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**Dimensions of Internal Communication for Organisation
Engagement: The Role of Co-Worker Trust**

A Thesis for the Degree of Doctor of Philosophy

By

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PhD Abstract

The organisation is continually confronting challenges to remain and successful, which compels organisation to regularly re-evaluate their strategies, structures, policies, processes, operations and culture. Managing change effectively is however a main challenge in the change management domain because of massive human involvement. Thus, managers and change agents are eager to know how to encourage and effectively prepare employees for change situation. Engagement can be seen as one of the more popular concepts in various social sciences, including psychology, organisational behaviour, human resource management, and of course, public relations, and one of the effective strategies in encouraging and preparing employees for change. Numerous researchers have mentioned reasons for the importance of employee engagement in organisation, recognising the strong connection between engagement, employee performance, and business outcomes. Although organisation is competing to develop engagement strategies to reach the purpose of engagement, studies report that these efforts may not be working. Internal communication is a part of the organisational context in which employees are engaged or disengaged. Studies have consistently shown that various internal communication elements, such as innovative corporate communication initiatives, open channels of communication, constant feedback, and information sharing, are positively associated with work engagement. This empirical study proceeds with a systemic review of literature that led to the development of a conceptual model. The data were collected from a sample of employees by using survey questionnaires. Data were analysed using descriptive statistics, and exploratory factor analysis runs on the statistical package for social sciences and applied analysis to assess the model fit of the study and hypotheses testing. This study may contribute to the literature on employees' engagement, particularly for Saudi Arabia, and may assist the management, change management strategies and practitioners of human resources.

KEYWORDS: Organisation engagement, internal communication, social relationship in the workplace, trust, co-worker, supervisor and organisational change.

DEDICATION

This doctoral research effort is dedication to my parents and families My Allah bless both of them and grant them Paradise.

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List of Abbreviations

AGFI	Adjusted Goodness of Fit Index
AMOS	Analysis of Moment Structure
BC	British Council
CR	Critical Ratio
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CM	Change Management
CV	Convergent validity
df	Degree of Freedom
DV	Discriminant validity
EFA	Exploratory Factor Analysis
GFI	Goodness of Fit Index
HRM	Human Resource Management
M	Mean
MANOVA	Multi Analysis of Variances
MSA	Measure of Sample Adequacy
N	Number of Participants
ND	Number of Dependents
NFI	Normated Fit Index
NNFI	Non Normated Fit Index
OC	Organisational Change

MOL	The Ministry of Labour
OD	Organisational Development
RMSEA	Root Mean Square Error Approximation
SE	Standard Error
SEM	Structural Equation Modelling
SHRM	Society of Human Resource Management
Sig.	Significant
SMC	Squared Multiple Correlations
SORE	Social Relationships in the Workplace
SPRE	Supervisor and Peer Relations
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
USA	United States of America
VIF	Variance Inflation Factor
YPE	Years with present employer
α	Cronbach's alpha
ρ	Composite Reliability
χ^2	Chi square

Chapter One Introduction

1.1 Background and Problem Statement

Engagement is one of the more popular concepts in various social and management sciences, including human resources management, public relations, psychology and organisational behaviour (Verčič & Vokić, 2017, Men & Tsai, 2016; Taylor & Kent, 2014). Numerous researchers have mentioned reasons for the importance of employee engagement in organisations, recognising the strong connection between engagement, employee performance and business outcomes such as greater work performance, reduced absenteeism and turnover, higher customer loyalty, innovation and competing on the market (Albrecht et al., 2015; Men, 2014; Saks & Gruman, 2014; Brunetto et al., 2012; Kim & Rhee, 2011; Welch, 2011). Barfoot, Doherty and Blackburn (2017), stress that studying employee engagement may lead an organisation to obtain good results. However, although companies are trying to create strategies for staff participation, studies suggest that these attempts are futile (Goodman, 2010). In fact, according to the Gallup Global Situation Report, which considers 142 countries, only 13% of staff interviewed indicated that they felt they were engaged in their workplace (Gallup, 2016). This result means that the number of employees disengaged is higher than the number of employees who are indeed engaged.

