations between AC and the subcomponent CCH was not significant, but the relationship between NC and subcomponent CCH was moderately significant ($r = 0.369$, $p < 0.001$). Meanwhile, the inter-correlation between NC and AC was positive, significant and strong ($r = 0.651$, $p < 0.001$).

We conclude that CFA supports the four-factor oblique model (including AC, NC, CCL and CCH) insofar as it appears to fit the data better than the two-, three- or five-factor models. The modest improvement based on the fit indices (Table 6.12) and significance tests (Table 6.11) also confirm this conclusion. Moreover, the results also revealed that the two subcomponents (CCL and CCH) were distinct yet moderately correlated ($r = 0.465$, $p < 0.001$). This finding is consistent with the results of Allen and Meyer (1990) and McGee and Ford (1987) for a non-Saudi setting.

Table 6.15: Four-factor model inter correlation.

	CCL	NC	CCH	AC
CCL	1.000			
NC	-.004	1.000		
CCH	.465**	.369***	1.000	
AC	-.249**	.651***	.075	1.000
Correlation significant p<.01 * Correlation significant p<.001				

6.4.1.5 Testing for latent mean structure (through invariance analysis)

We now test H2, which states that there is a significant difference in the commitment level among public employees according to their level of seniority. As noted in Chapter Five, data were divided into three organisational levels of seniority (upper-level, mid-level and lower-level groups). We were able to test this hypothesis through multi-group comparisons of latent mean structures. Our literature review reveals only a few studies that have relied on this test.

This test is probably not used frequently due to complexities associated with earlier versions of SEM statistical packages. However, recent programmes, such as AMOS 16.0, as well as factor mixture models (FMMs) have overcome these complexities, thus making the test simpler. Additionally, in the usual tests of multi-group comparisons (e.g., ANOVA and MANOVA), the focus is on the extent to which differences are statistically significant among the observed means corresponding to the different groups. Since these variables are drawn from raw data, they are measured as observed values. Alternatively, the means of latent variables are unobservable in the sense that they cannot be directly measured. Instead, they gain structure indirectly from their indicator variables, which are observable and thus directly measurable. In another words, MANOVA can be used when the analysis includes more than one related dependent variable, as the dependent variables in these cases are indeed observed. When the dependent variable of interest is not observed and differences in the latent construct are of primary interest, neither the *t*-test nor MANOVA is suitable. Instead, the researcher may use SEM to test latent mean differences (Allua, Stapleton and Beretvas, 2008).

As a result, in testing for the invariance of the mean structure, we must test for the equivalence of means related to each underlying construct. Therefore, the focus must

be on testing for discrepancies in the latent means of AC, CCH, CCL and NC for each group.

6.4.1.6 Estimating latent means

Testing for latent mean differences across groups requires appropriate methods. With regards to model identification, we began by assessing the factor structure of the commitment model. Recall that this was addressed in stage one of our data analysis. The results conclusively indicate that the hypothesised four-factor model offers the best fit indices. The next step involved testing measurement equivalences across the three group samples; recall that the size of the higher-level group is 111, the size of the mid-level group is 204 and the size of the lower-level group is 107.

Table 6.16: Invariance analysis results¹³.

Model	CMIN	DF	P	GFI	CFI	NNFI	RMSEA
Default model (free parameter)	227.963	144	.000	.921	.931	.839	.037
Constraint model 1 (factor loading equal)	249.086	160	.000	.914	.927	.824	.036
Constraint model 2 (factor loading, covariance equal)	241.513	155	.000	.918	.929	.829	.036
Independence model	1412.459	198	.000	.574	.000	.000	.121

We conducted a three-group analysis of the measurement model. In comparing models, we focused on the CFI and NNFI rather than the χ^2 difference test (see Table 6.16). When testing for factorial invariance, we must consider a baseline model that is separately estimated for each group (Byrne, 2001). The baseline model represents the model that best fits the data from both a parsimonious and a substantive perspective (see Table 6.17). However, measuring instruments are often group-specific, and therefore, baseline models are not likely to be entirely identical across groups (Byrne, 2001; 2008). As shown in (Table 6.18) the result of the χ^2 test difference (0.174) is insignificant for the factorial loading at the 0.05 significance level. This suggests a conceptual coherence among the three seniority groups in terms of the commitment components. Once this fact was established, the next step was to test for covariance equality. Note that the χ^2 difference test is also

¹³ Note: GFI: goodness of fit index; CFI= comparative fit index; NNFI= Non-Normed fit index; RMSEA = root mean error of approximation.

insignificant. Therefore, we concluded that the measurement model of the three components of OC is not significantly different for the upper-level, mid-level and lower-level groups.

Table 6.17: Baseline comparisons.

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.839	.778	.934	.905	.931
Constraint model 1	.824	.782	.929	.909	.927
Constraint model 2	.829	.782	.931	.909	.929
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 6.18: Model comparison.

Model (Assuming default model to be correct)	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Constraint model 1 (factor loading equal)	16	21.123	.174	.015	.017	-.004	-.004
Constraint model 2 (factor loading, covariance equal)	11	13.550	.259	.010	.011	-.003	-.004

Next we conducted an invariance analysis¹⁴. We commenced our invariance analysis with an unconstrained model, allowing all estimated parameters to vary freely across the three groups. This provided a very good fit; the results are listed under “Default model” in Table 6.16. Then, we estimated a constrained model (i.e., “Constrained model 1”) with equal factor loadings for the higher-level, middle-level and lower-level groups ($H1 = M1 = L1$). We noticed changes in the CFI and GFI, relative to the free-parameter model, of 0.004 and 0.007, respectively. The change in NNFI was 0.015.

Finally, we constrained the factor covariance to be equal across the three groups (i.e., “Constrained model 2”). In the second constrained model, the changes in GFI and CFI were 0.004 and 0.002, respectively, whereas the change in NNFI was 0.005. While the changes in the CFI and GFI were smaller, the difference between the default model and the constrained model, relative to the free parameter model, was 0.015. When assessing measurement invariance across groups, we observed changes

¹⁴ An analysis that involves more than one sample where the central concern is whether or not components of the measurement model and /or the structural model are invariant (i.e., equivalent) across a particular group (Byrne, 2001, p.173). Thus, tests of invariance are needed when we want to compare groups (e.g., cross-cultural) or groups formed from one sample by dividing it up on a logically meaningful characteristic (e.g., gender, organisational level).

in the CFI and NNFI that were smaller than 0.01; this value has been proposed as an appropriate threshold for assessing such measurements (van Hooft *et al.*, 2006). Moreover, only the factor loadings were assumed to be invariant across all groups. The invariance of the factor loadings, indicator intercepts and covariance provides strong support for measurement invariance (Allua *et al.*, 2008).

Thus, we conclude that the measurement model is not significantly different across the three organisational seniority (or job) levels in our Saudi sample. With regards to covariance structure analysis, we assumed that all observed variables were measured as deviations from their means and that the means equal zero. Consequently, the intercept terms do not influence the analysis. In contrast, when testing for differences in the latent mean structures, the intercepts are non-zero, and therefore, they had to be included in the analysis. A model that involves mean structures should thus include regression coefficients, independent variables, their variances and covariances, the intercepts of the dependent variables and the means of the dependent variables (Byrne, 2001).

We used AMOS 16.0 to obtain a valid comparison of latent means for the four commitment components. The following steps were employed:

1. The variances of the four latent variables (AC, CCH, CCL and NC) together with the covariances between them were freely estimated for each of the three levels of seniority groups.
2. The means of the error terms were not estimated but were instead constrained to zero. However, the variances of the error terms were freely estimated in each group, as were the error covariances.
3. Factor loadings were constrained across the three groups, along with those already constrained by being fixed to equal one.
4. All the latent variables' intercepts were freely estimated for the higher-level and lower-level groups. However, they were constrained to zero for the mid-level group, which became the reference group.

The above steps allowed us to address the diverse problems that can arise in model and factor identification (Byrne, 2001, p.238).

6.4.1.7 Findings of latent mean

Several analyses were undertaken to answer the research questions, including structured means model analysis, latent means estimates, evaluation of the goodness-of-fit between the commitment measurement model and the data and MANOVA.

Mean differences for the higher-level and mid-level groups: Table 6.19 represents the latent mean differences in the latent variables (i.e., AC, CCH, NC and CCL) between the upper-level (H) and mid-level (M) groups. The results show that significant differences exist at the 0.001 and 0.05 levels, suggesting significant differences in the means of the commitment component factors across the two groups. However, the CCL critical ratio is 0.999 ($p = 0.318$). This indicates that the higher-level group, the means of which were freely estimated, exhibits similar CCL levels to those of the mid-level group. In contrast,

Table 6.19: The latent mean differences between higher (H1) and mid-levels (M1); means, (H1-Default model).

	Estimate	S.E.	C.R.	P	Label
AC	.208	.094	2.223	.026	Hr1
CCH	-.396	.131	-3.032	.002	Hr2
NC	.336	.105	3.185	.001	Hr4
CCL	.113	.113	.999	.318	Hr3

Table 6.20 lists the mean differences in the latent variables (i.e., AC, CCH, CN and CCL) between the lower level and mid-level groups. No significant differences were found between the latent means across the low-level and mid-level groups.

Table 6.20: The latent mean differences between middle (M1) and lower levels (L1); means, (L1-Default model).

	Estimate	S.E.	C.R.	P	Label
AC	.001	.094	.014	.989	Lr1
CCH	.030	.144	.211	.833	Lr2
NC	.173	.114	1.523	.128	Lr4
CCL	.183	.123	1.485	.138	Lr3

6.4.1.8 Goodness of fit statistics

When the equality constraints of the three groups only marginally influence the model fit, it is reasonable to consider measurement equivalence. However, if the equality constraints force the observed variables to intercepts across the two groups -

the upper and the middle- the model fit with the data remains resolutely reasonable (CFI = .914, RMSEA=.039). Given the values of the model fit indices, it seems reasonable to conclude that on the whole, the two groups H1 and M1 differ regarding AC, CCH and NC. Conversely, CCL is similar across the two groups.

H2 states that there exists a significant difference in commitment level among public employees according to their organisational level. In terms of means comparisons, the most significant differences between the higher-level and mid-level groups is with regards to NC; the mean estimate was 0.336 ($p < 0.001$). This was followed by CCH; CCH was lower in the higher-level group than at the other job levels the mean estimate was negative (- 0.396, $p < 0.001$). However, levels of AC significantly differed across groups as well; AC was higher in the upper-seniority group than in the other job-level or seniority groups with a mean of 0.208 ($p < 0.05$); see Table 6.19. Therefore, we can deduce the following results: Saudi public-sector employees in more senior jobs exhibit higher levels of normative and affective commitment and lower levels of personal sacrifice than less senior employees. H2 is thus fully supported.

6.4.1.9 Correlation between the commitment components across the three groups

The strongest correlations between the components of commitment in the lower-level group are between AC and NC ($r = 0.673$, $p < 0.05$), followed by CCH and CCL ($r = 0.552$, $p < 0.001$), and CCH and NC ($r = 0.310$, $p < 0.05$). In contrast, a negative significant correlation was found between AC and CCL ($r = -0.514$, $p < 0.05$). Within the least senior group, no significant relationship was found between NC and CCL nor between AC and CCH (see Table 6.21).

Table 6.21: Correlation between OC components at the lower level of an organisation; L1-Default model.

	Estimate	S.E.	C.R.	P	Label
AC <--> NC	.673	.120	2.560	.010	Lr6
AC <--> CCH	-.189	.100	-1.011	.312	Lr1
CCH <--> NC	.310	.115	2.295	.022	Lr5
NC <--> CCL	-.127	.114	-.964	.335	Lr3
CCH <--> CCL	.552	.163	3.415	***	Lr2
AC <--> CCL	-.514	.141	-1.961	.050	Lr4

*** <0.001

With respect to the most senior group, correlations existed between AC and NC, between NC and CCH as well as between CCH and CCL ($r = 0.588, p < 0.001$; $0.382, p > 0.01$; $0.375, p < 0.05$, respectively), as seen in Table 6.22. These correlations were not unexpected because they reflected higher levels of AC and NC, associated with higher levels of seniority. On the other hand, there was no significant correlation between AC and CCH nor between the CCL and both components AC and NC.

Table 6.22: Correlation between OC components at the higher level of organisation H1-Default model.

	Estimate	S.E.	C.R.	P	Label
AC <--> NC	.588	.087	4.042	***	Hr6
AC <--> CCH	.260	.068	1.855	.064	Hr1
CCH <--> NC	.382	.064	2.631	.009	Hr5
NC <--> CCL	-.157	.055	-1.201	.230	Hr3
CCH <--> CCL	.375	.063	2.047	.041	Hr2
AC <--> CCL	-.188	.062	-1.407	.159	Hr4

***<0.001

Table 6.23: Correlation between OC components at the middle level of organisation; M1-Default model.

	Estimate	S.E.	C.R.	P	Label
AC <--> NC	.404	.076	5.318	***	Mr6
AC <--> CCH	.061	.046	1.331	.183	Mr1
CCH <--> NC	.247	.065	3.823	***	Mr5
NC <--> CCL	.045	.060	.754	.451	Mr3
CCH <--> CCL	.185	.058	3.166	.002	Mr2
AC <--> CCL	-.064	.049	-1.316	.188	Mr4

***<0.001

Finally, regarding the mid-level employees, the strongest significant correlation was between AC and NC ($r = 0.404, p < 0.001$), followed by NC and CCH ($r = 0.247, p < 0.001$) and CCL and CCH ($r = 0.185, p < 0.01$); At the middle level, similar to the higher level, there was no significant correlation between CCL and NC or AC nor between AC and CCH (see Table 6.23).

6.4.2 Stage two: Antecedents and consequences of commitment

6.4.2.1 Personal variables

Demographic characteristics include basic personal information such as gender, age, tenure, income, level of education and job level. Previous research on organisational

commitment suggests “that demographic variables [are] viewed as nuisance variables” (Becker, 1992). Thus, demographic variables (age, job tenure, seniority in the organisation, education level, marital status and gender) were measured and used as control variables in our regression analysis. The effects of personal characteristics were removed from this analysis because previous commitment research indicated that these variables could confound the effects of the other independent variables on organisational commitment (Becker, 1992; Becker *et al.*, 1996; Ng *et al.*, 2006, Clugston *et al.*, 2000).

Age and tenure were continuous, whilst the rest of the demographic variables were categorical. Variables that are not “part of the main experimental manipulation but have an influence on the dependent variables, are known as *covariates* and they can be included in an ANOVA analysis - this is analysis of covariance or ANCOVA” (Field, 2005, p.363). Thus, if these variables (or covariates) are measured, then it is possible to control their influence on the dependent variables (in this case, commitment). In the context of hierarchical regression, we first entered personal characteristics into the regression model, and then we entered the dummy variables that represented experimental manipulations. We could then parse out the effects of personal characteristics (Field, 2005). The reasons for including these covariates in ANOVA were twofold: first, to reduce intra-group error variance in order to more accurately assess the effect of independent variables, and second, to eliminate confounding variables because unmeasured variables may exist that confound the result.

We performed ANCOVA to discover any covariate effect on the components of commitment (Field, 2005). Table 6.24 presents Levene’s test of equality of error variances for independent variables AC, CCH, CCL and NC, together with the covariate output.

Table 6.24: Levene’s test of equality of error variances.

Dependent variable: CCH			
F	df1	df2	Sig
1.052	81	310	.373
Dependent variable: CCL			
F	df1	df2	Sig
1.004	81	310	.321
Dependent variable: AC			
F	df1	df2	Sig
1.010	81	310	.464
Dependent variable: NC			
F	df1	df2	Sig
0.974	81	310	.546
Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a: design: Intercept+JOB+GEND+STATUS+EDUC+ INCOM+AGE+TENURE p<.05			

Levene’s test (Table 6.24), to assess the tenability of the assumption of equal variance (or homogeneity of variance), identifies whether significant differences between the variances of groups of variables (Field, 2005) exist. There were no significant differences between the covariate variables (i.e., personal characteristics) and the dependent variables (i.e., AC, CCH, CCL and NC). This suggests that the assumption that personal variables are non-significant is reasonable.

To double-check using general linear modelling, ANOVA was conducted for each dependent variable with the covariate variable. As explained earlier, age and tenure were measured as continuance variables and the rest of the demographic variables were measured as categorical parameters. Table 6.25 shows the ANOVA test results when covariates were included. It is clear that there were no significant effects of personal characteristics on CCH. The total amount of variation to be explained (SST) was 299.410, of which the experimental manipulations that accounted for job level, gender, marital status, education and income were 1.186, 0.472, 0.119, 1.195 and 6.437 units, respectively; 276.672 of variation was unexplained (SSR). On the other hand, the age covariate was significantly linked with affective commitment, with $F(14,377) = 4.711, p < 0.05$ and $r = 0.042$. There was also a significant effect of tenure on affective commitment, with $F(14,377) = 8.975, p < 0.001$. However, Table 41 shows that the covariate exhibits no significant affect on CCH, CCL and NC. Note that only gender was significantly related to CCH, with $F(14,377) = 9.758, p < 0.001$ and $r = 0.032$.

The key research question was then addressed by using mean scores to determine the rank order for the organisational commitment factors and then comparing the mean of each commitment type across three levels of organisation. ANOVA was used to investigate the variations in AC and NC and the two subcomponents of CC, namely CCH and CCL by organisational level. In this study, as explained in Chapter Five, the employee group was divided into three organisational categories. Grades 1 – 5 comprised the lower level and were coded with the value 1; grades 6 – 9 comprised the middle level and were coded with the value 2; and grades 10 – 15 comprised the higher level and were coded with the value 3. The results of one-way ANOVA are presented in Table 6.25 and Table 6.26, which includes the means, standard deviations, standard errors and mean confidence intervals for each employee group. Since the data have only three groups, we would expect to identify only linear or quadratic trends. For coding the dummy variables, we specified the weights to ensure a contrast of 0, by assigning -2 for the lower level, +1 for the middle level, and +1 for the upper level.

Because we wanted to identify any existing differences between means, we used a *post hoc* test of pair-wise comparisons, with the intention of comparing the different sampled groups. The benefit of pair-wise comparisons is to control family-wise error by correcting the level of significance for each test, such that the overall type I error rate (α) across all comparisons does not exceed 0.05. The Bonferroni correction method, through which the family-wise error rate can be controlled, was used.

For the homogeneity of variance tests, SPSS uses Levene's test, which tests the hypothesis that the variances of each group are equal. However, if the homogeneity of variance assumption is contravened, then SPSS offers two versions of the *F*-ratio for testing: the Brown-Forsythe (1974) and the Welch (1951); Unequal group sizes and relatively large variations in the largest group tend to bias the *F*-ratio towards being conservative. Brown and Forsythe (1974) circumvent the bias problem by weighting group variance not by sample size but instead by the inverse of sample size. Essentially, they weight the group variance by n/N , i.e., the sample size as a proportion of the total population size. This tends to reduce the impact of a large group with large variance. However, in terms of power, these two techniques adjust

F and the residual degree of freedom to overcome problems that stem from a violation of the homogeneity of variance assumption (Field, 2005; Pallant, 2007).

Table 6.25: Factorial ANOVA table for the dependent variables (AC, CCH, CCL and NC) with the personal characteristics.

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	AC	22.738	14	1.624	2.213	.007
Intercept		2.423	1	2.423	3.302	.070
Job		1.186	2	.593	.808	.447
Gender		.472	1	.472	.644	.423
Status		.119	1	.119	.162	.688
Education		1.195	4	.299	.407	.804
Income		6.437	4	1.609	2.193	.069
Age		3.458	1	3.458	4.711	.031*
Service		6.587	1	6.587	8.975	.003**
Error		276.672	377	.734		
Total		299.596	392	1.624		
Corrected Total		299.410	391			
<i>R Squared = .076</i> <i>Adjusted R Squared = .042</i>						
Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	CCH	20.804	14	1.486	1.929	.022
Intercept		.488	1	.488	.633	.427
Job		1.708	2	.854	1.108	.331
Gender		7.518	1	7.518	9.758	.002**
Status		1.954	1	1.954	2.536	.112
Education		2.437	4	.609	.791	.532
Income		4.329	4	1.082	1.405	.232
Age		.019	1	.019	.025	.876
Service		.265	1	.265	.344	.558
Error		290.464	377	.770		
Total		311.529	392			
Corrected Total		311.268	391			
<i>R Squared = .067</i> <i>Adjusted R Squared = .032</i>						
Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	CCL	8.578	14	.613	1.010	.442
Intercept		.128	1	.128	.210	.647
Job		.191	2	.095	.157	.855
Gender		.111	1	.111	.183	.669
Status		.385	1	.385	.635	.426
Education		1.847	4	.462	.761	.551
Income		3.674	4	.919	1.514	.197
Age		.043	1	.043	.071	.789
Service		.748	1	.748	1.233	.268
Error		228.752	377	.607		
Total		237.794	392	.613		
Corrected Total		237.330	391	.128		
<i>R Squared = .036</i> <i>Adjusted R Squared = .000</i>						

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	NC	20.611	14	1.472	1.992	.017
Intercept		1.728	1	1.728	2.337	.127
Job		4.284	2	2.142	2.897	.056
Gender		2.185	1	2.185	2.956	.086
Status		.115	1	.115	.156	.693
Education		3.274	4	.818	1.107	.353
Income		4.134	4	1.034	1.398	.234
Age		.996	1	.996	1.348	.246
Service		1.835	1	1.835	2.483	.116
Error		278.670	377			
Total		299.738	392			
Corrected Total		299.281	391			

R Squared = .069
Adjusted R Squared = .034

Table 6.25: continued. *p < 0.05, **p < 0.001.

Table 6.26: Descriptive statistics of the data from one-way ANOVA.

	Group	N	Mean	Std. deviation	Std. error	95% confidence interval for mean		Minimum	Maximum
						Lower bound	Upper bound		
AC	1-5	107	-0.051	0.815	0.079	-0.208	0.105	-1.927	1.433
	6-9	204	-0.070	0.865	0.061	-0.190	0.049	-2.856	1.676
	>=10	111	0.202	0.828	0.079	0.046	0.357	-2.892	1.634
	Total	422	0.006	0.849	0.041	-0.075	0.087	-2.892	1.676
CCH	1-5	107	0.127	1.030	0.100	-0.070	0.325	-2.544	1.635
	6-9	204	0.080	0.824	0.058	-0.034	0.194	-2.004	1.651
	>=10	111	-0.208	0.847	0.080	-0.368	-0.049	-2.192	1.647
	Total	422	0.016	0.895	0.044	-0.069	0.102	-2.544	1.651
CCL	1-5	107	0.125	0.833	0.081	-0.035	0.284	-2.292	1.743
	6-9	204	-0.045	0.772	0.054	-0.152	0.061	-2.408	1.568
	>=10	111	0.016	0.777	0.074	-0.131	0.162	-2.369	1.583
	Total	422	0.014	0.790	0.039	-0.062	0.090	-2.408	1.743
NC	1-5	107	0.056	0.900	0.087	-0.116	0.229	-2.737	1.598
	6-9	204	-0.106	0.908	0.064	-0.232	0.019	-2.715	1.506
	>=10	111	0.188	0.796	0.076	0.038	0.338	-2.385	1.486
	Total	422	0.012	0.885	0.043	-0.072	0.097	-2.737	1.598

Table 6.27 reveals that the CCH variance was highly significantly different ($p < 0.05$). This implies that we violated one of the ANOVA assumptions and that an appropriate corrective measure would have to be undertaken (Field, 2005).

Table 6.27: Test of homogeneity of variance.

	Levene's Statistic	df1	df2	Sig.
AC	.404	2	419	.668
CCH	6.595	2	419	.002
CCL	.005	2	419	.995
NC	2.082	2	419	.126

Table 6.28 summarises the ANOVA results. It is divided into between-group effects (i.e., effects due to the model and experimental effects) and within-group effects (i.e., effects that represent unsystematic variance in the data). The between-group effects are divided into linear and quadratic components, and these components comprise the trend analyses described in the previous section. The between-group effect labelled *Combined* accounts for the overall experimental effect. In this row, we present the sums of squares for the AC, CCH, CCL and NC models ($SS_M = 5.784, 7.742, 2.026, \text{ and } 6.497$, respectively). The degree of freedom is 2 in all cases, and the mean squares for the AC, CCH, CCL and NC models correspond to 2.892, 3.871, 1.013, and 3.248, respectively. Note that this overall effect is broken down because we required SPSS to carry out trend analyses. The row labelled *Within-group* provides information about unsystematic variations within the data; this is due to the variation resulting from natural individual AC differences.

Table 6.28 shows the degree of unsystematic variation; the values of the residual sum of squares (SSR) are 297.743, 329.135, 260.915 and 323.005 for AC, CCH, CCL and NC, respectively. For the average unsystematic variation, the mean squares (MSR) values are 0.711, 0.786, 0.623 and 0.771, respectively. The test of whether the AC, CCH, CCL and NC group means are equivalent is represented by the F-ratio for the combined group effect. The values of the F-ratios are 4.070, 4.928, 1.627, and 4.214, respectively.

Table 6.28: Main ANOVA summary.

