An Empirical Study of Male and Female Leadership Styles in a Segregated Work Environment in the Kingdom of Saudi Arabia (KSA)

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By

Mohammed Saad Al-rayed Al-Shamrani

Master of Business Management (MSc), the University of Hull, UK

Bachelor of Public Management (BA), King Abdul-Aziz University, KSA

Diploma in Computer Science, New Horizon Computer Learning Centre, KSA

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ABSTRACT
Disparities between men’s and women’s leadership styles are particularly salient in contemporary organizations in which recent trends suggest leadership styles link to both sex and gender. Some research suggests leadership style is associated partly with sex, and other research suggests differences are attributed better to gender roles. Thus, it is unclear whether gender moderates relationships among psychological mechanisms that produce leadership and its various styles. Complicating the matter is the fact that most researchers conduct leadership studies in contexts in which genders interact regularly. In Saudi Arabia, interactions between the genders are limited to one’s relatives, though some interactions do occur among colleagues. Most Saudi Arabian organisations segregate employees based on gender since cultures governed by Islamic law commonly separate the sexes regarding institutions, education, employment, and even time spent in leisure. In such cultures, segregation acts as a means of respect and protection from sexual discrimination, regardless of any underestimation of women’s management skills or characteristics, including leadership. The purpose of this study is to assess gendered leadership in segregated, Saudi Arabian work environments, a context in which interactions between the genders is limited. This study examines leader-member interactions to assess whether gender status moderates either leader behaviours or organisational commitment. Since interactions among the genders are uncommon in this context, this study uniquely explores whether leadership is gendered in the environment.

A framework was developed based on both the full-range leadership model and leader-member exchange to assess correlations between the two models and predict employee organisational commitment. This study investigates relationships among both models’ components, including transformational leader behaviours, transactional leader behaviours, passive leadership behaviours and quality of relationships between leaders and subordinates, and organisational commitment, especially concerning how these components operate in a gender-segregated context. Finally, gender as a moderator was also assessed among these relationships. Data were collected through a quantitative survey from a sample of three-hundred and ninety-six bank employees whose organisation follows a strict sex-segregation policy. The survey consisted of the Multi-factor Leadership Questionnaire, the LMX-7, and the Organisational Commitment Scale instruments. Data were analysed using structural equation modelling, and Partial Least Squares was used as an alternative method of
evaluating hypothesised relationships among constructs. Results suggest idealised attributes, idealised behaviours, and developmental behaviours components of transformational leadership correlate strongest with leader-member exchange. Contingent reward, a component of transactional leadership, correlated positively with both leader-member exchange and organisational commitment. Management by exception (active) showed no correlation with leader-member exchange, but correlated with organisational commitment. Passive leader behaviours demonstrated a negative relationship with leader-member exchange. Finally, leader-member exchange mediated relationships among transformational leader behaviours, contingent reward, passive leader behaviours, and organisational commitment.

This study suggests the paramount role quality of relationship with a leader plays in the Saudi Arabian context regarding transformational leader behaviours. The mediating role of leader-member exchange between transformational leader behaviours and organisational commitment is attributed to recognition that followers establish relationships in a context in which power distance is high and collectivist values are held. Gender did not moderate relationships among constructs, though non-significant correlations suggest disparities between the male and female groups investigated in this study. Results from this study fill several gaps in the literature concerning gendered leadership in segregated work environments, especially concerning the finding that leadership is not gendered in Saudi Arabian, segregated contexts. Saudi Arabian female managers appear to be as effective as their male counterparts; in fact, they scored slightly higher. These findings argue against a stereotypical view of gendered leadership and suggest an important message regarding the abilities of female managers in Saudi Arabian and other gender-segregated contexts. Saudi Arabian female managers appear accessible to followers through several leadership styles, offering disparate communication channels that encourage multiple avenues to interact with them. Based on the female model, Saudi female managers were effective in the prediction of LMX using TRFLs, CR and PSVs, while men were effective in TRFLs and PSVs to predict LMX. Also female managers were effective in the prediction of OC using LMX, CR and MBEA, while Saudi male managers were effective to predict OC via LMX and MBEA. Results also suggest that the literature should pay more attention to minimising stereotyping of female managers regarding gendered leadership. Implications, limitations, and recommendations for future research are discussed in light of these findings.
DEDICATION

To the memory of my father

May Allah (swt) rest him in heaven (Amin)
ACKNOWLEDGEMENT

Firstly, my gratitude goes to the Almighty Allah. My thesis could not have been completed without his volition and support.

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<td>√AVE</td>
<td>Root of Average Variance Extracted</td>
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<tr>
<td>12-item LMX-MDM scale</td>
<td>Multidimensional Leader member exchange scale</td>
</tr>
<tr>
<td>a</td>
<td>The regression coefficient for the association between the independent variable and the mediator.</td>
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<tr>
<td>AMOS</td>
<td>Analysis of Moment Structures</td>
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<td>ANOVA</td>
<td>Analysis of variance</td>
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<td>Ave</td>
<td>Average</td>
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<td>AVE</td>
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<td>b</td>
<td>The regression coefficient for the association between the mediator and the dependent variable.</td>
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<td>BOCS</td>
<td>British Organisational Commitment Scale</td>
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<td>Com</td>
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<td>Contingent Reward</td>
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<td>CR*</td>
<td>Composite reliability</td>
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<td>Maximum</td>
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<td>Management by Exception Active</td>
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<td>MBEP</td>
<td>Management by Exception Passive</td>
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<td>Sea</td>
<td>The standard error of the relationship between the independent variable and the mediator</td>
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<td>The Vertical Dyad Linkage</td>
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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Gendered leadership is a complex and debatable issue. Eagly and Carli (2007) argue that it is not clear how gender moderates the relationship between psychological constructs. Does gender make a difference in leadership practices? (Eagly, 2005), “clearly, there is no simple answer to a seemingly simple question. Yet, the gender advantage perspective implies that one gender is superior at enacting a preferred style—a preferred style that is useful across settings”… “It has not been demonstrated that either sex is clearly advantaged with respect to operating as a leader. Strong claims of masculine or feminine advantage do not have the data to support them” (Vecchio, 2002, p.655). Leadership theories and practices have referred to the terms feminine and masculine characteristics. In other words, it is common to make links to gender roles when studying the relationship between leadership and gender. For example, feminine characteristics are associated with relational oriented, participative and transformational leadership styles, while masculine characteristics are related to task-oriented, directive and transactional leadership styles (Bass et al., 2008, Eagly and Carli, 2007). With respect to gender, Saudi Arabia is rated as a feminine society in nature. Arab societies scoring moderately on this dimension tend to value qualities like modesty, humility, benevolence, interpersonal relationships and concern for the weak (Al-Khatib et al., 2008). Saudi employees’ expectations, as seen by the managers, include kind and human treatment, care and respect (concern for others and nurturing) (Bjerke and Al- Meer, 1993). However, differentiation is strongly practised; for example, the practice of guardianship and the traditional attitudes to the desirability of men working and taking high positions over women are features of Saudi society (Elamin and Omair, 2010). Thus, Saudi society is male-dominated. Therefore, stereotypically, Saudi women have been under-represented in leadership positions
compared to Saudi men (Al-Rasheed, 2002).

In Saudi Arabia there is little interaction between men and women in daily life, and gender segregation is an important feature for most organisations (Al-Rasheed, Taleb, 2010 and Walker, 2004). Thus, this study provides a chance to explore leader-member relationships in a distinctive work environment toward gendered leadership. For example, as leadership theories have referred to gender roles, an exceptional social setting and sample could offer unique opportunity to investigate whether leadership behaviours are gendered or not. The current study was conducted in a setting where males and females have little interaction in their life, and specifically conducted in the banking sector where male and female employees work separately and each sex has its own management. Men and women in both branches have the same responsibility to their managers or for their subordinates. These features of setting and sample allow comparison between individuals of different gender in equivalent positions. Thus, the focus of the current study is to investigate whether leadership is gendered in a segregated work environment in the Kingdom of Saudi Arabia, which has distinctive socialisation and environment of gender interaction.

The research incorporated two leadership approaches in order to enrich understanding of how leadership is processed. The full range of leadership theory (FRLT) (Bass, 1985) was used to measure leaders’ behaviours, while leader member exchange (LMX) (Dansereau et al., 1975, Graen and Uhl-Bien, 1995) served to measure how leaders and followers interacted. Organisational commitment (OC) served as the dependent construct, and gender moderated the relationship between constructs.

This chapter consists of seven sections. Section one presents the research problem, which is considered and introduced from two sides: (1) a literature review with
consideration to the Saudi context; and (2) the researcher’s personal experience. Section two explains the significance of the study. Section four presents the research objectives, from which emerged the research questions in section five. The research questions are consistent with the philosophy of the study. As the current study adopts a positivist stance, a deductive logic and focus on causality follows. Thus, the research questions are formulated to test the relationship between constructs. In order to understand the research constructs, definitions of key terms are outlined for all proposed latent constructs in section six. Finally, the structure of the thesis is outlined (See Figure 1).

1.2 Research Problems:
The research problem is discussed in two parts: existing problems identified in the literature and the researcher’s personal experience.

1.2.1 Existing problem
Although leadership has been researched extensively, gendered leadership is a hot topic, which still needs investigation. Eagly and Carli (2007) provide theoretical and empirical studies of the differences between male and female leadership with an advantage for female leaders. They conclude that women are more effective leaders than men, although the differences are small. On the other hand some studies do not find any differences across gender. Thus the literature leaves a considerable debate on how leadership is gendered, in other words, how gender moderates the relationship between leadership and psychological outcomes.

Expectation states theory claims that gender becomes salient in a setting when it either differentiates the actors (a mixed-sex context) or is culturally linked to the task at hand. When gender is salient, gender status beliefs shape the expectations actors for the competence of men and women in the setting (Ridgeway and Smith-Lovin, 1999). In
fact, stereotypically masculine characteristics and behaviours have been linked to leadership characteristics and effectiveness (Kolb, 1999). This pattern is gradually practised from culture to culture, and strongly exists in some cultures such as the Middle East. For example, research conducted in Gulf countries (Bahrian, Oman and UAE) found women are challenged by some barriers such as cultural taboos, discrimination at work, lack of confidence and trust, and generally negative attitudes toward women as managers or in positions of authority (Piccinelli and Wilkinson, 2000). Thus, cross-cultural study has demonstrated that nations commonly perceive that significant overlap exists between the traits associated with male and manager, while little overlap was perceived between the social categories female and manager (Scott and Brown, 2006).

In addition, socialisation in same-sex groups may be associated with the discrimination/inequality of men and women in culture (Leaper, 2006). “Because of the cultural stereotype of leaders is relatively masculine, the mere activation of female stereotype can underestimate women’s interest in leadership” (Eagly and Carli, 2007, p. 93). “People generally consider women to be less expert than men, women should be at a disadvantage in gender-neutral contexts, in which without over-whelming evidence of a women’s superiority at the task, men would be presumed to be more competent and would therefore be more influential” (Carli, 2006, p. 734).

Saudi Arabia is a highly male-dominated and conservative society (Taleb, 2010). Due to Islamic and traditional values, Saudi Arabia has embraced a policy of gender segregation throughout life, so interaction between male and female apart from close family or relatives, is seldom found. One negative result is that women have been deprived of the opportunity to reach leadership positions in most organisations, and men are privileged over women in employment programmes (AlMunajjed, 2006b).
Consequently, Saudi women have suffered from the phenomenon of “stereotype threat”, which has classified them as having less ability to lead than men, and their influence and authority are resisted. On the other hand Blackburn and Jarman (2006, p.291) conclude that “gender segregation and gender inequality are often inversely related in contemporary countries and that in some situations high levels of gender segregation can offer some advantages to women”. Gender segregation policy could decrease the chance of discrimination and inequality for women.

Although the segregation policy could protect women from male discrimination and make it easy to communicate with the same sex, decreasing the possibility of harassment, it could be a reason to keep women away from interaction with men and take part as decision makers alongside men in political positions. Saudi Arabia’s segregated organisation policy has hidden women’s abilities and prevented their holding positions.

In Saudi Arabia, a few researches have studied gender and leadership. Saudi women managers were highly rated as transformational, interpersonally-oriented and democratic leaders, and were perceived to be more transformational leaders than practising transactional and non-leadership styles (Taleb, 2010, Walker, 2004). However, these studies were confined to single-sex organisations. Thus, the differences of leadership behaviours across genders were not investigated and this could sustain men’s advantage. There have been calls for research to focus on the effect of gender and culture on leadership (Barbuto et al., 2007, Engen et al., 2001, Gibson, 1995, Van Engen and Willemsen, 2004). Engen et al. (2001) claim that sex differences in leadership behaviours need to be explored in different contexts. “Both male and female managers seem to be sensitive to the sex composition in their surroundings, using leadership styles that match the gender typing of the context” (Engen et al., 2001, p. 584).
Thus, a segregated organisation could be a desirable context to investigate how leadership is practised across gender under a unique environment, as the interaction across gender in Saudi Arabia is very limited. I would argue that this study could provide insights into the ambiguity of “gendered Saudi leadership”.

1.2.2 Researcher's personal experience

During the first three decades of my life, I observed that leadership roles are restricted to men rather than women. In Saudi Arabia men took and held responsibility/authority over women, and usually made decisions independently of them. Moreover, Saudi businesswomen, female employees or even widows looking after the family are still not considered as strong as men and do not have as much ability to take responsibility as men. They are still required to have a guardian to look after them. Thus, and stereotypically, Saudi women are exaggeratedly perceived as very weak, not qualified to take on men’s responsibilities and surrounded with threats (discrimination, harassment).

When I arrived in the UK, I studied English language in the English Language Centre (ELC) in York, which was owned and led by a woman (Mrs Juddy). The centre was rated as the best English institution in the UK in 2008 and 2009. Mrs Juddy was a workaholic; she was a very charismatic leader, respected and trusted by students and staff. In 2007, I moved to the University of Hull to study for an MSc; I observed the proportion of women in organisations around the city, who take responsibilities, such as policewomen, Master lecturers, and university programme leaders.

What shocked me in this experience was not how women interact, or the level of performance or productivity but, rather, the ability of women in the UK to lead effectively. This point interested me to investigate how leadership is perceived across gender in Saudi Arabia.
1.3 Significance of the study

Most previous leadership studies found that women tend to be more transformational, democratic and relational oriented, while men are more transactional, autocratic and task-oriented (Eagly and Carli, 2007, Eagly and Johannesen-Schmidt, 2001, Eagly and Johnson, 1990). However, this classification might differ across cultures. The difference between men and women occurs across a variety of cultural, situational and individual factors (Bryman et al., 2011). “The impact of national culture on expectations of self and others in leadership remains an issue. Countries whose cultures value masculine styles may value leadership behaviours that are more competitive, valuing the strong, and holding up male norms as best practise; conversely, countries whose cultural values include decreased masculinity may tend to value organisational solidarity, gender complementarity, and sympathy and understanding for the weak” (Stelter, 2002,p.93). In addition, feminist theories have provided analysis that expands the traditional, gender-dominated understanding of leadership (Mendez-Negrete, 1999).

Most previous studies that compared male and female leadership were conducted in a mixed-sex environment (masculine or feminine) or conducted in an all-male or all-female setting, so it is not clear how leadership is gendered. As mentioned, the policy of gendered organisation has left such comparison less interesting or more complex. It is vital to develop an integrated understanding of sex segregation because of its extensive consequences. For example, the study of sex segregation is important for three reasons: first; same-sex groups might act as active agents in the socialisation of gender-stereotyped attitudes, traits, interests and skills. Second: gender-stereotyped issues are considered to lead to power asymmetries in male and female relationships, where males are afforded more power over females (Maccoby and Jacklin, 1987). And third: “gender perceptions in same-sex relations were less stereotypic than in cross-sex relations.
Apparently, employees were able to identify a wider range of attributes and behaviours in managers of the same-sex than in managers of the opposite sex” (Kark et al., 2012, p.637).

Moreover, a common feature of the sex segregation literature is that it has focused on sex segregation in Western cultures. In some Eastern cultures, especially cultures governed by Islamic law, sex segregation is an institutional practice, where males and females are purposefully kept separate in education, employment, and leisure (Vidyasagar and Rea, 2004). The background and consequences of sex segregation in a society where segregation is compulsory rather than optional would be likely to vary extensively. Thus, there is a need for study investigating the impact of sex segregation in Eastern cultures (Mehta and Strough, 2009). “We need to further develop our theoretical argument to take into account not only the activation of gender status beliefs, but also the activation of general gender stereotypes in the workplace”(Johnson et al., 2006, p.141).

This study provides a unique sample structure to compare between groups; first, it is conducted in the banking sector, which is not classified as a masculine or feminine setting in Saudi Arabia, which prevents the study from bias. “Clearly, the male and female domination of an organisational context influence the styles of both male and female managers. Surprisingly, this aspect is often left out of consideration” (Barbuto et al, 2007, p.584). Moreover “In essence, a gender advantage perspective is a step backward in explaining social behaviour in work settings” (Vecchio, 2002, p.655). Second, Saudi bank branch managers (men and women) have the same responsibilities either to their top management or for their followers. Third, the socialisation of gender interaction in Saudi Arabia is different from other cultures; males and females are not encouraged to interact with each other unless they are relatives or, sometimes, colleagues in specific cases (Walker, 2004). Thus, these contextual factors would
provide accurate information for the purpose of the study and prevent bias.

As far as the researcher is aware, there is no study that compares leadership across gender in segregated organisations. This context might provide a unique opportunity to study leader-member interactions in gender segregated context. This study could offer empirical results for gender and leadership studies in general, and for gender and leadership in Saudi Arabia in particular, identifying the extent to which leadership is gendered in the Saudi context.

Among leadership theories, full range leadership theory (Bass, 1985) focuses on leaders’ behaviour and characteristics. Leader-member exchange theory focuses on the interpersonal relationship between leader and followers and it is described as a “relationship-based approach” (Graen and Uhl-Bien, 1995). Bryman et al. (2011) suggest further studies to incorporate the full range of leadership theory with leader member exchange (LMX). This study combines the full range model and leader-member exchange, so this integration of behavioural and relational perspectives could enrich the understanding of the leadership process across gender in Saudi Arabia; investigation of how they impact on employees’ organisational commitment, and the causality between constructs (indirect and direct) contribute further insights.

Structural equation modelling (SEM) (measurement stage/outer model and structural stage/inner model) is applied in order to test the construct validity and to compare the degree of predictive ability among leadership constructs in the models. Latent constructs (exogenous or endogenous) need to be measured by one or more observed constructs (Chin, 2010b, Vinzi et al., 2010a). Thus SEM has the ability to achieve construct validation. Moreover, as the current study relies heavily on previous theories, SEM is able to estimate the parameters of the models with consideration of operationalisation of the theories (Schumacher and Lomax, 2010).
Finally, Metcalfe and Mimouni (2012, p.192) state that “leadership development and practise in Saudi Arabia are still in their early stages. Extensive research is needed”. Thus, leadership studies are still limited in the literature in general. Particularly, this study could benefit Saudi management to improve interaction among employees, managers and subordinates as well as expanding to gender stereotypes. The results can reveal the prevailing leadership style, diagnose the relationship between leaders and followers and suggest how this may be practised in Saudi banks. It can point to human resources policies and practices that may increase organisational commitment and performance, and thereby give the banks a competitive edge in a growing industry. Moreover, this study could offer suggestions for further research.

1.4 Research objectives

The main purpose of the current study is to examine gendered leadership in a segregated work environment. The framework was developed including the complex construct of leadership role in order to predict organisational commitment with consideration of the structure of the sample.

The second objective is to test the construct validation of the model. The SEM first stage (measurement stage) was used to test the validation of the constructs for the whole sample and across genders in order to examine the effect of gender moderation on these relationships. This step is initial for assessing participants’ perception towards their immediate manager’s leadership role and to understand the dimensionality of the constructs before testing the hypotheses.

The framework was developed in order to test some relationships as follows:

1. To examine the relationship between leadership behaviours ((transformational
leadership behaviours (TRFLs), transactional leadership behaviours (TXs) and passive leadership behaviours (PSVs)) and leadership member exchange (LMX).

2. To examine the relationship between leadership behaviours ((transformational leadership behaviours (TRFLs), transactional leadership behaviours (TXs) and passive leadership behaviours (PSVs) and subordinates’ organisational commitment (OC)).

3. To examine the relationship between leadership member exchange LMX and employees’ organizational commitment (OC).

4. To examine the influence of gender moderation between relationships, with particular interest in the effect of gender in segregated work environments. Context and sample homogeneity were carefully considered to meet the purpose of the study. For example, the socialization of gender is different from other contexts as the interaction between Saudi men and women is limited. Participants’ authority position and masculine versus feminine setting were considered in order to compare between two groups and to avoid the assumption of bias. Men and women who participated held the same responsibilities in the bank hierarchy; and the banking industry is not classified as a masculine or feminine setting. Thus, the salience of gender in segregated work and the characteristic of the setting could achieve the main objective of the study, exploring the gendered leadership issue.

1.5 Emerging research questions

This research was developed and conducted in a context where males and females have no interaction in most organisations. The ambiguity of the moderation role of gender between leadership and its outcomes has received attention by countless researchers. However, it is not clear how gender acts as a moderator. As mentioned, segregated work
environment features, which were explained in the significance of the study section, might add to the body of literature on the extent to which gender plays a role in leadership. Furthermore, as the study was developed based on a positivist approach, the framework was developed based with consideration to gender differences. Thus, the main question of this thesis is as follows:

1. Is leadership behaviours and organisational commitment modified by gender in a segregated work environment?

This question could be answered through testing relationships between constructs and comparing male and female followers’ perceptions toward their immediate branch managers, as the data were collected from a segregated organisation. The answers to the main question can be derived from the following questions:

2. To what extent do leadership behaviours (TRLs, TXs and PSVs) influence the leader member exchange (LMX) in a segregated work environment?.

3. To what extent do leadership behaviours (TRLs, TXs and PSVs) influence followers’ organisational commitment in a segregated work environment?.

4. To what extent does leadership relationship (LMX) influence followers’ organisational commitment in a segregated work environment?.

5.

1.6 Definitions of key terms

1.6.1 Transformational leadership behaviours (TRFLs):
“Transformational leaders do more with colleagues and followers than set up exchanges or agreement. They behave in ways to achieve superior results by employing one or more components of transformational leadership behaviours” (Bass and Riggio, 2006, p. 5). These components are defined as follows:
1. **Idealised Influence (II):**

“Transformational leaders behave in ways that allow them to serve as role models for their followers. The leaders are admired, respected, and trusted” (Bass and Riggio, 2006, p. 5). It is behaviour that encourages followers to use their leaders as role models. Another term used to describe this form of leadership is charisma. At the core of idealized influence is the creation of values which inspire, provide meaning for, and instill a sense of purpose in people. Idealised influence is divided into two sub factors 1. Idealised influence attributes (IIA), and idealised influence behaviours (IIB). Idealised influence refers to charismatic actions of the leader which are centred on beliefs, values and sense of mission (Bass, 1985).

2. **Inspirational Motivation (IM):**

“Transformational leaders behave in ways that motivate and inspire those around them by providing meaning and challenge to their followers’ work” (Bass and Riggio, 2006, p. 5).

3. **Intellectual Stimulation (IS):**

“Transformational leaders stimulate their followers’ efforts to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways” (Bass and Riggio, 2006, p. 5).

4. **Individualised Consideration (IC):**

“Transformational leaders pay special attention to each individual follower’s needs for achievement and growth by acting as a coach and mentor” (Bass and Riggio, 2006, p. 5).
1.6.2 Transactional leadership behaviours (TXs):

According to Bass and Avolio (1995) transactional leadership is an influence process to exchange valued rewards for performance. has three sub-constructs, contingent reward and management-by-exception, active and passive as follow:

1) Contingent Reward (CR):

“Contingent reward leadership involves the leader assigning or obtaining follower agreement on what needs to be done with promised or actual rewards offered in exchange for satisfactorily carrying out the assignment” (Bass and Riggio, 2006, p. 5).

2) Management–by-Exception Active (MBEA):

“In MBEA, the leader arranges to actively monitor deviances from standards and errors in the followers’ assignments and to take corrective action, if necessary” (Bass and Riggio, 2006, p. 5).

3) Management–by-Exception Passive (MBEP):

“MBEP implies waiting passively for deviances, mistakes, and errors to occur and then taking corrective action” (Bass and Riggio, 2006, p. 5).

1.6.3 Laissez-Faire Leadership (LF):

“It is the avoidance or absence of leadership” (Bass and Riggio, 2006, p. 5). The leader, here, avoids becoming involved, avoids making decisions, abdicates responsibility for urgent issues and delegates tasks to followers, so the leader does not care whether followers maintain standards on issues or gain performance goals (Bass and Avolio, 2004).

1.6.4 Leader-member Exchange (LMX):

“The leader-member exchange (LMX) involves the inter-personal relationships between leaders and followers. In general, these dyadic exchanges are thought to range on a continuum from high to low. High-quality exchanges are characterised by a higher level of trust, interaction, support and rewards than low-quality exchanges”
15

(Lee, 2005, p. 656).

1.6.5 Organisational Commitment (OC):
Porter *et al.* (1974, p.604) define organisational commitment as “the strength of an individual’s identification with and involvement in a particular organisation.”
1.7 Structure of the thesis

Chapter one
• INTRODUCTION: This chapter presents the research background, the research problem significance and questions of the research are presented. In addition, definitions of the key terms are outlined.

Chapter two
• RESEARCH CONTEXT: This chapter explains the profile of the Kingdom of Saudi Arabia (KSA) with particular reference to gender. The chapter includes the population, religion, details of Saudi society and the Saudi concept of women’s role, segregated organization and gendered participation in labour market. Also the justification of the selected context is presented.

Chapter three
• LITERATURE REVIEW-PART ONE: The aim of this chapter is to outline how leadership theories were developed. Some classical leadership theories are outlined.

Chapter four
• LITERATURE REVIEW-PART TWO: This chapter provides a review of previous studies of leadership and related topics. Section one provides an evaluation of the development of full range leadership theory, while section two explains the leadership exchange theory (LMX). Section three describes organizational commitment as an outcome of leadership. Section four considers the issue of gender and its relation to leadership, while the final section (five) discusses how culture could affect leadership from western and eastern perspectives with consideration to gender.

Chapter five
• HYPOTHESES DEVELOPMENT AND FRAMEWORK: This chapter extends what was presented in the literature review chapters. By synthesizing previous theoretical and empirical research and argument, this part is developed to draw a framework in order to answer the research questions, and test the research hypotheses. Thus, this chapter focuses on how to link the constructs together.

Chapter six
• METHODOLOGY: The aim of this chapter is to present and discuss the research methodology. It provides a justification for the methods used. It also explains the analysis techniques.

Chapter seven
• QUESTIONNAIRE DEVELOPMENT AND ADMINISTRATION: This chapter discusses in detail the questionnaire development and administration.

Chapter eight
• DATA ANALYSIS AND FINDINGS: The main objective of this chapter is to present the data analysis and findings of the survey, and test the hypotheses of the research. Also the process of construct validation is explained.

Chapter nine
• DISCUSSION: This chapter discusses the findings of the research. It consists of two main parts: 1: Discussion of construct validation (outer model stage/measurement models, and inner model stage/structural models), 2. Discussion of the research hypotheses findings.

Chapter ten
• CONCLUSION: This chapter concludes the research findings, contribution to knowledge implications, recommendations of the research and limitations.

Figure 1 Thesis structure
1.8 Conclusion

This chapter provided an outline of the thesis. It provided the background of the research in order to understand the phenomenon investigated. Then, the research problem was discussed, based on previous problems identified and the researcher’s personal experience. Also the significance of the research was evaluated. Based on the previous sections, the research questions logically emerged, and the contributions of the study were discussed. The key terms were defined, and finally the thesis structure was presented.
CHAPTER TWO: RESEARCH CONTEXT

2.1 Introduction
This chapter explains the profile of the Kingdom of Saudi Arabia (KSA) with particular reference to gender. The chapter includes the population, religion, details of Saudi society and the Saudi concept of women’s role, philosophy of gender segregation and gendered participation in the labour market. In order to investigate the leadership styles across gender, it is very important to understand the environment across gender. In Saudi Arabia males and females have little interaction in their life, and as gendered leadership is a debated topic, the selected research context is finally justified, and the challenges that face Saudi women in reaching high positions are identified throughout the chapter.

2.2 Overview of Saudi Arabia

2.2.1 Population
The Kingdom of Saudi Arabia (KSA) was established in 1920 by King Abdul-Aziz. It is located in the southwest of Asia with an area of 2,250,000 square kilometres (868,730 square miles), and 14 regions, it is the largest of the Gulf countries, and the second largest of the Arabian countries. The population of KSA is 25.8 million: Saudi citizens account for 72.9%; while 27.1% are non-Saudi residents. Riyadh is its capital. Mecca and Medina are the two holy cities for Muslims, which make KSA the focal point for all Muslims (more than one billion) (Saudinf.com, 2013) (See Table 1).

As shown in Table 1 men constitute 55.10% of the population, women 44.90%. However, the female population has increased by 0.90% over the last four years, while that of men decreased. The majority of the population lives in urban areas with 82.40% in 2012 (GMID, 2013). This indicates the number of females is increasing over males.
Table 1 Population of Saudi Arabia across gender

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<td>55.60</td>
<td>55.40</td>
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<tr>
<td><strong>Female population (%)</strong></td>
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<td>44.40</td>
<td>44.60</td>
<td>44.80</td>
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<tr>
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<td>82.20</td>
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<td>82.20</td>
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Source: (GMID, 2013).

2.2.2 Religion

The vast majority of the Saudi population are true practitioners and believers in Shari‘a (Islamic doctrine). The constitution is derived from the Qur’an (Al-Rasheed, 2002). Saudis regulate their daily life by the tradition of the Prophet Mohammed. It is expected that Saudi society are influenced, regulated and held together by religion in the twenty-first century and beyond (Pharaon, 2004).

In Muslim history relations between state and religion were introduced in two ways: (a) the resources and apparatus of the state were used to promote Islam, as in the time of the Prophet and the first four Khalifas; (b) Islam was mobilised to protect the state. Saudi Arabia is a modern manifestation of the latter. In the absence of political participation in the secular Western sense, religion has provided a major and almost exclusive source of legitimacy for the rule of the Saudi royal family (the other, secondary one is tribal allegiance) (Nevo, 1998).

However, the identity of most Muslim Arab nations of the Middle East integrates three elements: the Islamic, the Arab, and narrow traditional factors such as tribal and family commitment. In fact each element has its unique effect; the three elements are not complementary and harmonious. The differences of the degree of social and religious structure would have different effect from country to country; thus the perspective of nationalism might have different impact and consequences (Nevo, 1998). Thus, it could be argued that human resource management is strongly affected by religious and traditional factors, and it varies from culture to culture. The increasing interest management researchers have shown in religion and management recently is a
reflection of the growing evidence confirming that religious beliefs and values have substantial direct and indirect effects on an extensive range of behaviours (Mellahi and Budhwar, 2010).

2.2.3 Saudi Society

Saudi society is influenced and guided by Islamic teachings in all aspects of life (Al-Rasheed, 2002). Muna and Simmonds (1980) notes that Islam is not only a religion to be practised in specific places and situations. Indeed it is practical, and contributes to all Muslim life. For example, all people’s positive behaviours and attitudes were derived from Islam, God says, “Lo! Allah enjoineth justice and kindness, and giving to kinsfolk, and forbiddeth lewdness and abomination and wickedness. He exhorteth you in order that you may take heed” (Qur’an, Alnahl: 90) and he says, “Allah loves the equitable”(Qur’an, Alhujurat: 9). Also, the Prophet says, “I am ordered to do justice among you” Al-Sweel (1993) concludes that Saudis are religious, and characterised by strong family relationships, a moral society, respect for the elderly, kindness, modesty, forgiveness, courage, generosity and hospitality.

In fact, the conjunction of Islam and culture has shaped the character of Saudis throughout history (Pharaon, 2004). Saudi society is divided into urban and rural (Bedouins). It consists of tribes, which are divided into clans, subdivided into families. Saudi society is influenced by the role of tribal affiliation in general and the role of family commitment in particular (Division, 2004, Muna and Simmonds, 1980)

Hierarchically, obedience to and satisfaction of parents and guardian is required and appreciated, but people are not required to follow a guardian who makes wrong demands. God says, “Obey Allah, and the messenger and those of you who are in authority” (Qura’n, Alnisa, 59). Hofstede and Bond (1984, p.42) state, “Parents put high value on children’s obedience”. Leaders are shown as protectors with the image of a father, although their tendency is controlling rather than supportive. So, the value of hierarchy exists in the kingdom and affects people’s life.
Saudi Arabian managerial values are highly traditionally bound (Ali and Al-Shakhis, 1991), which means leaders could sacrifice rules and policy due to commitment to culture. Saudi managers are highly committed to family (Ali and Al-Shakhis, 1991). Based on “tribalism orientation”, Saudi culture can be described as a high context culture, in which members prefer to live together and take care of the family (Czinkota et al., 2009). For example, Saudi managers feel obliged to hire family or friends regardless of their qualifications, and not to fire unproductive employees. The reluctance to fire unproductive employees comes from a religious value, which is understood wrongly. People might think that they will be punished by God if they decide or think to fire employees. Such thinking can destroy the human resource management functions.

Based on Hofstede’s dimensions: Power distance (PD), Uncertainty avoidance index (UAI), Individualism/collectivism index (IDV) and Masculinity/femininity index (MAS) Bjerke and Al-Meer (1993) analyse the Saudi Arabian culture. The results reveal that Saudi managers score high in PD (score=73) and UAI (score=74). These results are consistent with the findings of Al-Gahtani et al. (2007). They indicate that Saudi managers would prefer to avoid taking risks and are prone to autocratic decision making (At-Twaijri and Al-Muhaiza, 1996). These findings suggest Saudi managers would rely less on followers’ consultation and be less tolerant to new ideas. However, Saudi managers score 41 in IDV; thus they prefer to be in groups and care for friends. These results are not in line with the score for power distance; thus, these results could be affected by the level of position in an organisation. Also, the score of MAS was 43, which indicates that Saudi managers are relation-oriented (Muna and Simmonds, 1980). This does not mean that the Saudis are equal in treating gender and do not discriminate between genders, but rather male-dominated-societies tend to be assertive, ambitions, and tough, whereas female-dominated-
societies value cooperation, modesty and affection (Al-Oadah, 2006). Moreover, with high scores for PDI and high MAS, leaders could employ such attitude in order to act as role models and be able to offer the exchange of respect, trust and obligation with followers.

2.2.4 Saudi Women

Historically, women in different cultures are seen to be below men to some degree and in some way protected by men (Badawi, 1996). “Societies expect women to behave in certain ways, and men, in others” (Adler, 1986, p.28). In Islamic society in general, and in Saudi Arabia in particular, the position of women is a highly complex and frequently misunderstood issue. According to Islam, men and women are equal in opportunity to obtain God’s blessings. This section highlights the status quo of Saudi women including the philosophy of gender segregation in an Islamic context and women’s participation in the Saudi context.

2.2.4.1 The status quo of Saudi women

As Saudi is a religious country, it upholds what is interpreted as God’s preference for men to hold authority (Quiwama) over women; God says, “And they (women) have rights similar to those (of men) over them, and men are a degree above them” (Qur’an, Albaqarah: 228). This degree refers to maintenance and protection, because biologically, women are considered to be the weak gender (Mitchell, 2009). This refers to the biological difference between men and women. Thus, it does not mean that men have superiority or advantage; the leadership role of a man in relation to his family does not mean dictatorship over the family members. In fact, consultation and mutual discussion and agreement in decision making are emphasised by the values of Islam. An example is given in the Qur’an, where God says, "...If they (husband and wife) desire to wean the child by mutual consent and (after) consultation, there is no blame on them...” (Al-Ahmadi, 2011). Muslims are asked to be very kind to women. The Prophet says, “Be
kind to women”. However, “men and women have complementary yet distinct roles within the family structure” (Mitchell, 2009, Badawi, 1996). However, this viewpoint has been used positively and negatively toward women. Traditionally and tribally, Saudi women’s abilities and capability are found to be limited. Indeed, this thinking is totally ‘a caricature born of ignorance’. In fact, women were given their social and economic rights by Islam. Khadejah (ra), who was the wife of Prophet Mohammed, was a famous businesswoman and the Prophet used to serve in her business. Women are given the right to hold wealth in their own name; they can inherit and bequeath property (Esposito, 2001). Although Saudi women have a high level of commitment to making a family home, in which they enjoy a pre-eminent role, it would be wrong to claim that their role is confined to home making. Saudi women are able to go beyond such limited thinking and roles (AlMunajjed, 2006b).

Moreover, Alanazi (2001) argues that tradition and religion affect the participation of women in the workforce. Religiously, women are not required to pay household expenses even if they work, as this is one of the man’s (guardian’s) duties toward his family. Saudi women are socialised to be passive, dependent, weak and subordinate, and to view men as independent, aggressive, stronger and leaders. Thus, women have been shown to be satisfied with their status and some would prefer not to work, although they are permitted to work in public jobs, provided they do not work with men together under one roof. Saudi women are allowed to work under limited conditions: 1. that the care of their families is not neglected; 2. they work under conditions that conform to Islamic teaching, for example, women must not work and have contact with strange (unrelated) men; 3. They are restricted to working in jobs that are considered to suit women’s nature (Al-Munajjid).

In addition, Ross (2008,p.116) states that “in general, the states that are richest in oil (Saudi Arabia, Qatar, United Arab Emirates, and Oman) have the fewest women in
their non-agricultural workforce, have been the most reluctant to grant female suffrage, have the fewest women in their parliaments, and have the lowest scores on the gender rights index”. Moreover, data presented by Moaddel (2006) reveals that Saudi men still hold a stereotypical view and discriminate against Saudi women in various management issues. Men are more inclined to agree with the statements or assumptions that: 1. “When jobs are scarce, men should have more right to a job than women.” 2. “Men make better political leaders than women do.” 3. “A university education is more important for a boy than for a girl” and 4. “A wife must always obey her husband” (Moaddel, 2006.p.88). Badawi (1980) argues that such stereotyped thinking against women has been derived wrongly from the Qura’n.

Politically, women have been impeded from taking positions (Al-Rasheed, 2002). For example, Saudi women cannot travel without their guardian’s permission, drive cars or even vote in municipal councils. The Prophet says, "A people will not prosper if they let a woman be their leader”. Saudi religious experts such as Binbaz, who used to hold the highest position on the religious council in Saudi Arabia, claim that women are not able to take some critical responsibilities due to their emotional nature and biology. Moreover, Badawi (1980) argues that this limitation has nothing to do with the dignity of women but is, rather, attributable to differences in the biological and physiological make-up between men and women. Thus the conjunction between Islam values and cultural values is complex, and causes disadvantage for Saudi women in society.

However, recently, the issue of Saudi female participation has concerned the government. King Abdullah appointed thirteen female advisers to the formerly all-male Consultative council; thus, 20% of seats are reserved for Saudi women (BBC, 2013). This decision will help Saudi female practice to catch an opportunity to be somewhat in line with their Saudi male/counterparts, and show their capabilities in the
Saudi management environment, which could minimize the issue of discrimination against Saudi women. In fact, countless Saudi women have reached high positions in many fields, in Saudi Arabia and abroad. Examples of such women are Dr. Nora Alfaiz, who was recently appointed by King Abdullah to be the Assistant Education Minister, Thoraya Obaid (Executive Director of the United Nations Population Fund and an Undersecretary General of the United Nations from 2000 to 2010), and Lubna Olayan (CEO of the Olayan Financing Company). Muna Abu Sulayman is an influential Arab and Muslim media personality and former founding Secretary General of the Alwaleed Bin Talal Foundation. Dr. Haifa Jamal Al-Lail is President of Effat University, the highest position that a women has gained. Dr. Salwa Al-Hazzaa is Head of the Ophthalmology Department at King Faisal Specialist Hospital in Riyadh. Abroad, Prof Ghada Al-Mutairi heads a medical research centre in California, and also countless women have achieved high positions in segregated organisations in Saudi Arabia (AlMunajjed, 2006b). Thus, women have been given the chance to enter new markets. In 2013, Alhujaile became the first women to be given the Certificate of trainee lawyer, in order to be certified by the Saudi Ministry of Justice (Sabq. 2013).

2.2.4.2 The philosophy of gender segregation in an Islamic context

Women have struggled against direct and indirect barriers to their self-development and their political, economic and social participation. Gender is not only how we identify ourselves but rather how others identify and relate to us and how we are positioned within the social structure (Peterson and Runyan, 2009). Issues related to gender and sex in the workplace are very important and complex (Cleveland et al., 2000). Gender segregation has become a complex concept in women’s studies as feminists try to explain inequality in the work setting in a way that would emphasise the specificity of women’s disadvantages and not reduce it to class (Bradley, 1998, Leaper, 2006).
Discussion of gender segregation usually starts from the assumption that the segregation itself is a form of inequality or is highly related to inequality and then unquestionably taken to be an advantage for men (Blackburn and Jarman, 2006). However, the actual circumstances are more complicated than this. The tendency, acceptance and outcomes of segregation could vary from culture to culture. In Islamic nations, the policy of segregation of sexes is observed in prayers, wedding ceremonies, public transport, and so forth (Tayeb, 1997). In fact, in religious nations the philosophy of gendered segregation is complex. For example, in Saudi Arabia, the philosophy of segregation is highly derived from Islamic teaching. It is not intrinsically bad or good. From one perspective it does not mean that women are controlled by men, rather it is a sign of comfortable and proper business practise. Indeed, sexual dissimilarity is seen as a mark of respect and reverence (Metcalf, 2006, 2007). Metcalf (2007, p.65) highlights female manager interviewees’ viewpoints as: “It is expected that men and women do business separately – it is what is culturally expected, but it is also proper..... I prefer to develop business relations with women because I feel more comfortable and rely on them to support women..... Men will usually support their male brothers and cousins”. Such views are indications of the facilitation of women’s leadership practise. Therefore, segregation policy is understood as a kind of respect in Islamic culture, regardless of underestimation of women managers’ skills and characteristics. Bradley (1998) argues that the structures of horizontal segregation are more resistant to change. In Saudi Arabia, women have suffered from the stereotype in work settings dominated by men (Alanazi, 2001). Men and women work separately in the majority of organisations and there is little cross-gender interaction in the workplace. Such rare interaction contributes to stereotypical negative images of Saudi female leaders.
2.2.4.3 Women’s participation in the Saudi context

In Saudi Arabia, segregation of the sexes in accordance with Sharia Law has created a conservative society where participation of women in the workforce is only 15% (Direitoamoradia.com, 2012). A United Nations Expert Group Meeting (EGM) entitled equal participation of women and men in decision-making processes, with particular emphasis on political participation and leadership”, found that the Arab states still have limited female representation (Union, 2006).

The KSA strongly promotes female education. The number of female students in Saudi colleges and universities doubled between the period 1983 and 1993, and more than doubled by 2000 (Doumato, 2000). KSA has taken many positive steps aimed at encouraging Saudi women’s advancement in the workforce. An opportunity to recruit women in the labour market is raised by the policy of ‘Saudization’; in fact it has increased the number of workforce of both male and female (GMID, 2013). In addition, the government’s Development Plan (2005–2009) stresses the need for more employment and advancement opportunities for women in the labour market. For example, the government announced plans to establish seventeen technical colleges for women around the kingdom and three hundred more technical institutes will be built to train both men and women in order to prepare them to enter the labour market (AlMunajjed, 2006b). New women-only “cities” are to be established near Riyadh and Jeddah, and they are expected to be fully operational by 2020 (Marketline.com.2013).

Moreover, government projects have been considered to focus specifically on training and job creation. For example, the Human Resource Development Fund has initiated plans to increase job opportunities for Saudi women through telecommuting arrangements with private sector companies; more than 4120 Saudi women were employed (El-Eqtisadya, 2009). Although the supply and demand of female workforce
are limited in the Middle East, the trend of female entry into the labour market is significantly improved (Metcalfe, 2007). Women are encouraged to work in the private sector by the establishment of a tourism industry employment programme, which offers opportunities such as work in hotels. Moreover, the number of Saudi women working in the banking industry increased dramatically by 280% from 972 in 2000 to 3,700 in 2008. Also the industrial city in Hofuf is expected to provide around 3,000 to 5,000 jobs for women (AlMunajjed, 2006b).

Saudi ARAMCO is a fully integrated international petroleum company that pioneers women’s employment in KSA. Saudi ARAMCO has promoted Saudi women to senior positions. For example, Huda Al-Ghoson was appointed the GM of Training and Career Development Operations and Nabilah Al-Tunisi was appointed Director of the Saudi ARAMCO joint venture with Dow Chemicals. However, Saudi women constitute only around 10% of the workforce (AlMunajjed, 2006b).

Compared to men the proportion of the Saudi female workforce is lower and also compared with other regions in the world (AlMunajjed, 2006a). This can be caused by various factors; first, the ambivalence toward empowerment and equality for women; second, the economic crisis; third the level of industrialisation and transnational activities in the KSA, and fourth, the low use of labour in the KSA (Pharaon, 2004). For example, the education system limits women’s access to labour markets and participation in the global economy, as they are denied entry to certain fields, and excluded from studying some subjects such as engineering, architecture, pharmacy, and journalism (Baki, 2004). As a result, some women graduates are unemployed and popular teaching occupations are over-employed, thus affecting women’s careers (Omair, 2008). Moreover, as reported by Al-Sheikh (2001,p.124) Saudi female labour still faces a number of barriers and obstacles, which cause the low rate of women’s participation in the Saudi labour market, such as: a) “The negative social attitude
towards Saudi working women, coupled with some social and cultural restrictions, which work to minimise women's opportunity for most jobs. b) Poorly trained women being accepted for some jobs offered in the Saudi Labour Market. c) The social, cultural and Islamic unsuitability of some jobs for Saudi women such as those that require women to stay overnight. d) The lack of technical, administration and business training courses for Saudi women make it difficult to compete within the Saudi Labour Force. e) The lack of co-ordination and clear vision of the role of women in the future labour force. f) Women in Saudi Arabia can only be utilised in specific areas of the Saudi labour force. g) Saudi employment laws require special Saudi women's working environments to be created by employers. Furthermore, they are also required to take extra security measures for women's working sites. h) Saudi women cannot expect to work far away from their families” (Al-Sheikh, 2001,p.124).

Although Saudi human resource management has been affected by Islamic and traditional values, the Saudi government has considered the importance of the gender issue in the labour market. This is a positive step for female empowerment in a country where strict laws exclude women from a range of activities. Government instructions provide more job openings for women in order to enable them to have a more important and participative role in the country’s development. Although these projects still have a limited number of employment opportunities for women, they constitute a sign of improvement and growing awareness of the side effects of gender stereotyping. Nevertheless, the policy of segregated organisation and the effect of male domination still make it difficult for women to exercise leadership (Booz and Company, 2013).

2.3 The rationale for the selected context

The current research was conducted in the banking industry in the Kingdom of Saudi Arabia (KSA). Saudi Arabia offers an interesting research context for a number of reasons; firstly: the rapid socio-economic development in the country and the great
increase in the size and activity of the private sector, which has created a highly competitive interest in how to develop organizations. In the last two decades the policy of ‘Saudization’ has encouraged Saudi employees to reach high positions in different organisations (Al-Shammar, 2009).

Secondly: there is evidence of the importance of leadership for organisational functions and its impact on the attitudes and behaviour of employees (Bass and Bass, 2008, Armstrong and Stephens, 2004). In fact the consideration of leadership research could be not salient in the Saudi business environment. “Arab scholars have paid little attention to the study of leadership. There is a great lack of locally valid Arab theories of management, leadership and organisation” (Abdalla and Al-Homoud, 2001, p.507). Moreover,“ it is apparent that administrative systems in most Arab countries suffer from underdeveloped governance practices characterised by a lack of transparency in decision making, absence of professional human resource and leadership development systems and an overall lack of systematic management processes and procedures” (Metcalf and Mimouni, 2012,p.143).

However, leadership theories and researches are predominantly Western in origin and focus. Based on empirical researches, official solutions have always been imported from Western studies. Most of the research conducted in Arab countries uses Western methodologies or theories. In this situation, forward-thinking organisations are showing an interest in management theories developed in the West, so the basis of Western theories can be useful as a start when developing study in Arab countries. For example Krishnan (2004), who developed an Indian transformational leadership scale, argues that the full range leadership theory (TRFL) can be a strong base to develop an Indian transformational leadership scale. Moreover Islamic values are in line with the full range of leadership theory and the perspective of interaction between leaders and followers (LMX) (Beekun and Badawi, 1998).
Thirdly, the promotion of the female workforce has increased in Saudi Arabia in both public and private sectors. Specifically, Saudi women have participated in the job market in the last two decades (GMID, 2011, Aguirre et al., 2012). Drummond and Alanazi (1997, p.4:7) state that “Saudi women have become one of the most rapidly changing elements of society and the society is experiencing social change that has no precedent”. “The government of Saudi Arabia has adopted a clear vision for the empowerment of women as reflected in recent development plans that show a clear shift in the orientation of planning efforts towards the development of women’s role” (Al-Ahmadi, 2011, p.149). Thus, the ideology toward gender in Saudi Arabia has been given some attention and changed by the government and the nation. A factor which is characteristic of many industries in Saudi Arabia and certainly of the banking industry is the term “segregation of the sexes”, which is popular due to religious and cultural perspectives. Traditional values of modesty and honour result in a cultural preference for women to be protected from contact with men outside the family circle. “Most fundamentally, the Saudi state legally requires the segregation of the sexes outside of the home” (Silvey, 2004, p.255). Saudi Arabia is a masculine-dominated society, which prevents women reaching high positions and practising leadership roles (Bjerke and Al-Meer, 1993).

The banking industry is one that meets the segregation policy by operating women-only windows and even branches, where women are served by staff of the same sex. Previous research in other contexts suggests that gender is an important factor which affects the input and output of the leadership field (Bass, 1985 Eagly, 2003 and DuBrin, 2006). Male and female leaders behave differently in some ways and they need to take the gender factor into consideration when interacting with subordinates (Eagly and Johnson, 1990). However, it is not clear how gender moderates the relationship between leadership style and organisational outcomes (Eagly, 2003).
Research in the Saudi banking industry offers a distinctive opportunity to compare men's and women's leadership styles, and to contribute towards filling these gaps in knowledge. In particular, the current study offers a comparative study based on a unique sample structure as males and females in Saudi Arabia have little interaction in their life and work environment. Moreover, there have been few studies focusing on female Saudi leaders (Walker, 2004; Omer, 2005). Also, in Saudi Arabia researchers have paid attention to study leadership in single-sex institutions (Taleb, 2010). Mehta and Strough (2009, p.215) point out that “the pervasiveness of sex segregation across the life span makes it an important area in need of further investigation by developmental psychologists. The wide ranges of the potential consequences of sex segregation from marital relationships to the development of skills and beliefs that channel career choices underline the importance of further investigating the mechanisms underlying sex segregation in social relationships across the life span”.

Therefore, there is a need for research in the Arab world, and particularly in Saudi Arabia, where the cultural context is different from that in the West, and may have implications for the way leadership is conceptualised and practised, and for the impact of leadership style on organizational outcomes. Also, this context might contribute to knowledge on whether leadership is gendered or not.

2.4 Conclusion

This chapter has outlined the profile of the Kingdom of Saudi Arabia (KSA) with consideration of gender. Saudi Arabia is changing because of religious, social, political, and economic challenges. The Government of Saudi Arabia is taking efforts toward improving Saudi women’s participation in private and public sectors in segregated work environment alongside with their male counterparts under certain conditions. It plays a very important role in approaching equality across gender. The following chapter will
provide an outline of earlier/classical leadership theories, drawing on various bodies of literatures in order to build the framework of the study.
3.1 Introduction

A successful literature review constructively informs the reader about what has been studied. Writing a faulty literature review is one of many ways to derail a thesis. If the literature review is flawed, the remainder of the thesis may also be viewed as flawed, because “a researcher cannot perform significant research without first understanding the literature in the field” (Boote & Beile, 2005, p. 3). Reviewing the literature critically will provide the foundation on which your research is built...... Its main purpose is to help you to develop a good understanding and insight into relevant previous research and the trends that have emerged (Saunders et al., 2009)

According to Finn (2005) a literature review can be developed and evaluated based on the diagram presented in Figure 2. The aim of this chapter is to outline how leadership theories were developed. Section two discusses how leadership is defined from different perspectives, and then section three differentiates between leadership and management. The fourth section outlines an overview of early leadership theories. Leadership theories and perspectives developed drawing heavily on previous leadership projects. Some theories are presented: trait theory and behavioural theory. Behavioural theory is presented with reference to two well-known projects, the Ohio and Michigan studies then the contingency approaches of leadership are discussed. In this section four approaches are discussed: Fidler’s model, the Vroom-Yetten normative model, path goal theory and situational leadership theory. As such, this chapter is a key and foundation for the next chapter (literature review – part two), which includes two recent leadership theories, the full range of leadership theory (FRLT) and leader member exchange (LMX), and their relationship with employees’ organisational commitment, which is drawn as shared goals in the framework of the current study Gender is discussed regarding its relationship with leadership. Also, in the last section of part two, culture is discussed from Western and
Eastern perspectives with consideration of its relationship with leadership.

Figure 2 Relationship diagram to represent the aim of a literature review
Source: (Finn, 2005, p. 95)

3.2 Definition of leadership

Leadership is a controversial subject which has been researched by many experts in different ways, so there is no universal definition of leadership (Hughes et al., 1999). Indeed, leadership is defined based on researchers’ interests (Epitropaki, 2000). Anderson (2005, p. 430) states that “leadership is a complicated topic, because there are probably as many definitions of leadership as there are leaders in the world. That is because a leader is a person with many roles”.

However, leadership definitions have features in common. First: leadership is a group phenomenon, which consists of leader, followers and situation. DuBrin (2004, p. 111) describes “the relatively consistent pattern of behavior that characterizes a leader”. Leadership is defined as “the process in which an individual influences other group members: subordinates or followers towards the attainment of group or organizational goals” (Shackleton, 1995, p. 447). House et al. (2004) defined leadership as the ability
of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the group of which they are members.

Followers are the heart of the leadership process. Leadership is not practiced only in high-level positions or restricted to those who have authority; leadership is needed at all levels in organisations and can be practised by people who do not occupy a formal leadership position (DuBrin, 2004). Burns (1978, p. 19) defines leadership as “leaders inducing followers to act for certain goals that represent the values and the motivations – the wants and needs, the aspirations and expectations – of both leaders and followers”.

Second, leadership is both a formal and well defined hierarchy and at the same time informal and flexible. Northouse (2011, p.6) defines leadership is “an influence process which means that it is not a trait or an ability that resides in the leader, but rather in an interactive event that occurs between the leaders and the followers”. It could be argued that there are three main functions of leaders: motivating and influencing followers, recognising opportunities and diagnosing situations (Buchanan and Huczynski, 2004). Mullins (2007, p.253) argues that leadership is “a relationship through which one person influences the behaviour or action of other people”. Thus, a leader should possess specific and desirable characteristics, and then develop the relationship between leaders and followers (Graen and Uhl-Bien, 1995). This relationship is the key to how employees interact and establish a social relationship in the workgroup (Eby and Allen, 2012).

Third, leadership is goal-directed (Hersey et al., 1996). Leadership has an effect on organisational outcomes. The goals/task should be clear to workers in order to be accomplished effectively. Yukl (1989, p.255) points out that “leadership involves influencing task objectives and strategies, influencing commitment and compliance in task behaviour to achieve these objectives, influencing group maintenance and identification, and influencing the culture of an organisation”.

36
3.3 Leadership versus Management

Leadership and management are two concepts which are often used interchangeably (Dubrin, 2004). In fact, both literature and experience establish that there are major differences between management and leadership, and those differences are critically important (Marker, 2010). See Table 2.

Leadership deals with interpersonal aspects of the job of managers, whereas planning, organising, directing and controlling deal with administrative aspects. So leaders are more emotional, while managers are more formal and scientific than leaders. Leadership involves having a vision for the organisation to move toward, whereas managers maintain the status quo. A manager relies on position, authority and power to direct the actions of followers by telling them what tasks to do, whereas a leader applies different skills including shared vision, values, emotion, logic, persuasion and communication (Dubrin, 2004). Leaders need to be clear and effective at explaining why tasks need to be accomplished with reasonable direction and then able to empower people with responsibilities to get them done (Marker, 2010).

Leaders are able to change, motivate, inspire and influence, and at the same time leaders need to be able to manage as well. Zaleznik (1992, p.74) states, “A crucial difference between managers and leaders lies in the conceptions they hold, deep in their psyches, of chaos and order”.

Dubrin (2004, p.6) acknowledges the simplistic view that “The leader is an inspirational figure and the manager is a stodgy bureaucrat mired in the status quo” but means also that “we must be careful not to downplay the importance of management”. Clemmer (2003) argues that while it is important to recognise the differences between them, it is also vital to appreciate that both concepts have complementary strengths and are needed
at the same time to reach success.

Based on the above definitions, leadership could be defined as a process shared between leaders and followers, who need to possess specific characteristics, which can be employed in formal and informal relationships in order to meet both parties’ interests and needs in order to accomplish shared goals.

Table 2 Management versus Leadership

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<thead>
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<td>Position power</td>
<td>Persuasion power</td>
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<td>Control</td>
<td>Commitment</td>
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<td>Possibility thinking</td>
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<td>Reactive</td>
<td>Proactive</td>
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<tr>
<td>Doing things right</td>
<td>Doing the right things</td>
</tr>
<tr>
<td>Rules</td>
<td>Values</td>
</tr>
<tr>
<td>Goals</td>
<td>Vision</td>
</tr>
<tr>
<td>Light a fair under people</td>
<td>Stoke the fire with people</td>
</tr>
<tr>
<td>Written communications</td>
<td>Verbal communications</td>
</tr>
<tr>
<td>Standardisations</td>
<td>Innovation</td>
</tr>
</tbody>
</table>

Source: (Clemmer, 2003, p.18).

3.4 Classical Leadership Theories

The aim of this section is to provide an overview of the development of leadership during the past decades. During the 20th century, the leadership concept was studied via different approaches and varieties of theories were put forward. This section presents the most popular approaches and theories of leadership.

3.4.1 Trait theory

Based on the “great man theory”, Trait theory proposes that leaders possess superior traits or characteristics, which are used to lead followers (Bass and Stogdill, 1981). Leaders should have specific traits, which differentiate them from others who are around in order to be able to control and influence followers (Gehring, 2007). In an early study, Stogdill (1948) reviewed 124 studies of leadership, with the aim of investigating the relationship between leaders’ traits and effective leadership. Stogdill found some characteristics that are claimed to differentiate leaders from non-leaders,
such as intelligence, appearance, personality, social background and task related traits. In the first half of the 20th century, many social scientists exerted efforts to investigate the personal traits of effective leaders and the traits that distinguish leaders and subordinates. However, later research indicates that these researches failed in two main aspects. Firstly, none of the studies identified common personality or physical characteristics of effective leaders. Secondly, none of the studies distinguished leaders from non-leaders (Gehring, 2007). Consequently, the weakness of traits theory led scholars to pay attention to other factors such as situational factors and behaviour (Sims, 2002).

3.4.2 Behavioural theory

Behavioural theory emphasises the behaviours of the leader, which is what distinguishes it from trait theory and the skills approach, which focuses on the leader’s capabilities. Behavioural theory focuses on “what leaders do and how they act” (Northouse, 2011, p.69). Based on the Ohio State University and University of Michigan studies, two main kinds of behaviours were suggested: task behaviour and relationship behaviour. Alternatively, the two kinds of behaviours are also described as “initiating structure versus consideration, autocratic versus democratic, task-oriented versus socioemotional or production-centred versus employee-centred” (Alammaj, 2000, p.16). The concern of this theory is how leaders can combine the two approaches to influence followers in their efforts to achieve goals (Northouse, 2011).

3.4.2.1 The Ohio State University study
The Ohio programme was launched in the late 1940s. A questionnaire was distributed to subordinates, including both military and civilian personnel to describe their immediate supervisor’s or manager’s behaviour. Researchers compiled a list of around 1800 behaviours related to leadership, and the list was reduced to 150 behaviours.
Subordinates viewed their supervisors in terms of two categories, consideration and initiating structure. Consideration is enacted when the leader shows concern for subordinates and displays a supportive manner; such a leader is likely to form a rapport with subordinates. In contrast, leaders who focus more on initiating structure tend to direct their subordinates through planning activities, scheduling and setting deadlines (Steers et al., 1996). As a result of this study, some instruments were developed, such as the Leader Behaviour Description Questionnaire (LBDQ) and Supervisory Behaviour Description Questionnaire (SBDQ) (Steers et al., 1996).

3.4.2.2 University of Michigan study
This study was very similar to the Ohio study, but their data were used to investigate the relationship between leader behaviours and group performance. The results of this study relied on two dimensions, relationship-oriented behaviour and task-oriented behaviour. Relationship-oriented behaviour or an employee-centred leadership style was described as reflecting how leaders are concerned for employees rather than the task, are friendly and show appreciation for followers’ contributions. On the other hand, task-oriented behaviour refers to behaviour such as planning, directing and controlling; the leader appreciates completed assignments, rather than the people who did the task. These studies assume that highly relationship-oriented behaviour is a sign of an effective leader (Steers et al., 1996).

3.4.2.3 Criticisms of Trait theory and Behavioural theory
The Ohio State Leadership Studies and University of Michigan Studies have been criticised. For example Yukl (1989) argues that these studies give little attention to situational difference. Also, these studies do not clarify whether they asked participants about their behaviour or attitudes toward their behaviours. However, Ohio State
University and the University of Michigan studies provide a framework for the radical development of contingency approaches and other recent approaches such as the transactional (economic) approach and transformational (relational) approach.

3.4.3 Contingency Approach

The contingency approaches rely on the notion of “task oriented and relationship oriented approaches”. This section outlines four contingency leadership approaches: Fiedler’s model, the Vroom-Yetton Normative model path goal theory and the Hersey-Blanchard Situational Leadership Model.