According to Mishra, Boynton & Mishra (2014), an essential role of internal communication is to build a culture of transparency within the organisation. Internal communication is a part of the organisational context in which employees are engaged or disengaged (Verčič & Vokić, 2017; Bakker, Albrecht & Leiter, 2011). Studies have consistently shown that various internal communication elements, such as innovative organisational communication initiatives, open channels of communication, constant feedback and information sharing, are positively associated with work engagement (Barfoot, Doherty and Blackburn, 2017; Caesens, Stinglhamber & Luypaert, 2014; Fearon, McLaughlin & Morris, 2013). Furthermore, clear information provided by top management about the duties and roles of employees contributes significantly to improving employees' performance and maintaining their strong relationship with their employer (Walden, Jung and Westerman, 2017; Mishra, Boynton & Mishra, 2014; Kim & Rhee, 2011; Welch & Jackson, 2007).

All in all, multiple scholars (including Gill, 2015; Ruck & Welch, 2012; Welch, 2011) have suggested that organisational engagement has been enhanced by effective communication with employees, although, how this is occurring has not been empirically explained in previous literature (Walden, Jung & Westerman, 2017; Verčič & Vokić, 2017). The relationship between employee engagement and effective internal communication has become a significant issue in studies related to human and administrative sciences (Mazzei, 2010).

Some studies have highlighted the role of performance and job characteristics as a critical connection between internal communication and engaging employees with organisations (Anitha, 2014). In the workplace, employees have various exchange relationships, and information is considered to be the most significant source of exchange. There are two types of critical relationships between employees that appear in a company environment: first, with their supervisor, and second, with co-worker (Mishra, Boynton & Mishra, 2014; Ni, 2007). Against this backdrop, trust in the information exchange, with supervisors and co-worker, has a vital influence on the strength of the relationship between the employee and the organisation, and between other parties within the organisation (Heide and Simonsson, 2018 p. 109; Jeong & Oh, 2017). Trust and engagement have been of great importance to management scientists over the past two decades because they are seen as two interrelated and essential work perspectives for employee's performance (Mone & London, 2018, p. 31). There is evidence that trust in organisational communication may have an impact on positive regulatory and individual-level outcomes (Bisbe & Sivabalan, 2017; Garoon et al., 2016). For instance, trust reciprocation will enhance the social exchange relationship in the workplace and will thus increase the level of trust between the two parties. Therefore, a level of trust between superior and subordinate will lead to employee engagement as one of its positive outcomes (Sievert & Scholz, 2017). However, although trust is an integral part of social exchange theory and has been linked to many positive organisational results (DeConinck, 2010), most researches have examined supervisor and organisational trust, neglecting the role of co-worker trust (Lau & Liden, 2008). Moreover, whilst the trust in the relationship between leaders and employees has garnered considerable experimental investigation, trust in employees' relationships with co-worker and direct supervisors has been virtually ignored (Halbesleben & Wheeler, 2015).

In addition to this, while many previous studies have restricted their focus to perceived support and identification as variables for exchange in the workplace, the present study expands the indirect effects by including another exchange variable: co-worker trust. Specifically, this research uses the perspective of social exchange theory by examining the role of trust in the relationship between employee engagement and internal communication.