				Sum of squares	df	Mean square	F	P-value
AC	Between Groups	(Combined) Linear	Unweighted	5.784	2	2.892	4.070	.018
			Weighted	3.488	1	3.488	4.908	.027
			Deviation	3.560	1	3.560	5.009	.026
				2.224	1	2.224	3.130	.078
		Quadratic Term	Unweighted	2.224	1	2.224	3.130	.078
			Weighted	2.224	1	2.224	3.130	.078
		Within Groups Total		297.743	419	.711		
			303.527	421	2.892	4.070	.018	
CCH	Between Groups	(Combined) Linear	Unweighted	7.742	2	3.871	4.928	.008
			Weighted	6.128	1	6.128	7.801	.005
			Deviation	6.207	1	6.207	7.902	.005
				1.535	1	1.535	1.954	.163
		Quadratic Term	Unweighted	1.535	1	1.535	1.954	.163
			Weighted	1.535	1	1.535	1.954	.163
		Within Groups Total		329.135	419	.786		
			336.877	421				
CCL	Between Groups	(Combined) Linear	Unweighted	2.026	2	1.013	1.627	.198
			Weighted	.646	1	.646	1.037	.309
			Deviation	.622	1	.622	.998	.318
				1.404	1	1.404	2.255	.134
		Quadratic Term	Unweighted	1.404	1	1.404	2.255	.134
			Weighted	1.404	1	1.404	2.255	.134
		Within Groups Total		260.915	419	.623		
			262.941	421				
NC	Between Groups	(Combined) Linear	Unweighted	6.497	2	3.248	4.214	.015
			Weighted	.945	1	.945	1.226	.269
			Deviation	1.004	1	1.004	1.303	.254
				5.492	1	5.492	7.125	.008
		Quadratic Term	Unweighted	5.492	1	5.492	7.125	.008
			Weighted	5.492	1	5.492	7.125	.008
		Within Groups Total		323.005	419	.771		
			329.501	421				

Finally, the significance level equals the probability of obtaining by chance an F-ratio that is at least the size of the one actually obtained. Regarding AC, there is a probability of 0.018 that a greater F-ratio would occur by chance (i.e., only a 1.8 per cent likelihood). In other words, the significance level is less than 0.05. Therefore, there was a significant effect of job level on AC. Regarding CCH and NC, a significance level of 0.015 was obtained. Finally, with a corresponding significance level of 0.198, there was no significant effect of job level on CCL.

The main findings of ANOVA as shown in Table 6.28 are as follows: job level had a significant effect on AC, CCH and NC, with $F(2, 419) = 4.07, 4.93$ and 4.21 , respectively. The significance levels were $0.018, 0.008$ and 0.015 , respectively. However, there was no significant effect of job level on CCL, with $F(2, 419) = 1.63$ and $p > 0.05$.

In Table 6.30, each group of participants is compared to the remaining groups. For each group, the differences between group means, the P-value of that difference and a 95% confidence interval are listed.

1. AC: Firstly, the lower-level group was compared to the mid-level group and the higher-level group. This revealed non-significant differences ($p > 0.05$). Secondly, comparing the mid-level group with the lower-level group revealed no significant differences ($p > 0.05$), however, when compared with the higher-level group, a significant difference was found ($p < 0.05$).
2. CCH: The comparison of the lower-level group with the mid-level group revealed no significant differences ($p > 0.05$). However, when compared with the higher-level group, a significant difference was identified ($p < 0.05$). On the other hand, comparisons of the higher-level group with the lower-level and mid-level groups both revealed significant differences ($p < 0.05$).
3. CCL: Comparisons regarding the level of CCL among the three groups revealed no significant differences ($p > 0.05$).

NC: The lower-level group was compared with the mid-level and higher-level groups; no significant differences were revealed ($p > 0.05$). The next comparison between the mid-level and lower-level groups also revealed no significant differences, with a significance of 0.366 . However, there were significant differences when the mid-level group was compared with the higher-level group ($p < 0.05$). Finally, when we compared the level of NC within the higher-level group with that of the lower-level group, no significant differences were revealed ($p > 0.05$). However, when we compared the NC

high-level group to the mid-level group, a significant difference was observed (significance was 0.014, thus, $p < 0.05$).

Table 6.29 shows the Welch and Brown-Forsyth *F*-ratios. Since Levene’s test was not significant, the variances of AC, CCL and NC were equal. However, when the homogeneity of variance assumption is violated, we should examine the *F*-ratio (Field, 2005; Pallant, 2007).

Table 6.29: Robust tests of equality of means A: asymptotically F distributed

		Statistic	df1	df2	Sig.
AC	Welch	4.140	2	236.239	.017
	Brown-Forsythe	4.169	2	358.266	.016
CCH	Welch	5.100	2	220.427	.007
	Brown-Forsythe	4.634	2	308.258	.010
CCL	Welch	1.534	2	227.868	.218
	Brown-Forsythe	1.594	2	336.492	.205
NC	Welch	4.507	2	237.242	.012
	Brown-Forsythe	4.339	2	354.711	.014

Since we did not formulate a specific hypothesis about the effect that job seniority might have on organisational commitment in the Saudi public sector, we carried out a *post hoc* test to compare all groups of participants with each other, as mentioned in the previous section. We conducted the Bonferroni test, because we wanted to control for the type I error rate. We employed the Games-Howell test, because we doubted that the variances would be unequal. Finally, we used Hochberg’s GT2 test, because the sample size of each group was different (the size of the lower-level sample was 107; the size of the mid-level sample was 204; and the size of the higher-level sample was 111). The results of these tests are shown in Table 6.30. All tests reveal the same pattern of results. Therefore, we have presented the results of the Bonferroni test only (see Table 6.30)

In Table 6.30, each group of participants is compared to the remaining groups. For each group, the differences between group means, the P-value of that difference and a 95% confidence interval are listed.

4. AC: Firstly, the lower-level group was compared to the mid-level group and the higher-level group. This revealed non-significant differences ($p > 0.05$). Secondly, comparing the mid-level group with the lower-level group revealed no significant differences ($p > 0.05$), however, when compared with the higher-level group, a significant difference was found ($p < 0.05$).
5. CCH: The comparison of the lower-level group with the mid-level group revealed no significant differences ($p > 0.05$). However, when compared with the higher-level group, a significant difference was identified ($p < 0.05$). On the other hand, comparisons of the higher-level group with the lower-level and mid-level groups both revealed significant differences ($p < 0.05$).
6. CCL: Comparisons regarding the level of CCL among the three groups revealed no significant differences ($p > 0.05$).
7. NC: The lower-level group was compared with the mid-level and higher-level groups; no significant differences were revealed ($p > 0.05$). The next comparison between the mid-level and lower-level groups also revealed no significance differences, with a significance of 0.366. However, there were significant differences when the mid-level group was compared with the higher-level group ($p < 0.05$). Finally, when we compared the level of NC within the higher-level group with that of the lower-level group, no significant differences were revealed ($p > 0.05$). However, when we compared the NC high-level group to the mid-level group, a significant difference was observed (significance was 0.014, thus, $p < 0.05$).

The Scheffé and Gabriel tests for AC revealed two subsets of groups with statistically similar means. The first subset contained the lower-level and mid-level groups. The second subset contained the higher-level and mid-level groups in the Scheffé test; for the Gabriel test, this second subset contained only the higher-level group. In other words, the only group that featured significantly different AC means across the three organisational levels was the higher level, which means that AC is different in the higher-level group. However, no significant differences in means were found across the other two organisational levels (see Table.31).

Table 6.30: Multiple Comparison.

Dependent variables		(I) Job level in organisation	(J) Job level in organisation	Mean difference (I-J)	P-value	95% Confidence interval	
						Lower bound	Upper bound
AC	Bonferroni	1-5	6-9	.0188	1.000	0.033	0.510
			>=10	-.253	1.000	-0.216	0.253
		6-9	1-5	-.0188	1.000	-0.516	0.010
			>=10	-.272*	.020	-0.253	0.216
		>=10	1-5	.253	.082	-0.506	-0.038
CCH	Bonferroni	1-5	6-9	.2718*	.020	-0.010	0.516
			>=10	.335*	.016	0.047	0.624
		6-9	1-5	-.0470	1.000	-0.301	0.207
			>=10	.2884*	.018	0.037	0.540
		>=10	1-5	-.3354*	.016	-0.624	-0.047
CCL	Bonferroni	1-5	6-9	-.2884*	.018	-0.540	-0.037
			>=10	.1089	.927	-0.148	0.366
		6-9	1-5	-.1699	.216	-0.396	0.057
			>=10	-.06102	1.000	-0.285	0.163
		>=10	1-5	-.1089	.927	-0.366	0.148
NC	Bonferroni	1-5	6-9	.06102	1.000	-0.163	0.285
			>=10	.1625	.366	-0.089	0.414
		6-9	1-5	-.1317	.807	-0.418	0.154
			>=10	-.1625	.366	-0.414	0.089
		>=10	1-5	-.2942*	.014	-0.543	-0.045
		>=10	1-5	.13171	.807	-0.154	0.418
		6-9	.2942*	.014	0.045	0.543	

*The mean difference is significant at the 0.05 level.

The final results from the one-way ANOVA for compared means are shown in Table 6.31, Table 6.32, Table 6.33 and Table 6.34. We used the Gabriel test, because the group sizes were unequal; we used the Scheffé test of the differences among the three groups, because this test has been used in commitment comparison studies (e.g. Cohen, 2007a). Finally, we checked the findings using the Games-Howell procedure.

Table 6.31: Means for groups in homogeneous subsets AC.

Independent variable AC	Job level in organisation	N	Subset for alpha=.05	
			1	2
Scheffe	1-5	107	-.0702	
	6-9	204	-.0514	-.0514
	>=10	111		.2016
	Sig.		.984	.984
Gabriel	1-5	107	-.070	
	6-9	204	-.051	
	>=10	111		.202
	Sig.		.997	1.000

As Table 6.32 shows, for the subcomponent CCH, the first subset only contained the lower-level group, and the second subset contained the mid-level and higher-level groups. These results demonstrate that the higher-level and mid-level groups have similar means. In other words, the two groups exhibit CCH means that are significantly different from those of the lower-level group. In contrast, CCL featured only one subset, which indicates that there are no significant differences in CCL means across the three groups (see Table 6.33).

Table 6.32: Means for groups in homogeneous subsets CCH.

Independent variable CCH	Job level in organisation	N	Subset for alpha=.05	
			1	2
Scheffe	1-5	107	-.2082	
	6-9	204		.0802
	>=10	111		.1272
	Sig.		1.000	.913
Gabriel	1-5	107	-.2082	
	6-9	204		.0802
	>=10	111		.1272
	Sig.		1.000	.964

Table 6.33: Means for groups in homogeneous subsets CCL.

Independent variable CCL	Job level in organisation	N	Subset for alpha=.05
			1
Scheffe	1-5	107	-.0453
	6-9	204	.0157
	>=10	111	.1247
	Sig.		.226
Gabriel	1-5	107	-.0453
	6-9	204	.0157
	>=10	111	.1246
	Sig.		.233

Uses Harmonic Mean Sample Size = 128.99. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table 6.34: Means for groups in homogeneous subsets NC.

Independent variable NC	Job level in organisation	N	Subset for alpha=.05	
			1	2
Scheffe	1-5	107	-.1062	
	6-9	204	.0563	.0563
	>=10	111		.1880
	Sig.		.332	.485
Gabriel	1-5	107	-.1062	
	6-9	204	.0563	.0563
	>=10	111		.1880
	Sig.		.359	.541

Uses Harmonic Mean Sample Size = 128.99. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Finally, tests for NC resulted in two subsets of groups. The first subset contained the lower-level and mid-level groups, whereas the second contained the higher-level group (see Table 6.34).

Table 6.35: Mean of AC, CCH, CCL and NC in different organisational levels.

Job level in Organisation		AC	CCH	CCL	NC
1-5	Mean	3.5981	3.6262	3.4081	3.6480
	N	107	107	107	107
	Std.D	.81230	1.03448	.83717	.89118
6-9	Mean	3.6242	3.5899	3.4114	3.7508
	N	204	204	204	204
	Std.D	.84246	.82937	.81148	.77651
>=10	Mean	3.8408	3.3498	3.4114	3.7508
	N	111	111	111	111
	Std.D	.83468	.87694	.81148	.85875
Total	Mean	3.6746	3.5359	3.3436	3.5964
	N	422	422	422	422
	Std.D	.83468	.87694	.81141	.85875

The final test provides a significant value for each subset. It is clear that the subsets have non-significant means ($p>0.05$). It is worth noting that the final test used the harmonic mean of the sample size¹⁵. The benefit of using this mean is that we eliminate any bias that might be introduced due to unequal sample sizes (Field, 2005).

¹⁵ The harmonic mean is a weighted framework that takes into account relationships between variance and sample sizes (see Howell, 2002, p.234).

Thus, regarding the levels of commitment across different organisational levels, our data show that affective commitment (AC) and normative commitment (NC) are significantly different and stronger at higher organisational levels, whereas continuance commitment (CC), and especially high sacrifice commitment (CCH), are stronger at lower levels. No significant differences were found regarding the low perceived alternative subcomponent of continuance commitment (CCL) among employees at a given organisational level. Most importantly, CCL levels were almost identical at the three organisational levels. In other words, the higher the hierarchical position occupied by the employees, the stronger their affective and normative commitments (see Table 6.35). The Pearson correlation between the four components of commitment is shown in Table 6.36.

Table 6.36: Correlations Bivariate between OC components.

		NC	CCH	CCL	AC
NC	Pearson correlation	1	.414(**)	.135(**)	.637(**)
	Sig. (2-tailed)		.000	.005	.000
	Covariance	.784	.328	.095	.482
	N	433	433	433	433
CCH	Pearson correlation	.414(**)	1	.503(**)	.098(*)
	Sig. (2-tailed)	.000		.000	.042
	Covariance	.328	.802	.357	.075
	N	433	433	433	433
CCL	Pearson correlation	.135(**)	.503(**)	1	-.223(**)
	Sig. (2-tailed)	.005	.000		.000
	Covariance	.095	.357	.629	-.151
	N	433	433	433	433
AC	Pearson correlation	.637(**)	.098(*)	-.223(**)	1
	Sig. (2-tailed)	.0005	.042	.0005	
	Covariance	.482	.075	-.151	.732
	N	433	433	433	433

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 6.36 shows the 2-tailed Pearson correlation between AC, CC and NC. The correlations among the commitment components are all moderate to high. AC and NC were highly correlated ($r = 0.64, p < 0.01$). AC correlates differently with the two continuance commitment subcomponents; it correlates with CCH positively ($r = 0.098, p < 0.05$) and correlates negatively with CCL ($r = -0.223, p < 0.01$). However,

NC correlates strongly with CCH ($r = 0.414, p < 0.01$) and with CCL ($r = 0.135, p < 0.001$). The two subcomponents of CC are highly correlated ($r = 0.503, p < 0.001$).

6.4.2.2 Dimensionality of Cultural Variables

CFA were conducted on each of the cultural dimensions independent of the other three independent variables (training, management communication and bureaucratic arrangement). Table 6.37 shows the fit indices and factor loadings for each cultural variable.

Table 6.37 shows results from the separate CFAs for each cultural dimension. The factor loadings were good, and the fit indices for each of the cultural variables were significant, except for the first indicator in the case of power distance, which exhibited a low factor loading (0.368), and two indicators of individualism/collectivism (items 3 and 5) which exhibited a cross-loading with an uncertainty avoidance factor. We therefore removed these items from our subsequent analyses.

Table 6.37: Fit indices and factor loadings for each cultural variable.

Latent variables	Observed variables	Factor loading	CR	SE	R ²	Latent Variables Model Fit Statistics								
						Chi ²	df	RMSEA	CFI	GFI	AGFI	NFI	PGFI	AVE
Masculinity/ Femininity	X ₁	.694***	14.55	.061	.482	14.122	5	.065	.991	.988	.964	.986	.495	.76
	X ₂	.784***	12.75	.045	.614									
	X ₃	.718***	15.09	.055	.515									
	X ₄	.786***	16.28	.057	.618									
	X ₅	.818***	17.45	.062	.670									
Individualism/ Collectivism	X ₁	.690***	13.10	.079	.476	16.410	2	.129	.971	.981	.905	.968	.324	.67
	X ₂	.700***	10.95	.047	.490									
	X ₃	.614***	10.58	.067	.377									
	X ₄	.702***	11.42	.092	.492									
	X ₅	.673***	10.86	.092	.453									
	X ₆	.654***	11.60	.085	.428									
Power Distance	X ₁	.368**	5.047	.169	.361	15.457	5	.070	.954	.986	.958	.935	.477	.53
	X ₂	.662***	5.943	.140	.203									
	X ₃	.517***	5.854	.129	.216									
	X ₄	.443***	6.137	.131	.197									
	X ₅	.661***	5.891	.158	.437									
	X ₆	.533***	4.707	.152	.284									
Uncertainty Avoidance	X ₁	.649***	15.180	.064	.422	24.616	5	.057	.977	.978	.934	.972	.489	.73
	X ₂	.689***	13.609	.060	.475									
	X ₃	.832***	9.902	.047	.692									
	X ₄	.639***	13.361	.072	.409									
	X ₅	.820***	17.404	.059	.673									

N= 443; $p^{**}<.01$; $p^{***}<.001$

Our modification indices suggested that the error terms between the fourth and the fifth items of the individualism/collectivism element (“employees should only pursue their goals after considering the best interests of the group” and “managers should encourage group loyalty even at the expense of an individual’s goals”) were

significantly correlated. Carefully examining these two indicators revealed that their meanings were too similar, implying a high error correlation. Consequently, these items were omitted from further analyses. Similarly, the first and second power distance indicators exhibited cross-loading, so they were also discarded.

6.4.2.3 First-order CFA measurement model of cultural dimensions

A first-order CFA model was designed to test the multidimensionality of the theoretical construct (Byrne, 2001). A model for all four cultural dimension factors (i.e., masculinity/femininity, power distance, individualism/collectivism and uncertainty avoidance) featured 100 degrees of freedom. The results for the four-factor CFA cultural dimensions model suggest an adequate fit with the data ($\chi^2_{[100]} = 156.979$; $p < 0.05$; $\chi^2/df = 1.600$; CFI=0.976; GFI= 0.956; AGFI= 0.940; NFI = 0.939; RMR= 0.046; and RMSEA = 0.037). All of the model fit indices are indicative of good data fitting. Before assessing the model fit indices, we measured construct validities (e.g., standardised loadings and estimated correlations).

To assess convergent validity, we examined whether each indicator's loading on its posited construct was greater than twice its standard error and whether each factor loading was over 0.5 (Anderson and Gerbing, 1988). For the four constructs, all items were found to load significantly on their respective constructs, and the factor loadings were greater than twice the standard error. Factor loadings exceeded 0.5, except for power distance items 4 and 1. The AVE values, which range from 0.53 to 0.76, all exceeded the recommended value of 0.5 (Hair *et al.*, 2006; Tabachnic and Fidell, 2007). These results suggest that convergent validity exists for the hypothesised measurement model. In the case of discriminant validity, the estimated correlations among the four factors ranged from 0.158 to 0.464 (see Table 6.38), all of which were statistically significant ($p < 0.05$) and below the 0.85 recommended value (Kline, 1998).

Table 6.38: Correlations between the four cultural dimension factors.

	PD	IC	UN	MF
PD	1.000			
IC	.233	1.000		
UN	.158	.464	1.000	
MF	.168	.446	.267	1.000

**Correlation is significant at the 0.01 level (2-tailed).

We also used Pearson correlations to corroborate the results. We identified a significant correlation between the four dimensions with a significance of 0.001. Only the power distance dimension exhibited no correlation, though it did correlate negatively with the uncertainty avoidance dimension (Table 6.39). Moreover, the literature does not indicate that any of these dimensions is antecedent to any other (Clugston *et al.*, 2000). To summarise: our results support the discriminant validity of the constructs in our measurement model.

Table 6.39: Pearson Correlations between cultural dimensions.

		MF	IC	UA	PD
MF	Pearson correlation	1	.377**	.231**	.021
	Sig. (2-tailed)		.000	.000	.671
	Covariance	.862	.303	.159	.015
	N	433	433	433	432
IC	Pearson correlation	.377**	1	.374**	-.036
	Sig. (2-tailed)	.000		.000	.454
	Covariance	.303	.745	.239	-.025
	N	433	433	433	432
UA	Pearson correlation	.231**	.374**	1	-.143**
	Sig. (2-tailed)	.000	.000		.003
	Covariance	.159	.239	.548	-.084
	N	433	433	433	432
PD	Pearson correlation	.021	-.036	-.143**	1
	Sig. (2-tailed)	.671	.454	.003	
	Covariance	.015	-.025	-.084	.629
	N	432	432	432	432

6.4.2.4 Cultural values level

We wished to explore the cultural dimensions present across the different organisational levels in the Saudi Arabian public sector. The mean score of culture dimensions at the three organisational levels is listed in Table 6.40.

Table 6.40 shows that the highest average cultural dimension score is for uncertainty avoidance (4.027) and that the lowest mean is for power distance (2.071). The mean scores for individualism/collectivism and masculinity/femininity are 3.715 and 3.470, respectively.

Table 6.40: Mean score of culture dimensions at the three organisational level.

Job level in organisation		PD	UA	IC	MF
1-5	Mean	2.063	3.907	3.804	3.587
	N	106	107	107	107
	Std. deviation	0.760	0.886	0.827	0.832
6-9	Mean	2.116	4.007	3.689	3.378
	N	204	204	204	204
	Std. deviation	0.865	0.692	0.873	1.012
≥10	Mean	1.997	4.179	3.679	3.525
	N	111	111	111	111
	Std. deviation	0.698	0.680	0.889	0.876
Total	Mean	<u>2.071</u>	<u>4.027</u>	<u>3.715</u>	<u>3.470</u>
	N	421	422	422	422
	Std. deviation	0.798	0.748	0.865	0.937

We used a one-way ANOVA to find out if there were any significant differences in cultural dimensions and employee seniority/job level. Table 6.41 summarises the main ANOVA findings in terms of cultural dimensions among the three organisational groups. The table is divided into between-group effects and within-group effects. The between-group effect is further categorized into linear and quadratic components. The between-group effect, labelled *Combined*, is the overall experimental effect. The *F*-ratio was derived from separating the mean squares from the effect of the residual mean squares (Field, 2005). There was a significant effect of organisational level at that degree of uncertainty avoidance ($F(2,419) = 3.796, p < 0.05$).

Employees in the higher-level group exhibit the highest average uncertainty avoidance, and the differences between this group and the other two groups were significant ($p < 0.05$). However, the other three dimensions (i.e., power distance, collectivism and masculinity) showed no differences among groups.

Table 6.41: ANOVA test of differences in culture dimensions among the three groups.

				Sum of squares	df	Mean square	F	P-value	
PD	Between Groups	(Combined) Linear	Unweighted	1.028	2	.514	.807	.447	
			Weighted	.235	1	.235	.370	.543	
	Quadratic Term	Unweighted	Deviation	.249	1	.249	.392	.532	
			Weighted	.779	1	.779	1.223	.269	
		Within Groups	Total		.779	1	.779	1.223	.269
					.779	1	.779	1.223	.269
					266.167	418	.637		
					267.196	420	.514		
UA	Between Groups	(Combined) Linear	Unweighted	4.192	2	2.096	3.796	.023	
			Weighted	4.035	1	4.035	7.308	.007	
	Quadratic Term	Unweighted	Deviation	4.054	1	4.054	7.344	.007	
			Weighted	.137	1	.137	.248	.618	
		Within Groups	Total		.137	1	.137	.248	.618
					.137	1	.137	.248	.618
					231.318	419	.552		
					235.510	421	2.096		
I/C	Between Groups	(Combined) Linear	Unweighted	1.130	2	.565	.754	.471	
			Weighted	.852	1	.852	1.137	.287	
	Quadratic Term	Unweighted	Deviation	.840	1	.840	1.120	.290	
			Weighted	.290	1	.290	.387	.534	
		Within Groups	Total		.290	1	.290	.387	.534
					.290	1	.290	.387	.534
					313.958	419	.749		
					315.087	421			
M/F	Between Groups	(Combined) Linear	Unweighted	3.560	2	1.780	2.039	.131	
			Weighted	.210	1	.210	.241	.624	
	Quadratic Term	Unweighted	Deviation	.190	1	.190	.217	.641	
			Weighted	3.371	1	3.371	3.860	.050	
		Within Groups	Total		3.371	1	3.371	3.860	.050
					3.371	1	3.371	3.860	.050
					365.836	419	.873		
					369.396	421			

6.4.2.5 CFA for antecedent variables

Based on the results of the first-order CFA measurement model for cultural dimensions, we once again conduct a first-order CFA for the seven independent variables (i.e., opportunity for learning, management communication, impersonal bureaucratic arrangement, power distance, uncertainty avoidance, individualism/collectivism and masculinity/femininity). These are exogenous constructs, as they are considered to exist outside this model. We tested the extension

of the cultural dimension metrics to delineate the relationship between these antecedents and organisational commitment levels. The model for this analysis is a hierarchical factorial structure. The model is composed of the aforementioned seven first-order factors, which are exogenous constructs, and the four components of commitment, which are endogenous. These impact outcome behaviour (i.e., intention to leave, organisational citizenship and in-role behaviour).

A second CFA measurement model for the antecedent variables was needed to test whether the hypothesised seven-factor model could explain effects on the mediating commitment components. Based on the results of the first-order factors of the measurement model test, items 1 and 3 of the “opportunity for learning” section were found to display cross-loading, while management communication items 3, 6, 7 and 8 exhibited loading values of smaller than 0.70, and impersonal bureaucratic arrangement item 2 had been discarded before the test. Although having more items can produce higher reliability estimates and higher levels of generalisability, the inclusion of more items is not necessarily better (Hair *et al.*, 2006). Also, a larger number of items requires a larger sample and this can render difficult the validation of truly unidimensional factors. However, good practice as advocated in the published literature recommends a minimum of three or four items per factor (Hair *et al.*, 2006).

The hypothesised measurement model exhibits an acceptable fit with the data ($\chi^2(266)=472.530$; $p < 0.05$; $\chi^2/df = 1.776$; RMSEA = 0.042; CFI = 0.958; GFI = 0.918; AGFI= 0.900; and PNFI = 0.806). The factor loadings, ranging between 0.502 and 0.896, were statistically significant ($p < 0.05$). The AVE values ranged from 0.64 to 0.85, thereby exceeding the recommended value of 0.50. These results provide evidence for the model’s relatively high convergent validity. Also, the correlations between the seven constructs ranged from 0.230 to 0.671 and did not exceed the limit of 0.85 proposed by Kline (1998). All of the seven constructs satisfied this test in terms of discriminant validity.