3.4.3.1 Fiedler’s model

Fiedler (1967) was the first researcher to propose the contingency approach to leadership. He assumes that an effective leader considers the match between leadership styles and situation. This approach can be explained directly by using the least-preferred co-worker (LPC) scale, which measure and differentiates leadership style relationship-motivated or task motivated. People with a low LPC score (describing the person as cold, untrustworthy, incompetent and quarrelsome) are task motivated. The consequence of this practise is that leaders use punishment and are highly punitive. On the other hand, a high LPC score describes the person as sincere, warm, and loyal and accepting. A leader who embraces this approach has good relationships with subordinates (Nahavandi, 2009) (See Table 3 and Figure 3).

Table 3 Differences between task-and relationship-motivated individuals

<table>
<thead>
<tr>
<th>Task-Motivated (low LPC)</th>
<th>Relationship-motivated (High LPC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draws self-esteem from completion of task.</td>
<td>Draws self-esteem from interpersonal relationships.</td>
</tr>
<tr>
<td>Focuses on the task first.</td>
<td>Focuses on people first.</td>
</tr>
<tr>
<td>Can be hard with failing employees</td>
<td>Likes to please others.</td>
</tr>
<tr>
<td>Considers competence of co-workers to be key trait.</td>
<td>Considers loyalty of co-workers to be key trait.</td>
</tr>
<tr>
<td>Enjoys details.</td>
<td>Gets bored with details.</td>
</tr>
</tbody>
</table>

Source: (Nahavandi 2009,p.70)
3.4.3.2 Vroom-Yetton Normative model

Vroom and Yetton (1973) propose a decision-making theory, which is designed to assist managers/leaders in assessing the proper level of follower participation to achieve successful decision outputs. Five possible leadership styles are suggested, based on the extent to which followers are permitted to participate in the process of making the final decision:

1) “You solve the problem or make the decision yourself; using information available to you at that time.

2) You obtain necessary information from your subordinates then decide on the solution to the problem yourself.

3) You share the problem with relevant subordinates individually, getting their ideas and suggestions without bringing them together as a group.

4) You share the problem with your subordinates as a group collectively, obtaining their ideas and suggestions, to solve the problem alone as a leader.

5) You share the problem with your subordinates as a group together, you generate and evaluate alternatives and attempt to reach agreement on a solution. Your role is much of a chairing and you also give your opinion before a collective decision on
the matter is reached” (Vroom and Jago, 1974, p.750).

As shown in Figure 4 Vroom and Yetton suggest seven ‘Yes’ or ‘No’ questions should be used to determine subordinates’ participation in the process of making decisions or getting involved in the final solution.

![Vroom-Yetton Decision-Making Methods](Leadershipchamps.wordpress.com, 2013)

**3.4.3.3 Path-Goal Theory**

Path-Goal Theory was developed by Robert House (1971), and focuses on what leaders have to do in order to achieve high productivity and morale among subordinates in a given situation. Clear goals need to be explained to followers in order to be accomplished effectively. Leaders should remove roadblocks which could stop them reaching the goals, as well as raise the rewards along the route (House and Dessler, 1974). The main proposition of this theory is that leaders should choose an appropriate leadership style that takes into account group members' characteristics and the demands of the task. Thus the core of this model is the exchange between leaders and subordinates. Moreover, the subordinate’s
satisfaction with the exchange is considered as a criterion of leadership effectiveness (Nahavandi, 2009).

Four different leadership styles must be considered and assessed to achieve optimum results on the task. These styles are the Directive Style, Supportive Style, Participative Style and Achievement Style.

1. **Directive style.** In this style the leader should emphasise formal activities such as planning, organising and controlling. This style improves morale when the task is unclear.

2. **Supportive style.** The function of the leader is to enhance morale when employees are working on a stressful, frustrating and unsatisfying task, so the leader should create an emotionally supportive climate.

3. **Participative style.** The leader consults with employees to gather their suggestions, which have to be taken seriously when making a decision; this style should be used when well-motivated employees are doing non-repetitive tasks.

4. **Achievement-oriented style:** Leaders who use this style set challenging goals, push for improvements and also have high expectations for employees. Also, employees are expected to assume responsibility (Dubrin, 2004).

### 3.4.3.4 The Hersey-Blanchard Situational Leadership Model

Situational theory is based on the relationship between the task and behaviour in which the leader engages. It attempts to provide understanding of the relationship between leadership style and follower readiness (Hersey and Blanchard, 1982, Hersey et al., 1996). Selected leadership behaviours vary depending on the readiness of the followers. “Readiness is the ability the follower has to take responsibility for his/her actions. Subordinate readiness is the thing that moderates the two primary aspects of leadership, task and relationship and leader effectiveness” (Silverthorne, 2000, p.69).
Employees' readiness is dependent upon their ability and willingness to achieve, that is, whether they have the self-motivation and desire to achieve a high quality of work and also the ability and knowledge to perform the task without leaders directing and structuring the work (Hersey et al., 1996). The readiness of the follower translates into four quadrants with associated recommended leadership styles to use in various situations. (See Figure 5).

Figure 5 The Hersey-Blanchard Situational Leadership Model.
Source: leadershipchamps.wordpress.com

_Telling, selling, participating and delegating_ are the different leadership styles. The first stage is _telling_ (high task and low relationship); it should be applied when employees are unable and unwilling to accomplish tasks. The leader must provide a great deal of direct supervision and instruction over those people in order to achieve goals. At this stage there is a high level of task behaviour and the leader needs to be focused on such behaviour to develop employees. The second stage is the _selling_ style (high task and high relationship), when employees are unable to perform a task but are willing to take on the role. During this stage, the leader should clarify the task for employees and also engage them in dialogue in order to help to explain unclear areas. The third stage is _participating_ (high relationship and low task). During this
stage the employee is able to perform the job successfully. However, if worker willingness turns to unwillingness, the leader should adopt more supportive than task behaviour to get workers to participate. The last stage is delegating (low relationship and low task), when the employees are empowered and responsibility could be delegated to workers (Gibson et al., 2002).

Silverthorne and Wang (2001) proved that situational theory takes a big place in non-western culture. It has the strengths of simplicity and practicality. However, there has been limited testing of the model, and there is a lack of significant evidence that the four different styles are comprehensive of employees' needs. Nevertheless, the theory makes a contribution to the understanding of leadership in different situations. Also, it provides guidelines and explanations of the relationship between leadership, motivation, satisfaction and performance (Gibson et al., 2002).

3.5 Conclusion

As leadership has been defined from different perspectives, leadership theories were developed based on different approaches. This chapter discussed the most traditional/classical leadership theories: trait and behavioural leadership theories, and contingency approaches. The theories were developed based on one another, and were respectively developed based on the limitations of previous ones. The significance of this chapter is to show that recent leadership theories are firmly built on solid literatures, which have been relied upon.
4.1 Introduction

This chapter provides a review of previous studies of leadership, gender, culture and organizational commitment. Section two provides an evaluation of the development of full range leadership theory (TRFL), while section three explains leadership exchange theory (LMX). Section four describes organisational commitment, which serves as an outcome of leadership theories. Section five considers the issue of gender and its relation to leadership, while the final section (six) discusses how culture could affect leadership from western and eastern perspectives.

4.2 Transformational leadership development

Transformational leadership theories were, basically, developed based on the concept of charismatic leadership. As suggested by Weber (1968), a charismatic leader is defined as set apart from ordinary people and treated as endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities. Also, Weber’s perspective embraces the sociological view; charismatic leaders would appear in social conditions that make people feel distressed.

Later, House (1971) argues that charisma is a relationship between a leader’s behaviours and one or more follower’s favourable attributes. House and his colleagues base their perspective on the view that psychological condition and specific personality traits and can differentiate leaders from non-leaders, taking account of the followers, who are considered as the pillar of the leadership process. Conger and Kanungo (1994, p.442) define charismatic leadership as “an attribution based on followers’ perceptions of their leader’s behaviour”. They argue that the core of the difference between charismatic leaders and other leaders is their “ability to formulate and articulate an inspirational vision and by behaviours and actions that
foster an impression that they and their mission are extraordinary”. Thus, leadership aims to move organisational members from the status quo to a future state. Leaders should have the ability to evaluate the current deficiencies of the current statutes, which can be transcended by clear vision through unconventional means, and personal influence; and involves personal risk. The components of Conger and Kanungo’s (1998) model are as follows:

• **Strategic vision and articulation**—the leader provides inspiring strategic and organisational goals; is inspirational, able to motivate by effectively articulating the importance of what organisational members are doing; is an exciting public speaker; has vision (consistently generates new ideas for the future of the organization; often brings up ideas about future possibilities; is entrepreneurial, seizes new opportunities in order to achieve goals; readily recognise new environmental opportunities that may facilitate achievement of organisational objectives).

• **Personal risk**— the leader takes high personal risks for the sake of the organisation; often incurs high personal cost for the good of the organisation; in pursuing organisational objectives, engages in activities involving considerable personal risk.

• **Unconventional behavior** — the leader engages in unconventional behavior in order to achieve organisational goals; uses non-traditional means to achieve organisational goals; often exhibits unique behaviour, that surprises other members of the organisation (Conger and Kanungo, 1998). The key behaviours in the Conger and Kanungo model include displaying unconventional behaviour, articulating an innovative strategic vision, showing sensitivity to member needs, showing sensitivity to the environment and taking personal risks.

Although charismatic perspectives have slight differences, they share some key behaviours:

1. Providing a sense of mission.
2. Articulating a sense of inspirational vision.

3. Providing insight.

4. Showing confidence

5. Displaying determination when achieving goals.


Bass (1985) argues that it is important to incorporate the perspective of transformational and transactional leadership styles including the effect of economic exchange. This combination makes the model unique among other models. The crucial contribution of the model is offering nine leadership styles, which vary in their effect on employees’ performance. This model is discussed below.

4.3 The Full Range of Leadership Theory (FRLT)

The concept of transformational and transactional leadership can be traced to Weber’s (1968) charismatic versus bureaucratic styles. The theory of transformational leadership was derived from political science from the writing of Burns (1978). Burns tries to link between the role of leadership and followership. He confirms that leaders and followers are closely linked, and leader influence over followers is extended through the leader-follower relationship. Burns (1978) defines leadership as leaders who can involve followers in acting toward certain goals that represent the values and the motivation, the wants and needs, the aspiration and expectation of both leaders and followers. The genius of leadership lies in the manner in which leaders see and act on their own and their followers’ values and motivation.

Burns distinguishes between transactional and transformational leadership styles. Transactional leadership follows the traditional structure of the relationship of leader-follower. The transactional style is often named as the traditional form of leadership (Hsu et al., 2002). Transactional leadership “occurs when one person takes the initiative
in making contact with others for the purpose of exchange of valued things” (Burns, 1978, p. 19). In contrast, “transformational leadership occurs when one person engages with others in such a way that leaders and followers raise one another to higher levels of motivation” (Burns, 1978, p. 20). The relationship between leader and followers is basically developed based on mutual exchange of bargains between leaders and their followers (Antonakis and House, 2002, Bass and Avolio, 2004, Brymer and Gray, 2006). Burns argues that the relationship in transformational leadership is based on mutually beneficial transactions.

Following Maslow's (1943) theory of human needs, Bass (1985) found proof that transformational leadership is particularly powerful and has the basis to move subordinates beyond what is expected and more than sets up an agreement. Bass believes that transformational leaders behave in ways that aim to enhance the level of commitment from subordinates. Bass (1985) suggests that application of transformational leadership requires raising the awareness of followers, followers' self-interest and need. Trait, behaviour and situational theories are integrated to build this approach.

The full range of leadership theory (FRLT) consists of three leadership styles, transformational, transactional and laissez-faire. Transformational leadership consists of five dimensions which are idealised influence (attitude and behaviour), inspirational motivation, intellectual stimulation and individualised consideration. Transactional leadership consists of three dimensions: contingent reward, management by exception active and management by exception passive. The third style is laissez-faire or no leadership. The outcomes of these components are provided in the questionnaire as three variables: extra effort, satisfaction and effectiveness (Bass, 1985).

Bass (1985) argues that charisma is necessary in the leadership but is not sufficient for transformational leadership. The significance of Bass’ full range of leadership model is
its incorporation of three leadership styles: transformational, transactional and laissez-faire leadership. Doherty and Danychuk (1996, p.294) state that “all leaders are transactional, to some extent, exchanging rewards for performance, but some leaders are also transformational, going beyond simple leader-subordinates exchange relations”. The following sections identify the components of the full range of leadership styles.

4.3.1 Transformational leadership dimensions

Transformational leadership style comprises five dimensions as follows:

1) Idealised Influence (II)

This factor refers to the leader's social charisma and whether the leader is perceived as powerful, focused, and confident with higher order ethics and ideals by his or her followers (Bass and Avolio, 2004). Transformational leaders (a) instill a sense of pride in followers, (b) go beyond their own interests for the improvement of the group, (c) act in ways that build respect from others, (d) show a sense of authority and expertise while making personal sacrifices for the common cause, and (e) encourage and build confidence in followers (Bass and Avolio, 1995). Leaders should be aware of being a positive role model, and put their employees’ best interests ahead of their own personal interests. Bass et al (1996) define transformational leaders as those who “behave in ways that result in their being role models for their followers”.

Idealised influence is divided into two sub factors 1. Idealised influence attributes (IIA), and idealised influence behaviours (IIB). Idealised influence refers to charismatic actions of the leader which are centred on beliefs, values and sense of mission (Bass, 1985). When leaders talk about value and beliefs, these might vary across cultures. The leader should be aware of how to address these behaviours, and understand how followers could accept such beliefs.

Consequently, a leader with a high level of idealised influence arouses a sense of respect and admiration in followers. This moves followers to identify highly with the
leader, and show a high level of commitment, satisfaction and trust to the leader, and also to achieve a high level of performance.

2) Inspiration Motivation (IM)

This element refers to a leader who motivates and inspires followers to achieve ambitious goals. This could be achieved by raising followers’ expectations by communicating confidence, and thereby followers could achieve brilliant goals (Bass and Avolio, 2004). Bass and Avolio (1990) state that followers are drawn to the goals, and purposes of the leader but not to the leader. Kouzes and Posner (2002) found that followers look for four top traits in leaders. They discovered that a leader is accepted as long as he/she is honest, forward-looking, competent, and inspiring. Transformational leaders trigger inspiration in followers, which involves three key concepts: “1. Motivation: inspiration provides energy and direction that fuels the action of followers. 2. Evocation: you cannot force inspiration on someone through an act of will; instead, inspiration is evoked from within or through significant others (e.g., leaders) and their environment. 3. Transcendence: inspiration moves followers through an application of beauty and excellence that allows them to rise above ordinary preoccupations or limitations” (Sosik and Jung, 2010, p. 119).

3) Intellectual Stimulation (IS)

In this factor the leader appeals to the intellect of followers and invites creative and innovative solutions to problems (Bass and Avolio, 2004). It aims to transform and arouse subordinates’ awareness of problems, imagination, thoughts, values and beliefs (Bass, 1985). Leaders encourage followers to think and change their thinking in a new mindset, so employees’ different perspectives can efficiently create solutions to problems in different ways (Antonakis and House, 2002). Followers are not encouraged to rely on “tried and true” policies and procedures, but rather go beyond this to involve creativity, rational thinking and freedom to fail. As a result, leaders allow their followers to be independent in thinking and solve traditional problems by untraditional
thinking (Sosik and Jung, 2010). Leaders need to be aware of the importance of involving all members when complex problems face the group or organisation. It is a good idea to involve diverse groups to participate in the decision making process. The group could be customers, suppliers, consolidators and even competitors. Also they should be given the freedom to deliver ideas and participation, which will be the level of engagement, which is a very important basis of innovation (Sosik and Jung, 2010). This diversity offers a rich range of resources to solve a problem by giving some alternative solutions. It has been found that people prefer a variety of ways to perform tasks (Dreachslin and Hunt, 1996).

However, intellectualised stimulation could be used in various ways on the leader’s responsibilities and facilities for the followers, but leaders should firstly define the goals of the organisations to followers which need to be clear, otherwise deviation from organisation goals could occur. Although followers are encouraged to face challenges and difficulties, leaders should be aware of the capacity of followers, and make sure that they not pushed beyond their abilities.

Leaders could open up the brainstorming process, which is a very important skill for participative leadership.

**Brainstorming**

Brainstorming is a major key for intellectual stimulation, and an effective way to produce new ideas (Jung, 2002, Jung and Avolio, 2000). Leaders should understand the attitudes and interests of followers/participations, for example, the level of interest in activities and characteristics of participants should be discovered by leaders. In addition the personality and past experience of participants needs to be identified and measured (Walton, 2003).

Followers need to be aware of the importance of creativity. Leader, who practice brainstorming with participants are advised to take into consideration the following
rules:

1. The more ideas, the better: leaders should learn and encourage their subordinates or participants to offer or produce as many ideas as possible.

2. Do not criticise: leaders should accept all ideas, so there is no bad or wrong idea in brainstorming; ideas should not be stifled by others.

3. Approaching wider ideas from divergent thinking: due to acceptance of numerous accepted ideas, offering freedom of thinking, non-traditional ideas can be raised.

4. Offer alternative solutions: alternative solutions can be built by accepting, modifying, combining and developing ideas. Thus, shortlisted solutions can be accomplished via the brainstorming process (Paulus and Nijstad, 2003).

The level of trust and respect could be the outcome of leadership behaviour via intellectual stimulations. For example, a sense of respect and trust can be exchanged between leader and followers via the sharing of ideas. Also, followers who are encouraged to offer such participation can easily build a level of commitment to the leader and then to the organisation’s goals. Moreover it can be argued that the diversity of demographic factors and the period of time with the current leader are important influences on intellectual stimulation (Bass and Riggio, 2006). Another issue that should arise is that individualised consideration behaviour is simultaneously practised when displaying intellectual stimulation. Thus, this dimension is highly related to individualised consideration.

4) Individualised Consideration (IC)

The idea of this component is derived from two main subcomponents: individuation and mentoring (Bass, 1985). Individuation “refers to the process of recognising important individual differences in followers that can influence their level of motivation and performance and promote their development” (Sadler, 2003, p.69). Consideration is defined as “behaviour evidencing concern for members of the group, such as
giving recognition, nurturing self-esteem, developing inviting participation” (Sadler, 2003, p.69). The leader should consider followers’ needs individually for growth and achievement and act as a mentor or coach. Mentoring accrues “when a more knowledgeable and senior individual shares wisdom and experience with a more junior individual for the purpose of advancing the junior individuals’ career and professional development” (Sosik and Jung, 2010, p. 195). The leader gives opportunities for new learning supported by an appropriate climate in which to grow (Bass and Avolio, 2004).

There are behaviours that should be considered by leaders in showing individual consideration. This behaviour emphasises the importance of “1. Recognising and appreciating the different needs, abilities and aspirations followers’ possess; 2. Personalising interactions with followers; 3. Being an active listener with followers; 4. Developing followers’ talents into strengths; 5. Effectively coaching, counselling, and mentoring; 6. Promoting self-development and love of learning” (Sosik and Jung, 2010, p.218).

4.3.2 Transactional leadership dimensions

“Transactional leaders focus on the clarification of task requirements and specification of contingent rewards” (Al-Ammaj, 2000, p.28). Based on Bass (1985) transactional leadership consists of two dimensions which are contingent: reward and management-by-exception - active and passive. This style therefore comprises three dimensions as follows.

1) Contingent Reward (CR)

This factor refers to leader behaviours that focus on clarifying task and role requirements then providing followers with rewards (material or psychological followers (Bass and Avolio, 2004). It is an emotional and economic exchange as long as the desired outcomes are met by followers (Bass and Avolio, 2004). Therefore
this component is a contractual transaction between the leader and the follower (Sosik and Jung, 2010). The outcomes of contingent reward can go further; for example when followers receive their rewards, which might increase their pride in themselves and a sense of accomplishment and these feelings are likely to enhance the feeling of self-esteem (Sosik and Jung, 2010). This suggestion supports the idea of incorporation of transactional and transformational leadership styles and how transactional leadership can increase the level of the quality of relationship among workforces. Also, contingent reward relies heavily on motivation development. For example, extrinsic rewards come from outside the subordinates, and then might increase intrinsic reward, which comes from inside the followers.

2) Management-by-Exception Active (MBEA)

MBEA refers to the leader’s vigilance to ensure that standard goals are met by followers (Bass, 1985). This dimension can be conducted by actions as such “1. Closely monitoring work for performance errors, 2. Focusing attention on mistakes, complaints, failures, deviations, and infractions; and 3. Arranging to know if and when things go wrong” (Solik and Jung, 2010, p. 255). It involves “corrective transaction” (Solik and Jung, 2010, p. 238). Moreover, “it is a negative transaction, in that the leader monitors deviations from norms and takes corrective action proactively. It is similar to contingent reward in terms of focusing on outcomes; however, in this case, the leader actively watches for, and acts on, mistakes or errors” (Antonakis and House, 2002).

Moreover, one aim of MBEA is to keep followers and process in control (Solik and Jung, 2010). A control system can decrease temptations to act unethically or shirk duties, reduce uncertainty about purpose, and refocus employees’ attention to what needs to be done, so this system is used in sensitive situations to prevent any possible unwelcome surprise or disaster from happening in advance, and meet needed
goals (Simons, 1994). “Leaders are seen as using these reinforcement leadership tactics to encourage desirable individual work behaviours and to punish undesirable or deviant behaviours” (Schriesheim et al., 2009).

3) **Management-by-Exception Passive (MBEP):**

This factor refers to leaders who intervene only after non-compliance has occurred or when errors have already happened. In other words, the leader sits back and waits for something to go wrong before taking action (Bass, 1985) so, the lack of effort or inactivity of the leader typically results in a lack of followers’ efforts or inactive followers and decreases negative organisational outcomes. Also, it decreases the level of relationship.

4.3.3 **Laissez-Faire (LF)**

This is an absence of leadership (Bass, 1985). The leader, here, avoids becoming involved, avoids making decisions, abdicates responsibility for urgent issues and delegates tasks to followers, so the leader does not care whether followers maintain standards on issues or gain performance goals (Bass and Avolio, 2004). Leaders are non-responsive to situations and characterised as ignoring subordinates’ needs and problems (Schriesheim et al., 2009). Due to the absence of an exchange relationship between leaders and their followers, laissez faire leadership is classified as non-leadership (Sosik and Jung, 2010). Consequently, followers might fail to meet organisational outcomes, feel confused and look to others to provide them with guidance which, in the end, might lead them to conflict, low job satisfaction and commitment, and low performance.

Leaders, who display MBEP only intervene when mistakes have happened, while laissez-faire is operationalized as leaders avoiding making decisions and not using their authority. However, there was confusion about whether MBEP and LF are different constructs.
4.3.3.1 Empowerment and Laissez Faire

Empowerment is an important function that should be explained when the LF style is mentioned. It focuses on delegation and passing power from higher organisational levels to lower ones. It occurs when power is delegated or passed from a high organisational level to a lower one in the hierarchy (Spreitzer et al., 1999). Thus, employees are given empowerment from their immediate managers or leaders to be independent and authorised to use power and make decisions, without needing permission from their managers or leaders (Forrester, 2000). Transformational leaders play a role in empowering their followers. When responsibilities are delegated to followers, the leader will enhance team members’ personal control, and they will practise autonomy in the work because of such empowered responsibilities (Özaralli, 2003). However, transformational leaders who offer such empowerment need to be aware of the possible negative outcomes. Negative consequences can occur when followers’ objectives are inconsistent or out of alignment with the organisation’s objectives; in such cases, unfortunately, followers may tend to use such authority to sabotage the organisation (Bass and Riggio, 2006).

LF is connected with lack of innovation, low productivity, high conflict and lack of cohesion among followers, unlike empowerment which increases the level of innovation and decision making and encourages leadership development and training (Bass and Riggio, 2006). It has been found that empowerment is correlated significantly with all transformational leadership components, and negatively with transactional leadership.

4.3.4 Transformational leadership in practise

Transformational leaders inspire followers to rise above self-interest for the greater good of the group and to do more than originally was expected. Transformational leadership is needed more than transactional leadership (Chan and Chan, 2005).

The question is how do transformations take place? Leaders who apply this approach
need to consider and understand challenge in many ways. Leaders encounter the need to transform companies from low performance to acceptable performance. Transformational leaders should raise employees' awareness, making them aware of what is important, the rewards to be gained and how to gain them. Also the leader should help people look beyond self-interest, and build trust between leader and group members (DuBrin, 2008). Also, the leader develops group members’ vision and transmits values to workers that could guide and motivate their behaviour. The leader motivates followers by building confidence, generating enthusiasm, remaining optimistic in a crisis, setting meaningful and exciting work and offering challenge (Avolio et al., 1991, Masi and Cooke, 2000).

While transformational leadership encourages interaction with subordinates as a group, it also encourages different ways of interaction with subordinates based on individual characteristics (Graen and Uhl-Bien, 1995). Transformational leaders focus on developing others by helping others to develop themselves. So these characteristics can enhance the level of employees’ motivation, which is based on "higher order values and beliefs" (Brymer and Gray, 2006, p.10). Members need to broaden and adapt their vision, to take a long-term perspective, at the same time viewing organisational issues and interests from a broad rather than a narrow perspective (DuBrin, 2008). For example, big five personality characteristics theory (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) encourages leaders to examine how followers differ in their personality in order to enhance the value of individualised consideration (Barrick and Mount, 1993).

4.3.5 “Pseudo-transformational” / inauthentic leadership versus transformational leadership

Pseudo-transformational leaders are equally skilled at communicating their beliefs and promoting their missions using rhetoric and metaphor, but they motivate followers through deception and false promises, often substituting self-indulgent emotionality for
logic. Pseudo-transformational is the unethical facet of transformational leadership. (Bass and Steidlmeier, 1999).

The term authentic leader is always expected to be in line with transformational leadership; otherwise the dark side of transformational leadership might emerge (Avolio and Gardner, 2005). Authentic leaders are “those who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others’ values/moral perspectives, knowledge, and strengths; aware of the context in which they operate; and who are confident, hopeful, optimistic, resilient, and of high moral character” (Avolio et al., 2004,p.4). Authentic leadership is not enough for successful leadership, so authentic followership is the corollary of authentic leadership; the role of followers is to follow their leader with an authentic reason (Shamir and Eilam, 2005). Authentic leadership development involves processes whereby leaders and their followers gain self-awareness and establish high a quality relationship (Avolio, 2005). It is an exchange of value between leader and followers, which is derived from a real and honest leadership process.

“Ethical values are likely to encourage leaders to use more relations-oriented behaviours with subordinates when they are appropriate for the situation. A leader who values altruism is more likely to be supportive and helpful to subordinates. A leader who values empowerment is more likely to use delegation. A leader who values personal growth and fairness is more likely to develop subordinates and provide equal opportunities for career advancement. A leader who values humility and fairness is more likely to provide recognition to subordinates who make important contributions to the mission rather than claiming credit for them. Leaders with strong ethical values will not deceive or exploit subordinates, and they will not be abusive or unkind in their behaviour towards subordinates” (Mahsud et al., 2010,p.565).

“Pseudo transformational” or inauthentic leadership could be a problem that followers might face, and which could take place in the transformational process (Bass and Riggio,
However, data on transformational leadership components can provide clues of pseudo-transformational leadership practice. As suggested by Barling et al. (2008), low idealised influence and high inspirational motivation are associated with a higher level of pseudo transformational behaviour. Therefore, transformational leaders are socialised using their referent and esteem power, and then commitment from followers is derived from a truly transformational leader’s referent power (DuBrin, 2008). Pseudo-transformational leaders are personalised, and use their power in arbitrary ways in order to dominate their followers (Bass and Riggio, 2006). Pseudo-transformational leaders use their inspirational motivation in the pursuit of their own self-interest. Thus, Barling et al. (2008) suggest that transformational and pseudo-transformational leaders can be differentiated on the basis of idealized influence and inspirational motivation.

In addition, laissez-faire leadership can be used to differentiate from pseudo-transformational leadership. Laissez-faire leaders are passive, indifferent to both values and performance, and fail to set goals to motivate their followers, and ambivalent about both the individual and the collective good (Kelloway et al., 2005; Skogstad et al., 2007). As a result leaders with passive leadership behaviors are unlikely to possess inspirational motivation.

It can be concluded that leaders use their charismatic behaviours either to maintain their self-interest or to share followers’ interest and needs. The problem is that followers could be deceived by their leader, so it is not clear whether their leader is authentic or inauthentic, and this could be the dark side of transformational leadership styles, which could negatively affect the outputs of followers. However, the consequences of displayed leadership behaviours can be a signal of the pseudo-transformational leadership practice.

4.3.6 The effectiveness of transformational and transactional leadership styles

Burns (1978), who was the first to suggest transactional and transformational styles, claims that a leader might be either transactional or transformational but not both.
However, later Burns (2004) suggests that transactional leaders can learn to become transformational. Despite this suggestion of a distinction between transactional and transformational leadership, some theories assume that both styles could be displayed by the same leaders. For example, followers are recognised and rewarded for achieving success in completing previously agreed objectives and goals. Also, followers only gain as long as they receive bonuses, recognition and merits. Followers may be approached by transactional leaders only when mistakes or problems occur; in other words, such leaders avoid intervention until something has gone wrong (Brymer and Gray, 2006).

Although transformational leaders exhibit different characteristics from transactional leaders (Yammarino et al., 1998), Bass (1999) argues that a leader can be transformational and transactional at the same time; a leader who displays transactional and transformational behaviours can be highly effective. Bass (1985) argues that transactional leadership is the easy way out, whereas transformational leadership is a harder path to follow. This suggestion indicates the importance of economic exchange between leaders and followers. Thus, leaders who avoid being transactional can decrease the effectiveness of transformational outcomes because transformation improvement is based upon a transactional process. Other evidence of the effectiveness of transactional leadership is the different needs among subordinates, which was suggested earlier by Maslow. The level of employees’ needs and personal objectives vary. Employees who appreciate rewards might perform better in response to transactional characteristics than transformational characteristics. Moreover, some organisational outcomes are highly related to transnational outcomes. For example the level of continuance commitment has been found to be more strongly correlated with transactional than transformational leadership (Lee, 2005). So the effectiveness of leadership styles could vary based on followers’ needs rather than the leader’s characteristics (Bass and Roggio, 2006). Thus, it could be argued that leadership styles’ effectiveness might vary based on followers’ needs and interests.
4.3.7 The full range of leadership theory and performance

Transactional leadership supplies the foundation for expected levels of performance, whereas transformational leadership builds upon that base to take performance beyond expectations. However, laissez-faire leadership is an inactive style which goes beyond management by exception – passive, and has a highly negative impact on performance (Bass, 1985). Bass (1990, p.21) explain "Superior leadership performance transformational leadership occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their own self-interest for the good of the group". Howell and Avolio (1993, p.891) propose that "transformational leadership is a behaviour process comprised of three factors: charisma, intellectual stimulation and individualised consideration". In contrast, "the transactional leader focuses on more routine transactions with an emphasis on rewarding group members for meeting standards (contingent reinforcement)" (DuBrin, 2004, p. 80).

Bass and Riggio (2006) argue that Bass’ model is comprehensive and it became the basis of the transformational leadership model. Also, transformational leadership improves the relationship with subordinates; it teaches them to think in new ways in order to solve old problems. Also it inspires them to perform beyond their expectations, and motivates and empowers them to achieve performance. In contrast, transactional leadership is built on the basis of a relationship between leaders and subordinates, clarifying responsibilities, providing recognition and achieving expected performance.

There are some disadvantages associated with the transactional approach. First, leaders usually act if something goes wrong, so subordinates are not given negative feedback
by leaders. Second, experienced workers are more likely to be self-reinforcing (Bass, 1985). Third, this approach could fail to meet employees’ expectations as leaders lack access to rewards (Bass and Avolio, 1990). Bass assumes that his transformational, transactional and laissez faire styles are significantly respectively associated with performance. This model is related to other organisational outcomes such as followers’ willingness to expend extra effort, unit effectiveness, job effectiveness, organisational effectiveness, effective leader representation of follower needs to higher level leaders and job satisfaction (Bass and Avolio, 2004) (See Figure 6 and Figure 7). As transformational improvement can be developed upon transactional styles, it can be argued that leaders who exhibit a more transformational style are able to move their followers to achieve high performance.

A recent study by Bass et al. (2003) in the US military showed that transformational-transactional leaders were related positively to enhanced performance. The researchers found that there are some intermediate skills, which affect the relationship between leadership and performance, such as trust, job satisfaction, motivation effectiveness and commitment. So, it could be argued that a leader’s behaviours might be mediated by other skills which could enhance leadership outcomes. Also, contextual factors can play a very important role in leader practices.
Figure 6 The full range leadership theory, model 1.

Source: (Kirkbride, 2006, p.24).

Figure 7 The full range leadership theory, model 2

Source: (Kirkbride, 2006, p.24).
4.4 **Leader-Member Exchange (LMX)**

Many challenging dimensions are addressed by leadership study and, also, within the complex field of human interactions (Truckenbrodt, 2000). Leadership scholars have shifted their perspective and attention to the interaction between leaders and numerous variables in a work situation (Dansereau et al., 1975, Graen and Cashman, 1975). LMX theory was originally developed in the 1960s (Dansereau et al., 1975), and then a number of revisions and measures were developed over the last three decades (Joseph et al., 2011). Thus, leader member exchange theory is defined by different perspectives and measured by different measurements.

### 4.4.1 Definition

The nature of exchange is a two way series of interactions in which two people engage in mutual behaviours. It is the basis of building relationships either personal or professional (Eby and Allen, 2012). Basically, leader member exchange is a leadership theory that focuses on the interaction between two pairs (Dansereau et al., 1975, Graen and Cashman, 1975). Graen and Uhl-Bien (1995) argue that the investigations of leadership should focus on three facets which are follower, leader and relationship. The main notion of LMX is the interaction between leader and member as a dyadic exchange; this interaction is developed informally based on inter-personal relationship between leaders and their followers and the theory differentiates the relationships between leader and one or more followers.

In fact LMX theory was developed heavily based on social role theory in which the leader delegates to the followers evaluates the behavioural response, and finally roles are defined. Reciprocity and negotiated rules are central in social exchange theory in order to for obligations to be accomplished (Eagly, 1987). The relationships between leaders and followers are shaped by underlying relational systems, which could be
developed on a functional or dysfunctional basis (Kahn, 1998). Eby and Allen (2012) argue that the LMX process could be difficult when leaders are not understood or are inauthentic. Thus, social roles differ across cultures and negotiation and reciprocation is different from person to person.

Scandura et al. (1986, p. 580) state that “Leader-member exchange is (a) a system of components and their relationships (b) involving both members of a dyad (c) involving interdependent patterns of behaviours and (d) sharing mutual outcome instrumentalities and (e) producing conceptions of environments, cause maps and value”. LMX theory is concerned with the development of the relationship between leader and members/followers through interactions including observations, communication and then tries outs over a considerable period (Graen and Scandura, 1987).

The current study adapts the definition of Graen and Uhl-Bien (1995), who argues that this interaction is developed based on three aspects: dimensions, trust, respect and obligation/commitment. Each reciprocal interaction should be developed over a period of time in order to achieve the required task.

4.4.2 Vertical Dyad Linkage (VDL)

Leader and member exchange theory (LMX) is a leadership theory that was originally developed based on The Vertical Dyad Linkage (VDL) model (Dansereau et al., 1975). LMX theory focuses on a dyad, which establishes the relationship between a leader and each follower independently, rather than on the relationship between the superior and the group. Each relationship might differ in quality. Thus, the leader might have poor interpersonal relations with some followers and good interpersonal relations with others; thus, within time these relationships are classified into in group and out group (Graen and Uhl-Bien, 1995). The concept of LMX is to describe the relationship
that exists between leader and members; considering individualised and differentiated relationships.

**In group**

In-group relationships are based on negotiated and expanded responsibilities or extra roles; other elements of in-group relationships are the high quality of mutual trust, respect, open communication, shared support, common bonds, interdependencies and reciprocal obligation (high quality exchange). In essence, in-group members are found to have stronger, high quality trusting relationships or emotional attachment with their leader as well as other in-group members (Graen and Uhl-Bien, 1995). Also, in-group members receive more attention and are given special support and opportunities by their leader (Kahn, 1998). The significance of this theory is that followers/subordinates have the chance to negotiate with the leader in order to improve the quality of the relationship and then be classified in the in-group; this step should move the followers from a formal to informal relationship. In return, members report greater amount of time and fewer problems and also satisfaction with their organisation and leaders (Dienesch and Liden, 1986, Liden and Graen, 1980). High quality exchange is correlated positively with in-group relationships (Dienesch and Liden, 1986).

**Out group**

In contrast, the rapport of out-group members’ exchange is the reverse (Dansereau et al., 1975). In out-group relationships, members tend to do their work as it is structured, they do not try to do more than they have to do, members are not expected to go beyond expectations, and they receive less attention, respect and trust (low quality behaviour) from their immediate leader. In this group the exchange is more economic than moral, in other words it is established on formal missions and functions (Graen and Scandura, 1987). So the more social exchange between supervisors and their immediate superior,
The better will be the relation between supervisors and their subordinates. Thus, the relationship depends heavily on upward influence (Graen and Scandura, 1987).

The purpose of the out-group is not a kind of discrimination or unfairness; rather it is a way of encouraging out-group members to engage with immediate leaders to be in the in-group. Followers who consider such a classification will work hard to gain the value of relationships. Also, followers who are in the in-group and have received more respect, trust, help and support feel that they are rewarded for their work, so they will be satisfied and committed to their leaders and hence to the organisation. If leaders treat all followers in the same manner, the motivation values might not be affective, and will then result in dissatisfaction, turnover and conflict among followers.

However, as this relationship is developed on functional and dysfunctional systems, the rapport between leaders and followers could vary contextually and across cultures. Dysfunctional leader-member exchange is a condition where the high quality of exchange between a leader and certain member/s is perceived by others in the work group as an inequity. The dysfunctional leader member exchange can accrue by the flawed assessment due to the lack of information and opportunity to observe the member. As a result of this flawed assessment, the leader fails to notice or underestimates the performance of certain members. In addition, they emphasize that recognizing the possibility that the exchange between leader and their followers can be dysfunctional is important. Leaders need to be sensitive about their assessment of their subordinates and ensure it is correct and fair. This is particularly the case in situations where the leader has limited opportunity to observe and interact with their employees and where the performance outcome is indistinctive (Othman et al., 2009). “Using this approach, emphasis is placed not on how managers discriminate among their people but rather on how they may work with each person on a one-on-one basis to develop a partnership with each of them” (Grean and Uhl-Bien, 1995, p. 229). Poon et al. (2006) found that trust in the leader will decrease when members perceive the leader as having
little intention to do good to followers in the leader-member relationship. Members who experience unfair treatment are likely to perceive their relationship with their leader to be of a low quality.

4.4.3 Life cycle of leadership making (LMX process)
Not only should leaders classify followers into groups, followers should also realise how such a classification is developed and which particular behaviours are needed in order to be in a specific group. However, leaders should offer access for followers to establish the relationship (Graen and Uhl-Bien, 1995). Graen and Scandura (1987) suggest that the leader-member relationship evolves in three stages as follows (see Figure 8).

The relationship between leaders and followers could be established and developed throughout three stages, 1. Role making, 2. Role making and 3. Role routinisation, which are discussed as follows:

1) Role taking
In the first stage, basically the member is evaluated by the leader, the leader sends a role (role-taking stage) and then the leader discovers the proper motivation and talent of each member and tests his or her response and then assigns the role to the member.

Based on regular feedback regarding the behaviour of the member, the member is evaluated by the leader, who comes to a decision whether to assign an additional role to the member or not. In this stage, leader and followers are judged formally. Observation and communication and try outs are considered highly in this stage. In essence this stage can be described as “cash and carry”, in other words, the relationship between leader and follower should be established based on economic exchange/ task oriented (Graen and Uhl-Bien, 1995).
2) **Role making**

The next stage appears as the role-making stage (leadership making). The significance of this stage is that the relationship goes one step further beyond role taking, which is influenced by the behaviour and characteristics of leaders and members. In this stage followers are offered access to develop the LMX partnership rather than treated favourably, which was done in the previous stage (Grean and Uhl-Bien, 1995). “Making the partnership offer to every subordinate has double effect: (a) perception of the LMX process as being more equitable; and (b) the potential for more wide-range high quality relationships (partnerships), since ideally a work unit could exist where all leader-member exchanges would be of high quality if every follower accepted the leader’s initial offer” (Epitropaki, 2000, p.43).

3) **Role Routinisation**

The last stage is role routinisation (acquaintance stage), which is established when the relationship becomes clear, understandable, expanded and stable, thus the level of trust, respect and obligation between pairs should be high (Graen and Scandura, 1987, Graen and Uhl-Bien, 1995).

Throughout the stages, members are classified into in-group or out-group. “These dyads are found to emerge on the basis of how well subordinates work with their leader and how well their leader works with them” (Stringer, 2006, p.129). Social exchange relationships can act in many ways, such as voluntary acts of citizenship behaviour or a worker being willing to do others’ work in an emergency (Truckenbrodt, 2000). Thus antecedents can play a very important role in establishing the relationships, which might cause positive outcomes.
4.4.4 Antecedents and consequences of LMX

It has been found that the quality of leadership exchange is developed based on different antecedents. Henderson et al. (2009) proposed and tested three propositions of LMX antecedent: 1. Individual level (leader characteristics), 2. Group level, and 3. Organisation level (see Figure 9).

1. **Individual level (leader characteristics):** different leadership perspectives could complement one another in order to describe the processes through which relationships between leaders and followers are differentiated. For example, both transformational leadership and servant leadership overlap with LMX theory (Henderson et al., 2009). Transformational leaders are able to motivate followers through individualised consideration (Bass and Riggio, 2006). Leaders who understand followers’ needs and interests are able to differentiate followers.

2. **Group level and composition:** It has been found that leader member interaction could vary in terms of demographic characteristics knowledge, abilities, skills, values, and similarity to the leader. Thus when the group size is high, leaders should pay attention to differentiating the relationship among the followers.

3. **Organisational level:** it consists of three factors: a) organisational culture (norms and values), organisational structure (bureaucratic, centralisation, and
control) and human resource (policies and practises). Differing in the way of conducting and practicing these three dimensions could lead to differentiation between leader and member interaction (Henderson et al., 2009).

Thus LMX outcomes could vary across disciplines and culture. Schyns et al. (2007) compares the antecedents and consequences between Germany and US. The German results show that relationship tenure is not associated to LMX. However, supervision span is shown to be related to the subordinates' evaluation of LMX. The overall findings indicate that German results differ from those in the US, namely, antecedents are associated to LMX to a lower degree in Germany and consequences to a higher degree. In meta-analysis, Gerstner and Day (1997) reviewed LMX correlates across 79 independent researches, and found LMX to be more strongly related to outcomes including satisfaction, performance ratings, and organisational commitment. With respect to the construct validation process (measurement model step).

LMX is behind countless outcomes, which are classified as organisational level, group level and individual level (subordinate). As the current research relies heavily on the individual level (e.g leadership style and LMX), which concerns subordinate and leader, the study was developed based on the interaction between leaders and followers (See Figure 9). The current study was developed based on two antecedents: Individual level (leader characteristics) and group level (gender similarity in segregated work environment), and organizational commitment (affective, normative and continuance) as outcome. Similarity can affect the behaviours and attitudes of employees and then increase the level of commitment (Riordan and Shore, 1997). In other words, similarity probably allows two individuals with the same gender to anticipate each other and this behavioral predictability might increase the ease and quality of their interactions. The current study was conducted with consideration of the sampling characteristics; male and female have limited interaction in their life due to
socialisation and no interaction due to segregated policy. These features would add to the knowledge the debate whether leadership is gendered by measuring the effect of gender in such environment on the outcome (organizational commitment).

The next two sections will discuss organisation commitment, gender and culture.

![Antecedent and consequences of LMX](image)

**Figure 9 Antecedent and consequences of LMX**

Source: (Xiaqi et al. 2012, p.518)

### 4.5 Organisational Commitment (OC)

#### 4.5.1 Definition

Commitment has become an important concept in organisational studies and in understanding workers' attitudes and behaviours in the workplace. As such behaviours and attitudes have been investigated in different ways; commitment has been defined and measured from different perspectives (Becker, 1960, Meyer and Herscovitch, 2001, Mowday et al., 1979). In order to define commitment it is very important to clarify the long standing distinction between attitudinal commitment and behavioural commitment (Meyer and Allen, 1997). Mowday et al. (1982) explain that attitudinal commitment focuses on the process by which people come to think about their relationship with the organisation. In many ways it can be thought of as a mind set in which individuals
consider the extent to which their own values and goals are congruent with those of the organisation. Meanwhile behavioural commitment relates to the process by which individual become locked into a certain organisation and how they deal with this problem. Salancik (1977, p.62) defines commitment as “a state of being in which individual becomes bound by his action and through his actions to beliefs that sustain the activities of his own involvement”. Meyer and Herscovitch (2001, p.301) define commitment as “a force that binds an individual to a course of action of relevance to one or more targets. As such, commitment is distinguishable from exchange based forms of motivation and from target-relevant attitudes, and can influence behaviour even in the absence of extrinsic motivation or positive attitude”.

O’Rielly and Chatman (1986, p.493) define commitment as “the psychological attachment felt by the person for organisations. It will reflect the degree to which the individual internalizes or adopts characteristics or perspectives of the organisation”. They argue that commitment is a multi-dimensional construct consisting of identification, compliance and internalisation. Identification occurs when a person accepts influence to set or maintain a satisfying relationship is based on a need for affiliation. Compliance occurs when attitudes and behaviours are adopted as involvement to gain specific benefits or rewards. Finally, internalisation is involvement that occurs based on the convergence between the individual’s attitude and behaviours and organisational objectives and values. Moreover, it has been argued that compliance is not only different from the other two dimensions (internalisation and identification), but also different in its relation with turnover. Although organisational commitment is correlated negatively to the turnover (Meyer and Allen, 1997), it was found that compliance is correlated positively to turnover (O’Reilly and Chatman, 1986). Tayyab (2006) suggests that the items measuring compliance could include day to day pressures for performance, not pressure to remain in the organisation. Compliance in O’Rielly and Chatman’s (1986) measurement
assesses commitment to perform rather than measuring commitment to remain. Thus, this compliance commitment is similar to conceptualisation to Meyer and Allen’s continuance commitment.

Based on the definitions in the literature, commitment is defined as the extent to which workers identify with organisations in order to be committed to organisational goals and values. Also, commitment was developed based on different perspectives. Moreover, commitment was treated and defined by some writers as a multidimensional construct (Mayer and Allen, 1991), while other researchers define and measure commitment as a unidimensional construct (Mowday et al., 1982). Mowday’s model is measured by a unidimensional construct, which measures the individual’s identification with the organisation (affective commitment). The organisational commitment questionnaire (OCQ) was developed based on three factors: (a) “a strong belief in and acceptance of the organisation’s goals and values, (b) a willingness to exert considerable effort on behalf of the organisations; and, (c) a strong desire to retain membership in the organisation” (Porter et al., 1974, p.605).

The current study uses the definition of Meyer and Allen and incorporates three types of organisational commitment (affective, normative and continuance).

4.5.2 Meyer and Allen’s Model

Meyer and Allen (1997) argue that commitment should be understood as a multidimensional concept: affective commitment, continuance commitment and normative commitment. They define these dimensions as follows:

"Affective commitment refers to the employee's emotional attachment to, identification with, and involvement in the organisation”. “Continuance commitment refers to an awareness of the costs associated with having the organisation”. With normative commitment “the employee might experience a considerable degree of desire, need, and obligation to remain with the current employer” (Meyer and Allen, 1997, p. 13). Meyer
and Allen (1997) argue that these are components of commitment rather than types; that is, employee commitment can be based upon one, two or all three components’ values (Swailes, 2002). In other words, workers can feel attached to the organisation’s objectives and a sense of obligation to the organisations and simultaneously would not leave the organisations due to costs, which could affect their economic situation when they leave. Regarding commitment components’ values and outcomes, this suggestion can offer organisations guidance on how to deal with employee commitment in different ways. Tayyab (2006) argues that it is very important to understand these components by considering the strengths of the three commitment components rather than dealing with each as a particular type.

The validity of Meyer and Allen’s three components validity was tested in different cultures. For example, Tayyab (2006) approves the multidimensional Mayer and Allen scale in Pakistan. She found after model comparisons using Exploratory Factor Analysis (EFA) and Confirmatory Factor Analaysis (CFA), the multidimensional construct achieves the best model fit among other constructs. Also, she found that all three constructs are correlated between \( r = .22 \) and \( r = .24 \) (\( p > .000 \)).

In order to understand and measure commitment, researchers have found various factors of antecedents of commitment (Meyer and Allen, 1997). These factors are discussed in the following section.

**4.5.3 Antecedents and consequences of commitment**

It was suggested that commitment occurs due to some antecedents; Mowday et al (1982) classify the antecedences of commitment into four categories: 1. personal characteristics (demographic factors), 2. Job characteristics (role-related characteristics), 3. Work experience and 4. Organisational characteristics (structural characteristics).
The effect of personal characteristics was correlated to demographic factors; for example, women were found to be more committed than men (Mathieu and Zajac, 1990a). Moreover, as discussed earlier, leadership styles vary in their effect on organisational commitment (Bass and Riggio, 2006, Geijsel et al., 2003, Lee, 2005, Nguni et al., 2006). Consequently, organisational commitment is likely to lead to higher productivity (Tett and Meyer, 1993). Mowday et al. (1982) point out that some studies conclude that outcomes of organisational commitment include at least five possible consequences which are job performance, absenteeism, and tardiness, tenure with organisation and turnover rates. Mayer and Allen (1997) argue that each component has its consequences for other work related behaviour such as performance, whether in role performance or extra-role performance, "citizenship behaviour", or attendance (or its inverse, absenteeism) (See Figure 10). These outcomes depend on the different psychological nature of each form of commitment.

![Figure 10 Antecedents and the degree of consequences of commitment components (affective, continuance and normative). Source: (Meyer et al., 2002).](image-url)
4.5.4 Organisational Commitment and Gender

There is no agreement of the degree of level of organisational commitment across gender. Women are found to be more committed to their organisation when working with male colleagues (Mowday et al., 1982). Female managers are rated as being less committed than their male colleagues (Marsden et al., 1993). Khalili and Asmawi (2012) found that men are more committed than women for the average of OC; specifically, men exceed their counterparts in affective and continuance, while women exceed men in normative. Powell (1999), however, argues that men and women do not differing in experience the levels of organisational commitment. It was argued that relationship between gender and commitment are not consistent (Mathieu and Zajac, 1990b).

The relationship between commitment and gender can differ across culture, for example in Qatar, males are higher in affective and normative commitment than females, these findings are suggested as being due to family responsibilities and higher pay for males (Al-Esmael, 2007). In Saudi Arabia, there is no study to investigate the level of organisational commitment across gender; however, the level of organisational commitment varies across gender based on culture value. For example, women in Saudi Arabia could rate high in continuance commitment for various reasons: 1. Saudi women are not responsible for all the expenditure in families; 2. Saudi women’s opportunities of employment are limited in Saudi Arabia, for example women are not allowed to serve in military and industrial sectors; 3. culturally, the majority of Saudi women still have guardians, so if not available, women refuse other offers and remain in their current job. 4. The policy of working alongside males is a strong reason to refuse jobs; in Saudi Arabia some women would not accept work with males under the same roof (Booz and Company, 2013).
4.6 Leadership and Gender

There is no doubt that gender is a much debated topic in the management and leadership fields. Studies have been conducted on the differences and similarities between men and women and their effect in the workplace (Eagly, 2003). Appelbaum et al. (2003) point out that research has provided a range of theories: whether or not leadership is linked to biology, whether differences are a part of style, whether perceived or real, whether leadership style is associated with effectiveness, and which styles can lead to success. Such propositions will be discussed through six sections: gender role, the biology of gender and leadership, attitudinal drivers, cause factors, communication across gender and the similarity attraction paradigm and leadership.

4.6.1 Gender role

Based on social role theory, the gender role ascribes individual behaviour to societal expectations, and any differences can be explained by individual leaders and their subordinates’ socialisation (Eagly et al., 2000). Thus, different experiences would be expected based upon gender (Carless, 1998). Gender role theory has found that gender roles can have real effects on individuals’ relationships, on their self-perceptions, and on other lifestyle aspects such as leisure activities and health (Williams et al., 2009). For example girls are expected to lean towards mothers’ responsibilities, and be more emotional, while boys are expected to be interested in other activities such as athletics (Walsh, 1997). Thus, males and females experience their roles depending on their gender role and socialisation.

“Because women and men perform different social roles, they exhibit different behaviour repertoires. Gender differentiation in social roles therefore produces gender differences in behaviours, abilities, and dispositional traits” (Marini, 1990,p.105). Eagly et al. (2000) provide evidence of these differences and similarities in leadership styles. They can be distinguished as agentic versus communal attributes. Agentic attributes such as independence, competitiveness and dominance are more associated with men
than women. In contrast, communal attributes - for example sympathy, helpfulness and interpersonal sensitivity - refer more to women than men.

4.6.2 The biology of gender and leadership

Leadership has been biologically determined, behaviourally demonstrated and refers innately to the male group (Appelbaum et al., 2003). Based upon hormones, men and women experience the world differently. There is evidence from scientists that women and men have different experiences in their life, and studies have documented that leadership is influenced by genetics (Li et al., 2011).

Johnson et al. (2004) found that 57% of the variance of transformational leadership was associated with genetic elements, whereas 43% of the variance was associated with environmental elements. Also, Arvey et al. (2006) found that genetic factors are associated with leadership role, occupancy role and personality. However, although the basic role of genetic factors could be influenced by other factors, the extent of inequality between males and females and the specific attributes of masculinity and feminism vary fundamentally across cultures (Peterson and Runyan, 2009). Arvey et al. (2006) found that genetic influences are weaker for those in enriched environments, compared to those who had relatively poorer social environments.

However, the gender reform approach asserts that gender differences are not based on biology and those men and women are similar in their common humanity (Lorber, 2005). Most studies of gender and transformational leadership are in line with the gender reform perspective arguing that biological differences should be ignored to achieve gender equality in job opportunities (Lorber, 2005). According to this approach, sex-role socialisation perpetuates the view that women are less capable than men to compete in the business environment. Thus, if women develop the required traits and skills, they would be better trained to compete with men and would advance at comparable rates (Kark, 2004).
3.6.3 Attitudinal drivers (leadership behaviours)

Attitude refers to a general and enduring positive or negative feeling about some person, object, or issue (Gardner, 1990). Attitudes have two elements, which decide how they affect leadership. The first element is how someone feels about doing something, while the second element is how they behave or act regarding how they feel about something. For the purpose of this study, the second reason will be discussed below (Gardner, 1990).

There has been much argument about what it takes to be a successful gendered leader (Eagly and Carli, 2007, Eagly and Johannesen-Schmidt, 2001, Eagly et al., 2003, Eagly et al., 1995 and Eagly et al., 1992a.b). Eagly et al. (2003) provide empirical evidence of differences between men and women in leadership. Women leaders were perceived to be more democratic and participative than men and to engage in more collaboration and sharing in decision making. However, the size of the differences was small. Differences between transformational and transactional leadership styles are correlated with the distinction between agentic and communal attributes (Rowold and Rohmann, 2009). Bass (1988) identifies that the best leadership style is one that integrates task- and relation-orientation in behaviour toward followers and colleagues. Task-orientation is regarded as more masculine, whereas relationship-orientation is seen as more feminine (Eagly, 2003).

Bass (1985) argues that women are more likely to be transformational leaders than men. In contrast, men are more inclined toward management-by-exception and laissez-faire, so transactional leadership is a more masculine style and transformational leadership is more feminine. However, Mujtaba and Alsua (2011) found that male and female participants demonstrate the same pattern of being more oriented toward a relationship orientation.

DuBrin (2004) represents a group of researchers who studied performance evaluations based on rating from superiors and followers. 425 executives were evaluated, each by
around 25 people. The results show that women achieve higher ratings on 42 of 52 skills. Although the gender differences are small, the data from 25 studies show that the performance of women is higher in motivating others, fostering communication, producing high-quality work and listening to others. In contrast, men are rated higher on strategic planning and analysing issues. This result proves that women are more likely to be transformational leaders.

4.6.4 Cause / environmental factors

Environmental factors are behind the complexity of the perception toward gendered leadership effectiveness/emergence (Appelbaum et al., 2003, Stelter, 2002). Kolb (1999) proposes that gender leadership emergence can be affected by three factors: masculine versus feminine, self-confidence and gender experience, he examined whether self-perceptions of masculine gender role characteristics predict individuals who are perceived by others as leaders. Results show that both attitude toward leadership and leadership experience are stronger predictors of leader emergence than masculine gender role. These results could indicate that masculine scales discriminate toward female leadership effectiveness. Also, this study highlights the importance of self-report toward leadership effectiveness. Thus, this study supports the idea that stereotypical masculine behaviours are still considered important for leadership effectiveness.

Individual attitude toward leadership emergence can also be perceived stereotypically by male raters, and it can be affected by traditional factors (Eagly and Carli, 2007). Elamin and Omair (2010) examined Saudi men’s attitude towards Saudi women at work. The results demonstrate that respondents’ attitudes are affected by traditional attitudes towards working females. Participants believed that men are capable of leadership and women are caring and good for domestic tasks and child rearing. This attitude was attributed to the strict gender roles in Arab
countries, which give men priority over women.

4.6.5 Communication across gender

Transformational leaders need to be effective communicators, as communication plays a significant part in delivering and receiving messages while leading. Understanding and conducting good communication contributes to achieving goals. Effective leaders need to have a range of communication techniques to deliver messages effectively, solicit feedback, motivate others, and create readiness for change (Hackman and Johnson, 2004). Appropriate communication provides followers with feedback which enables them to make better decisions and generate creative ideas (Gilley et al., 2009). Communication is a basic part of the dyadic exchange process. Emotional communication skills are important to motivate followers inspirationally in order to deliver and receive effective and accurate information (Mayfield et al., 1998). Thus, leaders and their followers need to exchange and understand messages, so mutual communication is important to achieve goals.

Moreover, there are differences between women and men in response to various situations. For example women are more sensitive in non-verbal communication, while men’s behaviour is characterised by a tendency to take leading and controlling roles during social interactions, such as meetings. Men are considered to express authoritative opinions and generally their voices are more forceful and confident. Also they are more listening oriented in conversation, whereas women are more inclined to ask questions or express a personal viewpoint and their voices are reassuring and placatory (Kakabadse and Kakabadse, 1999 and Oakley, 2000).

The relationship between leader’s verbal skills and outcomes is clearly embodied within the motivating language model. This theory predicts that strategic applications of leader oral communication have positive measurable effects on subordinate performance and job satisfaction (Sullivan, 1988). Researchers have found that women are better
emotional communicators than men, providing individualised consideration and intellectual stimulation, which need interpersonal skills (Bass and Riggio, 2006). Women also have the advantage of being better at individualised consideration than men (Eagly et al., 2003). Gender difference in communication might be a major key for women to surpass their counterparts, and display transformational leadership effectively. Some authors find it is reasonable to conclude that women differ from men in leadership styles (Knutson and Schmidgall, 1999). Women are perceived as transformational leaders; they are likely to be more effective and satisfactory as leaders than their male counterparts (Bass, 1988, Rosener, 2011).

Other studies have found that there is no difference across gender. They suggest that any differences between men and women could emerge due to two reasons: first, the stereotype of gendered leadership roles which privilege men, and second, the effect of setting (Appelbaum et al., 2003). For example in military settings leaders, whether male or female, are expected to possess masculine characteristics (Boyce and Herd, 2003). In addition, “Socially appropriate behaviour differs for females and males in many countries around the world” (Holt and DeVore, 2005, p.165).

It could be concluded that males and females are somewhat similar in possessing leadership styles, with an advantage for women (See Table 4). However, socialisation and leadership experience can affect how the genders display leadership behaviours.

Table 4 Male and female differences

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agentic</td>
<td>Communal</td>
</tr>
<tr>
<td>Masculine characteristics</td>
<td>Feminine characteristics</td>
</tr>
<tr>
<td>Task oriented (Structure)</td>
<td>Relation oriented (Consideration)</td>
</tr>
<tr>
<td>Autocratic (Directive)</td>
<td>Democratic (Participative)</td>
</tr>
<tr>
<td>Transactional</td>
<td>Transformational</td>
</tr>
</tbody>
</table>

Source: (Eagly and Carli, 2007).
4.6.6 Similarity attraction paradigm and leadership

The idea of the similarity attraction paradigm was developed by Byrne (1971). This paradigm argues that individuals are attracted to those who are similar to themselves. Demographically, when the manager and follower dyad is similar the relationship may be perceived as empathic and comfortable (Foley et al., 2006). Also, if both in the dyad have common experience, values and beliefs, the consequences of social interaction leads to less stressful and more positive reinforcement (Vecchio and Bullis, 2001).

In line with the similarity paradigm, relational demography theory offers an alternative mechanism to explain the effect of the leader on subordinates’ perception of leader behaviours (Romero, 2005). It is very important to consider the value of similarity and how similarity is viewed and measured. Surface similarities / physical features (race, sex and age) play a very important role in interaction between pairs. Romero (2005) hypothesises that the level of satisfaction with supervisor, and effectiveness can be increased when the leaders and their followers are ethnically the same.

However, the value of deep level similarity is more complex. Deep level similarity refers to similarity of personality, attitude, beliefs, value and knowledge (Harrison et al., 1998). It can affect the level of leader member exchange and increase positive organisational outcomes (Antonioni and Park, 2006). Schaubroeck and Lam (2002) examine the relationship between similarity in personality and leadership exchange, and find that personality is positively related to enhanced quality of the relationship between leaders and subordinates.

Similarity can affect the behaviours and attitudes of employees and then increase the level of commitment to the group (Riordan and Shore, 1997). Foley et al. (2006) suggest that demographic similarity between manager and subordinates should lead to perceived similarity in values and attitudes, greater trust and interpersonal attraction.

Moreover, Tsui and O’Reilly (1989,p.402) point out that “increasing dissimilarity in
superior-subordinate demographic characteristics is associated with lower effectiveness as perceived by supervisors, less personal attraction on the part of superiors for subordinates and increased role ambiguity experienced by subordinates”. Moreover, empirical studies found that there are significant effects of other demography similarities such as age, tenure, race and level of employment, with outcomes. For example, shared racial perspectives appear to be vital attitudes that indirectly affect organisational commitment (Brown et al., 2008). A study conducted by Epitropaki and Martin (1999) found a significant relationship between organisational tenure and outcomes; subordinates with high organisational tenure differences from the manager reported poor outcomes when they perceived low quality of LMX, whereas when the quality of relationship was reported as high, the outcomes of subordinates were high.