1.2 Research Problem and Gap

Employees are a vital group of stakeholders, given their functional roles within the organisation to develop relationships and maintain a positive environment in the workplace (Kim & Rhee, 2011). In recognition of this importance, companies are developing internal communication programmes to strengthen their relationships with employees in order to achieve their goals (see, e.g. Mishra, Boynton & Mishra, 2014; Welch & Jackson, 2007). Multiple scholars interested in increasing organisational efficiency and effectiveness believe that organisation communication should be one of the strategies utilised to improve the relationships between employees and companies (Jiang & Men, 2017; Ruck, Welch & Menara, 2017; Verčič & Vokić, 2017; Gill, 2015; Ruck & Welch, 2012). However, despite the importance of engagement for organisational efficiency and effectiveness, and the focus on internal organisation communication as an essential strategy to improve engagement, relatively little research attention has been dedicated to the study of co-worker trust, in relation to communication and engagement (Barfoot, Doherty & Blackburn, 2017; Ruck Welch & Menara, 2017). Moreover, previous studies have not empirically shown how co-worker trust behaviours occur; understanding factors that influence employee engagement through internal communication has emerged as significant in many aspects of human resource management and human relations management literature (Marchington, 2015). Although many studies have highlighted the role of organisational policies and the mechanisms of jobs as a fundamental factor in influencing employee engagement (Sluss & Ashforth, 2008), research has not recognised the workers social life in all aspects, mainly the role of social factors, to best demonstrate the association among employee engagement and internal communication (Schaufeli, 2013).

Another scarcity is lack of non-Western evidence on employee engagement (Sievert & Scholz, 2017). Schneider, Ehrhart and Macey (2013), stress that the majority of empirical studies are conducted almost exclusively in Western contexts without considering the cultural conditions that are specific to each country. Although some scholars suggest that cultural

differences vary across societies (Murphy et al., 2004), little research has examined the variables in GCC countries. A strong point of the research relates to the fact that it brings empirical evidence from a relatively new cultural context taking into account that most of the previous studies have taken place in USA, Canada, UK and Australia. This is the first study reported on communication co-worker trust for organisational engagement in the Saudi context. This is significant in permitting a test of the broader validity of findings derived from research conducted in developed economies.

1.3 Aim and Objectives

This section presents the research aims, objectives, and contributions of this study.

1.3.1 Research Aim

This study investigates the relationship between employee's engagement, trust and internal organisational communication from the perspective of the social exchange theory.

1.3.2 Objectives

The aim of the research will be achieved by addressing the following objectives:

- I. To comprehensively review the literature in the area of co-worker trust in internal communications and employee engagement within organisational relationships in the workplace to identify supporting theories to build a conceptual framework.
- II. To empirically investigate the role of co-worker, supervisor and organisation trust on employee engagement within organisational relationships in the workplace.
- III. To develop a systematic model of the relationship between employee engagement and trust in internal communication.

1.4 The Empirical Context of the Study

Employee engagement has recently gained immense attention amongst the scholars of organisational studies and human resource development. However, although this relationship has been widely examined in the private sector organisations operating in the Western developed countries, its application in Saudi Arabia public sector remains a significant gap in the engagement literature. Saudi Arabia is a significant producer and exporter of oil, with the

largest oil reserve in the world. The Saudi government is playing a vital role in the country's economic development for many reasons. Firstly, Saudi's government does not want to depend on only one income source (oil) because its price is not sustainable and may run out. Secondly, the Saudi government wants income from another source, such as utilising tourist attractions. Thirdly, Saudi's government wants to attract foreign investments. Fourthly, Saudi's government wants to join the world trade organisation. In order to achieve this, the Saudi government has a vision called (2030) which is a plan to reduce Saudi Arabia's dependence on oil, diversify its economy and develop public service sectors such as health, education, infrastructure, recreation and tourism. Goals include reinforcing economic and investment activities, increasing non-oil industry trade between countries through goods and consumer products and improving government performance. This is why the role of Saudi organisations in economic development is growing year after year with the support of a government that wants to diversify its national income by encouraging all sectors to transform massively in future Saudi strategies. Moreover, Saudi Arabia is restructuring its human resources to adapt to new trends in the global marketplace; however, it depends on employee performance, engagement and more loyalty that is associated with hard work, productivity and high quality (Al-Kahtani, 2002).