6.4.2.6 Consequences

In this section, we examine the relationships between organisational commitment components (AC, CCH, CCL and NC) and outcome behaviour: organisational citizenship behaviour (OCB), in-role behaviour (IRB) and intention to leave (Int),

Table 6.42: Items factor loading, internal consistencies for each factor, Cronbach's Alpha, AVE, M and SD.

	<i>Items</i>	<i>Maximum likelihood estimations of factor loading</i>			<i>AVE</i>	<i>Cronbach's Alpha α</i>	<i>Mean</i>	<i>SD</i>
OCBO2	Helps others who have heavy workloads	.797			.58	$\alpha = .781$	4.012	.575
OCBO5	Goes out of way to help new employees	.638						
OCBI1	Helps others who have been absent	.565						
OCBO1	Attendance at work is above the norm	.543						
OCBO4	Takes time to listen to co-workers' problems and worries	.512						
OCBI2	Gives advance notice when unable to come to work	.504						
OCBO3	Assists supervisor with his/her work (when not asked)	.501						
IRB2	Meets formal performance requirements of the job		.824		.70	$\alpha = .733$	4.131	.658
IRB1	Adequately completes assigned duties		.792					
IRB4R	Neglects aspects of the job he/she is obligated to perform (R)*		.590					
IRB5R	Fails to perform essential duties (R)*		.581					
Int1	How frequently you thought about leaving their current employer			.749	.77	$\alpha = .821$	2.683	1.061
Int2	How likely it was that you would search for a job in another organisation			.812				
Int3	How likely it was that you would actually leave the organisation within			.762				
Eigenvalues (Unrotated solution)		4.006	2.283	1.666				
Percent variance explained		28.60%	16.30%	11.90%				
Cumulative percent variance explained		28.60%	44.90%	56.80%				

*(R): reverse coding Items.

Firstly, we used exploratory factor analysis based on the maximum likelihood (ML) method, followed by varimax rotation and the extraction of all eigenvalues greater

than 1, for the 18 outcome behaviour measurement items (see Chapter Five for measurement details and questionnaire designs).

The analysis revealed a three-factor solution with high loadings (minimum 0.501) and negligible cross-loading for each of the alternative factors (maximum 0.30). The first factor was organisational citizenship behaviour; the second factor was in-role behaviour; and the third was intention to leave. The two sub-dimensions of organisational citizenship behaviour, altruism (OCBI) and generalised compliance (OCBO), together with the rest of the measurement items, loaded onto one factor. Since the focus of the study is on the relationships between organisational commitment components and outcome behaviour rather than the dimensionality of OCB, this factor contained seven items from both dimensions. This is consistent with previous studies where the OCB scales have been treated as a one factor (Smith Organ and Near, 1983; Lagomarsino, Cardona and Pearson, 2003; Kim, 2005).

More important was the distinction between in-role behaviour, which comprises traditional performance or in-role activities at work, and extra-role behaviour or behaviours not directly or explicitly recognized by formal reward systems (Organ, 1988). The Cronbach α coefficient for construct reliability for OCB was 0.781; for IRB, it was 0.733; and for Int it was 0.821.

The eigenvalues for OCB, IRB and Int were, 4.01, 2.28, and 0.67, respectively. The cumulative percentage of variance explained by the first and the second factors (i.e., OCB and IRB) was 44.92 per cent. The cumulative percentage of variance explained by the three factors was 56.82 per cent (see Table 6.42).

6.5 Phase three: SEM for overall model validity

Since prior CFA measurement models are sufficiently valid, a test of the structural model can be readily performed, as the measurement models provide a basis for assessing the validity of the structural model (Easterby-Smith *et al.*, 2008; Hair *et al.*, 2006; Tabachnick and Fidell, 2007). A SEM was estimated to provide an empirical measure of the relationships between manifest variables and constructs. The results of this model fit allow us to contrast theory against reality as represented

by the sample data. In other words, our goal was to assess how well the theory fits the data.

The two main underlying procedures can be described as follows: First, the fit of the proposed measurement model is tested. This was successfully accomplished during the second phase of data analysis. Second, the model hypotheses are tested. This process involves the following steps: establishing suitable units of analysis, constructing a path diagram that represents theory in a visual manner and discriminating exogenous constructs (i.e., independent variables) from endogenous ones (i.e., dependent variables).

The path diagram is a graphical representation that employs arrows and parameters to depict various relationships that link the different variables under consideration. It is fruitful at this juncture to differentiate between fixed parameters and free parameters. Fixed parameters “refer to a relationship that will not be estimated by the SEM routine” (Hair *et al.*, 2006, p.849). They are generally constants and thus do not appear in the path diagram. In contrast, free parameters “refer to a relationship that is estimated by the SEM analysis” (Hair *et al.*, 2006, p.849) and are usually represented by arrows in a path diagram. They are in many ways comparable and even equivalent to regression coefficients and can often be regarded as such. Within the SEM context, one can distinguish the following two types of free parameter connections:

- *Exogenous constructs* (ξ) *to endogenous constructs* (η). Represented by symbol (γ) (e.g. Ler \rightarrow AC). These are parameters that indicate the intensity of the relationships between the exogenous constructs and endogenous constructs.
- *Endogenous constructs* (η) *to endogenous constructs* (η). Referred to by the symbol (β) (e.g. AC \rightarrow Int). They represent structural relationships between the constructs under study (i.e. between the mediation and dependent variables) (Hair *et al.*, 2006, p.849).

The hypothesised structural model consisted of seven antecedent exogenous constructs and seven endogenous constructs. The exogenous constructs include opportunity for learning (Ler), management communication (Com), impersonal bureaucratic arrangements (Bur), and masculinity/femininity (M/F), uncertainty

avoidance (UA), individualism/collectivism (I/C) and power distance (PD). The endogenous constructs are: AC, NC, CCH, CCL, Int, OCB and IRB.

Each endogenous construct in this model is considered an outcome under certain hypotheses and a predictor for others. The exogenous constructs are determined by considerations outside the hypothesised model, which is not influenced by any other latent variables (LV) in the model. Therefore, no hypothesis truly predicts any of these constructs. The seven exogenous elements appear on the left-hand side of the model (see Figure 6.1). A curved double-headed arrow was included between the two exogenous work experience constructs (i.e., Ler and Com ($\phi_1, 2$)) and between the four cultural dimensions (i.e., I/C and M/F ($\phi_3, 4$) and UA and PD ($\phi_5, 6$)). Although these constructs do not appear to be connected through any theoretical hypotheses, they are not necessarily independent. If the measurement model estimates a path coefficient between constructs that is not included in any hypothesis, then the corresponding parameter should also be estimated (Hair *et al.*, 2006; Tabachnick and Fidell, 2007).

SEM allows us to test all hypotheses; by contrast, a single regression model would not be able to achieve this kind of hypothesis testing, because it is limited to a single dependent variable. As the paths between the constructs all proceed only from predictors to outcomes, the hypothesised model is recursive. The hypotheses to be tested concern the patterns of causal structure that connect antecedent and outcome variables. The causal structure is then determined by specifying the sets of relationships between constructs. The structural path model thus develops from exogenous constructs. The path should connect any two constructs that are theoretically linked by a hypothesis.

After the data analysis procedures in phase two, stages one and two, the hypothesised model postulated by the researcher should be represented in a manner that is amenable to easy testing, so that it can best fit the collected data. Here, hypotheses based on existing organisational commitment theories and related research literature suggesting that Ler, Com, Bur, M/F, UA, I/C, PD and commitment components are all related to Int, OCB and IRB in different ways, have been postulated. For instance, a high Ler score indicates that Saudi employees in the public sector believe that work experience (i.e., opportunity for learning) enables them to work more efficiently.

Thus, it is important that an organisational environment creates a high level of affective and normative commitment. This should facilitate a relationship between Ler and intention to leave (Int) (see Chapter Three).

At this point, we tested all but the first two research hypotheses, which were tested during stage one, using MANOVA, and testing for invariant latent mean differences is presented in Section 6.4.1.5 using AMOS 16.0. The rest of the hypotheses were tested using a full structural model (SEM). We designate the hypothesised structural model ACOCC, which stands for antecedents and consequences of organisational commitment components (the formulation of the hypothesised model is shown in Figure 6.1).

Figure 6.1 depicts the hypothesised model, which captures the causal structure that relates organisational commitment antecedents and consequences. It is important to represent the error terms and the variance scores associated with the indicators. For simplicity and clarity, all double-headed arrows indicate covariance representing correlations between the independent (exogenous) variables, such as those between Ler and Com, and between the four cultural dimensions omitted from the diagram. In the SEM diagram (Figure 6.1); all standardised loadings are relatively high, ranging from 0.601 to 0.905, and statistically significant, indicating convergent validity for this ACOCC model. The AVE values ranged from 0.54 to 0.75, and all exceed the cut-off of 0.50 proposed by Fornell and Larcker (1981). Each factor-loading estimation in the structural model was included along with relevant parameters in order to test the hypothesis and assess the relationships between the constructs. Note that each manifest variable is indicated by three to five indicators. The measurement of each latent variable is psychometrically sound; for more information, see stage two of the data analysis section.

Fourteen latent constructs were measured using a total of 48 items, which were then used to evaluate the hypothesised structural model. The error variances denoted by (r) were estimated by the model, but the scores are not shown in Figure 6.1 for the sake of simplicity. The path parameters in the structural model test are ($\gamma = 1, 1$) and ($\gamma = 1, 4$), for H3a and H3b, respectively. For H4a and H4b ($\gamma = 2, 1$), ($\gamma = 2, 4$) respectively. H5 ($\gamma = 3, 2$), H6 ($\gamma = 4, 2$), for H7a and H7b ($\gamma = 5, 2$) and ($\gamma = 5, 3$)

respectively. For H8a ($\gamma = 6, 1$) and for H8b ($\gamma = 6, 4$), for H9a and H9b ($\gamma = 7, 1$) and $\gamma = 7, 4$) respectively.

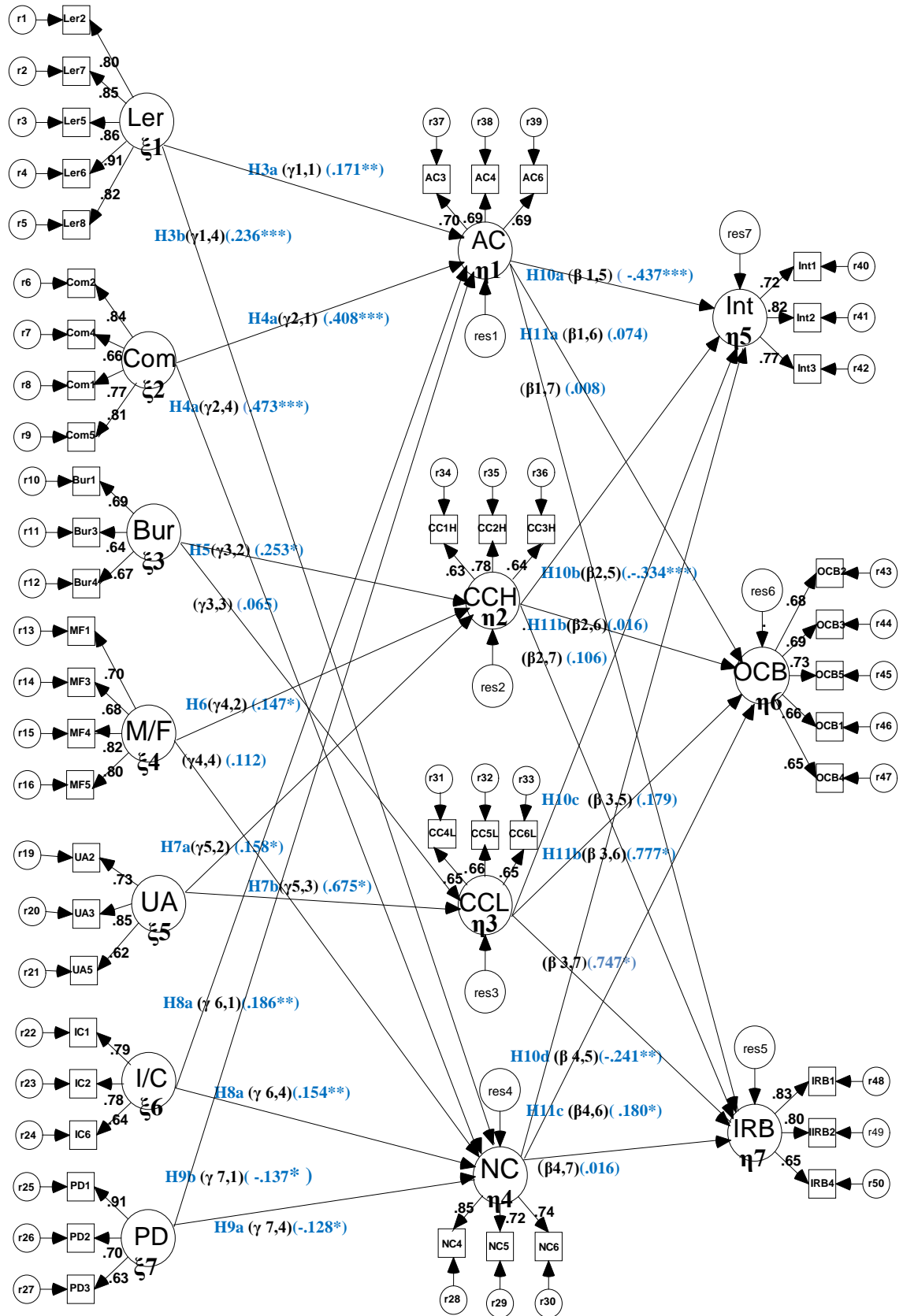
The standardised regression weights, standardised regression path and these are independent of significance levels (0.05, 0.01 and 0.001) are shown in the figure along with the hypothesis number. Factor loadings for the indicators are all over 0.5. This further demonstrates discriminant and convergent validity, as discussed in detail in stage one; as further confirmation.

6.5.1 Model assessment

Any assessment of the model fit should draw on a diversity of perceptions and needs to be based on numerous procedures, especially those that indicate the sufficiency of parameter estimations as well as overall goodness-of-fit for the model.

Parameter estimations in the model were evaluated using the sign and size of the correlation and were found to be consistent with extant commitment theory, with the exception of the effect of AC on OCB, AC on IRB, CCL on OCB and CCL on IRB. This was rather unexpected. All standardised solutions exhibited reasonable estimates. There were no covariance or correlation matrices that were not positive and definite, and there was no unreasonable variance. Also, most of the parameter estimates were shown to be statistically significant at the 0.001, 0.01 and 0.05 levels of significance.

Figure 6.1: The hypothesised structural model of the antecedent and consequences of organisational commitment components in the Saudi public employees ACOCC.



***Significant at 0.001 level.
 ** Significant at 0.01 level.
 * Significant at 0.05 level.

6.5.2 Model fit

The goodness-of-fit for the overall model is based on theoretical assumptions that underlie the relationships among the various organisational commitment components and their antecedents and consequences. The adopted model is recursive for a sample size of 433. The overall results indicate a satisfactory model fit especially when one takes into account the large number of variables and the model's complexity together with the exploratory nature of our analysis. The important point regarding RMSEA as a measure for goodness-of-fit is that it does not take into account error within the sample population. This discrepancy, as measured by RMSEA, is expressed using degrees of freedom. Therefore, the fit index is sensitive to the number of estimated parameters in the model (i.e., the complexity of the model) (Byrne, 2001). Browne and Cudeck (1993, p.144) suggested that "a value of the RMSEA of about 0.5 or less would indicate a close fit of the model in relation to the degree of freedom while a value of about 0.08 or less would indicate a reasonable error of approximation - one would not want to employ a model with a RMSEA greater than 0.1". The RMSEA value for the ACOCC model presented here is 0.034, with a 90 per cent confidence level from 0.031 to 0.038; this model thus represents an excellent degree of accuracy.

The associated χ^2 exhibits 1031 degrees of freedom and equals 1532.881 ($\chi^2/df = 1.520$, $p < 0.001$). However, the χ^2 alone provides little guidance in determining the extent to which the model does not fit the data. Therefore, reliance on other fit indices, such as the CFI, PNFI, GFI and AGFI, seems essential. In addition, to identify a final model with an adequate goodness-of-fit, a series of alternative models must be compared. Furthermore, the EICI is also of interest when a causal structural model is under consideration. Following Bentler and Bonett's (1980) recommendations, an NFI score of 0.828 and an IFI score of 0.934 further confirm that the hypothesised model offers an adequate fit for our empirical data.

The ACOCC model also yielded a small value for RMR (0.075), meaning that the model can explain correlations within an average error of 7.5%. However, the GFI and AGFI values (0.873 and 0.855, respectively) suggest that model fit is only marginally adequate. A value of 0.933 (above 0.9) for the CFI and a value of 0.034 for the RMSEA do however suggest that the model fits the data reasonably well. In addition, the EICI value for the ACOCC model is 4.290. As the EICI coefficient can

take on any value, no range of values for goodness-of-fit exists. Thus, this value has no substantive meaning; it is only meaningful on a relative scale (Byrne, 2001). Thus, the assessment of the hypothesised model involves comparing the EICI value (4.290) with that of the saturated model (EICI = 5.444) and of the independence model (EICI = 21.273). Given the lower EICI value for the ACOCC model, we conclude that it represents the best fit with the data. Finally, Hoelter's values for the ACOCC model were 306 and 315 for $p < 0.01$ and $p < 0.05$, respectively. This suggests that the group sample size of 433 is, according to the Hoelter's benchmark, appropriate. All the other goodness-of-fit indices confirmed that the hypothesised ACOCC structural model fits the data well.

6.5.3 Path analysis

Although our findings regarding path coefficients are more complex and less conclusive than those regarding fit indices, they nevertheless support the majority of our hypotheses. The parameter estimates corresponding to the hypothesised SEM paths and the resulting regression weights are presented in Table 6.43.

6.5.4 Antecedent path coefficient

6.5.4.1 Work experience

The standardised regression path between selected antecedent variables and organisational commitment is statistically significant for Ler to AC and to NC ($\gamma = 0.171$, $p < 0.05$; $\gamma = 0.236$, $p < 0.001$, respectively). This means that H3a is partially supported, whereas, H3b is fully supported. Thus, training (i.e., opportunity for learning) is more positively related to NC than to CC.

H4a and H4b are fully supported, because there was a significant positive relationship of Com with AC and NC ($\gamma = 0.408$; $\gamma = 0.473$, $p < 0.001$, respectively).

6.5.4.2 Impersonal bureaucratic arrangements

H5 was fully supported as per the significant relation between Bur and CCH ($\gamma = 0.253$, $p < 0.001$). In contrast, Bur's relationship with CCL was non-significant; see Table 6.43. In other words, the regression weight for Bur in predicting CCH is significantly different from 0 at the 0.001 significance level.

Table 6.43: Hypothesis and path estimates for the ACOCC structural model.

Regression path (Parameter)			Hypothesis	Standardized regression weight	C.R.	P	Supported
AC	<---	Ler	H3a	.171	2.496	.013	Yes (partially)
NC	<---	Ler	H3b	.236	3.968	***	Yes
AC	<---	Com	H4a	.408	5.302	***	Yes
NC	<---	Com	H4b	.473	7.080	***	Yes
CCL	<---	Bur	H5	.065	.741	.459	Yes
CCH	<---	Bur		.253	2.808	.005	Yes
CCH	<---	M/F	H6	.147	2.292	.022	Yes
NC	<---	M/F		.112	1.807	.071	
CCH	<---	UA	H7	.158	2.468	.014	Yes
CCL	<---	UA		.675	2.040	.041	
NC	<---	I/C	H8	.154	2.224	.026	Yes
AC	<---	I/C		.186	2.252	.024	
CCH	<---	PD	H9a	.003	.024	.980	No
CCL	<---	PD		.007	.387	.699	
NC	<---	PD	H9b	-.128	-2.129	.033	No
AC	<---	PD		-.137	-1.984	.047	
Int	<---	AC	H10a	-.437	-3.814	***	
Int	<---	CCH	H10b	-.334	-3.878	***	Yes
Int	<---	CCL	H10c	.179	1.757	.079	Yes
Int	<---	NC	H10d	-.241	-2.642	.008	Yes
OCB	<---	AC	H11a	.074	.990	.322	No
OCB	<---	CCH	H11b	.016	.253	.801	No
OCB	<---	CCL		.777	2.051	.040	No
OCB	<---	NC	H11c	.180	2.322	.020	Yes
IRB	<---	AC		.008	.120	.905	
IRB	<---	CCH		.106	1.795	.073	
IRB	<---	CCL		.747	2.054	.040	
IRB	<---	NC		.016	.238	.812	

*Significant at 0.05 level (two-tailed)
** Significant at 0.01 level
*** *Significant at 0.001 level

6.5.4.3 Cultural Dimensions

6.5.4.3.1 Masculinity/Femininity

Regarding masculinity/femininity (M/F), Hofstede's (2001) index for Arab countries, which includes Saudi Arabia, is 53. This means that the Saudi Arabian society shows a tendency towards a masculine cultural orientation. Our first stage results also indicate a high mean score for M/F (3.47 out of 5.00). Therefore, our results seem to agree with the notion that Saudi society is more masculine; in other words, high scores indicate acceptance of masculine work goals. Hypothesis H6 states that masculinity is positively related to CC. This hypothesis is fully supported because

the results reveal a significant connection between M/F and CCH ($\gamma = 0.147, p < 0.05$). Previous research confirms the notion that masculine values increase calculative commitment, whereas feminine cultural values engender affective commitment (Randall, 1993). However, for exploratory purposes, we added paths from M/F to NC and AC, based on results from Hofstede's index that indicate that Arab countries lie midway between Canada and Belgium with regards to M/F, as suggested by the significant correlations mentioned above. No significant relations between AC and NC and masculinity/femininity were found.

6.5.4.3.2 Uncertainty Avoidance

H7 states that uncertainty avoidance (UA) is positively associated with both continuance commitment subcomponents. Our results provide full support for H7 because uncertainty avoidance is significantly associated with CCH and CCL ($\gamma = 0.158; \gamma = 0.675, p < 0.05$, respectively). The correlation between UA and low perceived alternatives is stronger and significant.

6.5.4.3.3 Individualism/Collectivism

With regards to individualism/collectivism (I/C), H8 states that collectivism is positively associated with NC. This hypothesis is fully supported. A significant relationship exists between I/C and NC ($\gamma = 0.154, p < 0.05$). To explore further, a regression path between I/C and AC was analysed, and the results suggest a significant relationship between I/C and AC ($\gamma = 0.186, p < 0.05$).

6.5.4.3.4 Power distance

H9a states that power distance (PD) is positively associated with CCH and CCL. H9a is not supported by our results. The results reveal no significant correlation with either subcomponent of CC (CCH, CCL). However, the regression path shows that PD exhibits a significant negative relationship with NC ($\gamma = -0.128, p < 0.05$) which means that H9b is not supported. Our results contradict our hypothesis in that there is a negative significant correlation between power distance and NC. To further explore this issue, we added a path between PD and AC, the regression path unexpectedly showed a significant negative relationship with AC ($\gamma = -0.137, p < 0.05$).

6.5.5 Consequences of path coefficients

In this section, we examine the consequences of organisational commitment components (AC, NC, CCH and CCL). All of the hypothesised paths between commitment components and corresponding consequences were significant, specifically, paths linking AC with OCB and IRB, and paths linking CCH with OCB and IRB. The path linking NC with IRB was not significant. Moreover, although the paths linking AC, CCH and NC to Int showed a significant negative relation as predicted, CCL had no correlation with Int. In other words, the results indicate that employees exhibiting high levels of AC are less likely to leave the organisation ($\gamma = -0.437, p < 0.001$), whereas employees who show high CCH exhibit a lower tendency, on average, to leave ($\gamma = -0.334, p < 0.001$).

Finally, those with a high NC are less likely to leave ($\gamma = -0.241, p < 0.001$); H10a, H10b, H10c and H10d are thus fully supported. Nevertheless, H11a and H11b are not supported, as no significant relation was identified linking AC or CCH to OCB or IRB. The stronger the employees' NC, the more significant is the relation with OCB ($\gamma = 0.180, p < 0.05$) and therefore, the higher their tendency to engage only in OCB. Thus, H11c is partially supported. Interestingly, H11b predicted no relationship or a negative effect of CCL on OCB and IRB. This contradicts the notion that employees with high levels of CCL increase their propensity to engage in OCB and IRB ($\gamma = 0.777; \gamma = 0.747, p < 0.05$, respectively); thus, H11b is rejected.

6.6 Testing of the mediation role of OC components

To explore whether any cultural dimension and the other antecedent variables contribute directly to the consequences under study and to answer the main research question, the researcher systematically added direct paths from the four cultural dimension variables and the three other antecedent variables to Int, OCB and IRB and compared the fit of the model with the hypothesised full-mediation ACOCC model. Since the two models being tested produced similar fits, as the exploratory model with the direct paths exhibited a fit index that was almost the same as the ACOCC model ($\chi^2/df = 1.502, p < 0.001, RMSEA = 0.034, CFI = 0.936$), mediation is supported (Hair et al., 2006, p.867) and the difference in χ^2/df between the two models is $\Delta \chi^2/df = 0.018$. Hence, this further confirms that the ACOCC model

displays a reasonable fit with the data and supports the mediation role of OC components.

However, mediation can be examined in several ways. One alternative is to add previous paths one by one to the exploratory model and to then evaluate the model fit. If the model fit is improved significantly after the addition of new paths, then mediation is not supported. If the model does not improve significantly (e.g., $\Delta \chi^2/df = 0.018$), mediation is considered to be supported. Moreover, a series of steps can be followed to evaluate mediation. Regardless of whether SEM or any other general linear or even multiple regression analysis is used, we can still use the following rules to evaluate mediation:

- If the model, after the inclusion of a new direct path relation, remains unchanged and retains its significance once the mediation variable is included as an additional predictor, then mediation is not supported.
- If the new direct path decreases but remains significant when mediation variables (i.e., AC, NC, CCH, CCL) are included as additional predictors, then partial mediation is supported.
- If new direct paths are reduced to such an extent that they are not significantly different from zero after the mediation variable is included as a mediating construct, then full mediation is supported (Hair *et al.*, 2006).