4.6.6.1 Sex and similarity

Sex is a central demographic characteristic and similarity can be expected to have a direct impact on the quality of workers’ social interaction, and hence lead to a greater sense of satisfaction at the workplace than for workers in an opposite-gender dominated setting (Peccei and Lee, 2005). Elsass and Graves (1997) suggest that the relationship exchange between manager and subordinate, and the level of this mutual relationship, is enhanced for same-gender dyads. Green et al. (1996) found that gender similarity is correlated positively and significantly with the level of LMX.

Hyde (2005) evaluates gender similarities by reviewing 46 major meta analyses conducted on psychological gender differences classified into six categories: cognitive variables, verbal, nonverbal communication, personality variables, psychological well-being, motor behaviour and miscellaneous constructs. The results show that 78% of gender differences are small or close to zero. This result supports and is similar to the study of Hyde and Plant (1995), who found that 60% of differences were small or close to zero, they argue that males and females are alike on most but not all
characteristics. For example, Pelled and Xin (2000) found that gender similarity has a significant positive effect on one dimension of relationship quality (trust) between supervisors and their followers, whereas age has a negative impact. Although men and women share their best features, male and female executives have often been unwilling to accept the nature of their gender traits and work together equally.

Many men say that they are afraid to criticise women executives because they react negatively and become too emotional. In addition, women have suffered from sex discrimination and harassment. Also women found that it is very difficult to gain access to top management positions. However, some men realise this and pay attention to treating women differently (Kakabadse and Kakabadse, 1999). Thus, women prefer to work with the same sex rather than men (Dolan and Sanbonmatsu, 2009, Gorman, 2005). Jackson et al. (2007) found that mixed-sex groups with male and female leaders show preference for same-gender leaders significantly more than opposite-gender leaders.

Bauer and Green (1996) suggest that interpersonal attraction is related to the establishment of leader member relationship. Vecchio and Bullis (2001b) analysed a study describing the relationship between supervisors and their subordinates, in which separate analyses were run for males supervising females, males supervising males, females supervising females and females supervising males. The results indicate that gender similarity has a positive correlation with outcomes of leadership; the results show a strong interaction of the length of relationship with gender similarity. This supports a link between gender similarity and the level of satisfaction with supervision. Consequently gender similarity might affect the impact of other demographic factors such as age, race, tenure and level of employment and the period with the current manager. However, most previous studies were conducted in contexts where there was greater interaction between males and females in life.
4.6.7 Barriers faced by women in organisations.

Although women show a higher tendency to transformational leadership styles, relation-oriented and participative styles (Eagly and Carli, 2007), women still face barriers which can block them from reaching high positions and developing their career. Women still face the persistent stereotype, which is the most important obstacle in management (Cebuc et al., 2009). The association between maleness and leadership is vividly and universally accepted. Males are seen as more qualified than women, as managerial traits are perceived to be masculine (Ryan and Haslam, 2007). Eagly and Carli (2003, p.669) state that “Any female advantage in leadership style might be offset by disadvantage that flows from prejudice and discrimination directed against women as leaders”. The following sections discuss barriers that face women in practising their leadership role.

4.6.7.1 Glass ceiling:

King (1997, p.97) states that “the class ceiling is a barrier which prevents women from rising, which real enough from below is often invisible from above. Men at the top can look down and ask why women are not achieving, and seeing no barrier, can only surmise a lack of talent, commitment or energy”. The term “glass ceiling” flows from many stereotypes. The glass ceiling is a symbol for prejudice and discrimination. To the extent that people are prejudiced against women as leaders this prejudice would manifest itself in many ways and have numerous effects (Carli and Eagly, 2001). Cotter et al. (2001) argue that the glass ceiling prevents women from taking part and using their full abilities in senior positions. Pai and Vaidya (2009,p.109) state that “the essence of a glass ceiling effect is the greater disadvantages for moving into higher outcome (e.g. earnings and authority) levels at later stages in one's work life”. It was found that only three per cent of female managers held top management positions in the
world’s largest organisations (Wirth, 2002, Wirth, 2009).

The effect of the glass ceiling is a universal issue, not limited to one nation; indeed, it exists in all nations, although Middle Eastern women have suffered from the glass ceiling more than those in any other nation (Pai and Vaidya, 2009). However, in segregated organisations, the term glass ceiling does not exist. For example, in Saudi Arabia, women do not have male colleagues in most organisations. Dr Alia exchanged the term glass ceiling for “iron curtain”, which she believes better describes the Saudi culture. The iron curtain leads to a shortage of women in top positions (Walker, 2004). “The term and the effect of glass ceiling has a different meaning in the western context and it could have different meanings here in Saudi Arabia” (Walker, 2004, p. 53). Thus, with respect to the influence of the culture in the Saudi Arabian context, the effect of the glass ceiling or iron curtain could impede women from high positions due to two reasons, first, the abilities of Saudi women have not been observed by Saudi men, who dominate in the Saudi context; second, the limited communication across gender could lead to a shortage of development programmes for women.

4.6.7.2 Gender Stereotype

When people hold stereotypes about a group, they expect members of that group to possess characteristics and exhibit behaviour consistent with those stereotypes, as well as disparaging the effectiveness of women who attain leadership roles (Eagly and Karau, 2002). Gender stereotypes are beliefs regarding the traits and behaviours ascribed to individuals on the basis of their gender (Duehr and Bono, 2006). The traditional female role fails to correspond to the behaviours and attitudes associated with traditional managers, so many women fail to aspire to managerial positions and, simultaneously, men refuse or fail to allow them such aspiration (Asuncion-Landé, 1979). So, traditionally, the ability of women can be a barrier; gender identity is responsible for the
disparity between female and male. Although women generally fail to act in masculine ways, a study conducted by Schruijer (2009) found a positive relationship between gender identity and masculine qualities. She found that women with a masculine gender identity move upward, whereas women with a feminine gender identity have more difficulty balancing their personal life and work. In eastern cultures, women are responsible for homecare. For example Soviet women feel the pressure of two societal forces: work and responsibility for home and family (Puffer et al., 1997). So, the cultural stereotype gives men advantage and priority in being recruited into leadership positions. Thus, in many cultures it is believed that leaders must be male as men mainly possess attitudes and behaviour that qualify them to act as leaders (Eagly and Carli, 2007).

As a result, stereotypically, people perceive that women could face difficulty in being recruited into leadership positions (Charles and Aull Davies, 2000). This stereotype cannot accept women as leaders, especially in male dominated organisations. This can be termed as “stereotype threat”. For example “associations with femininity make women shy away from leadership. As a result, stereotypes block women’s progress through the leadership labyrinth in two ways: by fuelling people’s doubt about women’s leadership abilities and by making women personally anxious about confirming these doubts” (Eagly and Carli, 2007, p.94). In addition, these concrescences can be a mechanism to decrease the level of confidence of female leaders; women may always see themselves as followers or managers, not leaders, and need more training. “Women are easily intimidated and do not know how to handle it” (Rezvani, 2010, p.85).

Moreover the term “prejudice” has been a consequence of cultural stereotypes toward women’s leadership. Prejudice consists of unfair evaluation of a group of people based on stereotypical judgments of the group rather than the behaviour or qualifications of its individual members (Eagly, 2003). Role-matching theory proposes that perceived
contradiction between the role of the female gender, and the role of leadership leads to two kinds of prejudice: (a) perceiving women less favourably than men as having the potential for leadership roles and (b) assessing the behaviour that meets the prescriptions of the role of leader less favourably when applied by a woman (Eagly and Karau, 2002). One result is that attitudes are less positive towards women from male leaders and potential leaders. Another consequence is that it is very hard for women to become leaders and accomplish success in leadership roles. Evidence from various forms of research captures these effects, especially in situations that increase the awareness of the contradiction between the role of the female gender and leadership roles (Eagly and Karau, 2002). Garcia-Retamero and López-Zafra (2006) empirically investigated the expectations of people toward the effect of prejudice in various work environments. Men and women, selected for leadership positions in industry, were evaluated by participants on whether their positions were incongruent or congruent with the candidate’s gender role. The results show that prejudice was practised against female candidates and female participants showed more prejudice against female leaders than did male participants (Garcia-Retamero and López-Zafra, 2006).

In addition, although women play a very important role in management, they are still affected by dominant constraints. Workforces react differently toward leaders on the basis of culture. Adler (1986, p.4) states, “Both the possibility for increased representation and impact of women in management and the selection of potentially more effective strategies to bring about such change depend fundamentally on each culture’s perception of the dominant constraints. Women in Japan and Saudi Arabia, for example, may focus on cultural patterns when explaining the situation with regard to female managers, whereas American women may look primarily to the legal structure, and Chinese women in Singapore and the People’s Republic of China may emphasize current economic conditions and political leadership”. Thus, the stereotype/attitude
towards leadership abilities differs across cultures.

4.6.7.3 Proportion of gender in the workplace

Blau (1977) suggests that in work situations characterised by a majority group and minority group, the lack of out-group contacts by majority employees increases the likelihood that they will sustain prejudices against minority employees which, in turn, will lead to discriminatory behaviour among groups. This behaviour is not confined to gender difference but can be extended to different demographic factors, beliefs, attitudes and behaviours. Alongside the similarity-attraction perspective, the social contact perspective suggests that the lower the proportion of women in the work group, the less supportive attitudes and behaviours will be exhibited toward women, and the more supportive attitude and behaviours will be exhibited toward men. Thus, women in this situation suffer from stress as a result of a negative social environment (Tolbert et al., 1999).

Based on sex-role spillover theory, females in male-dominated work settings are likely receive more negative treatment than men in female-dominated settings (Gutek 1985). Carless (1998) argues that in a male dominated environment, women leaders suffer visibility and the situational exaggeration of gender differences and stereotype and decreased emotional and physical health.

Eagly et al. (1995) found in a meta-analysis of 96 studies when comparing the effectiveness of men and women who have the same responsibilities, that women are less effective than men when 1. Leadership positions are male dominated; 2. The proportion of male subordinates is higher, and 3. Substantially in military organisations. Thus, women suffer from disproportion of gender compared to men. This finding might reveal the importance of gender similarity to female leaders and the equality of the percentage of the genders in the same organisation.
4.6.7.4 Organisational context

Organisational contexts have a strong relationship with stereotypes. Rohmann and Rowold (2009) and Hyde (2005) argue the importance of analysing organisational contexts when comparing male and female leadership style. Rohmann and Rowold (2009) found sex differences concerning leadership style in different organisational contexts. Eagly and Carli (2003, p. 820) argue that “Male-dominated environments can be difficult for women”. For example men’s effectiveness exceeded that of their female counterparts in military organisations, but not in education and social services. Thus, the nature of context can be an advantage for gendered leadership roles.

4.6.7.5 Earning

Typically women are seen as mothers looking after children and in some cultures their responsibilities are limited to being a housewife. Traditionally, women focus primarily on home lives, while men divide their energy and time between family and work. For example, married women face conflict between reality and their intention (Kong, 1997). Eagly and Carli (2007) report that many female executives face more challenges in controlling/balancing family and work than male executives face, despite the egalitarian notion that male and female workers share homecare duties in order to contribute to increasing the family income. Gutek (1985) argues that such features can spill over to the organisation; Gutek suggests that gender norms are stable and spill over into the workplace role. However, the consequences of this theory vary across cultures and individuals’ beliefs. For example, and as argued by Stickney and Konrad (2007,p.808) “the importance egalitarian women place on their work life reflects their gender-role attitudes and results in a stronger focus on paid work, which manifests itself in behaviours leading to higher earnings. Traditional women who place primary importance on their household responsibilities are likely to exert more energy in the household sphere and thus have lower earnings relative to egalitarian women who
spend a greater amount of their energy in the work sphere”.

Eagly and Carli (2007) point out that women in the US earn less than their male counterparts, while on average among UK workers in 2005, men earned 27% more than women. This variance was reported, however, without taking into account their working hours or any other consideration. In addition, in collectivist cultures, women can earn less than men due to the effect of gender roles, and organisations can be affected by the impact of gender roles. For example in Saudi Arabia, although women may have jobs, they are not responsible to share with men in paying the cost of living. Thus, organisation policies pay less to women especially in private organisations compared to men. Also, as women are expected to take care of children, their work hours are reduced, which also could affect negatively their income (AlMunajjed, 2006b).

4.6.7.6 Communication and sexuality

Workers deal, respond to and communicate with women in their gender role rather than work role. The notion of sexual harassment is a consequence of sex-role spill over theory, and also female-male sexual harassment can occur when men assume higher power in the workplace (Houghton-James, 1995). Thus, women can receive sexually based treatment due to the gender role instead of work role. In the US, Rosen and Martin (1998) found that women in military service with higher percentages of male colleagues report more gender harassment and fewer acceptances of females. In the UK a survey was conducted of 112 organisations and it was found that 111 organisations had a harassment policy that included sexual harassment. The results of the survey indicate that 69% of participants believe sexual harassment is a fairly important problem for employers, whereas 17% thought it a major problem and only 2% viewed it as no problem at all (Samuels, 2003). These figures reveal that the value of sex-role spillover theory is spreading in the workplace, as represented in the sexual harassment phenomenon.
Therefore, it could be argued that the consequences of spillover theory in segregated organisations should be small due to no interaction between males and females. Although, women can be harassed by women, the percentage compared with men is very low (Fitzgerald, 1990).

4.6.7.7 Economic factor

Ross (2008) argues that oil production decreases the proportion of the female workforce; consequently, it leads to less education for girls, a higher fertility rate and less influence of females within the family. Moreover, politically, it has far-reaching consequences; when women stay or work at home, rather than outside, they are less likely to participate politically and to lobby for expanded rights, to obtain and exchange information, and to overcome collective action problems, and so they are less likely to reach positions or representation in government. On the other hand, it has been observed that women in non-oil countries play a major role in the income of the family. Thus, the proportion of women in the workforce is higher than in oil countries, so this can offer opportunities for women to work alongside males in organisations although the issue of discrimination can occur.

4.6.7.8 Lack of Women's Political Empowerment

Based on political offices, leadership positions employ require agentic characteristics/masculine images more than communal characteristics/feminine images. Therefore, women, who take political leadership positions usually, identify themselves in masculine terms, which are difficult to employ in a culture such as the Middle East (Metcalfè, 2011). For example, Jane Byrne, who was the mayor of Chicago, said, “I never saw myself as women”, so she avoided presenting herself as womanly or feminine (Eagly and Carli, 2007).
4.7 Culture

4.7.1 Definition of culture

Culture is a set of norms, customs, values and assumptions that guide a group of people to have shared behaviour (Singh and Krishnan, 2007). It affects how people view the world and how they believe, think and shape their behaviours (Nahavandi, 2009). Hofstede (1980, p.21) defines culture as “the collective programming of the mind which distinguishes the members of one group from another”. Culture is a system of shared meaning where people in a nation have a common way of viewing objectives and events, and then interpret, behave and evaluate management practices and situations consistently (Mendonca and Kanungo, 1996). Therefore, culture and leadership are highly associated. Leadership is about influencing the construction of ideas, beliefs and interpretations of how things should be done (Bryman et al., 2011).

4.7.2 Culture and Leadership

Leadership is a social and interpersonal process. Culture is paramount in understanding the leadership process, as leadership is fundamentally a social phenomenon (Singh and Krishnan, 2007). Hofstede and Hofstede (2001, p.388) state that “the leader is a culture hero, asking followers to describe their leaders is in fact another way to describe the culture”. Every culture perceives leadership from its own perspective, and considers different types of effectiveness of leadership. Thus, an effective leader in the East might not be effective in the West. For example, in India’s collectivist culture, workers reported higher levels of satisfaction and performance when working under fraternal foremen than under nurturing foremen (Kakar, 1971).

Culture has been argued to have a fundamental influence on leadership behaviours (Gibson, 1995). If cultural values have an impact on individual and group behaviours, then it is arguable that these values would also impact leadership behaviours and subordinates perceptions of them. However, the effect of personal characteristic on
leadership varies across cultures (Nahavandi, 2009). Developing managers across cultural barriers could not be impossible, but fortunately programmes should not be judged exclusively on the basis of their cognitive content, they bring people from different cultures and subcultures together and by this act broaden their outlook (Hofstede and Hofstede, 2001).

4.7.3 Leadership from a Western perspective

4.7.3.1 Hofstede’s Model

Hofstede’s (1980) research is the most widely recognised set of culture studies. Hofstede (1980) suggests four dimensions of culture that can influence leadership behaviours; they are power distance, uncertainty avoidance, collectivism versus individualism and masculinity versus femininity.

1. **Power distance (PD):** Hofstede (1980) defines power distance the extent to which the community accepts the fact that power in institutions and organisations is distributed unevenly. Power distance in society is strongly related to leadership. For instance, in a high power distance culture, followers are more reluctant to challenge their leaders or managers and also, more fearful in stating disagreement with their leaders or managers (Adsit et al., 1997).

However, in a high power distance society, subordinates expect their managers to display more acceptable and typical guidance and, at the same time, in terms of leaders’ characteristics and behaviour, they tend and need to be recognised as effective (Dickson et al., 2003). Moreover, people in a high power distance society accept their leaders’ direction, so they have a higher degree of willingness than have followers in low power distance cultures (Dickson et al., 2003). A study conducted by Bu et al. (2001) compares the willingness to accept the direction of supervisors between Chinese and US employees. The results illustrate that Far Eastern people show a stronger tendency to accept direction and are less responsive to their assessment than US employees. Also,
Smith et al. (2002) report that managers in high power distance countries tend to use formal rules and procedures and rely less on their subordinates’ skills in dealing with everyday events.

A study shows that employees’ effectiveness is greater in the U.S.A than in Bulgaria. U.S. managers use referent power (based on interpersonal attraction and liking of the supervisor), whereas Bulgarians use legitimate power (based on followers’ belief that the manager/leader has the right to control their behaviour), correlating with power distance. Both kinds of power show a positive relationship with the effectiveness of employees (Shipper et al., 2003).

A qualitative study conducted in some Gulf countries found the importance of consultation and participation in contributing to exceptional leadership (Kabasakal and Dastmalchian, 2001). Research done by Bjerke and Al-Meer (1993) found that Saudi culture scores 73 on power distance, which is a high power distance, they argue that Saudi managers may make decisions autocratically instead of sharing with or consulting their followers, although this is not encouraged by Islamic teachings. However, Fikret Pasa et al. (2001) found that in Turkey, outstanding leaders use consultation to induce feeling toward the group rather than getting involved in improving the quality of decisions. Similar to Arab society, the purpose of participation or consultation is to satisfy the egos of the parties involved, rather than improve the quality of decisions.

Thus, an effective leader in a high power distance society might operate within a directive, autocratic, task-oriented relationship using legitimate power; all of which behaviours are correlated positively with transactional leadership style more than transformational leadership styles. Also, autocratic, directive leadership and less participation in making decisions may exist in collectivist cultures; moreover, in such a culture the possibilities of inauthentic leadership can negatively affect the environment of the organisation. However, when leaders in eastern culture act as transformational
leaders and emphasise achieving collective goals, it might be acceptable when the group is collectivist (Jung and Avolio, 1999). See Table 5.

Table 5 The connotations of power distance

<table>
<thead>
<tr>
<th>In low power distance countries</th>
<th>In high distance countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers are seen as making decisions after consulting with subordinates.</td>
<td>Managers are seen as making decisions autocratically and paternalistically.</td>
</tr>
<tr>
<td>Managers are more satisfied with participative superiors.</td>
<td>Managers are more satisfied with directive and persuasive superiors.</td>
</tr>
<tr>
<td>Managers like seeing themselves as practical and systematic; they admit a need for support.</td>
<td>Managers like seeing themselves as benevolent decision makers.</td>
</tr>
<tr>
<td>Employees are less afraid of disagreeing with their boss.</td>
<td>Employees fear to disagree with their boss.</td>
</tr>
</tbody>
</table>

Source: (Hofstede, 1984, p.92).

2. Uncertainty avoidance (UA): Uncertainty avoidance is defined by Hofstede (1980, p. 80) as “the extent to which people within a culture are made nervous by situations which they perceive as unstructured, unclear, or unpredictable, situations which they therefore try to avoid by maintaining strict codes of behaviour and a belief in absolute truths”. Offermann and Hellmann (1997) found that managers in high uncertainty avoidance countries are more controlling, less approachable and less delegating than managers in low uncertainty avoidance countries. Shane (1995) found lower preferences for innovation championing roles (including the transformational leader role) in high UA societies, as the level of flexibility of a high UA society is low and it relies more on organisational rules and procedures.

“Thus, UA has an impact on the characteristics associated with outstanding leadership and leaders' typical career patterns. UA also influences the expectations leaders have of subordinates and customers have of businesses. In high UA contexts, planning and detailed agreements are the norm, whereas in low UA contexts flexibility and innovation are more prominent” (Dickson, 2003, p. 45). See Table 6.
Table 6 The connotations of uncertainty avoidance

<table>
<thead>
<tr>
<th><strong>In low uncertainty avoidance countries</strong></th>
<th><strong>In high uncertainty avoidance countries</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less emotional resistance to change.</td>
<td>More emotional resistance to change.</td>
</tr>
<tr>
<td>Loyalty to employer is not seen as a virtue.</td>
<td>Loyalty to employer is seen as a virtue.</td>
</tr>
<tr>
<td>Performance for smaller organisations as employers.</td>
<td>Preference for larger organisations as employers.</td>
</tr>
<tr>
<td>Rules may be broken for pragmatic reason.</td>
<td>Company rules should not be broken.</td>
</tr>
<tr>
<td>Conflicts in organisations are natural.</td>
<td>Conflicts in organisations are undesirable.</td>
</tr>
</tbody>
</table>

Source: (Hofstede, 1984, p. 132:133)

3. **Individualism versus collectivism (IC*)**: Many studies assume that collectivist people tend to have strong attachment to their organisation. People have steady work and a long term relationship with their organisation and place a high value on interpersonal relationships and skills. Collectivist culture is parallel with transformational leadership. For example, in a collectivist culture, employees’ own needs are considered (Jung and Avolio, 1999). “Collective people are expected to be more motivated and satisfy their own self-interests and personal goals” (Jung and Avolio, 1999, p. 209), see Table 7. The score for Saudi Arabia on this dimension is 40, indicating that, as a collectivist society, Saudi managers are required to set a rapport with followers, cooperate with them, and share their happiness and sorrows (Bjerke and Al-Meer, 1993).

Table 7 the connotations of individualism versus collectivism

<table>
<thead>
<tr>
<th><strong>In low individualism countries</strong></th>
<th><strong>In high individualism countries</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of provisions by company (training, physical conditions).</td>
<td>Importance of employee’s’ personal life (time).</td>
</tr>
<tr>
<td>Large company attractive.</td>
<td>Small company attractive.</td>
</tr>
<tr>
<td>More importance attached to training and use of skills in jobs.</td>
<td>More importance attached to freedom and challenge in jobs.</td>
</tr>
<tr>
<td>Managers aspire to conformity and orderliness.</td>
<td>Managers aspire to leadership and variety.</td>
</tr>
<tr>
<td>Manager’s rate having security in their position as more important.</td>
<td>Manager’s rate having autonomy as more important.</td>
</tr>
<tr>
<td>People thought of in terms of in-groups and out-groups; particularism.</td>
<td>People thought of in general terms: universalism.</td>
</tr>
</tbody>
</table>

Source: (Hofstede, 1984, p. 166-167)

4. **Masculinity versus femininity (MF)**: “Masculinity implies dominant values in a society that stresses assertiveness and being tough, the acquisition of money and material objects, and not caring for others, the quality of life or people”. In a feminine culture, by contrast “values such as warm social relationships, quality of life, and care
of the weak are stressed” (Dickson et al., 2003, p.49). Regarding leadership behaviours, Hofstede holds that heroic leaders in a masculine culture are aggressive, assertive and decisive, whereas, in a feminine culture, they are cooperative, seek consensus, and are intuitive and less visible. Hofstede (2001) links this dimension to gender differences. He divides the conception of masculinity into gender role division and assertiveness. He assumes that men are expected to be assertive and tough in a high masculinity or low femininity society, and women tend to be modest. However, in a high femininity culture, both men and women tend to be modest. “Arab societies scoring moderately on this dimension tend to value qualities like modesty, humility, benevolence, interpersonal relationships and concern for the weak” (Al-Khatib et al., 2008, p.84). Bjerke and Al-Meer’s (1993) study indicates that the Saudi result for this dimension is 43, which places it on the "feminine" side. Saudis show their emotions and have a friendly relationship among people. Arab employees' expectations, as seen by the managers, include "kind and humane treatment", "care", "respect", "control", and "guidance" (Muna and Simmonds, 1980,p.41).

Although the full range of leadership theory was developed in the West, Bass argues that it is a cross cultural model due to its results, supported reliabilities and validity in different contexts. A recent study conducted by Leong and Fischer (2011) investigates the impact of cultural values variability on transformational leadership behaviour levels across cultures. Schwartz and Hofstede’s cultural dimension variability were used to predict that higher egalitarianism and higher cultural mastery would be related with higher levels of transformational leadership behaviours. The study uses meta-analysis of research over the last two decades using MLQ. The findings support the hypothesis that there is significant variability between countries in rating transformational leadership behaviours.
4.7.3.2 Leadership and Organisational Behaviour Effectiveness research (GLOBE)

The GLOBE research is one of the most extensive and exciting about cross-cultural differences and leadership. Conducted by House et al. (2004), using a group of 62 countries, this model is a comprehensive project to understand leadership and culture. GLOBE examines culture using nine dimensions, predicting their effectiveness on leadership and organisational processes. Although House and his colleagues use Hofstede’s dimensions, others are added for more comprehensive understanding (Nahavandi, 2009). See Table 8.

Table 8 GLOBE dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Description</th>
<th>Mean of Middle East countries</th>
<th>World mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power distance</td>
<td>The degree to which power is distributed equally</td>
<td>5.2125</td>
<td>5.10</td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>The extent to which a culture relies on social norms and rules to reduce unpredictability (high score indicates high tolerance for uncertainty)</td>
<td>3.875</td>
<td>4.16</td>
</tr>
<tr>
<td>Humane orientation</td>
<td>The degree to which a culture values fairness, generosity, caring and kindness</td>
<td>4.2775</td>
<td>4.07</td>
</tr>
<tr>
<td>Collectivism I</td>
<td>The degree to which a culture values and practises collective action and collective distribution of resources</td>
<td>4.225</td>
<td>4.23</td>
</tr>
<tr>
<td>Collectivism II (in-group)</td>
<td>The degree to which individuals express pride and cohesion in their family or organisations</td>
<td>5.605</td>
<td>5.08</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>The degree to which individuals are assertive, direct and confrontational</td>
<td>4.0775</td>
<td>4.13</td>
</tr>
<tr>
<td>Gender egalitarianism</td>
<td>The extent of gender differentiation (high score indicates more differentiation)</td>
<td>3.0225</td>
<td>3.38</td>
</tr>
<tr>
<td>Future orientation</td>
<td>The extent to which a culture invests in the future rather than in the present or past</td>
<td>3.62</td>
<td>3.83</td>
</tr>
<tr>
<td>Performance orientation</td>
<td>The degree to which a culture values and encourages performance and excellence</td>
<td>3.9525</td>
<td>4.07</td>
</tr>
</tbody>
</table>

*Middle East countries’ data have fewer scales than the GLOBE scales.

** Means range between 1 (low) and 7 (high). Source: (Nahavandi, 2009, p. 42).

Kabasakal and Dastmalchian (2001) argue that geography precedes some important factors such as religion, climate, ethnicity and language, which have undeniable impact on dominant culture values. A part of the data was collected from four Middle East countries (Turkey, Iran, Kuwait and Qatar), which are in the same cluster of Arab countries (Hofstede, 1985). All the countries are Muslim which suggests that Islam
would have its impact on culture dimensions as well as implicit leadership characteristics that are shown to be effective. Kabasakal and Dastmalchian (2001) found there are major similarities between the four countries. However, some differences exist, such as language, economic and social institutions, which would account for differences in cultures and implicit leadership theories. Leaders in such societies are expected to be sensitive to culture and tradition which become the inhibitors of change.

4.7.4 Leadership from an Islamic perspective

The concept of Islam penetrates all aspects of Muslim life, so it is very important to consider Islam when studying behaviour, personality, and attitude and so forth in Islamic countries. Saudi Arabia is an Islamic nation; all Saudis believe in Islam. Issues of rules and authority are addressed by Shariah (Islamic law). Thus it is essential to understand the concept of leadership in Islam, if we want to understand the leadership process in Muslim society (Omer, 2005).

Beekun and Badawi (1998, p. 6) define Leadership in Islam in two definitions. The first one is “the process by which the leader seeks the voluntary participation of followers in an effort to reach organisational objectives”. They assume that leadership is a social exchange process in which the leader and followers work alongside each other and share a vision to achieve objectives. During the process, the leader cannot force followers to change (Beekun and Badawi, 1998). The second definition is, “Leadership is the ability to persuade others to seek defined objectives enthusiastically. It is the human factor which binds a group together and motivates it toward goals. Management activities, such as planning, organising, and decision making are dormant cocoons until the leader triggers the power for motivation in people and guides them toward their goals” (Beekun and Badawi, 1998, p. 8). Alqahtani (2008) defines leadership in Islam as the ability to influence, direct and lead followers in an Islamic way in order to mobilise their enthusiasm to
achieve goals.

There are four sources that Saudi rules follow. The main source is the Quran, and the second source is Hadith (sayings of Muhammad witnessed by his companions) (Campbell, 2008). The third source is Ijmaa (scholars’ agreement on a particular issue), Ijmaa requires scholars to apply their intelligence and consult each other in order to agree or make a decision. The fourth source is Qeyas (analogy), which involves a comparison between a new issue and an established one on which a rule exists, to create a new decision or idea. The last two sources encourage people to think of old problems in a new way, so Muslims are encouraged to apply their intellect and think before making decisions.

Muslims believe that God (Allah) is the greatest leader and they have faith in him and follow his messengers. Muslims believe that the Prophet Mohammed is the most charismatic and best leader ever; they follow his attitudes, beliefs and behaviour. “When Muhammad met people he gave them his full attention, turning towards them as he spoke to them, With warmth he clasped their hands affectionately, it was said he was never the first to withdraw his hand from that of another, in conversation with someone he never looked over the other person’s shoulder, as if he wanted to talked to someone more important or interesting. (Beekun and Badawi, 1998). Nor did he ever look bored or distracted. People always remembered his face”... “He disliked the kind of gossip that speaks ill of people behind their backs. He was always carful to preserve a person’s honour or reputation .For example. He never pound fault with people in public, thought he could be very truthful and firm with individuals in private”(Adair, 2010,p.90).

Therefore, leadership in Islam is practical; people are encouraged to practise it in all aspects of their life (Beekun and Badawi, 1998). Islam should guide social and political as well as personal life (Berman, 2003). For example, the Prophet Mohammed said,
“When three are on a journey, they should appoint one of them as their commander” (Beekun and Badawi, 1998, p. 14). This shows that Islam recognises the value of leadership, and leadership practices to facilitate human activities. Moreover, God set guidance to appoint a leader in all aspects of life. For example, Muslims pray five times a day and when they pray as a group, they need to appoint one to be “Imam” (Leader). This Imam should be qualified and have specific features to guide the prayer. The criterion for appointing the Imam is how well he can read the Quran. So people in this situation recognise the importance of leadership and its characteristics.

Trust or Amanah is Leadership in Islam, "It represents a psychological contract between a leader and followers, by which the leader will try his best to guide the followers, to protect them and to treat them justly. Hence, the focus of leadership in Islam is on doing well" (Omer, 2005, p. 27). It is clear that the Islamic view of leadership is interested in charisma and tends toward transformational leadership. The Quran supports this approach, God says "Uswatun hasana" (Qur’an, Alahzab:21) , which means “an excellent example (person) to follow “or “role model”.

Consultation is a very important part of Islam. Before making decisions on all aspects of life, people are encouraged to consult. God says Muslims should “conduct their affairs by mutual consultation” (Qur’an, Alshura: 38). These behaviours are in line with components of Bass’ transformational leadership styles, specifically with individual consideration and intellectual stimulation. "The concept in Islam has a broad and comprehensive sense that includes both intellectual authority and political leadership” (Omer, 2005, p. 28).

Islam emphasises that acknowledged leaders must not act contrary to reason and must be sincere; otherwise they are not qualified to be. The Quran clearly supports this point, saying, "Why say you that which you do not? Grievous and odious is it in the sight of Allah that you say which you do not” (Qur’an, Alsaf: 2,3). Thus, Islam does not
encourage the dark side of leadership. Muslims are asked to behave in a good way. God says “Allah commands Justice, the doing of good and liberality to kith and kin; and he forbids all shameful deeds, injustice, and rebellion: He instructs you that you may receive admonition” (Qur'an, Alnahl: 90).

On the other hand, the term “guardianship” exists in Saudi Arabia (Muna and Simmonds, 1980), it is related in some ways to pseudo transformational leadership. In Saudi society people from early life must have a guardian, a boy until he reaches eighteen years old and girl until she is married, and children should obey their parents throughout their life, so the norm of obedience is shown in Saudi society. However, this in itself is neither good nor bad, but rather obedience toward inauthentic leadership might occur, as there is a possibility of pseudo transformational leadership being practised in Saudi banks. As suggested by Hofstede (1980), Saudi Arabia is high in power distance, which could lead to a high level of obedience and low level of relationship. Therefore, in the Saudi context, the impossibility of criticising leaders’ behaviours could facilitate leaders to act in a pseudo transformational way. Also, the high degree of power distance between managers and followers can occur as an outcome of pseudo transformational leadership behaviours. In addition, inauthentic leaders do not really pay attention to others’ needs, so managers might find it difficult to predict the reactions of subordinates (Charsley, 1988).

It could be concluded that leadership in the Saudi context is complex. Islamic teachings clearly encourage people to be close and positive to their followers, consider their needs and ask them to participate in the process of decision quality. However, traditional values impact on Saudi management. As indicated, Islam is significantly associated with the value of transformational leadership style and encourages leaders to have good relations with followers, and leaders are not encouraged to practise the dark side of leadership.
4.8 Conclusion

In this review of the literature, the evolution of the full range of leadership theory was discussed. Key to this discussion is the focus of the effect of three main styles (transformational, transactional and laissez-fair). The literature suggests that each style has its independent effect on organizational commitment. The Leader member exchange approach was also discussed and the literature asserts that there is a positive relationship with transformational and transactional leadership styles and a negative relationship with laissez-fair. As the literature indicates, however, the existence of gendered leadership styles is a debatable issue that has been discussed and evaluated based on socialization and experience, which can vary from culture to culture. An evaluation was provided of the leadership styles from two perspectives (Western and Islamic perspectives). The relationship between constructs and drawing the framework, and the development of hypotheses are discussed in the following chapter.
CHAPTER FIVE: HYPOTHESES DEVELOPMENT AND FRAMEWORK

5.1 Introduction

This chapter extends what was presented in the literature review chapters. By synthesising previous theoretical and empirical research and arguments, this part is developed to draw a framework in order to answer the research questions, and test the research hypotheses. Thus, this chapter focuses on how to link the constructs together in order to develop the framework.

The inner circle of this research is to explore gendered leadership in segregated work environments, which offer a unique sample structure to gain the research objectives. The main question (question one) of this research is: Is leadership behaviours and organisational commitment modified by gender in a segregated work environment?

The first part discusses the relationship between leadership behaviours (TRFLs, TXs and PSVs) and leadership relationship (LMX); it evaluates the differences and similarities between them, and how they are drawn in the framework. The second part discusses the linkage between leadership (behaviours and relationship) and employees’ organisational commitment (affective, normative and continuance). The final part discusses issues of relationship between gender and leadership, as one main aim of this study is to test whether leadership is gendered in a segregated organisation.

5.2 Transformational, Transactional, Passive Leadership Behaviours and LMX

Research hypotheses for question two

To what extent do leadership behaviours (TRFLs, TXs and PSVs) influence the leader member exchange (LMX) in a segregated work environment?

Most research focuses on the outcomes of LMX rather than antecedents (Erdogan and Liden, 2002). Limited research examines leader behaviours as an antecedent of LMX
Early development of LMX theory specifically notes that leader behaviours towards individual subordinates help to shape the quality of the exchange relationship with each subordinate. Graen and Cashman (1975) note that LMX development is highly established based on leaders’ behaviours to shape the quality of the exchange relationship with each follower.

However, there is ambiguity regarding relationships between TRFLs, TXs and LMX. Grean and Uhl-Bien (1995, p. 239) claim that “LMX is both transactional and transformational”. They argue that in the early stage of LMX (role taking), transactional leaders should take part in classifying the groups (in-group and out-group). Transactional leaders should offer limited social relationships with followers in order to test followers’ competences. They argue that economic exchange is not a part of leadership; rather it is a part of management. On the other hand Bass and Riggio (2006, p. 231) argue that “in the first stage, LMX is transactional; if the last stage is reached, it is transformational”. However, they point out the importance of the economic exchange in the early stage of the leadership process.

In addition, although transformational leadership and LMX are similar, they have some differences. Herman and Mitchell (2010, p. 91) point out that “although transformational leadership and LMX seem to be conceptually overlapping, they are two separate constructs theoretically”. Transformational leadership needs unique behaviours by leaders toward their followers based on self-concept motivational theory (Shamir et al., 1993), whereas LMX theory focuses on (dyadic) interpersonal relationships through role making processes (Grean and Uhl-Bien, 1995).

Moreover, Sosik and Jung (2010) argue that leaders’ member exchange theory (LMX) and the full range of leadership theory (FRLD) are similar in two ways. First, LMX theory focuses on the nature of social exchange (dyadic) between leaders and their subordinates. Contingent reward behaviour (transaction) is based on the economic
exchange relationship. Thus, it is derived from goal motivation theory, for example expectancy theory, leaders clarify goals and expect performance and productivity; followers are promised rewards when they meet such expectations (more or less). Second, an individualised approach is a major characteristic of LMX theory (Yammarino and Dansereau, 2008). For example, followers are given individualised attention by transformational leaders using coaching and monitoring and appreciating those followers who possess unique characteristics related to skills and abilities.

Herman and Mitchell (2010) argue that transformational leaders determine how followers maintain and develop the quality of the relationship with leaders, so when leaders display, for example, individualised consideration to followers, the relationships will be strong, because followers realise the value of such concern, and feel obligated to their leaders. Deluga (1992, p.245) notes that “transformational leaders may help foster the development of high-quality relationships and a sense of common fate with individual subordinates; while in a social exchange process, subordinates strengthen and encourage the leader”. While transactional leaders agree with their followers based on economic exchange (reward and punishment), a tendency toward transactional leadership might lead the leaders to be tough and aggressive toward their followers, thus the possibility of establishing relationships with leaders might be limited or difficult (Amabile, 1998).

Therefore, the effectiveness of material exchange could be different from social exchange; when the relationship relies on economic exchange, this exchange is not leadership at all, but is much closer to supervision or manager-ship. Leaders should begin with limited social exchange “transactions”, as long they are able to generate leadership that results in transformation (Grean and Uhl-Bien, 1995).

It can be concluded that transformational leadership enhances LMX relationships
(Herman and Mitchell, 2010). Recent researchers found that transformational leadership has a positive relationship with a high quality relationship and increases the level of such relationships (Grean and Uhl-Bien, 1995, Bass and Avolio, 2000, 2004, Lee, 2005, Wang et al., 2005; Herman and Mitchell, 2010).

The dimensionality of transactional styles could be complex. This indicates that the relationship between leaders and followers might not be established via economic exchange, it could be established in the first stage by the characteristics of MBEA, leaders taking corrective action would be able to begin to establish relationships with followers. The main distinction between economic and social exchange relationships that has been highlighted is that economic exchanges are impersonal so trust is not emphasise, while trust is viewed as the basic relationship for social exchange (Shore et al., 2006).

Based on the suggestion of Bass (1990), leaders who offer the MBEA characteristics could encourage followers to do their work independently until mistakes are about to occur or a standard is not met, MBEA leaders offer their followers time for the task to be completed. Thus, during this monitoring and coaching of leaders, the level of trust, respect and obligation would be slightly established by the characteristic of MBEA, for those who are in the out-group. Meanwhile, MBEP could lead to low or non-relationships between leaders and followers as leaders take corrective action only after mistakes are encountered; thus, in this case, the leader would offer a kind of punishment to followers or react negatively to mistakes or uncompleted tasks. In term of laissez faire , the leader avoid to get involve when important issue rise (Bass and Riggio, 2006), one of the important practise that employees pay attention is the interaction with their immediate leader, thus such leader was perceived as not effective and not offer the bridge to set the rapport with followers to establish the relationship.
In addition, studies found LMX acts as a mediator between transformational leadership and other psychological outcomes (Lee, 2005, Herman and Mitchell, 2010). Lee (2005) and Rowden (2000) found that transformational leader’s behavioural charisma improves LMX quality and commitment to the organisation and other outcome variables such as performance (Wang et al., 2005). On the other hand, LMX does not always mediate such relationships. In Singapore a study conducted by Lee (2008) found that transformational and transactional leadership are related positively with LMX, and innovation; however, LMX was not found to be a mediator between leadership behaviours and innovations.

A study conducted by Yukl et al. (2009) found that LMX was independently predicted by three leader behaviours (recognizing, consulting and delegating). However, transformational leadership styles were not found to be antecedent of LMX. This could suggest that relation-oriented behaviours (recognizing, consulting and delegating are primary predictors of LMX rather than charismatic and inspirational behaviours, as the casual study results with a variety of behaviours could make complexity, which affects the interpretation.

Following the above discussion, it could be hypothesised that LMX is established based on the degree of leadership behaviours. The relationships between leadership behaviours can be broken into three hypotheses:

**H1:** There is a positive relationship between transformational leadership behaviours and leader member exchange relationship (LMX).

**H2:** There is no relationship between transactional leadership behaviours (CR and MBEA) and LMX.

**H3:** There is a negative relationship between passive leadership behaviours (MBEP and LF) and LMX.
5.3 Leadership behaviours and Organisational Commitment (OC)

Research hypotheses for question three

To what extent do leadership behaviours (TRLs, TXs and PSVs) influence followers’ organisational commitment in a segregated work environment?

Bass (1985) argues that both transformational and transactional leadership behaviours can be exhibited and are effective by leaders, with an advantage for transformational leadership behaviours, which has the greatest power to produce commitment (Bass, 1990, Lee, 2005). Transformational leaders influence followers to achieve goals, and increase commitment (Bass and Riggio, 2006, Bono and Judge, 2003, Lee, 2005, Nguni et al., 2006 and Rowden, 2000).

Bass and Avolio (1995) suggest that orgabisational culture is related to leaders’ characteristics. For example, the transactional culture (economic exchange) provides short term commitment and has a positive correlation with continuance commitment, unlike transformational culture, which tends to produce and enhance long term commitment to the organisation and has a positive correlation with affective commitment. Transformational leadership has a clear effect on commitment to organisations; the strongest effect of transformational leadership appears to be on subordinates’ attitudes and their commitment to leaders and organisations (Bass and Riggio, 2006). Sosik and Jung (2010) state the importance of realising the action of the leader can cascade down the organisational hierarchy to create a positive or negative organisational climate; this could be done by the influence on organisational culture by a charismatic leader to increase organisational commitment and the outcomes of commitment.

Transformational leadership components can help to build followers’ commitment in different ways (Bass and Riggio, 2006). For example, a leader who is a model for subordinates and acts in ways to be emulated by others can easily build a
sense of commitment to leader and organisation. Also, when followers are considered individually and feel that their personal career needs are met and, additionally, monitoring and coaching by the leaders can provide them with a sense of increased competence. Moreover, when leaders stimulate followers’ intellects through employees’ experience, education and concerns, and employees are given a chance to solve problems by thinking in their own and different ways, this action can build the level of commitment of employees by trying to accomplish the organisation’s goals. Inspirational motivation should be considered by leaders to build emotional commitment to the organisation’s mission or goals, beliefs, values and responsibilities; these are encouraged by transformational leaders.

In addition, the influence of transformational leadership upon commitment can be displayed throughout empowerment (Avolio et al., 2004). “Empowerment is widely touted for its effectiveness, particularly where followers’ commitment, loyalty, and involvement are sought” (Bass, and Riggio, 2006, p. 193). Prior research argues that psychological empowerment could be described in narrow terms as the motivational concept of self-efficacy and, in general terms, as increased intrinsic task motivation (Thomas and Velthouse, 1990). It was suggested that followers who feel more empowered by their leaders display more commitment to the firm (Kraimer et al., 1999). As empowerment is a key/product of individualised consideration (Bass and Riggio, 2006), transformational leaders employ individualised consideration as a means of empowering followers and paying attention to their needs in order to develop them. Pitman (1993) reports that the commitment of 245 workers in six organisations is correlated with a variety of measures of transformational leadership among their leaders. Bass shows by the MLQ scale that charisma (idealised influence) and inspirational motivation (IM) correlates at $r=.24$ with commitment to organisational values and at $r=.40$ with commitment to stay with the organisation. A study in India which involved 261 managers in some public sector banks showed a significant amount of variance on
bank subordinates’ commitments to their organisations; as commitment increased financial performance increased.

Thus it could be hypothesised that:

\[ H4: \text{There is a positive relationship between transformational leadership behaviours and organisational commitment (OC).} \]

Regarding transactional leadership behaviour’s influence to predict employees’ organisational commitment, again, this approach is complex due to its dimensionality. Thus, the effect of transactional styles varies based on dimensions. As proposed, affective and normative organisational commitment involve the feeling and attachment of employees toward the organisation. Conversely, other employees are committed to the organisation due to cost/investment. In other words, they would stay in the organisation due to their cost of living, and to break from the organisation would harm their life (Meyer and Allen, 1997). This style/condition suggests that it is useful to employ contingent rewards (economic exchange) in order to obtain employees’ continuance commitment (Lee, 2005).

As mentioned in the literature review chapter, CR is behind economic exchange, while MBEA is behind social exchange as a part of corrective action with respect to their effectiveness. Thus, it can be argued that CR could increase the level of continuance organisational commitment, while MBEA influences the level of affective and normative but not continuance commitment. PSVs leadership behaviours would have negative relationship with OC as there are limited interaction between pairs, the shortage of the interaction between pairs might decrease the obligation toward leader and then to the organisations.

However, the significance of commitment dimensions is their independence; thus employees could have a sense of all three organisational commitment dimensions
(affective, normative and continuance) simultaneously. Consequently, it is reasonable for employees to express all dimensions simultaneously.

In view of the above, it is hypothesised that:

**H5:** There is a positive relationship between transactional leadership (CR and MBEA) behaviours and organisational commitment (OC).

**H6:** There is a negative relationship between passive leadership behaviours (MBEP and LF) and OC.

### 5.4 LMX and Organisational Commitment (OC)

**Research hypotheses for question four**

To what extent does leadership relationship (LMX) influence followers’ organisational commitment in a segregated work environment?

Transformational leadership theory suggests that transformational leadership behaviours are related to individual follower performance (Bass, 1985, Conger and Kanungo, 1998 and Shamir et al., 1993). Yuki (1999) argues that recent theories of organisation-based charismatic leadership focus intensively on dyadic processes, rather than on the leaders’ influence over groups. This viewpoint indicates that charismatic leaders need to understand individuals independently. Leaders should establish different levels of relationship with groups/followers, so different mutual trust, and respect and obligation among members are crucial and a prerequisite in order to achieve goals.

Based on Hofstede (1981), in a collectivist culture (e.g. the Saudi context) the effect of power distance between leaders and subordinates might cause ineffective communications. In a high power distance culture, the level of charismatic leadership is high; in fact this is due to leading by coercion and fear (ordinary role) (Dorfman, 1996). Thus, the outputs of personalised leaders might occur in the Saudi context, which could decrease the level of commitment toward the immediate leaders.
In Arab society, management practices are influenced by tribal traditions (Yahchouchi, 2009). Tribal leadership is also termed as paternalistic. It is defined as a “hierarchical relationship in which a leader guides the professional and personal lives of subordinates in a manner resembling a parent, and in exchange expects loyalty and deference” (Gelfand et al., 2007, p.493). Leaders are expected to play a father’s role, acting in "a highly personalized manner characterized by providing and caring for employees and favouring individuals within the family and tribe over outsiders" (Dorfman et al., 1997, p.307). In Arab countries, paternalism does not imply an official level of interaction between managers and employees (Yahchouchi, 2009). This indicates that the value of LMX is appreciated by followers. LMX may be manifested in paternalistic development of the relationship between the leader and followers (Zhao and Bo, 2007), and also in the way leaders care about the career progress of followers (Bass, 1990). Thus, such development could enhance the level of commitment toward leaders and then toward the organisation.

Moreover, the interaction (face to face interaction) between pairs would be crucial in leadership practises in order to achieve the attachment of employees to the organisation as well as being effective; however, the outcome of leadership practise can vary based on leadership behaviour. Leaders, who spend more time with subordinates, would build informal relationships. Thus, the leadership relationship is crucial for the leader to gain charismatic influence over followers. Thus, it can be hypothesised that:

\[ H7: \text{There is a positive relationship between leader member exchange (LMX) and OC.} \]

5.5 The mediation role of LMX between leadership behaviours and OC

Following the above discussions, it has been argued that employees who are committed to their organisations can also be committed to their top management, supervisor and work team (Becker and Billings, 1993). A study conducted by Becker et al. (1996) found that employees’ commitment to their supervisor is higher than
commitment to their organisation. Thus, building relationships is a key for leaders to exhibit their leadership behaviours and then to organisation.

This interesting finding reveals that the relationship between leaders and their subordinates can increase the level of organisational commitment. In other words, desired characteristics of the immediate leader and establishing a relationship with the leader can be exploited to retain employees to the organisation. Leaders’ characteristics, and leader member relationships, can heavily impact the level of organisational commitment (Lee, 2005 and Alammaj, 2000).

LMX was also found to increase the level of organisational commitment; Lee (2005) found that leader member exchange increases the level of normative and affective commitment, and mediates the relationship between transformational leadership styles and commitment. Leaders who establish a low quality relationship (out-group) with their subordinates could have low organisational commitment, while high organisational commitment is inspired when they establish a high quality relationship with subordinates (in-group). A meta-analysis conducted by Gerstner and Day (1997) found that LMX is positively correlated to performance rating and organisational commitment and negatively related to turnover. Also, Landry and Vandenberghe (2009) found that LMX negatively relates to supervisor-subordinate relationship conflicts, which increases the level of commitment among subordinates.

However, the level of organisational affective commitment varies due to the different effect of LMX’s dimensions. Jing-zhou and Wen-xia (2011) found that loyalty, affection and professional respect has a positive significant relationship with the level of affective commitment, whereas no influence was found for contribution. These results could raise two issues, 1. The level of organisational commitment can be different based on different LMX scales; they argue that the strength of multidimensional LMX its different aspect (dimensions) to predict outcomes; 2. The level of organisational
commitment can be different based on the level of analysis.

Based on the above evaluations:

\[ H8: \text{LMX mediates the relationship between TRFLs and OC.} \]
\[ H9: \text{LMX does not mediate the relationship between TXs and OC.} \]
\[ H10: \text{LMX mediates the relationship between PSVs and OC.} \]

5.6 The role of gender moderation of relationships between constructs relationships

“Because women and men perform different social roles, they exhibit different behaviour repertoires. Gender differentiation in social roles therefore produces gender differences in behaviours, abilities, and dispositional traits” (Marini, 1990, p.117). Based on social role theory (Eagly and Johannesen-Schmidt, 2001), gender behaviours could be classified as agentic versus communal attributes. Agentic and communal attribute are aspects of gender role are especially relevant to understand leadership. Agentic characteristics such as a tendency to be assertive and confident are ascribed significantly more to men than women. Conversely, communal characteristics such as the welfare of other people described, primarily, as a concern with the welfare of other people such as being kind, helpful, interpersonally sensitive and sympathetic, are ascribed more strongly to women than men.

Schmitt et al. (2008) examine the sex differences in five main personality traits across gender. Data were collected from 55 cultures (N = 17,637). The results indicate that gender differences are small. The differences are generally consistent with the stereotype of gender; women are reported as high in neuroticism, extraversion, agreeableness, and conscientiousness.

Gendered leadership behaviours were investigated based on the terms of task oriented and relation-orientated behaviours toward followers (Eagly and Johnson, 1990, Eagly et al, 2003 and Park, 1996). Kawatra and Krishnan (2004) found that feminine
leadership enhances people-orientation, team-orientation and collaboration. Boatwright and Forrest (2000) found that employees’ gender accounted for a significant proportion of the variance in employees’ preference for relational leadership behaviours, and mediated the relationship between gender and ideal preferences for relational leadership behaviours. Eagly and Karau (1991) claim that men focus to some extent more than women do on strictly task-oriented styles, while women focus somewhat more than men on relational oriented styles. Leaders with feminine characteristics would tend to possess relationship-oriented styles.

Eagly et al. (1992) conducted an empirical study of the differences between males and females based on the terms democratic and autocratic. Women were perceived to engage in more collaboration and offer participation in making the decisions. Luthar (1996) argues that a democratic, participative leadership style would be looked upon favourably and reacted to more positively than an autocratic, directive leadership style.

More recently, studies conducted on leadership styles have shifted to focus on the concept of transformational leadership (Bryman et al., 2011). In order to discover the difference between male and female leadership styles, it is useful to focus on specific behaviours, which can vary across gender. Transformational leadership style/approaches focuses on leaders being effective, leaders developing and motivating their followers in order to enhance their abilities to add value to the work environment (Burns, 1978). Leaders display a transformational leadership style when they stimulate their followers to move beyond their own self-interests to that of the organisation, while transactional leadership involves conducting the rewards and punishment in order to motivate the followers (Bass and Avolio, 2004). Transformational leadership has four dimensions, namely, idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. Transactional leadership is classified
into contingent reward and management-by-exception (MBEA and MABP). And the avoidance of leadership was labelled as laissez-faire (LF) leadership. It was found that female managers were perceived as more transformational and more inclined to contingent reward than male managers by male and female followers, while female managers were perceived as lower in management by exception behaviours (Bass and Avolio, 1996). It was found that leaders who display transformational leadership behaviours are able to influence their followers more than those who employ transactional styles. However, leaders who display passive leadership styles (MBEP and LF) are ineffective.

Specifically, Bass and Avolio (1994b) found that women managers are higher in charisma/idealised influence (II), inspirational motivation (IM) and individualised consideration (IC) than men, while men are higher in management-by-exception (MBEA and MABP), and laissez-faire (LF) leadership. Leadership effectiveness was found to vary in predicting countless outcomes. Transformational leadership enhances achievement-orientation and performance expectations (Kawatra and Krishnan, 2004). Moreover, Eagly et al. (2003) found that women are rated higher in transformational behaviours and men in transactional; however, the difference across gender was very small. On the other hand, Komives (1991) did not find differences across gender in exhibiting transformational leadership behaviours. Engen et al. (2001) argue that sex differences in the leadership styles of managers are negligible. Women managers are as strong and goal-oriented, and as socially-oriented and charismatic as men managers. According to Eagly et al. (2003) women were perceived slightly higher as more in transformational leadership behaviours than men. Individualised consideration was found to be the highest variance in comparison between males and females, with an advantage to women (Eagly, 2003). This indicates the women recognise individual needs and help followers develop skills needed to achieve goals. Also, they
are likely to spend time teaching, coaching and developing their followers. Additional evidence suggests that women develop relationships individually with each follower; the relationship needs to have one to one interaction (Yammarino et al., 1997).

**Gender similarity in segregated work environment**

In terms of the influence of gender similarity on leadership effectiveness, the literature has not provided deep evaluation and argument on this topic. Most previous studies provide mean difference scores across gender in leadership styles with the same and opposite sex, but no study tests the influence of gender in a segregated work environment. However, there might be a general tendency for people to respond more positively to leaders relative to the similarity. This part will evaluate the effect of gender similarity in possessing leadership styles.

Leadership is a social process. It is portrayed as an emergent process more than an achieved state. Thus, human interactions occur through relationships and networks of influence. These interactions could be displayed by some channels such as power. It has been argued that men and women differ in their use of power (Fletcher, 2004). With respect to the interaction with different gender, which is not the issue discussed in the current study, Carli (1999) argues that men possess higher levels of legitimate and expert power than women, while women display higher levels of referent power. Furthermore, Carli (1999) argues that men are more influenced by competent men, while women are equally influence by men and women. Thus, competence would not be effective for women as women are low in legitimate power. Moreover, in face to face interactions, men were perceived to be stronger in influencing others than were women. Although competence was not measured in the current study, Avolio et al. (2004) found that competence mediates the relationship between transformational leadership
styles and organisational commitment. Also Gerstner and Day (1997) found that competence is an antecedent of LMX. The result shows moderating effects of the relationship between LMX and competence and provides preliminary evidence for differential weighting of predictors for leaders and followers. Thus, it could be argued that in segregated organisations, female managers would be less effective than their male counterparts.

As mentioned, social roles are gendered and determined by a range of social, economic, political and cultural factors (Takala and Aaltio, 2004). In Saudi Arabia, it was found that both genders possess transformational behaviours, and followers preferred to work with transformational leaders (Al-Ammaj, 2000, Omer, 2005, Taleb, 2010, Walker., 2004), experience human relationship with their immediate leaders (Assad, 2006) and express favourable attitudes toward democracy (Moaddel, 2006). However, they were conducted in a single-sex environment. In fact, in Saudi Arabia such interaction between leaders and followers differs due to the roots of socialisation, traditional value and Islamic teaching (Assad, 2006 and Al-Rasheed, 2002). Thus, it could be argued that gender roles in Saudi Arabia strongly affect leadership practise. For example, women in Saudi Arabia are expected to be wives and mothers. They are expected to help others, and display concern for followers (Assad, 2006). However, Saudi men are in charge of guardianship (Metcalfe and Mimouni, 2012). Therefore, and in such a context, both genders believe that men have superiority over women, for example, in taking responsibilities, and making decisions, albeit with consultation and the right to serve and influence. Therefore, men could have an advantage in exerting leadership over women. Guardianship has been found to be a disadvantage for women’s mobility and career development (Minkus-McKenna, 2009). Moreover, Saudi men report advantages for men in work (Elamin and Omair, 2010). As a result, confidence and independence could be a bridge for men to practise leadership.
Conversely, their independence could restrict the wildlings of Saudi women from such practice.

On the other hand, the debate on what is the best between masculinity and femininity in leadership and the extent of discrimination across gender could provide Saudi women with a good environment for interaction. Thus, in such a context, it could be argued that both males and females are expected to be effective leaders, however, albeit an advantage for men. As such, it can be hypothesised that:

**H11: Gender moderates the relationship between TRFLs and LMX.**

**H12: Gender moderates the relationship between TXs and LMX.**

**H13: Gender moderates the relationship between PSVs and LMX.**

**H14: Gender moderates the relationship between TRFLs and OC**

**H15: Gender moderates the relationship between TXs and OC.**

**H16: Gender moderates the relationship between PSVs and OC.**

**H17: Gender moderates the relationship between LMX and OC.**

### 5.7 The framework of the study:

This study attempts to provide additional insights on the relationship between leadership styles and organizational commitment in segregated work environment. As shown in Figure 10 the framework was developed based on solid arguments including two leadership approaches, the full range of leadership theory (FRLT), and leader member exchange theory (LMX), and their relationship with organisational commitment with consideration of the sample structure in segregated work environment. It has been suggested that Transformational leadership styles is the first independent construct measured and reflected by three observed constructs: Idealised influence attributes (IIA), Idealised influence behaviours (IIB), and developmental behaviours (DEV) which
encompasses inspiration motivation (IM), intellectual stimulation (IS) and individualised consideration (IC). The second independent construct is TXs which is measured by two observed constructs: contingent reward (CR) and management by exception active (MBEA). The third independent construct is PSVs, measured by two observed constructs, management by exception passive (MBEP) and laissez faire (LF). These three independent constructs were suggested to be multidimensional constructs. LMX was measured as a unidimensional construct and acts as a mediator. Organisational commitment (OC) was measured by three observed constructs (OCA, OCN and OCC). One main contribution of the current research is to fill the gap the debate on male and female leadership differences and similarities. The Saudi context offers sample structure in a segregated work environment, where male and female have no interaction. Thus, the gender moderation role in the framework could add knowledge for this debate. However, as this framework will be validated and analysed by structural equation modelling (SME), the modification of the framework is possible with consideration of the theories.
Idealised influence attribute
Idealised influence behaviour
Inspiration motivation
Intellectual stimulation
Individualised consideration
Contingent reward
Management by exception active
Management by exception passive
Laissez faire

Transformational leadership behaviours
H1

Leader
member exchange
H8:10

Transactional leadership behaviours
H2

Passive leadership behaviours
H3

Organisational commitment (OC)
- Affective
- Normative
- Continuance

Gender
H11:17

H7

Observed construct
Independent construct (latent)
Mediator
Moderator
Dependent construct (Latent)

Figure 11 The framework
5.8 Conclusion

This chapter explains the relationship between the main constructs of the study. The main focus of this study is comparison between male and female leadership processes in a segregated organisation. In order to achieve this objective, a framework was developed. With respect to the construct validation process in the data analysis, three main leadership styles were proposed to serve as independent constructs: TRFLs, TXs and PSVs, LMX served as a mediator construct, while OC was a dependent construct. Seventeen hypotheses were developed on the basis of the framework (See Figure 12). The next chapter discusses the research methodology.
CHAPTER SIX: METHODOLOGY

6.1 Introduction
The aim of this chapter is to present and discuss the research methodology. It provides a justification for the methods used. This chapter consists of nine sections. Section two provides an evaluation of the research philosophy adopted in leadership studies. Section three discusses the differences between quantitative and qualitative methods. Section four explains the research approach adopted in this study. Section five describes the research design, and then the research strategy for the study is presented in section six. Section seven provides an overview of the questionnaire structure; more details are presented in the next chapter, which explains the research questionnaire development. Then sections eight and nine explain several analysis techniques. Data were analysed via several techniques in order to answer the research questions and test the research hypotheses. SPSS and Smart-PLS software was used to analyse the data. Mainly, structural equation modelling (SEM) was used for construct validation testing, and then the hypotheses were tested; specifically, moderated multiple regression (MMR) was used to test the moderation effect of gender between main constructs. Finally, section eleven discusses ethical issues.