In Saudi organisations, it is very significant to keep an eye on employee performance for the public and private sectors. The Ministry of Labour (MoL) of the Kingdom of Saudi Arabia has, since the late 2000s, built a large and diverse portfolio of labour market policies that seek to address the Kingdom's socio-economic issues. Representing the (MoL), and serving as Harvard's main counterpart, is the Human Resources Development Fund (HRDF). The goal of this partnership is to evaluate and help inform the design of evidence-backed labour policies and to use findings to improve outcomes for Saudi men, women and youths. In the public sector, for example, fringe salary and benefits are given to employees regularly to satisfy them sufficiently. However, although pay and benefits are high, the employees performance is lower than expected (AL-Dosary & Rahman, 2009). Moussa (2013) stated, "Unfortunately, the organisations are not capitalising on the Saudi national's enthusiasm. Half of the workforce reported that they are neither enabled nor encouraged to put in extra effort to get the job done" (Moussa, 2013). According to Hay's consulting report (2010), thirty-four percent of ineffective and frustrated employees may not have a direct impact on the growth of the economy nowadays; however, their frustration and disengagement may lead to less productivity later on as the Saudi economy open up to foreign competition as a result

of the (WTO) role. The study also indicated that 34% of Saudi employees are unmotivated. Hay research shows that motivated Saudi employees could achieve 4.5 times revenue growth more than their peers if they were motivated to work.

The newly hired Saudis constitute a loss of effectiveness, productivity and competitiveness in an already very competitive market. Saudi employees must become engaged in their work to allow private sector companies to attain their goals in competing in a global and competitive market (Fakeeh, 2009). Despite the increased resolution of the Saudi Arabian government to engage and commit to employees, the stakeholders and managers are still unsatisfied with the outcomes. Saudi Arabia is expanding globally, and the need for highly qualified Saudi employees has become a necessity. Inspiring and training youth and increasing female participation is essential for a young and rapidly growing nation in order to achieve sustainable economic success (Saudi Arabia Labor Market Report, 2016). In constraint, some researchers explored Saudi organisations, but little research exists on the concept of employee engagement and its causes as a strategy to improve employee performance.

Iyer and Israel (2012) suggested that communication is one of the factors of employees' disengagement. They described an on-site study of a large Indian trucking firm. The study concluded that poor communication between management and blue-collar workers contributes to a high employee disengagement rate. Wang (2008) noted that the common problem with many organisations in the KSA is that they do not establish a long-term plan or make a firm commitment to their organisations. Most of them do not have a philosophy for quality, a vision or a mission. They also lack the availability of documented procedures that show how the organisation is operating. Organisational engagement, however, is an effective response to the whole organisation and the degree of attachment or loyalty that employees feel towards the organisation. Job engagement represents the extent employees are absorbed in or preoccupied with their jobs, and the extent to which an individual identifies with his or her career.

The literature on employee engagement in Saudi organisations is limited so far. Al Shehri et al., (2017) investigated the organisational culture enablers and inhibitors of employee engagement in Saudi Arabia Banks. Interviews were recorded electronically, and 45 interviews were conducted. The aim of this paper was to provide an exciting opportunity to advance the knowledge of the link between organisational culture and employee engagement in Saudi banks. Results showed that the enabler factors that contribute most to employee

engagement enablers were training and development, organisational communication, reward and recognition. Moussa (2013) examined the reasons for the high turnover through examining employee engagement antecedents of the Saudi's nationals versus non-Saudis.' The researcher distributed surveys among 104 employees working in the healthcare and information technology industries in Saudi Arabia. The study revealed a significant positive relationship between the job characteristics and rewards is that two antecedents have a positive relationship with employee engagement. Results showed that job characteristics induced employee engagement while reward and recognition induced organisational engagement. Ahmed, Rasheed & Jehanzeb (2012) study was set to examine the predictors of organisational citizenship behaviour (OCB) and its significant link to employee engagement in the present scenario, particularly the banking sector and particularly the banking and financial area in the economies of Gulf Co-operation Council (GCC) member countries, which include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates (UAE). The qualitative research method was employed to explore the association between job satisfaction and commitment, employee engagement and human resource development climate (HRDC). The results showed that well-established predictors of OCB might lead to promoting required behaviours among employees for improved performance and negative voluntary intentions.