We found that only three direct paths were significant. One path linked management communication (Com) with Int, while the other two paths linked UA with OCB and IRB. Thus, AC and NC partially mediate the relationship between Com and Int. Note that the continuance commitment subcomponent CCL fully mediates the relationship between UA and OCB. Importantly, there is a strong and significant relationship between UA and OCB ($\gamma = 0.438, p < 0.001$) before adding the mediation variables, but when we include CCL as a mediating construct, the relationship reduces to a point at which it is not significantly different from zero. Therefore, the relationship is fully mediated. Alternatively, CCL partially mediates between UA and IRB, because the relationship between UA and IRB remains significant ($\gamma = 0.492, p < 0.001$) when we added CCL as a mediating variable. This may cast light on the significant relationships between CCL, IRB and OCB, between CCL, UA and IRB, and between CCL, UA and OCB.

6.7 Hierarchical regression analysis of cultural variables and antecedents

Additional hierarchical regression analyses were conducted. There were two reasons to do this. First, as was argued in stage two of the data analysis, previous research on organisational commitment suggests that demographic variables should be considered nuisance variables (Becker, 1992; Becker *et al.*, 1996; Czajka, 1990) and controlled accordingly. One additional reason is that hierarchical regression can serve as further corroboration of the evidence obtained from SEM results.

In the first step of our hierarchical regression analysis, we entered age, tenure and gender, because these are the only demographic variables that may exert a significant effect on commitment components (see Table 6.25). In the second step, we entered work experience and impersonal bureaucratic arrangements. We entered the affected variables in the third step because of their impact on job-related attitudes. Finally, we entered the OC components. Subsequently, we examined the relationship of each component separately with regards to work experience, impersonal bureaucratic arrangements and cultural dimension, with into account controlling the effects of the demographic variables. We entered all of the cultural dimensions in a single step, because there was no indication in the literature that any dimension could be a precursor or an antecedent of any other (Clugston *et al.*, 2000). Table 6.44, Table 6.45, Table 6.46 and Table 6.47 show the regression steps, and report the results of our *F*-test, explaining the variance (*R*-squared) for each regression step. The *F*-test for each component of commitment is separately denoted R^2 , and the change in R^2 is denoted ΔR^2 for each subsequent step of the model.

Table 6.44 presents the results of the *F*-test and explains the variance for each regression equation, with AC as the dependent variable. Table 6.45 shows the results of hypothesis testing for affective commitment and the corresponding regression coefficients. The *F*-ratio represents the ratio of improvement in fit due to the additional predictor and the amount of variance that can be explained by the predictor. Table 6.45 shows β -values that indicate a significant positive relationship between tenure and AC (the effect has been controlled so it will not affect the other relation). Table 6.45 also indicates significant positive relationships between Ler,

Com, I/C and AC ($\beta = 0.387, p < 0.001$; $\beta = 0.230, p < 0.001$; $\beta = 0.147, p < 0.01$, respectively).

Table 6.44: Hierarchical regression analysis of antecedent of AC.

Variable	Predictor Block In	F	R ²	ΔR^2
Step1 Age Gender Tenure	Age Tenure Gender	14.59***	.04	.04
Step2 Ler Com	Work experience	42.76***	.18	.14
Step3 M/F UA I/C PD	Cultural dimension	39.58***	.23	.05

*** $p < .001$

Table 6.45: Results of regression analysis for the antecedent of AC.

Variable	Predictor controlled	Standardized Coefficients β	SE	R ²	ΔR^2
Step1 Model 1	(Constant)		.074	.04	.04
	Tenure	.189***	.004		
Step2 Model 2	(Constant)		.069	.18	.14
	Tenure	.140**	.004		
	Com	.382***	.039		
Step3 Model3	(Constant)		.068	.23	.05
	Tenure	.104*	.004		
	Com	.388***	.037		
	Ler	.235***	.039		
Step4 Model 4	(Constant)		.067	.26	.02
	Tenure	.117*	.004		
	Ler	.387***	.037		
	Com	.230***	.038		
	I/C	.147**	.037		

*** $p < .001$, ** $p < .01$, * $p < .05$

According to Table 6.46, the results regarding NC were almost the same as those obtained through SEM. There were significant correlations between Ler, Com (standardised $\beta = .449, p < .001$; $\beta = .292, p < .001$, respectively). M/F and I/C were also significantly related to NC (standardised $\beta = .173$; $\beta = .127, p < .01$, respectively). Since we had no hypotheses regarding NC and M/F, we did not add any regression paths between these two variables using SEM. Finally, CCH showed significant positive correlations with gender, Bur, M/F and UA ($\beta = .170, p < .05$, $\beta = .166, p < .01$, $\beta = .170, p < .01$, respectively). However, CCL had no significant

relationship with any other antecedents, except for a positive, significant relationship with UA ($\beta = .108, p < .01$); see Table 6.47.

Table 6.46: Results of hierarchical regression analysis of antecedent of NC.

Variable	Predictor Block In	Standardized Coefficients β	SE	R^2	ΔR^2	F
Step1 Model 1	(Constant)		.077	.019	.019	7.70**
	Tenure	.139**	.005			
Step2 Model 2	(Constant)		.070	.212	.193	52.72***
	Tenure	.081	.004			
	Com	.443***	.039			
Step3 Model3	(Constant)		.067	.298	.086	55.25***
	Tenure	.036	.004			
	Com	.451**	.037			
	Ler	.296***	.038			
Model 4	(Constant)		.065	.327	.030	47.43***
	Tenure	.043	.004			
	Ler	.450***	.036			
	Com	.296***	.037			
	M/F	.172**	.036			
Model5	(Constant)		.065	.343	.016	40.65***
	Tenure	.055	.004			
	Ler	.449***	.036			
	Com	.292***	.037			
	M/F	.173**	.036			
	I/C	.127**	.036			

*** $p < .001$, ** $p < .01$, * $p < .05$.

Table 6.47: Results of Hierarchical regression analysis of antecedent of CCH & CCL.

Variable	Predictor block in	Standardized Coefficients β	SE	R^2	ΔR^2	F
CCH	(Constant)		.175	.023	.023	9.10***
	Gender	.150**	.156			
Step1 Model 1						
Step2 Model 2	(Constant)		.177	.028	.061	5.73***
	Gender	.137*	.158			
	Bur	.177*	.146			
Step3 Model 3	(Constant)		.187	.083	.055	8.86***
	Gender	.175*	.167			
	Bur	.170*	.044			
	M/F	.166**	.046			
	UA	.170**	.043			
CCL	(Constant)		.039	.013	.013	5.35*
	Bur	.116	.039			
Step1 Model1						
Step 2 Model2	(Constant)		.039	.032	.018	5.35**
	Bur	.115	.039			
	M/F	.082	.039			
	UA	.108**	.038			

*** $p < .001$, ** $p < .01$, * $p < .05$.

In conclusion, after controlling for the demographic variables, the results of our hierarchical regression analyses support the assertion that cultural characteristics -

namely masculinity/femininity, uncertainty avoidance and individualism/collectivism - significantly impact AC, NC, CCL and CCH. The only cultural dimension that appears to have negative or no effect is power distance. These results are fundamentally consistent with our SEM findings.

6.8 Chapter Summary

The main purpose of these analyses has been to answer our main research question and to quantitatively test our research hypotheses. To achieve these objectives, various analyses were applied to the data in three phases, with each phase involving several stages.

Phase one involved exploring the data and included a descriptive analysis of the demographic characteristics of the Saudi sample. We utilised common methods, such as factor analysis, to identify latent variable clusters. The variables demonstrated high reliability. Notwithstanding the Cronbach alpha value for CCL, which was marginally below the 0.6 threshold at 0.55, all other values exceeded this threshold. These results permitted us to proceed to the next stage. In exploratory factor analysis, the variable measurements showed equivalent factor loadings above 0.5. No cross-loadings within the factors exceeded 0.3. This confirms both discriminant and convergent validity. The AVE was employed as a stricter benchmark for confirming convergent validity. All variables exhibited AVE values of above 0.5, indicating adequate convergence and discriminant validity for the measurements. Further analysis of nomological validity was based on the correlation matrix of the constructs. Thus, a correlation analysis was applied to the interrelationships between research variables in order to examine the possibility of multicollinearity.

Phase two of the analysis consisted of confirmatory factor analyses (CFA) of various measurement models to analyse goodness-of-fit. Antecedent and outcome measurement models were estimated on the basis of overall model fit, validity and reliability. The results conclusively indicate that the hypothesised four-factor model (ACOCC) offers the best fit indices. In stage one of phase two, testing for latent mean differences across the three organisational job levels was conducted. The researcher used two methods to confirm the results. The first method was SEM, used to test latent mean differences with invariance analyses. The second method used

general linear modelling: ANOVA was conducted for each dependent variable with the covariate variable. For personal characteristics we performed ANCOVA to discover any covariate effect on the components of commitment. Levene's test identified that there were no significant differences between the covariate variables (i.e., personal characteristics) and the dependent variables (i.e., AC, CCH, CCL and NC). This suggests that the assumption that personal variables are non-significant is reasonable.

Phase three of analysis involved the development and evaluation of our structural equation model (SEM). The SEM was estimated using overall model fit and the path coefficient was associated with relevant causal effects. The fit index for ACOCC was reasonably good. An illustration for the mediation variables was conducted by providing a model with direct paths from the antecedent variables to the consequences. The two models produce similar fits, so mediation is supported. Therefore, we further confirm that the ACOCC model displays a reasonable fit with the data. Finally, to confirm the SEM, a hierarchical regression was conducted in which demographic characteristics were controlled variables. These results are significantly consistent with our SEM findings.

CHAPTER SEVEN DISCUSSION

7.1 Introduction

The main findings of this study confirm the multidimensionality of commitment. Four correlated dimensions of commitment were extracted from the data using CFA to compare the fit index of the single-model approach to that of the multi-factor model. These dimensions included affective commitment, high personal sacrifice, low perceived alternatives and normative commitment, and each presented different antecedents and outcomes that have not yet been investigated in the Saudi cultural context. SEM findings broadly confirmed the hypotheses presented in this study and demonstrated some consistency with similar findings already documented in the literature. After controlling for demographic characteristics, a hierarchical regression analysis confirmed the SEM findings. The results raise a number of interesting issues related to the Hofstede cultural values that presumably affect commitment and work environments as well as enhance commitment among Saudi public-sector employees.

This chapter presents a discussion of the results and their academic and managerial implications. First, the sample of individuals that participated in this study is briefly summarised. Second, a thorough dissection of the empirical findings is presented, which includes a discussion of reliability, convergent and discriminate validity, the dimensionality of the commitment scale, level of organisational commitment, the correlation between the components and the analysis of the hypotheses and cultural dimensions. Third, an illustration for OC mediation role is presented.

7.2 Empirical findings discussion

The sample of individuals that participated in this study reflects the population of the public-sector in Saudi Arabia. Sixteen ministries out of a total of twenty-two Saudi ministries in the two main cities of Riyadh and Jeddah agreed to take part in this research; out of 700 survey questionnaires, 433 were analysed in this study. The demographic data are presented in the analysis chapter and are

summarised as follows. The average age of sampled individuals was 38.55 years, and the average tenure was 14.09 years. The sample included a higher percentage of male respondents at 91.9 per cent, whereas only 8.1 per cent were female. This may be in part due to the fact that the female respondents in this research were drawn from only two female branches of two ministries, namely, the Economics and Planning Ministry in Riyadh and the Social Affairs Ministry in Jeddah. The respondents were relatively well educated; almost half (48.5 per cent) held a graduate or more advanced degree. The respondents also came from different organisational levels; almost half (47.1 per cent) were from the middle organisational level (6th-9th grade), 24.7 per cent were from the lower level of organisation (1st-5th grade), and 25.6 per cent of respondents were from the upper level (>10th grade) (see Table 6.2).

The purpose of the study was to address main and secondary research questions, as well as test the research hypotheses. As presented in Chapter Six, many tests were conducted to achieve these objectives. However, before these tests were conducted, an analysis of the dimensionality of organisational commitment in the Saudi context was conducted. Accordingly, we first discuss the psychometric effects of the OC scales and then consider the conceptual problems relating to this scale. Specifically with respect to the OC scale, four aspects have been analysed in the chapter on analysis, namely, reliability, convergent and discriminant validity, and the dimensionality of the OC scales.

7.2.1 Reliability

To ensure the reliability of our research, we used Cronbach's alpha α to estimate construct reliability (CR). Alpha values were estimated for commitment components before the factor analysis test. The internal consistency (i.e., Cronbach's alpha α) of the overall OC scales was 0.81. For AC and NC, the values were 0.73 and 0.78, respectively, while a value of 0.67 was generated for CC as one scale. Alternatively, based on factor analysis, the reliabilities of AC, NC and CCH were each over 0.70 with scores of 0.70, 0.75 and 0.71, respectively. These scores are acceptable because alpha is greater than or equal to 0.7, and also because each of the component scales contained only three items. In fact, the CCH score was slightly higher than the internal consistency estimate for the original 6-item CC with one factor (where $\alpha = 0.67$), even though CC included a greater number of items. Nevertheless, Cronbach's

alpha α for the CCL sub-component was 0.55. Perhaps the low reliability of CCS could be attributed to the low factor loadings of individual items of CCL6. In general, low reliability results from high-error components of certain items in the relevant commitment component (e.g., CCL6, NC2 and AC6).

If we compare our results with similar studies of Arab culture, namely, Suliman (2002) and Suliman and Iles (2000), we note that both studies test the original 24 items of Meyer and Allen (1991) in the Jordanian context. The reliabilities of the AC, CC and NC scales in the latter study were 0.73, 0.60 and 0.47, respectively, whereas the scores in the former study were 0.80, 0.60 and 0.48, respectively. If we compare these results with the Saudi sample in this study, we see that the values for AC and CC were very similar but that the value for NC in the current study is more acceptable. In other words, the psychometric properties of the normative commitment scale appear highly reliable given comparable studies.

Yousef (2001; 2000a; 2000b) also used the original 24 items of Meyer and Allen (1991) and achieved results that were more consistent with North American findings; the Cronbach's alpha scores for AC, CCH, CCL and NC were 0.85, 0.81, 0.78 and 0.79, respectively. Finally, as the only study that used 18 revised Meyer and Allen (1997) items to measure the relationship between demographic factors and organisational commitment in Saudi Arabia, at the Institute of Public Administration (IPA), Al-Kahtani (2004) found Cronbach's alphas α for AC, CC and NC that were highly reliable with scores of 0.87, 0.85 and 0.83, respectively. With respect to Al-Kahtani's (2004) findings, we note that the applications of his study were limited, especially for Saudi Arabian organisations, because he conducted the study in only one organisation and did not employ confirmatory factor analysis (CFA) to explore the construct validity of the OC component.

Overall, there are only five studies that have been conducted in the Arab countries, four of which used the original 24 scales of Meyer and Allen and their three components. The internal consistency using Cronbach's alpha for the three commitment components ranges from very low (0.47) for the NC scale to highly reliable (0.87) for the AC scale. Therefore, we consider that the internal consistency of OC components in this research was acceptable. Our results are especially consistent with those of other studies conducted outside North America, as well as

those studies that use the revised version of the three-component scale with 18 items. For example, we can compare our results with those of Ko *et al.* (1997), where the Cronbach's alpha (α) for sub-component CCL was 0.57. In addition, we can compare our findings with those of Cheng and Stockdale (2003), who carried out a study in China and found a Cronbach's alpha α of 0.52 for the one-component CC scale. Finally, we can also compare our results to those of Lee *et al.* (2001), who also found a low Cronbach's alpha α of 0.61 for the CC scale for a Korean sample.

In sum, the reliability test of the OC scale including 18 items yields a high score ($\alpha=0.81$), while the reliability test for each component after factor analysis and the exclusion of the cross-loading and low factor-loading items yielded acceptable results except in the case of the CCL scale. However, this variable showed divergent relationships with the other dimensions and variables. The multicollinearity test showed no connections between CCL and the other OC dimensions. Therefore, we found it important to include CCL, especially in order to be consistent with other research carried out in non-Western countries.

7.2.2 Convergent and discriminant validity

As pointed out in the analysis chapter, the first factor analysis suggested that ACS and CCS contain four factors and that NCS contains one factor. Normative commitment items were loaded on the first factor with all items. CC scales were divided into two sub-scales, namely, CCH, which loaded strongly on the third factor, and CCL, which loaded on the fifth factor with one item (CCL6) that exhibited low loading.

Alternatively, the three reverse-coding items for ACS loaded strongly on the second factor with a minimum factor loading of 0.614. NC1, the fourth reverse coding in the commitment scales, exhibited cross-loading'. Loading on the first factor with the rest of the NC items and with the other reverse factor loading AC items. On both factors NC1 exhibited very low loading. The other three positive AC wording items loaded on the fourth factor and had cross-loading with the NC factor.

The dimensionality of CC has been extensively considered in the research literature, though there is a lack of agreement about whether the continuance commitment scale reflects one construct (Allen and Meyer, 1990; Ko *et al.*, 1997; Hackett *et al.*, 1994;

Dunham *et al.*, 1994) or two highly-related but distinct sub-dimensions of the same construct (McGee and Ford, 1987; Randall, Fedor and Longnecker, 1990; Whitener and Walz, 1993). The first authors to identify CCS as having two distinct dimensions were McGee and Ford (1987), who employed exploratory factor analysis using no specific number of factors. Our EFA supports the distinction between the two CC sub-component factors suggested by Meyer and Allen (1984) and McGee and Ford (1987). In particular, all six items of the CC scale were positively worded and loaded very appropriately on two separate factors with no cross-loading, although one item of CCL exhibited low factor loading.

With regard to the two dimensions of AC, Magazine *et al.* (1996) provided strong support for the existence of reverse-coding factors defined by the six negatively worded items for the original Meyer and Allen (1984) AC and CC scales. Despite some evidence that explains the results regarding reverse coding factors as the product of careless responses (Schmitt and Stuits, 1985) or insufficient cognitive ability (Cordery and Sevastos, 1993), there is also some evidence that the reverse-coded items may weaken the validity and reliability of a measure. Therefore, they may reduce the pragmatic relationships between a construct and other variables (Schmitt and Stuits, 1985).

Wong, Rindfleisch and Burroughs (2003) measured the Material Values Scale (MVS) and focused on the problems that are likely to emerge when employing domestic mixed-worded scales (i.e., scales that contain both positively-worded and reverse-worded items). They found that there was a problem associated with the mixed-worded format, suggesting that East Asians respond to positively-worded items and reverse-worded items quite differently than do Americans. Therefore, the direction of item wording appears to have a powerful influence on the responses of East Asians when Likert scales are employed. Moreover, this influence has the potential to affect the real impact and suggests that the mixed-worded format of scales such as the MVS represent a substantial threat to the validity of measures in cultures in which differences in values, language or customs lead individuals to interpret reverse-wording items differently from positive-wording items (Wong *et al.*, 2003).

Alternatively, recent research has investigated the correlates of method effects associated with negatively-worded items on the Rosenberg Self-Esteem scale (DiStefano and Motl, 2009) and suggested that the method effect associated with negatively-worded items may be more important for subjects who possess certain personality traits than for others. Notwithstanding the disagreement regarding the real affect of the reverse-coding items, our results revealed a reverse-coding factor that is consistent with the results of previous analyses of negatively-worded items in psychology and organisational behaviour studies. These findings may have been obtained for many reasons, not least for reasons mentioned above, and they present strong support for the existence of reverse-coding factors in organisational behaviour measures.

With regard to the lack of discriminant validity, there is substantial conceptual overlap between AC and NC. Ko *et al.* (1997) considered this issue and suggested that more work in this area be done with respect to measurement. In their meta-analysis, Meyer *et al.* (2002) also found that affective commitment and normative commitment were indeed extremely correlated and were more related to each other in contexts outside of North America. Consistent with previous research, the correlation between affective commitment and normative commitment in this study was relatively strong ($r = 0.65$, $p < 0.001$). However, because of the consistently high correlations between AC and NC dimensions, there is uncertainty about the distinction between these constructs (Allen and Meyer, 1990; Ko *et al.*, 1997). Furthermore, Allen and Meyer (1990) reported that the expected antecedents of AC are also highly correlated with NC. Thus, correlations with other antecedents and consequences are almost equal, suggesting a lack of discriminant validity between affective commitment and normative commitment. In other words, AC, NC and CC are theoretically distinct ways in which an individual can bond with an organisation.

The literature has constantly demonstrated discriminant validity for CC by distinguishing CCS from ACS and NCS and through discrepancy relationships with other variables as evaluated using AC and NC. Nevertheless, AC and NC have not been documented to show this same level of comprehensible discrimination, although confirmatory factor analyses across many studies have shown that ACS and NCS items load on different manifest factors (Meyer *et al.*, 1993; Dunham *et al.*,

1994; Ko *et al.*, 1997), scale scores and latent factors and thus can be considered likely to be moderately correlated (Meyer *et al.*, 1993; Allen and Meyer, 1990; Dunham *et al.*, 1994; Ko *et al.*, 1997; Meyer *et al.*, 2002; Chen and Francesco, 2003). In addition, NCS appears correlated with OCQ and ACS to a similar degree (Allen and Meyer, 1990; Dunham *et al.*, 1994; Cheng and Stockdale, 2003, p.470). In fact, when Suliman and Iles (2000) conducted a study in Jordan, a nation where the culture is similar to Saudi culture, their factor analysis revealed two normative commitment items loaded on AC factors rather than a NC factor. The other NC items did not load at all and showed very low reliability ($\alpha = 0.47$).

Despite this issue, Meyer and Allen (1997) maintained that more support was provided for the construct validity of the measures. For instance, the correlations between the organisational commitment questionnaire (OCQ) and commitment measures are a significant issue in approximating construct validity. The OCQ, which is based on emotional attachment to an organisation, must correlate strongly with ACS (Allen and Meyer, 1996). While normative commitment is based on obligation instead of affection, it does seem to overlap to some extent with affective commitment. Consequently, it is expected that the NCS score should be moderately to highly associate with other affective measures.

CC is understood as independent of affection, despite the fact that one may simply perceive that the costs that result from leaving an organisation are high. This does not inevitably create negative or positive feelings. Thus, CCS would be expected to contribute very little variance to other work behaviour measures. In prior empirical studies, the OCQ was strongly related to the ACS as expected, and it provided verification for convergent validity. In addition, the OCQ, again as expected, is modestly correlated with the NCS and is weakly correlated with the CCS (Allen and Meyer, 1990; Cohen, 1993; Hackett *et al.*, 1994).

The main point of our findings is that the three negatively worded items were negatively coded, thereby indicating emotional attachment to the organisation. These items include AC3, "I do not feel like part of the family at my organisation"; AC4, "I am not emotionally attached to this organisation"; and AC6, "I do not feel a strong sense of belonging to my organisation". In contrast, positively worded AC items loaded on one factor, namely, item AC1, "I would be very happy to spend the rest of

my career with this organisation”, while item AC5, “this organisation has a great deal of personal meaning for me”, exhibited cross-loading with the NC factor and loaded on the first factor. Both items also exhibited low factor loading on both factors of less than the recommended 0.5.

It may be that the use of the same words for ACS and NCS (for instance, the word ‘feelings’) had an impact in these particular items. In Arabic, the word ‘feeling’ more heavily reflects a respondent’s emotional attachment to the organisation. Thus, the confusion with respect to AC and NC in terms of clarity of the construct could be ascribed to measurement problems in cross-cultural research, as Lee *et al.* (2001) have argued in their research. Despite the use of back-translation in this study, the meanings of the items may still be inexact. This is simply because the content has different connotations in the Arabic culture. For example, item NC3, “I would feel guilty if I left my organisation now”, reflects a feeling of guilt that in Muslim culture is connected more with religion and reflects the possibility of negative behaviour in contrast to norms and roles. Consequently, these items might exhibit cross-loading with CCH as a result of some misunderstandings among respondents regarding the content of the items.

With all this in mind, it would seem that the connotative meanings of the negatively coded AC items reflect an accurate measure of emotional attachment. In other words, in the Arabic language, the negatively-coded items represent AC constructs in Saudi culture, whereas the positively-worded items reflect more of an obligation to the organisation.

In the same vein, Jaros *et al.* (1993) supported the classic idea presented by Kanter (1968) that attitudinal commitment is multidimensional. Thus, affective commitment is distinct from normative commitment, though Jaros *et al.* (1993) highlighted that the minor convergence between the two scales centred on loyalty items. Accordingly, it seems that there were equivalent cross-loadings between affective and normative factors. Jaros *et al.* (1993) argued that from the point of view of employees, the everyday meaning of loyalty to an organisation may imply psychological attachment that resembles some aspects of moral or normative commitment. Thus, they opposed Mathieu and Zajac’s (1990) view. Moreover, Jaros and his colleagues emphasised the importance of mapping out the dimensionality of organisational commitment,

regardless of whether the specific dimensions influence other variables of interest differently (Jaros *et al.*, 1993, p.985).

Meyer *et al.*'s (2002) meta-analysis showed a stronger relationship between AC and NC outside rather than inside North America. The authors ascribe this difference to translation complications. The literal meanings of the terms used in the ACS and NCS items could not be the same in other languages. This problem has appeared with respect to certain items developed in English and Western contexts (Ko *et al.*, 1997; Cheng and Stockdale, 2003; Vandenberghe, 2003). However, Wasti (2002; 2003) has tackled this issue empirically by creating etic-emic commitment scales for use in Turkey and, together with items from Meyer *et al.* (1993), developing culture-specific items through interviews with the Turkish sample. Despite the strong correlation between ACS and NCS that Wasti found in her work, she demonstrated discriminant validity in her research by investigating relationships with other variables. As a result, Wasti has recommended avoiding overlap among constructs, and that culture-specific items should preferably be included in research in non-Western cultures.