6.2 Research Philosophy
Deciding on the research philosophy is the first stage of conducting research. The research philosophy is defined as “the process of scientific practise based on people’s assumptions about the world and the nature of knowledge” (Collis and Hussey, 2003, p. 45). Thus, it concerns the researcher’s attitude toward the research. Saunders et al. (2009) highlight three assumptions which need to be considered when developing the research: ontology, epistemology and axiology. Each assumption has a distinct role in the selection of the appropriate methodology (Collis and Hussey, 2003).
Saunders et al. (2009) and Guba and Lincoln (1994) indicate a perspective that views philosophies (i.e. positivism, realism, interpretism, and pragmatism) from an ontological, epistemological and axiological stance, and possible data collection techniques most often used. However, “these philosophies are not completely different. Put differently, they all share a common set of assumptions, and their commonalities classify these philosophies as examples of broader philosophies. However, whilst they share critical assumptions, they emphasize very different implications of those assumptions. And while they all focus on explaining methodological differences in research, they adopt different categorisation and classification” (Mkansi and Acheampong, 2012, p.133) (See Table 9).

Understanding the theoretical assumptions helps to recognize what the techniques we are working with do well and what they do less well, and enables us to design the research to take full advantage of their strengths and compensate for their weaknesses. A philosophical review can have a dual effect on the researcher: (1) it may open their mind to other possibilities, therefore, enriching their own research abilities, and (2) it can enhance their confidence in the appropriateness of their methodology to the research problem which, in turn, enhances confidence in their research results (Holden and Lynch, 2004). Thus, the comparisons addressed in Table 9 the researcher to compare between philosophies in order to choose the appropriate one for the current research objectives.

6.2.1 Ontology

Ontology is fundamentally concerned with the reality being studied (Collis and Hussey, 2003). “The purpose of social science is to understand the social reality as different people see it and to demonstrate how their views shape the action which they take within that reality” (Anderson, 2004, p.153).

There are two main perspectives of reality: objectivity and subjectivity.
Objectivism/positivism is realism/truth interchangeably. The truth obtained is value-free and objective, so the researcher is independent of the research and not affected by others’ opinions (McNeill, 2005). However, this philosophy is restricted by the researcher, who could dominate the research, and neglect others’ views, which could lead to some limitations of the study.

Subjectivism is based on the participation of respondents, who play the dominant role in the study, reflecting the phenomena of the situation, so the viewpoints/beliefs/actions of the respondents could be interdependent and affected by the factors of the research (researcher, respondents and the study) (Saunders et al., 2009). Collis and Hussey (2003) point out that subjectivism is a consequence of the interaction of respondents/participants, so the respondents are interdependent in the research, and take part in the process of the research.

6.2.2 Epistemology

Epistemology concerns how the researcher views the research (Collis and Hussey, 2003). Basically, there are two research paradigms, positivist and phenomenological, although scholars have different terms for them; for example the latter is also called interpretivism (Collis and Hussey, 2003).

According to Bryman (2004, p. 30), Positivism is defined as “an epistemological position that advocates the application of methods of the natural sciences to the study of social reality and beyond”. It holds great faith in the ability to examine and test things in a very objective manner (e.g. biology) (Crotty, 1998), and focus what can be observed and measured (Collis and Hussey, 2003). The researcher who embraces this paradigm is separate from what is being studied (Bryman and Bell, 2007), so the researcher’s feelings should not be involved in “a value free method” (Saunders et al., 2009). For example, it is very hard in this method to be involved with every participant’s
viewpoint/perspective, and take into consideration each respondent’s data individually. Here, the research questions are well defined in advance based on a solid literature review of the appropriate theories (Gray, 2009). However, although positivism can gain some degree of generalizability by covering a large sample, there is also doubt that the highly structured design could ignore relevant and interesting findings (Collins and Hussey, 2003). So the researcher should be aware during the research design of the best methodology to answer the questions and cover the research objectives clearly, otherwise, ambiguity and irrelevant data could result.

Conversely, interpretivism is defined by Walliman (2006) as the belief that social phenomena are in a constant state of change because they are totally reliant on social interactions as they take place. Even the accounts of researchers are subject to these interactions; therefore social knowledge can only be indeterminate. There is no definite yes or no regarding a research question and there are multiple realities (Lewis et al., 2009). The findings need to be interpreted from the researcher’s perspective (Saunders, et al., 2007). Hence; an object only carries a potential meaning based on how a researcher constructs it. In addition, the replication of the same study by a different researcher is likely to lead to different conclusions and findings (Gray, 2009). Importantly, this paradigm requires an inductive research approach involving looking for emerging patterns from data, which can be the basis for inferences and conclusions (Bryman and Bell, 2007).

Table 9 Comparison of four research philosophies in management research

<table>
<thead>
<tr>
<th>Ontology: the researcher’s view of the nature of reality or being</th>
<th>Positivism</th>
<th>Realism</th>
<th>Interpretivism</th>
<th>Pragmatism</th>
</tr>
</thead>
<tbody>
<tr>
<td>External, objective and independent of social actors</td>
<td>Is objective. Exists independent of human thoughts and beliefs or knowledge of their existence (realist), but is interpreted through social conditioning (critical realist)</td>
<td>Socially constructed, subjective, may change, multiple</td>
<td>External, multiple views chosen to best enable answering of research question</td>
<td></td>
</tr>
<tr>
<td><strong>Epistemology: the researcher’s view regarding what constitutes acceptable knowledge</strong></td>
<td>Only observable phenomena can provide credible data, facts. Focus on causality and law like generalisations reducing phenomena to simplest elements</td>
<td>Observable phenomena provide credible data, facts. Insufficient data means inaccuracies in sensations (direct realism). Alternatively phenomena create sensations which are open to misinterpretation (critical realism). Focus on explaining within a context or contexts</td>
<td>Subjective meanings and social phenomena. Focus upon the details of situation, a reality behind these details, subjective meanings motivating actions</td>
<td>Either or both observable phenomena and subjective meanings can provide acceptable knowledge dependent upon the research question. Focus on practical applied research, integrating different perspectives to help interest the data</td>
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<tr>
<td><strong>Axiology: the researcher’s view of the role of values in research</strong></td>
<td>Research is undertaken in a value-free way, the researcher is independent of the data and maintains an objective stance</td>
<td>Research is value laden; the researcher is biased by world views, cultural experiences and upbringing. These will impact on the research</td>
<td>Research is value bound, the researcher is part of what is being researched, cannot be separated and so will be subjective</td>
<td>Values play a large role in interpreting results, the researcher adopting both objective and subjective points of view</td>
</tr>
<tr>
<td><strong>Data collection techniques most often used</strong></td>
<td>Highly structured large</td>
<td>Methods chosen must fit the Small samples, in-depth investigations, qualitative</td>
<td>Mixed or multiple</td>
<td></td>
</tr>
<tr>
<td></td>
<td>samples, measurements, quantitative, but can use qualitative</td>
<td>subject matter, quantitative or qualitative</td>
<td>methods designs, quantitative and qualitative</td>
<td></td>
</tr>
</tbody>
</table>

Source: (Saunders, et al., 2009, p. 119)

### 6.2.3 Adopted philosophy:

Researchers need to be clear and consistent in using a particular research paradigm; consistency is a crucial aspect of good research practices. Once the researcher has understood and evaluated the two main assumptions (ontology, epistemology), the research paradigm should emerge through the evaluation and justification of the assumptions. This study is developed based on a positivistic philosophy, which is perceived to be appropriate to answer the research questions, achieve the objectives of the study and test the hypotheses. The objective view of reality depends on the existence
of valid theories that build a set of relationships.

The leadership process and leaders are seen as constructed in social interaction (Uhl-Bien, 2006). Leadership, ontologically, is identified within the interaction between leaders and their followers. Such interaction is based on influence, which needs to be considered in the leadership process, “Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purpose” (Rost, 1993, p.102). Leadership is based on three main actors: leader, followers and situation or context, such as gender, culture and so on. All of these constructs are seen in the leadership field as fundamental to develop or study phenomena in order to achieve shared goals (Drath et al., 2008) (See Figure 12). This study integrates two main leadership theories, the full range of leadership styles and leader member exchange, in order to test their integration. The full range of leadership styles is used to measure leader behaviours and LMX measures the interaction between leaders and followers. These interactions could affect the level of organisational commitment (shared goal). Kotter (2011,p.2) states that “the central to the phenomenon of leadership. Some of the mare as follows: (a) Leadership is a process, (b) leadership involves influencing others, (c) leadership happens within the context of a group, (d) leadership involves goal attainment, and (e) these goals are shared by leaders and their followers” For example, leaders and followers could interact in order to achieve affective organisational commitment by possessing transformational leadership behaviours, while continuous organisational commitment can be gained by using exchange reward. As a leader is influenced by the third main factor (situation or context), gender serves as a moderator between relationships.

The epistemological assumption is that what is measurable observable and can be considered as accurate knowledge. As the research objectives were formed based on a framework developed to measure the leadership styles and leadership relationship from follower’s perceptions in a segregated work environment, this phenomenon can be
observed and measured because it reflects the follower’s perceptions which can be identified and tested through hypothetic-deductive logic and statistical analysis. The framework of the current study is developed to test the construct validation and research hypotheses, using structural equation modelling (SEM), an advanced statistical technique, to compare between male and female leadership styles. Urbach and Ahlemann (2010) emphasize that research that applies SEM usually follows a positivist epistemological belief.

The axiological assumption was that the research is value-free because the research was examined established theories, and the relationship between leadership behaviours, leadership relationship and organisational commitment and whether they might be influenced by gender in segregated work environment.

In addition, and according to a number of studies (See Table 13 and 14) employing the full range of leadership theory and other dependent constructs, the quantitative is the prominent methodology in leadership studies. Therefore, the current research was developed based on positivist research, which is more consistent with the researcher’s view of the world. Also, as this study examines causal relationships, an objectivist view is adopted.

Figure 12 Fundamental framework of the ontology of leadership

Source: (Drath et al., 2008, p. 641).
6.3 Quantitative and qualitative approaches

Methodology is defined by Crotty (1998, p.55) as “the strategy, plan of action, process design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes”. Although the terms methodology and methods are used by some writers interchangeably, Collis and Hussey (2003) distinguish between the two terms; methodology refers to the whole research process, whereas methods refer only to the means by which data are collected, such as questionnaire, interview, documentation and observation.

There are two main types of research methods: qualitative and quantitative methods (Bryman and Bell, 2007). Bryman and Bell (2007, p. 26) point out that “quantitative research can be characterised as a linear series of steps moving from theory to conclusions”. “It is concerned with the numerical attributes of an individual or objects. Quantitative variables are divided into discrete quantitative variables and continuous quantitative variables” (Collis and Hussey, 2003, p.153). The quantitative approach helps to measure variables and is associated with deductive approaches (Collis and Hussey, 2003). Quantitative methods of measurement are used for three reasons: generalisation, replication and causality (Bryman and Bell, 2007).

However, although with a quantitative method it is easy and quick to collect data and could achieve generalizability, this approach has been criticised. Firstly, quantitative methods might fail to reflect social attributes. The measurement process lacks accuracy and precision. Also the reliance on procedures and instruments distorts the relationship between the research and everyday life (Bryman and Bell, 2007).

On the other hand, the qualitative method relies heavily on non-numerical attributes. It is explained by Bryman (2004, p.21) as “a research strategy that usually emphasizes words rather than quantification in collecting and analysis of data, and
that rejects the practise and norms of the natural scientific models”. It is associated with the interpretive philosophy. It facilitates the collection of rich data on participants’ thoughts, feelings and experience, and the meanings they attach to them. In this respect, it is useful for gathering information about social phenomena.

However, typical qualitative methods, such as in-depth interview, case study, observation and ethnography are time consuming and may only be feasible with small samples. Moreover, they generate a large volume of data, which is not in a standardised format. For this reason, the data may be difficult and complex to analyse and interpret (Bryman and Bell, 2007).

Using both quantitative and qualitative approaches in one study is a useful way to give the researcher an accurate picture of the situation of the study, filling the gaps which might be missed by one approach. Howe (1988) assumes that they complement each other, so they could be two faces of one coin. Rossman and Wilson (1985, p.631) suggest several reasons to combine quantitative and qualitative data. First, “to enable confirmation or collaboration of each other via triangulation”, second “to elaborate or develop analysis; providing richer detail;” and third, “to initiate new lines of thinking through attention to surprises or paradoxes, providing fresh insight”.

Therefore, the researcher should be aware of the process/steps that are established to be followed by setting a clear, organised, flexible plan for the methodology. Adopting the positivistic paradigm needs clear evaluated theory and a suitable measurement to present valuable data, and then suitable techniques to analyse the data, so the positivistic paradigm needs a strong body of prior literature to support the research process.

As the current study adopted a positivistic philosophy, it employed scales that test well-established theories. The quantitative method/positivistic paradigm is appropriate to test the relationship between constructs (causality). The positivistic approach can explore
the antecedents of leadership styles and how the relationship between employees and managers is built in order to test their effect on organisational commitment.

6.4 Research Approach

“The research approach refers to the extent to which the researcher is clear about the theory at the beginning of the research” (Saunders et al., 2009, p.124). There are two main research approaches, the deductive “testing theory”?hypothetic deductive approach and inductive “building theory” (Anderson, 2004, p.103). The deductive approach starts with conceiving the theory and proceeds successively to setting some questions and hypotheses, and then collecting data and finally testing the theory. This approach is commonly used in the quantitative method (Becker and Bryman, 2004). Researchers who embrace this approach are able to predict the effect between constructs as long as the constructs are designed in an appropriate framework. Mainly, leadership theories have been studied based on scientific approaches. “The vast majority of research that is conducted in the leadership domain is quantitative in nature, and theory can be tested only with quantitative methods” (Antonakis et al., 2004, p.55). The goal of science is to start with theory, and then understand phenomena objectively, uncontaminated by traditions and speculations (Williams and Slife, 1995). The scientific approach involves four steps (Kerlinger and Lee, 1999) as follows:

1. The problem expression, or idea (e.g., why do transformational leaders motivate followers better than transactional leaders; why is leadership hypothesised as gender issue?). The ideas in this step might be based on unscientific assumptions.

2. In the second step, relationships between two or more phenomena are developed by a conjectural statement (e.g., transformational leaders are associated with employee commitment for particular reasons).

3. The deduction or reasoning step comes as an outcome of the conjectural
statement development; hypothesised relationships between factors are speculated (e.g., transformational leadership style is associated with leader member exchange).

4. The last step includes testing, observation and experimentation to put the speculations to empirical test. Relationships between constructs are tested via some hypotheses (e.g., the leadership styles and the corresponding degree of commitment are measured to determine if there is a statistically significant association between leadership styles and follower commitment).

In contrast, the inductive approach starts with observation and extracting a case, then goes on to setting hypotheses and finally ends the process by generating theory (Collis and Hussey, 2003). This approach is fundamentally different from the deductive approach, in that the researcher starts by collecting data using a qualitative method (for example interview) and then analyses the data in order to generate the theory. The significance of this approach is the involvement with respondents’ viewpoints, and it is possible to amend part of the research during data collection to take account of interesting data that emerge.

Consistent with the positivist paradigm - and as this study is based on an extensive literature review, and built heavily on two main existing leadership theories - a deductive research approach was followed. This enables the researcher to adopt existing theories, as evaluated in the methodology chapter. Two leadership theories were evaluated in this research to investigate the relationship between leadership styles, leader follower relationship and commitment in a segregated organisation.

6.5 Research strategy

It is essential to consider the purpose of the study before choosing the research strategy, although different studies (e.g. exploratory, explanatory and descriptive) can adopt
deductive or inductive approaches. Bryman et al. (2011, p. xix) states, “Leadership studies have also been conducted in the widest range of empirical contexts. However, efforts to progress the theory to its next level of development are hampered by an overreliance on quantitative data, most especially survey-generated data”.

The most important consideration is not the label attached to a study but, rather, whether the strategy answers the research questions and objectives (Saunders et al., 2009). For the purpose of this study, survey was selected as the appropriate strategy to answer the research questions and test the research hypotheses. A survey questionnaire was used for collecting primary data. This was constructed based on prior extensive literature review.

6.5.1 Literature review

This research is underpinned by a solid literature review, in order to establish a reliable background to answer the research questions and test the hypotheses appropriately. While this study’s quantitative method relies on one instrument (questionnaire), which was developed in a Western context, examination of literature from different context/perspectives, both Western and Islamic provides an insight into how leadership is perceived across the two contexts. Books, journals and websites from different contexts were the main sources of information on how leadership is researched and perceived, and how gender is related to leadership styles in different contexts. This includes intensive information about leadership and gender in the Saudi context.

6.5.2 Primary data

Primary data can be collected by different methods, in different strategies, from different sources, so there are several ways to collect information, such as questionnaire (mailed, web–based questionnaire, or face to face), interview (structured or semi-
structured) diaries; focus group, observation and documentation (Collis and Hussey, 2003). There is no agreement on which method should be selected. However, researchers need to take into consideration why, how, and when to select the appropriate method, based on the objectives of the study, and the philosophy followed. For example, researchers who follow positivism mainly use quantitative data, while those adopting interpretivism use qualitative data (Collis and Hussey, 2003).

6.6 Questionnaire structure

Consistent with the positivist paradigm, a deductive research approach is followed in this study. The deductive approach starts with conceiving theory and proceeds successively to setting some questions and hypotheses, based on theories and then collecting data and the last step of this approach is testing the theory (Collis and Hussey, 2003, Becker and Bryman, 2004).

6.6.1 Variable/construct

“A variable refers to a characteristic or attribute of an individual or an organisation that can be measured or observed and that varies among the people or organisation being studied” (Creswell, 2009, p.50). The term variable is used differently in different disciplines. For example, psychologists prefer to use the term construct, whereas social scientists use the term variable (Creswell, 2009). However, the different terms used for a variable do not change its role/meaning in quantitative study. As the current study applies SEM to analyse the data, and the term construct is widely used in most published papers that use SEM, the term construct is used in the current study as interchangeable with variable.

6.6.2 Instrumentation

Three instruments were used in order to test the relationship between leadership styles (transformational, transactional and laissez faire), leader member exchange and
subordinates’ organisational commitment: 1- The multifactor leadership questionnaire (MLQ) is one of the most used instruments to measure transactional and transformational leader behaviours (Bass and Avolio, 2004, Snodgrass and Shachar, 2008). 2- Leader member exchange is measured by many LMX versions, and LMX-7 was found the most appropriate instrument to measure leader member relationship (Graen & Uhl-Bien, 1995). 3- Organisational commitment is measured by Meyer and Allen’s (1991) scale consisting of three components (affective, continuous and normative).

Leadership styles of managers are represented by bank employees’ perceptions of their managers’ leadership style; also relationship quality is rated by followers/bankers. Previous research shows that transformational style and high quality relationship are highly correlated (Bass and Riggio, 2006; Lee, 2005), and have strong correlations to organizational commitment (Bass and Avolio, 2004; Lee, 2005). Eagly et al. (2003) found that male and female leaders differ in displaying their leadership behaviour; however, the differences were very small.

This study has multiple constructs. There are three major independent variables: transformational, transactional and passive leadership styles (leadership behaviour). Leader member relationship is the mediator variable and organisational commitment (affective, continuous and normative) is the dependent variable. Gender is a control variable. See Table 10 for the main/latent constructs of the study.

Table 10 Constructs of the study

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Mediator variable</th>
<th>Moderator variable</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Transformational leadership behaviours</td>
<td>Leader member exchange LMX</td>
<td>Gender</td>
<td>Organisational commitment (affective, continuous and normative)</td>
</tr>
<tr>
<td>2. Transactional leadership behaviours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Passive leadership behaviours</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: the framework of the current study
Multi-item measures were used for all the study constructs, because a one-item scale may not be enough to truly identify the multi-attributes of a given construct (Churchill, 1995). The questionnaire consists of four sections:

Section one: Multifactor Leadership Questionnaire (MLQ) 5X short (Bass, 1985; Bass and Avolio, 1996).

Leadership styles were measured by the Multifactor Leadership Questionnaire (MLQ) 5X short (Bass, 1985; Bass and Avolio, 1997). It is one of the most used instruments to measure transactional and transformational leader behaviours (Snodgrass and Shachar, 2008). It is a tool for measuring three kinds of leadership style. Transactional factors are contingent reward and management by exception (active and passive). Transformational leadership factors are charisma or idealised influence (attribute and behaviour), inspiration motivation, intellectual stimulation and individualised consideration. The instrument also measures the absence or avoidance of leadership; this is the laissez-faire style. These nine factors are measured by 36 items; four items each (see Table 11).

Although MLQ consists of 45 items (Bass 1985, Bass and Avolio, 1996), for the purpose of this study, nine items, which measure the outcome of MLQ, were excluded since organisational commitment items replaced them as an outcome of the study. The remaining 36 items were distributed using a five-point Likert scale (from frequently, fairly often, sometimes, once in a while to not at all).

Table 11 Distribution of MLQ items

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Scale Name</th>
<th>Scale Abbreviation</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>Idealized Influence (Attributes)</td>
<td>IIA</td>
<td>10,18,21,25</td>
</tr>
<tr>
<td>Transformational</td>
<td>Idealized Influence (Behaviours)</td>
<td>IIB</td>
<td>6,14,23,34</td>
</tr>
<tr>
<td>Transformational</td>
<td>Inspirational Motivation</td>
<td>IM</td>
<td>9,13,26,36</td>
</tr>
<tr>
<td>Transformational</td>
<td>Intellectual Stimulation</td>
<td>IS</td>
<td>2,8,30,32</td>
</tr>
<tr>
<td>Transformational</td>
<td>Individualised Consideration</td>
<td>IC</td>
<td>15,19,29,31</td>
</tr>
<tr>
<td>Transactional</td>
<td>Contingent Reward</td>
<td>CR</td>
<td>1,11,16,35</td>
</tr>
<tr>
<td>Transactional active</td>
<td>Mgmt by Exception (Active)</td>
<td>MBEA</td>
<td>4,22,24,27</td>
</tr>
<tr>
<td>Transactional passive</td>
<td>Mgmt by Exception (Passive)</td>
<td>MBEP</td>
<td>3,12,17,20</td>
</tr>
<tr>
<td>Passive Avoidant</td>
<td>Laissez-Faire</td>
<td>LF</td>
<td>5,7,28,33</td>
</tr>
</tbody>
</table>

Source: (Bass and Avolio 2004, p. 110).
Examples of the nine dimensions are as follows:

Five transformational dimensions (20 items in total):

- Idealised Influence Attributes (IIA). An example is: “Talks about their most important values and beliefs”.
- Idealised Influence (Behaviours). An example is: “Instills pride in me for being associated with him/her”.
- Inspirational Motivation. An example is: “Talks optimistically about the future”.
- Intellectual Stimulation. An example is: “Re-examines critical assumptions to question whether they are appropriate”.
- Individualised Consideration. An example is: “Spends time teaching and coaching.

Three transactional dimensions (12 items in total):

- Contingent Reward. An example is: “Provides me with assistance in exchange for my efforts”.
- Management by Exception (Active). An example is: “Focuses attention on irregularities, mistakes, exceptions, and deviations from standards”.
- Management by Exception (Passive). An example is: “Fails to interfere until problems become serious”.

One Laissez-Faire dimension (four items in total). An example is: “Avoids getting involved when important issues arise” (Bass and Avolio, 2004, p. 95).

Section Two: Leader-Member Exchange (LMX7) (Graen & Uhl-Bien, 1995)

The quality of the dyadic relationship between manager and employee was assessed using a version of the LMX-7 (Graen et al., 1982). There are seven forms of LMX measure; the seven-item form is recommended by Graen & Uhl-Bien (1995, p. 236) as
the standard measure of LMX and “the most appropriate and recommended measure of LMX”. LMX7 consists of seven items and measures mutual trust, respect and obligation. Respondents were asked to indicate their answers to the seven questions on a five-point Likert scale. A sample item of this measure is: “Do you know where you stand with your supervisor…do you usually know how satisfied your leader is with what you do?” Managers were asked to perceive their relationship with five subordinates and also subordinates were asked to perceive their relationship with their immediate managers.


Employees’ commitment toward their organisation was measured using Allen and Meyer’s 18 items. Followers (bankers) were asked to measure their commitment in three types (affective, continuous and normative). Examples of the three dimensions are as follows: Affective: “I would be very happy to spend the rest of my career in the organisation”; Continuous: “It would be very hard for me to leave my organisation right now, even if I wanted to”; and Normative: “I do not feel any obligation to remain with my current employer”. The 18 items were answered using a seven-point Likert scale (from strongly disagree to strongly agree).

Section four: Demographic factors:

Demographic factors have effects on the results of social science studies. This study examines the effect of demographic factors including gender, age, level of education, marital status, position, salary, length of employment and the length of employment with a current leader. Those with less than four months employment were excluded. Details of questionnaire design are discussed in the next chapter (Chapter Seven).
6.7 Statistical Analysis Techniques

A number of analysis techniques were performed as follows:

6.7.1 Correlation

“Correlation analysis is used to describe the strength and direction of the linear relationship between variables. SPSS offers two types of correlation, a simple bivariate correlation, which measures the correlation between two variables, and partial correlation, which allows exploration of the relationship between two variables while controlling for another variable. Pearson correlation coefficients ($r$) can only take on values from $-1$ to $+1$” (Pallent, 2010, p.128). This is due to the linear association between variables in the scatterplot, which is used to inspect whether there is a linear relationship between variables, in which case that $r$ would be a meaningful statistic to conduct. It also helps to guess accurately what the value of $r$ would be if calculated (Kinnear and Gray, 2008).

The direction of such a relationship can be positive or negative. Pallant (2010) suggests the following ranges to rate the strength of the relationship in either direction:

Small relationship $r = .10 \text{ to } .29$ or $r = -.10 \text{ to } -.29$
Medium relationship $r = .30 \text{ to } .49$ or $r = -.30 \text{ to } -.49$
Large relationship $r = .50 \text{ to } 1.0$ or $r = -.50 \text{ to } -1.0$

Correlation analysis needs to be carried out to test certain assumptions before conducting regression analysis. Otherwise, regressions cannot achieve a significant value ($p>.05$), (Pallant, 2010; Kinnear and Gray, 2008; Hair et al, 1988). Tabachnick and Fidell (2007) argue that intercorrelations among the items should be greater than 0.3 to conduct factor analysis. However, co-linearity might exist when exogenous variables are highly correlated, so this assumption needs to be checked before regression analysis. The rationale of this assumption is that the variance between independent variables might not be clear when the correlations between predictors are
very high (Hair et al., 2006). Correlations between latent constructs and between observed constructs were achieved.

6.7.2 T test
There are different types of t-tests (e.g., independent samples- t-test, and paired-samples t-test (Pallant, 2010). The current study conducted the independent samples type to compare the different mean scores across gender. This type was used as a preliminary method for the analysis of variances across gender.

6.7.3 Regressions
Multiple regressions are a set of analysis techniques, which can be used to explore the relationship between one dependent/outcome/creation/continuous variable and one or more independent/predictor/ regressor variables (Hair et al., 2006).

Some assumptions need to be checked before conducting regression analysis, such as normality, outliers, linearity and sample size (Hair et al., 2006). Multiple regressions can be conducted in a variety of ways; three kinds are discussed as follows:

6.7.3.1 Hierarchical multiple regressions
The independent variables need to be entered into the model in order based on theoretical justification. Multiple regressions show how independent variables vary in predicting the dependent construct (Pallant, 2010). The researcher should be aware of the importance of “ordered” entering of variables. For example does the addition of more predictor variables develop the accuracy of the prediction of the model? Also, are new variables more useful than previous variables for prediction of the outcome variable? For addition of a new predictor in the model it needs to have at least the same value of $R^2$. The variance effect among independent variables can vary and is ascertained by checking the change of $R^2$ between models. Thus, the higher the value of $R^2$ change the stronger the effect the model has (Kinnear and Gray, 2008). This indicates that a new variable does not necessarily improve the model, unless there is a basic
theoretical background for it. For this reason, researchers were offered other kinds of regression to test sub/variables or variables simultaneously.

**6.7.3.2 Simultaneous/Standard multiple regressions**

In this approach, all relevant predictor variables are entered simultaneously into the equation. Each predictor variable can be evaluated by its power of prediction of the outcome variable. This approach is used to investigate the variance among predictor variables so there is no need to have order in entering variables. This approach was used for the current study. For example, theoretically and as argued by Bass and Riggio (2006) a leader can possess all transformational behaviours simultaneously, so all the five transformational leadership behaviours were collapsed into the model in order to compare variance among them. A first contribution of this step is to compare between the powers of the independent variables to predict employees’ commitment. A second contribution was to compare between male and female equations (Pallant, 2010). In standard multiple regression, the researcher should consider the Beta coefficient ($\beta$), which shows a change of standard deviation of each variable, so the stronger the value of Beta, the higher the effect for prediction of the outcome variable ($p>0.05$).

**6.7.3.3 Linear multiple regressions**

Linear multiple regression is a statistical method to test the inner relationship between two variables. The equation between variables is to estimate the coefficient of the straight line. The relationship between variables can be checked via the Beta coefficient ($\beta$) ($p>.05$). In order to accept a hypothesis, the value of $B$ needs to be in line with the hypothesis and the relationship significant; otherwise, the hypothesis is rejected. This technique was used to test the relationship between leader member exchange and organisational commitment.
6.7.4 Mediation and Moderation

Although mediating and moderating relationships have been confused with each other, they are very different. According to Baron and Kenny (1986), a mediating relationship investigates how and why effects occur, whereas a moderating relationship investigates when effects occur. So a moderator is a construct that alters the strength or direction of the relationship between an independent construct (predictor) and a dependent construct (outcome), while a mediator explains the relationship between independent and dependent constructs.

6.7.4.1 Mediation

Well known steps were discussed by Baron and Kenny (1986) and Judd and Kenny (1981) for conducting mediation:

**Step 1:** ensure that the independent variable is correlated with the dependent variable, and then establish the effect (e.g., transformational leadership styles have an impact organisational commitment). The correlation between the variables must be tested first.

**Step 2:** ensure that IV is correlated with MV. (e.g., transformational leadership styles are correlated with LMX).

**Step 3:** test the MV effect on DV. It is important to ensure the correlation between them is insufficient to conduct the mediation test (LMX has impact on organisational commitment).

**Step 4:** MV mediates the relationship between IV and DV when path c is zero (Full mediation). However, when path c exists, then partial mediation occurs (See Figure 14). However, meeting these relationships does not establish the mediation; some assumptions need to be considered before conducting such a test to be consistent with the data. For example, it is strongly advised to check the assumptions of normality, linearity etc.
6.7.4.2 Moderation

A moderator alters the relationship between an independent variable and the dependent variable. In other words, a moderator affects the direction and the strength of the relationship between the predictor and an outcome. For example, the level of the relationship between leadership and organisational commitment can differ between genders. It is very important to hypothesise at what level the moderator is strong or weak (Baron and Kenny, 1986).

Moderation can be tested by multiple regression analysis (MMR). To improve the interpretation of the regression coefficients, all predictor variables and their interaction need to be centred/standardised prior to model estimation (Cohen et al., 2003).

As shown in Figures 13 and 14, the equation of the moderation model is:

\[ Y = i_5 + \beta_1 X + \beta_2 Z + \beta_3 XZ + e_5 \]

\( \beta_1 \) is the coefficient relating the predictor variable (X) to the outcome (Y). \( \beta_2 \) is the coefficient relating the moderator variable (Z), to the outcome when \( X = 0 \). \( e_5 \) is the residual in the equation. \( i_5 \) is the intercept in the equation. \( \beta_3 \) provides the estimation effect, so when \( \beta_3 \) is different from zero, moderation exists.

The steps of moderation can be summarised as follows:

As mentioned, regression is the way to test for a moderator effect.

**Step 1**: one or more independent variables can be entered with the moderator variable in the first regression step.

**Step 2**: the interaction needs to be added in the second step.

If \( R^2 \) represents the percentage of the variance, it ranges from one to zero. When \( R^2 \) changes in step two, this is an indicator of the effect of the moderator (p<.05) (Baron and Kenny, 1986) (See Figure 15).
Figure 13 Mediation and Moderation Models
Source: (Fairchild and MacKinnon, 2009).

Figure 14 Steps of Moderation Model.
Source: (Fairchild and MacKinnon, 2009)
6.8 Structural Equation Modelling (SEM)

The field of leadership research has recently witnessed a significant development in methods to examine a range of topics. The main advantage of conducting SEM is to provide simultaneous tests of measurement reliability and structural relations, which may overcome some of the limitations that have been leveled at the way that management accounting has used more traditional statistical techniques (Smith and Langfield-Smith, 2004). SEM can be conducted by different software such as Smart-PLS, LISREL and AMOS. PLS can be used to avoid some assumptions, which may be faced by other software, Vinzi et al. (2010a, p.668-669) point out some advantages of selecting PLS as follows:

- “Places fewer premiums on explaining the covariance of all item measures.
- Avoids negative impact due to errors in modelling or item usage.
- Values soft distributional assumptions.
- Sees the research as not simply exploratory in nature, but interactive.
- Requires flexibility in modelling higher order Molar and Molecular models.
- Is interested in obtaining determinate scores/indices that are predictive.
- Has high model complexity.
- Faces relatively smaller sample size.
- Is less concerned with accuracy of parameter estimation or does not hold the belief in the notion of an underlying covariance based latent variable generating mechanism.
- Wants to shift the perspective of a “True” Model towards a prediction focus.
- Values Ease of Model Specification and Model Interpretation”.

The software does not tell the researcher how to specify the model. Also it does not need additional considerations such as measurement scale adequacy and model identification for the discrepancy estimator (Chin, 2010b, Vinzi et al., 2010a). However,
SEM estimates the parameters as long as the model was suggested by prior research/theoretical consideration; thus theory suggests that a construct should be included in the specified model (Schumacher and Lomax, 2010). So this issue is closely related to conceptual framework development and clear hypotheses. In other words, the researcher needs to have a very strong background when developing the framework; for example the researcher needs to be careful which constructs to include or exclude from the model.

PLS software can easily be described by a graphical representation with simple language. Once the prior step (model specification) is obtained, and using a component-based-approach, automatically recursive models are identified, unlike CBSEM, which needs articulation of parameter specifications (Chin, 2010b). For example throughout the CBSEM process, the researcher needs to move the model to be over-identified so that the fit of the model can be tested. Methods of estimating the model, basically, involve estimating the model with initial fits, testing how well the model fits, and then adjusting the model, testing the fit again and so on to reach a sufficient fit (model convergence) (Brown, 2006). In order to determine the identification, it is very important to assess the order condition; to estimate the number of free parameters, it must be below or equal to the number of distinct values in the matrix. The degree of freedom (df) can be automatically calculated via software such as AMOS. The identified model needs to be positive, not zero or negative (under-identified) (Schumacher and Lomax, 2010). Thus, PLS would be easily identified.

SEM can be broken down into two components: (1) the measurement model/outer model, which shows how various indicators are related to latent factors. Evaluation of the outer model is also referred to as confirmatory factor analysis (CFA). (2) The structural model/inner model, which specifies the relationship among latent variables.
(e.g., direct effect, indirect effect (mediator), or no relationship), which should be theoretically related either positively or negatively (Brown, 2006). Both stages are discussed below.

6.8.1 Measurement model/outer-model (model validation)

“Factor analysis provides a diagnostic tool to evaluate whether the collected data are in line with the theoretically expected pattern, or structure, of the target construct and thereby to determine if the measures used have indeed measured what they are purposed to measure” (Matsunaga, 2010, p.98).

The specification of CFA is highly driven by existing evidence. Thus, unlike exploratory factor analysis (EFA), CFA usually examines solutions by indicating the number of factors, the pattern of factor loading, and an appropriate error theory. Also CFA is an appropriate test of the validity of the research using different kinds of validity such as convergent and discriminant validity (Brown, 2006).

The researcher, who is not testing existing theory, needs to conduct principal components analysis (PCA) and EFA. For example, within EFA the researcher needs to generate as many items as possible to avoid missing data and maximise the face validity, and then reduce the initial pool by trimming items that do not emerge as expected. Subsequently, items are distributed into components, which is where CPA is used. The main distinction between PCA and CFA is that items are reduced into a number of components and then observed variables are assessed without measurement error (Matsunaga, 2010). However, the current research is limited to CFA. CFA has four primary functions - psychometric evaluation of measures, construct validation, testing method effects, and testing measurement invariance (Harrington, 2008). Relationships among variables can be tested directly using a variety of analytical techniques, e.g., regression.

Confirmatory factor analysis is an initial element within the broader class of structural
equation modelling (SEM)/covariance structure analysis. CFA specifies the “measurement models” delineating how latent variables are reflected by observed construct. Once a satisfactory measurement model is gained, path analysis can be explored by linking between latent variables (Thompson, 2004).

To reproduce the relationships among latent variables (exogenous or endogenous), goodness of the model fit needs to be determined by how both the measurement and structure models are specified. The measurement model must be able to reproduce the relationship among the indicators (e.g., factor loading and correlations); otherwise a mis-specified model (poor-fitting solution) will result (Brown, 2006).

Thus, CFA/outer model verification is prior and a crucial step before the next stage of SEM, the structural modelling/inner model (causality relationship). Once CFAs are achieved, the relationships between constructs are ready to be tested (causality and nomological validity testing).

6.8.1.1 Construct Validation

According to Gray (2009, p.260), validity is defined as “a research instrument must measure what it was intended to”. “The validity of a scale refers to the degree to which it measures what it is supposed to measure, however, there is no one clear-cut indicator of scale’s validity”. “The main types of validity are content validity, criterion validity and construct validity” It includes several categories, namely, content, predictive and statistical validity (Pallant, 2010, p. 7).

As evaluated by O’Leary-Kelly and Vokurka (1998), the validity was tested based on three types of validity: content validity, construct validity and nomological validity (construct validation process) (See Figure 15). Construct validity was tested through two widely used methods: discriminant validity and convergent validity. CFA/inner model was used to test the validity as the most comprehensive method for testing construct validity (O’Leary-Kelly and J Vokurka, 1998). It uses only statistical tests and outputs
for assessing construct validity, such as factor loading and factor correlation.

- **Definition**: Identification of theoretically based empirical indicators (items that are expected to measure the construct).

- **Definition**: Empirical assessment of the extent to which empirical indicators measure the construct:
  - Unidimensionality
  - Reliability (composite reliability)
  - Discriminant validity (AVE).

- **Definition**: Determination of the extent to which the construct relates to other constructs in the predictable manner (causality)
  - $R^2$

Figure 15 Construct validation process.

Source: (O'Leary-Kelly and J Vokurka, 1998).
6.8.1.1.1 Content validity

The current study used established scales and their content validity had been tested previously. It is important to prove that the group of measurement items logically/theoretically and empirically measures the construct (Nunnally, 1978). Although this study was conducted in a different context from the one where the scales were developed, the pilot study and the literature review suggest that there is alignment between the Western and Islamic perspectives of leadership.

6.8.1.1.2 Construct validity

Construct validity is a very important scientific concept in all psychological fields. It is defined as “representing the correspondence between a construct (conceptual definition of a variable) and the operational procedure to measure or manipulate that construct” (Schwab, 1978, p.6). “The construct validation focuses on the extent to which a measure performs in accordance with theoretical expectations. Specifically, if the performance of the measure is consistent with theoretically derived expectations, then it is concluded that the measure has construct validity. On the other hand, if it behaves inconsistently with theoretical expectations, then it is usually inferred that the empirical measure does not represent its intended theoretical concept” (Carmines and Zeller, 1979,p.19:20). It involves the assessment of the degree to which a measure correctly measures its targeted variable (O’Leary-Kelly and Vokurka, 1998). The construct validity was assessed to attain four aims: dimensionality, reliability, discriminant validity and convergent validity.

6.8.1.1.2.1 Multidimensionality versus Unidimensionality

Multidimensionality refers to a construct which has two objectives, measured by two observed constructs (Hair et al., 1988), while “Unidimensionality refers to the existence of a single trait or construct underlying a set of measures (or empirical indicators)”
In other words, the latent construct needs to be measured by items/indicators or observed constructs, which need to be significant at \( p > 0.05 \). There are two main methods for assessing the dimensionality: exploratory factor analysis and confirmatory factor analysis. Theoretically, factor analysis is conducted to test unidimensionality; theoretically some alternative models are suggested to test the best model fit according to unidimensionality. For instance, it was hypothesised that transformational leadership styles were measured by one, three, four and five observed constructs. Therefore, and theoretically, latent constructs are tested to prove their multidimensionality (high order/second order) or their uni-dimensionality (low order/first order).

### 6.8.1.1.2.2 Reliability

The reliability of a measure refers to the consistency of a measurement instrument in measuring the same construct (Gray, 2009). It indicates how free it is from random error (Pallant, 2010, p. 6). “Poorly measured variables, indicators, scales, factors, or composites influences sample size requirements and potentially deteriorate power in the study” (Marcoulides and Saunders, 2006,p.vii). Thus, reliability needs to be considered during the measurement stage. Reliability can be tested by different methods, for example: test-retest reliability. This method is conducted on different occasions by testing the variance of correlations between two occasions. High correlation between test outcomes in two occasions indicates good reliability, as reliability should be stable over time (Pallant, 2010). For cross sectional studies, there are two main methods to test reliability 1. Cronbach's \( \alpha \) coefficient and 2. Composite reliability (Hair et al., 2012), which are discussed below.
1) Cronbach's $\alpha$ coefficient method

The Cronbach's $\alpha$ coefficient is one of the well-known tests for assessing reliability. It is a measure of internal consistency, which indicates that all measuring items in a scale measure the same attribute (the items hang together) (Pallant, 2010). Reliability is based on the correlation between the items/indicators of the construct. Values range from zero to one (high correlation between items/indicators high reliability). A cut off of 0.7 is recommended by Nunnally (1978). However, Nunnally et al. (1967) consider a cut off of 0.5 is acceptable, while also Van de Ven and Ferry (1980) argue that a cut off of 0.4 is acceptable. So there is no agreement on the specific cut off for reliability. Hair et al. (2011) argue that the use of Cronbach’s alpha in assessing reliability is not recommended in PLS-SEM. For the current study the Cronbach’s coefficient alpha ranged between 0.71 and 0.92, and correlation between items/indicators ranged between 0.42 and 0.75.

2) Composite reliability ($CR^*$) method

Composite reliability was developed by Fornell and Larcker (1981), and is calculated to assess the internal consistency of the measurement model. The results of $CR^*$ should be similar to Cronbach’s alpha ($\alpha$), $CR^*$ takes into consideration the factor loading. It is tested using the following formula:

$$CR^* = \frac{\text{Squared } \sum \text{ factor loadings for construct items}}{(\text{Squared } \sum \text{ factor loadings for construct items}) + (\sum \text{ the estimation error variance})}$$

(Hair et al., 1988).

In PLS, the composite reliability is calculated automatically. The value of $CR^*$ is acceptable at $> 0.7$. However, reliability is a necessary but insufficient condition for validity (Morgan, 1989).

6.8.1.1.2.3 Discriminant validity

“Discriminant validity is the degree to which measures of different latent variables are
unique” (O'Leary-Kelly and J Vokurka, 1998,p.399). It was assessed using various methods, for example the correlation between latent constructs was examined and also, average variance extracted analysis was used.

1) Correlation

Basically, discriminant validity can be obtained by testing the correlation between the latent constructs. Discriminant validity is supported when the correlations are different from 1.0 (Bagozzi et al., 1991). The correlations for the current study did not exceed 0.80. Also multicollinearity was tested. Moreover, average variance extracted (AVE) needs to be tested to prove the discriminate validity among construct.

2) Average Variance Extracted analysis (AVE)

“Discriminant validity is assessed by comparing the shared variance (squared correlation) between each pair of constructs against the average of the AVEs for these two constructs” (Bove et al., 2009, p.702), the value of AVE for each construct should be at least 0.50 (Fornell and Larcker, 1981). Moreover, Fornell and Larcker (1981) suggest that discriminant validity can be proved when the average of AVE is more than the correlation squared of two variables/constructs.

The formula is

\[
\text{AVE} = \frac{(\sum_{FL2}) \text{varF}}{(\sum_{FL2}) \text{varF} + \text{err}}
\]

where FL, F and err are the factor loading, factor variance and error variance respectively.

The validity of all instruments utilised in this study was established by existing theories, MLQ (Bass, 1985; Bass and Avolio, 1996), LMX-7 (Graen & Uhl-Bien, 1995) and OCS (Meyer and Allen, 1991). The discriminant validity was proved between the main constructs, which indicates the constructs had independent measurement. However, combination and separation in leadership styles measurement were followed in order to obtain the validation of the constructs.
6.8.1.1.3 Convergent validity

Convergent validity relates to the degree to which multiple methods of measuring a variable provide the same results (O’Leary-Kelly and Vokurka, 1998). It explains the correlation between responses (Chin, 2010b). The factor loading/outer with cross-loading should be higher than the factor loadings with other items of other constructs. As suggested by Anderson and Gerbing (1988), convergent validity can be assessed using four criteria: first the factor loading (FL) for each item should be over the recommended value (FL>0.50); second, the average of FL should be more than 0.5; third, composite reliability (CR) should be more than 0.7, and finally, the value of AVE should be more than 0.50. Loadings of 0.5 and 0.6 are considered acceptable. For the current study, the rule of thumb of accepting items with a loading of 0.707 or more was followed (Chin, 2010b). Also the value of AVE was considered for convergent validity.

6.8.1.1.4 Nomological validity (substantive validity)

In social science, behavioural scales were developed based on theoretical and empirical evidence. Nomological validity entails the relationship between constructs theoretically and empirically (Hair, 2006). This validity is supported by obtaining the value of path estimation ($\beta$), which is discussed in detail in the second stage.

6.8.2 Structural model/inner model

In this stage, once the CFA/inner model stage was approved, the causality between independent (exogenous) and dependent (endogenous) construct was tested. The model testing (GOF) can be evaluated based on the software used. For example AMOS has criteria that need to be met. Common measures of overall goodness of fit (GOF) are $X^2$ value, goodness of fit index (GFI) and root mean square residual (RMR). Large values of $X^2$ indicate a bad fit. GFI are better when near to one and greater than 0.95
and RMR need to be as small as possible (near to zero). Comparative Fit Index is very significant with value greater than 0.95. RMSEA is one of the incremental fit indices (Schumaker and Lomax., 2010); it is acceptable if smaller than 0.08. Matsunaga (2010) recommends CFI/RNI/TLI greater than 0.90.

As the current study used PLS to test the model and hypotheses, non-parametric statistical tests were conducted to evaluate good model fit. For GOF, in PLS, only three criteria were considered to test the good model fit: $R^2$, Standardised beta coefficients ($\beta$), and $t$ value, which are discussed below.

### 6.8.2.1 Standardised beta coefficients ($\beta$)

The path estimation is used to test the relationship between constructs (regressions), but correlation is considered by the value of $r$. So $\beta$ value tests the effect of an independent variable on the dependent variable, but not the correlation between constructs. The way $\beta$ value is shown depends on the software used. For example, Amos presents the results automatically by checking the output under the standardised and unstandardized regression tables (Byrne, 2001). The PLS structural model’s path represents standardised beta coefficients ($\beta$)/ consequential from estimation of the least-squares method. The $\beta$ estimated can be tested by means of $t$-statistics, which are automatically calculated in PLS (Vinzi et al., 2010a). The significance of $\beta$ is considered based on selected $p$ value level. For reference, $t$ values corresponding to the two-tailed $p$-values of 0.10,0.05, 0.01, 0.001, and 0.0001 are 1.64, 1.96, 2.58, 3.29, and 3.89, respectively (Rosenthal, 1991). Henseler et al. (2009b) argue that any value of $t$-statistic of 1.64 or more should be left in the model. They point out that beta coefficients of 0.02, 0.15 and 0.35 or more can be interpreted as a weak, medium and large effect respectively. The current study used this criterion. Thus, any relationship (path coefficient) with a $t$-statistics value of 1.64 ($p \leq 0.10$) or more is retained in the model.
6.8.2.2 Determination coefficient ($R^2$)

“The determination coefficient ($R^2$) reflects the level or share of the latent construct’s explained variance and therefore measures the regression function’s “goodness of fit” against the empirically obtained manifest items” (Backhaus et al., 2003, p.63). The value of $R^2$ ranges between 1.00 and zero, and there is no agreement on the threshold value of $R^2$. However, the greater the values of $R^2$ the more variance in the dependent construct can be explained by the independent construct (Chin, 1998b). Chin (1988b) claims that $R^2$ values of 0.19, 0.33 and 0.67 are considered as weak, moderate and small respectively. Table 12 presents a summary of analysis functions and techniques used in the current study.
<table>
<thead>
<tr>
<th>Task</th>
<th>Purpose</th>
<th>Software</th>
<th>Analytical technique</th>
<th>Cut off value</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coding and editing of data</td>
<td>To define the labels each variable and assign numbers to each of the possible responses</td>
<td>Excel and SPSS</td>
<td>NA</td>
<td>NA</td>
<td>(Pallant, 2010)</td>
</tr>
<tr>
<td>Missing data examination</td>
<td>Examination of missing data and its possible treatment.</td>
<td>SPSS</td>
<td>Computation</td>
<td>NA</td>
<td>(Pallant, 2010)</td>
</tr>
<tr>
<td>Outliers</td>
<td>a case with such an extreme value on one variable or such a strange combination of scores on two or more variables</td>
<td>SPSS</td>
<td>Linear regression</td>
<td>Standardised residual &lt; -3.0</td>
<td>(Tabachnick and Fidell, 2007)</td>
</tr>
<tr>
<td>Normality</td>
<td>the shape of the data distribution for an individual metric variable and its correspondence to the normal distribution</td>
<td>SPSS</td>
<td>P-P plots</td>
<td>a straight diagonal line</td>
<td>(Hair et al., 1998)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SPSS</td>
<td>Kolmogorov-Smirnov and Shapiro-Wilk (K-S) test</td>
<td>p&gt;.05</td>
<td>(Hair et al., 1998)</td>
</tr>
<tr>
<td>Common method bias (CMB)</td>
<td></td>
<td>SPSS</td>
<td>Harman’s (1976) one-factor test</td>
<td>one factor is more than 50% of the total variance</td>
<td>(Harman, 1976)</td>
</tr>
<tr>
<td>Multicollinearity</td>
<td>To ensure that correlation matrix of three or more independent variables should be weakly related to each (&lt;0.90)</td>
<td>SPSS</td>
<td>Pearson’s correlation</td>
<td>r&lt;0.8</td>
<td>(Pallant, 2010)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SPSS</td>
<td>VIF and Tolerance</td>
<td>VIF&lt;10, and tolerance &gt;0.1</td>
<td>(Pallant, 2010)</td>
</tr>
<tr>
<td>Composite reliability</td>
<td>It measure of internal consistency.</td>
<td>Smart-PLS</td>
<td>CFA</td>
<td>Value &gt; 0.6</td>
<td>(Hair et al., 2006)</td>
</tr>
<tr>
<td>Convergent validity</td>
<td>It is the degree to which two measures of the same concepts are correlated. It is demonstrated by the uni-dimensionality using average variance extracted</td>
<td>Smart-PLS</td>
<td>CFA</td>
<td>Value &gt; 0.5</td>
<td>(Fornell &amp; Larcker, 1981)</td>
</tr>
<tr>
<td>Discriminant validity</td>
<td>It ensures that each latent variable shares more variance with its own block of indicators that with another latent variable</td>
<td>Smart-PLS</td>
<td>CFA</td>
<td>√AVE≥0.5, highest correlation≤0.714</td>
<td>(Fornell &amp; Larcker, 1981)</td>
</tr>
<tr>
<td>Criterion validity</td>
<td>It can be quantified by the correlation coefficient between sets of measurements, it proved the external validity</td>
<td>Smart-PLS</td>
<td>Correlation</td>
<td>Small = r =±0.10 to ±0.29, Medium = r =±0.30 to ±0.5, Large = r =±0.50 to ±1.0</td>
<td>(Chin, 1988)</td>
</tr>
<tr>
<td>Demographics</td>
<td>Detailed information on bankers’ (subordinates’) demographic characteristics</td>
<td>SPSS</td>
<td>Mean, standard deviation, NA</td>
<td>(Pallant, 2010)</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>------</td>
<td>-----------------------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Measurement model evaluation</td>
<td>Measurement models delineate how latent variables are reflected by observed construct. Once a satisfactory measurement model is gained, then path analysis can be explored by linking between latent variables</td>
<td>Smart-PLS</td>
<td>CFA</td>
<td>See section 8.5</td>
<td>(Chin, 1998; Hair et al., 1988; Hair et al., 2011 and (Gefen et al., 2000).)</td>
</tr>
<tr>
<td>Structural model evaluation</td>
<td></td>
<td>Smart-PLS</td>
<td>CFA</td>
<td>See section 8.5</td>
<td></td>
</tr>
<tr>
<td>Dimensionality</td>
<td>Substantial degrees of within-method convergent validity and discriminant validity were processed in order to test dimensionality. The square root of AVE should be greater than any correlation coefficient between constructs</td>
<td>Smart-PLS</td>
<td>AVE and Correlation</td>
<td>( \sqrt{AVE} \geq 0.5 ) highest correlation ( \leq 0.7 )</td>
<td>(Chin, 1998. Hair et al., 1988).</td>
</tr>
<tr>
<td>Correlation</td>
<td>to describe the strength and direction of the linear relationship between variables</td>
<td>SPSS</td>
<td>Pearson’s correlation</td>
<td>Small = ( r = \pm 0.10 ) to ( \pm 0.29 ) Medium= ( r = \pm 0.30 ) to ( \pm 0.50 ) Large ( r = \pm 0.50 ) to 1.0</td>
<td>(Pallant, 2010)</td>
</tr>
<tr>
<td>( Z_{obs} )</td>
<td>Measure the differences in correlation between tow groups. Z score can be calculated using the following formula: ( Z_{obs} = \frac{Z1-Z2}{\sqrt{\frac{1}{N1-3} + \frac{1}{N2-2}}} )</td>
<td>SPSS</td>
<td>Correlation</td>
<td>(-1.64 &lt; Z &lt; 1.64)</td>
<td>(Pallant, 2010)</td>
</tr>
<tr>
<td>T-test</td>
<td>To compare the different mean scores</td>
<td>SPSS</td>
<td>independent samples - t-test</td>
<td>( p &gt; 0.05 )</td>
<td>(Pallant, 2010)</td>
</tr>
<tr>
<td>Mediation</td>
<td>A mediator explains the relationship between independent and dependent variables</td>
<td>Smart-PLS</td>
<td>Sobel test</td>
<td>( p \leq 0.01 )</td>
<td>(Preacher and Hayes, 2004)</td>
</tr>
<tr>
<td>Moderation</td>
<td>A moderator is a variable that alters the strength or direction of the relationship between an independent variable (predictor) and a dependent variable (outcome). Multiple group analysis assesses the differences of paths across gender and is basically concerned with the value of Beta (standardised regression coefficients). Beta (( \beta )) value tells how much effect the change of indicator has on the criterion variables. A Smith-Satterthwait test was conducted to test the differences in ( \beta ) value/relationships across gender.</td>
<td>Smart-PLS</td>
<td>MGA and Smith- Satterthwait test</td>
<td>( -1.96 &lt; Z &lt; 1.96 )</td>
<td>(Chin, 2002)</td>
</tr>
<tr>
<td>SPSS</td>
<td>MMR</td>
<td>( p &lt; 0.5 )</td>
<td>(Cohen et al., 2003) (Baron and Kenny, 1986)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F test</td>
<td>To test the comparisons between the effects among two or more independent constructs to predict the dependent construct. The formula was produced by Falk and Miller (1992) to test the significance of ( R^2 : F = \frac{R^2}{(1-R^2)/(N-M-1)} )</td>
<td>Excel</td>
<td>F test</td>
<td>( p \leq 0.10 )</td>
<td>(Hair et al., 2011a)</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>It measures how much variability in outcome is accounted for by the independent constructs.</td>
<td>Smart-PLS CFA</td>
<td>Value 0.67, 0.33, 0.19 are substantial, moderate, and weak respectively</td>
<td>(Chin, 1998)</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>β coefficient</strong></td>
<td>It measure of multiple correlation coefficients between independent and dependent constructs.</td>
<td>Smart-PLS CFA</td>
<td>Value $t=2.58$, $p&lt;0.01$, $t=1.96$, $p&lt;0.05$, and $t=1.64$, $p&lt;0.10$</td>
<td>(Hair et al., 2006, p.390)</td>
<td></td>
</tr>
</tbody>
</table>
| **Goodness of fit (GoF)** | It is criterion of global goodness of fit, which is computed through the geometric mean of the average communality and average $R^2$. Tenenhaus et al. (2005) proposed a formula to measure the goodness of fit index as follows:  

$$\text{Goodness of Fit index (GoF)} = \sqrt{\text{average } R^2 \times \text{average communality}}$$  

Excel Equation Value closer to 1 is better | (Tenenhaus et al., 2005) |

Source: developed by the researcher.
6.9 Ethical Issues

There is no absolute right or wrong ethical procedure that researchers need to follow, but being ethical in research is vital to gain high quality results and avoid damage to the research field (Saunders et al., 2003). “Ethics refers to the appropriateness of your behaviour in relation to the rights of those who become the subject of your work, or are affected by it” (Saunders et al., 2003, p.129).

Before the research is undertaken, the researcher should have formal ethical approval. This might be obtained from, for example, the University. This approval is gained by submitting details of the nature of the study, including the aim and objectives of the study (Broome, 2006). “Ethical issues should be incorporated into the earliest stages of study design. Initial stages of study design are critically important to maintaining high ethical standards because early choices made during the design process (e.g., about the study population, choice of control, or data collection procedures) influence the nature of ethical issues that will arise” (Laneader et al., 2007, p.21).

During the data collection step, researchers need to pay attention to some important points. For example, participants must be fully informed about the study before giving consent to participate. Also, the privacy of participants needs to be maintained. They have the right to withdraw whenever they want to. Also, the data that is collected must be accurate (objectivity). Moreover, offering confidentiality and anonymity is important to protect participants and gain their trust, so they provide accurate information and to increase the rate of responses (Saunders et al., 2009). For example, no names were used on the questionnaire form. Participants were assured that all information received would be used only for the research and would be kept secure. All this is to ensure participants are protected from psychological, physical, social or legal harm or risk (Saunders et al., 2009). As a questionnaire was employed, these points were mentioned in the cover
letter and participants were reminded of them when the questionnaire was handed to them. Also, as half the sample were women and a male researcher in Saudi Arabia cannot contact females directly, the researcher contacted them by telephone or email in accordance with cultural norms. In addition, deception can be an issue in research. It is common in social and business studies (Saunders et al., 2007). The researcher presented his study accurately in terms of the methods and decisions involved, and the results obtained.

6.10 Conclusion
This chapter presented the research methodology. The research philosophy was discussed to decide how the research would start and be developed. Then the quantitative and qualitative approaches were briefly outlined. The research was designed based on a large survey (see chapter seven for details). Then, techniques for analysing the data were explained in details. The next chapter explains how the survey instrument was developed and data collected.
CHAPTER SEVEN: QUESTIONNAIRE DEVELOPMENT AND ADMINISTRATION

7.1 Introduction:
This chapter discusses in detail the questionnaire development and administration. Section two explains the data collection methods, and the justification of the method employed. Section three discusses the questionnaire structure, including the main sections of the questionnaire. Section four shows how the questionnaire was translated. Section five provides the procedure and findings of the questionnaire piloting. Section six explains the questionnaire administration and response rate. Finally section seven describes the population and sampling procedure.

7.2 Data collection method
This research was a positivist research, and relied mainly on quantitative data; as the aim was to explain the relationship between constructs and test hypotheses. A one-time large survey was selected for use in this study. A survey is a method of collecting data directly from respondents about their feelings, plans, and beliefs by different tools such as questionnaire and personal interview (Edwards, 1996). “Survey research comprises a cross-sectional design in relation to which data are collected predominantly by questionnaire or by structured interview on more than one case (usually many more than one) and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more constructs (usually more than two), which are then examined to detect patterns of association” (Bryman and Bell, 2007,p.56). The use of this research strategy enables the researcher to:

- Provide quantifiable data that allow the researcher to identify patterns of association between constructs. Quantitative data can be analysed using descriptive and inferential techniques in order to explore the relationships between the research constructs.
- Identify differences between male and female leaders, as it has a systematic and
standardised method for obtaining variation.

- Address demographic factors that might affect the results, and obtain a better understanding of the research.

7.2.1 Questionnaire Survey (Delivery collection questionnaire)

For the purpose of the study, using a questionnaire was a more appropriate method to collect data in Saudi Arabia than interview or observation. It offered more confidence as to the truthfulness of the respondents in providing information, increased generalizability, anonymity, and convenience for women, given it was conducted by a male researcher. Moreover, the cooperation of managers was found to be very important in facilitating interaction between researcher and respondents.

Surveys can be distributed in different ways such as face to face, mail and web survey. Each of these kinds has advantages and disadvantages, which need to be considered before selection (Fink, 2009). A questionnaire is the instrument used in the survey method, and it can be used under the positivistic paradigm, for a large survey, with closed questions. “A questionnaire is a list of carefully structured questions, chosen after considerable testing, with a view to eliciting reliable responses from a chosen sample” (Collis and Hussey, 2003, p. 173). There are different types of questionnaires, (see Figure 16) for example self-administered questionnaires are completed by the participants such as internet mediated questionnaire, postal/mail questionnaires and delivery and collection questionnaires. Interviewer administered questionnaires are recorded physically by the researcher/interviewer, as in the case of structured interview questionnaires and telephone questionnaires (Saunders et al., 2009).

There are advantages of using a questionnaire as a tool for collecting data; it helps researchers to collect data in a short time and from large samples, it is easy and quick to collect data by quantitative method. It can save time and cost, and it confers anonymity and enables respondents to answer questions in their own time and the data is easy to
analyse (Bryman and Bell, 2007). Comparing the costs among survey methods, face to face interviews are the most expensive method. However, face to face survey shows the least susceptibility to non-response bias, whereas mail questionnaire is the most susceptible to non-response bias. However, this approach has been criticised. Quantitative methods might fail to capture social attributions; and the reliance on procedures and instruments weakens the relationship between the research and everyday life (Bryman and Bell, 2007).