In brief, the stakeholders and managers need to focus on the role of co-worker and engagement issue. They have little idea about the effects of engagement into the productivity of their organisations. In recent years, researchers have been conducting studies on the impact of employee engagement in work performance and outcomes. Furthermore, employee engagement has always been one of the challenges to the human resource managers and the respective employers in any fast-growing economies, including Saudi Arabia.

1.5 Research Methodology

The objective of this research is to examine the association within internal organisational communication and employee engagement and how it is affected by both co-worker and supervisory trust based on social exchange theory. This research study was developed based on a review of previous literature and an understanding of the conceptual approach to the research topics. The hypotheses were determined after identifying the independent and dependent variables. The research followed a standardised approach, namely a quantitative approach, to data collection and analysis. Many researchers have used the quantitative

approach in their studies on the subject of employee engagement and internal communication. According to Groeneveld *et al.*, (2015), the purpose of using the quantitative approach in academic studies is to arrive at the facts in correct and reliable ways, to develop an explanation of a phenomenon occurring in the world. Studying the literature is a positive way to develop a theory that can be applied to an appropriate model and used to construct a scientific hypothesis (Saunders and Bezzina, 2015).

This study used the quantitative method to collect data for several reasons. Firstly, this research measures the correlations among variables. Second, the quantitative analysis examines the causes and facts regarding the relationship between variables, which can be used to identify a cause-and-effect relationship between these variables, which can, in turn, result in the possibility of predicting several things related to the phenomenon under study. When collecting data on the phenomenon or problem to be studied, the use of the quantitative approach is more appropriate (Given, 2008, p. 28).

1.6 Research Questions

To address the above aims and objectives, an essential research question has been formulated to assist in creating a data collection approach, methods, and techniques. The research question is as follow:

How does co-worker and supervisor trust affect the relationship between internal organisational communications and employee engagement?

1.7 Significance of the Study

The researcher has urged a further investigation of how the theory of social exchange can be used to understand the work experience of the individual from a more in-depth perspective. In response to this call, the present study bridges this gap by examining the relationship between trust, engagement and internal communication. The study also uses the theory of social exchange to explain employee engagement.

1.8 Purpose of Study

The purpose is to bridge the gap in knowledge on the role of trust in internal communication and organisation engagement. This research aims to examine the role of trust in internal communication affecting employee engagement. It will be necessary for organisations to encourage employees to engage in their work to maximise job performance and loyalty and

to facilitate change management (Karanges *et al.*, 2015). Due to the scarcity of relevant knowledge, the present study investigates the impact of internal communication on employee engagement whilst exploring the role of trust.

1.9 Contributions of the Study

This study makes two types of scientific contribution: a theoretical contribution and a practical contribution.

1.9.1 Theoretical Contributions

The novelty of this research comes from the development of a comprehensive theoretical framework that examines the factors, which influence employee engagement in the workplace. Prior studies on organisational engagement focus on the role of supervisor trust and organisation trust whilst neglecting the role of co-worker trust in organisations. This research is the first of its type to both empirically and theoretically test the framework, leading to several theoretical contributions. This study makes two types of scientific contribution: a theoretical contribution and a practical contribution:

Firstly, this research makes the first empirical attempt to combine three trust variables into one framework in discussing employee engagement. Embedded within social exchange theory, this research highlights the role of communication as an essential antecedent that affects employee engagement and discusses how trust between supervisors, co-worker and organisations could work together to influence engagement comprehensively.