Jaros (1997, p.332) has also emphasised this issue and stated that confusion between AC and NC due to a lack of item clarity could be resolved by developing more scale items for NCS that reflect an employee's viewpoint or belief about his/her obligation to an organisation rather than his/her feelings. Such modifications may be difficult, given the informal way that a person can express in English the concept of 'feeling obligated' to a person or an organisation, even though this 'feeling' is not a real feeling. However, some items could be developed to convey this lack of formality, including, for instance, "I do not have (feel) an obligation to remain with my current employer" or "I would be letting my current employer down (feel guilty) if I left my organisation now" (Meyer *et al.*, 1993). Such a modification could possibly prevent any further confusion with respect to AC regarding the significance of the term 'feelings' in non-English languages.

In summary, the discussion in the last paragraph suggests an overlap between AC and NC. A high correlation and a lack of discriminant validity have been found in the literature, particularly in non-Western cultures. The problem arises because of the way in which some of the AC and NC measurement items are presented. AC items

include aspects associated with feelings (i.e., the three negatively-worded items mentioned above) and obligation (i.e., the positively-worded items) that may confuse respondents, especially Arabic-speaking respondents. This result is consistent with Suliman (2000), who found an overlap between the two commitment dimensions and showed that emotional attachment and feelings of obligation to an organisation in Arabic culture are not independent. In other words, at a phenomenological level, normative (i.e., ought to stay) and affective (i.e., want to stay) concepts appear to have greater psychological overlap, whereas neither of these two components has a psychological overlap with have to stay, whether this is associated with perceived low alternative or high level of personal sacrifice.

Taken together, the overall results of the exploratory factor analysis revealed some psychometric problems with the Arabic-language version of AC and NC. Any item that failed to load with a single factor of 0.5 or greater was excluded, after which analysis was carried out once more. This procedure of excluding items continued until all indicators were loaded with the proper factors with values greater than 0.5 and until each of the commitment factors had no cross-loadings exceeding 0.3. We were left with twelve items, three items per scale, based on the results of the factor analysis. The internal consistency reliability of the new scales was acceptable; the correlation between ACS and NCS was 0.651, while the correlation between CCH and CCL was 0.465. The correlation between commitment components with the expected antecedent and consequences supports the construct validity of the three components, as the correlations were significant in the predicted direction.

7.2.3 Confirmatory factor analysis and the dimensionality of the scales

To investigate the construct validity of the Meyer and Allen (1991) model in a Saudi context, the current study examined the underlying factor structure of the revised version of AC, CC and NC (Meyer and Allen, 1997) by comparing models that reflect the substantive structure of OC to models that include method factors.

Overall, CFA revealed that the four-factor oblique model (i.e., AC, NC, CCH and CCL) fits the Saudi data better than the two- or three-factor models. Fit indices and significance tests (see Table 6.12) likewise showed that the four-factor model fits the

data better than the other three- and two-factor models. However, the improvement based on fit indices was modest. The results also revealed a distinction between the two sub-components (CCH and CCL). However, in our study, they were moderately correlated ($r = 0.465$, $p < 0.01$); they were also correlated differently from their antecedents and consequences. This finding is consistent with Lee *et al.*, 2001; Iverson and Buttigieg, 1999; Allen and Meyer, 1990; and McGee and Ford, 1987.

The three organisational commitment constructs appear likely to be theoretically and conceptually similar in Saudi culture. Nevertheless, there might be a need to modify some items so that they are applicable to Arabic culture as discussed in the previous section. It seems that some items do not generalise across cultures, in particular in an Arabic-speaking context, because when we dropped some of the problematic items, we achieved a very good fit index (CMIN/DF= 2.078, CFI= 0.954, GFI= 0.941, and RMSEA = 0.050). This provides evidence that even when the construct that we measure does generalise, differences in the significance of some items seem to occur in the Saudi context.

These findings demonstrate that Meyer and Allen's (1991) three-component model of OC is generalisable to the Saudi context. Thus, the first hypothesis is supported; namely, the three-component model including AC, NC and CC demonstrates construct validity in a Saudi context. The findings are consistent with much research that has tested the model outside North America, such as in Korea (Chang, 1999; Ko *et al.*, 1997; Lee *et al.*, 2001), China (Cheng and Stockdale, 2003), Belgium (Vandenberghe, 1997), Australia (Iverson and Buttigieg, 1999), Nepal (Gautam *et al.*, 2001), Jordan (Suliman and Iles, 2000; 2001) and the United Arab Emirates (Yousef, 2000; 2002).

7.2.4 Level of organisational commitment

In addressing the first secondary research question that considers the levels of AC, CCH, CCL and NC at different organisational levels, the research findings showed that affective commitment (AC) and normative commitment (NC) were significantly different or stronger at higher organisation levels with means of 3.841 and 3.751, respectively, while continuance commitment (CC), and especially high-sacrifice (CCH) commitment, was stronger at lower organisational levels with a mean of

3.626. No significant differences were found in the levels of the continuance commitment sub-component (CCL) among employees at different organisational levels. Most importantly, CCL was found to be almost identical across the three surveyed organisational levels with a mean of 3.411. In other words, the higher the hierarchical position that the employees occupy, the stronger their demonstrated affective commitment and normative commitment, whereas at the lower level of the hierarchy, continuance commitment was stronger (see Table 6.35 giving the levels of AC, CCH, CCL and NC by organisational level). This finding is consistent with some early studies (Cohen and Lowenberg, 1990; Angle and Perry, 1983) that found that commitment increases with job level. Thus, it has been suggested that the higher a person's job level, the greater the payments received from the organisation, which in turn increases the level of commitment.

Finally, the total AC level for the three organisation levels was by far the highest with a mean of 3.675, followed by NC (3.596) and CCH (3.536). The lowest was CCL with a mean of 3.343. This is consistent with the results of a earlier study by AlQurashi (1998) conducted in Saudi Arabia among public-sector employees that measured OC uni-dimensionally using the OCQ measurement that reflects AC; in that study, OC was considerably higher among public employees in Jeddah. Thus, to address the first secondary research question regarding the levels of AC, CCH, CCL and NC at different organisational levels, we note that the higher the hierarchical position the employees occupy, the stronger their affective and normative commitment, whereas at lower levels, continuance commitment (CCH) was demonstrated to be stronger.

These findings, relating organisational job level to differences in the levels of the three commitment components, are new in the Saudi Arabian context. With regard to Arab countries, Awamleh (1996) conducted a study about Jordanian "Civil service managers" and revealed that there was a positive relationship between managerial positions and affective commitment. This relationship was attributed to the governmental departments' organisational dimensions rather than to the external environment or to managers' personal qualities. However, there has been no empirical analysis directly addressing the differences between the three OC

components in terms of hierarchal organisational levels in the Middle East or in Arab countries.

The most significant contribution our findings make to this issue is that Saudi public-sector employees have different or varying degrees of affective, normative and contenance commitment to their organisation. These findings are consistent with those of Meyer and Allen (1997), which indicated that employee commitment can reflect varying combinations of desire (AC), obligation (NC) and perceived cost (CC) and that the behavioural consequences of commitment could depend on the relative strength of the three components combined. This is what Herscovitch and Meyer (2002) and Gellatly *et al.* (2006) have called “the commitment profile”. Therefore, understanding the multidimensionality of employee commitment at each organisational job level should have major managerial implications, as it encourages awareness of the effects of commitment on work behaviour as well as an exploration of the antecedents of each component of commitment. However, in this study, we did not test interaction effects on job behaviour or commitment profiles because it is sufficient for our study to acknowledge this element of multidimensionality for the full support of H2; that is, we have shown that there were significant differences between these components at different organisational levels. This concept will be discussed further when we analyse the effect of culture dimensions on commitment development.

7.2.5 Correlations between commitment components

The second secondary question is the following: what is the correlation between the commitment components at the different organisational levels?

We obtained interesting findings regarding the correlation between the OC components in the Saudi sample. Three correlations were strong at the three organisational job levels; those between AC and NC, NC and CCH and the two CC sub-components. However, the strongest correlation was between the CC sub-component at the lower organisational level, which reflects the higher level of CCH and CCL also at the lower organisational level. NC and CCH showed their strongest most significant correlation at higher organisational levels ($r = 0.382, p < 0.001$) (see Table 6.22). However, the nature and direction of the correlation between CCL and

the other three components are consistent with the results of McGee and Ford (1987); they noted that these subscales are correlated significantly. Note that the scores for AC were correlated in opposite directions; CCL was correlated negatively; and CCH was correlated positively. In their meta-analysis, Meyer *et al.* (2002, p.24) argued that if the CC sub-components related differently, as McGee and Ford (1987) found to be the case with ACS, then this would have implications for how correlations involving the full-scale CCS are interpreted and how continuance commitment should be operationally defined in the future.

In our research, CCL was negatively correlated with AC only at higher organisational levels and did not correlate with NC. Affective commitment was significantly and negatively related to CCL but insignificantly correlated with CCH. In other words, employees who are more emotionally committed were significantly less likely to remain with an organisation because of a perceived lack of alternatives. In contrast, NC had a significant and positive relation to CCH but did not have a significant relation to CCL. Thus, employees exhibiting normative commitment are more likely to feel that there would be great personal sacrifice associated with leaving their organisation.

The pattern of correlations in the Saudi sample is similar to that reported in the prior literature (Meyer *et al.*, 2002) concerning the relation between AC and NC. However, the results contradict previous findings regarding the correlation between AC and CCL. We conclude that even in non-Western cultures (e.g., Saudi culture), the correlations between the OC components are similar.

7.2.6 Testing the hypothesis

To test the research hypothesis, we introduced the results of EFA regarding the factorial structure of the commitment components and other variables in the hypothesised model, which revealed that all items loaded on their expected factors. The average variance extracted (AVE) percentage for any two factors was greater than the square of the correlation estimate between the two constructs, which was over 0.5, and the reliability test for most variables exceeded 0.7. In addition, the eigenvalues and the scree test suggested that fourteen is the appropriate number of factors, which together explain 65.51 per cent of the variance. In addition, the

nomological net of organisational commitment and the set of the hypothesised relations among the three OC components and other variables demonstrated that the relationships found here matched the relationships in the hypothesised model. These results support the prediction that these constructs are related to one another. This provides sufficient evidence for the convergent validity of the constructs of the antecedent variables, organisational commitment and consequences.

The results of the CFA of the first-order measurement model of cultural dimensions, the CFA of the measurement model of the antecedent variables (including work experience and impersonal bureaucratic arrangement) and the CFA of the measurement model of the consequences (including intention to leave, in-role behaviour and organisational citizen behaviour) showed convergent and discriminate validity. The factor loadings were good, and the fit indices for each of the cultural variables were significant (see Table 6.37), except for the first indicators in the case of power distance, which exhibited a low factor loading (0.368), and two indicators of individualism/collectivism (items 3 and 5), which exhibited cross-loading with an uncertainty avoidance factor. We therefore removed these items from subsequent analyses. Our modified indices suggested that the error terms for the fourth and the fifth items of the individualism/collectivism element (i.e., “employees should only pursue their goals after considering the best interests of the group” and “managers should encourage group loyalty even at the expense of an individual’s goals”) were significantly correlated. Carefully examining these two indicators revealed that their meanings were very similar, implying a high error correlation. Consequently, these items were omitted from further analyses. Similarly, the first and second power distance indicators exhibited cross loading; they were also discarded.

With regards to the CFA of the consequences, the analysis revealed a three-factor solution with high loadings, with a minimum of 0.540, and negligible cross-loading for each of the alternative factors, with a maximum of 0.30. The first factor was organisational citizenship behaviour, the second was in-role behaviour and the third was intention to leave. We analysed the two sub-dimensions of organisational citizenship behaviour, namely, altruism (OCBI) and generalised compliance (OCBO), with the rest of the measurement items, which loaded onto one factor. Because this study focuses on the relationship between organisational commitment

components and outcome behaviour rather than on the dimensionality of OCB, this factor contains seven items from both dimensions (for example, OCB2, “helps others who have heavy workloads”, and OCBI2, “gives advance notice when unable to come to work”); (see Table 6.42). It is also worth noting that many previous studies have assumed that the relationship between commitment and OCB scales can be captured in a single factor or along one dimension (Smith *et al.*, 1983; Kim, 2005). Therefore, we treated OCB as one construct, especially after excluding those items with low-score factor loadings; this process resulted in the elimination of five items with $\alpha = 0.73$ only, which is an acceptable Cronbach’s alpha (α).

The CFA of the measurement model fit indices generated the recommended values. The results provided evidence of excellent internal consistency among the factors. The reliability of the measurement models was also evaluated using AVE, as Fornell and Larcker (1981) have suggested that AVE should be an indicator of the overall convergent validity of a subscale and the value should exceed 0.50. All standardised factor loadings were greater than twice the standard error, and nearly all of the factor loadings were over 0.60 (see Table 6.37 and Table 6.42). Taken as a whole, the results of the CFA of the measurement models seemed to be psychometrically appropriate to employ in the analysis of SEM.

Consistent with the weight of evidence supporting Meyer and Allen’s (1991) three-component model, we employed an ACOCC hypothesised model of the relationships between the antecedents and consequences of OC components. The overall results indicated satisfactory model fit despite the large number of variables and the model’s complexity. Thus, the ACOCC model can be concluded to offer an acceptable fit, particularly given the model’s RMSEA of 0.034 and CFI of 0.933. This suggests that the ACOCC model reasonably fits the Saudi data. Discussion for each hypothesis follows below.

Firstly, in order to test hypothesis H2 (namely, that there are significant differences in commitment levels for public employees at different organisational levels), invariance analysis was conducted. The means comparison revealed that the most significant difference between the higher and middle job levels was for NC (0.336, $p < 0.001$). This was followed by CCH, which showed a significant negative difference between the mean for CCH at the highest level and at the other two job levels (-

0.396, $p < 0.001$). This indicated that the difference in CCH was lower than at the other job levels. However, AC was also significantly different at the highest level from that at the other job levels (0.208, $p < 0.05$). Therefore, we can deduce that Saudi employees at the highest job level have higher levels of normative and affective commitment and lower levels of high personal sacrifice than those working at the other two job levels in the public sector. Hypothesis 2 is thus fully supported; there are differences in the level of OC components at the different organisation levels.

Secondly, the standardised regression path between selected antecedent variables and organisational commitment components was statistically significant with regard to the relationship of Ler with AC and NC. This means that H3a is partially supported. Training (i.e., opportunities for learning) was more positively related to AC than to CC and NC. The organisational commitment literature has posited that antecedent work experience exerts a positive effect on AC, and commitment researchers have concluded that work experience can serve as antecedents of AC (Meyer and Allen, 1997; Meyer *et al.* 2002). Thus, learning should increase AC more than other commitment components. Interestingly, our findings revealed that for our sample of Saudi public employees, Ler also exhibited a significant positive relationship with NC. This relationship was more significant and stronger than the relationship with AC; that is, employees who have an opportunity to learn appeared to feel a moral obligation to remain in the organisation. Thus, H3b is fully supported. Ler exhibited a significant relation to NC. In other words, the regression weight for Ler in predicting NC was significantly different from 0 at the 0.001 significance level.

Thirdly, H4a and H4b were fully supported because there was a significant positive relationship between management communication and AC and NC; the two relationships were almost at the same level ($\gamma = 0.408$ and 0.473 , respectively, $p < 0.001$). However, the relationship with NC was relatively stronger. This is consistent with the results of previous studies. Both employee emotional attachment and moral obligation to the organisation increased when individuals experienced efficient communication with management in their work environments. Thus, these results are consistent with those of previous studies regarding the antecedents of commitment and, specifically, with the conclusion that work experience predicts organisational

commitment (Meyer *et al.*, 2002; Meyer and Allen, 1997; Mowday *et al.*, 1982). However, the results contradict those of studies suggesting that NC is less strongly related to work experience than is AC and accord with a few recent studies that purport that NC antecedents have different effects than do the antecedents of AC (Cheng and Stockdale, 2003; Kondratuk *et al.*, 2004).

This finding can be explained by the conceptual similarity between the two factors in that both tend to build and satisfy individual needs. Also, training and communication are commonly an essential part of the socialisation process. Our research revealed that in Saudi culture, work experience (i.e., training) increases employee obligation attachment to an organisation. High NC occurred when this obligation was developed through reciprocity. In a way, the employee may feel that he/she should reciprocate positive learning experiences; that is, he/she should pay the organisation back. Communication also implies a higher level of NC than of AC. Thus, effective management communication will enhance both NC and AC components.

Fourthly, H5 was fully supported because of the significant positive relation between Bur and CCH ($\gamma = 0.253$, $p < 0.001$). In contrast, Bur's relationship with CCL was non-significant (see Table 6.43). In other words, the regression weight for Bur in predicting CCH was significantly different from 0 at the 0.001 significance level. This is consistent with the results of previous research (Meyer *et al.*, 2002; Powell and Meyer, 2004; Shore *et al.*, 2000). It also suggests that the high sacrifice subscale is best captured by considering continuance commitment as conceptualised in Becker's side-bet theory, i.e., as an impersonal bureaucratic arrangement. The only variable that was selected from the side-bet theory index was treated as an antecedent of the high personal sacrifice subcomponent CCH. This was not surprising because the Bur scale addressed issues such as seniority, job security and benefits. These issues capture the most substantial or calculative losses that would be incurred in leaving the organisation. This provides ample evidence that even in a non-Western culture such as Saudi Arabia, this scale is also significantly correlated with CCH. It seems that, as Becker proposed, employees remain with their organisation because of the various costs associated with leaving (side bets captured by the Bur scale). Thus,

the loss of items such as pensions, seniority privileges and job security remains a significant binding force today.

7.2.7 Cultural dimension findings

This research aimed at exploring the effects of the selected antecedent variables on organisational commitment among public-sector employees in Saudi Arabia. Cultural dimensions were chosen as one such antecedent. Cultural characteristics vary among countries and across regions (Clugston *et al.*, 2000), and Saudi culture naturally also differs from Western culture in numerous respects. Several fundamental cultural patterns that can emerge as macro-level cultural dimensions, including beliefs and values, may also manifest on an individual basis (Triandis, 1995). However, the majority of culture-focused studies have used a national-level analysis to compare countries in order to explore cultural values (Hofstede, 2001; Schwartz, 1999).

Few cultural studies have observed the relationships between cultural values and employee work attitudes and behaviours vis-à-vis an organisation or the effects of the former on the latter. If we want to empirically study the cultural dimensions within one country, we require measurement instruments that capture individual-level manifestations of cultural values. That is, when culture is an independent variable that influences and predicts individually-measured dependent variables, individualised measures of culture must be used (Bochner and Hesketh, 1994). Thus, because the cultural dimension is constructed as a psychological dimension that affects the components of organisational commitment in the context of individual employees, individualised measures of culture have been used here.

This final issue concerns culture-relevant complexities in the context of the socialisation and communication processes that impact an individual's life experiences. The experiences of an individual are rooted in a cultural setting, though context alone cannot fully explain personal development. Many attitudinal variables studied in organisational behaviour research, such as organisational commitment, are affected by personal characteristics. Therefore, as previously mentioned in the chapter presenting our analysis, the effects of personal characteristics were tested and removed from our analysis (Becker *et al.*, 1996; Clugston *et al.*, 2000).

Hofstede's index identifies four cultural dimensions and assigns each country an aggregate score. Therefore, it is possible to use judicious comparisons to differentiate between the cultural orientations within the data under consideration. However, there are major issues pertaining to the use of Hofstede's index. First, researchers often rely on Hofstede's (1980) results without considering the cultural changes that may have occurred during the past 30 years (McCoy, Everard, and Jones, 2005). Second, Hofstede designed his index in such a way that the country scores would ideally fall between 0 and 100. However, it is not uncommon for some countries to score higher than 100.

Despite the fact that Hofstede's work reflects an "ecological" level of analysis, correlations among the items in each scale and factor analyses used to classify the measures employ mean scores from respondents aggregated at the national level before they were subjected to analysis; in addition, each item in Hofstede's questionnaire produces a single data point (the mean score) for each country in his analysis. Analysis at the individual level reveals a completely different perspective than does analysis at the ecological level (Dorfman and Howell, 1988, p.129). For instance, the relationships among the three items measuring PD in Hofstede (2001) are significant only at the national level, while the same correlations at the individual level of analysis are almost zero.

In this research, some of the mean scores were close to Hofstede's original data, while others were different. However, this does not necessarily mean that the cultures in these countries are changing. Hofstede constructed his index after having studied employees of IBM, a single, large multinational corporation. Critics argue that this has led to significantly biased country scores as two samples drawn from one country may result in different scales. Triandis (1995) has cogently argued that people within the same country may exhibit different cultural orientations. Finally, using Hofstede's measures can only indicate an aggregate cultural orientation of a group; it does not allow one to distinguish between the idiosyncrasies of individuals within a sample.

This research has addressed two main issues related to cultural dimensions, namely, a confirmation of the multidimensionality of cultural dimensions and an investigation of the effect of these personal cultural values on work behaviours using individual-

level analysis. Antecedent variables were used to eliminate biases as explanations for cross-cultural differences that were observed (Leung, 1989, p.716). The results of the CFA confirmed the multidimensionality of the cultural factor. The results also confirmed that cultural values are antecedent to organisational commitment.

Our results showed that the highest average cultural dimension score occurs for uncertainty avoidance (4.027) and that the lowest mean is for power distance (2.071). The mean scores for individualism/collectivism and masculinity/femininity were 3.715 and 3.470, respectively. From these average scores, we have concluded that Saudi public-sector employees exhibit a high level of uncertainty avoidance and a moderate-to-high degree of individualism and masculinity. In contrast, the mean power distance score was relatively low. These findings are consistent with those of previous studies conducted in the Middle East (Bjerke and Al-Meer, 1993; Cohen, 2007a). The rather unexpected results regarding relatively high masculinity, with an average score of 3.470, suggested that the Saudi culture may exhibit a more “macho” orientation as well as a relatively high level of individualism, given the average score of 3.715 for this scale. This seems to justify the notion that employees with more individualist values might express more attachment to an organisation as a whole, which would explain the high to moderate level of AC in the Saudi sample. Employees at the highest organisational level showed the highest average uncertainty avoidance, and the differences between this group and the other two groups were significant. However, the other three dimensions (i.e., power distance, individualism and masculinity) showed no differences among the groups of employees at different organisational levels.

With regard to masculinity/femininity, Hofstede’s (2001) index for Arab countries, which includes Saudi Arabia, is 53, and so it is just above the mid-point, as the index ranges from zero to 100. Bjerke and Al-Meer (1993) obtained different results, with a score of 43 for Saudi Arabia, which situates it on the feminine side along with Iran and Turkey (43). However, in At-Twajri and Al-Muhaiza’s (1996) more recent research that used Hofstede’s formulas to measure cultural dimensions, Saudi Arabia is measured as masculine with an index of 53. This means that Saudi Arabia tends towards a masculine cultural orientation (see Table 7.1). As mentioned earlier, our results also indicate a relatively high mean score for masculinity/femininity (M/F)

(3.47 out of 5.00). Another justification for these results could be that the respondents were 91.9 per cent males. In sum, our results seem to support the notion that the Saudi sample scores relatively high in the masculine work value.

Hypothesis H6 suggested that masculinity is positively related to CCH. This hypothesis is fully supported because the results revealed a strong and significant regression path between M/F and CCH ($\gamma = 0.147$, $p < 0.05$). Previous research indicated the notion that masculine values increase calculative commitment, whereas feminine cultural values engender affective commitment (Randall, 1993). However, for exploratory purposes, as mentioned in the analysis chapter, we added paths from M/F to NC as well as to AC based on Hofstede's index, which has indicated that Arab countries lie midway between Canada and Belgium with regards to M/F. No significant relations were found linking AC and NC with M/F.

Table 7.1: Hofstede's cultural dimensions scores in Arab Countries (KSA).

Cultural Dimension		Hofstede index for Arab Countries	At-Twajri and Al-Muhaiza (1996) Index for Saudi Arabia	Mean score of cultural dimension in the present study*
Masculinity/Femininity	<i>Index</i>	53	53	3.47
	<i>Rank</i>	23		
Uncertainty Avoidance	<i>Index</i>	68	88	4.03
	<i>Rank</i>	27		
Individualism/Collectivism	<i>Index</i>	38	41	3.72
	<i>Rank</i>	26-27		
Power Distance	<i>Index</i>	80	61	2.07
	<i>Rank</i>	7		

* Total mean score is out of 5 on a Likert-type scale measure.

Hofstede (2001) defined uncertainty avoidance as the degree to which people feel threatened by uncertain and ambiguous situations and seek to avoid them. He argued that when individuals encounter high uncertainty, they seek job security and prefer formal rules; such individuals tend to have longer job tenures and exhibit weaker intentions to leave their employer as well as higher average seniority in their jobs. H7 states that uncertainty avoidance (UA) is positively associated with both continuance commitment subcomponents CCH and CCL. Our results provide full support for H7 because uncertainty avoidance was significantly correlated with CCH and CCL.

Our data revealed a total mean score for UA of 4.03, which indicates that Saudi Arabia is a risk-averse society. Such a society tends to foster increased continuance

commitment, rooted in an employee's evaluation of the cost of leaving his/her organisation and finding another job. This is consistent with At-Twajri and Al-Muhaiza's (1996) results; their study revealed a higher score for UA. One of their justifications for this finding could be that, with the increase in the standard of living in GCC countries, including Saudi Arabia, the fear of losing that wealth has also increased. In addition, the fluctuation in oil prices is a principal concern for these countries because the revenue from oil sales is the main source of government funding, so economic planning is affected by that fluctuation. As has been described in Chapter Four, before oil was discovered in Saudi Arabia, life in Saudi society was simple; the Saudi people had nothing to lose because they were already faced with difficult living circumstances. Now, however, they have build up greater capital reserves than other nearby countries, and so UA has increased. Even in the public sector in which job security is higher than in the private sector, employees can be classified as risk avoiders.