Figure 16 Types of questionnaire

Source: (Saunders et al., 2009, p.363)
7.2.2 Social desirability

Social desirability might be seen as a way of responding to an instrument that distorts or contaminates the construct of the instruments (Martin and Nagao, 1989). Social desirability bias (SDB) is defined as “the tendency to stretch the truth in an effort to make a good impression” (Martin and Nagao, 1989, p.264). The outcomes of social desirability could occur when specific personality characteristics of respondents are exercised in filling a survey. It might occur when dealing with anonymous modes of data collection or dealing with sensitive questions/issues (Johnson and van de Vijver, 2003).

Considering the possibility of social desirability bias during the research design helps in gaining more accurate data and information (Al-Subaihi, 2008). Such bias varies across data collection methods. It has been found that interview could pose a greater possibility of social desirability bias than self-administered questionnaire (Presser and Stinson, 1998). Also, social desirability might vary across culture. Johnson and Van de Vijver (2003) found that the level of social desirability in affluent countries is lower than in poor countries. Moreover, social desirability score could be higher in collectivist than individualist societies (Johnson, 1988). In Saudi Arabia, the power distance between managers and subordinates is high (Hofstede and Hofstede, 2001): power distance might be a consequence of low relationship and lack of an open door policy between managers and their subordinates (Walker, 2004). As a result subordinates are likely to try to keep themselves safe by satisfying their managers. This attitude can seriously affect the validity of data, for example employees would prefer to withdraw from data collection participation or provide incorrect information. Saudi employees would prefer to have direct contact with researchers (e.g., by telephone, or interview) rather than with a web survey. Saudis are more likely to respond when the researcher contacts them and builds a relationship (rapport) with
respondents before collecting data (Alsubaihi, 2008). A study conducted by Miles and King (1998) found no interaction between gender and SDB in their method comparisons. Gender difference in cooperation with data collection was not significant in Saudi Arabia (Alsubaihi, 2008).

Therefore, considering social desirability bias, the method of data collection should be considered. Selecting the most appropriate method is essential to gain more accurate data and a satisfactory response rate. However, a face to face questionnaire can cost researchers more than other methods (e.g., web survey). Sensitive questions were involved in the current study due to managers being evaluated by their subordinates. Such a strategy can increase response errors and reduce the validity of questionnaires due to two reasons. Firstly, in leadership studies usually the mean of self-rated questionnaires is higher than the mean of rated questionnaires. Secondly, subordinates tend to rate their manager higher than the manager deserves in order to safeguard their relationship with their manager or gain their satisfaction. To reduce the problem of social desirability, some issues were considered during research design and data collection as follows:

- The researcher had to choose an appropriate means to collect data in order to answer the research questions.
- As the researcher is male, it was not possible to meet women face to face and have a discussion unless relatives or possibly colleagues were present. Thus, providing a questionnaire in such a culture can be easier and enable more data than that gathered by interview.
- A single version of the questionnaire was filled by subordinates, who evaluated their managers; therefore, the researcher asked managers to encourage their subordinates to be honest during their participation.
- An envelope was provided for respondents, which they collected once they had finished completing the questionnaire, to offer confidentiality and anonymity.
7.3 Questionnaire structure

7.3.1 Leadership behaviour measurement

Leadership behaviour measurements have been studied over time. The significant leadership theories are considered in relation to each other, and sometimes in different contexts. Fleishman (1953) attempts to look at the behaviours of leaders as opposed to leaders’ traits or styles; the Ohio studies identify two dimensions of leader behaviours (initiating structure versus consideration). These two classifications are also known as task orientation versus relational orientation. Basically, initiating structure behaviours includes those related to work roles/mission and assignment, which are related to organisational culture and regulation. Consideration focuses on the relationship between pairs rather than the task between them, such as work relationship and warm development. However, gender characteristics were not considered in early leadership studies. This could lead to leaders being considered stereotypically as men, but some scholars argue that men and women do not differ in their leadership styles. Bass and Stogdill (1981, p. 449) state, “the preponderance of available evidence is that no consistently clear pattern of differences can be discerned in the supervisory style of female as compared to male leaders”.

However, later on, some studies found that males and females differ in their leadership styles; Eagly and her colleagues have undertaken intensive research on the relationship between gender and leadership. They found that males and females differ in leadership styles, although the differences were very small. The following parts present and discuss the questionnaire design for leadership behaviour scales.

7.3.1.1 Transformational leadership scale

Leadership behaviours have been measured using different scales. Bass (1985) proposes well known leadership styles in the MLQ, which combine three main leadership styles with nine sub dimensions. Also, three outcomes (satisfaction with supervision,
effectiveness, and extra efforts) were tested as dependent variables in the scale. In fact, transformational leadership was measured by different scales.

Podsakoff et al.’s (1990) transformational leadership inventory scale (TLI) was defined based on six characteristics common to transformational styles, which are 1- Vision, 2- high expected performance, 3- intellectual stimulation, 4- individualised consideration, 5- role modelling, and 6- fostering the acceptance of group goals. Conger et al.’s (1997) scale (CKS) consists of six dimensions: “1-vision and articulation; 2-environmental sensitivity; 3-unconventional behaviour; 4-personal risk; 5-sensitivity to members ‘needs; and 6-does not maintain status quo”. Also others argue that transformational leadership scales could be developed across cultures. For example Singh and Krishnan (2007) propose an Indian transformational leadership scale; however, the scale was developed based on the MLQ conceptualisation.

Although these scales were developed based on their own conceptualisations of transformational/charismatic leadership, and discriminant validity was approved among them, they shared similar qualities. Also all transformational leadership behaviour scales have been shown to be effective, either subjectively (e.g., commitment) or objectively (e.g., profit) (Rowold and Heinitz, 2007). “Fundamental to the theories is the representation and articulation of a vision by the leader, as a long-term attempt to change followers' attitudes, and self-concepts. The ethical foundation of the vision is fundamental. Thus, they focus on socialized as opposed to personalized charisma. Socialized charismatic leaders use their abilities to achieve benefits for all followers and not just for their own benefit” (Rowold and Heinitz, 2007,p.122).
Bass’ (1985) transformational leadership scale:

The transformational leader behaviours scale (TRFL) was tested based on Bass and Avolio (1997). They argue that transformational leadership behaviours are measured by five independent sub dimensions: idealised influence attribute (IIA) and idealised influence behaviour (IIB), inspiration motivation (IM), intellectual stimulation (IS) and individualisation consideration (IC).

These dimensions are defined as follows:

1. **Influence Attributes** (IIA): this factor refers to the leader's social charisma and whether the leader is perceived as powerful, focused, and confident with higher order ethics and ideals by his or her followers.

2. **Idealised Influence Behaviours** (IIB): this factor refers to charismatic actions of the leader toward followers, which are centred on beliefs, values and sense of mission.

3. **Inspiration Motivation** (IM): this element refers to a leader who motivates and inspires followers to achieve ambitious goals.

4. **Intellectual Stimulation** (IS): in this factor leaders appeal to the intellect of followers and also invite creative and innovative solutions to problems.

5. **Individualised Consideration** (IC): by this factor leaders should consider followers’ needs individually for growth and achievement and act as a mentor or coach (Bass and Avolio, 2004). Each of the above dimensions was tested by four items/questions.

7.3.1.2 Transactional leadership styles scale

The phenomenon of transactional leadership was fundamentally derived from goal path theory (House, 1971), whereby managers/leaders focus and clearly explain assignments, which should be met by others (subordinates), then subordinates are
expected to do the work and receive prior and considered rewards; otherwise punitive action would be taken. The leader should be involved with subordinates using different leadership styles, so both economic and social system should be considered by both parties.

The measurement of transactional leadership scales has received attention from scholars. Debates were raised whether transactional is a part of the management or leadership process (Burns, 1978) or they can be practised by leaders simultaneously (Bass and Avolio, 2004). Transactional leadership behaviours were suggested to be measured by Bass and Avolio’s (1997) scale, each behaviour is measured by four items consisting of three main dimensions, defined as follows:

1. **Contingent Reward (CR):** refers to leader behaviours that focus on clarifying task and role requirements then providing followers with rewards. It is an emotional and economic exchange as long as the desired outcomes are met by followers (Bass and Avolio, 2004).

2. **Management-by-Exception Active (MBEA):** the aim of MBEA is to keep followers and process in control (Sosik and Jung, 2010). Leaders exercise vigilance to ensure that standard goals are met by followers (Bass, 1985). The rationale of selecting CR and MBEA for measuring transactional leadership styles is their unique effect upon outcomes. CR focuses on the economic exchange, and MBEA focuses on coaching and mentoring practise, which is not related to reward exchange. Each of TX styles was measured by four items.

3. **Management-by-Exception, Passive (MBEP):** this factor refers to leaders who intervene only after noncompliance has occurred or when errors have already happened, in other words, leaders sit back and wait for something to go wrong before taking action (Bass, 1985). As suggested by Bass and Avolio (1997) MBEP is measured by four items. For the current study four items were
used to measure MBEP.

7.3.1.3 Laissez faire scale

This style is known as non-leadership. The leader is assumed to not take responsibilities or is seen as ineffective (Bass, 1985). The significance of including this style is to test the validities across styles. For example, a leader with high TRFL should be low in LF, so discriminant validities should exist. This factor was measured by Bass and Avolio’s (1985) scale, consisting of four items.

7.3.1.4 The advantage and rationale of employing MLQ

Fundamentally, MLQ assesses the perception of leadership behaviours in different styles (transformational, transactional, and passive/avoidant leadership styles) (Bass, 1985), from avoidance of taking responsibilities to exchange of reward and going beyond reward (transformational characteristics). The significance of MLQ is its combination of three main leadership styles, which were fundamentally developed simultaneously and are suggested and validated to be tested simultaneously. Thus, MLQ was employed for the current study to meet the objectives of the study and due to its advantages, which are discussed below.

For the purpose of the study, MLQ has many advantages:

1. It is suitable to be administered in different levels of position (top, middle and high position) and in different disciplines and services (education, business, and military). Also, it can be used in both private and public organisations.

2. It offers two versions (rated and self-rated). The self-rated form enables leaders to be measured directly and indirectly by raters, for example, subordinates, peers (Bass and Avolio, 2004).

3. Evidence has been reported that MLQ is universally and extensively applicable across cultures (Bass and Avolio, 2004). A recent meta-analysis conducted by
Leong and Fischer (2011) investigates the impact of cultural values on reporting the transformational leadership level. The study examines articles published between 1985 and 2006 using MLQ, based on 40 articles and 54 samples FROM 18 nations. Hypotheses are supported between countries in rating transformational leadership. In addition - and specifically in Islamic culture – an evaluation is reported by Beekun and Badawi (1998), who argue that MLQ characteristics are aligned with Islamic values.

4. It offers an expected performance for each style (Bass and Avolio, 2004).

5. It has proved its ability to differentiate across gender (Eagly and Carli, 2003).

6. The validation of MLQ was proved with its nine leadership styles and three outcomes with only 45 items. Also it has the flexibility of usage for the researcher's purpose. For example, the transformational leadership styles scale can be used with only 20 items, without the transactional, LF and outcomes scales; thus it was proved to be effective with its validation with other questionnaires, which can be used as dependent variables directly or indirectly via mediator variables.

7. In addition, it offers easy contact with Mind Garden, which offers services such as manual report, translation and any inquiries or suggestions (See appendix 2). Also, it offers other surveys that can help leaders with development. For example, leaders can develop a leadership development plan based on MLQ results, to develop their styles in order to develop others effectively. MLQ is not one questionnaire; products are available for researchers and leaders to improve their studies, experiences and development (Bass and Avolio, 2004).

7.3.1.5 MLQ and gender differences
MLQ was conducted to measure the differences between male and female leadership styles (See Table 13). Eagly and Carli (2003) found that such differences are small. The
results suggest MLQ can be used to function similarly across genders; however, their study was limited to the USA sample and the social context of the sample was not considered. Druskat’s (1994) research supports the existence of gender differences in leadership style; Z test for independent correlation resulted in significant differences in transformational leadership styles to the advantage of women, while no significant differences were found in transactional and passive leadership styles.

Table 13 Summary of researches conducted using MLQ to measure leadership styles across gender

<table>
<thead>
<tr>
<th>Author</th>
<th>Scale</th>
<th>Context</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Bass et al., 1996)</td>
<td>MLQ (three main style)</td>
<td>Mixed sex work environment, USA</td>
<td>Rejected</td>
</tr>
<tr>
<td>(Walumbwa et al., 2004)</td>
<td>MLQ (three main style)</td>
<td>Mixed sex work environment, USA</td>
<td>Rejected</td>
</tr>
<tr>
<td>(Eagly et al., 2001)</td>
<td>MLQ (three main style)</td>
<td>Mixed sex work environment, USA</td>
<td>Rejected, however, female exceeded in TRFLs and CR while male in MBE and LF</td>
</tr>
<tr>
<td>(Chen, 2005)</td>
<td>MLQ (TRFLs and TX)</td>
<td>Mixed sex work environment, China</td>
<td>Supported</td>
</tr>
<tr>
<td>(Chen et al., 2010)</td>
<td>MLQ (TRFLs and TXs)</td>
<td>Mixed sex work environment, China</td>
<td>Supported only with TXs</td>
</tr>
<tr>
<td>(Mandell and Pherwani, 2003)</td>
<td>MLQ (TRFLs)</td>
<td>Mixed sex work environment, USA</td>
<td>Rejected</td>
</tr>
<tr>
<td>(Carless, 1998)</td>
<td>MLQ (TRFLs)</td>
<td>Mixed sex work environment, Australia</td>
<td>Supported</td>
</tr>
<tr>
<td>(Barbuto et al., 2007)</td>
<td>MLQ (TRFLs and TXs)</td>
<td>Mixed sex work environment, USA</td>
<td>Rejected</td>
</tr>
<tr>
<td>(Rosenbusch and Townsend, 2004)</td>
<td>MLQ (TRFLs and TXs)</td>
<td>Mixed sex work environment, USA</td>
<td>Supported</td>
</tr>
<tr>
<td>(Oshagbemi and Gill, 2003)</td>
<td>MLQ (TRFLs)</td>
<td>Mixed sex work environment, UK</td>
<td>Supported only inspirational Motivation</td>
</tr>
<tr>
<td>(Burke and Collins, 2001)</td>
<td>MLQ (TRFLs)</td>
<td>Mixed sex work environment, USA</td>
<td>Supported</td>
</tr>
<tr>
<td>Current study</td>
<td>MLQ (three main style)</td>
<td>Segregated work Environment</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Note: no previous study conducted MLQ to measure the difference across genders in segregated work environment.

Source: developed by the researcher.

7.3.1.6 Validity and reliability of MLQ scale

The content validity of MLQ has been tested repeatedly at different times with different participations in a variety of disciplines. Firstly, Bass selected university students, who were asked to evaluate their leadership styles, then the results were tested comparatively in order to shortlist the behaviours. Then, in order to validate the questionnaire in different organisations, MLQ was tested in many private and public organisations. Finally the questionnaire was confidently ascribed to be valid.
Regarding its dimensionality, MLQ has been tested in different alternative models. Based on CFA results, the full range of leadership styles has been perceived with different/alternative models containing from one to nine leadership factors (Bass and Avolio, 2004). Finally Bass and Avolio’s (1999) results support 36 items perceived as nine factors.

The validation of MLQ was tested in different context and nations. Antonakis et al. (2003) tested the validation of the MLQ model using 18 samples and 6525 raters. The study intensively tested whether, 1- the MLQ is measured by nine factors, 2- the MLQ is invariant in different samples and contexts, and 3- MLQ is affected by context. The results support the nine factors of the MLQ. Also the results were proved to be invariant across samples, and the validation of the MLQ was proved by gender. However, the results revealed that MLQ might be affected across context, i.e. the effect of cultures upon to MLQ factors could vary.

Table 14 outlines the reliabilities, dimensionality and analysis used in different studies across different contexts. Previous studies prove the reliability and validity of MLQ, however, the dimensionality of MLQ was perceived differently in terms of either the typologies of MLQ (three factors) or their nine factors. In the current study the construct validity of MLQ was proved (see chapter 8).

Table 14 Summary of previous studies of the construct validation of MLQ.

<table>
<thead>
<tr>
<th>Author</th>
<th>Sample</th>
<th>Place</th>
<th>N</th>
<th>MLQ’s dimension</th>
<th>α</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Den Hartog et al., 1997)</td>
<td>NA</td>
<td>Holland</td>
<td>787</td>
<td>TRFL</td>
<td>0.95</td>
<td>EFA and Correlation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TX</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LF</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td>(Druskat, 1994)</td>
<td>Catholic church</td>
<td>USA</td>
<td>891</td>
<td>II/IC</td>
<td>0.94</td>
<td>EFA ANOVA, post-hoc, correlation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IS/IM</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LF/MBEP</td>
<td>0.93</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CR</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MBEA</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>(Avolio et al., 2004)</td>
<td>Healthcare</td>
<td>Singapore</td>
<td>520</td>
<td>TRFL</td>
<td>0.87</td>
<td>Hierarchical regression analysis</td>
</tr>
<tr>
<td>(Miao et al., 2012)</td>
<td>NA</td>
<td>China</td>
<td>322</td>
<td>TRFL</td>
<td>0.82</td>
<td>CFA and Hierarchical regression analysis</td>
</tr>
<tr>
<td>Study (Year)</td>
<td>Industry/Location</td>
<td>Sample Size</td>
<td>Constructs Measures</td>
<td>Methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------------</td>
<td>-------------</td>
<td>---------------------</td>
<td>---------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Edwards et al., 2012)</td>
<td>Manufacturing organisations, UK</td>
<td>367</td>
<td>TRFLs and CR</td>
<td>Satisfied, CFA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Gumusluoglu and Ilsev, 2009)</td>
<td>Software companies, Turkey</td>
<td>163</td>
<td>TRFL</td>
<td>EFA and regression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Camps and Rodríguez, 2011)</td>
<td>Education, Spain</td>
<td>797</td>
<td>TRFL</td>
<td>NA, SEM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Bekiroğullari et al., 2013)</td>
<td>Financial sector, Pakistan</td>
<td>150</td>
<td>TRFLs, TXs, PSVs</td>
<td>.93, .66:0.88, linear regression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omer, 2005)</td>
<td>Healthcare, Saudi Arabia</td>
<td>294</td>
<td>TRFLs</td>
<td>linear regression</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: developed by the researcher.

7.3.1.7 Criticism of MLQ

On the other hand, MLQ has been criticised. As stated by Muenjohn and Armstrong (2008), the five dimensions might fall into factors due to the high correlation; therefore, transformational leadership behaviours might be collapsed into one single factor. Such results were supported by some researchers (Yammamino and Dubinsky, 1994, Tracey and Hinkin, 1998), so the dimensionality of TRFL does not allow researchers to investigate the prediction of each dimension independently. The benefit of the comparison between TRFL constructs’ effectiveness could lead to more investigation of TRFL outcomes. Although stating that a conceptual distinction between the II and IM factors had not been clearly articulated, Barling et al. (2008, p.853) argue that “transformational and pseudo-transformational leaders can be differentiated on the basis of idealized influence and inspirational motivation, low idealized influence and high inspirational motivation associated with a higher level of pseudo transformational behaviour.” Also, taking TRFL as one construct can ignore the value of the conceptualisation of each dimension; thus the dimensionality would be unclear. Also, the high correlation between CR and TRFL factors has raised a problem of the conceptualisation and differentiation between them. Chen (2005) found that CR was loaded with TRFL factors rather than with TX factors. So, since the TRFL high ordered measured including CR, the effect of CR with TRFL
factors is complex and not clear, CR was developed based on economic exchange, while TRFL was based on social exchange.

In addition to the CR relationship with TRFLS, the combination of TX would not be clear to be measured as a higher order construct. It was found that MBEP and LF are correlated positively. LF and MBEP items were highly loaded in a higher order factor, called passive/corrective leadership (Avolio et al., 1999). Also, many studies including Bass and Avolio’s findings found that LF and MBEP are positively correlated (Bass et al., 1996, Bass and Riggio, 2006, Den Hartog et al., 1997, Hinkin and Schriesheim, 2008). Therefore, since the TX construct is complicated and complex, there might be a problem with its operationalization.

Robert et al. (2000) developed a transformational leadership scale in India. They argue that transformational leadership behaviour could vary across culture. Their Indian transformational leadership (ITL) scale is based on MLQ-TL. EFA, CFA and several regression analyses found that ITL could be replaced to measure transformational leadership behaviours in India.

7.3.2 LMX measurement

Leader–member exchange (LMX) is “a construct that has been defined in various ways. It has been treated as member perceptions of leader characteristics, as leader perceptions of member characteristics, and/or as a dyadic construct representing a property of the leader–member unit (i.e., leader and member perceptions of their relationship, at the dyadic level of analysis)” (Joseph et al., 2011, p.129). LMX has been used as a unidimensional concept (Graen and Schiemann, 1978) and as a multidimensional set of concepts (Dienesch & Liden, 1986).
7.3.2.1 LMX-7 items scale development:

The LMX-7 item measurement was essentially developed in three gradual stages: (1) the Leader Behaviour Description Questionnaire (LBDQ) (Stogdill and Coons, 1957), (2) prior scales to the LMX-7 items scale, (3) the LMX-7 items scale (See Table 15).

**Stage (1):** LMX scales were fundamentally developed based on the Ohio State studies using LBDQ, which measures leader consideration and initial structure (Stogdill and Coons1957). Consideration is enacted when the leader shows concern for subordinates and displays a supportive manner. Such a leader is likely to form a rapport with subordinates. In contrast, leaders who focus more on initiating structure tend to direct their subordinates through planning activities, scheduling and setting deadlines.

**Stage (2):** LMX-7 items scale is the most used scale to measure leader member exchange due to its history and strong development process (Gerstner and Day, 1997b), 66% of LMX studies relied on LMX-7 items (Joseph et al, 2011). LMX-7 items were developed based on the practise of using LBDQ. Two items were derived originally to measure. Negotiating Latitude was defined as “the extent to which a superior is willing to consider requests from a member concerning role development” (Dansereau et al., 1975, p.51). During this period LMX scale items were developed from two items to five items, focusing on leader flexibility, which supports job change of followers, leader supportiveness, and openness and leader helpfulness.

**Stage (3):** the final measurement of leader member exchange (LMX-7) is reported by Scandura and Graen (1984), LMX item 1 measures the leader’s provision of performance feedback, LMX item 2 measures the leader’s underrating of followers needs, LMX item 3 measures the leader’s recognition of follower potential, LMX items 4 and 5 measure the leader’s helpfulness, LMX item 6 measures the leader’s
confidence in leader decisions and LMX item 7 measures relationship effectiveness. In addition, other LMX scales were developed on a multidimensional basis. Dienesch and Liden (1986) argue that leader member exchange could be established through three independent components’ contribution, loyalty and affect. Later Graen and Uhl-Bien (1995) argue that LMX could comprise three independent dimensions, respect, trust and mutual obligation. Liden and Maslyn (1998) propose a validated four-dimensional model of LMX (the 12-item LMX-MDM scale) which consists of loyalty, affect, contribution and professional respect. Epitropaki and Martin (2005) argue that LMX need further studies in order to be utilised with confidence. A recent study conducted by Joseph et al. (2011) found that the LMX-7 item scale is not the same as the 12 item LMX-MDM scale, although a high correlation was found between the two scales (r > .85). When testing their content validities, it was found that only two items of LMX-7 (5 and 6) overlapped with two dimensions of LMX-MDM (contribution and professional respect), so from the overall findings it appears that the two scales are not the same. A high correlation could occur due to the synonymous behaviours across items. Also researchers do not ensure whether respondents have differentiated between items/questions due to the synonyms, and understand the meaning of items; such misunderstanding could affect the validity and results of the research.

Table 15 Development of the LMX-7 item scale

<table>
<thead>
<tr>
<th>LMX perspective</th>
<th>LMX measurement</th>
<th>Methodology Used in LMX Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>The vertical Dyad linkage approach is formally introduced and contracted with the traditional leadership styles approaches (Danseresu, Cashman and Graen, 1973; Danseresu, Graen, and Haga, 1975; Graen, Danseresu, and Minamai, 1972)</td>
<td>Danseresu and colleagues (Dansereau et al., 1973; Graen at al., 1972, 1972) Use scores on the leader behaviours description questionnaire (Stogdill and Coons, 1957) to investigate the vertical Dyad Linkage (VDL)</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
<td>Measure</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>1975</td>
<td>Dansereau et al. (1975) create the two items Negotiating Latitude measure</td>
<td>Item intercorrelations, test-retest reliability</td>
</tr>
<tr>
<td>1976</td>
<td>Grean (1976) proposes a theory of LMX development including role-taking, role-making, and role re-utilisation</td>
<td>Internal consistency, Heise test-retest stability coefficients, MTMM analysis</td>
</tr>
<tr>
<td>1978</td>
<td>Graen and Schieman (1978) re-label the construct LMX, which includes “reciprocal influence, extra-contractual behaviour exchange, mutual trust, respect and liking, and common fate” (p. 206)</td>
<td>Leader-member agreement, test, retest reliability</td>
</tr>
<tr>
<td>1980</td>
<td>Liden and Graen (1980) introduce a 4-point response scale for the LMX-4</td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>Graen, Liden and Hoel (1982) add a “centroid” item (“how would you characterise your working relationship with your supervisor?” to the LMX-4 to create the LMX-5</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>Scandura and Graen (1984) add items to make LMX-7 which includes three items from the LMX-5.</td>
<td>Cronbach’s alpha, test-retest reliability</td>
</tr>
</tbody>
</table>

Source: (Joseph et al., 2011, p. 95).

### 7.3.2.2 Validity and reliability of LMX-7 items scale

The main idea of content validity is to ensure that the question/items of a measure represent what they are intended to measure. Evidence of the validity and the independence of LMX-7 from LBDQ was obtained recently by Schriesheim and Cogliser (2009). They found that the correlation between LMX-7 and LBDQ scales was $r=.75$. “This implies the LMX-7 is in large part a re-invention of the LBDQ consideration facet from the Ohio State studies (measured at the individual member-level)” (Joseph et al., 2011,p.101).

Effective leaders need to be “supportive” to their followers (Bass and Stogdill, 1981). In individualised consideration, leaders show support to their followers and display individualised attention and responses to their personal needs. Avolio and Bass (1995, p.202) state, “the leader displays more frequent individualised consideration by showing general support for the efforts of followers.” LMX-7’s supportive
reflects supportive behaviour (items 2 through 5). So individualised consideration factors and LMX-7 items scale are assumed to measure supportive behaviour. In the current study, the results of the correlations between individualised consideration factor and LMX-7’s supportive items ranged between 0.20 and 0.54 (p>.000). In addition a recent finding of content validity of LMX-7 was supported by Schrieshiem and Coliser (2009), LMX-7 items showed significant correlations with three support scales. LMX-7 was correlated with Schrieshiem’s support scale (r=.74), with LBDQ consideration (r=.40, p>.000), with House (1974) supportive leadership scale (r=.78, p>.000), and with MLQ (Lee, 2005). These results indicate that LMX-7 could be classified as a supportive leadership scale, showing great attention to followers’ needs. Moreover, the construct validity of LMX-7 items was tested using different methods, composite reliability was approved at >0.7 and AVE was >0.5 with highest correlation of 0.69, thus discriminant validity was proved. This study could contribute to the study of transformational leadership scale and LMX-7 items, specifically the big debate of their problem of meeting the discriminant validity due to high correlation and similar conceptualisation. Thus, TRFL and LMX-7 items are appropriate to be used independently in the Saudi context.

7.3.2.3 The rationale for using the LMX-7 items scale

LMX-7 item was used to assess how the quality relationship is established between managers and their subordinates; the perception of leader member interaction was measured from subordinates’ perception. Having proven itself as a reliable and valid scale, being widely used in different disciplines and cultures (Liden et al., 2006), and obvious use among LMX measurements (Joseph et al., 2011) (see Table 16). LMX-7 items was used for three reasons, first: LMX theory was developed based on the social role theory (Eagly et al., 2000). As the current study aims to compare between males and females in a sex-segregated organisation, and Saudi Arabia is highly affected
by social role theory, LMX-7 items would be helpful to answer the research questions. Second: it was supported that gender has influenced the level of LMX; based on the similarity paradigm, pairs with the same gender can establish relationship more easily than with opposite gender. Varma and Storh (2001) found that female subordinates were consistent in reporting LMX with their female leader higher than with their male leaders. However, Adebayo and Udegbe (2004) found that when dyads were made up of opposite sexes, the relationship quality tended to be better than when they were composed of the same sex. With respect to opposite sex effectiveness findings, the current study was conducted with the same sex, and based on the similarity paradigm, LMX would have an influence on the interaction in segregated organisations. Third, it has been suggested that the mediation effect of LMX between leadership styles and OC be tested (Lee, 2005), MLQ offers different leadership styles, which are hypothesised to independently predict the establishment of leader and subordinates’ relationship. This combination could create deeper understanding of the leadership process in the Saudi context.

Table 16 Summary of LMX-7 items of previous studies

<table>
<thead>
<tr>
<th>Author</th>
<th>Sample</th>
<th>Place</th>
<th>n</th>
<th>a</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Agarwal et al., 2012)</td>
<td>Financial sector</td>
<td>India</td>
<td>979</td>
<td>0.92</td>
<td>SEM</td>
</tr>
<tr>
<td>(Maksom and Winter, 2009)</td>
<td>Military</td>
<td>Canada</td>
<td>512</td>
<td>0.91</td>
<td>Correlation</td>
</tr>
<tr>
<td>(Brunetto et al., 2011)</td>
<td>Health care</td>
<td>Australia</td>
<td>1064</td>
<td>NA</td>
<td>FA and correlation</td>
</tr>
<tr>
<td>(Xiaqi et al., 2012)</td>
<td>Manufacture</td>
<td>China</td>
<td>202</td>
<td>0.86</td>
<td>SEM</td>
</tr>
<tr>
<td>(Sue-Chan et al., 2012)</td>
<td>Manufacturing Facility</td>
<td>Malaysia</td>
<td>1133</td>
<td>0.91</td>
<td>SEM</td>
</tr>
<tr>
<td>(Tse et al., 2012)</td>
<td>Banking sector</td>
<td>Australia</td>
<td>294</td>
<td>0.94</td>
<td>CFA and regression</td>
</tr>
<tr>
<td>(Truckenbrodt, 2000)</td>
<td>Engineering and Technology</td>
<td>US</td>
<td>162</td>
<td>0.89</td>
<td>Correlation and ANOVA</td>
</tr>
<tr>
<td>(Kim and George, 2005)</td>
<td>NA</td>
<td>US</td>
<td>173</td>
<td>0.90</td>
<td>FA and regression</td>
</tr>
<tr>
<td>(Schriesheimand Cogliser, 2009)</td>
<td>bakery workers and MBA students</td>
<td>NA</td>
<td>729</td>
<td>0.89</td>
<td>CFA and multiple regression analysis</td>
</tr>
<tr>
<td>(Joo, 2010)</td>
<td>HR managers</td>
<td>NA</td>
<td>516</td>
<td>0.86</td>
<td>SEM</td>
</tr>
</tbody>
</table>

Source: developed by the researcher.
7.3.3 Organisational Commitment Scale (OCS):

There are some scales for measuring organisational commitment. For example, Mowday et al. (1979) propose a one-dimension organisational commitment questionnaire (OCQ). Also Cook and Wall (1980) developed the British Organisational Commitment Scale (BOCS) with a single scale. These two scales only measure commitment in two levels, low and high, whereas other researchers suggested a medium level (Al-Ammaj, 2000). However, interestingly, Meyer and Allen (1990) argue that organisational commitment is measured as a multidimensional construct, these dimensions are affective, normative and continuance. The validity and reliability of these scales are supported in different fields and contexts (Allen and Meyer, 1990, Drath et al., 2008, Kacmar et al., 1999, Lee, 2005, Mathieu and Zajac, 1990b, Meyer and Allen, 1997, Meyer and Herscovitch, 2001, Meyer et al., 2002, Park and Rainey, 2007, Tayyab, 2006).

Meyer and Allen’s scale was selected for the current study for several reasons. Firstly, the scale displays satisfactory psychometric properties (Meyer et al., 1993). For example, a meta-analysis conducted by Meyer et al. (2002) with around 155 studies with over 50,000 participants shows that Cronbach’s alpha coefficients of affective, normative and continuance commitment were 0.82, 0.73 and 0.76 respectively. The current study obtained good results for validity and reliability based on Cronbach’s alpha coefficients >0.6, composite reliability >.70 and AVE >0.5. Also the dimensionality of the construct supports the view that OCS in Saudi Arabia is a multidimensional scale.

Secondly, the relationship between leadership styles and OCS is consistent with other constructs such as leadership styles. In order to test the effect of leadership styles, the dependent constructs should be considered as having theoretical relationships. As suggested by Allen and Meyer, the antecedents of affective commitment are somewhat different than those of continuance commitment (Bass and Riggio, 2006). For
example, the antecedents of affective commitment are related to the attachment with the organisation policies, whereas continuance commitment is related to the economic exchange between the employee and the organisation, so affective commitment should develop over time, while continuance commitment might be established in the short term. As a result, the relationship between TRFLs and affective commitment is highly positive, and CR is suggested to be positively related to continuance commitment.

7.4 Translation technique

Perhaps the most commonly recommended procedure for the translation of a questionnaire or test is the procedure of back translation. In this procedure the instrument is rendered into the second language by one translator and the resulting version is translated back into the original language (Chapman and Carter, 1979). It is recommended that scales be translated at least three times by different translators (Brislin et al., 1973). However, the methodology of back translation often incorporates a procedure named decentring, in which both the original and second language versions are subject to modification. This allows for words or concepts that have no clear correspondence in the other language. Once back translation procedure and modifications are accomplished, the researcher is still not sure of the similarity of meaning across languages, so both versions should be administered to experts fluent in both languages, and comparison made between them to test their correlations (Chapman and Carter, 1979). Therefore the questionnaire was first translated from English to Arabic by an Arabic native speaker, and then back translated by an English native speaker, and then comparison made between the original and translated versions.
7.5 Pilot study

“The term ‘pilot studies’ refers to mini versions of a full-scale study (also called ‘feasibility’ studies), as well as the specific pre-testing of a particular research instrument such as a questionnaire or interview schedule” (Van Teijlingen and Hundley, 2001, p.1). An advantage of conducting a pilot study is to give advance warning of any deviation, inappropriateness, difficulty or complexity, which could cause a failure of the project (Van Teijlingen and Hundley, 2001). Table 17 lists considered reasons for conducting pilot studies.

Table 17 Reasons for conducting pilot studies.

<table>
<thead>
<tr>
<th>Reason for conducting pilot studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing and testing adequacy of research instruments.</td>
</tr>
<tr>
<td>Assessing the feasibility of a (full-scale) study/survey.</td>
</tr>
<tr>
<td>Designing a research protocol.</td>
</tr>
<tr>
<td>Assessing whether the research protocol is realistic and workable.</td>
</tr>
<tr>
<td>Establishing whether the sampling frame and technique are effective.</td>
</tr>
<tr>
<td>Assessing the likely success of proposed recruitment approaches.</td>
</tr>
<tr>
<td>Identifying logistical problems which might occur using proposed methods.</td>
</tr>
<tr>
<td>Estimating variability in outcomes to help determining sample size.</td>
</tr>
<tr>
<td>Collecting preliminary data.</td>
</tr>
<tr>
<td>Determining what resources (finance, staff) are needed for a planned study.</td>
</tr>
<tr>
<td>Assessing the proposed data analysis techniques to uncover potential problems.</td>
</tr>
<tr>
<td>Developing a research question and research plan.</td>
</tr>
<tr>
<td>Training a researcher in as many elements of the research process as possible.</td>
</tr>
<tr>
<td>Convincing funding bodies that the research team is competent and knowledgeable.</td>
</tr>
<tr>
<td>Convincing funding bodies that the main study is feasible and worth funding.</td>
</tr>
<tr>
<td>Convincing other stakeholders that the main study is worth supporting.</td>
</tr>
</tbody>
</table>

Source: (Van Teijlingen and Hundley, 2001, p.2).

Although established measurements were used in this study, there was still a possibility that the study respondents might misinterpret some questions in the survey. It is always desirable to conduct a pilot study before administering a questionnaire (Bryman and Bell, 2007).

The study consists of three instruments, the multifactor leadership questionnaire (MLQ)-Short Form 5X, leader member exchange (LMX) and organisational commitment scale. As MLQ is owned by Mind Garden & Inc, permission was obtained to use 900 copies (See Appendices 2 and 3).

Forza (2002) proposes that the best way to pre-test a self-administered questionnaire is
in two phases. In the first phase, it is tested with a group of potential participants, who are part of the survey. During this phase the researcher should observe how volunteer respondents fill in the questionnaire and note any feedback. In this way it is possible to remedy unclear instructions and unclear questions, identify any problems in understanding questions and check the effectiveness of the planned administration procedure. The second phase aims to perform an exploratory assessment of the quality of measurement and the adequacy of measures in relation to the sample. Also the preliminary analysis of data can be carried out in this phase.

In the current study, the pilot study was carried out in four phases:

**Phase one**: As established instruments were utilised, the researcher contacted human resource department managers to ensure that the questionnaires had not previously been used in Saudi banks. Also, agreement to participate was obtained. Six out of fourteen banks agreed to participate in the survey; there were no major comments but two banks noted that in order to choose an appropriate time, the researcher should not contact branch managers, since they are busy with customers.

**Phase two**: random sample: 20 questionnaires were distributed to staff and PhD students within UK universities to be completed. They were asked to be potential participants. The purpose of this participation was to ascertain the face validity, which refers to the “obviousness” of a test, in order to estimate of the degree to which a measure is clear and unambiguous (Holden, Ronald B, 2010). The comments of the items content and layout (e.g. language, appearance) of the questionnaire were considered.

**Phase three**: random stratified sample: one major aim of the study was to investigate the impact of leadership styles and leader member relationship on employees’ organisational commitment in a segregated organisation. The sample of 15 females, and 15 males was selected in banks. 25 pairs of questionnaires were returned, and two
questionnaires were excluded as they were not completed. It should be taken into consideration that a pilot study does not guarantee the success of research, as it does not have a statistical foundation and is always based on a small number of participants (Van Teijlingen and Hundley, 2001). The aim of phases two and three was to obtain feedback/comments from respondents on whether the instructions and questions were clear and understandable, to estimate the time needed to fill the questionnaire, and to improve the researcher’s communication skills. Some comments were received, suggesting revision of some words, for example, to say bank instead of organisation. Also one female respondent stated, “It is really important to order a version suitable for women; this way shows a kind of respect and recognition for women”, so the researcher developed one version for men and another for women. Therefore, during this phase the pilot study provided feedback to support the face validity, which provided feedback for content validity.

**Phase four:** Contacting Saudi women: this issue was raised during the researcher’s upgrade seminar as it is very difficult for Saudi women to be contacted by a man face to face, unless their relatives or colleagues are present. The researcher used two ways to contact women, via telephone and via a coordinator (his sister) who was fully trained to deliver the questionnaire. It is very important to review and consider how a man should communicate with Saudi women. For example, generally Saudi women do not welcome attempts to establish rapport with men before meeting; it is sufficient to attach approval for conducting the survey, have a quick greeting and then explain how to fill the questionnaire. Finally, the results of the pilot study produced the following outcomes:

- Assurance was obtained that the questionnaires had not previously been used in Saudi banks.
- Satisfactory reliability scores were obtained, ranging from 0.55 to 0.79.
- Instructions were found to be clear and understood.
• The questionnaire was distributed in segregated organisations; it is very important to pay attention when writing letters to men and women since Arabic grammar is gendered. Therefore, taking into account the respondents’ gender, two versions of the questionnaire were typed to address male and female participants appropriately.

• The questionnaire took between 15-20 minutes to answer.

• The researcher gained practice and experience in meeting and interviewing respondents, establishing rapport, and increasing the effectiveness of the administration procedures. For example, as the branch managers were rated by followers, they were asked to encourage the followers to participate; also to facilitate the communication with their employees colleagues in other branches, to increase the response rate. Also, as interaction with the other gender is sensitive in Saudi Arabia, the researcher did not need to spend time greeting lady branch managers, the research should be explained to them, directly, via telephone and email.

• The difficulty of a man contacting Saudi women due to the impossibility of meeting them face to face was confirmed.

7.6 Population and sampling

Selecting a sample is a fundamental factor in research (Collis and Hussey, 2003). Sampling decisions should focus on the target population or individuals; demographically the sampling decisions should focus on "who in the group or organisation is the most knowledgeable individual and can provide accurate information" (Czaja and Blair, 2005, p.14). There are different methods of selecting a sample such as random sampling, systematic sampling and stratified sampling (Collis and Hussey, 2003).

One main objective of this study was to investigate whether there are any differences
between male and female leadership styles in segregated organisations in Saudi Arabia. In Saudi Arabia most organisations follow a segregation policy, so men and women work separately.

Therefore, the study used stratified sampling, whereby the sample was classified into two groups, male and female. The rationale for selecting the organisations was considered in order to obtain accurate information. Context and sample homogeneity was carefully considered, as the rating of leadership might be contextually highly sensitive, which could negatively affect the interpretation of the results of leadership measurement (Antonakis et al., 2003). For example some important factors across gender were considered, and some strategies adopted as follows:

1. **Segregated organisation**: Most organisations in Saudi Arabia follow segregation policy, particularly the education and banking sectors.

2. **Masculine versus feminine setting**: In order to protect the study from bias, the banking sector does not belong to masculine or feminine settings. It was found that male managers are rated as more effective than women in masculine settings such as military discipline, whereas women managers are perceived as more effective than men in feminine settings such as social services (Eagly et al., 1995). Although predominantly female due to the structure of employment in the financial sector, it would be difficult to attach causal primacy to gender (Scott, 1994). This suggests that bias of rating would occur stereotypically based on the tendency of setting. In Saudi Arabia the banking sector is neither a masculine nor feminine setting.

3. **Strength status**: in a military context, individual differences might not make big differences in behaviour, as behaviour is stable or restricted. On the other hand, in a weak situation (e.g., private sector), individual differences should be greater because behaviours are not stable and are less restricted: “Leadership
may be contextualized in that the same behaviours (factors) may be seen as more or less effective depending upon the context in which they are observed and measured” (Antonakis et al., 2003,p.268). Thus, the banking sector was selected.

4. **Accessibility**: The banking sector was used because most branches have one building with two branches (male and female branches), so this could provide both branches.

5. **Participants’ position similarity**: One of the objectives of the study was to compare between groups, so similarity was considered in selecting samples, as this study depends on two groups. Male and female subordinates have the same responsibilities to their managers and customers; also managers across gender are independent and possess similar responsibilities. All financial services and strategies in both branches are the same, except for the number of customers which is greater in men’s branches. Also, demographic factors were nearly similar between groups. All these similarities can support the accuracy of the given information when comparing between groups. Moreover, experience with immediate managers was taken into consideration; all subordinates had a minimum of four months’ experience with the immediate manager. This period was expected to be enough to enable them to describe the immediate manager’s leadership behaviour and relationship. All the above points contribute to providing more accurate information and decrease the problem of sampling bias. Also, non-homogeneity across gender was considered; an independent t-test was conducted to discover whether there were any differences of demographic factors across gender. Demographic factors were not significantly different (p>0.5) except the level of education, which was higher for female respondents.
6. **Subordinate participation:** Leadership styles can be rated by leaders (*self-rater*) and followers (*rater*) (Bass and Avolio, 2004). However, and in order to avoid leader bias, followers were selected to rate their immediate leaders’ behaviours and relationship. “Followers attribute qualities to leaders. These attributes are mostly behaviour based; followers observe leaders and make corresponding relationships between observed behaviours and character. “Followers make attributions whether the person is a leader or not” (Metcalfe and Mimouni, 2012, p.95).

7. **Performance level of subordinates:** Managers were asked to select from one to five subordinates, who have different performance (e.g. poor, excellent). This point would help to decrease bias when answering the questionnaire.

8. **Generalizability:** it is very important and fundamental when selecting a sample for quantitative research (Hultsch et al., 2002). The researcher should be aware of the value of generalizability. Saudi Arabia consists of five regions; four regions were covered, and six banks out of fourteen were selected. Moreover, covering demographic factors can increase the level of generalizability (Hultsch et al., 2002). For example, young employees might prefer to receive economic exchange with their managers rather than social exchange, so their level of organisational commitment could be enhanced with transaction, whereas older employees may prefer to receive social exchange rather than economic exchange. Thus, some demographic factors were selected to capture different perspectives from diverse population groups.

9. **Researcher relationship:** In Saudi Arabia, relationship value exists, and was considered during data collection to reduce non-response. Some branches were selected by making arrangements with friends or relatives who worked there, or they had arranged for the researcher to contact particular branches.
7.6.1 Sample size

There is no doubt that sample size plays an initial role in almost all statistical techniques conducted in practise. Although there is a general agreement among researchers that the larger the sample size, the more steady the parameter estimates, there is no agreement as to what represents large (Marcoulides and Saunders, 2006). Quantitative research often fails to understand the usefulness of a small sample (Marshall, 1996). Although a large sample cannot guarantee the precision of sampling, generally, increasing the sample size can probably increase precision of sampling, and hence lead to reduced sampling error. A larger sample size could provide accurate information and represent a more accurate representative of the population (Bryman and Bell, 2007). According to Hair et al. (2012) and Chin (1988b) each construct requires between 10 and 20 cases/respondents.

The current study was originally developed based on 64 items/cases, which required 640 cases. However, and after elimination due to low factor loading (FL>0.70) of the number usable items was reduced to 26 items/cases, so the model required a minimum of 260 cases. However, PLS-SEM generally can be run with smaller sample sizes and more complex models; it works particularly well with small sample sizes. Based on previous research the average sample size is 211.29 cases (Hair et al., 2012). On the other hand, Marcoulides et al. (2009) argue that the sample size could affect the quality of the results when conducting PLS. “When moderately non-normal data are considered, a markedly larger sample size is needed despite the inclusion of highly reliable indicators in the model”. Based on the Kolomogrov-Smirov (K-S) and Shapiro-Wilks (S-W) tests normality was not achieved and composite reliability was over 0.79. Thus, it was important to have sufficient data. The current study had 396 cases, so the model had a large enough sample size to test the hypotheses (direct and indirect moderation of gender).
7.7 Questionnaire administration and response rate

As the study was conducted using a large survey around the kingdom of Saudi Arabia (KSA), which has huge regions, some important points were considered before collecting the data as follows:

- Contact numbers of branch managers were obtained from their human resource departments. Due to the nature of banks’ policies, meetings and visits were arranged by banks’ departments and some by the researcher.
- Fieldwork was organised by city, region and district respectively, to save time and cost.
- The target number of participants was around 200 men and 200 women.

Five subordinates who had worked for at least four months with the current manager were asked to participate. A full explanation of the purpose of the study was provided and their right of privacy assured. They took around 15-20 minutes to rate their managers’ leadership style and relationship with their manager and their own level of organisational commitment. Their survey consisted of four parts: 1- Multifactor Leadership Questionnaire (MLQ) (rater form), 2- LMX instrument, 3- Organisational Commitment Scale (OCS) and 4- Demographic factors.

**Response rate:** 669 questionnaires were distributed to six bank branches, and 396 valid questionnaires were obtained (234 usable male, and 162 usable female) (See Table 18).

Table 18 Detailed questionnaire distribution

<table>
<thead>
<tr>
<th>Week</th>
<th>Region</th>
<th>City</th>
<th>Male Distributed questionnaires</th>
<th>Male Received questionnaires</th>
<th>Female Distributed questionnaires</th>
<th>Female Received questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2 &amp; 3</td>
<td>East</td>
<td>Dammam</td>
<td>48</td>
<td>25</td>
<td>36</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Khobar</td>
<td>24</td>
<td>13</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jubail</td>
<td>12</td>
<td>10</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>4,5,6 &amp; 7</td>
<td>Middle</td>
<td>Riyadh</td>
<td>96</td>
<td>63</td>
<td>62</td>
<td>40</td>
</tr>
<tr>
<td>8,9,10 &amp; 11</td>
<td>West</td>
<td>Jeddah</td>
<td>91</td>
<td>72</td>
<td>55</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Makkah</td>
<td>55</td>
<td>41</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taif</td>
<td>24</td>
<td>9</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yanbu</td>
<td>12</td>
<td>9</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>12,13 &amp; 14</td>
<td>South</td>
<td>Bisha</td>
<td>18</td>
<td>8</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Baha</td>
<td>12</td>
<td>5</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bashair</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Received</td>
<td>398</td>
<td>261 (65.6%)</td>
<td>271</td>
<td>182 (67.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----</td>
<td>-------------</td>
<td>-----</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Useable</td>
<td>234 (89.7%)</td>
<td>162 (89%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396 respondents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s documentation of data collection.

7.8 Conclusion

This chapter examined the study instrument used in this research and research sampling. Based on the research objectives and the social desirability issues survey questionnaires were employed to collect the data. The questionnaire structures was explained in detail, addressing the rationale for using the scales, and results of the validity and reliability of each scale. The translation technique used was discussed. Then the pilot study experience for the current study was explained from four aspects. Finally, the sample selection method was discussed, with consideration of the sample size.
CHAPTER EIGHT: DATA ANALYSIS AND FINDINGS

8.1 Introduction
This research was developed to examine gendered leadership in a segregated work environment in Saudi Arabia. The main objective of this chapter is to present the data analysis findings of the survey, and test the hypotheses of the research. The chapter consists of ten further sections. In section two, inspection of data is presented in order to remediate the data from any errors or assumptions that could affect the accuracy of the data. Therefore, assumptions related to missing values, multicollinearity, normality, outliers and common methods bias are tested. Section three provides data on demographic factors/respondents’ characteristics. The fourth section presents descriptive analysis of each subscale; this section contains an elaborated presentation of mean scores of the whole sample and across gender, so male and female perceptions are presented.

Section five presents the results of the outer model (measurement model/stage) of the main constructs: the transformational leadership behaviours scale (TRFLs), the transactional leadership behaviours scale (TXs), the passive leadership behaviours scale (PSVs), then the final/correlated construct including the TRFLs, TXs and PSVs to test the model fit of the construct as three correlated constructs/predictors in the final model. Also the leader member exchange scale (LMX) and organisational commitment scale (OC) model are obtained. As a result of the outer model, the inner model was created and presented. In section six Composite reliability (CR*) is presented. In section seven the value of Average Variance Extracted (AVE) is used to test construct validity (convergent and discriminant validity). Also, criterion validity is discussed to prove the validity. As the current study was developed with three independent constructs and one mediator, thus the assumptions of multicollinearity are tested and presented in section eight. In section nine, sample size is considered and presented.
Section ten evaluates the final model for testing the hypotheses. Dimensionality, the F test and goodness of model index (GoF) are tested; also the hypotheses are tested using the SEM (inner model/structural stage). SEM was used due to its strong ability to test the relationship between constructs in a complex model. Both direct and indirect effects are presented. The Sobel test was employed to test for a significant effect of the mediator constructs. Also the impact of gender was tested; different techniques were used to investigate to what extent gender has an impact in a segregated organisation. A T-test was conducted to test whether there were differences between male and female perceptions of all scales. A Z-test was conducted to test for correlation differences across gender. Moderation multiple regression (MMR) was conducted to test the effect of gender as a moderator variable. As differences were found across gender, the data were tested separately using multiple group analysis (MGA) to test the difference of $\beta$ value across gender using the Smith-Satterthwait test.

8.2 Inspection of the data

The accuracy of statistics depends on the degree of data quality. Thus, some assumptions need to be checked before going further in the analysis, otherwise the data might violate some assumptions such as missing data, outliers, normality or collinearity (Hair et al., 1998). These assumptions are discussed as follows:

8.2.1 Entering data

As entering data is the first step in managing data, consideration of the entering of the data might increase the quality of the data. Some software was suggested for entering the raw data, such as EXCEL software and STATISTICA, which can be read by SPSS (Kinnear and Gray, 2008). In the first step of dealing with data, the data were entered into EXCEL software. EXCEL was found easier than SPSS for managing the data as it is in the same direction as the questionnaire (vertical). EXCEL software has some features such as colour, italic and bold, that can be used to change
the direction of the data; the data can be entered vertically, and then the direction of the data can be changed to be horizontal via paste special → transpose. These features can assist the researcher to fill cells in a short time and obtain accurate data, and avoid or minimise the possibility of data errors. When the data was finally entered, it was exported to SPSS for inspection before analysis. At this stage the researcher needed to understand which software should be used and which techniques would be the best to analyse the data.

8.2.2 Missing values

The frequencies were computed to ensure that the values of the variables were located in the expected range for each variable. This step is essential to discover any typos (entering errors), so the data were checked for errors such as missing data, and any unusual values. Due to human error, it is rare to collect data without missing values. The data were inspected for any missing data or errors by running a descriptive feature in SPSS (Pallant, 2010).

Researchers need to understand why data has been missed. Rubin’s (1976) classification concerns whether the data are ignorable or not. Rubin classified missing data into three kinds: (a) missing not at random (MNAR), (b) missing at random (MAR), (c) missing completely at random (MCAR). The last kind is assumed to be missed by chance, and can be observed when the missing data are equally distributed across variables; MAR is based on the characteristics of respondents; so this kind of missing data can be found in a specific variable or in one demographic factor or group. MNAR indicates a serious problem in the data, because the researcher cannot observe what is missing (Sinha ray et al., 2001).

To prevent ignorable missing values researchers need first to exclude non sampled observations of sample (Hair et al., 2010). In the early stage (questionnaire design), the researcher needs to take into consideration the causes of missing data. Missing data can
be due to a variety of reasons, for example, participants may skip some questions due to confusion or unclear questions. To prevent such problems, the researcher revised the questionnaire during the pilot stage, and some questions were clarified. Also the researcher allowed participants to withdraw from participation, or to ask for more explanation.

There are two main approaches to deal with missing data. The first approach is case deletion, and the second approach is imputing/ replacing missing values. Case deletion can be used when there is a large enough sample, and few cases are affected (Hair et al., 2010). Hair et al. (2006) suggest that 10% of missing data can be ignored if it is randomly missing. Although the result for the missing data was below 5%, this approach was not used in the current study due to the sensitive sample size.

The second approach seeks to remediate the missing data by replacing values. Three imputation methods were suggested by Churchill (1994) to remediate missing data; (1) treat missing data as a separate category; (2) conduct multiple regression to resolve the missing data (regression imputation); and (3) calculate the average of missing data for the variable (mean imputation). Tabachnick and Fidell (2007) argue that the mean is the popular way to estimate the missing value. The mean is the best guess about the value of the construct. Mean substitution can be profitability employed when missing data are proportionately small (Meyers et al., 2006). “If only a few data points say 5% or less, are missing in a random pattern from a large data set, the problems are less serious and almost any procedure for handling missing values yields similar results. If, however, a lot of data are missing from a small to moderately sized data set, the problems can be very serious” (Tabachnick and Fidell, 2007,p.63). In addition, Hair et al. (2010) claim that any of the imputation methods can be applied when missing data are below 10%. As the current study used a large sample and the missing data were below 5%, the missing values were imputed based on the mean score of all cases for the missing
values.

8.2.3 Assessing normality

“The most fundamental assumption in multivariate analysis is normality, referring to the shape of the data distribution for an individual metric variable and its correspondence to the normal distribution, the benchmark for statistical methods” (Hair et al., 1998, p.70). Although prior research has provided evidence of PLS-SEM’s robustness in data, which are extremely non-normal, nevertheless researchers should consider the assumption of data distribution. Extremely skewed data inflate bootstrap standard errors and then reduce statistical power, which is problematic of the tendency of PLS-SEM to underestimate the inner model (Hair et al., 2012).

Therefore, it is necessary to assess the normality of distribution scores before analysing data; it can be assessed by some tests available in SPSS, such as checking the value of skewness and kurtosis, Kolomogrov-Smirov (K-S) and Shapiro-Wilks (S-W) test. Also there are a number of graphical ways of testing the assumption of normality: Histogram, Boxplot, Stem-and-leaf plot, Normal distributed plot and Dertended normal plot (Pallant, 2010).

The “explore” option in SPSS can be used to test normality. A non-significant result ($p>.05$) indicates normality (Osborne and Waters, 2002). The results of the Kolomogrov-Smirov (K-S) and Shapiro-Wilks (S-W) tests show that the results are not normal (see Table 19). However, researchers point out that it is unusual for Likert scales to follow a normal distribution (Nunnally, 1978); this result is common in large samples (N>200) (Pallant, 2010).

Hair et al (1988) indicate that normality should be tested by both statistical and graphical results. The values of skewness and kurtosis were selected to test normality. The significance of the values of skewness and kurtosis were considered for each
However, with regard to the probability level values exceeding ±2.58 indicate the assumption of the normality of the distribution is rejected at the 0.1 level. Another critical value of ±1.96 is acceptable at the level of 0.05. As shown in Table 20 the results for skewness and kurtosis values were within the acceptable range ±2.58, which indicates that the data set was normally distributed.

In addition, Hair et al. (1988, p. 175) point out that “a better method is the use of normal probability plots”. Thus normality was tested by P-P plots. As shown in Figure 17, the data did not divert from the line of normal distribution. “The normal distribution makes a straight diagonal line, and the plotted residual line closely follows the diagonal” (Hair et al., 1988, p. 175). The current study tested normality based on graphical and statistical results, and the results indicate that the data are normally distributed.

Table 19 Normality test

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
<th>TRFLs</th>
<th>CR</th>
<th>MBEA</th>
<th>PSVs</th>
<th>LMX</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>396</td>
<td>396</td>
<td>396</td>
<td>396</td>
<td>396</td>
</tr>
<tr>
<td>Normal Parameters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.78</td>
<td>3.21</td>
<td>2.53</td>
<td>1.09</td>
<td>4.06</td>
</tr>
<tr>
<td>Std. Dev</td>
<td>0.78</td>
<td>1.06</td>
<td>0.77</td>
<td>0.86</td>
<td>0.72</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>0.08</td>
<td>0.31</td>
<td>0.15</td>
<td>0.13</td>
<td>0.14</td>
</tr>
<tr>
<td>Positive</td>
<td>0.06</td>
<td>0.23</td>
<td>0.15</td>
<td>0.13</td>
<td>0.10</td>
</tr>
<tr>
<td>Negative</td>
<td>-0.08</td>
<td>-0.31</td>
<td>-0.11</td>
<td>-0.10</td>
<td>-0.14</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>1.51</td>
<td>6.09</td>
<td>2.98</td>
<td>2.49</td>
<td>2.85</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.02</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.

Source: SPSS output

Table 20 Descriptive statsitics of the final model (N=396).

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIA</td>
<td>2.70</td>
<td>0.95</td>
<td>0.00</td>
<td>4.00</td>
<td>-0.37</td>
<td>-0.43</td>
</tr>
<tr>
<td>IIB</td>
<td>2.86</td>
<td>0.87</td>
<td>0.50</td>
<td>4.00</td>
<td>-0.52</td>
<td>-0.27</td>
</tr>
<tr>
<td>Dev</td>
<td>2.78</td>
<td>0.93</td>
<td>0.40</td>
<td>4.00</td>
<td>-0.54</td>
<td>-0.41</td>
</tr>
<tr>
<td>MBEP</td>
<td>1.08</td>
<td>0.96</td>
<td>0.00</td>
<td>4.00</td>
<td>0.82</td>
<td>0.20</td>
</tr>
<tr>
<td>LF</td>
<td>1.10</td>
<td>1.03</td>
<td>0.00</td>
<td>4.00</td>
<td>0.65</td>
<td>-0.57</td>
</tr>
<tr>
<td>OCA</td>
<td>4.75</td>
<td>1.69</td>
<td>1.00</td>
<td>7.00</td>
<td>-0.58</td>
<td>-0.56</td>
</tr>
<tr>
<td>OCN</td>
<td>4.87</td>
<td>1.80</td>
<td>1.00</td>
<td>7.00</td>
<td>-0.68</td>
<td>-0.54</td>
</tr>
<tr>
<td>OCC</td>
<td>4.79</td>
<td>1.57</td>
<td>1.00</td>
<td>7.00</td>
<td>-0.58</td>
<td>-0.41</td>
</tr>
<tr>
<td>TRFLs</td>
<td>2.78</td>
<td>0.78</td>
<td>0.43</td>
<td>4.00</td>
<td>-0.49</td>
<td>-0.16</td>
</tr>
<tr>
<td></td>
<td>CR</td>
<td>MBEA</td>
<td>PSVs</td>
<td>LMX</td>
<td>OC</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>3.21</td>
<td>2.53</td>
<td>1.09</td>
<td>4.06</td>
<td>4.80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.06</td>
<td>0.77</td>
<td>0.86</td>
<td>0.72</td>
<td>1.47</td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>0.00</td>
<td>0.50</td>
<td>0.00</td>
<td>2.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>5.00</td>
<td>7.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-1.42</td>
<td>0.15</td>
<td>0.56</td>
<td>-0.59</td>
<td>-0.65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.48</td>
<td>-0.53</td>
<td>-0.28</td>
<td>-0.33</td>
<td>-0.39</td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS output

Figure 17 Q-Q results of main constructs.

Source: SPSS output.
8.2.4 Assessment of Outliers

An outlier is defined as “a case with such an extreme value on one variable or such a strange combination of scores on two or more variables” (Tabachnick and Fidell, 2007, p.72). The output of the regression analysis was used to check the outliers by checking the value of standardised residual in the residual statistics table. If the value ranges between 3.3 and -3.3, then it can be concluded that the data does not violate this assumption (Tabachnick and Fidell, 2007). The results for the current study did not exceed the recommended value, so it can be concluded that the data is free from outliers. See Table 21.

Table 21 Residual Statistics (N=396)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Mini</th>
<th>Max</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted Value</td>
<td>2.9912</td>
<td>2.1003</td>
<td>3.7246</td>
<td>.31413</td>
</tr>
<tr>
<td>Residual</td>
<td>.00000</td>
<td>-2.44633</td>
<td>1.66683</td>
<td>.82311</td>
</tr>
<tr>
<td>Std. Predicted Value</td>
<td>.000</td>
<td>-2.836</td>
<td>2.335</td>
<td>1.000</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>.000</td>
<td>-2.953</td>
<td>2.012</td>
<td>.994</td>
</tr>
</tbody>
</table>

Dependent construct = OC

Source: SPSS output

8.2.5 Common method bias (CMB) test

As the data were collected at one time in a cross-sectional survey, a problem of common method bias might appear. There are different ways to test for this problem using different software. Harman’s (1976) one-factor test was used to examine the possibility of common method bias. All items were merged in factor analysis by extracting only one factor. Harman suggests that when the contribution of the one factor is more than 50% of the total variance, it is a sign of common method bias. SPSS was used to investigate common method bias via Analysis →Dimension reduction →Factor, and then all items were extracted as one factor, selecting the principal components method.