The second contribution to knowledge is that this study's emphasis on co-worker trust. While some research has examined the effect of trust in the contexts of organisational communication and organisational management, such as psychological factors, workplace policies, culture and the supervisor's personality, they ignore the role of other factors such as trust in a co-worker. This study is in response to the employee's need for a trusty communication process amongst organisations, supervisors and co-worker using the preferred and available channels. From the perspective of theory building, understanding co-worker requirements, concerning communication within an organisation, can help improve the interactions between colleagues and supervisors, which in turn can lead to relationship and network development and maintenance. This study contributes significantly to the

understanding of co-worker influence in the workplace, which has been neglected by many researchers and practitioners.

The third contribution to knowledge is that this empirical study provides evidence from a relatively Saudi cultural context, different from previous works conducted in the West such as US, Australia and Canada. This study makes the first attempt to explore the relations between internal communication, trust and organisational engagement in the Saudi public sector. Using data collected from Saudi government services, this study assesses how employees' trust and engagement in their supervisors and organisations could be increased through internal communication methods.

1.9.2 Practical Contributions

Firstly, according to the organisational hierarchy structure in developing countries, it is best to evaluate the forms of communication from managers within the organisation to learn which forms of communication are preferred by individuals in order to transmit clear information, smoothly and without complications. This, in turn, enables the creation of a trusting climate within the company. In practical terms, this study can be of great value to managers and supervisors who seek to improve employee engagement.

Secondly, the positive effects of trust are directly reflected on the behaviour and attitudes of leaders and managers in the workplace with the increase in the number of employees mainly from employees and the multiplicity of the hierarchy of the organisation; managers must show interest in employees within the work environment. Similarly, management must also ensure adequate and satisfactory levels of communication to enhance the trust environment within the organisation and to reduce conflict with the organisation, whereby employee engagement can be enhanced (Rich, Lepine & Crawford, 2010).

Lastly, the present study reveals a distinct advantage of trust in various levels of organisation, supervisors and co-worker. Meanwhile, this study investigates the position of co-worker's trust in the association with communication and engagement. Therefore, this research helps managers to utilise several ways to manage employees.

1.10 Structure of the Thesis

This research has seven chapters along with references and annexes, and will be divided and presented as follows:

Chapter One – Introduction: The first chapter discusses the background and scope of the study, aims and objectives, the context and the respondent base of the study. It continues by presenting the methodology and methods adopted and the contribution of the study.

Chapter Two - Literature Review: This chapter will discuss the literature review related to organisational communication trust and employee engagement. The literature review will provide definitions related to the research subject. It proceeds to discuss internal communication and engagement in the context of ‘trust in co-worker and supervisor.’

Chapter Three - Conceptual Framework: The construct of this chapter is to present a conceptual framework of the study: the model development, conceptual framework and research hypotheses. It addresses the hypotheses effectively; the researcher reviews and integrates subject areas. This leads to the clarification of the research area, the development of a conceptual approach and a theoretical framework.

Chapter Four - Research Methodology: This chapter includes a detailed discussion of the methodology as used for this study and data collection; it also presents the pilot study analysis and the findings. It discusses the process that led to adopting a grounded theory methodology and how this affected the research design. It shows the research design, considering the research arena and domains, the approach of the study, and why a quantity approach was adopted.

Chapter Five - Analysis and Findings: will present the study analysis and Findings. In addition, this chapter will discuss the analysis of the study, whereby the most significant findings have been included.

Chapter Six – Discussion: This chapter will discuss the analysis outcomes and findings. It will state the research result interpretations, explaining the effects of the research findings and how the results support the thesis questions, and how the answers fit relative to the existing body of knowledge about the subject.