H8 states that collectivism is positively associated with NC. This hypothesis is fully supported. A significant relationship exists between I/C and NC ($\gamma = 0.154, p < 0.05$). It is amply documented in the literature that collectivist societies tend to encourage individuals to show normative commitment more than affective and continuance commitment (Clugston *et al.*, 2000; Wasti, 1999; Wasti and Can, 2008). It has been cogently argued that the relationships between management and employees in collectivist societies tend to be founded on their mutual moral commitment to their organisation (Hofstede, 2001). However, the mean score for I/C in our data was relatively high (3.72 out of 5.0), and this appears to contradict the Hofstede index, according to which Arab countries are, in general, collectivistic societies (see Table 7.1). Saudi society, however, displays a tendency towards individualism.

To explore this issue further, we note that the regression path between I/C and AC was significant and that the results suggest a significant relationship between I/C and AC ($\gamma = 0.186, p < 0.05$). These results were not unexpected, as the I/C mean score was relatively high for the Saudi sample. However, one of the reasons for a significant relation between I/C and both AC and NC may be, as claimed by Triandis (1995, p.36), that "in a collectivist society there are idiocentrics (collectivist) who

look for the earliest opportunity to escape the oppression of their groups, and in individualist societies there are allocentrics (individualistic) who reject individual pursuits and join gangs, clubs, communes and other collectives.” Thus, within one country, individuals will display considerable variation with respect to measurements of I/C. Another explanation for this variation may be cultural changes. Moreover, Hofstede has indicated that the degree of individualism in a country is statistically related to that country’s wealth; thus, if wealth has caused the Saudis to enjoy a more comfortable life, this may be correspondingly expected to decrease the reliance of people on one another.

However, modern Arab management practices have been influenced by Islamic religious, tribal and family traditions as explained in Chapter Four. The result has been a combination of family and tribal norms in addition to a bureaucratic organisational structure (House *et al.*, 2004, p.63). Thus, these aspects still influence Saudi public employees. This influence could explain the fact that both tendencies exist in employees, including the traditional values associated with social forces and the tendency of people to look after themselves and their immediate family only. This could be why positive relationships between I/C and both AC and NC were found.

H9 states that power distance (PD) is positively associated with NC; H9 was not supported. In contrast, the regression path showed that PD exhibited a significant negative relationship with NC ($\gamma = -0.128$, $p < 0.05$). To further explore this issue, we added paths between PD and both CC and AC. The results revealed no significant relationship between PD and either component of CC, whereas the regression path unexpectedly showed a significant negative relationship with AC ($\gamma = -0.137$, $p < 0.05$). These results contradict those of Clugston *et al.* (2000), who found PD to be positively related to CC and NC across all forms of commitment. Also, the results relate to Cohen (2007a), who compared five groups and found that Arab teachers demonstrated an average score of 2.85 for PD. Furthermore, the PD mean score for our Saudi sample was 2.07, whereas in Hofstede’s index, Arab countries were high-PD nations with an index score of 80. According to Hofstede, PD is the extent to which a society accepts the unequal distribution of power in institutions and organisations. At-Twajiri and Al-Muhaiza (1996), who used Hofstede’s formulation

in measuring the four dimensions of culture, also found PD to be lower with an index of 61 versus Hofstede's index of 80 (see Table 7.1). This shift may be related to the fact that Hofstede's study commenced over thirty-five years ago, whereas the data for the current study was collected in 2008 when certain social changes were occurring in Saudi Arabia as explained in Chapter Four. For example, at the beginning of the 1990s, the government established the Al-Shura Council, which is a body of consultative assemblies in which important issues are discussed before they are finally decided (see Section 4.3.2). Though it is one example, it indicates that Saudis are moving in the direction of decentralising decision-making and thus reducing the conditions for high PD. Moreover, many Saudis have more exposure to Western education and interact with different cultures; therefore, if employees and managers in the past behaved according to traditional cultural patterns, this new exposure should reduce the tendency towards PD among them.

7.2.8 Consequences

With regard to the relationship between organisational commitment components (i.e., AC, CCH, CCL and NC) and the predicted behavioural outcomes, the OC component showed similar relationships with the intention to leave and organisational citizenship behaviour, as these variables explained 26.2 per cent and 69.3 per cent of variance, respectively. In-role behaviour (IRB) explained 59.3 per cent of the variance. However, the hypothesised paths between commitment components and their consequences were not all significant. Specifically, paths linking AC with OCB and IRB, those linking CCH with OCB and IRB and the path linking NC with IRB were not significant. However, Somers and Birnbaum (1998) also obtained unexpected results regarding the affect of AC on employee performance that revealed that both affective and continuance organisational commitment were unrelated to job performance. Additionally, Norris-Watts and Levy (2004) found that AC's relation with OCBO was not as strong as expected.

Moreover, although the paths linking AC, CCH and NC to Int showed a significant negative relation as predicted, CCL had no significant correlation with Int. However, the relationship between the continuance commitment high sacrifice sub-component and intentions to leave was also negative but had less of an effect than did AC; this finding has been revealed by a number of studies (Whitener and Walz, 1993; Lee,

Ashford, Walsh and Mowday, 1992; Carson and Bedeian, 1994; Meyer *et al.*, 1993; Heckett *et al.*, 1994). In other words, the results of the current study indicate that employees who exhibit high levels of AC are less likely to leave the organisation ($\gamma = -0.437, p < 0.001$), whereas employees who show high levels of CCH exhibit a lower tendency to leave ($\gamma = -0.334, p < 0.001$). Finally, those who experience high levels of NC are less likely to leave ($\gamma = -0.241, p < 0.001$). H10a, H10b, H10c and H10d are thus all fully supported. These results are consistent with research on commitment in Western and non-Western societies. However, H11a and H11b are not supported because no significant relation was identified between AC and CCH and the consequences OCB and IRB. The stronger an employee's level of NC, the more significant is the relation between NC and OCB ($\gamma = 0.180, p < 0.05$), and therefore, the higher an employee's tendency to engage only in OCB. Thus, H11c is partially supported. Interestingly, H11b predicted that there would be no relationship between CCL and OCB nor between CCL and IRB; it did not even predict that there would exist a negative effect of CCL on OCB or IRB. This contradicts the finding that employees with high levels of CCL have an increased propensity to engage in OCB and IRB ($\gamma = 0.777; \gamma = 0.747, p < 0.05$, respectively). Thus, H11b is rejected.

In this sample of Saudi public employees, low perceived alternatives and normative commitment explained the most variance of all dimensions with 46 per cent and 45.5 per cent, respectively, followed by affective commitment (29.1 per cent) and high personal sacrifice (12.1 per cent). Moreover, AC and CCH predicted only a single outcome variable, while NC was associated with Int and OCB, and CCL was related to IRB and OCB. These different results have important implications for the nature and management of commitment in the Saudi Arabian context.

This research found that normative commitment played a more important role in predicting OCB, whereas AC and CCH were more important in predicting intention to leave in the Saudi sample. This result suggests that Saudi people form attitudes towards their organisation on the basis of values of organisational loyalty. The cultural background of Saudi employees, which emphasises loyalty, may help to explain this result. Indeed, normative commitment is a psychological condition in which individuals feel obliged to stay with an employer or organisation because of some social and/or cultural norms. Therefore, employees may be likely or expected

to participate in extra-role behaviour to fulfil their obligations or to show their gratitude towards their supervisors or colleagues. Thus, normatively-committed public-sector employees are expected to show greater levels of extra-role behaviour, whereas employees with high levels of commitment based on the cost of leaving because of few alternatives, perform more in-role behaviour to avoid uncertainty.

7.3 Commitment mediation role-illustrating mediation

SEM was also used to estimate the mediating effects of AC, CCH, CCL and NC on the relationship between Ler, Com, Bur, the Hofstede cultural dimensions and the productive behaviour dimensions IRB, OCB and Int. As presented in Section 6.6, to examine the extent of mediation, the original ACOCC model can be compared to an exploratory model with direct paths. Although the significant results of the hypothesised regression path between the antecedents and components of organisational commitment remain unaltered, changes occur in other path estimates. For instance, the significant path in the ACOCC model that connects CCL to both IRB and OCB becomes insignificant. Similarly, the estimated paths between NC and both Int and OCB become insignificant. However, the relationship among AC, CCH and Int remains significant with the introduction of a new direct path. Thus, the exploratory model calls into question whether the relationship between the antecedent variables and the outcome variables is mediated.

The inclusion of a significant direct path between UA and IRB transforms the relationship between CCL and IRB from significant to insignificant. Therefore, CCL does not appear to play a mediating role in the relationship between UA and IRB. Rather, this relationship (i.e., the connection between UA and OCB) is likely to be direct rather than indirect. In retrospect, the direct relationship between UA and IRB appears theoretically sensible, as UA induces employees to avoid uncertainty in their work environments by meeting the required performance standards as stated in their job descriptions. The direct regression path between M/F and Int was also significant ($r = 0.192$, $p < 0.011$), which indicated that CCH partially mediates the relationship between M/F and Int. That is, the strong emphasis in Saudi culture on masculine role attributes affects, employee intentions to leave their employers. Meanwhile, the paths from the exogenous variables Ler, Bur, I/C and PD to AC,

CCH and NC remain significant; thus, Int is fully mediated by commitment components.

No empirical study has estimated the mediating effect of all three components of OC on antecedent variables and consequences. Only a few studies conducted in Western contexts, such as Clugston (2000), have used SEM to test the mediating effects of AC, CC and NC on the relationship between job satisfaction and intention to leave. Drawing his sample from a government agency in the Western state in the US, Clugston suggested three models. His findings revealed that a partially-mediated model of multidimensional commitment fit the data better than a fully mediated or non-mediated model. Also, Suliman (2002) explored the role of OC in mediating work climate-performance relationships but using the mediated regression approach of Baron and Kenney (1986). The results revealed that organisational commitment only partially mediated the relationship between work climate and self-rated performance. In contrast, Meyer and Allen's (1991) original model assumed that the multidimensional commitment model fully mediated the relationship between work-related antecedents and important organisational outcomes (see Section 2.5.2).

The results of this research suggest a partially-mediated, multidimensional model that integrates management communication, uncertainty avoidance and masculinity in relation to employee intention to leave, in-role behaviour and extra-role behaviour, whereas the variables of opportunity for learning, impersonal bureaucratic arrangements, collectivism and power distance were fully mediated by commitment components in the Saudi samples.

7.4 Chapter Summary

This study was designed as a first attempt at investigating the mediation role of OC as a multidimensional construct in one of the GCC countries, Saudi Arabia. It also contributes to filling a gap in the area of cultural values, training, communication and the accumulation of seniority privileges as indicators of OC components in the work place; moreover it encompasses the question of how OC affects employee performance regarding in-role or extra-role behaviour. In particular, the concept of employee attachment to an organisation has received increased consideration and interest in the research literature lately, as both managers and

organisational analysts search for ways to enhance employee retention and performance. As analysed in Chapter Three, employee commitment is an essential managerial issue for several reasons. However, the results of the current study are discussed thoroughly in this chapter, beginning with reliability, especially where the results are acceptable, except on the CCL scale, which is consistent with other research carried out in non-Western countries.

The discussion also argues about the overlap between AC and NC. A high correlation and a lack of discriminating validity have also been demonstrated in the literature, mainly in non-Western cultures. The theoretical validity and empirical applicability of ACOCC have been discussed in the research. It emerges from this research that the three organisational commitment constructs are liable to be theoretically and conceptually similar in the Saudi culture. Nevertheless, there might be a need to modify some items to make them applicable to Arabic culture. As discussed in this chapter, some items do not generalise across cultures; in particular, in the Arabic-speaking context, we achieved a very good fit index, which provides evidence that even when the construct that we measure does generalise, differences in the significance of some items seem to occur in the Saudi context. These findings provide evidence that Meyer and Allen's (1991) three-component model of OC is generalisable in terms of the Saudi context.

The independent variables of this research showed divergent relationships with the dimensions of OC and other dependent variables. However, some of the dissection revealed an interesting justification for unexpected relationships (i.e., PD negatively affects NC and CCL positively affects IRB). We found that these relationships were broadly consistent with other research carried out in non-Western countries. Finally, a discussion illustrating the mediation role of OC between the antecedent and consequence variables showed that the OC component had a partially and fully mediating role between these relationships; this has been little argued in the literature.

In the next chapter, we will present the conclusions, the limitations of this research and a detailed study of the managerial implications and future vision of managing commitment in Saudi Arabia; finally, we will answer the research question and

elaborate on the contributions of this research, together with future research and recommendations.

CHAPTER EIGHT CONCLUSION

8.1 Research Summary

To begin with, Chapters Two and Three make the case that organisational commitment (OC) has been a main subject among many studies in the field of organisational behaviour in Western and Far East countries (Japan and China). The research underpinning this thesis focused on the nature and level of commitment and its influence on the outcomes of organisations, with particular reference to Saudi Arabia. Organisational commitment has been recognised by a number of researchers as a significant variable in understanding the work attitude and behaviour of employees in organisations. Thus, this research should be helpful to managers in public and private sectors when seeking to improve employee commitment.

The social changes in Saudi Arabian society were analysed, and the influence that they have had on employees' OC was presented in Chapter Four. We also discussed how bureaucracy in the Saudi public sector has been greatly influenced by society, its socio-normative changes, values and beliefs. Three key influences shape the social environment: religion, family and tribe. Islam influences all aspects of life and values, including the principal institutions, law and the ethics and morals of Muslims. Dedication to work and commitment are greatly valued in Islam. Undesirably, while these principles are promoted in theory, they are not applied in practice at work. Individuals are afraid of alterations and feel that change may lead to social degeneration, negatively affecting religious faith and social norms.

Education has opened new opportunities for Saudis to contribute in the workforce, permitting them to think critically and to question taste, material wealth and diverse standards of living. It is therefore becoming harder and more complicated to generate strong ties between employees and their organisations, as employees become aware of what is adequate at work and what is not.

In Chapter Three, a conceptual framework using Meyer and Allen's (1991) three-component model of commitment was presented in order to improve the prediction and explanation of organisational commitment in the public-sector in Saudi Arabia.

The study employed the ACOCC model to assess organisational commitment among different seniority levels of Saudi public employees. It also investigated the effects of selected antecedent variables on employee commitment as well as the effects of commitment on employee behaviours, namely, in-role behaviour, organisational citizen behaviour and intention to leave. To the best of our knowledge, no research in this area has been conducted in Saudi Arabia that focuses on the dimensionality of OC and the work environment as well as cultural values that influence commitment and its outcomes.

The research methodology was presented in Chapter Five. This research adopted a mixed approach (triangulation), and involved quantitative research supported by qualitative data. A questionnaire survey was the main research method used in this study. The research sample was drawn from 16 ministries who distributed 700 questionnaires. The response rate for the questionnaire was satisfactory (63.4 per cent). The many statistical techniques used for data analysis underwent three phases: phases one and two covered confirmatory factor analysis (CFA) for the OC component, cultural dimensions constructs and productive behaviour, whereas phase three covers the structural equation modelling (SEM) analysis.

Regardless of the limitations, this research presents some important findings concerning the OC construct dimensions and the management of commitment in one of the GCC countries. Our findings suggest that OC should be tackled as a multidimensional concept and, for that reason, the antecedents and outcomes of commitment should be dimension-dependent. These findings contradict Randall (1990), who questioned the capability of OC to predict behaviour in terms of consequences. Our research results indicate that OC is certainly a multidimensional construct. All four commitment components predicted three consequences: the intention to leave, in-role behaviour and organisational citizenship behaviour. Different antecedents for each component revealed a relationship with OC. These different antecedents and consequences of commitment components suggest that public administrations need to focus more on how to enhance and maintain affective and normative commitment rather than continuance commitment based on the cost of leaving an organisation.

The CFA of the commitment model confirmed that organisational commitment is indeed a multidimensional construct. This finding is congruent with one of our study's objectives, namely, to examine the multidimensional nature of organisational commitment for Saudi Arabian public-sector employees. According to Hypothesis 1 (H1), the three-component model (i.e., the model that includes AC, NC and CC subdivided into CCH and CCL) demonstrates construct validity in the Saudi context. H1 was therefore addressed in phase two of our analysis. CFA supported the four-factor oblique model (i.e., the model that includes AC, NC, CCL and CCH) rather than a two- or three-factor alternative. Specifically, fit indices revealed that the four-factor model fits the data better than the two-, three- and five-factor models. In addition, the results revealed that the two subcomponents of continuance commitment (i.e., CCL and CCH) were distinguishable but moderately correlated ($r = 0.465$). Therefore, the ACOCC commitment model tested and found that H1 is fully supported.

To answer the first sub-research question regarding the level of OC components among public sector employees, we performed invariance analyses involving multi-group comparisons of latent mean structures to identify the statistical variations in commitment across the three employee-seniority levels. A significant difference was detected in commitment levels among public employees according to their seniority, suggesting full support for H2.

Empirical results suggested that affective commitment (AC) and normative commitment (NC) were stronger at higher levels of seniority, whereas continuance commitment (CC) and, in particular, high-sacrifice commitment (CCH) were stronger among less senior employees. However, no significant differences were found regarding low-alternative commitment (CCL) among employees at all levels of seniority. Most importantly, NC was high in the higher and lower levels of the organisation. In other words, the higher the seniority of a given employee, the stronger his/her affective and normative commitment, whereas, the lower the seniority, the stronger his/her high-sacrifice continuance commitment and normative commitment.

Our SEM findings broadly confirmed the hypotheses and demonstrated some consistency with parallel findings that were previously acknowledged in the

literature. These findings were also confirmed after controlling for personal characteristics (as recommended in the literature) by using hierarchical regression analyses. The findings are summarised below:

- First, the path analysis between independent antecedent variables and mediating variables revealed a significant relationship between work experience (i.e., opportunities for learning and communication management) and affective commitment, as well as between work experience and normative commitment. The data provide sufficient evidence to support H3a and H3b.
- Second, the findings provide strong support for one component of the side-bet theory index, namely, impersonal bureaucratic arrangements (Powell and Meyer, 2004), which was significantly related to CCH; H4 is therefore supported.
- Third, our CFA confirms the multidimensionality of Hofstede's cultural dimensions, and the SEM results suggest that these dimensions could be significant predictors of the components and consequences of commitment. Significant results include the following:

1. An important finding is the strong support for Hofstede's cultural dimensions, not only in distinguishing environments across nations, but also within a homogenous work-setting within one country. This finding supports previous research (e.g., Bochner and Hesketh, 1994; Clugston *et al.*, 2000) and confirms the claims that cultural socialisation is antecedent to organisational commitment (Meyer and Allen, 1991; Wiener, 1982). The ANOVA test revealed significant differences in uncertainty avoidance (UA) at the higher levels of job seniority. This indicates that top-level managers in the Saudi public sector are uncertainty avoiders. In fact, the Saudi sample exhibited a high level of UA. The Saudi public sector employee sample obtained high to moderate scores from individual measures of masculinity and individualism, showing to be a more masculine and individualistic society, which, as Hofstede indicates, could be related to the degree of individualism in a country and its statistical relationship to that country's wealth. Our results also revealed that power distance (PD) has decreased in comparison with Hofstede's study and is consistent with the recent study by

At-Twajiri and Al-Muhaiza (1996). This observation is a consequence of the change in lifestyle of the GCC populations and the increasing contact with the West.

2. Hypothesis 6 states that individual measures of masculinity/femininity (M/F) will be positively associated with the continuance commitment CCH. The regression coefficient path indicated a significant positive effect of M/F on the high-sacrifice subcomponent of continuance commitment. Thus, H6 is fully supported.
 3. Uncertainty avoidance is related to high sacrifice and low perceived alternatives, both of which are subcomponents of continuance commitment; H7 is therefore supported.
 4. The individual measures of individualism/collectivism (I/C) showed that Saudi employees exhibited fairly high mean scores (3.75 out of 5), indicating that the sample attitudes are more individualistic, characterised as independent from the group, achievement oriented, autonomous and desiring fair treatment. Concomitantly, as suggested by Triandis (1995), individuals may also exhibit collectivism characterised by interdependence, norms that favour in-group attachment, duty and personalised relationships. This finding could justify the association between the I/C dimension and two components of OC (NC as well as AC). Thus, H8 is partially supported.
 5. Hypotheses 9a and 9b, which state that the individual measures of power distance are positively associated with continuance commitment (including both sub-components) and normative commitment were rejected. An examination of the regression coefficient path in Table 6.43 revealed no significant relationship between PD and either of the sub-components, CCH or CCL. Interestingly, PD related negatively to NC. One explanation for this finding could be the cultural changes that occur over time; the mean PD score was low (2.07 out of 5), evidenced as individual measurements indicative of low power distances. This indicates that Saudi public employees prefer a more participative or consultative lifestyle.
- Fourth, as predicted, the results also suggest that the components of commitment (AC, CCH and NC) negatively impact an employee's intention to

leave (Int). Thus, Hypotheses 10a, b, and d are fully supported and are consistent with the literature. No significant correlation was detected between low alternatives and intention to leave, and therefore H10c is also supported.

- Fifth, most organisational commitment research findings have indicated a positive and significant relationship between in-role behaviour (IRB) and AC, and between IRB and NC, with either no effect, or a negative relationship between CC and organisational citizen behaviour (OCB). Our results revealed that the NC dimension relates positively to OCB, whereas AC has no effect on either OCB or IRB. An important and rather surprising finding is that CCL exerts a significant positive effect on both IRB and extra-role behaviour. To confirm the SEM analysis results, we controlled the demographic variables and conducted a hierarchical regression analysis of cultural variables and antecedents of commitment, which produced the same results.
- Sixth, with regard to the mediation role of OC, the results obtained by examining the ACOCC structural model and another expletory structural model, showed a direct path between the exogenous-antecedent variables and endogenous consequences, namely, Int, OCB and IRB. The results of this research suggest that OC components mediate the antecedents-consequences relationships, sometimes fully and other times partially.

This research provided a valuable opportunity to repeat the use of research methods applied in North America and to evaluate and discover, in the Saudi Arabian culture, the nature of the three components of OC, including varied socio-economic and work settings. Accordingly, the influence of these antecedents will be applicable within similar cultural contexts (i.e., Arab countries). Additionally, this study is the first to examine the influence of Hofstede's cultural-dimension (individual level) variables on organisational commitment and to explore how these relationships vary in a cross-cultural population, particularly in public sector environments. Finally, this study considered the mediating role of OC between these antecedents and the consequence variables (i.e., intention to leave, OCB and IRB).

Although the evaluation of different facets of commitment has been the subject of many studies, few studies have employed a more inclusive and methodical approach. Moreover, the direct linkages between the causal level and the level of overall

organisational effectiveness call for further investigation. By shedding more light on the causes and outcomes of OC, the current study attempts to explore, using an articulated approach, the determinants of OC and its potential connotations.

8.2 Research limitations

A number of limitations to this research can be identified. First, all variables were measured in conceptual ways; this is the usual method for organisational behaviour. However, one major limitation is that the original versions of most scale items were written in English; it was then translated into Arabic. In our research, as mentioned in the chapter on methodology, we used the Brislin (1970; 1980) stages accurately, in the translation and back translation. Despite these steps, a lack of discriminate validity between AC and NC remains.

Another limitation lies in the fact that there were few women labour-force participants in this research for cultural reasons. The workforce in Saudi Arabian ministries is overwhelmingly male (administrative work). The exception is the ministry of health (e.g., hospitals) and education (e.g., schools, universities and colleges), small branches in the ministry of economics and planning and the civil service ministry. However, separate male and female sections exist in these ministries, from which we drew our (8.1 per cent) female sample. This means that the results of the present research apply more to the male segment of Saudi public-sector employees. If we had included more female employees, the findings might be different and more comprehensive.

Third, the issue of common method variance should be considered, given the cross-sectional design of the study based on self-report. Meta-analytical studies of these constructs (Meyer *et al.*, 2002; Organ and Ryan, 1995) recommend that studies which depend only on self-reporting may either inflate correlations or, in a cross-sectional design, bring in problems of instability in relationships due to situational moderators. To measure employees' commitment, self-report is the common method employed. Additionally, in all cases, we established a correlation between the OC components in this study with that documented in the meta-analysis, demonstrating that it has the same pattern.

Finally, the assessment for OCB and IRB future research needs independent assessment of OCB and IRB (i.e., supervisor, personnel management documentation). In our research, it was very difficult to measure performance by means of supervisor assessment because of public-sector confidentiality requirements, therefore, we utilised self-reporting. One of the problems associated with self-reporting is a self-report bias. However, the results of the CFA and SEM support the finding that the indicator variables fit well with the latent constructs, which is what they intended to measure.

8.3 Research implications

The implications of this research should be of interest for both academic and managerial practitioners. From a managerial point of view, knowing the level and form of commitment among government administrative employees, and relationships between relevant antecedents and consequences in the context of Saudi culture, can assist managers in cultivating a work environment that boosts employee commitment to an organisation. This is vital if one's goal is to enact constant improvements in the standards of public-sector service.

Although AC has been the focus of much empirical research, the refutation of the hypotheses that AC does not affect OCB and in-role behaviour indicates that NC and CCL are key components of two kinds of productive behaviour, namely OCB and IRB, whereas AC and CCH have stronger effects on Int. This is consistent with the work of Wasti (2003), who suggested that CC and NC may vary in important ways across cultures. Thus, human resource managers in public administration can design more socialisation programmes or adviser systems for employees (whether they be newcomers or veterans) as well as provide more organisational support (e.g., effective communication management and opportunities for learning through extensive training) to enhance the positive socialisation experiences of employees (Whitener, 2001; Wiener, 1982). Through an internalisation of normative demands, socialisation processes can lead employees to experience deeper feelings of obligation and desires to reciprocate what is perceived to be organisational benevolence. Regarding the refutation that low PD negatively affects NC and AC, our attention should be drawn to the fact that societies are changing over time and

may have different results in the future; thus, further investigations in this area are still necessary.