The first factor in the current study accounts for 33% of the total variance. This finding indicates that common variance bias was not a serious problem (CMB<50%) (See Table 22).
Table 22 Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>8.549</td>
<td>32.881</td>
</tr>
<tr>
<td>2</td>
<td>3.237</td>
<td>12.452</td>
</tr>
<tr>
<td>3</td>
<td>1.390</td>
<td>5.344</td>
</tr>
<tr>
<td>4</td>
<td>1.159</td>
<td>4.457</td>
</tr>
<tr>
<td>5</td>
<td>1.021</td>
<td>3.925</td>
</tr>
<tr>
<td>6</td>
<td>.959</td>
<td>3.688</td>
</tr>
<tr>
<td>7</td>
<td>.811</td>
<td>3.119</td>
</tr>
<tr>
<td>8</td>
<td>.770</td>
<td>2.961</td>
</tr>
<tr>
<td>9</td>
<td>.750</td>
<td>2.886</td>
</tr>
<tr>
<td>10</td>
<td>.730</td>
<td>2.809</td>
</tr>
<tr>
<td>11</td>
<td>.704</td>
<td>2.707</td>
</tr>
<tr>
<td>12</td>
<td>.618</td>
<td>2.376</td>
</tr>
<tr>
<td>13</td>
<td>.591</td>
<td>2.275</td>
</tr>
<tr>
<td>14</td>
<td>.552</td>
<td>2.121</td>
</tr>
<tr>
<td>15</td>
<td>.527</td>
<td>2.026</td>
</tr>
<tr>
<td>16</td>
<td>.469</td>
<td>1.806</td>
</tr>
<tr>
<td>17</td>
<td>.424</td>
<td>1.632</td>
</tr>
<tr>
<td>18</td>
<td>.418</td>
<td>1.606</td>
</tr>
<tr>
<td>19</td>
<td>.401</td>
<td>1.542</td>
</tr>
<tr>
<td>20</td>
<td>.344</td>
<td>1.324</td>
</tr>
<tr>
<td>21</td>
<td>.321</td>
<td>1.234</td>
</tr>
<tr>
<td>22</td>
<td>.310</td>
<td>1.192</td>
</tr>
<tr>
<td>23</td>
<td>.281</td>
<td>1.081</td>
</tr>
<tr>
<td>24</td>
<td>.278</td>
<td>1.071</td>
</tr>
<tr>
<td>25</td>
<td>.207</td>
<td>.797</td>
</tr>
<tr>
<td>26</td>
<td>.179</td>
<td>.690</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Source: SPSS output

8.3 Demographic factors of respondents

This section provides detailed information on bankers’ (subordinates’) demographic characteristics for the following factors: sex, marital status, age, monthly income (salary), highest level of formal education, period of employment with the current employer, and period of employment with the current supervisor. Crosstab analysis was used to describe the demographic factors based on gender.

8.3.1 Sex

A total of 398 subordinates (bankers) participated in the current study, of whom 58.3% (n=232) were male, and 41.7% (n=166) were female.
8.3.2 Marital Status

Two thirds of subordinates (66.7%, n=264) were married and almost one third (30.4%, n=120) were single. Only a tiny percentage (3.3%, n=12) were in the “other” category. There is no obvious difference in percentage of this category across gender (See Table 23).

Table 23 Marital status of respondents

<table>
<thead>
<tr>
<th>MS</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>163</td>
<td>101</td>
<td>264</td>
</tr>
<tr>
<td>69.7%</td>
<td>62.3%</td>
<td>66.7%</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>66</td>
<td>54</td>
<td>120</td>
</tr>
<tr>
<td>28.2%</td>
<td>33.3%</td>
<td>30.3%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>2.1%</td>
<td>4.3%</td>
<td>3.0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>162</td>
<td>396(100%)</td>
</tr>
</tbody>
</table>

Source: SPSS output

8.3.3 Age

No subordinates were over 44. The 25-34 age group was in a clear majority with 74.7% (n=296) while the 16-24 group, and the 35-44 group were almost equally divided at 12.1% (n=48) and 13.1% (n=52) respectively. There are no obvious differences in percentage of age group across gender (See Table 24).

Table 24 Age of respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-24</td>
<td>25</td>
<td>23</td>
<td>48</td>
</tr>
<tr>
<td>10.7%</td>
<td>14.2%</td>
<td>12.1%</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>176</td>
<td>120</td>
<td>296</td>
</tr>
<tr>
<td>75.2%</td>
<td>74.1%</td>
<td>74.7%</td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>33</td>
<td>19</td>
<td>52</td>
</tr>
<tr>
<td>14.1%</td>
<td>11.7%</td>
<td>13.1%</td>
<td></td>
</tr>
<tr>
<td>&gt;45</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>162</td>
<td>396(100%)</td>
</tr>
</tbody>
</table>

Source: SPSS output

8.3.4 Salary

The majority of subordinates earned between 3000 SR and 9000 SR. The 6001-9000 S.R group accounted for over half of the subordinates (53.3%, n=212), whereas the
3000-6000 SR group constituted 39.7% (n=158). Low percentages were found in the
other group; the 9001-12000SR group accounted for 6.0 % (n=24), and only 1% (n=4)
earned 12001-15000 SR. There were no obvious differences in percentages of income
groups across gender (See Table 25).

Table 25 Salary of respondents

<table>
<thead>
<tr>
<th>Income</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3000-6000 SR</td>
<td>88</td>
<td>68</td>
<td>156</td>
</tr>
<tr>
<td>6001-9000 SR</td>
<td>129</td>
<td>83</td>
<td>212</td>
</tr>
<tr>
<td>9001-12000 SR</td>
<td>14</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>12001-15000 SR</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>More than 15000 SR</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>162</td>
<td>396(100%)</td>
</tr>
</tbody>
</table>

* One US dollar = 3.75 Saudi riyal (SR)

Source: SPSS output

8.3.5 The Level of Education

Over 80% of subordinates had a diploma or bachelor degree. Diploma-holders were the
largest category among subordinates, with 42.4 % (n=168), but almost as many (40.5 %, n=161) held a bachelor degree. Secondary school certificate holders accounted for 16.2 % (n=64), while only 4 subordinates (1.0%) had a higher degree. There were some differences in percentage of the level of education across gender; more than half the female respondents had a Bachelor degree, with 51 % ( n=84) compared to 32.5% (n=76) of males, whereas more men than women had a Diploma; half of male respondents (49.1%, n=115), and a third of female (32.7%, n=53). This indicates the
female subordinates had higher educational qualifications than male (See Table 26).

Table 26 The Level of education of respondents

<table>
<thead>
<tr>
<th>Education</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary school</td>
<td>41</td>
<td>23</td>
<td>64</td>
</tr>
<tr>
<td>Diploma</td>
<td>115</td>
<td>53</td>
<td>168</td>
</tr>
<tr>
<td>Bachelor</td>
<td>76</td>
<td>84</td>
<td>160</td>
</tr>
<tr>
<td>Post graduate</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>162</td>
<td>396(100%)</td>
</tr>
</tbody>
</table>
8.3.6 Period with current employer

Nearly half the employees had worked for only five years or less in the current bank (48.5% n=192). Those with 6-10 years’ experience came in second place with 36.4% (n=144). The 11-15 year group accounted for 12.1% (n=48), and only 3% (n=12) had worked in the current bank for 16-20 years, and no employees had employment of more than 21 years. There was no obvious difference in percentage of the period with the current employer across gender (See Table 27).

Table 27 Period with current employer

<table>
<thead>
<tr>
<th>Periods with current employer</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 years or less</td>
<td>107</td>
<td>85</td>
<td>192</td>
</tr>
<tr>
<td>6-10 years</td>
<td>88</td>
<td>56</td>
<td>144</td>
</tr>
<tr>
<td>11-15 years</td>
<td>33</td>
<td>15</td>
<td>48</td>
</tr>
<tr>
<td>16-20 years</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>21+</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>162</td>
<td>396(100%)</td>
</tr>
</tbody>
</table>

Source: SPSS output

8.3.7 Period with current leader

Period with current leader was collected in months. As shown in figure 18, the average period with the current manager was calculated, revealing that male subordinates had longer periods with the current manager (1.73 years) than had women subordinates (1.66 years); however the difference is only one month across gender.

Figure 18 Period with current leader. Source: SPSS and EXCEL outputs.
8.4 Descriptive analysis of constructs

The aim of this section is to present in percentage terms respondents’ perception of the measuring scales. Every item was calculated using frequencies analysis. The reason for this analysis is to find the details of mean scores. Also, male and female perspectives were measured separately.

8.4.1 Transformational Leadership Behaviours (TRFLs)

As mentioned previously, transformational leadership behaviours were measured by five subscales; Idealised Influence Attributes (IIA), Idealised Influence Behaviours (IIB), Inspiration Motivation (IM), Intellectualised Stimulation and Individualised Consideration (IC). Each subscale was measured by four items.

8.4.1.1 Idealised Influence Attributes (IIA)

The variable Idealised Influence Attributes was measured using four items. The overall mean was 2.71 out of 4 with SD of 0.95 on a 4-point Likert scale. This indicates that subordinates perceived their managers high in this variable. Women rated their managers higher on the variable than men, with an overall mean of 2.74 compared to 2.68 for men; however the difference is very small.

Followers perceived their leaders high in idealised influence attributes; 56.6% of respondents rated their managers high in instilling pride in employees for being associated with leaders, and 24.2% of respondents said they did so sometimes. 76.7% of respondents considered that their leaders went beyond self-interest. 73.2% saw that their leaders act in such ways as to be respected by their subordinates. 44% thought that their leaders displayed a high sense of power and confidence, and almost a third (29.3%) said they did so sometimes. This percentage indicates that leaders strongly display idealised influence attributes, practically building others’ respect, which had the highest mean. Male and female perceptions were almost the same in perceptions of these items; however, female respondents gave slightly higher ratings.
8.4.1.2 Idealised Influence Behaviours (IIB):

The variable Idealised Influence Behaviour was measured using four items. The overall mean was 2.86 out of 4 with SD of 0.869 on the 4-point Likert scale. This indicates that subordinates perceived their managers as behaving as moral, ethical models for employees. Women gave higher ratings than men; the overall means were 2.92 and 2.82 respectively; however the difference is very small.

Followers perceived their leaders as high in idealised influence behaviour. 55.3% of subordinates rated their managers high in talking and sharing with subordinates about important values and beliefs and displayed a sense of trust with others, and a third of respondents thought their manager did so sometimes. Only approximately 13% thought they rarely displayed this behaviour. Items IIB2, IIB3 and IIB4 had nearly the same percentages; just above 65.6% of subordinates rated their managers as having a sense of challenge, giving employees reasons to persist and face strong purpose, being aware of the consequences when making decisions, and emphasising the importance of teamwork. This percentage indicates that leaders highly display idealised influence behaviour. Male and female perceptions were almost the same on these items; however, female managers had slightly higher ratings than male managers.

8.4.1.3 Inspiration Motivation (IM)

Inspiration Motivation was measured using four items. The overall mean was 3.00 out of 4 with SD of 0.885 on a 4-point Likert scale. Managers had the ability to inspire their subordinates to work hard and collectively, face challenges and evoke visions; this subscale had the highest mean among others, with very small variance. Female respondents exceeded males in rating their leaders with an overall means of 3.03 and 2.98 respectively; however the variance is very small. Managers were rated as high in inspiration motivation; items IM1 and IM3 had nearly the same percentages with around 65% of subordinates rating their managers as frequently and
fairly often talking about the future optimistically, and managers being clear in explaining their thoughts toward the future. Also around a quarter of managers sometimes exhibited these behaviours, whereas 11.6% did so rarely. Items IM2 and IM4 had nearly the same percentages; just above 70% of subordinates rated their managers as enthusing employees and expressing confidence when missions needed to be completed. Around a quarter of managers sometimes possessed these behaviours and approximately 10% did so once in a while. These results indicate that leaders highly display idealised influence behaviour; 19.2% of respondents said they were sometimes enthusiastic and 13.2% said they expressed confidence, while only around 7% exhibited these behaviours, and only 2.5% not at all. Finally, comparing means, IM4 has the highest mean among all transformational leadership behaviours, so managers were perceived as possessing a sense of confidence and being committed to the goals of banks. Male and female managers’ leadership behaviours were rated almost the same on these items; however, female managers scored slightly higher than male managers.

8.4.1.4 Intellectual Stimulation (IS)

Intellectual stimulation was measured using four items. The overall mean was 2.75 out of 4 with SD of .900 on the 4-point Likert scale. Managers were able to get their followers to think in different ways to solve problems instead of relying on “tried and true” policies and procedures. Female and male respondents’ ratings of their leaders were almost the same, with overall means of 2.75 and 2.74 respectively. Managers were rated as high in possessing intellectualised stimulation behaviours, and IS2 had the highest mean for such behaviours (2.88). 63.2% of subordinates rated their managers as frequently and fairly often seeking different perspectives when solving problems. Around a quarter of managers sometimes exhibited this behaviour, whereas 8.8% did so rarely and only 1.5% did not have these behaviours. Items IS1 and IS3 had
nearly the same percentages; close to 60% of subordinates rated their managers as re-examining critical assumptions and getting employees to look at problems in different ways. Around a quarter were said to do so once in a while or not at all. Based on these frequencies, managers were high in possessing these behaviours. IS4 had the lowest mean, 2.85. Close to 55% of employees indicated that their managers encouraged employees in creativity and innovation, 25% of managers were said sometimes to have this behaviour, whilst 19.4% did so once in a while or not at all. Male and female managers’ leadership behaviours were seen as almost the same in these items; however, female managers scored higher than male managers, with very small differences.

8.4.1.5 Individualised Consideration (IC)

Individualised consideration was measured using four items. The overall mean was 2.75 out of 4 with $SD$ of 0.900. Managers held characteristics of being sympathetic toward employees, and were able to consider subordinates’ needs and abilities. Females exceeded their male counterparts with a very small difference, with overall means of 2.75 and 2.74 respectively.

Managers were rated as high in individualised consideration behaviours. IC1 had the highest mean among other behaviours (2.83). 61.9% of subordinates rated their managers as frequently and fairly often being attached and spending time to teach and coach followers. 24% of managers did so sometimes, whereas 9.1% did so once in a while and 3.8% did not possess this behaviour. 64.4% said managers were aware of the value of individuality of members rather than just as one of the group, while 15.7% were sometimes; and around 20% were once in a while or not at all. Items IC3 and IC4 had nearly the same percentages; close to 50% of subordinates rated their managers as considering employees’ different abilities, needs and aspirations, discovering employees’ strengths and helping them to develop such strengths. Male and female managers’ leadership behaviours were rated almost the same in these behaviours;
however, female managers exceeded male managers with a very small differences; men had a mean of 2.74, while women had a mean score of 2.78.

8.4.2 Transactional Leadership Behaviours (TXs)

Transactional Leadership behaviours were measured by two subscales, contingent reward (CR) and management by exception active (MBEA). Each subscale was measured by four items.

8.4.2.1 Contingent Reward (CR)

Contingent reward was measured using four items. The overall mean was 2.98 out of 4 with SD of 0.688. This behaviour was measured in the same manner as transformational leadership behaviours, and also compared across gender. Female and male respondents rated their managers the same, with an overall mean of 2.75. Managers were thought to have a contract with followers in order to match rewards with assignments; CR4 had the highest mean among all 36 behaviours with a mean score of 3.21. This behaviour indicates that managers express satisfaction when expectations are met, with a percentage of 79.2%. 13.1% of respondents said managers sometimes expressed satisfaction, whereas 3.5% said they did so rarely and 4.0% not at all. CR1, CR2 and CR3 had nearly the same percentages across the Likert scale. Around 70% of managers were observed as having an economic exchange policy, helped employees to meet this exchange and specified subordinates’ responsibilities to perform the bank’s goals. Around 20% of managers sometimes displayed contingent reward behaviours, while 10% did so once in a while and around 5% did not use contingent reward behaviours. As a result managers used the expression of satisfaction and generally scored very high in using contingent reward, with the same overall mean across gender.
8.4.2.2 Management by Exception Active (MBEA)

The variable management by exception active was measured using four items. The overall mean was 2.35 out of 4 with SD of 0.652 on the 4-point Likert scale. The overall mean indicated that managers acted as monitors, were involved with bankers and took corrective action when mistakes occurred and when deviation was just about to happen. Male and female managers were very close on this variable, with overall means of 2.34 and 3.35 respectively.

The majority of managers were said sometimes to possess these behaviours for all items. As rated by subordinates, 53.5% of managers sometimes focused their attention on mistakes, exceptions and deviation from standards. Around 20% often showed this behaviour and just above 20% rarely did so. This behaviour had the lowest mean compared with others, at 1.98. In behaviour MBEA2, 51.5% of subordinates said that their managers sometimes concentrated their full attention on dealing with complaints, mistakes and failures, 27.1% said their managers highly possessed this behaviour, while around 10% said they seldom expressed this behaviour.

MBEA3 and MBEA4 had similar values across the Likert scale, with overall means of 2.48 and 2.58 respectively. Around 40% of respondents said managers sometimes kept track of all subordinates’ mistakes and directed attention towards failure to meet standard assignments. Around 50% said managers often express these behaviours. This indicates that managers were highly inclined to monitor their followers. Only around 10% did so once in a while or not at all. Male and female managers’ leadership behaviours were almost the same across items.
8.4.3 Passive Leadership Behaviours (PSVs)

These were measured by two subscales, management by exception Passive (MBEP) and Laissez faire (LF). Each subscale was measured by four items.

8.4.3.1 Management by Exception Passive (MBEP)

The variable management by exception passive was measured using four items. The overall mean was 1.19 out of 4 with SD of 0.840 on the 4-point Likert scale. The overall mean indicated that managers were rated low in expressing these behaviours. More than 55% of respondents said their managers did not display MBEP behaviours; for example, managers did not wait until problems became serious, or wait for wrong to occur. Males exceeded female managers with overall mean of 1.22 and 1.17 respectively.

In MBEP1, MBEP2 and MBEP4 the majority of respondents (over 65%) perceived managers as not showing these behaviours, or doing so only once in a while. Thus the majority of managers did not wait to interfere until problems became serious, so they seemed to interfere and monitor employees to direct them before things went wrong. Around 20% of respondents thought managers sometimes showed these behaviours, while around 15% said they fairly often and frequently expressed passive behaviours. In Item MBEP3, just above 15% said managers did not care about improvements, but relied heavily on standard procedures, 28% said managers sometimes exhibited this behaviour, while 51.8% said they did not do this and might encourage employees for development or to think in different ways (intellectual stimulation). Male and female managers did not show obvious differences across behaviours; while females scored higher than males the differences were very small.

8.4.3.2 Laissez Faire (LF)

The variable laissez faire was measured using four items. The overall mean was 1.28 out of 4 with SD of 0.896 on the 4-point Likert scale. The overall mean indicated that
managers did not avoid being effective leaders. More than 60% of respondents said their managers did not neglect to take the leader role. Females exceeded male managers with overall means of 1.29 and 1.16 respectively.

The majority (over 60%) of respondents thought their managers possessed distinct leadership styles. Managers did not avoid getting involved when important issues arose, and shared with subordinates when needed. Also managers made decisions and were good communicators, answering urgent questions. Fewer than 15% of managers avoided being leaders. Male and female managers did not show obvious differences across behaviours; however, females exceeded males with very small differences.

8.4.4 Leader Member Exchange (LMX)

Followers were asked to measure their relationships with their immediate managers via seven questions using LMX-7 items scale on a five-point Likert scale. The average mean score of the whole sample was 3.90 with SD of 0.687. Male and female respondents did not have significant differences; men’s mean score was 3.89 with SD of 0.723, whereas women had a mean score of 3.92 with SD of 0.634. These results suggest that subordinates had a high relationship with their immediate managers and there were no differences across gender despite the slightly higher mean score for females.

The majority of followers (65.3%) highly rated that they understand where they stand with their immediate managers and how satisfied their managers are with what they do, a quarter (25.8%) thought they did so a fair amount, and fewer than 10% reported little understanding of this perspective. Male and female respondents scored almost the same one this item, but slightly higher for females. In LMX2, the majority (51%) of participants rated that their immediate managers highly understood their problems and needs, 37.9% said they did so sometimes, whereas 11.1% said they were not aware of the employees’ problems and needs. Female respondents scored higher than males with
small differences in the mean score, 3.70 and 3.65 respectively. LMX3 asked employees to rate how well their immediate manager recognised their potential. Three quarters (75.3%) of employees rated that their managers significantly knew their potential, 18.2% said moderately, while only 5.6% said a little. Women’s ratings exceeded men’s with means of 4.13 and 4.04 respectively. In LMX4 employees were asked to what extent their immediate managers had chances to use their power to solve employees’ problems at work. The results varied between moderate (34.3%) and high (37.4%) and 16.2% said very high, while 12.1% said either none or small. Male and female managers did not differ in helping their subordinates to solve their problem; however, males exceeded their female counterparts with very small differences, shown in means of 3.57 for males and 3.52 for females. In LMX5, subordinates were asked the chances that their managers would bail their subordinates out at their own expense. This question measured how trust occurs between members of the dyad, which could lead to making sacrifices for each other. The result showed that the majority (55%) rated either managers high or very high in this behaviour, around 25.8% of managers possessed the dyadic relationship, while only 18.2% said the chance was either small or none. Males and females did not differ in trust, although females exceeded males with a very small difference; males had a mean score of 3.40, and females had 3.44. In LMX6 employees were asked for their agreement on the leader’s confidence that employees would defend and justify the manager’s decision if the managers were not present to do it. This question measures the level of trust between pairs (managers and subordinates). The results indicate that the majority (73.25%) of employees agreed and strongly agreed that their managers had such confidence, 21.7% gave a neutral response, and 5% either disagreed or strongly disagreed. Males and females did not differ in this item.

The last question (LMX7) was a general question to rate how subordinates characterised the working relationship with their immediate managers. A very high percentage
(79.3%) rated it as extremely effective or better than average, only 14.6% said that the relationship was average, whereas 6% said it was either worse than average or extremely ineffective. Females scored slightly higher than males in describing their general relationship with their manager, but with very small difference; men had a mean score of 4.17 and women’s was 4.20. An interesting result was that this item had the highest mean score among all seven items, with an overall mean score of 4.18. According to the item descriptions both male and female subordinates had a high quality relationship with their immediate managers. Men and women did not show significant differences in mean score, although women exceeded men, with very small differences.

8.4.5 Organisational Commitment (OC)

Organisational commitment was measured by three observed constructs (affective, normative and continuance) using seven items. The overall mean was 4.89 out of 7 with SD of 1.41 on the 7-point Likert scale. The overall mean indicated that employees are quite committed to the banks. Regarding the observed construct, employees’ ratings show that they rated their commitment to the organisation (organisational commitment affective) highest score with a close to five out of 7 (mean=4.91, SD=1.5). Normative commitment came second with a score of 4.88, SD=1.8, while continuance commitment was the lowest score with 4.79, SD=1.7. These results would indicate that employees were committed to their banks due to the banks’ policies and goals more than their investment to stay in the banks.
8.5 Partial Least Square (PLS)

“The power of SEM is seen most fully when multiple indicators for each latent variable are first tested through CFA to establish the conceptual soundness of latent variables used in the final structural model” (Schereiber et al., 2006, p.335). The significance of Smart-PLS is its ability to evaluate the whole hypothesised model simultaneously.

Smart-PLS was conducted in the current study for the following reasons:

1. To test the validation of the constructs (validities and reliability) (outer model).
2. To investigate the dimensionality of scales.
3. To achieve the best model fit among alternative models.
4. To test the hypotheses.
5. It is less concerned with distributed data.
6. To compare the path differences between groups. Multi group analysis is conducted by different approaches such as the component-based approach and the covariance-based approach. Both approaches consistently detect differences under conditions of normality with large sample sizes. However, an appropriate approach is selected under conditions as follows:

- The component-based approach is more likely to detect differences between groups than is the covariance-based approach when data are normally distributed, with a small sample size and correlated independent constructs.

- With non-normally distributed data, neither approach can consistently detect differences across the groups in two of the paths, suggesting that both struggle with the prediction of a highly skewed and kurtosis dependent construct.

- Both approaches detect the differences in the other paths consistently under conditions of non-normality, however, with the preferable
component-based approach (Qureshi and Compeau, 2009, Marcoulides and Saunders, 2006). As the data distribution is debatable due to its different inspective methods and the satisfied results of skewed and kurtosis, PLS would be the appropriate method to detect the differences across group (Chin, 1988b).

Unlike other software (e.g. AMOS), PLS does not have criteria for the model fit, however, two main stages need to be conducted respectively: the outer model assessment stage and inner model assessment stage (see Figure 19). During the outer model stage, and before drawing the diagram, it is important to decide whether the outer model is reflective or formative or both. The selection is subject to theoretical reasoning (Diamantopoulos and Winklhofer, 2001). In the current study the outer model is hypothesised to be a reflective model, which has causal relationships from the latent construct to the manifest construct in its block. Thus, each manifest construct in the measurement model is supposed to be created as a linear function of its latent construct (Henseler et al., 2009).

![Diagram](image.png)

Figure 19 Two-Step Process of PLS path Model Assessment.
Outer model assessment involves testing the individual indicators (squared standardized outer loading), reliabilities for each construct’s composite of measures (internal consistency reliability), as well as the measures of convergence (average variance extracted, AVE) and discriminant validities (Hair et al., 2012). These criteria are required for reflective outer model assessment, which is the prior stage before inner model assessment (causality stage). When the outer model has been proved, the inner model should automatically be proved. However, three criteria should be considered for the model evaluation: R² explains the variance of latent construct; Beta (β) explains the prediction of the latent and the t value at is 1.64 or more (Chin, 2010b).

As PLS path modelling does not rely on direct inference statistical tests of the model fit, distributional assumptions and the model parameters are not available (Chin, 2010a). In order to estimate the precision of the PLS estimates non-parametric techniques of re-sampling need to be used. In PLS the bootstrapping estimation/method is commonly used, which provides the standard errors and t-values of the parameters (Vilares et al., 2010).

It is very important to consider the options of the weighting scheme (computational options). Three weighting scheme options are available to run the PLS algorithm; centroid weighting, factorial weighting, and path weighting (or structural) and they have different estimations for outer and inner model and different situations, in which they should be selected (Hair et al., 2012). For example centroid weighting should not be used for estimating a second order component model (Henseler et al., 2009). Thus, as the current study has high order constructs, the first option was not considered. Tenenhaus et al. (2005) argue that the other two options do not significantly influence the results. Therefore, the current study implemented the individual sign change option, which provides an estimate of the standard error for latent constructs, and used
path weighting scheme as the computational option and the bootstrapping procedure on 5000 samples. A sample replication of 5000 ensures the stability of the results (Marcoulides and Saunders, 2006).

Basically, SEM does not determine which model should be selected; rather, it estimates the parameters in the model as long as the theory has already been proved. Therefore, theory and especially content validity plays an initial role in formulating SEMs and guiding the researcher on which model(s) (relationships) should be specified and tested. Model specification is a prior step in SEM stages (Schumacker and Lomax, 2010; Hair et al., 1988). In addition, see Table 28 for the capabilities differences between SEM-PLS and traditional analysis method (SPSS regression).

Table 28 Capabilities differences between PLS and regression

<table>
<thead>
<tr>
<th>Statement</th>
<th>PLS</th>
<th>Regression (SPSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maps paths to many dependent (latent or observed) variables in the same research model and analyse all the paths simultaneously rather than one at a time.</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Can perform a confirmatory factor analysis</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Estimating item loadings and residual covariance.</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Analysis of individual item loading paths</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Analyse all the paths, both measurement and structural, in one analysis.</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Unidimensionality design</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>Composite reliability</td>
<td>Provided</td>
<td>Not provided</td>
</tr>
<tr>
<td>Type of variance examined</td>
<td>Common</td>
<td>Combined specific and error</td>
</tr>
<tr>
<td>Suited for predictive applications and theory building</td>
<td>Stronger</td>
<td>Weaker</td>
</tr>
</tbody>
</table>

Source: (Gefen et al., 2000).

The following models were developed based on the previous suggestions in order to achieve the best model.

**8.5.1 CFA /outer model of hypothesised model (original model)**

Hypothesised model (model one) consists of five latent constructs with their observed constructs. The first latent construct is TRFLs, which theoretically consists of five observed constructs (IIA, IIB, IM, IS and IC). The second latent construct was TXs, which was originally hypothesised as measured by three observed constructs (CR, MBEA and MBEP). The third latent construct was LF; each observed construct was
measured by four items (unidimensional construct). The fourth latent construct was LMX, hypothesised as a unidimension, measured by seven items. The last latent construct was OC, which is drawn in the framework as a dependent construct, measured by three observed constructs (OCA, OCN and OCC), each observed construct theoretically measured by seven items.

In order to test the validity of the model, PLS offers to test the entire model simultaneously (Chin, 1998b). In the hypothesis model (Model 1), all items were collapsed as they are hypothesised by scholars. However, the results indicated that there were high correlations between some constructs and the AVE values were not acceptable for some constructs. If the squared correlations between constructs are higher than AVE, discriminant validity is not proved (Chin, 1998b). The results indicate that the model has two assumptions: 1. Low AVE for transformational leadership styles (TRFLs) and transactional leadership styles ((TXs) (CR and MBEA)). 2. High correlation between TRFLs constructs (See Figure 20, Table 28, and Appendix 6 for PLS based t-values and β diagrams). To rectify this problem the strategy of combination and separation among constructs was suggested, with consideration to the operationalisation of the constructs: Drop one of the measures or split the construct into two distinct sub constructs (Hulland, 1999). Thus, the alternative models were tested in order to accomplish the best model fit. These models are discussed in the next sections.
Table 29 Hypothesised model (model 1) outputs

<table>
<thead>
<tr>
<th>Latent name</th>
<th>Latent construct</th>
<th>Observed construct</th>
<th>Number of items</th>
<th>AVE</th>
</tr>
</thead>
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<tr>
<td>Transformational leadership styles (TRFLs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TRFLs</td>
<td></td>
<td>IIA</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>IIB</td>
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<td>0.52</td>
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<tr>
<td></td>
<td></td>
<td>IM</td>
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<td>0.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IS</td>
<td>4</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IC</td>
<td>4</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>TRFLs</td>
<td></td>
<td>20</td>
<td>0.47*</td>
</tr>
<tr>
<td>Transactional leadership styles (TXs)</td>
<td></td>
<td>CR</td>
<td>4</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBEA</td>
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<td>0.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBEP</td>
<td>4</td>
<td>0.47*</td>
</tr>
<tr>
<td></td>
<td>TXs</td>
<td></td>
<td>12</td>
<td>0.32</td>
</tr>
<tr>
<td>Laissez fair (LF)</td>
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<td>LF</td>
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<td>0.45*</td>
</tr>
<tr>
<td>Leader Member Exchange (LMX)</td>
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<td>0.46*</td>
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<tr>
<td></td>
<td></td>
<td>LMX1:7</td>
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<td></td>
</tr>
<tr>
<td>Organisational Commitment (OC)</td>
<td></td>
<td>OCA</td>
<td>7</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OCC</td>
<td>7</td>
<td>0.36*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OCN</td>
<td>7</td>
<td>0.43*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OC</td>
<td>21</td>
<td>0.33*</td>
</tr>
</tbody>
</table>

*AVE is not acceptable <0.50 (Fornell and Larcker, 1981)

Source: PLS output

8.5.2 CFA/outer-model of transformational leadership behaviours (TRFLs) construct

According to Hom and Griffeth (1991) the competing measurement method was used in the current study in order to achieve the best model fit. This method is appropriate to
compare model fit in order to test the suggestions of scholars among constructs or to investigate further relationships. Therefore, five models were suggested and tested as follows:

Alternative models for TRFLs:

This model consists of Inspiration Motivation (IM), Intellectual Stimulation (IS) and Idealised Influence (II) or Charisma. Idealised influence consists of Idealised Influence Attribute (IIA) and Idealised Influence Behaviour (IIB). This combination was suggested early by Bass (1985).

a. This model was the same as model two with the addition of Individualised Consideration (IC). This model is known as the 4Is (Bass, 1990).

b. This model was produced by Bass and Avolio (1997), and is known as the 5Is. It includes Idealised Influence Attributes (IIA), and Idealised Influence Behaviours (IIB), Inspiration Motivation (IM), Intellectual Stimulation (IS) and Individualised Consideration (IC).

c. Due to the high correlation between TRFL dimensions and CR, this model was tested. This correlation has been found to be high by researchers (Bass and Avolio, 2004). Chen (2005) and Garman et al. (2003) found that CR supports the model fit with transformational leadership dimensions. This combination was due to the strong relationship between TRFL dimensions and CR.

The above models were tested with TRFLs as a high order construct. The model did not achieve a good model fit due to the high correlation between observed constructs (IIA, IIB, IM, IS and IC) ($r>0.72$). Also the value of AVE of TRFLs was 0.49. As suggested by Hair et al. (1998), the condition of discriminant validity was not met. Thus, a combination strategy was followed in order to achieve the possible dimensionality of TRFLs construct; otherwise the construct might be suggested to be measured by one construct (first order). This is not a surprising result since according to Bass and Avolio
(2004) a leader can effectively possess the values of transactional and transformational leadership behaviours simultaneously.

Finally Model (e), which was not hypothesised, achieved a good model fit. It consisted of three observed constructs (IIA, IIB, Developmental construct (DEV)) rather than five constructs. The developmental behaviour/construct (DEV) was created for this study including IM, IS and IC. The results of composite reliability were 0.79, 0.83 and 0.91 respectively, and the values of AVE were 0.65, 0.71 and 0.67 respectively (see Table 28). Thus, a high order TRFLs construct including three dimensions/observed constructs achieved a good model fit, and was suggested to be applied for the current study.

8.5.3 CFA/outer-model of transactional leadership behaviours construct (TXs) and passive leadership behaviours construct (PSVs)

Theoretically and due to the positive correlations between MBEP and LF, TXs was suggested to be high order construct consisting of two observed constructs, CR and MBEA, while PSVs was thought to be a high order construct consisting of MBEP and LF. After elimination of factor that had factor loadings below 0.7, three latent constructs were created: The PSVs model was achieved as a high order construct measured by two observed constructs (MBEP and LF), each measured by two factors. However, CR and MBEA were not loaded as two observed constructs for TXs due to the poor results of CR and AVE. Therefore, they were broken into two latent constructs: CR was measured by a single item (CR4) and MBEA measured by two items.

As hypothesised by Bass (1985), transactional leaders can exhibit three different behaviours: Contingent reward (CR), management by exception active (MBEA), and management by exception passive (MBEP). However, Hartog et al. (1997) argue that one problem in the MLQ and its operationalization is the distinction between MBEP and LF. “Passive management by exception is not the same as laissez faire. The status
quo is guarded and respected in passive management by exception; the status quo is
ignored by a laissez faire leader, who essentially avoids decision making and
supervisory responsibilities” (Hater and Bass, 1988,p.679). Hartog et al. (1997) found in
their empirical study that MBEP and LF are not clearly divided into different constructs.
They argue that the expected grouping of MBEP and LF items is very clear from the
data. They finally point out that these two related constructs are not only empirically
correlated but also theoretically related as they are externally passive in nature. An
interesting result in the current study was that MBEP and LF showed as positively
correlated (r=0.52) significant negative correlation between MBEP and MBEA (r= -
0.24) and there was a significant negative correlation between MBEP and CR (r=-0.40).
MBEP and LF were repeatedly positively correlated (Hartog et al., 1997).

Thus, three constructs were suggested rather than two, TXs construct is broken into two
latent constructs (CR with one single- item and MBEA) and one observed construct
(MBEP), which was loaded with LF under PSVs as a high order construct.

8.5.4 CFA/outer-model of LMX constructs

LMX were finally measured by three items. The model achieved a good model fit with
three items (LMX2, LMX6 and LMX7). Three factors were eliminated as they had a
factor loading below 0.7, the value of CR was 0.83 and AVE was 0.59 (see Table 28).
The significance of the LMX construct was the remaining of LMX-7, which reflects the
general relationship between pairs. It can be argued that the LMX-7 item is proved to be a
unidimensional construct in the Saudi context.

8.5.5 CFA/outer-model of organisational commitment constructs

Based on the results of the outer model, substantially, this study supports the
dimensionality of Meyer and Allen’s organisational commitment scale in Saudi Arabia,
so organisational commitment was proved as a multidimensional construct, which has
three independent observed variables: affective commitment (OCA), normative
commitment (OCN) and continuance commitment (OCC). “It is now generally recognized that commitment is a multidimensional construct” (Tayyab, 2006, p. 13). The multidimensional construct was proved in other non-Western contexts, such as the United Arab Emirates (Suliman and Al-Junaibi, 2010), Jordan (Suliman and Iles, 2000) and Pakistan (Tayyab, 2006). Thus, organisational commitment’s three components were supported in Eastern/collectivist cultures (Tayyab, 2006). It could be argued that Allen and Meyer’s scale is an effective scale to measure commitment with three independent components across gender samples.

Another finding was the correlation between constructs. The positive correlation between constructs supported the theoretical model of Allen and Meyer. Positive correlations were found between observed variables, the relationship between OCA and OCN achieving the highest correlation ($r=0.65, p>.000$). The correlation between OCA and OCC was also high and positive ($r=0.64, p=0.000$). The correlation between OCC and OCN was also high and positive ($r=0.63, p>.000$). Similar results for the correlation between OCA and OCN have been widely obtained (Allen and Meyer, 1997; Tayyab, 2006).

As discussed in the literature review chapter, theoretically, it has been proposed that organisational commitment is measured through three components (affective, normative and continuous) (Allen and Meyer, 1991). However, Meyer and Herscovitch (2001) consider the value of evaluating different models in order to address and raise some issues from such comparisons. Allen and Meyer (1991) argue that the degree of organisational commitment is derived from three different components rather than three kinds, because the degree of each component might differ among employees. For instance, one employee might have an obligation to the organisation; another also has attachment to the organisation’s goals, while the last might have a sense of obligation, attachment and at the same time a need to remain in the organisation. Thus, there are
different perspectives on how organisational commitment varies among employees. The current study found and suggested that employees at the same time had a sense of obligation to their banks, and felt emotionally attached. Employees also needed to stay with the banks due to the cost of leaving.

Findings from the CFA/outer model provided support for the construct validation; internal, convergent and discriminant validities were approved. The three components of commitment showed satisfactory internal consistency reliability. The composite reliability of the three components were OCA= 0.90, OCC 0.86 and OCN=0.91. Also AVE was achieved for the model as 0.81, 0.68 and 0.84 respectively (see Table 30). Also as data were collected from a segregated organisation, it can be argued that OC is perceived across gender as a multidimensional construct measured by three observed constructs.

Table 30 CR and AVE

<table>
<thead>
<tr>
<th>Construct</th>
<th>AVE</th>
<th>Composite Reliability (CR)</th>
</tr>
</thead>
<tbody>
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<td>CR</td>
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<td>1.00</td>
</tr>
<tr>
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<td>0.93</td>
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<td>0.78</td>
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<td>LF</td>
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<td>0.82</td>
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<td>0.85</td>
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<td>0.81</td>
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<tr>
<td>MBEA</td>
<td>0.69</td>
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<tr>
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</tr>
<tr>
<td>OCA</td>
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<td>0.90</td>
</tr>
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<td>OCC</td>
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<td>0.86</td>
</tr>
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<td>OCN</td>
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<td>0.91</td>
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<tr>
<td>PSV</td>
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<td>0.81</td>
</tr>
<tr>
<td>TRFL</td>
<td>0.55</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Source: PLS output.
8.5.6 *Inner model assessment (alternative models)*

As the current study includes complex constructs, alternative models were suggested and tested to achieve the best model fit among them. As mentioned, there are ambiguities between TRFLs, TXs and LMX and their effects on each other.

As this study employed PLS for data analysis, there is no generally accepted global measure of goodness of fit (Hair et al., 2011), therefore, as suggested by Chin (2010b) the change in $R^2$ was used to test the best model fit of alternative models. In order to meet the best model fit, comparisons were made among several alternative models. The benefit of the comparison between alternative models is to find if there is an un-hypothesised or unexpected model fit or to create new relationships due to a significant relationship between constructs. For example, throughout the CFA/outer model, MBEP was loaded as an observed construct in the high order construct PSVs instead of with TXs, so a PSVs latent construct was suggested including two observed variables (MBEP and LF). Also the TXs construct was broken down into two independent latent constructs (CR, MBEA). These findings are due to the advantage of conducting SEM rather than adopting traditional analysis techniques.

**Inner model two:**

Model (2) was selected based on the suggestion of Bass (1985b). It was found that the full range of leadership styles have direct effect to predict organisational commitment (affective, normative and continuance).

Most studies found that leader member exchange (LMX) has the ability to predict the organisational outcomes. Leaders and followers establish trust, respect and obligation taking into account how to differentiate ability to increase the level of organisational outcomes. However, LMX does not always mediate such relationships. In Singapore a study conducted by Lee (2008) found that transformational and transactional leadership
were related positively with LMX, and with innovation; however, LMX was not found to be a mediator between leadership behaviours and innovation. Thus, in this model, LMX was eliminated from the model. The model achieved a good model fit, the value of $R^2$ for OC was 0.13 (see Figure 21, and Appendix 7 for PLS based $t$-values and $\beta$ diagrams).

![Figure 21 Model 2](source: PLS output)

**Inner model three:**

Model 3 was suggested including LMX as an independent construct to predict OC. Leadership behaviour scales were eliminated from the model. Prior study found that LMX effectively and directly predicts OC (Duchon et al., 1986, Sharih, 2008), and supervision effectiveness (Gray and Howe, 2012). Thus model (2) and model (3) test and compare the effect of leadership behaviours and leadership relationship on OC. The model yielded an acceptable result for $R^2$ for OC, of 0.13 (see Figure 22 and Appendix 8 of PLS based $t$-values and $\beta$ diagrams).
Inner model four:

It has been found that TRFLs are strong predictors to establish the LMX (Lee, 2005, Lee, 2008, O'Donnell et al., 2012, Piccolo and Colquitt, 2006). Bryman et al. (2011) suggests further studies to incorporate LMX with TRFLs. It has been argued that TRFLs and LMX are somewhat similar (Bass and Riggio, 2006). “Given the absence of complementary experimental studies manipulating leadership behaviours to test for changes in relationship quality, we cannot be entirely certain whether transformational leadership behaviours lead to formation of high quality relationship or whether employees who form positive supervisory relationships tend to attribute effective leadership behaviours to supervisors ” (Eby and Allen, 2012,p.55:56).

Empirically, researchers found that both approaches have unique strengths to predict outcomes. For example Burns (1978) points out those goals are fused when leaders display one or more TRFL behaviours. It was suggested that leaders’ and followers’attributes should be considered when a leader wants to establish a relationship with followers (Sosik and Jung, 2010), so LMX here would be a
predictor of the leader’s behaviours. Krishnan (2004) argues that LMX is oriented toward TRFLs. He proposes that TRFLs could mediate the relationship between LMX and value system. Also Gupta and Krishman (2004) argue that socialisation is related to TRFLs, but if followers, who are socialised to be less assertive, independent and self-confident consider they receive a high quality relationship, then the leader is likely to display TRFLs, so TRFLs could mediate the relationship between LMX and outcomes.

Following the above suggestions, model 4 was formulated, which embodies LMX as an independent construct, TRFLs was employed as a mediator construct, and OC as a dependent construct. The model met the criterion of good model fit; the $R^2$ for OC was 0.14 and for TRFLs was 0.46 (See Figure 23 and Appendix 9 for PLS based $t$-values and $\beta$ diagrams).

Figure 23 Model 4
Source: PLS output
**Inner models five and six:**

These models were developed following Burns (1971) who argues leaders cannot incorporate economic exchange with social exchange; He argues that economic exchange is manager-ship. It has been argued that material exchange is different from social exchange; for example when the relationship relies on economic exchange, this exchange is not leadership at all, but is closer to supervision or manager-ship (Grean and Uhl-Bien, 1995).

In fact, leaders should begin with limited social exchange “transactions” as long as leaders are able to generate leadership that results in transformation (Grean and Uhl-Bien, 1995). This indicates that the relationship between leaders and followers might not be established via economic exchange, but it could be established in the first stage by the characteristics of MBEA. A leader who acts as a corrective would be able to begin to establish a relationship with followers.

Based on the suggestion of Bass (1990), leaders who offer the MBEA characteristics could encourage followers to do their work independently until the mistake is about to occur or a standard is not met. The active leader allows followers time for the task to be completed. Thus, during this monitoring and coaching of leaders, the level of trust and respect could be established and then would increase the obligation between pairs; these would be established by the characteristic of MBEA.

Studies found LMX acts as a mediator between TRFLs and other psychological outcomes (Lee, 2005; Herman and Mitchell, 2010; Lee, 2005). Rowden (2000) found that charisma improves LMX quality and commitment to the organisation and also with other outcome constructs such as performance (Wang et al., 2005).

Following the above suggestions, two models were suggested. Model 5 included all study constructs except CR, and model 6 consisted of all study constructs with leadership behaviours (TRFLs, CR, MBEA and PSVs) as independent constructs, LMX as a mediator, and OC as a dependent construct.
In Model 5, LMX was predicted with $R^2$ of 0.468 and OC was 0.152. While the $R^2$ changes in Model 6 achieved the highest $R^2$ among all alternative model models, OC was predicted with $R^2$ of 0.16 and also LMX $R^2$ was 0.476. The indication from models 5 and 6 that TRFLs is the strongest predictor for LMX and CR is really important in Saudi management, to increase the relationship with leaders and the level of employee commitment. Therefore Model 6 was selected to test the hypotheses for the current study. (See Figures 24 and 25 and Appendices 10 and 11 for PLS based $t$-values and $\beta$ diagrams).

Figure 24 Model 5.
Source: PLS output
8.6 Reliability

Commonly, reliability can be measured by two methods: Cronbach’s alpha ($\alpha$) and composite reliability (CR*). They measure internal consistency, which refers to the degree to which the items that make up the scale hang together; in other words, do these items measure the actual construct? (Pallant, 2010). Reliability gives a value between zero and one. The block is considered homogenous when the index is equal to or more than 0.7 (Hair et al., 1988). Nunnally (1978) suggests that a benchmark of 0.7 is applicable in the early stage of the research. For the current research, the reliability was measured and restricted to composite reliability because the composite reliability is not influenced by the number of items in each construct and uses the item loading extracted from the causal model analysed (Vinzi et al., 2010a). In addition, Chin (1998, p. 320) argues that “the composite reliability statistic is considered to be a better indicator of the unidimensionality of a block than the Cronbach’s alpha”. Thus composite reliability only was conducted for the
current study.

8.6.1 Composite Reliability (CR*)

Composite reliability was developed by Fornell and Larcker (1981), and calculated to assess the internal consistency of the measurement model. The results of CR* should be similar to Cronbach’s alpha (α). CR* takes into consideration the factor loading; it is tested using the following formula:

\[ CR* = \frac{\text{Squared } \sum \text{ factor loadings for construct items}}{(\text{Squared } \sum \text{ factor loadings for construct items}) + (\sum \text{ the estimation error variance})} \]

In PLS, the composite reliability is calculated automatically. The value of CR* is acceptable at > 0.7. The value of CR* for the current study ranged between 0.78 and 1.00, which all exceeded the minimum value of 0.7. However, reliability is a necessary but insufficient condition for validity (Morgan, 1989). The following section discusses the construct validity.

8.7 Validity

8.7.1 Average Variance Extracted (AVE)

The value of average variance extracted (AVE) was used to test construct validity (convergent and discriminant validity). Convergent validity refers to the extent to which multiple measures of a construct agree with one another (Hair et al., 1988). “Discriminant validity is assessed by comparing the shared variance (squared correlation) between each pair of constructs against the average of the AVEs for these two constructs” (Bove et al., 2009, p.702). The formula is as follows:

\[ \sqrt{AVE} = \frac{(\sum FL^2) \text{ varF}}{(\sum FL^2) \text{ varF} + \sum \text{ err}} \] (Hair et al, 1988)

Table 31 presents the proved discriminant validity among constructs. Diagonal elements should be > off-diagonal elements, diagonal elements (in bold) are the square root of the AVE. Off-diagonal elements are the correlations among constructs (Byrne, 2001). AVE indicates whether there is more mutual variance between the main construct and its items than other constructs, which are measured by different items (Chin, 1998a). As
shown in Table 31, the diagonal elements exceed the value of the diagonal elements; values for the diagonal elements ranged between 0.52 and 1.00, whereas those of the off-diagonal were over 0.5. This confirms adequate discriminant validity.

Discriminant validity can be checked via the intercorrelation matrix among main / latent variables, as suggested by Kline (2010). Constructs had the expected direction and did not exceed the cut-off point of >.81. The highest correlation result was 0.72. Thus, discriminant validity was proved for the model.
<table>
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<tr>
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<th>AVE</th>
<th>√AVE</th>
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<th>IIB</th>
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Average 0.65 0.34
GoF 0.469

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed)
Correlations in bold and italic are the correlations between latent constructs and their observed constructs. They are not considered when comparing AVE with the correlations.

GoF= Goodness of Fit index=√average R²*average communality

Key: Transformational leadership behaviours (TRFLs); Idealized Influence attributes (IIA); Idealized influence behaviour (IIB); Developmental behaviours (DEV); contingent reward (CR); management by exception active (MBEA); management by exception passive (MBEP); passive leadership behaviour (PSVs); leader member exchange (LMX); Organisational commitment (OC); Organisational commitment affective (OCA); Organisational commitment normative (OCN); Organisational commitment continuance (OCC); Average variance extracted (AVE); Communality (Com), Composite reliability (CR*).

Source: PLS output.
8.7.2 Factor/cross loadings

The outer model was assessed to investigate construct validity; it has been found to be an appropriate method to investigate constructs validity as it allows direct testing of the degree to which specific items jointly load on hypothesised factors and display negligible cross loading on other factors (Kraimer et al., 1999). After reducing the number of items due to factor loadings below 0.707 (Chin, 1998a), factor loading was used to test average variance extract in order to test the construct validity. As shown in Table 32, constructs were more highly associated with their own items/measures than with any other of the constructs, suggesting good construct validity (convergent and discriminant) (Duarte and Raposo, 2010, Chin, 1998a).

Table 32 Outer model loadings and cross loadings:

<table>
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<th>MBFA</th>
<th>OC</th>
<th>PSVs</th>
<th>TRFLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIA3</td>
<td>0.38</td>
<td>0.36</td>
<td>0.41</td>
<td>0.14</td>
<td>-0.43</td>
<td>0.64</td>
</tr>
<tr>
<td>IIA4</td>
<td>0.37</td>
<td>0.47</td>
<td>0.31</td>
<td>0.10</td>
<td>-0.38</td>
<td>0.63</td>
</tr>
<tr>
<td>IIB3</td>
<td>0.36</td>
<td>0.39</td>
<td>0.30</td>
<td>0.17</td>
<td>-0.33</td>
<td>0.53</td>
</tr>
<tr>
<td>IIB4</td>
<td>0.45</td>
<td>0.43</td>
<td>0.38</td>
<td>0.30</td>
<td>-0.45</td>
<td>0.72</td>
</tr>
<tr>
<td>DEV4</td>
<td>0.52</td>
<td>0.61</td>
<td>0.46</td>
<td>0.33</td>
<td>-0.45</td>
<td>0.83</td>
</tr>
<tr>
<td>DEV8</td>
<td>0.68</td>
<td>0.48</td>
<td>0.40</td>
<td>0.27</td>
<td>-0.44</td>
<td>0.74</td>
</tr>
<tr>
<td>DEV10</td>
<td>0.49</td>
<td>0.57</td>
<td>0.45</td>
<td>0.22</td>
<td>-0.51</td>
<td>0.79</td>
</tr>
<tr>
<td>DEV11</td>
<td>0.47</td>
<td>0.54</td>
<td>0.38</td>
<td>0.26</td>
<td>-0.40</td>
<td>0.79</td>
</tr>
<tr>
<td>DEV12</td>
<td>0.46</td>
<td>0.54</td>
<td>0.30</td>
<td>0.27</td>
<td>-0.47</td>
<td>0.80</td>
</tr>
<tr>
<td>CR4</td>
<td>1.00</td>
<td>0.51</td>
<td>0.37</td>
<td>0.30</td>
<td>-0.43</td>
<td>0.64</td>
</tr>
<tr>
<td>MBEA3</td>
<td>0.32</td>
<td>0.26</td>
<td>0.76</td>
<td>0.16</td>
<td>-0.22</td>
<td>0.40</td>
</tr>
<tr>
<td>MBEA4</td>
<td>0.29</td>
<td>0.34</td>
<td>0.89</td>
<td>0.25</td>
<td>-0.22</td>
<td>0.51</td>
</tr>
<tr>
<td>MBEA1</td>
<td>-0.35</td>
<td>-0.40</td>
<td>-0.26</td>
<td>-0.26</td>
<td>0.72</td>
<td>-0.47</td>
</tr>
<tr>
<td>MBEA4</td>
<td>-0.31</td>
<td>-0.25</td>
<td>-0.13</td>
<td>-0.16</td>
<td>0.72</td>
<td>-0.41</td>
</tr>
<tr>
<td>LF1</td>
<td>-0.25</td>
<td>-0.34</td>
<td>-0.12</td>
<td>-0.09</td>
<td>0.70</td>
<td>-0.41</td>
</tr>
<tr>
<td>LF2</td>
<td>-0.33</td>
<td>-0.38</td>
<td>-0.24</td>
<td>-0.20</td>
<td>0.74</td>
<td>-0.42</td>
</tr>
<tr>
<td>LMX3</td>
<td>0.39</td>
<td>0.78</td>
<td>0.28</td>
<td>0.25</td>
<td>-0.29</td>
<td>0.53</td>
</tr>
<tr>
<td>LMX6</td>
<td>0.35</td>
<td>0.75</td>
<td>0.25</td>
<td>0.27</td>
<td>-0.38</td>
<td>0.48</td>
</tr>
<tr>
<td>LMX7</td>
<td>0.45</td>
<td>0.84</td>
<td>0.33</td>
<td>0.33</td>
<td>-0.44</td>
<td>0.59</td>
</tr>
<tr>
<td>OCA1</td>
<td>0.25</td>
<td>0.32</td>
<td>0.21</td>
<td>0.75</td>
<td>-0.10</td>
<td>0.26</td>
</tr>
<tr>
<td>OCA5</td>
<td>0.22</td>
<td>0.35</td>
<td>0.19</td>
<td>0.82</td>
<td>-0.22</td>
<td>0.29</td>
</tr>
<tr>
<td>OCC1</td>
<td>0.18</td>
<td>0.27</td>
<td>0.20</td>
<td>0.71</td>
<td>-0.19</td>
<td>0.22</td>
</tr>
<tr>
<td>OCC2</td>
<td>0.21</td>
<td>0.24</td>
<td>0.14</td>
<td>0.68</td>
<td>-0.17</td>
<td>0.21</td>
</tr>
<tr>
<td>OCC3</td>
<td>0.26</td>
<td>0.24</td>
<td>0.19</td>
<td>0.80</td>
<td>-0.26</td>
<td>0.29</td>
</tr>
<tr>
<td>OCN4</td>
<td>0.26</td>
<td>0.27</td>
<td>0.21</td>
<td>0.80</td>
<td>-0.25</td>
<td>0.26</td>
</tr>
<tr>
<td>OCN6</td>
<td>0.20</td>
<td>0.23</td>
<td>0.20</td>
<td>0.77</td>
<td>-0.13</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Source: PLS output.
8.7.3 Criterion validity (Correlation)

Criterion validity can be quantified by the correlation coefficient between sets of measurements, it proves external validity. As the current study used existing theory/scales the findings of reliability and validity were compared with the findings of publishers and prior studies and found to be consistence. Criterion validity can be checked via correlation matrix among variables. If the correlations between subscales constructs are significant, the correlations among the leadership styles/subscales are consistent with the theory (Bass and Avolio, 2004). Significant positive correlations were found between TRFLs and CR and MBEA respectively ($r=0.64$) ($r=0.55$). However, a negative correlation was found between TRFLs and PSVs ($r=-0.59$). These results are consistent with prior studies (Bass and Avolio, 2004). In addition, evidence of criterion validity was found due to the correlation between two different measurements; LMX was correlated significantly and positively with TRFLs ($r=0.68$) and with transactional leadership styles (CR and MBEA) respectively ($r=0.51$), ($r=0.37$) and negatively with PSVs ($r=-0.43$). These results are consistent with Lee’s (2005) findings. Also the relationship between independent constructs and dependent constructs were found: TRFLs were correlated positively with OC ($r=0.32$). TXs (CR and MBEA) were correlated positively with OC($r=0.30$, $r=0.25$), and PSVs correlated negatively with OC ($r=-0.25$) (see Table 31).

Correlation is an initial step and a condition for conducting regression analysis, since the ability of independent constructs to improve the prediction of dependent constructs is not only related to their correlation with dependent constructs, but also to the correlations between predictors themselves. However, a high correlation between predictors can create serious problems with the outcomes. Multicollinearity is an assumption that needs to be checked before testing the ability of the independent construct to predict the dependent construct.
8.8 Multicollinearity

As the current study has more than two independent constructs, which might have adverse effects on estimated coefficients in regression analysis (Mansfield and Helms, 1982), it is very important to check multicollinearity before estimating the hypothesised conceptual model (Hair, et al., 1988).

Multicollinearity has serious effects on the model when the correlation between independent constructs is high. If the predictors are highly correlated (e.g., > .80 or .90), then similar variance in the outcomes might occur (Hair, et al., 1998). Multicollinearity might not be evident in the correlation matrix and it cannot be checked only by testing the correlation matrix (Hair et al., 1998). Therefore, tolerance and variance inflation factor (VIF) values show the degree of multicollinearity (Hair et al., 1988; Pallant, 2010). Tolerance is “an indicator of how much of the variability of the specified independent variable is not explained by the other independent variables” (Pallant, 2010, p. 158). When the value of tolerance is more than 5, it indicates that the correlation with other constructs is high, which suggests multicollinearity. VIF is the inverse of tolerance; if the VIF value is more than 5, this value might be a concern indicating multicollinearity (Hair et al., 2011, Menard, 2001 and Pallant, 2010). SPSS was used to test the assumption of multicollinearity by checking the matrix correlation between independent constructs. In the current study, the correlations between independent constructs were less than 0.80, which suggests that multicollinearity is absent (Hair et al., 1988). Also, multicollinearity was tested by checking the values of tolerance and VIF. From multiple regression analysis, the results of VIF ranged between 1.43 and 3.2 which were <5.00, and the average for the whole model was clearly less than 5.00. Tolerance ranged between 0.32 and 0.70, which are <1.00. Therefore, these results proved that multicollinearity was absent in the interaction among independent constructs (See Table 33).
Table 33 Collinearity Statistics results

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.430</td>
<td>.492</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRFL</td>
<td>-.162</td>
<td>.149</td>
<td>-.090</td>
<td>-1.084</td>
<td>.316</td>
</tr>
<tr>
<td>CR</td>
<td>.180</td>
<td>.080</td>
<td>.136</td>
<td>2.249</td>
<td>.02</td>
</tr>
<tr>
<td>MBEA</td>
<td>.210</td>
<td>.102</td>
<td>.115</td>
<td>2.066</td>
<td>.03</td>
</tr>
<tr>
<td>PSV</td>
<td>-.153</td>
<td>.096</td>
<td>-.094</td>
<td>-1.587</td>
<td>.11</td>
</tr>
<tr>
<td>LMX</td>
<td>.489</td>
<td>.128</td>
<td>.252</td>
<td>3.814</td>
<td>.00</td>
</tr>
</tbody>
</table>

Source: PLS output

8.9 Inner model evaluation

8.9.1 Dimensionality

Substantial degrees of within-method convergent validity and discriminant validity were processed in order to test dimensionality. Within-method convergent validity is supported by the cut off factor loading (> .707) (Chin, 1998). Also the square root value of average variance extracted (AVE) is obtained, which was greater than any correlation coefficient between constructs. Also, evidence was found of composite reliability construct values exceeding the recommended cut-off values of 0.70 (Hair et al, 1988).

In the current study, the dimensionality of leadership behaviours was slightly different from what has previously been published. For example TRFLs consists of three observed constructs (IIA, IIB and DEV) rather than five constructs (IIA, IIB, IS, IM, IC). DEV was created due to the high correlation between IM, IS and IC, which caused a lack of discriminant validity. For the same reason, the TXs construct was divided into three independent constructs rather than one the high order construct. CR and MBEA were found to measure different constructs, so they were left as first order constructs in the final model. MBEP had a consistency with LF; they were collapsed as observed constructs to measure high order passive leadership behaviours construct (PSVs). LMX was proved to be a unidimensional construct, while organisational commitment was proved to be a multidimensional construct measured by three observed constructs (OCA, OCN and OCC). Descriptive details of the items and constructs (latent and
observed) are shown in Table 34.

Table 34 Factor loadings/cross loadings of the final model.

<table>
<thead>
<tr>
<th>Latent construct</th>
<th>Observed construct</th>
<th>Number of item before elimination</th>
<th>Number of items after elimination</th>
<th>Name of items</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRFLs</td>
<td>IIA</td>
<td>4</td>
<td>2</td>
<td>IIA3</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IIA4</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>IIB</td>
<td>4</td>
<td>2</td>
<td>IIB3</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IIB4</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>DEV</td>
<td>12</td>
<td>5</td>
<td>DEV3</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DEV4</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DEV5</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DEV10</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DEV11</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DEV12</td>
<td>0.80</td>
</tr>
<tr>
<td>TXs</td>
<td>CR</td>
<td>4</td>
<td>1</td>
<td>CR4</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>MBEA</td>
<td>4</td>
<td>2</td>
<td>MBEA3</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MBEA4</td>
<td>0.89</td>
</tr>
<tr>
<td>PSVs</td>
<td>MBEP</td>
<td>4</td>
<td>2</td>
<td>MBEP3</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MBEP4</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>LF</td>
<td>4</td>
<td>2</td>
<td>LF1</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LF2</td>
<td>0.74</td>
</tr>
<tr>
<td>LMX</td>
<td>LMX</td>
<td>7</td>
<td>4</td>
<td>LMX3</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LMX6</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LMX7</td>
<td>0.84</td>
</tr>
<tr>
<td>OC</td>
<td>OCA</td>
<td>7</td>
<td>2</td>
<td>OCA1</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OCA5</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>OCN</td>
<td>7</td>
<td>2</td>
<td>OCN4</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OCN6</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>OCC</td>
<td>7</td>
<td>3</td>
<td>OCC1</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OCC2</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OCC3</td>
<td>0.80</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>64</td>
<td>26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: PLS output.