The three forms of OC are not present at the same level in each employee, and each one can simultaneously experience all three forms of OC (Meyer and Allen, 1997). In addition, the extent of these forms of OC differs, depending on the organisational level of the individual. Managers should be encouraged to know that an employee who experiences appropriate management communication, and has opportunities for learning, is significantly more likely to demonstrate desirable levels of NC and AC and that these levels in turn can affect vital work behaviours such as OCB and Int. Furthermore, in the Saudi sample, AC, CCH and NC together explained 47 per cent of the variance in intentions to leave the organisation, whereas in Meyer *et al.*'s (1993) analysis of a Canadian sample of Western culture, they only explained 21 per cent of the total variance in intentions to leave. This means that in the Saudi sample, employees' intentions to leave are more vital than in the Canadian sample.

There is general support for the theory laid out here regarding the antecedents and consequences of different aspects of organisational commitment. There is also strong support for the proposition that organisations have varying degrees of influence over these different components of work experience and cultural values. This suggests that the important variables that increase and maintain employee commitment to an organisation are related not only to the actual human resource (HR) practices but also to the cultural work values. Our results offer some insights into how managers might seek to foster key positive work behaviours among their employees. Training and other opportunities for learning can contribute to the development of affective commitment and normative commitment in the context of Saudi culture. One suggestion could help to introduce the right amount of training at the right level of the organisation. Employees with higher levels of CCH and CCL at the lower and middle levels of an organisation can become involved as well.

From an academic point of view, the results of this study support the idea that cultural socialisation is antecedent to OC (Meyer and Allen, 1997). These findings may help in developing a strategy that increases AC and NC among employees at the lower levels of an organisation, since both AC and NC were much less apparent among employees at middle and lower job levels. It is also worth noting that the

various Hofstede cultural values, when viewed as predictors, may affect OC components differently, even within a homogenous work setting in one country.

Hofstede (2001, p.442) put forward an argument: “for making cultural considerations part of strategic planning and for locating activities in countries, regions, and organisational units that possess the cultural characteristics necessary for competing in these activities”. He also claims that “the analysis of differences in national cultures should be complemented with a further differentiation of regional, ethnic, occupational, and organisational sub-cultures” (p.462). Saudi Arabia has many tribes and there are individuals with different backgrounds in Saudi public organisations. In view of the contemporary Saudi vision of strong support for enlightened, creative practitioners, given the frequency of international visits and contacts, and the existence of many employees with different cultural backgrounds in Saudi public organisations, there is ample opportunity to encourage further research into the complexities of national culture as they impact on OC. This should result in insights which could make a major contribution to the transformation of cultural conflict into what Hofstede terms “cultural synergy” (p.462).

Awareness of the direct and indirect affect of communication on commitment underlines the importance of management communication to organisational efficiency. Despite the limitations of the present study, the effects of communication on fit and efficacy perceptions can be clearly seen. They emphasise the role of interactions between managers and employees and between employees themselves. For managers, it is well known that commitment can have an impact on employee intention to leave an organisation and on in-role and extra-role performance. In this study, we have shown that management communication promotes the formation of a fundamentally important attitude: commitment. Thus, we have bridged the gap between daily interactions and attitudes by showing that listening and providing feedback are key activities in enhancing commitment. The importance of these processes is partly explained by considering their effect on how employees understand what their organisation want from them (i.e. tasks needed to be done) and what it is they are expected to achieve. Upper level management can play an essential role in the success of management communication by discussing how

employees can work effectively and benefit their organisation and provide a clear vision for middle managers as they seek to discuss the behaviour of employees.

Finally, the correlation between CCH and bureaucratic arrangement implies that CCH fully mediates the relationship between Bur and Int. This supports Becker's suggestion that commitment reflects certain recognition of the costs associated with discontinuing an activity, with side bets contributing to this perceived cost. More specifically, this finding supports the contention that there can be both economic and social costs associated with leaving an organisation and that some of the costs of leaving come from side bets made outside of the workplace. Therefore, management should consider this aspect with special care.

8.4 Future vision for managing OC in Saudi Arabia

This study considers Saudi Arabia because very little is known about the effect of cultural values on employee commitment to an organisation and the mediation role of OC components in relation to OCB, IRB and Int. The important implications of the research findings should be of interest not only to academic researchers interested in examining the uniqueness of the variables included in the research and how they may be used to solve issues in a country, but also to public-sector managers and policy makers in Saudi Arabia and other Arab countries and developing countries that share similar socio-economic environments.

The vision underlying Saudi national strategies results in a focus on introducing structural changes in the national economy, diversifying its base and allowing a larger role for the private sector to undertake economic and social activities. Therefore, the system is moving toward privatisation and providing support to encourage both public and private sectors to achieve the development plan's objectives (Achoui, 2009). In the future vision of Saudi management, the question is: Can commitment be managed? Early studies, such as that of Iverson and Buttigieg (1999), suggested that the management of commitment requires some awareness of the effect of diverse HR policies on the OC dimension. On the other hand, a recent study by Conway and Monks (2009) suggested that managers should be expected to emphasise practices that they perceive to be most vital in achieving organisational objectives rather than those that are greatly valued by employees. Most research

exploring the HRM-performance linkage has employed HR directors or senior managers as respondents.

These findings suggest a series of practical steps that are advisable for public managers and public policy makers in the Saudi Arabia public sector:

Firstly, to assign importance to the effects of opportunities for learning (i.e., training), management communication, the accumulation of seniority privileges, vesting of pension benefits and retention bonuses, all of which are possibly independent arrangements in a public-sector environment. Such an emphasis should provide some ideas about how to manage human resources in an effective way in the public sector. Training, as proposed by many researchers, promotes substantially better individual performance.

Secondly, the mediating role of organisational commitment (AC, CCH, and NC) should enable public managers to create more opportunities to apply the research findings efficiently to their organisation, particularly in the context of HRM. As the commitment components are, at some level (partial or full), the mediating mechanisms that reduce employees' intention to leave and improve extra-role behaviour and in-role performance, attention to AC and NC levels can help manage the effect of the antecedent HRM practices (training and management communication), which in turn enhances the productive behaviour of employees. Since these research findings indicate that AC and NC are low in the middle and lower organisational strata, advice for providing more opportunities for learning at these two strata to enhance their NC and AC is needed¹⁶. Moreover, creating a learning organisation by providing training programs depends on the needs of the organisation.

Thirdly, managers need to become aware that antecedent cultural work values have a significant impact on the OC mediation role. Attention to Hofstede's cultural dimensions should allow practitioners to integrate training and communication into organisation policy. However, these results should not only attract public managers

¹⁶ Government employees at all organisational levels for whom general training programmes are locally available include 38,709 (male) and 2,911 (female) Saudis in 2007, whereas, only 657 employees of both gender have been sent abroad for training programmes in 2007 (*Ministry of Civil Service Report*, 2007, pp.95-97).

in the field to take on some challenges, but should also encourage confidence in future researchers to investigate these issues more intensively

Fourthly, the research findings indicate the benefit of putting planning and control systems into practice. Attention to cultural work values should generate a base framework to boost employee development both in personal terms and in work values. As already discussed, our findings reveal that uncertainty avoidance is significantly high, and it is apparently correlated with in-role performance and the intention to leave, which is fully mediated by CCH (partially or fully), and partially mediated by CCL. As Chew and Putti (1995) correctly pointed out, employees' high aversion to risk may reflect an unwillingness to deal with further uncertainty because of the fear of failure. This reflects the strong relationship between UA and high sacrifice, indicative of a greater long-term commitment to their organisation. We found that CCH to be higher at the middle and lower levels of an organisation. To deal with this matter, as suggested by Hofstede, one of the strategies could be to introduce planning and control systems dealing with the processes reflecting basic organisational principles and values, in an attempt to reduce UA.

Fifthly, strategic planning should focus on planning and controlling processes in public organisations that reflect the basic principles which guide employees in their work and avoid any surprises, as Hofstede suggested. The government does have long-term development plans, but we suggest that the existence of an effective planning and control system for each ministry, with clear vision, would improve the norms of public organisations. High UA is a possible indicator that strategic planning is not practised. Therefore, encouragement of the requirement for more specificity in planning and more short-term feedback would suggest involving experts in the planning process, who know how these plans could decrease uncertainty among staff. Furthermore, high UA is a result of too restricted a view of related information, which could explain the strong affect of communication management on AC and NC. Employees need more details about rules and procedures in order to deal with and solve different situations. As At-Twajri and Al-Muhaiza (1996) pointed out, everyone in the organisation should know who reports to whom. Formal lines of communication run vertically, which means that management reduces UA by emphasising who has the authority over whom. In GCC countries, individuals are

generally requested to go to the top of the pyramid to get their papers processed, their requirements considered or their objections dealt with.

Sixthly, UA (mediated by CCL) impacts on in-role performance both directly and indirectly. This provides further evidence that, to the extent that employees have sufficient and clear information regarding their job description (which describes and explains the requirements of specific jobs and what is expected from employees to perform at high levels of in-role performance), the organisation will prosper.

Seventhly, job design that takes account of the desire for high achievement would increase the intrinsic motivation of employees. Providing some kind of autonomy to their work, together with some motivation, would satisfy the assertiveness and the determination needs of employees. Since the Saudi sample exhibited high scores for the individual measurement of masculinity and individualism, and there was a strong relationship between those who scored highly in masculinity and continuance commitment, then high sacrifice rather than emotional attachment or obligation were observed. On the other hand, individualism had a strong relationship with both emotional attachment and obligation to their organisation. This suggests that employees form their attachment based on the satisfaction of some extrinsic need: security, advancement and/or ambition. Management can utilise this work value to improve employee commitment and consequently employees' productive behaviour. At the same time, the religion and Islamic principles and tribal influences emphasise the concept of caring and cooperation between employees.

Finally, consultation and sharing ideas with employees decentralises decision structures. This suggestion could not negatively affect emotional attachment and obligation. Our findings showed that there is a negative relationship between power distance and normative commitment as well as between power distance and effective commitment. Therefore, consultative management may lead to better extra role performance and high commitment.

Overall, from the researcher's point of view, one of the fundamental issues regarding a culture's effect on commitment is that, as Hofstede (2001) put it, "there is a great lack of locally valid theories of management and organisation in which the universally human, the globally-imposed, and the culturally-specific elements will be

wisely reorganised” (p.462). Thus, there is a need for local, culturally applicable theories of management that apply to Saudi culture, particularly in a difficult global economic situation, leading to a high quality of public services.

8.5 Answering the research question

The answer to the main research question proposes to further our understanding of organisational commitment by examining structural models of the antecedent variables and resulting behaviour (i.e., intention to leave, and in-role and organisational citizen behaviour), mediated simultaneously by affective, high-sacrifice, low-alternative and normative commitments. To test the mediation role and the hypothesis, we developed and tested the causal model presented in Figure 9. In addition to the primary variables of interest, the results of this research suggested that a “partially mediated” model exists for OC components connecting management communication and uncertainty avoidance, and masculinity with the intention to leave, in-role behaviour and extra-role behaviour. However, the opportunity for learning, impersonal bureaucratic arrangements, collectivism and power distance were “fully mediated” by the commitment component in the Saudi sample.

The answer to the main research question has contributed important implications for academia, since it overcomes the lack of commitment research in general and the scarcity of research investigating organisational commitment’s mediating role in GCC countries.

8.6 Research contribution

The present research makes a substantial contribution to OC non-Western literature, in particular, literature pertaining to Arab culture. In the first place, this study considered Saudi Arabia because very little is known about the effect of cultural values on employee commitment to an organisation and the mediation role of OC components in relation to OCB, IRB and Int. We chose the public sector (i.e. government administrative employees) because this sector is generally ignored as compared to the private sector in both Western and non-Western nations. Moreover, this research concerned an oil-rich, autocratic system occupying almost four-fifths of the Arabian Peninsula. Some cultural features of Saudi Arabia, such as strong

hierarchical social structures, the importance of empathy and personal relationships, religion, the meaningfulness of constructs (e.g., commitment, extra-role behaviour), responsibility and trust and the nature of some of its socio-economic institutions, are similar to other developing countries and can provide insights into those countries with related cultural values.

The findings of this research should be relevant not only to academic researchers interested in examining the distinctiveness of the variables integrated in this research, but also to experts and higher managerial levels in Saudi Arabia and other GCC and developing countries with related socio-economic environments. The findings should help in decisions about what strategy to use in gaining employee commitment, taking into consideration how that strategy is likely to be perceived and whether it will tend to create the conditions identified as contributing to the development of AC, CC or NC.

The clearest accomplishments of the present research are results which are consistent with the relatively large body of earlier work showing a definite negative relationship between organisational commitment (AC, NC and CCH) and intention to leave the organisation in Saudi Arabia.

The current study contributes an integrated and detailed perspective conceptualised to advance the knowledge of the multidimensionality of organisational commitment in the Saudi context (i.e., Arab culture); it confirms the appropriateness of employing four bases (drawing on Hofstede's categories of M/F, UA, I/C and PD) for modelling the construct of cultural dimensions. While the soundness of the four-factor model for organisational commitment has been confirmed in a previous study, the four-base model for cultural dimensions has not been used in any studies as an antecedent and predictor of work behaviour. Consequently, the study aimed to address this issue in a non-Western setting (in particular, Saudi Arabia) and considers organisational commitment as a multidimensional construct.

For academics, it should improve their understanding that the mediation potential of organisational commitment components can play a role in opportunities for learning and rewards (e.g., seniority, job security and benefits). The application of Hofstede's cultural dimensions is particularly useful in this context, as well as different facets of

work behaviour in the context of an Arab country. On the other hand, this research should draw practitioners' attention to the effects of training, communication and cultural values as sources of organisational commitment and beneficial work outcomes. For that reason, there is a need to combine and exploit these effects to improve the organisational commitment component and extra-role behaviour as well as the in-role performance and decrease employees' intention to leave.

Using an empirical analysis, the results of this study demonstrated that the commitment components fit the data fairly well, indicating that the measurements were psychometrically sound and appropriate for representing the concepts. Although the four-factor organisational commitment model was appropriate for Saudi public employees, it is expected that other researchers may express a variety of very different views about the sub-dimensions and primary dimensions of continuance commitment. Since no study has examined organisational commitment in terms of the four factors used in this study, no direct comparison with previous studies can be made in the Arab area. In many previous studies of organisational commitment, continuance commitment has not been sub-divided into high-sacrifice and low-alternative aspects because of disagreement over whether they constitute one component or two. Therefore, some researchers may disagree with the findings of this study regarding the four dimensions of commitment. However, this study confirms the conceptual validity of the four-factor organisational commitment model, including the CC sub-components, despite the lack of discriminate validity between the two components (AC and NC).

Finally, within the public administration literature, there is limited research on issues related to public-sector culture, work values and productive behaviours. Thus, this research fills this gap.

8.7 Recommendations for Future Research

In the final section of this research, we suggest some ideas for future research resulting from the current study's empirical experiences and its implications. We also highlight some future research which we consider to be helpful for the development of OC research:

1. In terms of additional modifications for NC and AC conceptualisation and scale, in future studies, it might be better to add items that are applicable to the Arabic culture to overcome the overlap between the AC and NC constructs and to provide a clear statement of the distinction between emotional attachment and obligation to an organisation.
2. The results of the qualitative data analysis indicate that there are many other variables that affect employees' attachment to their organisation, such as justice, leadership relationships with subordinates, and the organisational climate. These issues could be considered in future studies to investigate their affect on the commitment component and its outcome.
3. Future research should replicate the findings of the present study to test the generality of the research results and should use the same multidimensional model with other important variables (e.g., absenteeism, burn out, stress, job satisfaction and employee innovation and creativity).
4. Future research should utilise SEM to examine the ACOCC multidimensional model, but employ samples drawn from other sectors such as the private sector, for comparison with the results of the present study. The sample size should be increased to include more public-sector employees from other regions. Perhaps other Arab countries or GCC countries could be sampled as well.
5. Future research could be directed toward other objective measurements of performance (i.e., supervisor reporting).
6. Future research could use the same ACOCC multidimensional model and integrate the implications of the multiple forms and foci of commitment (e.g., occupation, top management, supervisor, team, union) in a Saudi cultural framework. The multiple forms and foci of commitment have not yet been studied in GCC countries. Perhaps the effect of individualised measures of cultural values within one country could also predict multiple bases and foci of commitment.
7. Future research could use the same framework as that of the present research and use theoretical propositions advanced by Meyer and Herscovitch (2001) to study the interactive effects of AC, CC and NC on Int, OCB and IRB. Due to the time constraints of this study, we were unable to explore this interactive

relationship sufficiently. Therefore, this may present new insight into the nature of the construct in Saudi Arabia.

8. The methodological issue of translation, specifically, the approach recommended in the literature regarding forward and back translation of questionnaires is limited and as a consequence, undermines confidence in equivalence of meaning. The approach developed by this research is a more sophisticated approach and more time consuming, but is likely to yield more accurate results.
9. The difficulty in getting an 'exact' equivalent to an Arabic term, is that in Arabic it may have had a much deeper meaning. For instance, the term for 'guilty', can perhaps have a religious connotation. Researchers either (a) try to adjust research instruments so they have a similar meaning consistent within the culture or (b) ensure there is equivalence in term of sound/words (the emic/etic distinction).
10. It could be argued that there is less pressure to undertake 'sophisticated' emic/etic pilots and designs because the research population is familiarized with Anglo-American and Anglophone culture and ideas (through education in English speaking universities and the widespread nature of American culture through the media and the Web), especially in commercial organisations.

Finally, this research is based in the public sector, where exposure to Anglo-American influences is less strong. Therefore in reality, many researchers who are (a) looking at non-commercial, non-managerial populations or (b) are not translating to or from English (e.g., from Swedish to Arabic), a more robust methodology (within either an emic or etic approach) is likely to be essential.

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Appendix 1

1 Pilot Study

Before distributing a survey, the researcher should carry out a pilot-study. The main reasons for doing so is to ensure that the instructions, questions, and scale items in the questionnaire are clear and that the respondents fully understandable. Moreover, the pilot study will enable early detection of any issues of sensitive nature such are questions or items that are likely to offend potential respondents (Pallant, 2005). The pilot study should be carried out on a type sample similar to the one that will be used in the main study (i.e. public sector employees).

The pilot study was conducted between 4th of December 2007 and 8th of February 2008. Thirty questionnaires were distributed through personal and by e-mail contact. The respondents were employees who work in different public sector organisations (e.g. Ministry of high education, ministry of education, Saudi Aramco). A total of 27 completed questionnaires were returned; representing a response rate of 90%. Subsequent to the collection of the questionnaire from the respondents, suggestions for possible improvements were discussed with them.

Data were encoded and analysed with the aid of SPSS 13 statistical package. The researcher started data analysis by running the reliability analysis.

1 Results of the pilot study

1.1 Demographic Variables

1) Gender: There were 9 females and 15 males.

Table 1: Male - Female

	Frequency	Valid Percent	Cumulative Percent
Valid Male	15	55.6	55.6
Female	9	33.3	88.9
4.00	1	3.7	92.6
5.00	2	7.4	100.0
Total	27	100.0	

2) Work place

The respondents were employees from different public sector organisations (e.g. Ministry of high education, Ministry of education, Ministry of foreign affair, Ministry of health, public administration institute, Saudi telecommunication company, Ministry of petroleum and minerals (Saudi Aramco)).

Table 2: Working place Statistics

	Frequency	Valid Percent	Cumulative Percent
Valid foreign	2	7.4	7.4
IPA	3	11.1	18.5
HE	6	22.2	40.7
Educ.	5	18.5	59.3
Islamic	1	3.7	63.0
STC	1	3.7	66.7
Health	1	3.7	70.4
Petrol	8	29.6	100.0
Total	27	100.0	

3) Age

Table 3: Age statistics

Mean		22.11
Missing	0	0
N	Valid	27

Table 4: Age distribution

	Frequency	Valid Percent	Cumulative Percent
Valid 20-30	6	22.2	22.2
31-40	13	48.1	70.4
41-50	7	25.9	96.3
51-60	1	3.7	100.0
Total	27	100.0	

2. Organisational commitment

2.1 Affective commitment (AC) reliability test:

Table 5: AC Reliability statistics

Cronbach's Alpha	N of Items
.811	6

Table 6: AC Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. I would be very happy to spend rest of my career with this organisation	19.0370	17.191	.595	.778
2. I really feel as if this organisation's problems are my own	18.4815	21.182	.391	.816
3. This organisation has a great deal of personal meaning for me	18.2222	19.026	.536	.790
4. I do not feel like 'part of the family' at my organisation (R) (RS).	18.2963	17.524	.622	.770
5. I do not feel 'emotionally attached' to this organisation(R) (RS).	18.0741	18.225	.738	.750
6. I do not feel a strong sense of belonging to my organisation (R) (RS).	18.2593	18.584	.578	.780

The construct items were combined to represent the construct for reliability assessment. The Cronbach's alpha was .81, which is an excellent value that exceeds Kline's criterion that recommends an alpha value ≥ 0.7 . Moreover Field (2005) recommended 0.7 and suggested that, in social sciences, even 0.6 or 0.5 is acceptable.

2.2 Continuance commitment (CC)

Table 7: Reliability Statistics for CC

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.864	.862	6

The construct items were combined to represent the construct for reliability assessment. The Cronbach's alpha was 0.864, which is fairly good. Looking for more accurate reliability analysis, the reliability of each construct item was assessed separately. This allows for a deeper examination of the construct items deeper and helps in assessing its impact on the reliability of the construct.

Table 8: Item-Total Statistics for CC

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1. It would be very hard for me to leave my organisation right now, even if I wanted to.	16.451	20.114	.784	.615	.802
2. Too much of my life would be disrupted if I decided I wanted to leave my organisation right now.	17.2191	19.784	.697	.534	.839
3. Right now, staying with my organisation is a matter of necessity as much as desire.	15.8037	18.778	.870	.683	.813
4. I believe that I have too few options to consider leaving this organisation.	16.390	21.165	.538	.531	.832
5. One of the few serious negative consequences of leaving this organisation would be the scarcity of available alternatives	15.8167	19.923	.780	.622	.801
6. If I have not already put so much of myself into this organisation, I might consider working elsewhere	15.9420	23.125	.393	.286	.835

2.3 Normative commitment (NC)

Table 9: Reliability Statistics for NC

Cronbach's Alpha	N of Items
.864	6

Table 10: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. I do not feel any obligation to remain with my current employer (R).	15.9630	24.114	.393	.884
2. Even if it were to my advantage, I do not feel it would be right to leave my organisation now.	15.6667	19.923	.780	.818
3. I would feel guilty if left my organisation now.	16.3704	22.165	.537	.862
4. This organisation deserves my loyalty.	15.7037	19.678	.806	.813
5. I would not leave my organisation right now because I have a sense of obligation to the people in it.	16.2593	20.584	.687	.836
6. I owe a great deal to my organisation	16.3333	20.154	.764	.822

No possible elements omission. The Cronbach’s alpha value is fairly high 0.864. The corrected item-total correlation is also high. They are all above .3, which is the recommended value (Field, 2005).

3. Independent variables:

3.1 Management communications:

Table 11: Reliability Statistics for (Com)

Cronbach's Alpha	N of Items
.839	10

Cronbach’s alpha is fairly high 0.839. The corrected item-total correlation is fairly high and the recommended value of .3 (Field, 2005). As the study (Ng *et al.* 2006), from which we adapted these measurements omit two items (item no 7 and 10 in Table 32), therefore we omitted these items. The reliability test of the remaining items 8 items is .85 (see Table 12 reliability after omission 2 items from management communication scale). The corrected item-total correlation is high and above .3, which is the recommended (Field, 2005).

Table 12: Reliability Statistics for Management communication

Cronbach's Alpha	N of Items
.85	8

3.2 Opportunity for learning:

Table 13: Reliability Statistics for opportunity for learning

Cronbach's Alpha	N of Items
.921	8

No possible elements omission. The Cronbach's alpha is fairly high 0.921. The Alpha value for this variable was .90 in (Vandenberg *et al.*, 1999) and .89 in (Ng *et al.*, 2006). Thus the alpha value of this independent variable is acceptable. The corrected item total correlation is high and above .3 is the recommended (Field, 2005).

3.3 Impersonal Bureaucratic arrangement:

As can be seen from the SPSS output (Table 14), the values in the column labelled *Corrected Item-Total correlation* are the correlations between each item and the total score from the questionnaire (Field, 2005). If any of the items are less than .3, then we have a problem. Because it means that any particular item (3, 5, and 7) does not correlate very well with the overall scale. Moreover, items 3, 5, 7 are not applicable (NA) to the Saudi public sector organisation (see Table 14). Thus, to increase the alpha value, we omitted these items. The alpha value before omission of these items was .490 (Table 15). Therefore, the omission of the 3 item can further improve the alpha value to .511 (Table 1 6). However, this was not supported by the corrected item total correlation and it is it is preferable to measure the construct with more items rather less (see Table 17).

Table 14: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. My current level of pay.	16.6538	9.995	.365	.296
2. The benefits of seniority that I've gained in this organisation	16.4615	11.618	.329	.339
3. A retention bonus that this organisation provides	17.0000	11.520	.266	.365
4. Having to give up on upcoming promotional opportunities for me at this organisation	17.3077	11.022	.518	.266
5. The benefits package at my current organisation (e.g., vacation time, dental plan, flexible hours, childcare)	16.4615	13.378	-.018	.524
6. The loss of employer contributions to my pension plan.	16.6923	13.022	.120	.436
7. Stock options that can only be exercised if I stay.	17.3462	14.475	-.050	.501

Table 15: Reliability Statistics for (Bur) before omission items

Cronbach's Alpha	N of Items
.437	7

Table 16: Reliability Statistics for Bur after omission 3 items.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.490	.499	4

Table 17: Impersonal bureaucratic arrangement after omission items -Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1. My current level of pay.	8.5000	4.180	.339	.142	.368
2. Having to give up on upcoming promotional opportunities for me at this organisation.	9.1538	5.415	.397	.195	.337
3. The loss of employer contributions to my pension plan.	8.5385	5.938	.176	.038	.511
4. The benefits of seniority that I have gained in this organisation	8.3077	5.582	.263	.116	.437

Table 18: Reliability Statistics for Bur with 3 items only

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.511	.537	3

3.4 Cultural dimensions

3.4.1 Power Distance

Table 19: Reliability Statistic for PD

Cronbach's Alpha PD	Cronbach's Alpha Based on Standardized Items	N of Items
.695	.698	6

Table 20: Item-Total Statistics PD

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1. Managers should make most decisions without consulting subordinates.	10.7407	14.123	.324	.196	.686
2. It is frequently necessary for a manager to use authority and power when dealing with subordinates	9.9259	10.610	.651	.480	.567
3. <u>Managers should seldom ask for the opinions of employees</u>	<u>10.2593</u>	<u>15.661</u>	<u>.077</u>	<u>.148</u>	<u>.765</u>
4. Managers should avoid off-the-job social contacts with employees.	10.7778	13.564	.418	.436	.658
5. Employees should not disagree with management decisions.	10.7778	12.410	.597	.520	.603
6. Managers should not delegate important tasks to employees	10.6667	12.231	.571	.377	.608

The omission of the third item is recommended because it will increase the power distance construct Cronbach alpha from 0.695 to 0.765. This is supported by the low value (0.077) of the item corrected correlation (Table 20).