8.9.2 F test

F test can be used to test the comparisons between the effects among two or more independent constructs to predict the dependent construct (Hair et al., 2011). However, for the purpose of the study the block (model) of the study was tested simultaneously in order to predict the dependent construct. Testing F value separately would be meaningless, as it was not necessary to take the separate effects of each independent construct into account. \( \beta \) and \( t \) values were considered to compare between the independent and dependent constructs at the level of \( p \geq 1.64 \) (Chin, 1988). \( R^2 \) in PLS takes the same function in SPSS regression analysis. It explains the contribution of the independent construct to variance the dependent
construct. In the current study there are two dependent constructs (LMX, OC). PLS does not provide the p value. Thus, the F test was calculated before testing the hypotheses. The formula was produced by Falk and Miller (1992) to test the significance of $R^2$:

$$F = \frac{R^2}{(1-R^2)/(N-M-1)}$$

$N$ = the number of sample size, and $M$ = the number of items in the dependent construct.

The result of F was considered to be significant at $(p \leq 0.10)$.

As shown in Table 35 the results indicate that $R^2$ is significant for all dependent constructs. This indicates the independent constructs were able to predict the dependent constructs.

Table 35 F test results

<table>
<thead>
<tr>
<th>Dependent construct</th>
<th>Number of items</th>
<th>$R^2$</th>
<th>Calculation of p value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMX</td>
<td>3</td>
<td>0.476</td>
<td>$= 0.476/((1 - 0.476)/(396 - 3 - 1) = 358.82$ *</td>
<td></td>
</tr>
<tr>
<td>OC</td>
<td>7</td>
<td>0.16</td>
<td>$= 0.16/((1 - 0.16)/(396 - 7 - 1) = 75.24$ *</td>
<td></td>
</tr>
</tbody>
</table>

Sample size ($N$) = 396

*p $p \leq 0.10$

Source: the researcher’s calculation.

8.9.3 Goodness of fit index (GoF)

As PLS lacks an optimised global function of model fit index (e.g., $X^2$, CFI and RMSEA), PLS is unable to measure the index. Thus, Tenenhaus et al. (2005) propose a formula to measure the goodness of fit index as follows:

$$\text{GoF} = \text{Goodness of Fit index} = \sqrt{\text{average } R^2 \times \text{average communality}}$$

The communality measures the quality of the measurement model (outer model), commonality and $R^2$ are computed automatically in the PLS outer model output. The average of communality should have the cut off (COM$\geq 0.5$).

The current study had one single item construct and, as this would increase the GoF
of the models, Vinzi et al. (2010b) argue that a single-item construct should be removed from the calculation of the GoF. The single-item measurement always entails a communality of one, which means that it does not allow measuring the error in the indicator. Thus, only multi-item measurements remain in the equation of GoF.

As shown in the correlation matrix table (Table 29), all constructs achieved a value of communality higher than the recommended range between 0.52 and 0.84, and the average communality was 0.65. Also the GoF result was 0.459 (46%), which is acceptable (Chin, 2010b, Vinzi et al., 2010b).

8.9.4 Model estimation and testing (path estimation) ($\beta$)

The aim of this step is to examine the path relations of the models. This step was determined via the inner model or structural model stage. The significance of path estimation ($\beta$) value was considered based on the results of $t$ value ($p \leq 0.10$) (Henseler et al., 2009), thus any path with a $t$ value below 1.64 was eliminated from the model. The results of $\beta$ and $t$ value and standard errors were obtained via PLS Bootstrap procedure (Chin, 1998).

As shown in Table 36, the results of hypothesis testing show that leadership behaviours (TRFLs, PSVs) had no direct effect on OC ($p \leq 0.10$), while CR and MBEA show significant and positive direct impact on OC. Also the direct impact of leadership behaviours (TRFLs, CR and PSVs) had direct impact on LMX, which showed direct positive impact on OC and ($p \leq 0.10$). The overall results show that leadership relationship (LMX) was stronger than behavioural leadership. Thus LMX was shown to be a very important condition to predict OC.
8.9.5 Hypotheses interpretation (direct effect)

Table 36 presents the results of the hypotheses for the direct relationships.

<table>
<thead>
<tr>
<th>H</th>
<th>Relationship between Exogenous and Endogenous</th>
<th>B</th>
<th>T</th>
<th>SE</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>TRFLs → LMX</td>
<td>0.55***</td>
<td>9.10</td>
<td>0.06</td>
<td>Supported</td>
</tr>
<tr>
<td>H2a</td>
<td>CR → LMX</td>
<td>0.11**</td>
<td>2.15</td>
<td>0.05</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2b</td>
<td>MBEA → LMX</td>
<td>-0.03(ns)</td>
<td>1.24</td>
<td>0.03</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>PSVs → LMX</td>
<td>-0.10**</td>
<td>2.35</td>
<td>0.04</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>TRFLs → OC</td>
<td>-0.01(ns)</td>
<td>0.25</td>
<td>0.06</td>
<td>Not supported</td>
</tr>
<tr>
<td>H5a</td>
<td>CR → OC</td>
<td>0.12**</td>
<td>2.0</td>
<td>0.06</td>
<td>Supported</td>
</tr>
<tr>
<td>H5b</td>
<td>MBEA → OC</td>
<td>0.11*</td>
<td>1.85</td>
<td>0.06</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>PSVs → OC</td>
<td>-0.06(ns)</td>
<td>1.36</td>
<td>0.05</td>
<td>Not supported</td>
</tr>
<tr>
<td>H7</td>
<td>LMX → OC</td>
<td>0.24**</td>
<td>3.70</td>
<td>0.07</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Keys: \( \beta \) = Coefficient path, SE = standard error, T = T-statistic
\( *p \leq 0.10, **p \leq 0.05, ***p \leq 0.01 \)

Source: PLS output.

(H1): There is a positive relationship between transformational leadership behaviours and leader member exchange relationship (LMX).

This hypothesis suggests that transformational leadership behaviours (TRFLs) have a positive relationship with leader member exchange (LMX). The result of structural equation modelling indicates that the structural path between TRFLs and LMX was positive and significant (\( \beta=0.55, t=9.10, p \leq 0.01 \)). This result indicates that there is a strong relationship between TRFLs and LMX. TRFLs were found to be a perfect predictor and antecedent for establishing relationship with followers in the Saudi context; thus, H1 is supported.

(H2a): There is a positive relationship between transactional leadership behaviours CR and LMX.

According to construct validation results, transactional leadership was not a high order construct. CR and MBEA were independent in the final model. Thus, H2 was divided into two hypotheses (H2a and H2b). The path between CR and LMX indicates that there was a relationship between the constructs (\( p \leq 0.10 \)). CR was found to predict and establish a relationship between leaders and followers; the result was positive and
significant ($\beta=0.11$, $t=2.15$, $p \leq 0.05$), so H2a was rejected.

(H2b): There is a positive relationship between transactional leadership behaviours MBEA and LMX.

The hypothesis indicates that MBEA has a positive relationship with LMX. The path coefficient shows leaders who direct followers and correct mistakes before they occur are not able to establish relationship with subordinates ($\beta=-0.003$, $t=1.24$, $p \geq 0.10$). Thus H2b is supported.

(H3): There is a negative relationship between passive leadership behaviours (MBEP and LF) and LMX.

It has been hypothesised that passive leadership behaviours (PSVs) negatively influence LMX. The result of the path indicates that the structural path between PSVs and LMX was negatively significant ($\beta=-0.10$, $t=2.35$, $p \leq 0.05$). This result confirms that the more leaders use passive leadership characteristics, the less relationship would be established. Thus H4 is supported.

(H4): There is a positive relationship between transformational leadership behaviours and organisational commitment (OC).

This hypothesis suggests that transformational leadership behaviours (TRFLs) have positive relationship with (OC). The result of structural equation modelling indicates that the structural path between TRFLs and OC was negative and insignificant ($\beta=-0.01$, $t=0.25$, $p \geq 0.10$). This result indicates that there is no relationship between TRFLs and OC, so H4 is not supported.

(H5a): There is a positive relationship between transactional leadership (CR) behaviours and organisational commitment (OC).
It has been hypothesised that transactional leadership behaviours (CR) influence the level of organisational commitment (OC) positively. The result of path analysis indicates that the standardised regression weight between the structural path between CR and OC was supported ($\beta=.12$, $t=2.00$, $p\leq0.05$). The result indicates that the economic exchange between leaders and followers increases the level of employees' commitment toward their organisation. Thus H5a is supported.

(H5b): There is a positive relationship between transactional leadership (MBEA) behaviours and organisational commitment (OC).

It has been hypothesised that MBEA does influence the level of organisational commitment (OC). The result of SEM indicates that the standardised regression weight between the structural path between MBEA and OC was significant ($\beta=.11$, $t=1.85$, $p\leq0.10$). This result confirms that the relationship between MBEA and OC was significant, H5b is supported.

(H6): There is a negative relationship between passive leadership behaviours (MBEP and LF) and OC.

It was suggested that passive leadership behaviours (PSV) influence negatively the level of organisational commitment (OC). The result of structural equation modelling indicates that the standardised regression weight between PSV and OC was insignificant ($\beta=-.06$, $t=1.36$, $p\geq0.10$). This result did not confirm the relationship between PSVs and OC, however, the path was negative, and thus H6 is rejected.

(H7): There is a positive relationship between leader member exchange (LMX) and OC.

The relationship between LMX and OC was significant ($p<0.10$). Hence, it can be argued that establishing a relationship with followers highly affects the level of OC.
(β=.24, t=3.70, p≤0.01). Therefore H7 is confirmed.

8.9.6 Direct and indirect effect

Based on the final model, LMX played a very important role in the model. Full mediation was found between TRFLs and OC, and between PSVs and OC, and partial mediation between CR and OC, while no mediation role was found between MBEA and OC. The following section confirms the results of LMX mediation using multiple regression analysis using SPSS. Table 37 presents the indirect, direct and total effect of the mediation.

<table>
<thead>
<tr>
<th>H</th>
<th>Relationship</th>
<th>Indirect effect</th>
<th>Total effect</th>
<th>Mediating</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>MV</td>
<td>DV</td>
<td>Indirect effect</td>
<td>Path</td>
</tr>
<tr>
<td>8</td>
<td>TRFLs</td>
<td>LMX</td>
<td>OC</td>
<td>TRFLs⇒LMX⇒OC</td>
</tr>
<tr>
<td>9a</td>
<td>CR</td>
<td>LMX</td>
<td>OC</td>
<td>CR⇒LMX⇒OC</td>
</tr>
<tr>
<td>9b</td>
<td>MBEA</td>
<td>LMX</td>
<td>OC</td>
<td>MBEA⇒LMX⇒OC</td>
</tr>
<tr>
<td>10</td>
<td>PSVs</td>
<td>LMX</td>
<td>OC</td>
<td>PSVs⇒LMX⇒OC</td>
</tr>
</tbody>
</table>

**Key:** IV= independent construct, MV= mediator construct, DV= dependent construct

Source: the researcher’s calculation.

8.9.7 Hypothesis interpretation: Indirect effect/mediating role of LMX

The purpose of this section is to test the mediation role of LMX between leadership behaviours (TRFLs, CR, MBEA and PSVs) and OC.

As suggested by Baron and Kenny (1986), three conditions need to be satisfied to test the mediation role of LMX. SPSS was used to run three separated regression analyses (models) as follows:

**Model (1):** Regression analysis was conducted between independent and dependent construct; thus the proposed mediator was not considered in this model.

**Model (2):** Regression analysis was conducted between the independent construct and
the mediator construct; thus the proposed dependent was not considered in this model.

Model (3) The regression analysis includes the independent construct, which is controlled by the mediator in order to test their predictive ability on the dependent construct. Thus, in this block the three constructs were considered in order to test the kind of mediation (full or partial).

8.9.8 Sobel test

The Sobel test was conducted for the mediation effect, thus only significance of the t value from independent construct to LMX was tested. The Sobel test was calculated automatically via danielsoper.com (2012).

A Sobel test was conducted to test whether the relationship between constructs is decreased by the control of LMX. The equation of the Sobel test is summarised in Table 38:

Table 38 Sobel Test equation

<table>
<thead>
<tr>
<th>Formula:</th>
<th>$z = \frac{ab}{(b^2 SE_a^2) + (a^2 SE_b^2)}$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key</strong></td>
<td><strong>Definition</strong></td>
</tr>
<tr>
<td>a</td>
<td>The regression coefficient for the association between the independent variable and the mediator.</td>
</tr>
<tr>
<td>b</td>
<td>The regression coefficient for the association between the mediator and the dependent variable. (In model 3).</td>
</tr>
<tr>
<td>SE_a</td>
<td>The standard error of the relationship between the independent variable and the mediator</td>
</tr>
<tr>
<td>SE_b</td>
<td>The standard error of the relationship between the mediator variable and the dependent variable. (In model three)</td>
</tr>
</tbody>
</table>


The mediation role of LMX between TRFLs, CR, MBEA, PSVs and OC was hypothesized as follows:

(H8) LMX mediates the relationship between TRFLs and OC

(H9a) LMX does not mediate the relationship between CR and OC.

(H9b) LMX does not mediate the relationship between MBEA and OC.

(H10) LMX mediates the relationship between PSVs and OC.
(H8): LMX mediates the relationship between TRFLs and OC.

Following the steps suggested by Baron and Kenny (1986), the mediation role between TRFLs and OC was tested. As shown in Table 39, the four values, provided by regression analysis (unstandardised coefficient): $a=0.645$, $b=0.557$, $SEa=0.034$ and $SEb=0.127$, were entered in the Sobel test, and were calculated automatically via danielsoper.com (2012). Based on Preacher and Hayes (2004), the result of the Sobel test statistic was significant $=4.224 \ (p \leq 0.01)$. The results indicate that the greater the level of the relationship between leaders and their subordinates (LMX), the stronger the association between transformational leadership behaviour (TRFLs) and organizational commitment (OC). However, as when TRFLs prediction was controlled in model 3 by the prediction LMX, the effect of TRFLs was not significant; this change indicates that LMX is a full mediator. This result is consistent with the results of SEM. Thus H8 was supported.

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>SE</th>
<th>Sig</th>
<th>R2</th>
<th>Sobel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.416</td>
<td>0.251</td>
<td>0.000</td>
<td>0.083</td>
<td></td>
</tr>
<tr>
<td>TRFL</td>
<td>0.518</td>
<td>0.087</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model (2)</td>
<td>LMX (DV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.166</td>
<td>0.997</td>
<td>0.000</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>TRFL</td>
<td>0.645(a)</td>
<td>0.034(SEa)</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model (3)</td>
<td>OC (DV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.210</td>
<td>0.369</td>
<td>0.000</td>
<td>0.126</td>
<td></td>
</tr>
<tr>
<td>TRFL</td>
<td>0.159</td>
<td>0.118</td>
<td>0.178</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMX</td>
<td>0.557(b)</td>
<td>0.127(SEb)</td>
<td>0.000</td>
<td>4.27***</td>
<td></td>
</tr>
</tbody>
</table>

* $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$ 


(H9a): LMX mediates the relationship between CR and OC.

The mediation role between CR and OC was tested. As shown in Table 40, the four values, provided by regression analysis (unstandardised coefficient): $a=0.354$, $b=0.521$, $SEa=0.0029$ and $SEb=0.106$, were entered in the Sobel test, and were calculated automatically via Danielsoper.com (2012). Based on Preacher and Hayes (2004),
the result of the Sobel test statistic was significant $= 4.224 \ (p \leq 0.01)$. The results indicate that there was a relationship between LMX, CR and OC. However, as when LMX prediction was controlled in model 3 by the prediction LMX, the effect of CR was significant; this change indicates that LMX is a partial mediator. This result is consistent with the results of SEM. Thus H9a was rejected.

Table 40 Mediation and Sobel test results of the mediation role of LMX between CR and OC.

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>SE</th>
<th>Sig</th>
<th>R2</th>
<th>Sobel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.613</td>
<td>0.216</td>
<td>.000</td>
<td>.086</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>0.388</td>
<td>0.064</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model (2) LMX (DV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.825</td>
<td>0.100</td>
<td>.000</td>
<td>0.296</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>.354(a)</td>
<td>.029(SEa)</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model (3) OC (DV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.141</td>
<td>.366</td>
<td>.000</td>
<td>0.139</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>.203</td>
<td>.073</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMX</td>
<td>.521(b)</td>
<td>.106(SEb)</td>
<td>.000</td>
<td>4.56***</td>
<td></td>
</tr>
</tbody>
</table>

* $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$


(H9b): the mediation role of LMX between MBEA and OC

As shown in Table 41, the mediation role of LMX between MBEA and OC was examined. The regression analysis unstandardised coefficient were provided as: $a=0.354$, $b=0.521$, $SEa=0.0029$ and $SEb=0.106$. The result of the Sobel test statistic was significant $= 3.73 \ (p \leq 0.01)$. The results indicate that there a relationship between LMX, MBEA and OC. Based on model 3 both MBEA and LMX were significant to predict OC. This means that LMX partially mediates the paths. However, the result of SEM found that a mediation effect of LMX was not obtained. Thus H9b was supported.

Table 41 Mediation and Sobel test results of the mediation role of LMX between CR and OC.

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>SE</th>
<th>Sig</th>
<th>R2</th>
<th>Sobel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.787</td>
<td>.236</td>
<td>.000</td>
<td>0.054</td>
<td></td>
</tr>
<tr>
<td>MBEA</td>
<td>.424</td>
<td>.089</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(H10): LMX mediates the relationship between PSVs and OC.

As indicated above, three models were obtained to test the mediating role of LMX between PSVs and OC. As shown in Table 42 the three conditions of regression analysis were met ($p \leq 0.01$). However, when LMX was added in Model 3, the effect of PSVs was insignificant, thus the LMX had a full mediation role, which was proved in SEM. Thus H10 is supported.

Table 42 Mediation analysis outputs

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>SE</th>
<th>Sig</th>
<th>R2</th>
<th>Sobel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.307</td>
<td>.111</td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSVs</td>
<td>-.410</td>
<td>.079</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMX (DV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.417</td>
<td>.051</td>
<td>0.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSVs</td>
<td>-.415 (a)</td>
<td>.037 (sea)</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OC (DV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.766</td>
<td>.475</td>
<td>0.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSVs</td>
<td>-.171</td>
<td>.088</td>
<td>.054</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMX</td>
<td>.575(b)</td>
<td>.105(seb)</td>
<td>.000</td>
<td>-.4.92***</td>
<td></td>
</tr>
</tbody>
</table>

* $p \leq 0.10$, ** $p \leq 0.05$, *** $p \leq 0.01$


8.9.9 Analysis of gender influence

This section presents the analysis results of the effect of gender influence. It includes a variety of analysis techniques. Firstly, it very important to test the validation of the model for male and female subordinates; thus, the value of AVE, CO and GoF are presented. Secondly, a t test was conducted to investigate the mean score across gender; thirdly a Z test was conducted to investigate the correlation differences across gender. For advanced analysis Moderation Multiple Regressions (MMR) was used, and finally multiple group analysis (MGA) was used to test the difference of b value across...
gender using the Smith-Satterthwait test.

**8.9.9.1 Gender models**

Tables 43 and 44 and Figures 26 and 27 present an overview of male and female models. The results of AVE for both models were higher than the common threshold 0.5, which supports the convergent validity. Also the square roots of AVE of the constructs were higher than any correlation in the models, which supports the discriminant validity of the models (Fornell and Larcker, 1981). Composite reliability for both models was acceptable (CR*>0.70). In addition, in the male group the average of communality was 0.66, while it was 0.68 for the female group. The results of GoF achieved acceptable results, 0.46 for men and 0.47 for women. Thus, it could be argued that both models are applicable to be tested for the comparison.
Table 43: AVE, √AVE and Correlation between constructs for men (N=234)

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>√AVE</th>
<th>CR</th>
<th>Com R²</th>
<th>CR</th>
<th>DEV</th>
<th>IIA</th>
<th>IIB</th>
<th>LF</th>
<th>LMX</th>
<th>MBEA</th>
<th>MBEP</th>
<th>OC</th>
<th>OCA</th>
<th>OCC</th>
<th>OCN</th>
<th>PSVs</th>
<th>TRF Ls</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>0.68</td>
<td>0.79</td>
<td>0.71</td>
<td>0.48</td>
<td>0.48</td>
<td>0.71</td>
<td>0.65</td>
<td>0.54</td>
<td>0.79</td>
<td>0.66</td>
<td>0.79</td>
<td>0.54</td>
<td>0.66</td>
</tr>
<tr>
<td>DEV</td>
<td>0.68</td>
<td>0.83</td>
<td>0.91</td>
<td>0.68</td>
<td>0.63**</td>
<td>0.48**</td>
<td>0.66**</td>
<td>1.00</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIA</td>
<td>0.63</td>
<td>0.79</td>
<td>0.77</td>
<td>0.63</td>
<td>0.48**</td>
<td>0.66**</td>
<td>0.48**</td>
<td>0.47**</td>
<td>1.00</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>IIB</td>
<td>0.71</td>
<td>0.84</td>
<td>0.83</td>
<td>0.71</td>
<td>0.48**</td>
<td>0.60**</td>
<td>0.46**</td>
<td>1.00</td>
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<td></td>
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</tr>
<tr>
<td>LF</td>
<td>0.67</td>
<td>0.81</td>
<td>0.80</td>
<td>0.67</td>
<td>-0.36**</td>
<td>-0.48**</td>
<td>-0.47**</td>
<td>-0.35**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>LMX</td>
<td>0.65</td>
<td>0.81</td>
<td>0.85</td>
<td>0.65</td>
<td>0.49**</td>
<td>0.69**</td>
<td>0.52**</td>
<td>0.48**</td>
<td>-0.47**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>MBEA</td>
<td>0.68</td>
<td>0.82</td>
<td>0.81</td>
<td>0.68</td>
<td>0.38**</td>
<td>0.57**</td>
<td>0.46**</td>
<td>0.41**</td>
<td>-0.29**</td>
<td>0.40**</td>
<td>1.00</td>
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<tr>
<td>MBEP</td>
<td>0.69</td>
<td>0.83</td>
<td>0.82</td>
<td>0.69</td>
<td>-0.37**</td>
<td>-0.48**</td>
<td>-0.39**</td>
<td>-0.47**</td>
<td>0.49**</td>
<td>-0.37**</td>
<td>-0.24**</td>
<td>1.00</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>OC</td>
<td>0.54</td>
<td>0.73</td>
<td>0.89</td>
<td>0.54</td>
<td>0.148</td>
<td>0.25**</td>
<td>0.33**</td>
<td>0.16**</td>
<td>0.28**</td>
<td>-0.22**</td>
<td>0.34**</td>
<td>0.26**</td>
<td>-0.23**</td>
<td>1.00</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>OCA</td>
<td>0.79</td>
<td>0.88</td>
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**. Correlation is significant at the 0.01 level (2-tailed).
* . Correlation is significant at the 0.05 level (2-tailed)
Correlations in bold and italic are the correlations between latent construct and their observed constructs. They are not considered when comparing AVE with the correlations.

GoF= Goodness of Fit index= √average R²* average communality

Key: Transformational leadership behaviours (TRFLs); Idealized Influence attributes (IIA); Idealized influence behaviour (IIB); Developmental behaviours (DEV); contingent reward (CR); management by exception active (MBEA); management by exception passive (MBEP); passive leadership behaviour (PSVs); leader member exchange (LMX); Organisational commitment (OC); Organisational commitment affective (OCA); Organisational commitment normative (OCN); Organisational commitment continuance (OCC); Average variance extracted (AVE); Communality (Com), Composite reliability (CR*).

Source: PLS output.
Table 44 AVE, √AVE and Correlation between constructs for women (N=162)

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GoF= Goodness of Fit index=√average R²* *average communality

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Correlations in ** and italic are the correlations between latent construct and their observed constructs. They are not considered when compare AVE with the correlations.

Source: PLS output.
Figure 26 Male model. Source: PLS output.

Figure 27 Female model. Source: PLS output.
8.9.9.2 T-Test analysis

T-test was used to investigate the difference in mean score across gender. As shown in Table 45 and Figure 28, there were no differences between male and female subordinates in their perceptions toward their immediate leaders’ styles, leadership relationship and organisational commitment (p>.05). This indicates that male and female managers have almost the same leadership behaviours as perceived by subordinates (p>.05). This finding is consistent with most previous findings (Andersen and Hansson, 2011, Bass and Avolio, 1990, Engen et al., 2001, Oshagbemi and Gill, 2003). The perceptions of leader member exchange were nearly the same across gender (p>.05). Also the level of organisational commitment was nearly the same across gender.

Table 45 T test results between male and female perspectives.

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*Male and Female means are significantly different at p<.05 for each factor.

Source: SPSS output.
In order to investigate whether there are any differences in correlation across gender, the data was separated from the menu → data → split file and then the group was split based on gender. The \( r \) values for two correlations need to be converted into Z scores. If \( Z_{\text{obs}} \) is below or equal to -1.64 or more than or equal to 1.64, the correlation is statistically significantly different between male and female (Pallant, 2010). Z score can be calculated using the following formula: 

\[
Z_{\text{obs}} = \frac{Z_1 - Z_2}{\sqrt{\frac{1}{N_1-3} + \frac{1}{N_2-2}}}
\]

for the male group, \( N_2 \) = the group size for the female group, \( Z_1 \) and \( Z_2 \) is the correlation value for each group (\( r \)).

Based on the results of \( Z_{\text{obs}} \) value, there were no significant differences in correlation results across gender for all correlations (-.164 < \( Z \) < 1.64). Z s ranged between \( Z_{\text{obs}} \) =0.78 and \( Z_{\text{obs}} \) =-1.07 (see Table 46). The results suggest that male and female managers have nearly the same results on the correlation/relationships between constructs. This would indicate that male and female managers do not differ.
Table 46 Zobs score across gender

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<td>-1.07</td>
<td>0.00</td>
<td>-1.02</td>
<td>-0.29</td>
<td>-0.97</td>
<td>-0.68</td>
<td>-0.19</td>
<td>0.29</td>
<td>-0.39</td>
<td>-0.68</td>
<td>-0.87</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSVs</td>
<td>0.29</td>
<td>-0.10</td>
<td>0.10</td>
<td>0.00</td>
<td>-0.19</td>
<td>-0.10</td>
<td>-0.97</td>
<td>-0.10</td>
<td>-0.49</td>
<td>-0.78</td>
<td>-0.19</td>
<td>-0.39</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>TRFLs</td>
<td>-0.10</td>
<td>0.00</td>
<td>-0.49</td>
<td>-0.10</td>
<td>-0.19</td>
<td>0.49</td>
<td>0.68</td>
<td>0.29</td>
<td>0.29</td>
<td>0.29</td>
<td>0.00</td>
<td>-0.10</td>
<td>-0.10</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Zobs** is significant at (p≤.10). Zobs is not significant when the value is between 1.64 and -1.64.

**Key:** Transformational leadership behaviours (TRFLs); Idealized Influence attributes (IIA); Idealised influence behaviour (IIB); Developmental behaviours (DEV); contingent reward (CR); management by exception active (MBEA); management by exception passive (MBEP); passive leadership behaviours (PSVs); leader member exchange (LMX); Organisational commitment (OC); Organisational commitment affective (OCA); Organisational commitment normative (OCN); Organisational commitment continuance (OCC); Communal ity (Com), Composite reliability (CR*).

Source: PLS output.
8.9.9.4 Moderation Multiple Regressions (MMR)/the moderation effect of gender

The moderating role of gender between TRFLs and OC was tested using moderated multiple regression (MMR). In order to test the moderation of gender, the average score of TRFL was used as one predictor factor, and then an interaction term between TRFLs and gender was computed. As recommended by Cohen, et al. (2003) and Baron and Kenny (1986) the interaction between the predictor construct (IV) and the moderator construct (Gender) were centred, so a new variable (Gender*IV) was created / computed in the data. The standard/simultaneous multiple regression test was conducted.

The same procedure was conducted for all nine paths to test whether gender moderates the relationships. As shown in Table 47, gender had no effect across paths/relationships.

Table 47 Moderation Multiple Regressions (MMR) analysis results

<table>
<thead>
<tr>
<th>Gender*LMX</th>
<th>Gender*TRFLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²=0.14</td>
<td>R²=0.084</td>
</tr>
<tr>
<td>Adjusted R²=0.13</td>
<td>Adjusted R²=0.077</td>
</tr>
<tr>
<td>Sig =0.000</td>
<td>Sig =0.000</td>
</tr>
<tr>
<td>Model</td>
<td>Model</td>
</tr>
<tr>
<td>(Constant)</td>
<td>(Constant)</td>
</tr>
<tr>
<td>Beta</td>
<td>Beta</td>
</tr>
<tr>
<td>LMX</td>
<td>LMX</td>
</tr>
<tr>
<td>.373</td>
<td>.373</td>
</tr>
<tr>
<td>Gender</td>
<td>Gender</td>
</tr>
<tr>
<td>-.015</td>
<td>-.015</td>
</tr>
<tr>
<td>Gender*LMX</td>
<td>Gender*LMX</td>
</tr>
<tr>
<td>.074</td>
<td>.074</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender*CR</th>
<th>Gender*MBAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²=0.093</td>
<td>R²=0.060</td>
</tr>
<tr>
<td>Adjusted R²=0.086</td>
<td>Adjusted R²=0.053</td>
</tr>
<tr>
<td>Sig =0.000</td>
<td>Sig =0.000</td>
</tr>
<tr>
<td>Model</td>
<td>Model</td>
</tr>
<tr>
<td>(Constant)</td>
<td>(Constant)</td>
</tr>
<tr>
<td>Beta</td>
<td>Beta</td>
</tr>
<tr>
<td>CR</td>
<td>CR</td>
</tr>
<tr>
<td>.300</td>
<td>.300</td>
</tr>
<tr>
<td>Gender</td>
<td>Gender</td>
</tr>
<tr>
<td>-.258</td>
<td>-.258</td>
</tr>
<tr>
<td>Gender*CR</td>
<td>Gender*CR</td>
</tr>
<tr>
<td>.255</td>
<td>.255</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender*PSVs</th>
<th>Gender*TRFLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²=0.54</td>
<td>R²=0.32</td>
</tr>
<tr>
<td>Adjusted R²=0.047</td>
<td>Adjusted R²=0.31</td>
</tr>
<tr>
<td>Sig =0.000</td>
<td>Sig =0.000</td>
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<tr>
<td>Model</td>
<td>Model</td>
</tr>
<tr>
<td>(Constant)</td>
<td>(Constant)</td>
</tr>
<tr>
<td>Beta</td>
<td>T value</td>
</tr>
<tr>
<td>PSVs</td>
<td>TRFLs</td>
</tr>
<tr>
<td>.563</td>
<td>.563</td>
</tr>
<tr>
<td>Gender</td>
<td>Gender</td>
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<tr>
<td>.005</td>
<td>.005</td>
</tr>
<tr>
<td>Gender*PSVs</td>
<td>Gender*PSVs</td>
</tr>
<tr>
<td>-.034</td>
<td>-.034</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender*CR</th>
<th>Gender*MBAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²=0.26</td>
<td>R²=0.013</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8.9.9.5 Multi group analysis (MGA)

This section presents the differences between males and females. Thus the moderation impact of gender was investigated to test the impact of gender. Multiple group analysis was used. This method is widely used when the moderating variable is categorical in nature (Henseler et al., 2009). Recently, researchers have been concerned to conduct PLS to measure moderation impact (Chin et al., 2003, Goodhue et al., 2007, Wilson, 2010). Unlike CBSEM approaches, PLS does not need to test the \( t \) value of normal data. PLS has overcome this assumption with free distribution data (Chin, 1998b).

PLS was used to test the moderation effect for three reasons. First the limitation of the centred interaction approach using SPSS is that it does not actually provide such a value across groups. Second, gender is a categorical variable in nature; thus, PLS is appropriate to test the impact of gender moderation by dividing the data into groups. Group differences can be tested by comparing \( t \) value (Eberl, 2010, Henseler and Fassott, 2010). Third, once the data was divided into two groups, the female sample was considered as not a large sample (below 200 cases), PLS is not affected by the sample size (Chin, 1988a). Thus PLS was selected to test the effect of gender moderation on how the independent construct predicts the dependent construct.

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>Model</th>
<th>Beta</th>
<th>Model</th>
<th>Beta</th>
<th>Model</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>(Constant)</td>
<td>(Constant)</td>
<td>(Constant)</td>
<td>(Constant)</td>
<td>(Constant)</td>
<td>(Constant)</td>
<td>(Constant)</td>
</tr>
<tr>
<td>CR</td>
<td>.563</td>
<td>TRFLs</td>
<td>.563</td>
<td>MBEA</td>
<td>.359</td>
<td>MBEA</td>
<td>.359</td>
</tr>
<tr>
<td>Gender</td>
<td>.005</td>
<td>Gender</td>
<td>.005</td>
<td>Gender</td>
<td>.026</td>
<td>Gender</td>
<td>.026</td>
</tr>
<tr>
<td>Gender*CR</td>
<td>-0.034</td>
<td>Gender*CR</td>
<td>-0.034</td>
<td>Gender*TRFL</td>
<td>-0.048</td>
<td>Gender*MBEA</td>
<td>-0.048</td>
</tr>
<tr>
<td>IV = CR</td>
<td></td>
<td>DV = LMX</td>
<td></td>
<td>IV = MBEA</td>
<td></td>
<td>DV = LMX</td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS output.
Multiple group analysis assesses the differences of paths across gender and is basically concerned with the value of Beta (standardised regression coefficients). Beta ($\beta$) value tells how much effect the change of indicator has on the criterion variables. Thus, the higher the beta value, the higher the effect of the predictor variable on the dependent variable (Miles and Shevlin, 2001). Three steps were taken to test the moderation as follows:

**Step 1:** the data was split into two groups (male and female). Thus each data set was tested based on the comparison of the value of paths ($\beta$).

**Step 2:** as each set of data is independent with its data (values), each data should be tested for its reliability and validity. In PLS the value of AVE and correlation were considered to achieve the construct validity (convergent and discriminant validity). Composite reliability was considered to test the reliability. Also each data set (model) should have good model fit. PLS has as its main objective the minimisation of error in all independent constructs. The degree to which a PLS model achieves this objective can be determined by examining the $R^2$ values (Hulland, 1999).

**Step 3:** The bootstrap estimation/method was used. It provides an estimate of the standard error for latent constructs. It assesses the contribution of each data point to the latent constructs. Standard errors estimation is stable after 100 re-samplings. For the current study 5000 re-samples were considered to accomplish the standard errors of the paths (Tenenhaus et al., 2005).

**Step 4:** Finally, and throughout the inner model output, the $t$ values were used to compare between models/groups. The $p$ value level of was selected ($p\leq1.64$) (Henseler et al., 2009b).
8.9.9.5.1 Smith-Satterthwait test

A Smith-Satterthwait test was conducted to test the differences in $\beta$ value/relationships across gender (Chin et al., 2003). It was used because the standard error’s inequality assumption is proved (Abbasi, 2011). The formula of testing the differences between paths is as follows:

$$t = \frac{\text{path (male group)} - \text{path (female group)}}{\sqrt{\text{se (male group)}^2 + \text{se (female group)}^2}}$$

As shown in Table 46, the variance in dependent constructs explained by independent constructs. $R^2$ in the male sample was greater in LMX (0.498/49.8%), while the female sample was (0.459/45.9%). However, in OC, $R^2$ was higher in the female sample (0.186, 18.6%), while it was 0.148 (14.8%) in the male group.

The structural paths across gender are presented in Table 48. A total of eighteen paths/comparisons were examined using the Smith-Satterthwait test. The observation of the Smith-Satterthwait test reveals that males and females were not significantly different. However, TRFLs $\rightarrow$ LMX was greater for males ($\beta=0.61$, $t=7.56$, $p\leq0.01$) than females ($\beta=0.44$, $t=4.97$, $p\leq0.01$). Although TRFLs $\rightarrow$ OC was not significant for both groups it was negative. However, CR $\rightarrow$ LMX and CR $\rightarrow$ OC were higher and significant in the women’s group ($\beta=0.20$, $t=2.59$, $p\leq0.05$), ($\beta=0.21$, $t=2.24$, $p\leq0.05$) whereas, they were not significant for the men’s group ($\beta=0.06$, $t=.87$, $p\geq0.05$), ($\beta=0.05$, $t=0.73$, $p\geq0.05$). Although MBEA $\rightarrow$ LMX was significant in the whole sample, this path was not significant for either gender. PSVs $\rightarrow$ LMX was significant in the female group ($\beta=-0.12$, $t=1.75$, $p\geq0.10$) and also for males ($\beta=-0.10$, $t=1.84$, $p\geq0.10$). Although PSVs $\rightarrow$ OC were insignificant, they were negative for both groups. LMX $\rightarrow$ OC show that males and females had significant paths with advantage for females ($\beta=0.29$, $t=2.97$, $p\leq0.05$) ($\beta=0.22$, $t=2.49$, $p\leq0.05$). As a result of the Smith-Satterthwait test, it could be argued that males and females do not differ in their leadership styles and leadership relationship, therefore, H11:H17 were rejected.
<table>
<thead>
<tr>
<th>H</th>
<th>Relationship between Exogenous and Endogenous</th>
<th>Male (n=234)</th>
<th>Female (n=162)</th>
<th>Smith-Satterthwaite test results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>β</td>
<td>t value</td>
<td>s.e</td>
</tr>
<tr>
<td>H1</td>
<td>TRFLs → LMX</td>
<td>0.61</td>
<td>7.64***</td>
<td>0.08</td>
</tr>
<tr>
<td>H12a</td>
<td>CR → LMX</td>
<td>0.05</td>
<td>1.13</td>
<td>0.05</td>
</tr>
<tr>
<td>H12b</td>
<td>MBEA → LMX</td>
<td>-0.014</td>
<td>0.40</td>
<td>0.04</td>
</tr>
<tr>
<td>H13</td>
<td>PSVs → LMX</td>
<td>-0.10</td>
<td>1.85*</td>
<td>0.05</td>
</tr>
<tr>
<td>H14</td>
<td>TRFLs → OC</td>
<td>0.02</td>
<td>0.32</td>
<td>0.08</td>
</tr>
<tr>
<td>H15a</td>
<td>CR → OC</td>
<td>0.05</td>
<td>0.87</td>
<td>0.05</td>
</tr>
<tr>
<td>H15b</td>
<td>MBEA → OC</td>
<td>0.11</td>
<td>1.48</td>
<td>0.07</td>
</tr>
<tr>
<td>H16</td>
<td>PSVs → OC</td>
<td>-0.09</td>
<td>1.47</td>
<td>0.06</td>
</tr>
<tr>
<td>H17</td>
<td>LMX → OC</td>
<td>0.22</td>
<td>2.49**</td>
<td>0.09</td>
</tr>
</tbody>
</table>

*p≤0.10, **p≤0.05, ***p≤0.01

Source: PLS output and the researcher’s calculations.

### 8.10 Conclusion

The aim of this chapter was to present the analysis for the study. SPSS and Smart-PLS were used to analyse the data. The inspection of the data was the first step in the analysis. The data were checked for any errors/mistakes and missing data. The errors were checked using descriptive analysis. Missing data were below 5%. Although this result can be ignored, the missing data were replaced by the mean value. Normality is a very important assumption needing to be checked. As suggested, it was checked by statistical and graphical test. The results of checking the value of skewness and kurtosis were in the acceptable range, also the line in P-P plots seemed to be normal. However, the results of Kolmogorov-Smirnov (K-S) and Shapiro-Wilk (S-W) tests, which are the main tests used to check normality, reveal that the data were not normal (p>0.05). The outliers were tested by checking the value of standardised residual in the residual statistics table. The results ranged between 3.3 and -3.3, which indicate that the data did not violate this assumption.

The second step was the descriptive analysis of the demographic factors. The number of respondents was 396, divided into 234 males and 162 females. Also, other demographic factors were presented (marital status, age salary, and level of education, the period of employment and the period spent with immediate employer). The third step was the
analysis of the mean score for latent and observed constructs. The aim of this step was
to discover how males and females rate their immediate leaders and whether there were
any differences across gender. The results reveal that males and females did not differ in
rating their leaders and have nearly the same level of organisational commitment.
The fourth step was constructing and testing the outer model (measurement stage). It
was applied in the current study to test reliability and validity. The composite reliability
(CR*) ranged between 0.78 and 1.00. Average variance extracted (AVE) and composite
reliability were used to test the validity of the research (convergent and discriminant).
All main constructs met the cut off criteria of convergent validity. Then discriminant
validity was tested by calculating the root of AVE for each construct. The root of AVE
exceeded all correlation results between every correlation pair in the correlation matrix
table. Thus, the above findings indicate that all scales were valid and reliable for
hypothesis testing. Also it can be argued that all scales were valid and reliable to be
used in the Saudi context, as the results were derived from four out of the five regions in
Saudi Arabia. Also, demographic variables were considered in order to achieve the
generalizability of the study.

Based on the measurement stage /outer model results, transformational leadership
behaviours were measured by three observed factors (IIA, IIB,DEV) rather than five,
and transactional leadership styles (TX) measured by two latent variables (CR and
MBEA). However, the inner model stage showed that CR and MBEA were considered
to be separated (latent constructs), and passive leadership behaviours (PSVs) made up
of two variables (MBEP and LF). Due to not meeting the acceptable standard for factor
loading (FL>0.707), some items were eliminated from the models. TRFLs were reduced
to nine items out of 20 items, CR was reduced to one item out of four items, MBEA was
reduced to two out of four items, and PSVs was reduced to four out of eight items.
LMX was originally measured using seven items; however, due to the recommended
FL, the items were reduced from seven to three, organisational commitment was
measured by three observed variables (OCA, OCN and OCC), each measured by seven items. After the CFA/outer model results, only seven items were left to measure OC. Thus, dimensionality for all constructs was tested.

The fifth step was to test the inner model in order to find the best model to be used to test the hypotheses. Six alternative models were tested based on the change in $R^2$. Model five achieved the highest $R^2$, and this model was used by the researcher to test the hypotheses. However, as mentioned in the outer model stage (construct validation process), combination and separation were followed in this step. During this step seven paths were tested directly between independent constructs (TRFLs, CR, MBEA and PSVs) and the dependent construct (OC). Also the mediation role of LMX was tested between these paths.

In the final step (sixth step), the influence of gender was tested by various analysis methods. The validity of male and female models was tested before comparing the gender groups. The values of AVE and CR were proved for male and female groups. Then, t test analysis was conducted to test the mean difference across gender. Also Z score analysis was used to test differences of correlation across gender. The results for both groups were not significantly different. MMR was used to test whether gender moderates the nine paths of the model. The results found that gender did not moderate the relationships between constructs. Therefore, MGA was used to find the differences in $\beta$ value across gender. This method enables the researcher to compare the variances of $R^2$ and $\beta$ even if they are insignificant. The results of the Smith-Satterthwait test indicate that Saudi male and female managers were not significantly different in their leadership styles effectiveness.
CHAPTER NINE: DISCUSSION

9.1 Review of the study

As this study relies on the positivist paradigm, a set of constructs were suggested to meet the objectives of the study. The framework was developed based on two main leadership theories: full range of leadership styles (FRLT) and leader member exchange (LMX). The rationale of this combination was to discover how leadership is processed in the Saudi context, also whether leadership is or not gendered in segregated work environments. The theoretical model and empirical findings of the current study provide several interesting insights.

Based on the outer model stage (measurement stage) it was found that TRFLs is measured by three observed constructs: idealised influence attributes (IIA), idealised influence behaviours (IIB), and developmental behaviours (DEV) which encompasses inspiration motivation (IM), intellectual stimulation (IS) and individualised consideration (IC). TXs was measured by two observed constructs: contingent reward (CR) and management by exception active (MBEA), however, they measured two independent constructs (latent constructs) as they were not loaded under the transactional high order construct. PSVs were measured by two observed constructs, management by exception passive (MBEP) and laissez faire (LF). LMX was measured by three items/observed constructs. OC was measured by three observed constructs (OCA, OCN and OCC). It was found that three main latent constructs, transformational (TRFLs), transactional (TXs) and passive leadership (PSVs) could play a role as antecedents to predict leader member exchange (LMX) and organisational commitment (OC). Also, LMX was found to mediate the relationship between leadership behaviours and OC.

There has been extensive debate whether leadership is gendered or not. However, no study has examined gender effectiveness and differences in a segregated work
environment. Through the inner model stage, it was found that TRFLs, TXs and PSVs are perfect antecedents to predict LMX. However, based on the best model, LMX was found to be a conditional mediator between TRFLs and organisational commitment (OC).

One significant contribution of this study is the sample construction, as comparative studies of leadership and gender in segregated work environment are almost absent from the research literature. This study offers recognition of the role of segregated policy and leadership studies for further study, as no previous study tested the three leadership styles (TRFLs, TXs and PSVs) with LMX and OC using SEM this context.

This chapter discusses the findings of the research. It consists of two parts: 1: Discussion of construct validation 2. Discussion of hypotheses(inner model stage/ structural models).

9.2 Discussion of outer model/measurement models

9.2.1 Transformational Leadership Behaviours Construct (TRFLs)

This is an initial step for transformational measurement in order to prove the validity and reliability before going further with testing hypotheses. Based on previous findings TRFLs was measured as one construct (unidimensional) including all five dimensions’ items (Epitropaki, 2000), and one construct including the five dimensions with CR (Edwards et al., 2012) or as a multidimensional construct variously measured by three dimensions (IM,IS,IC) (Hinkin and Tracey, 1999) or by four dimensions (II,IM,IS and IC) (Bass and Avolio, 1999), five dimensions (IIA,IIB,IM,IS and IC) (Bass and Avolio, 2004), six dimensions (IIA,IIB,IM,IS,IC and CR (Chen, 2005). The results of the outer model stage showed that TRFLs was found to be a multidimensional construct, which was measured by three observed dimensions/observed constructs. Throughout the outer models and due to the high correlation between TRFL dimensions, the multidimensional construct measured by five dimensions (IIA, IIB, IM, IS and IC)
did not show discriminant validity. Thus, a combination and separation policy was followed to prove the construct validation. The final result of the TRFLs model confirmed that it was measured independently by three latent constructs: idealised influence attributes (IIA), idealised influence behaviour (IIB), and developmental behaviours (DEV), which included three observed constructs: inspiration motivation (IM), intellectual stimulation (IS) and individualised consideration (IC) (See Figure 25). This result is not consistent with most previous research. These three subscales were confirmed due to the acceptable results of the squared root of AVE (AVE=0.52 (sig≥0.50), which exceeded the highest correlation (r=0.69) found in the matrix table (Hair et al., 2011) (See Table 31). The TRFLs final model caused the elimination of 11 items out of 20 items, leaving nine items to be used.

The overall mean score was 2.78 out of 4 with SD of 0.78 on 5 point Likert scales (not at all = 0 and frequently = 4). This score indicates that bank managers were perceived as high in possessing transformational leadership behaviours. Such results motivated the researcher to inspect each dimension to find the effect of each dimension on the model.

The first sub factor/dimension is **idealised influence attribute (IIA)**. The mean score was 2.70 out of 4, which means that managers had a high degree of charisma; managers were able to make a reflection due to displaying idealised influence attributes. In other words the bankers gave feedback, reflecting a sense of charisma back to the managers. This could be a kind of mutual influence between manager and followers, and could be a very important output to increase the level of relationship between pairs. Specifically, the remaining items of IIA3 “Acts in ways that builds my respect” and IIA4 “Displays a sense of power and confidence” in the final model indicate that managers displayed a sense of confidence and power to the followers (Avolio and Bass, 2004). IIA3 had a mean score of 3.07, showing bank managers acted in ways to be respected by others (followers); they seemed to be mutually accepted by managers and followers. IIA4 had a mean score of 2.33, showing that power essentially shapes the way individuals
construe the world by leading them to process information more abstractly, to see the
forest beyond the trees (Guinote, 2007). Thus, it could be a fundamental aspect for
social interaction. Power affects the psychology of individuals and the psychological
experience of power affects people’s action towards others in a dyadic interaction
(Galinsky et al., 2012).
Moreover, Sosik and Jung (2010) point out that leaders idealised influence attributes
can display altruism, which is the opposite of egotism (Batson and Shaw, 1991).
Altruism is a social and moral characteristic favoured in all cultures. In Islamic society
it reflects the good intention of Muslims to engage with God and achieve intrinsic
satisfaction (Zokaei and Phillips, 2000). Altruism is a behaviour, which is encouraged
by Islamic teaching and found to be practised by Saudi managers. God said, “and give
them (people/followers) preference over themselves (leaders/those who have authority)
even though they were in need of that, and whosoever is saved from his own
covetousness, such are they who will be the successful” (Quran, 59:9). Finally IIA were
perceived to be practised in the form of power, confidence, altruism and mutual respect.
However, it can be difficult to be sure that a manager is following the fundamental
principles of Islam as suggested by Eastern researchers.
The second sub factor of TRFLs is idealised influence behaviours (IIB). This component
was measured by four items; however, only IIB3 and IIB4 were loaded to measure the
IIB construct. The overall mean score was 2.86 out of 4 with SD of 0.86 on 5 point
Likert scales (not at all = 0 and frequently = 4). This was an indication that Saudi
managers were seen as charismatic leaders, acted in ways that made them role models
for followers, and were perceived to consider the moral and ethical consequences of
making decisions. IIB3 “Considers the moral and ethical consequences of decisions”
had a mean score of 2.85 in the current study, indicating that followers perceived their
managers as paying attention of the consequences of decisions in terms of morality and
ethics. Turner et al. (2002) found that leaders displaying higher levels of moral
reasoning would exhibit more transformational leadership behaviours than leaders with lower moral reasoning levels. However, many factors could influence the level of moral and ethical reasoning in taking action (e.g., decision making) such as demographic, situational factors and culture (Brown and Treviño, 2006). IIB4 “Emphasizes the importance of having a collective sense of mission” had a mean score of 2.87. Followers perceived their leaders seeking their participation in group work by emphasising the importance of cooperation in performing collective tasks, offering the opportunity to be trained from a shared experience, and delegating power to them to gain effective performance and increase the possibility of practicing the decision making process with followers (Jung and Sosik, 2002). It can be inferred from this dimension that Saudi managers are aware of the cultural value of collectivism in the work environment, letting employees work in groups and practicing the function of empowerment.

However, two important behaviours were not loaded in the model: “talks about important beliefs and values” and “specify the importance of having a strong sense of purpose” (Sosik and Jung, 2010). As these two important behaviours were not loaded in the model, it can be argued that there was limited communication between pairs, which could lead to misunderstanding of what leaders deeply believe and want. Thus, this dimension reveals that leaders behave in ways to achieve goals directly rather than offer a sense of deep communication and develop a relationship with followers. This could depict the dark side of charisma, due to the limits of the relationship with followers. In other words, the results of this dimension could lead to the conclusion that managers are mission/task oriented more than interpersonal relationship/relation oriented.

The third sub factor/dimension was complex; three dimensions (IM, IS, IC) were collapsed into one observed variable, developmental behaviours (DEV). Five items were left in the inner model. Jointly, these factors had a mean score of 2.78. This outcome is not surprising, as mentioned; TRFLs could be loaded in one construct (Bass and Avolio,
1997; Chen, 2005, Epitropaki, 2000, Howell and Avolio, 1993). This indicates that Saudi managers were perceived highly to employ inspiration motivation to enhance the relationship between managers and members, and allow their followers to think in ways that seek followers’ improvement. Leaders allow their followers to think about common problems from different perspectives. This finding is in line with Islamic teaching. Saudi society relies on four main sources of rules and regulations, 1. The Quran, 2. Speeches of the Prophet Muhammad, 3. Ijmaa (scholars’ agreement on a particular issue), Ijmaa requires scholars to apply their intelligence and consult each other in order to agree or make a decision. 4. Qeyas (analogy), which involves a comparison between a new issue and an established one on which a rule exists in order to create a new decision or idea. The last two sources encourage people to think about old problems in a new way, so Muslims are encouraged to apply their intellect and think before making decisions. In terms of individualised consideration (IC): IC1 and IC4 were left in the final model. These two items refer to the subcomponents of IC (individuation and mentoring), so, managers were shown to spend time with subordinates teaching and mentoring and deal with each member as an individual rather than a member of the group.

In terms of gender, and based on the T test, there were no differences between male and female managers as rated by their followers (See Table 45). This finding is in line with most previous studies (Judeh, 2010). This study would add the argument of regarding gender in a segregated organisation; males and females did not differ in rating their immediate managers in transformational leadership behaviours.
9.2.2 Transactional Leadership Behaviours Construct (TXs) and Passive Leadership Behaviours Construct (PSVs)

There has been great debate on transactional leadership behaviours, so the study tested different models of TXs. In the Saudi Arabian sample the outer model of transactional leadership styles (TXs) confirmed that TXs loaded in three independent constructs rather than in one order construct: Contingent reward (CR) was found as a latent construct measured by a single item (CR4). Management by exception active (MBEA) was loaded as a latent construct measured by two items (MBEA and MBEA), while MBEP was loaded with LF under the high construct PSVs (See Figure 45 and Table 34).

Based on Bass’ (1985) findings and suggestions, MBEP and LF are passive in nature but measure two different things; however, the empirical results found that MBEP and LF substantially overlapped. Two explanations were suggested to be most plausible for this situation. It is possible that leaders who are keen to use MBEP are also keen to use LF. Second, perceptually, respondents found it difficult to distinguish between the two constructs, as their items were generally labelled as passive leadership behaviours (PSVs) (Hinkin and Schriesheim, 2008). In addition to their similarity, some studies including the current study, using the outer model, found that MBEP and LF items were highly loaded in a high order construct, called passive/corrective leadership (Avolio et al., 1999). Also, numerous studies, including the current study and Bass and Avolio’s findings, found that MBEP and LF are positively correlated (Bass et al., 1996, Bass and Riggio, 2006, Den Hartog et al., 1997, Hinkin and Schriesheim, 2008), and negatively correlated with transformational behaviours and transactional behaviour (CR and MBEA) (Bass, 1985). Bass and Avolio (2004) present findings of their previous studies, which indicate that MBEP and LF are highly correlated ($r=0.52$, $p>.000$) and negatively correlated with extra effort, effectiveness and satisfaction. In addition, studies found the same correlation results in different contexts and different outcomes (Omer, 2005; Al-Ammaj, 2000; Bass and Avolio, 2004).
However, CR was measured by a single item (CR4). Hair et al. (2012) point out that researchers argue that a single item is the best approach to be used when the construct’s scope is narrow, unambiguous and unidimensional. Nagy (2002) found that single item constructs had high levels of face validity, and high correlations with multiple item measures. In fact, the conceptualisation of the CR construct was not theoretically developed under this suggestion. However, due to the problem faced in discriminant validity, a high correlation between TRFLs and CR was found. Thus, CR was finally measured by a single item in order to prove its validation and test the hypotheses. It is very important for the researcher to consider the software used to run such a model. For example, AMOS is not able to run such a model as the CB-SEM approach, thus the covariance between items needs to be constructed. Thus the CB-SEM construct with a single item is not identified as proposed by Hair et al. (2012), and cannot yield estimates of internal consistency reliability (Oshagbemi, 1999, Wanous et al., 1997). However, PLS is not restricted in this respect. PLS can achieve an identified model with a single item construct and the internal consistency reliability is presented as one. The composite reliability for leadership behaviours measurement ranged between 0.79 and 1.00. Also, both convergent and discriminant validity were proved.

This study would argue and proves that MBEP and LF can be combined in high order construct, labelled as passive leadership behaviours (PSVs). Moreover, this study suggests a need for further study to investigate the structure of the TXs construct, as the original transactional construct was not loaded under one high latent construct (TXs). Also there would be a problem to prove the external validity/homononallogical validity of the original transactional construct. For example, the relationship between CR and LMX was positive and operationally based on economic exchange, whereas the relationship between MBEA and LMX is based on directive leadership (monitoring), and MBEA could be conducted in the early stage of LMX (role making). However, MBEP correlated negatively with LMX and with OC. Therefore, classifying the three
components in one construct is very complicated and complex, so the TXs model might have a problem of operationalization.

Based on the research results, it could be argued that the full range of leadership theory is applicable and effective in the Saudi context. Also as males and females have little interaction in Saudi Arabia, this study added a new suggestion, that the MLQ questionnaire is valid and reliable in a specific context (gender segregated organisations and with little interaction across gender in life), so the instruments provide a reliable and valid way of measuring leadership styles in the Saudi context and across gender.

9.2.3 Leader Member Exchange Construct (LMX)

The LMX-7 item scale was used for the current study to test the quality of the relationship between leaders and followers. The results of CFA/outer model found that three items (LMX3, LMX6 and LMX7) were left in the final model with a mean score of 4 out of 5, which indicates that managers and followers had a high quality of relationship (See Table 31 and 34). LMX7 is important as it generally describes the relationship between leader and followers (Graen and Uhl-Bien, 1995). The construct validation process proved that LMX-7 items were valid, reliable and reflected the unidimensional construct.

In addition, as the current study had multi independent constructs, it was very important to test multicollinearity assumptions. The result of VIF ranged between 1.5 and 4.2 which are <10.00 and the average of the whole model was clearly less than 10.00. Tolerance ranged between 0.29 and 0.77, which are <1.00. Therefore, these results prove that multicollinearity was absent among independent constructs.

Based on the results of the inner model, and the change of $R^2$, it was found that LMX was more effective in the model as a mediator construct than when as an independent construct. The highest $R^2$ of LMX was 0.459 when LMX was hypothesised to mediate
leadership behaviours and OC. Also this model (model five) OC achieved the highest $R^2$ (0.165). This finding goes in line with the suggestion of Deluga (1992,p.245) that “transformational leaders may help foster the development of high-quality relationships and a sense of common fate with individual subordinates; while in a social exchange process, subordinates strengthen and encourage the leader”

In regard to gender, male and female managers did not show big differences in establishing relationships with subordinates; they appeared to be the same in the relationship exchange process. The reliability and validity were proved for LMX; the reliability and validity (convergent and discriminant) of LMX-7 items were proved in the Saudi context and across gender.

9.2.4 Organisational Commitment Construct (OC)

Organisational commitment was measured for this study using Meyer and Allen’s scale (1997), as a dependent construct. The finding of the outer model indicates that OC was a multi-dimensional construct consisting of three observed constructs: affective, continuance and normative commitment (See Table 34 and Figure 25). The correlation between constructs ranged between ($r=63$ and $r=0.67$). This indicates that bankers express attachment to their bank and feel obligated to remain in the bank, and also would find it costly to leave the bank. Similar results have been reported in eastern culture (Tayyab, 2006). Also the external validity was met for all independent constructs. The results indicates that TRFLs, CR, MBEA LMX and PSVs had correlation with OC $r=0.32$, $r=0.30$ $r=0.25$, $r=0.36$ and $r=-0.25$ respectively (See Table 31). It could be argued that LMX had the highest correlation.
9.3 Discussion of hypotheses findings (inner model/structural model)

Leadership studies link between leadership theories/scales, for example between leadership behaviours and leadership relationship (Howell and Hall-Merenda, 1999, Lee, 2005, Lee, 2008, Chen, 2005, Wang et al., 2005). However, there is still need for more exploration of how leadership behaviours link to leadership relationship. In their Sage Handbook of Leadership, Bryman et al. (2011) call for further studies to incorporate the full range of leadership theory with leader member exchange (LMX). Also, there is a need for leadership research in different cultures and specific contexts, for example, there is ambiguity about the extent to which leadership is gendered (Eagly and Carli, 2007). As far as the researcher is aware, the linkage between leadership behaviours and leadership relationship has not been compared across gender, in settings where the sexes experience no interaction in the work environment (segregated organisation). Thus, the following hypotheses were firstly established based on a literature review evaluation (see Chapter Five), and secondly tested and amended based on SEM (See Chapter Eight: Data Analysis and Findings). Thus the aim of the following section is to provide discussion of the research hypotheses with consideration of the notion of gendered leadership; in other words, to what extent is leadership gendered among these hypotheses/relationships? As the study was conducted in a segregated organisation, the research hypotheses are discussed based on the whole sample and between the male and female group/models.
Table 49 Results of the direct impact between latent constructs of the whole sample and across gender.

<table>
<thead>
<tr>
<th>Relationship between Exogenous and Endogenous</th>
<th>The whole (N=396)</th>
<th>Male (N=234)</th>
<th>Female(N=162)</th>
<th>Smith-satterthwait test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRFLs → LMX</td>
<td>β = 0.55*** (t=9.10, s.e=0.06, R²=0.498)</td>
<td>B = 0.61 (t=7.64***, s.e=0.08, R²=0.498)</td>
<td>0.44 (t=4.98***, s.e=0.09)</td>
<td>0.459 (t=1.42)</td>
</tr>
<tr>
<td>CR → LMX</td>
<td>β = 0.11** (t=2.15, s.e=0.05)</td>
<td>0.05 (t=1.13, s.e=0.05)</td>
<td>0.008 (t=0.20, s.e=0.03)</td>
<td>-1.27</td>
</tr>
<tr>
<td>MBEA → LMX</td>
<td>β = -0.003(ns) (t=1.24, s.e=0.03)</td>
<td>-0.014 (t=0.40, s.e=0.04)</td>
<td>0.008 (t=0.20, s.e=0.03)</td>
<td>-0.12</td>
</tr>
<tr>
<td>PSVs → LMX</td>
<td>β = -0.10** (t=2.35, s.e=0.04)</td>
<td>-0.10 (t=1.85*, s.e=0.05)</td>
<td>-0.12 (t=1.75*, s.e=0.07)</td>
<td>0.23</td>
</tr>
<tr>
<td>TRFLs → OC</td>
<td>β = -0.01(ns) (t=0.25, s.e=0.06)</td>
<td>0.02 (t=0.32, s.e=0.08)</td>
<td>0.008 (t=0.20, s.e=0.03)</td>
<td>0.186 (t=0.67)</td>
</tr>
<tr>
<td>CR → OC</td>
<td>β = 0.12** (t=2.0, s.e=0.06)</td>
<td>0.05 (t=0.87, s.e=0.05)</td>
<td>0.008 (t=0.20, s.e=0.03)</td>
<td>-1.45</td>
</tr>
<tr>
<td>MBEA → OC</td>
<td>β = 0.11* (t=1.85, s.e=0.06)</td>
<td>0.11 (t=1.48, s.e=0.07)</td>
<td>0.01 (t=0.17, s.e=0.05)</td>
<td>0.19</td>
</tr>
<tr>
<td>PSVs → OC</td>
<td>β = -0.06(ns) (t=1.36, s.e=0.05)</td>
<td>-0.09 (t=1.47, s.e=0.06)</td>
<td>-0.09 (t=0.17, s.e=0.05)</td>
<td>-0.03</td>
</tr>
<tr>
<td>LMX → OC</td>
<td>β = 0.24** (t=3.70, s.e=0.07)</td>
<td>0.22 (t=2.49**, s.e=0.09)</td>
<td>0.29 (t=2.94**, s.e=0.10)</td>
<td>-0.52</td>
</tr>
</tbody>
</table>

*p≤0.10, **p≤0.05, ***p≤0.01

Source: PLS output and the researcher’s calculation.
9.3.1 Transformational Leadership Behaviours (TRFLs) and Leader Member Exchange (LMX) (H1)

As evaluated in Chapter Five, there has been ambiguity regarding the difference and similarity between TRFLs and LMX (See Table 31). The current study suggests models to achieve the best model. In order to achieve the best model, $R^2$ was used to select the best model fit. The higher $R^2$, the better the model is (Chin, 1988b). Based on the results of inner models/alternative models, the current study argues that the integration of both constructs with the mediation role of LMX between TRFLs and OC is the best model, as it achieved the highest score of $R^2$ ($R^2=0.16$) (See Figure 25).

Theoretically and empirically, it was found that TRFLs correlated positively with the LMX ($r=68$). Also the structural model/inner model for the direct effect indicates that the more leaders/managers possess TRFLs characteristics, the more leader member exchange (relationship) can be established. The regression weight result shows that TRFLs explains 55% ($p<0.01$) of the variance in LMX, which confirms H1 (See Table 49). Transformational leadership behaviours were found to be highly strong predictors of leader and members tending to establish a relationship in the financial sector in Saudi Arabia. This finding is in line with previous research. For example LMX is highly related with the leader’s behaviours (O'Donnell et al., 2012, Yukl et al., 2009). Specifically, TRFLS play a very important role in predicting LMX (Deluga, 1992; Howell and Hall-Merenda 1999, Lee, 2005, Lee, 2008). In terms of dimensionality findings, LMX can be predicted by multidimensional construct (TRFLs (IIA, IIB and DEV)). Thus, it could be argued that TRFLs are essential characteristics for Saudi managers to establish relationships with subordinates. TRFLs are a substantial antecedent for LMX in the Saudi context. Deluga (1992) found a significant positive relationship between two transformational leadership components, idealised influence and individualised consideration and LMX but no such relationship was found for intellectual stimulation or inspirational motivation.
In addition, it can be argued that this finding is consistent with Islamic teaching. The values of TRFLs and LMX have been taught and encouraged by Islamic values. For example, charismatic leadership exists and is influential in Saudi society. The idea of a role model is mentioned in the holy book, the Quran as having charisma/beaing a role model (Asuaton hasanah), which means having the best characteristics (behaviours and attitudes) that are observed and followed by followers (Beekun and Badawi, 1998). In other words, the leader is a person who possesses a high level of the right personality and characteristics, which are desired by followers.

9.3.2 Transformational Leadership Behaviours (TRFLs) and Organizational Commitment (OC) (H4)

Based on the conceptual framework, TRFLs is proposed to increase the level of organisational commitment (OC). However, the structural model for the direct relationship between the independent and the dependent constructs indicates that TRFLs had no direct effect to predict OC; rather, its effect was via LMX(See Table 48 and Figure 25) . The regression weight between TRFLs and OC was ($\beta=-0.01$, $p>0.10$). This result is inconsistent with most of the previous findings as most previous studies found that organisational commitment is influenced by transformational leadership behaviours (Arnold et al., 2001, Bass and Riggio, 2006, Geijsel et al., 2003, Joo et al., 2012, Nguni et al., 2006, Ross and Gray, 2006, Yu et al., 2002, Yousef, 2000). However, one recent study conducted in the United Arab Emirates (UAE) found that TRFLS are not significant as a predictor of OC (Behary et al., 2012).

Yuk1 et al (2009) found that LMX can be predicted by three different leader behaviours which are not transformational but are relations-oriented: recognising, consulting and delegating. They argue that LMX can be predicted primarily by relation-oriented behaviours, rather than by transformational components. So it might be that other behaviour is an initial antecedent of LMX and should be examined simultaneously with transformational behaviours.
In addition, organisational commitment is a huge topic in management, so there are many possible antecedents to predict the level of OC, and OC is a major predictor for many outcomes such as performance, turnover and absenteeism (Allen and Meyer, 1990. Thus, the dimensions of OC are influenced by different predictors and cause other outcomes (Park and Rainey, 2007). For example, it has been suggested that continuance commitment is influenced by economic exchange more than relational exchange, while affective and normative commitment are influenced by TRFLs more than by CR (Bycio et al., 1995; Bass and Riggio, 2006).

According to Barling et al. (2008, p.853), “transformational and pseudo-transformational leaders can be differentiated on the basis of idealized influence and inspirational motivation”. Bass and Riggio (2006) argue that idealised influence was the aspect of transformational leadership with the strongest influence on followers’ attachment to their leader and organisation. The highest quality of a transformational leader is the ability to act as a role model for employees (Bass, 1985). In idealised influence, the leader acts in ways beyond his/her interests, sacrificing them for followers’ interest and needs. In contract, pseudo-transformational leaders act in personal ways; although they act as role models, it is for their own sake rather than for followers’ sake (Avolio and Bass, 2004; Bass and Riggio, 2006). With regards to the inspiration motivation component, transformational leaders have the ability to increase follower awareness of a vision and motivate them to pursue collective goals, whereas pseudo-transformational leaders are capable and well skilled in promoting their beliefs and missions using metaphor and rhetoric, like transformational leaders, but their followers are motivated through false promises and deception (Bass and Steidlmeyer, 1999).

Moreover, the cultural background could be more complex, and the affect the attitude of managers and the reaction of subordinates to their manager’s behaviours, so there is
no agreement on a universal assumption about supervisory practices (Hofstede, 1980). In Saudi Arabia, there might still be barriers that can face managers with regard to how to deal with subordinates fairly. Unfortunately, even managers who want to be role models for their followers still suffer from cultural assumptions. For example, it was found that Saudi managers commit to a traditional negative or positive bond (Al-Shakhis and Ali, 1991). This could affect the attitude of managers to followers’ performance. A problem with this assumption is that managers could sacrifice their followers, which could lead to breaking the trust and respect from followers, and then this might affect the level of leadership effectiveness and commitment.

9.3.3 Transactional Leadership Behaviours (CR) and LMX (H2a)

In regard to CR, economic exchange is based on benefit exchange whereby one who: “does the job gets a reward” (goal theory). However, LMX theory is fundamentally measured and developed based on an exchange relationship, assuming that leader and follower develop their relationship based on exchange of respect, trust and obligation (Scandura and Graen 1984).

As mentioned, CR and MBEA were hypothesised to measure TXs. However, based on the validation process, these observed variables were found to measure different constructs. This finding would expand the understanding of the effect of transactional leadership behaviours on LMX and OC, as well as their conceptualisations.

The results confirm that contingent reward can increase the relationship between leaders and followers (See Table 48 and Figure 25). This result is in line with previous findings (Lee, 2005, Lee, 2008) However, the main distinction between economic and social exchange relationships that has been highlighted is that economic exchanges are impersonal, while trust is viewed as the basic relationship for social exchange (Shore et el., 2006). Grean and Uhl-Bien, (1995, p. 239) claim that “LMX is both transactional and transformational”, they argue that material exchange is
different from social exchange. For example, once the relationship relies on economic exchange, this exchange “is not leadership at all”, but is much closer to supervision or manager-ship. Leadership should begin with limited social exchange “transactions” as long as leaders are able to generate leadership that results in transformation. On the other hand, Bass and Riggio (2006, p. 231) argue that “in the first stage, LMX is transactional; if the last stage is reached, it is transformational”. It was emphasised that transformational leadership and transactional leadership do not form a single behavioural continuum; rather they represent different leadership styles (Turner et al., 2002). Thus, with transactions at the basis of leadership (e.g., exchange, expectancy), a leader displaying high levels of transformational leadership behaviours should not forego transactional leadership behaviours, but rather build on these transactions alongside transformational behaviours (Avolio & Bass, 1995). This result indicates that economic exchange (CR) is effective in Saudi banks in establishing relationship with managers. It could be argued that economic exchange could enhance the level of the relationship between pairs in the earlier stage (role making). Then, once role making is reached, transformational leadership would be valuable.

For this path, it could be argued that we should consider that both social and material exchanges motivate employees (the traditional conception of social exchange theory) (Judge and Piccolo, 2004). However, economic and social exchange relationships with the organisation may be linked under particular conditions, for example, when the task is trivial and performance is easy to assess and observe (Kuvaas et al., 2012). Also, the individual needs of employees might differ based on economic needs.
9.3.4 Transactional Leadership Behaviours (MBEA) and LMX (H2b)

It was found that the relationship between MBEA and LMX was insignificant and negative (See Table 48 and Figure 25). This finding is in line with what of Howell and Hall-Merenda (1999), who found that LMX and active management-by-exception have positive relationship and positively predicted follower performance. They concluded that trust between followers and close leaders is higher than between followers and distant leaders because close leaders have more opportunities to interact directly, establish personal contact, and build relationships. From this result of the current study, it can be interpreted that MBEA did not play a role in establishing relationships with followers. The results could imply that bank managers might not spend enough time coaching and directing subordinates, and not spend time with them to monitor deviances from standards and take corrective action as necessary, so the communication/interaction with subordinates could be limited.

In addition, the results indicate that managers were traditional in possessing MBEA, Amabile (1998) points out that the tendency of transactional leaders might be to react negatively to deviation or mistakes, so leaders could be aggressive toward their followers during a directive leadership process. Consequently, followers are not willing to think of establishing a relationship with leaders or find difficulties when they want to do so.

Transactional leadership behaviours are usually associated with bureaucratic authority. Thus, Saudi leaders could be linked with legitimacy within organisation policies. As a result, leaders who possess such behaviours tend to think only about how assignments are met and lead subordinates in a task-oriented rather than relation oriented style, which is expected to be an antecedent of LMX, so a sense of compliance rather than trust between managers and subordinates could be established by MBEA. Hence, the
quality of relationship could be decreased by MBEA. Moreover, Saudi Arabia is characterised by high power distance between leaders and followers, who are not encouraged to take risks in order to avoid mistakes. Thus, as MBEA is a part of a directive leadership style, working under such a leader might not establish the relationship between pairs/or not provide followers with the initiative to do so.

Most studies follow the suggestion of Bass on the combination of transformational and transactional behaviours (Boateng, 2012). Bass and Avolio (1990) argue that leaders can be transactional and transformational simultaneously Shore et al. (2006), however, would argue that it is necessary to think more about the dimensionality of the TXs construct. The value of conducting PLS to evaluate construct validity is that it enabled hypotheses for the TXs construct to be divided into two constructs (CR and MABA) rather than one construct. The current study confirms that each construct independently operates in organisational management. In other words, it can be argued that the effects of transactional behaviour including CR and MBEA in one latent construct are confused, and they need to be tested independently as they are based on different perspectives.

9.3.5 Transactional Leadership Behaviours (CR) and OC (H5a)

The results indicate that contingent reward (CR) can increase employees’ organisational commitment (OC) (See Table 48 and Figure 25). This result is congruent with most previous studies (Bass and Avolio, 1995, Bass and Riggio, 2006, Lee, 2005, Yaseen, 2010, Tayyab, 2006, Park and Rainey, 2007, Meyer and Allen, 1997). OC was measured as a high order construct measured by its three observed constructs (affective, normative, continuance) (Allen and Meyer, 1990, Meyer and Allen, 1997). We could recognise that this path is significant due the valuable effect of economic exchange on continuance commitment. In fact employees who are committed by cost or investment can simultaneously express a sense of attachment to
the organisation (Meyer et al., 2002).

A possible explanation of this finding is that employees were aware of actions that could increase or decrease the cost of leaving the banks. As suggested by Meyer and Allen (1997), employees who recognise the consequences of continuance commitment will be aware of the possibility of losing money, and/or do not have alternatives to move to. The availability of viable alternatives is negatively related to continuance commitment. Moreover, with respect to cost and alternative values, if rewards are managed on a contingent basis, then employees will perceive that they are being treated fairly and trusted; consequently, this will increase their willingness to express commitment to the leaders and organisation (Suliman and Al Obaidli, 2013). Hence, it could be argued that contingent reward behaviours help bank managers to increase the level of employees’ organisational commitment.

9.3.6 Transactional Leadership Behaviours (MBEA) and OC (H5b)

This study found that MBEA positively and significantly predicts OC. This finding would argue that bank managers who closely monitor their followers in achieving their duties tend to increase attachment to the banks (See Table 48 and Figure 25). This is inconsistent with the path (MBEA>LMX), which indicates that MBEA insignificantly and negatively relates to social exchange. However, as mentioned, OC has countless antecedents and consequences. One possible explanation of this finding is the perception of followers toward beneficial observational behaviours, which could increase the employee’s motivation and performance. As suggested by Niehoff and Moorman (1993) employees may view managerial monitoring as a "necessary evil." Employees might not appreciate being monitored and might display behaviours that show they do not. Moreover, as MBEA > LMX was negative and insignificant the possibility of distance monitoring might be somewhat useful in such practice.
9.3.7 Passive Leadership Behaviours (PSVs) and LMX and OC (H3 and H6)

The current study confirms that passive leadership behaviours decrease the level of relationship between leaders and followers (See Table 48 and Figure 25). This is consistent with previous study findings (Howell and Hall-Merenda, 1999, Lee, 2005, Lee, 2008).

Bass and Riggio (2006) argue that leaders who avoid taking part in the leadership function (LF) can decrease followers’ outcomes. Also, when leaders take action after a mistake has occurred, it will negatively affect the outcomes of followers (MBEP). Sosic and Jung (2010) also point out that LF leaders do not care whether followers meet their standard, or reach their performance goals. They are rarely involved with subordinates’ work, so they are absolutely absent in taking actions, delay and fail to follow up. As a result, both managers and subordinates have no chance to be involved/interact in the first step of the exchange leadership process. Based on LF characteristics, leaders are not effective (Bass and Riggio, 2006). This is not leadership and “there is absolutely no exchange between the leader and the follower” (Sosik and Jung, 2010, p. 273).

MBEP can negatively affect the establishment of relationship and decrease employees’ commitment to the banks. One possible explanation is that managers who display such behaviour are aggressive rather than emotional. As a result, a sense of passive behaviours can lead to shortage of involvement/interaction, which causes little trust and respect (Sosic and Jung, 2010). For example, MBEP leaders take action after mistakes occur; they only pay attention when standards are not met. As a result, subordinates do not care for the development of the banks or themselves, but only pay attention to what is important, so attachment to the banks would be low. Interestingly, LMX was found to be a condition for establishing a negative relationship (full mediation).

The insignificant path between PSVs and OC was inconsistent with most previous
studies (Al-Ammaj, 2000, DKK and Kumar, 2003, Lee, 2005, Nguni et al., 2006, Yousef, 2000). However, the relationship was negative, which means the possibility of a negative effect could occur. Interestingly, LMX was found to be a condition for establishing a negative relationship (full mediation). Thus, it could be argued that the lower trust and respect between leaders and followers could decrease the obligation to the leaders and then to the organisation (Bass and Avolio, 1994a).

Moreover, in Saudi Arabia the power distance is expected to be high between managers and followers, so delay or not being involved with the team could be passive characteristics. Therefore, shortage of involvement can lead to delay in establishing relationship between pairs. Moreover, passive leadership behaviours are inconsistent with Islamic teaching; Islamic values do not encourage people in positions of responsibility to avoid taking decisions or neglecting those around them. The Prophet Mohammed said, “God loves the work if any of you to do it well”. He also said, "Every one of you is responsible for what is in his custody". The word responsibility is given importance, so people who do not take care of their responsibilities might be judged negatively by God. Therefore, the importance of Islamic values inspires aspects of Muslim life and is in line with Western theory.

Finally, it would be concluded that the level of LMX was a condition the relationship passive between leadership behaviours and organisational commitment. In other words, when leaders display passive leadership behaviours, this caus a low relationship with subordinates. These results raise the importance of LMX in the final model, which is discussed in the following section.

**9.3.8 The role of LMX: (H7, H8, H9a and H9b)**

Based on the conceptual framework, LMX was proposed to serve as a mediator construct between leadership behaviours and organisational commitment. The structural model indicates that LMX positively affects the level of followers’ organisational
commitment. Thus, employees who receive a high level of trust and respect and have a sense of obligation would attach to their banks. This result is in line with most previous studies (Ansari et al., 2007, Gagnon and Michael, 2004, Harris et al., 2005, Schyns et al., 2007).

This study provides evidence of the significant and insignificant results of the relationship between FRLT and LMX theory to predict OC. The results of the full mediation of LMX could offer an interesting finding and contribution of the current study, as it adds a very important perspective of LMX in the Saudi context (See Table 37 and 48 and Figure 25). This finding was supported using the comparisons between alternative models (See Analysis Chapter, section 8.5.6).

Testing the role of LMX has raised some interesting results: first, TRFLs were found as initial predictors for establishing a personal relationship with subordinates. Second, the full mediation of LMX to achieve subordinates’ organisational commitment (House and Aditya, 1997). Third, CR had an effect on LMX and OC, which indicates that economic exchange behaviour was very important to establish a relationship and to increase the level of OC. Conversely, MBEA and PSVs (LF and MBEP) had a negative effect on establishing the relationship with followers. Therefore, the current study confirms that LMX can be established by TRFLs and CR but not by MBEA and negatively by PSVs (LF and MBEP).

Comparing these results to the previous results is very interesting. Regarding the full mediation role of LMX between TRFLs and OC, although TRFLs and LMX have some overlap, some of the differences between the approaches are especially relevant in the context of perception (Schyns et al., 2008). The focuses of TRFLs are on a leader's behaviours, whereas LMX focuses on the relationship quality between leader and followers. With respect to TRFLs, LMX might be more effective than TRFLs in the Saudi context and, as the data were collected based on the perception of followers, one might argue that the result indicates the need of followers’ ratings of LMX that reflect
actual differences in the LMX relationship. So, despite the importance of implicit leadership approaches, which construct the relationship on the basis of needs, followers might be more inclined to consider their needs in that relationship.

Based on the concept of LMX, it was understood that followers who are classified in the in-group should receive more trust, respect and obligation from their managers/leaders, whereas followers who are classified in the out-group receive less trust, respect and obligation than the in-group (Graen and Uhl-Bien, 1995). It could be argued that such classification would encourage employees to attach to their leader first, and then a sense of obligation to the leader should emerge. Finally, the differentiation might provide competition among subordinates to attain the leader’s respect, trust and obligation. As a result of the LMX process, attachment to the bank might come second; a commitment to the leader could act as a mechanism to obtain organisational commitment.

The above finding reveals the importance of LMX stages in the Saudi context. Based on the literature, no previous study measured leader member exchange in Saudi Arabia. Saudi bankers who received more trust, respect and obligation tended to express attachment to their banks. Moreover, cultural values could be very important during the LMX stage; for example the power distance in Saudi Arabia is expected to be high, so the involvement and interaction between followers and their managers could be limited, and attaining the leader’s satisfaction and involvement would be appreciated by followers. Thus, followers who build relationships with the leader would be very satisfied and then express an attachment to the organisation. However, it is not clear which other particular behaviours can effectively enhance the level of the quality of the relationship, what level of trust, respect and obligation should be applied to reach a high level of relationship, or what imports can the high relationship have on selected groups. House and Aditya (1997,p.436) state that “the LMX process does not imply intentional favouritism, discrimination or bias toward selected individuals” Human resource management specialists need to be made
aware of the positional biasing processes associated with high-quality LMX, and procedural checks and balances need to be applied to minimise such biases, if this is indeed possible. Otherwise, the development of high-quality LMX relations could result in organisational dysfunctional consequences and discrimination against out-group organisation”. Unfortunately, in the Saudi context, the differentiation of groups could develop not only based on the work but, rather, based on unfair criteria, which are affected by culture (traditional values) (Al-Khatib et al., 2008, Al-Rasheed, 2002, Al–Shakhis and Ali, 1991). This study contributes that LMX is more effective than TRFLs and TXs in increasing the level of OC in Saudi banks.

9.3.9 The moderation role of gender in a segregated organisation (H10:H17)

One of the main objectives of the study was to examine the moderating role of gender on the relationships in the model. In Saudi Arabia, men and women work separately in most organisations. However, gender moderation in single-sex institutions has not yet received obvious adequate attention in prior studies.

The effect of the moderation of gender on the relationship between the nine paths was examined using a variety of techniques: t tests (see Figure 28), Z score of correlation differences (see Table 46), moderation multiple regressions (MMR) (see Table 47) and multiple group analysis (MGA) using Smart-PLS (See Table 48 and Figure 27 and 28). The data was divided into two groups to ensure that group validation was met across groups and the comparison across groups could be tested by the value of $\beta$. As perceived by followers, the results indicate that male and female managers do not differ; gender does not moderate the nine paths. This finding is consistent with most previous findings (Barbuto Jr et al., 2007, Bass and Avolio, 1996, Eagly et al., 2003, Eagly et al., 1992b, Maher, 1997, Mandell and Pherwani, 2003, Walumbwa et al., 2004). Although both male and female managers were strongly and positively able to conduct TRFLs to establish the relationship with followers, the result of $\beta$ value across gender enables comparison between groups.
The result of the relationship TRFLs and LMX indicates that Saudi male managers are higher in predicting LMX than Saudi female managers. This result is inconsistent with most previous studies that indicate that women are higher in displaying TRFLs (Eagly and Carli, 2007, Eagly and Johannesen -Schmidt, 2001, Eagly and Johnson, 1990, Eagly et al., 1992a, Eagly et al., 1992b, Druskat, 1994, Burke and Collins, 2001). Carli and Eagly (2003, p. 815) highlight that “the greater social skills of women (vs. men) may have facilitated collaborative democratic leadership behaviour and (b) such behaviour may have been especially advantageous for women because it placated subordinates and peers who might otherwise have been resistant to female leadership”. Leaders with TRFLs act as a role model, recognise followers’ accomplishment, demonstrate individualised consideration, communicate with followers in a very powerful, dynamic manner and are confident (Bass, 1985). Groves (2005) argues that there is some conceptual evidence suggesting women are more emotional and more socialised and, thus, more likely to possess charismatic leadership behaviours.

One possible explanation of this finding is due to contextual differences. Since TRFLs were measured by three constructs, the dimensionality of charisma (IIA and IIB) was recognised by Saudi followers. Saudi society has been rated as a male dominated society (Walker, 2004). For instance, guardianship is exercised by men over women, and men expect women’s obedience, as authority with care is expected to be possessed by men. In this case, both male and female followers might still stereotypically express a sense of role model value toward male more than female leaders. However, Vecchio (2002, p.658) points out that “evidence that a gender heuristic may be operative in some instances can be discerned from recent research on the common stereotype that females are ‘more emotional’ than males”. Thus, it could be argued that the contextual factor might play a very important role in exhibiting a leadership role.

In terms of the moderation role of gender between LMX and OC, the result confirms
that gender does not moderate the relationship. Thus, it would be argued that Saudi male and female managers are capable of engaging in LMX with their followers. However, female managers were more effective than male managers in possessing LMX to predict OC. Based on the similarity attraction paradigm, individuals are attracted to those who are similar to themselves (Byrne, 1971). Hence, individual characteristics such as gender might be associated with LMX (Dienesch and Liden, 1986, Wayne et al., 1994, Varma and Stroh, 2001). Bhal et al. (2007) found that gender similarity leads to higher affect in a leader-member dyad. Similarity perhaps allows two individuals with the same gender to accept each other, and the mechanism of gender might be valuable and important in the LMX process. However, the current study goes one step further in such comparisons and arguments, as it was conducted in a setting where males and females seldom interact. It argues that female managers are more effective in possessing LMX to affect employees’ outcomes. One could argue that the female work environment might consider the mutual emotional more than a male one. “Emotional mutual respect, trust, and obligation grow throughout the process. The degree of incremental influence is obtained and, hence, leadership between member is extremely high” (Graen and Uhl-Bien, 1995, p.230).

In addition, studies confirm that women’s influence depends on communicating in a communal style that shows lot of self- interest/friendliness (Carli, 1999). Thus, Saudi female managers are expected to make more use with their followers of communal behaviours such as showing support for others, smiling and expressing agreement. This very important finding could be referred to the segregated facility; in Saudi Arabia female pairs could benefit from a segregated environment, which might facilitate the development of the interaction with absence of gender stereotype (gender difference and inequality). Thus, females might find in this context it is easier for them to form rapport with the same sex than in settings where males and females work together. Varma and Stroh (2001) found that female followers had significantly
higher correlations on LMX with their female managers than with their male managers. They argue that mixed interaction needs better communication.

In terms of CR prediction, the results confirm that male followers were not influenced by CR to increase LMX and OC; unlike the female model, the results indicate that CR was effective to predict LMX and OC. These results were not in line with how males and females are expected to behave regarding the value of CR in Saudi Arabia. Saudi men, as guardians, are responsible to pay the family’s expense, which logically means that they should be aware of the value of CR. In fact, gender grows out of cultural ideas that specify the social meaning and expectation of each sex (Wood, 2012). However, there are two possible explanations for these results. Female unemployment has increased at a high rate from 17% in 2001 to about 25% in 2008, while male unemployment was between 7% and 8% in the same period. One reason for these figures is that work opportunities for Saudi women are limited due to traditional reasons and governance rules (Booz. and Company, 2013). Thus, male employees might think of alternatives afforded by development of the banking sector in Saudi Arabia, as a result of which women would prefer to stay and be satisfied with the reward policy. Meyer and Allen (1997) argue that employees who have several viable alternatives will have weaker commitment than those who have fewer. Thus, it might be argued that the lack of alternatives might lie behind the significant prediction of female commitment. As found, gender did not moderate the relationships between PSVs and LMX and between PSVs and OC. Thus, both genders agreed on the negative effect of passive leadership behaviours. Based on MGA the PSVs→LMX was negative and significant for both models with advantage towards males. Thus, Saudi male followers were more influenced negatively by PSVs to establish relationships with their immediate managers than were female followers. Commonly, the female stereotype refers to an interpersonally sensitive orientation in which the individual is concerned with others. In line with this perspective, females are naturally assumed to be kind, helpful and
sympathetic (Scott and Brown, 2006).

9.3.10 Advantage for Saudi women managers

Although male and female managers display approximately the same leadership styles, Saudi female managers show that they were more effective than their counterparts. The result of $R^2$ of OC in the female model was higher than the male model (See Table 48 and Figure 25). Also the female models show that women were effective in the prediction of LMX and OC using TRFLs, CR and PSVs, while men were effective only in TRFLs to predict LMX. Vecchio (2002) argues that leaders, who are able to incorporate and balance a variety of leader behaviours are judged to be comparatively more effective, and in order to be able to enact these roles, effective leaders should be able to recognise when to enact these roles.

It is likely that both biological and psychological gender differences contribute to men and women exhibiting somewhat different leadership outputs whilst having the same leadership role (Carpenter, 2011). For example, one possible explanation is that women, who often must balance work and family demands, are superior at handling competing tasks (Collins and Killough, 1992). Thus, it could be argued that Saudi female managers are able to be accessible to their followers via different leadership styles offering different channels of communication to increase the possibility of interactions.

Eagly (2005) argues that evidence of the absence of significant differences between men and women in leadership styles could open new opportunities for women. She argues that increasing gender difference will undermine women’s social and political agenda. On the other hand, Hare-Mustin and Marecek (1994) believe that lack of differences between genders will not serve the feminist cause. For example, due to natural and cultural attribution toward gender participation in a research context, women need to be treated differently from men.
This study confirms that Saudi female managers are stereotypically affected by the predominant perception of men as leaders in the Saudi context. West and Zimmerman (1987) argue that gender is something we do, not something we are. Eagly and Carli (2003) argue that women face challenges to prove the high level of capability required to be a leader. Some bias could prevent women from exhibiting leadership (Garcia- Retamero and López-Zafra, 2006). For example discrimination and prejudice against women exist in Arab work environments (Yaseen, 2010).

Eagly and Karau (2002) argue that detrimental reactions not only limit women's access to leadership roles, but also can decrease the effectiveness of women who reach these roles.

For example Eagly et al. (2003) state that “the activation of beliefs about women and men by gender-related cues influences people to perceive individual women as communal but not very agentic and individual men as agentic but not very communal”. Moreover, “expectation states theory argues that it is the status element of gender stereotypes that causes such stereotypes to act as distinctively powerful barriers to women’s achievement of positions of authority, leadership, and power” (Ridgeway, 2001, p.638). Thus, gender state is unlikely to be salient in a segregated organisation. Therefore, this study argues for Saudi management to start thinking for minimising the stereotyping of gendered leadership, and one possible tool for such practice is the segregation policy. In fact, culturally, women in Saudi Arabia are still far from being effective in a mixed sex environment. In Saudi Arabia, the majority of organisations do not encourage the genders to interact. Therefore women could find this helpful to practise their leadership role; the notion of “segregation policy facilitation” might facilitate easy interaction between pairs.

In addition, gender composition effects could be a positive advantage for Saudi female managers provided by segregated policy. According to expectation states theory, gender effects on influence depends on the salience of gender as a status characteristic. For
example women’s lower status relative to men is particularly highlighted in interactions between men and women. Consequently, women’s relative advantage in influencing others would likely be weak in their interactions with their counterparts. Moreover, male resistance to female influence is certainly one way in which men can keep their power advantage over women (Carli, 2001). Thus, I would argue that segregated policy, in contexts that underestimate and have negative attitudes to female leadership roles, is a very important facility for Saudi female leaders when practising their leadership roles. A gender stereotype indicates that women are perceived to be less knowledgeable and expert except in situations that favour female expertise (Carli, 1999). Finally, this research would argue that leadership is not gendered in a segregated work environment, where the gender state is not salient. Saudi women might not face unfair evaluation based on stereotypical judgments of men, and so may not have to resist such problems, which can emerge when they work face to face with men. Also, a segregated organisation might be a good “fertile environment” for female leaders in the Saudi Arabian context. However, other problems could emerge due to other demographic factors or the problem of gender state outside the segregated organisation that could prevent the career movement of women.

Despite the barriers (stereotypical issues) that hinder Saudi women from participating effectively in high positions in the government, it is interesting to speculate on the findings that Saudi female managers should be self-motivated to increase the chance of minimising the gendered stereotypical leadership issue as the gender state is absent in the bank environment due to the segregation policy. The results indicate an advantage of “Saudi female leadership”, as they show that Saudi female managers are qualified to practise leadership styles and able to establish relationships with their followers in order to increase organisational outcomes.
CHAPTER TEN: CONCLUSION

10.1 Introduction

This empirical research was developed in order to investigate how leadership is gendered in a segregated work environment in Saudi Arabia. The model was developed by combining two leadership perspectives, the full range of leadership and leader member exchange theories, to investigate how leadership is processed. The model explains the association between leadership behaviours (transformational leadership, transactional leadership and non-leadership), leader member exchange and employees’ organisational commitment.

Since the main objective was to examine gendered leadership in a segregated work environment, the model was developed with consideration of gender influence in such an environment. There has been much argument about what it takes to be a successful gendered leader (Eagly and Carli, 2007, Eagly and Johannesen-Schmidt, 2001, Eagly et al., 2003, Eagly et al., 1995, Eagly et al., 1992b). Appelbaum et al. (2003) point out that research has provided a range of theories: whether or not leadership is linked to biology, whether differences are a part of style, whether preceived or real, whether leadership style is associated with effectiveness, and which styles can lead to success.

For example, and based on social role theory, the gender role ascribes individual behaviour to societal expectations, and any differences can be explained by individual leaders’ and their subordinates’ socialisation (Eagly et al., 2000). Eagly et al. (2000) argued that leadership styles can be distinguished as either agentic, which is more associated with men, or having communal attributes, which is more associated with women. Differences between transformational and transactional leadership styles are correlated with the distinction between agentic and communal attributes (Rowold and Rohmann, 2009). Moreover, Eagly et al. (2003) provide empirical evidence of differences between men and women in leadership. Women leaders were perceived to
be more democratic and participative than men and to engage in more collaboration and sharing in decision making. Bass (1988) identifies that the best leadership style is one that integrates task- and relation-orientation in behaviour toward followers and colleagues. Task-orientation is regarded as more masculine, whereas relationship-orientation is seen as more feminine (Eagly, 2003). Eagly (2007) argues that women are more likely to be transformational leaders, and relation-orientated in behaviour than men. In contrast, men are more inclined toward management-by-exception and laissez-faire and task-orientation behaviour, so transactional leadership is a more masculine style and transformational leadership is more feminine.

In terms of the role of LMX, Grean and Uhl-Bien (1995, p. 239) claim that “LMX is both transactional and transformational”. They argue that in the early stage of LMX (role taking), transactional leaders should take part in classifying the groups (in-group and out-group). Transactional leaders should offer limited social relationships with followers in order to test followers’ competences. They argue that economic exchange is not a part of leadership; rather it is a part of management. On the other hand Bass and Riggio (2006, p. 231) argue that “in the first stage, LMX is transactional; if the last stage is reached, it is transformational”.

It is argued that both transformational and transactional leadership behaviours, but not non-leadership styles, can be exhibited by leaders and both can be effective, albeit, with an advantage for transformational leadership behaviours, which has the greatest power to produce commitment (Lee, 2005).

However, environmental factors and the statues of gender are behind the complexity of the perception toward gendered leadership effectiveness/emergence (Appelbaum et al., 2003, Stelter, 2002). For example, individual attitudes toward leadership emergence can also be perceived stereotypically, and can be affected by traditional factors, in favour of males (Eagly and Carli, 2007). Elamin and Omair (2010) found that Saudi men’s
attitude is traditionally biased towards men. Thus, stereotypical masculine behaviours are still considered important for leadership effectiveness.

What makes this research unique and different from previous research is its sampling structure. The socialisation of gender interaction in Saudi Arabia is practised differently from other cultures; males and females are not encouraged to interact with each other unless they are relatives or, sometimes, colleagues in specific cases (Walker, 2004). This is not a strict rule but rather is preferred by both genders (Metcalfe, 2007). Thus, the independence of gender status, or in other words the feature that gender is not salient in a segregated work environment, could achieve the main objective of the study. Thus, the importance of the framework is to compare between both genders based on two gendered models answering the same hypotheses across genders.

In order to achieve the research objectives, a positivist approach was adopted, and a cross-sectional survey methodology was selected to collect the data from subordinates (234 male and 162 female), who work in the Saudi bank sector, which has adopted a gendered segregation policy; males and females work in one building, which is divided based on gender into two independent branches. There is no interaction across gender (horizontal communication); thus, each branch has its independent work environment. Data were analysed using SPSS and Smart-PLS software. Structural equation modelling (SEM) was comprehensively used via its two main stages (outer model/measurement model and inner model/structural model).

As the research was developed based on a complex model, before testing hypotheses, theoretically, six alternative models were tested and compared in order to achieve the best model. This provides for entanglement among the three leadership roles, LMX and OC. These models were developed as follows:

A) Hypothesized model (model one) consists of five latent constructs with their observed constructs. The first latent construct was TRFLs, which theoretically
consists of five observed constructs (IIA, IIB, IM, IS and IC). The second latent construct was TXs, which was originally hypothesised as measured by three observed constructs (CR, MBEA and MBEP). The third latent construct was LF; each observed construct was measured by four items (unidimensional construct). The fourth latent construct was LMX, hypothesized as a unidimension, measured by seven items. The last latent construct was OC, which is drawn in the framework as a dependent construct, measured by three observed constructs (OCA, OCN and OCC), each observed construct theoretically measured by seven items.

B) In model 2: the full range of leadership theory including the main three leadership styles (TRFLs, TXs and LF) was included in the model without LMX, which does not always mediate such relationships.

C) In model 3, and following LMX theory, LMX can be a strong predictor for OC, thus the leadership behaviours were eliminated from the model.

D) Model 4 was developed following the suggestion of Burns (1978) who points out those goals are fused when leaders display one or more TRFL behaviours. It was suggested that leaders’ and followers’ attributes should be considered when a leader wants to establish a relationship with followers (Sosik and Jung, 2010), so LMX here would be a predictor of the leader’s behaviours. Krishnan (2004) argues that LMX is oriented toward TRFLs. He proposes that TRFLs could mediate the relationship between LMX and value system. Also Gupta and Krishnan (2004) argue that socialisation is related to TRFLs, but if followers, who are socialised to be less assertive, independent and self-confident consider they receive a high quality relationship, then the leader is likely to display TRFLs, so TRFLs could mediate the relationship between LMX and outcomes.

E) Models 5 and 6 were developed following the suggestion of Burn (1971) who argues leaders cannot incorporate economic exchange with social exchange; He argues
that economic exchange is manager-ship. It has been argued that material exchange is different from social exchange; for example when the relationship relies on economic exchange, this exchange is not leadership at all, but is closer to supervision or manager-ship (Grean and Uhl-Bien, 1995). Based on the value of $R^2$ model six was the best model to use to test the hypotheses (See Figure 25).

In terms of dimensionality, and based on the final models, the dimensionality was found as follows:

A) TRFLs were measured by three observed constructs (IIA, IIB and DEV) rather than five constructs (IIA, IIB, IS, IM and IC).

B) TXs were not collapsed as a higher construct, thus they were divided into two independent constructs (CR and MBEA) rather than one high order construct.

C) PSVs were measured with two observed constructs (MBEP and LF). D) LMX was measured as a unidimensional construct.

D) OC was measured as a high order construct with three observed constructs (OCA, OCN and OCC).

The findings of gender moderation indicate that gender did not moderate the relationship between the constructs. Mainly this study would argue that leadership is not gendered in a segregated work environment. However, based on MGA, female managers were perceived as more effective in possessing their leadership role than males in predicting OC. The significance of the female model was its ability to incorporate and balance a variety of leader behaviours which, then, were judged to be comparatively more effective. Although the difference between genders was very small, this finding would indicate the ability of Saudi women to practise their leadership roles in settings where they still have been under-represented by the government, compared with men.

This chapter consists of four sections: section one discusses the contributions of the
research, divided into theoretical and methodological contributions. Section two explains possible implications for leadership practice in Saudi Arabia. Section three presents the study limitations. Finally section four provides recommendations for further studies.

10.2 Contributions to knowledge

This research fills a gap in the work on gendered leadership in a segregated work environment, where male and female managers and followers hold the same responsibilities. The conceptual framework of the study was developed to understand the leadership process in the Saudi context. Two main theories (FRLT and LMX) were integrated in order to find how they are related and test their ability to predict the level of employees’ commitment, and how gender can moderate the relationship between constructs in a segregated work environment. Leadership styles have been perceived as directly related to gender issues (Appelbaum et al., 2003; Gorman, 2005; Ridgeway, 2001; Rohmann and Rowold, 2009), However, Eagly and Carli (2007) argue that is not clear how gender moderates the relationship between leadership and its outcomes. This study made some contributions to leadership and gender in a context where males and females had no interaction, as this study was conducted in a segregated organisation in the Saudi context.

10.2.1 Theoretical contributions

Five theoretical contributions emerged from this thesis as follows:

First: The current study has integrated the full range of leadership theory (FRLT) and leadership member exchange (LMX), Bass and Riggio (2006) argue that LMX can be both TRFLs and TXs. On the other hand, Grean and Uhl-Bien (1995) argue that economic exchange is not leadership at all, but it is related to manager-ship. Bryman et al. (2011) suggested that “LMX theory can be integrated with transformational theory
to further understand leaders’ influence on individual outcomes”. Moreover, most previous studies focus heavily on the relationship between TRFLs and LMX but few consider TXs and PSVs (O’Donnell, 2009). However, “given the absence of complement experimental studies manipulating leadership behaviours to test for changes in relationship quality, we cannot be entirely certain whether transformational leadership behaviours lead to formation of high quality relationships” (Eby and Allen, 2012). Thus, similarities and ambiguities between TRFLs and LMX were reported (Herman and Mitchell, 2010; Sosik and Jung, 2010). Grean and Uhl-Bien (1995) point out the importance of economic exchange in the early stage of the leadership relationship process. Bass (1985) argued that transactional leadership, particularly contingent reward, provides a broad for effective leadership. Thus, TXs and PSVs were added in the model.

By integrating the two theories, better understating of leadership phenomena in Saudi Arabia is achieved; it enabled the development and testing several alternative models in order to identify which produce the best model fit.

Throughout the measurement model stage, TRFLs (IIA,IIB,DEV) were the best antecedents/predictors for LMX and CR came second as a predictor to establish LMX, while MBEA and PSVs (LF and MBEP) were negative predictors of LMX. These findings confirm that leadership in Saudi Arabia is heavily based on TRFLs and LMX more than CR and PSVs. However, this study found that CR plays a role in building the relationship between leaders and followers and increases the level of employees’ organisational commitment, while PSVs were seen as negative behaviours. Therefore, this study confirms that leadership relationships in the bank sector in Saudi Arabia can be developed based on both social exchange and material exchange.

**Second:** This research extends the work of Bass (1985). In terms of dimensionality the research achieves different dimensions from those originally established. Three interesting results were found for MLQ in the Saudi context. Firstly, it was found that
TRFLs is measured by three observed constructs (IIA, IIB and DEV), rather than five constructs. This finding proves the effect of charisma in the Saudi context. TXs construct was divided into two latent constructs (CR and MBEA). Thus, with respect to hypothesis development and framework, six new hypotheses were created. Also, it was confirmed that MBEP should be loaded with the LF style rather than with TX style. Both MBEP and LF were negatively related to all constructs and positively to each other. Thus, this study extends further evidence and argument about the dimensionality and validation of the Bass (1995) study, and its relationship with LMX theory in the Saudi context. The discriminant validity between TRFLs and LMX has been proved. It could be argued that MLQ constructs might not be consistent across cultures. Some leader behaviours and their enactment may be universal or may vary systematically as a function of national culture (Antonakis et al., 2004).

**Third:** This study brings to the literature the important mechanism of the role of LMX over TRFLs. The full mediation role of relational exchange was found between TRFLs and the level of employees’ commitment. This is inconsistent with most previous studies, and shows that the informal relationship is initial and valuable in Saudi management practise. This might be due to the recognition of the followers to establish the relationship in a setting where the power distance is high, and collectivist values are appreciated. Hence, this study confirms that LMX is more effective than TRFLs in a collectivist culture.

**Fourth:** most previous studies focus on the outcomes of leadership theories, and few focus on the antecedents of leadership theories (O’Donnell, 2009). The current study was framed in order to investigate how leadership is practised in a gender-segregated work environment. This study goes beyond what has previously been done in terms of gender-based leadership, as interaction across gender is seldom practised in the Saudi
context. “The impact of gender socialization on differences in leadership behaviours began to scratch the surface of how a context or environment can impact how one behaves in an organisational setting” (Stelter, 2002, p.93). Based on gender socialisation and determined expectations, national cultures were found to have significant influence on leadership behaviours (Gibson, 1995). Stelter (2002) argues that if cultural values have an impact on individual behaviours, then can be argued that these values would also impact leadership behaviours and the followers’ perceptions of them. Moreover, when gender roles are salient, stereotypic expectations for agency and communion create gender differences in behaviour. Expectation states theory claims that gender becomes salient in a setting when it either differentiates the actors (a mixed-sex context) or is culturally linked to the task at hand. When gender is salient, gender status beliefs shape the expectations actors form for the competence of men and women in the setting. For example, when gender status is salient (in a mixed-sex environment), women face legitimacy problems when they want to be highly influential (Ridgeway and Smith-Lovin, 1999).

Thus, this study fills a very important gap in gender study in general, and in “gendered Saudi management” in particular, as it is the first study to compare the leadership in a segregated work environment, where gender status is not salient.

Previous studies have not paid obvious attention to this issue, perhaps due to the inapplicability of such conditions in other contexts. In fact, in Saudi Arabia males and females have little interaction in their life and no or limited interaction in most organisations. The construction of gender in the study is unique to leadership styles across genders.

**Fifth:** this study adds to the existing body of evidence that gender differences in leadership styles of managers in a segregated work environment are negligible, with an advantage for female managers, who were found to be more effective than male
managers. The results could identify the ambiguity of how Saudi male and female managers display their leadership styles and interact with their followers in the same organisation. The empirical study fills the gap in the literature concerning the ability of Saudi females to be in line with their male counterparts, and could thereby raise an argument against the stereotypical view, with respect to the Saudi government policy about gender, which is underpinned by complicated traditional and Islamic issues, leading to the dominance of males over females. Also, this study could highlight the advantage of “segregated organisation” for gender and leadership study. However, as gender movement into leadership positions happens only slowly because men still hold the reins of political power, and gender status is stereotypically practised, the researcher would argue that comparative research would be helpful to minimise such thinking toward women’s participation in Saudi Arabia.

10.2.2 Methodological contributions

The current study made two methodological contributions, discussed as follows:

First: Most previous research in the leadership field was limited to one path analysis. In traditional analysis such as linear regression, all items might be used in the final model as long as only the reliability is good (Pallant, 2010), while in SEM, items with loading lower than 0.5 should be deleted. Thus, the final model was finally achieved; constructs were represented and measured by the strongest items. “Structural-equation modelling (SEM) is based on, and simultaneously uses principles of, path analysis, regression analysis, and factor analysis. Thus, it is a very powerful and flexible statistical methodology for testing theoretical frameworks” (Antonakis et al., 2004, p.60).

This study conducted SEM in integrating the full range of leadership theory and LMX to predict organisational commitment in a segregated work environment. Measurement/outer models and structural/inner models were conducted respectively to test the 1: construct validation, 2: alternative models and 3: construct
relationships. SEM can be run by different software such as AMOS, Smart-PLS and LISREL. The current study conducted PLS, which is rarely adopted in leadership studies. Hair et al. (2012) note that “our review substantiates that PLS-SEM has become a more widely used method in marketing research”. Thus, and as the current study results are somewhat in line with the previous findings, it could be argued that PLS is appropriate software for leadership studies.

In addition, multiple group analysis (MGA) was conducted to test the effect of gender moderation. MGA is still a new approach to test the moderation affect (Chin et al., 2003). The significance of MGA using PLS is its ability to test group models’ validity based on the final model. Male and female models were represented by the same items, which could provide more accurate results when comparing between groups. Thus, Smart-PLS and MGA can be used to contribute in the leadership field. Interestingly, and based on the construct validation of the current study and the consistency with previous researchers’ findings, PLS-SEM application could be expanded in leadership research.

**Second: Sample structure:** This research was conducted in Saudi Arabia, which embraces the philosophy of gender segregation. Males and females in Saudi Arabia have little interaction, so socialisation based on gender is different from other cultures. Also, Saudi Arabia is a male-dominated society (Taleb, 2010). Thus, it has a different society and community from the West and possibly from Eastern cultures. Saudi Arabia has been criticised regarding women’s rights and related issues. Saudi women are treated quite differently from other women in the world. For example, Saudi women are not allowed to drive, must have a guardian, and are not allowed to travel without the guardian’s permission. Thus, in terms of taking responsibilities, stereotypically, Saudi women are underestimated, in Saudi politics and management, especially when comparing the right to work across gender. The number of working women in Saudi Arabia has increased, but is limited to some organisations, and most Saudi women work
in segregated organisations (GMID, 2011). Therefore, an important contribution of this study is to add to gender study of whether males and females have different leadership styles in Saudi Arabia, where organisations are gender segregated. In other words, does gender matter in segregated organisations? This issue was one pillar of the contribution of the thesis. Basically, the findings confirm that male and female managers in the Saudi context are almost the same in displaying their leadership styles. Thus, one important feature of this thesis is the structure of the selected sample. It is essential to consider the similarity when comparing between groups (e.g., hierarchical leader level, and demographic factors) (Antonakis et al., 2004). The Saudi context offers unique sampling features, which are somewhat difficult to find in other contexts, as follows:

1. All male and female managers who were rated in this study had the same responsibilities, either to their top management or for their subordinates. This is a very important condition for comparing between groups’ attitudes and behaviours in leadership studies.

2. Based on the results of demographic factors (see analysis chapter), respondents are reasonably similar in characteristics, which is important to avoid distortion of the outputs member interaction across groups.

3. As mentioned, in Saudi Arabia males and females work separately in most organisations, so there is no interaction across gender in most Saudi organisations, and it is rare in everyday life. Therefore, gender-socialisation in Saudi Arabia is different from most other cultures. This is the first study to compare between male and female managers in such a society, which has respondents who are socialised to a life that involves little interaction between males and females in all aspects of life. Based on gender theories, it was suggested that males and females differ in the way they see life. In leadership and gender studies, scholars argue that males and females differ in the leadership they display (Boatwright and Forrest, 2000, Druskat, 1994, Moaddel, 2006,
10.3 Implications

The results discussed above indicate that the leadership role is potentially valuable to increase the relationship between managers and followers and increase the level of employees’ organisational commitment. Based on the construct validation process, no construct in the proposed framework was dropped. This indicates that each behaviour is valuable and rational to increase employees’ commitment. Managers need to examine and determine which style it is best to adopt to increase employees’ commitment. As suggested by Bass (1997) leadership behaviours should be incorporated by managers and tested in order to achieve desired outcomes. Also, and as perceived by bankers (followers), male and female managers are qualified to be effective leaders.

The findings of this research contribute several implications for leadership as follows:

1. This study showed a potential role for branch managers to benefit from different leadership styles to establish their relationship with employees and increase the level of organisational commitment, so in a small organisation (such as a bank branch), managers can easily establish a relationship with bankers due to the micro environment and the availability of channels of interaction with employees during the working day. Managers can engage in more than simple exchange or agreements with subordinates; they can behave in ways to establish exchange relationship by employing one or more transformational components. The path verifies that TRFLs has a strong influence on establishing a relationship with employees in the Saudi context.

2. Since TRFLs lead to a high quality relationship between leader and followers, Saudi bank managers need to focus independently on the value of each component of TRFL. Charismatic leader characteristics are perceived as valuable by followers in the last model. IIA and IIB were found to measure
idealised influence. Leaders should gradually reach the point of being “role models”, socialised leaders rather than personalised leaders. Managers should also show concern for their followers, treat them individually, get to know them well and be active listeners. In addition, managers need to differentiate their followers’ abilities in order to think and solve problems in unusual ways.

3. It was found that CR positively affects LMX and OC. It would, therefore, be valuable to invest in CR at the early stage of LMX, when relationship development has not been established. It would be worthwhile for banks’ management to increase the authority of immediate managers to use economic exchange with followers.

4. MBEA pays very close attention to any problems or deviations, and so employees who are subject to this style often learn to avoid mistakes. Hence, managers would employ this style at the early stage to develop the relationship with subordinates rather than conduct it as traditional supervision.

5. Passive leadership behaviours (MBEP and LF) were perceived as negative predictors for OC via full mediation of LMX. This finding should be taken into account in the interaction in order to increase the relationship based on trust, respect and obligation. Moreover, and as power distance is expected to be high between managers and followers in Saudi Arabia, it could benefit from the findings that branch managers should shorten this distance. It was found that LMX had a tremendous potential role in the framework. LMX was the strongest construct to predict OC for the whole model and across groups. In this case, the idea of leader member exchange (LMX) would be beneficial to be practised in the Saudi context. However, branch managers and followers need to take into consideration that this policy is part of encouragement, motivation and justice between groups to establish relationship, rather than part of discrimination. In fact the relationship between pairs is highly affected by traditional values. Thus,
human resource management of the banks should pay attention to the value of LMX theory, which is based on the dyadic interaction between pairs. The interaction is based on trust, respect and obligation.

6. Saudi Arabia is a conservative Muslim state (Hickson and Pugh, 1995). Although Islamic teachings were not tested in the current study; the literature has provided evaluation of the alignment between Western leadership theories and Islamic teaching on leadership (See Chapters Two and Four). Islamic teachings on leadership and Western leadership theories are consistent (Beekun and Badawi, 1998). “The religious and ethnic homogeneity of Saudi Arabia has made it a much easier task, politically and socially, for the Saudi government to reinforce a strict Islamic code of conduct among its people” (Robertson et al., 2001, p.228). Such alignment can easily be invested and used to lead followers.

7. Based on these intensive comparisons between genders, and as female managers were somewhat more effective in exhibiting their leadership role, the researcher would strongly emphasise that female managers should practise their leadership roles, ignoring stereotypical views, when a segregated organisation is launched. Blackburn and Jarman (2006,p.2) conclude that “gender segregation and gender inequality are often inversely related in contemporary countries and that in some situations high levels of gender segregation can offer some advantages to women”, and segregated organisations decrease the chance of discrimination and inequality for women. This facility would help them to increase their knowledge and experience, and the degree of discrimination and harassment would be limited as gender similarity is available.

8. As the findings support the full range of leadership theory and LMX, banks’ human resource management might benefit from this finding by recruiting leaders based on their transformational leadership behaviours and leadership
relationship. These characteristics would be invested in, rather than conducting economic exchange, which incurs expense for the bank.

9. Leadership behaviours could be strengthened by providing a training programme that focuses on both managers and followers and how they interact, and pays attention to their abilities in order to increase the levels of commitment to the bank.

10. As the current study was conducted in Saudi Arabia, which is classified as a collectivist country, committed employees are those who are affected by immediate managers. Employees’ commitment has become a competitive advantage of the successful organisation.

10.4 Limitations

Leadership is more than simply a word and it is not easy to cover all its aspects. Leadership is a huge discipline affected by numerous factors. This study faced some limitations:

1. Traditionally, leadership theories have focused on leading people (individuals) (Bass, 1990). However, scholars see leadership practices in different ways and based on different levels of analysis. For example, goal theory focuses on leader contingent reward; LMX theory focuses on a leader member dyadic relationship, whereby both leaders and members are encouraged to establish a relationship with one another. The full range of leadership theory focuses on the characteristics of leaders, and how these behaviours can function to lead individuals, while distributed leadership focuses on self-leadership. The findings of this study were derived from and restricted to two main leadership theories, FRLT and LMX, and data was collected and analysis based on followers’ perceptions.

2. Avolio and Bass (2004) recommend that MLQ can be used for individual and
group assessment, feedback and development. However, the MLQ manual does not discuss the appropriate level of analysis that should be selected for different MLQ scales. For example, MLQ can be used for leader (self-rater) or followers (raters) or to compute the average between them. Based on the literature, usually leaders rate themselves higher in transformational behaviour than their followers rate them, so these differences can affect the comparison results across studies.

The current study was restricted to the subordinates’ rating.

3. The contingent reward (CR) construct was originally measured by four items and due to the purpose of the study it was finally measured by one item. Although Smart-PLS software is able to deal with a single-item construct, composite reliability, which measures the internal consistency between constructs, cannot be measured. Also, in order to measure correlation, more than one item is needed to measure the intercorrelation between constructs’ items; thus one item correlation is reported as one between the construct items. As a result, the values of AVE and communality were reported as one. Therefore, the value of CR was excluded when calculating the GoF of the final model and group models.

4. In Saudi Arabia, due to traditional and Islamic values, establishing rapport with females is highly sensitive and is not acceptable across gender unless with relatives or colleagues under specific circumstances. As the data were collected by face to face questionnaire, the researcher found that contact with males was easier and more beneficial for the study than with females. For example, one of the objectives of using a face to face questionnaire is to judge the readiness of respondents’ participation. This action was not applied with female respondents; in fact, traditionally, the researcher would be embarrassed to explain the objectives of the questionnaire even by telephone. This limitation always arises for a Saudi male when conducting research in a female environment and vice versa.

5. The final limitation concerns restricted generalizability of the results. Although
the sample structure of the banks allowed the researcher to achieve the objectives of the study, there are different sectors, which have different managerial environments where males and females work together in the same organisation and could interact. This could give rise to different ways of interaction across genders. Also, leadership practises in different positions across the vertical hierarchy might differ.

10.5 Recommendations for further studies

The current study offers some recommendations for further studies:

1. Future research may benefit from investigating both leadership and gender in segregated work environments. As discussed, it is more important to think about TRFLs and LMX than TXs. In organisational contexts, however, it is likely that there are factors/constructs that can act as antecedents of LMX. The present study identifies three leadership behaviours (TRFLs, TXs and PSVs) and shows that these constructs relate to LMX. Future research may study the simultaneous effects of more behaviours closely to yield a more holistic understanding of what motivates OC.

2. The relationships between constructs were tested based on the latent constructs rather than observed constructs. Therefore, it is crucial for further studies to focus on sub components of leadership behaviours, and how each behaviour can affect the outcomes independently. Moreover, due to the mechanism whereby LMX increases OC, it might be important for further study to conduct in depth research to study leader member exchange. Thus, trust, respect and obligation between leader and followers would be suggested to be investigated as independent/latent constructs in the Saudi context. As the literature contains no study that tests how leaders and followers interact in Saudi Arabia, further exploration of the antecedents of leader member interaction would be suggested for further study in Saudi management.
3. It has been shown that leadership behaviours vary across hierarchical levels in the organisation; for example, there is evidence that TRFLs, TXs and LF vary across different levels in the organisation (Edwards and Gill, 2012), so more investigation across different level hierarchical levels in banks (e.g. top management of the bank) would be very interesting.

4. The level of analysis is very important in the leadership field. This study relied heavily on subordinates’ perspectives, so it would be useful to conduct comparative research between manager and subordinates to identify how organisational outcomes are influenced by different perceptions. Therefore, it is not sufficient to believe that followers have a good relationship with their leaders; the point is how the perceptions of both leaders and followers compare (dyadic).

5. This study focused on a segregated organisation, where males and females had no interaction. An important area for future research would be to conduct a comparative study between males and females in organisations, in which males and females work together. However, contextually, some aspects should be considered, such as the level of masculinity and femininity of the context, and the degree of discrimination across gender of leadership in the organisation. For example, the health sector and banks (main administration) could be the best examples to be considered, as these contexts are not regarded as specifically masculine or feminine in Saudi Arabia leadership practise. The significance of such study would be to compare between same and opposite sex relationships in the same organisation. According to the literature, such study has not been conducted yet in the Saudi context.

6. A prior phase (interview) would be suggested for further research; however, the possibility of interview with Saudi females is limited for male researchers and this issue needs to be taken into consideration to prevent any problem of common bias or desirable response issues.
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### Appendix 1 The Kingdom of Saudi Arabia profile

<table>
<thead>
<tr>
<th>Official Name</th>
<th>Al-Mamlaka al-Arabiya as-Saudiya (The Kingdom of Saudi Arabia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area:</td>
<td>2,250,000 square kilometres (868,730 square miles)</td>
</tr>
<tr>
<td>Physical Features:</td>
<td>Deserts, Plateaux, Mountains</td>
</tr>
<tr>
<td>Highest Point:</td>
<td>Jabal Sawda</td>
</tr>
<tr>
<td>Population:</td>
<td>25.8 million (2009): Saudi citizens 72.9%; 27.1% non-Saudi residents</td>
</tr>
<tr>
<td>Language:</td>
<td>Arabic</td>
</tr>
<tr>
<td>Religion:</td>
<td>Islam</td>
</tr>
<tr>
<td>Flag:</td>
<td>Green Banner of Islam, bearing the inscription: “There is no God but God; and Muhammad is his Messenger”. The sword was added in 1906, symbolising the military successes of Islam and of Ibn Saud, founder of the Kingdom of Saudi Arabia.</td>
</tr>
<tr>
<td>Anthem:</td>
<td>&quot;Sarei Lil Majd Walaya&quot;</td>
</tr>
<tr>
<td>Currency:</td>
<td>Saudi Riyal</td>
</tr>
<tr>
<td>Capital:</td>
<td>Riyadh (population in 2006: 5.8 million)</td>
</tr>
<tr>
<td>Head of State and Prime Minister:</td>
<td>Head of State and Prime Minister: King Abdullah bin Abdul Aziz, Custodian of the Two Holy Mosques</td>
</tr>
<tr>
<td>Highest Court:</td>
<td>Highest Court: Supreme Council of Justice</td>
</tr>
<tr>
<td>Administrative Regions:</td>
<td>Administrative Regions: Al-Baha, Al-Jouf, Asir, Eastern, Hail, Jizan, Madinah, Makkah, Najran, Northern Border, Qasim, Riyadh, Tabouk</td>
</tr>
</tbody>
</table>
Multifactor Leadership Questionnaire

Third Edition
Manual and Sampler Set
Bruce J. Avolio and Bernard M. Bass
University of Nebraska and SUNY Binghamton
Contributions by:
Dr. Fred Walumbwa
Wenjun Zhu
University of Nebraska—Lincoln
Gallup Leadership Institute
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Appendix 3 Garden & Inc., permission of MLQ questionnaire (version and invoice)
Appendix 4 Questionnaire (English version)

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Appendix 5  Male questionnaire (Arabic version)

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Appendix 6 Female questionnaire (English version)

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Appendix 7 Model 1 (Hypothesised model), (PLS based t-value and β values)
Appendix 8: Model 2 (PLS based $t$-value and $\beta$ values)
Appendix 9: Model 3 (PLS based $t$-value and $\beta$ values)
Appendix 10: Model 4 (PLS based $t$-value and $\beta$ values)
Appendix 11 Model 5 (PLS based t-value and β values)
Appendix 12 Model 6 (Finale model) (PLS based t-value and $\beta$ values)

Appendix 13 Male model (PLS based t-value and $\beta$ values)
Appendix 14 Female model (PLS based $t$-value and $\beta$ values)