Table 21: Reliability Statistics for PD after omission one item

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.765	.765	5

3.4.2 Uncertainty Avoidance

Table 22: Reliability Statistics for UA

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.561	.634	5

Table 23: Item UA-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1. <u>It is important to have job requirements and instructions spelled out in detail so that employees always know what they are expected to do.</u>	15.6667	4.538	.091	.123	.696
2. Managers expect employees to closely follow instructions and procedures	16.3704	4.165	.427	.207	.444
3. Rules and regulations are important because they inform employees what the organisation expects of them	15.2963	4.293	.528	.303	.409
4. Standard operating procedures are helpful to employees on job	15.4815	4.644	.477	.486	.450
5. Instructions for operations are important for employees on job	15.7037	4.524	.293	.424	.522

The omission of the first item is recommended because it will improve the value of the alpha value of the construct uncertainty avoidance from 0.561 to 0.696. This is supported by the low item corrected correlation 0.091. According to Field (2005), the values in the column labelled *Corrected Item-Total Correlation* represent the correlations between each item and the total score from the questionnaire. If any of the entries are less than .3, then we have a problem. Because it means that particular item, for example, item (1) did not correlate very well with the scale overall correlation(see table 23).

Table 24: Reliability Statistics for UA

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.696	.714	4

3.4.3 Individualism /Collectivism

Table 25: Reliability Statistics I/C

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.872	.868	5

There No possible elements omission. The Cronbach’s alpha is fairly high .872. The Alpha value for this variable was .86 in (Clugston *et al.*, 2000). Thus the alpha value of this independent variable I/C is acceptable. The corrected item total correlation is high and above .3 is the recommended (Field, 2005) (see table26).

Table 26: Item I/C -Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1. Group welfare is more important than individual rewards	15.6667	9.308	.768	.653	.828
2. Group success is more important than individual success	15.7407	8.738	.851	.736	.805
3. Being accepted by members of you work group is very important	15.4074	10.097	.655	.544	.856
4. Employees should only pursue their goals after considering the welfare of group	15.4444	11.564	.458	.284	.896
5. Individuals may be expected to give up their goals in order to benefit group success	16.2593	9.353	.773	.671	.827

3.4.4 Masculinity / Femininity

Table 27: Reliability Statistics M/F

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.934	.935	5

No possible elements' omission. The Cronbach's alpha value is fairly high 0.934. The corrected item-total correlation is high and above .3, which is the recommended (Field, 2005).

4. Consequences variables : In-role behaviour and organisational citizen behaviour:

For IRB, OCBO, OCBI items (self report measurements). Respondents were asked to imagine how their supervisor would evaluate their own behaviour on a 5-point Likert- scales. The Cronbach's alpha values for IRB, OCBO and OCBI scales are .828, .575, and .662, respectively. The value of OCBO is relatively low. We omitted 6 items (see Table30). The omission of the sex items is recommended; because it will improve the construct alpha value. This is supported by the low item corrected correlation. The internal consistency of the 15 items scales has been normally estimated by using the alpha coefficient. The value of the alpha coefficient for the three variables scales is .85. IRB and OCB (see Table 30).

Table 28: Reliability Statistics (IRB, OCBO, OCBI)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.853	.889	15

IRB in-rule behaviour

Table 29: Item IRB-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Adequately completes assigned duties	25.0000	12.545	.698	.799
2. Fulfils responsibilities specified in job description	25.2500	12.386	.649	.800
3. Performs tasks that are expected of him/her	24.9167	12.992	.555	.813
4. Meets formal performance requirements of the job	25.1667	11.970	.698	.791
5. Engages in activities that will directly affect his/her performance evaluation	25.5833	10.265	.539	.824
6. Neglects aspects of the job he/she is obligated to perform.	25.5000	9.000	.648	.810
7. Fails to perform essential duties.	25.0833	12.083	.629	.799

Table 30 : Pilot study: Variables, Questionnaire, Ressources. Coefficient alpha

<i>Variable</i>	<i>Questions</i>	<i>Notes</i>	<i>Pilot Study</i>
Affective commitment (AC)	<ol style="list-style-type: none"> 1. I would be very happy to spend the rest of my career with this organisation (RS) 2. I really feel as if this organisation's problems are my own (RS). 3. I do not feel like 'part of the family' at my organisation (R) (RS). 4. I do not feel 'emotionally attached 'to this organisation(R) (RS). 5. This organisation has a great deal of personal meaning for me (RS). 6. I do not feel a strong sense of belonging to my organisation (R) (RS). 	<p>Organisational commitment will be measured using Myer and Allen's (1997) instrument.</p> <p>Internal consistency of the three scales has been normally estimated by using coefficient alpha. The coefficient alpha values for the three scales ranged, respectively, from .77 to .88 for ACS.</p>	Coefficient alpha value for the AC scales: .811.
Continuance Commitment (CC)	<p>High sacrifice (CC: HiSac) subscale</p> <ol style="list-style-type: none"> 7. It would be very hard for me to leave my organisation right now, even if I wanted to (RS) 8. Too much of my life would be disrupted if decided I wanted to leave my organisation right now (RS). 9. Right now, staying with my organisation is a matter of necessity as much as desire (RS). <p>Lack of alternative (CC: LoAlt) subscale</p> <ol style="list-style-type: none"> 10. I believe that I have too few options to consider leaving this organisation (RS). 11. One of the few serious negative consequences of leaving this organisation would be the scarcity of available alternatives (RS). 12. If I have not already put so much of myself into this organisation, I might consider working elsewhere. 	<p>Coefficient alpha for continuance commitment scales (CCS) range from .69 to .84 in (Allen and Meyer, 1990; Cohen, 1996; Hackett, Bycio, and Hausdorf, 1994; Myer and Allen, 1997, Myer, Irving, and Allen, 1998; Somers, 1995; 998).</p>	Coefficient alpha value for the AC scales: .864.
Normative Commitment (NC)	<ol style="list-style-type: none"> 13. I do not feel any obligation to remain with my current employer (R). 14. Even if it were to my advantage, I do not feel it would be right to leave my organisation now. 15. I would feel guilty if left my organisation now. 16. This organisation deserves my loyalty. 	<p>Coefficient alpha range from .65 to .86 for normative commitment scales (NCS), and from .69 to .84 in (Allen and Meyer, 1990; Cohen, 1996; Hackett, Bycio, and Hausdorf, 1994;</p>	Coefficient alpha value for the NC scales: .864

	<p>17.I would not leave my organisation right now because I have a sense of obligation to the people in it.</p> <p>18.I owe a great deal to my organisation.</p>	<p>Myer and Allen, 1997, Myer, Irving, and Allen, 1998; Somers, 1995; 1998).</p>	
<p>Antecedent Variables of (AC). Work experiences:</p> <p>Management communication</p>	<ol style="list-style-type: none"> 1. Company policies and procedures are clearly communicated to employees. 2. Management gives sufficient notice to employees prior to making changes in policies and procedures. 3. Most of the time I receive sufficient notice of changes that affect my work group. 4. Management takes time to explain to employees the reasoning behind critical decisions that are made. 5. Management is adequately informed of the important issues in my department. 6. Management makes a sufficient effort to get the opinions and feelings of people who work here. 7. <u>Management tends to stay informed of employees needs.</u> 8. The channels of employee communication with top management effective. 9. Top management communicates a clear organisational mission and how each division contributes to achieving that mission. 10. <u>Employees of this company work toward common organisational goals.</u> 	<p>All variables will be measured on 5-point Likert-format scales.</p> <p>Coefficient α was .88 in (Vandenberg <i>et al.</i>, 1999) and .89 in (Ng <i>et al.</i>, 2006).</p>	<p>Management communication Coefficient alpha value for the scales: .839 Two items (7 and 10) omitted. Omission is recommended; because it will improve the construct reliability from .78 to 0.839.</p>
<p>Opportunity for learning</p>	<ol style="list-style-type: none"> 1. I am given a real opportunity to improve my skills at this company through education and training programs. 2. I have had sufficient job-related training. 3. My supervisor helped me acquire additional job-related training when I have needed it. 4. I receive ongoing training, which enables me to do my job better. 5. I am satisfied with the number of training and development programs available to me. 6. I am satisfied with the quality of training and development programs available to me. 	<p>α for this variable was .90 in (Vandenberg <i>et al.</i>, 1999) and .89 in (Ng <i>et al.</i>, 2006).</p>	<p>Coefficient alpha value for the Opportunity for learning scales: .889.</p>

	<p>7. The training and educational activities I have received enabled me to perform my job more effectively.</p> <p>8. Overall, I am satisfied with my training opportunities.</p>		
Antecedents of (CC) Impersonal Bureaucratic arrangements	<p>1. My current level of pay.</p> <p>2. The benefits of seniority that I've gained in this organisation.</p> <p>3. <u>A retention bonus that this organisation provides. (NA)</u></p> <p>4. Having to give up on upcoming promotional opportunities for me at this organisation.</p> <p>5. <u>The benefits package at my current organisation (e.g., vacation time, dental plan, flexible hours, childcare. (NA)</u></p> <p>6. The loss of employer contributions to my pension plan.</p> <p>7. <u>Stock options that can only be exercised if I stay. (NA)</u></p>	<p>Items adapted from Powell and Meyer, (2004). They test the side-bet conceptualization of commitment within the context of Meyer and Allen's (1991) three-component model of OC.</p> <p>The Cronbach's value ranges from 0.54 to 0.86 for internal consistency estimates of the side-bet scales in Powell and Meyer (2004).</p>	<p>Coefficient alpha value for the Impersonal Bureaucratic Scales: .625. Three items (3, 5, and 7) were omitted. Omission is recommended because they are not applicable (NA) to Saudi government organisations.</p>
Antecedent of (NC) Cultural dimensions: Power distance	<p>Power Distance</p> <p>1. Managers should make most decisions without consulting subordinates.</p> <p>2. It is frequently necessary for a manager to use authority and power when dealing with subordinates.</p> <p>3. <u>Managers should seldom ask for the opinions of employees.</u></p> <p>4. Managers should avoid off-the-job social contacts with employees.</p> <p>5. Employees should <i>not</i> disagree with management decisions.</p> <p>6. Managers should <i>not</i> delegate important tasks to employees.</p>	<p>Will use Clugston and Dorfman (2000) scales that are adapted from Dorfman Howell's (1988) cultural scales and Dorfman and Howell scales that are adapted from Hofsted's (1980) ecological level. Reliability coefficients for these measures were as follows: Power Distance: .70. Uncertainty avoidance: .81. Collectivism /individualism: .86. Masculine/Feminine .77. Source: (Clugston <i>et al.</i>, 2000).</p>	<p>Coefficient alpha value for the Power Distance scales: .765. Item (3) was omitted. Omission is recommended because it will improve the construct reliability from .69 to 0.76.</p>
Uncertainty Avoidance	<p>Uncertainty Avoidance</p> <p>1. It is important to have job requirements and instructions spelled out in detail so that employees always know what they are expected to do.</p> <p>2. Managers expect employees to closely follow instructions and procedures.</p> <p>3. Rules and regulations are important because they inform employees what the organisation expects of them.</p> <p>4. Standard operating procedures</p>		<p>Coefficient alpha value for the Uncertainty Avoidance scales: .65.</p>

<p><i>Individualism/Collectivism</i></p>	<p>are helpful to employees on job. 5. Instructions for operations are important for employees on job.</p> <p>Individualism/Collectivism</p> <ol style="list-style-type: none"> 1. Group welfare is more important than individual rewards. 2. Group success is more important than individual success. 3. Being accepted by members of you work group is very important. 4. Employees should only pursue their goals after considering the welfare of group. 5. Managers should encourage group loyalty even if individual goals suffer. 6. Individuals may be expected to give up their goals in order to benefit group success. <p>Masculinity/ Femininity</p> <ol style="list-style-type: none"> 1. Meetings are usually run more effectively when they are chaired by a man. 2. It is more important for men to have professional career than it is for women to have a professional career. 3. Men usually solve problems with logical analysis; women usually solve problems with intuition. 4. Solving organisational problems usually requires an active forcible approach, which is typical of men. 5. It is preferable to have a man in a high-level position rather that a woman. 		<p>Coefficient alpha value for Individualism/Collectivism scales: .87.</p> <p>Coefficient alpha value for Masculinity/Femininity Scales: .93.</p>
<p>Consequences Employee performance of in-role behaviour (IRB)¹⁷</p>	<ol style="list-style-type: none"> 8. Adequately completes assigned duties. 9. <u>Fulfils responsibilities specified in the job description.</u> 10. <u>Performs tasks that are expected of him/her.</u> 11. Meets formal performance requirements of the job. 12. Engages in activities that will directly affect his/her performance evaluation. 	<p>Standardized Canonical Coefficients of 0.85 and .82 in (Williams and Anderson, 1991).</p>	<p>Reliability Statistics Coefficient alpha For IRB. 828.</p>

¹⁷ In-role behaviour (IRB): behaviours that are recognized by formal reward systems and are part of the requirements as described in job descriptions. (Williams and Anderson, (1991)

	<p>13. Neglects aspects of the job he/she is obligated to perform.</p> <p>14. Fails to perform essential duties.</p>		
<p>(OCB)</p> <p>Two types of Occupational citizen behaviour which are distinguished: OCBI and OCBO</p>	<p>OCBI</p> <ol style="list-style-type: none"> 1. Helps others who have been absent. 2. Helps others who have heavy workloads. 3. Assists supervisor with his/her work (when not asked). 4. Takes time to listen to co-workers' problems and worries. 5. Goes out of way to help new employees. 6. <u>Takes a personal interest in other employees.</u> 7. <u>Passes along information to co-workers.</u> <p>OCBO</p> <ol style="list-style-type: none"> 1. Attendance at work is above the norm. 2. Gives advance notice when unable to come to work. 3. <u>Takes undeserved work break (R)</u> 4. Great deal of time spent with personal phone conversations (R) 5. Complains about insignificant things at work (R). 6. Conservation and protects organisational property. 7. <u>Adheres to informal rules devised to maintain order.</u> 	<p>Scale</p> <p>1. Totally agree</p> <p>2.3.4.5. totally disagree #I do not know</p> <p>Standardized Canonical Coefficients of 0.85 and .82 in (Williams and Anderson, 1991).</p>	<p>Reliability Statistics Cronbach's Alpha For OCBI .575</p> <p>Reliability Statistics Cronbach's Alpha For OCBO .662</p>
<p>Intention to leave</p>	<ol style="list-style-type: none"> 1. How frequently they thought about leaving their current employer 2. How likely it was that they would search for a job in another organisation. 3. How likely it was that they would actually leave the organisation within next year. 	<p>Intention to leave will be measured using Myer, Allen and Smith (1993) instrument. Internal consistency of the three scales has been normally estimated by using coefficient alpha. The coefficient alpha value for the three scales is .83.</p>	<p>Reliability Statistics Cronbach's Alpha For intention to leave .820</p>

NOTE: NA is not applicable. R indicates reverse- keyed items (scoring is reversed).RS: revised scale.

Appendix 2

In a comparison between the main survey data and the new data, the main value that we are interested in from the output of the Chi-Square Test is the Pearson Chi-Square value. We use

The Chi-square test for independence to explore the relationship between two categorical variables. The test compares the observed frequencies or proportions of cases that occur in each of the categories, with the values that would be expected if there was no correlation between the two variables being measured. It is based on a cross tabulation table, with cases classified according to the categories in each variable (Pallant, 2007, p. 214).

Chi- square test: the main value that we are interested in from the output is the Person Chi-square value, which is presented in the Chi-Square test (see Tables 4, 5, 6, 7, 8, 9). As shown in these tables only one categorical variable, educational level had a significant Person Chi-square value, which had a level of significance less than .05. Pearson Chi-Square is 13.623 significant level of $> .009$. Therefore, there is a difference between the main survey and the new data with respect to educational level.

Descriptive Statistics for new data (Table 1)

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Your Age	34	25.00	59.00	38.7647	9.80741	96.185
Job level in organisation	35	1.00	3.00	1.9143	.70174	.492
Number of Years Service	34	1.00	36.00	15.1765	8.96279	80.332
Male - Female	35	1.00	1.00	1.0000	.00000	.000
Social Status	34	1.00	2.00	1.7941	.41043	.168
Educational Level	35	1.00	5.00	2.7429	1.19663	1.432
Monthly income	35	1.00	5.00	3.6286	1.08697	1.182
Valid N (list wise)	32					

Descriptive Statistics for the main survey (Table 2)

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Your Age	416	18.00	65.00	16038.00	38.5529	9.23571	85.298
Job level in organisation	422	1.00	3.00	848.00	2.0095	.71953	.518
Number of Years Service	402	1.00	37.00	5665.00	14.0920	9.63260	92.787
Male - Female	433	1.00	2.00	468.00	1.0808	.27289	.074
Marital Status	432	1.00	2.00	780.00	1.8056	.39623	.157
Educational Level	432	1.00	5.00	1401.00	3.2431	1.05694	1.117
Monthly income	432	1.00	5.00	1631.00	3.7755	1.10810	1.228
Valid N (list wise)	392						

Educational Level for the new data (Table 3)

	Frequency	Frequency	Valid Percent	Cumulative Percent
Valid Less than secondary education	6	17.1	17.1	17.1
Secondary education	10	28.6	28.6	45.7
Diploma	8	22.9	22.9	68.6
University	9	25.7	25.7	94.3
Higher Education	2	5.7	5.7	100.0
Total	35	100.0	100.0	

Chi-Square Tests for Educational Level (Table 4)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.623(a)	4	.009
Likelihood Ratio	10.720	4	.030
Linear-by-Linear Association	9.533	1	.002
N of Valid Cases	452		

a 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.89.

Chi-Square Tests for Job level (Table 5)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.422(a)	2	.483
Likelihood Ratio	1.567		
	1.154	2	.457
Linear-by-Linear Association		1	.283
N of Valid Cases	445		

a 2 cells (20.0%) have expected count less than 5. The minimum expected count is 8.62.

Chi-Square Tests for age (Table 6)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.753 ^a	42	.526
Likelihood Ratio	46.292	42	.300
Linear-by-Linear Association	.019	1	
N of Valid Cases	456		

a 58 cells (67.4%) have expected count less than 5. The minimum expected count is .08.

Chi-Square Tests for tenure (Table 7)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.668 ^a	36	.628
Likelihood Ratio	37.934	36	.381
Linear-by-Linear Association	.298	1	.585
N of Valid Cases	454		

a. 46 cells (62.2%) have expected count less than 5. The minimum expected count is .08.

Chi-Square Tests for marital status (Table 8)

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.071(b)	1	.789		
Continuity Correction(a)	.001	1	.970		
Likelihood Ratio	.070	1	.792		
Fisher's Exact Test				.819	.469
Linear-by-Linear Association	.071	1	.790		
N of Valid Cases	442				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.42.

Chi-Square Tests for monthly income (Table 9)

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.350 ^a	4	.253
Likelihood Ratio	4.926	4	.295
Linear-by-Linear Association	1.054	1	.305
N of Valid Cases	452		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is .55.

Appendix 3

List of research instruments, Mean and Standard deviation.

<i>Variable</i>	<i>Research Instrument</i>	<i>Mean</i>	<i>SD</i>
Affective commitment (AC)	<ol style="list-style-type: none"> 1. Would be very happy to spend the rest of my career with this organisation. 2. I really feel as if this organisation's problems are my own. 3. I do not feel like 'part of the family' at my organisation (R). 4. I do not feel 'emotionally attached' to this organisation(R). 5. This organisation has a great deal of personal meaning for me. 6. I do not feel a strong sense of belonging to my organisation (R). 	21.61	4.09
Continuance Commitment (CC)	<p>High sacrifice (CCH) subscale</p> <ol style="list-style-type: none"> 1. It would be very hard for me to leave my organisation right now, even if I wanted to. 2. Too much of my life would be disrupted if decided I wanted to leave my organisation right now. 3. Right now, staying with my organisation is a matter of necessity as much as desire. 	10.58	2.61
	<p>Lack of alternative (CCL) subscale</p> <ol style="list-style-type: none"> 1. I believe that I have too few options to consider leaving this organisation 2. One of the few serious negative consequences of leaving this organisation would be the scarcity of available alternatives. 3. If I have not already put so much of myself into this organisation, I might consider working elsewhere. 	9.99	2.45
Normative Commitment (NC)	<ol style="list-style-type: none"> 1. I do not feel any obligation to remain with my current employer (R). 2. Even if it were to my advantage, I do not feel it would be right to leave my organisation now. 3. I would feel guilty if left my organisation now. 4. This organisation deserves my loyalty. 5. I would not leave my organisation right now because I have a sense of obligation to the people in it. 6. I owe a great deal to my organisation. 	20.27	4.42
Management communication	<ol style="list-style-type: none"> 1. Company policies and procedures are clearly communicated to employees. 2. Management gives sufficient notice to employees prior to making changes in policies and procedures. 3. Most of the time I receive sufficient notice of changes that affect my work group. 4. Management takes time to explain to employees the reasoning behind critical decisions that are made. 5. Management is adequately informed of the important issues in my department. 6. Management makes a sufficient effort to get the opinions and feelings of people who work here. 7. The channels of employee communication with top management effective. 8. Top management communicates a clear organisational mission and how each division contributes to achieving that mission. 	24.04	7.30
Opportunity for learning (training)	<ol style="list-style-type: none"> 1. I am given a real opportunity to improve my skills at this company through education and training programs. 2. I have had sufficient job-related training. 3. My supervisor helped me acquire additional job-related training when I have needed it. 	22.83	8.29

		<ol style="list-style-type: none"> 4. I receive ongoing training, which enables me to do my job better. 5. I am satisfied with the number of training and development programs available to me. 6. I am satisfied with the quality of training and development programs available to me. 7. The training and educational activities I have received enabled me to perform my job more effectively. 8. Overall, I am satisfied with my training opportunities. 		
Impersonal arrangements	Bureaucratic	<ol style="list-style-type: none"> 1. My current level of pay. 2. The benefits of seniority that I've gained in this organisation. 3. Having to give up on upcoming promotional opportunities for me at this organisation. 4. The loss of employer contributions to my pension plan. 	11.93	2.99
Cultural dimensions: Power distance (PD)		<ol style="list-style-type: none"> 1. Managers should make most decisions without consulting subordinates. 2. It is frequently necessary for a manager to use authority and power when dealing with subordinates. 3. Managers should avoid off-the-job social contacts with employees. 4. Employees should <i>not</i> disagree with management decisions. 5. Managers should <i>not</i> delegate important tasks to employees. 	13.59	3.98
Uncertainty Avoidance (UA)		<ol style="list-style-type: none"> 1. It is important to have job requirements and instructions spelled out in detail so that employees always know what they are expected to do. 2. Managers expect employees to closely follow instructions and procedures. 3. Rules and regulations are important because they inform employees what the organisation expects of them. 4. Standard operating procedures are helpful to employees on job. 5. Instructions for operations are important for employees on job. 	20.24	4.42
Individualism/ Collectivism (I/C)		<ol style="list-style-type: none"> 1. Group welfare is more important than individual rewards. 2. Group success is more important than individual success. 3. Being accepted by members of your work group is very important. 4. Employees should only pursue their goals after considering the welfare of group. 5. Managers should encourage group loyalty even if individual goals suffer. 6. Individuals may be expected to give up their goals in order to benefit group success. 	23.21	4.42
Masculine/ Feminine (M/F)		<ol style="list-style-type: none"> 1. Meetings are usually run more effectively when they are chaired by a man. 2. It is more important for men to have a professional career than it is for women to have a professional career. 3. Men usually solve problems with logical analysis; women usually solve problems with intuition. 4. Solving organisational problems usually requires an active forcible approach, which is typical of men. 5. It is preferable to have a man in a high-level position rather than a woman. 	17.36	4.67

Performance of in-role behaviour (IRB)	<ol style="list-style-type: none"> 1. Adequately completes assigned duties. 2. Meets formal performance requirements of the job. 3. Engages in activities that will directly affect his/her performance evaluation. 4. Neglects aspects of the job he/she is obligated to perform(R). 5. Fails to perform essential duties (R). 	20.48	3.11
Organisational citizenship that benefits the specific individual	<p>OCBI</p> <ol style="list-style-type: none"> 1. Helps others who have been absent. 2. Helps others who have heavy workloads. 3. Assists supervisor with his/her work (when not asked). 4. Takes time to listen to co-workers' problems and worries. 5. Goes out of way to help new employees 	19.43	3.03
Organisational citizenship that benefits the organisation	<p>OCBO</p> <ol style="list-style-type: none"> 1. Attendance at work is above the norm. 2. Gives advance notice when unable to come to work. 3. Great deal of time spent with personal phone conversations (R) 4. Complains about insignificant things at work (R). 5. Conservation and protects organisational property. 	21.15	2.86
Intention to leave (Int)	<ol style="list-style-type: none"> 1. How frequently they thought about leaving their current employer 2. How likely it was that they would search for a job in another organisation. 3. How likely it was that they would actually leave the organisation within next year. 	8.05	3.18

Note: R indicates a reverse- keyed item (scoring is reversed).