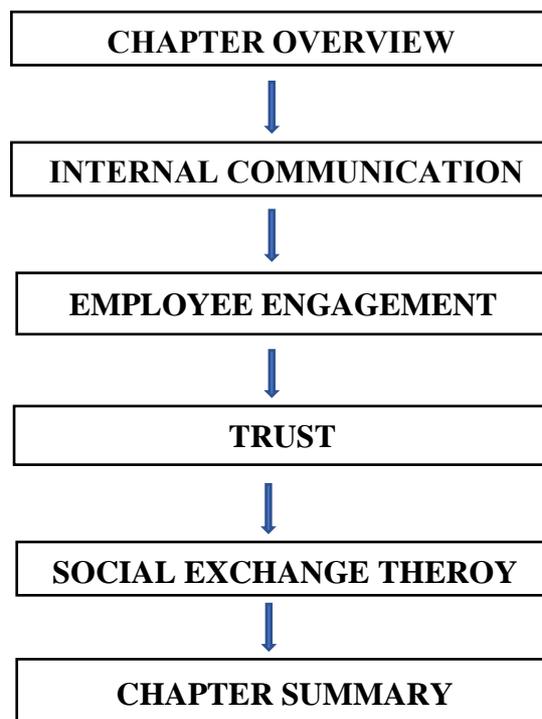
Chapter Seven - Conclusions: This chapter will present the researcher’s personal opinion on the results of the study, a statement about the limitations of the study and the implications of future research.

Chapter 2 Literature Review

2.1 CHAPTER OVERVIEW

This chapter reviews the literature related to the research subjects: trust in the internal communication of the organisation, the supervisor and co-worker, and the engagement of employees from the perspective of the social exchange theory. Gaps in the literature have also been identified. Furthermore, this chapter highlights the conceptual frameworks supporting the subject, highlighting the most significant points, problems and views on the issues. The purpose of the literature review was to gather knowledge on the role of trust in engaging employees through internal communication. Studying these topics is important because it paves the way for research questions.

Figure 2. 1 Illustrates the Main Sections of This Chapter



2.2 INTERNAL COMMUNICATION

In order to stimulate employees' creativity, stakeholders must continually look for ways to meet their individual needs whilst trying to motivate them in a manner consistent with the organisation's goals (Bakker, Albrecht and Leiter, 2011). Internal communication is one method used by organisations to maintain employee satisfaction and motivation within the workplace (Ruck & Welch, 2012; Tkalac Verčič, Verčič & Sriramesh, 2012). The role of internal communication within an organisation is the focus of decision-making, which is considered a vital process for distributing the roles of individuals and providing them with information about these roles (Mishra, Boynton & Mishra, 2014; Ruck & Welch, 2012). The role of internal communication is seen as an independent function within organisations and is necessary for many aspects of human relations management and the public relations domain (Walden, Jung & Westerman, 2017; Marchington, 2015). Many researchers and authors (e.g. Kitchen & Daly, 2002; Mazzei, 2010) view internal communication as a challenging and significant field that enhances the relationships amongst stakeholders.

Internal communication can be considered a condition for improving an organisation's internal image and reputation (Kitchen & Daly, 2002; Mazzei, 2010). Internal communication plays a vital role in strong organisational recognition (Tkalac Verčič, Verčič & Sriramesh, 2012; Bakker, Albrecht & Leiter, 2011) developing positive employee attitudes (Gray & Laidlaw, 2004), favourable communication behaviour (Kim & Rhee, 2011) and organisational engagement (White, Vanc & Stafford, 2010). This is also linked to appropriate outcomes, including improved performance, organisational effectiveness, favourable financial results, employee engagement and increased productivity (Jacobs, Yu and Chavez, 2016). All these advantages have previously led to increased employee motivation, satisfaction and commitment, and a decrease in employee turnover (Welch, 2011). While studies have emphasised the influence of internal communication on the improvement and development of relations between members of an organisation, gaps in these studies have led to calls for further scientific and applied research on the areas and factors affecting internal communication, especially employee engagement, in which research is rather scarce (Verčič & Vokić, 2017; Karanges *et al.*, 2015; Welch, 2011). In addition, very little attention has been given to the role of employee co-worker communication by their organisations (Ruck & Welch, 2012).

2.2.1 Definition and Evolution of Internal Communication

According to Welch and Jackson (2007), several different terms have been used to identify internal communication, including staff communication, employee relations (White, Vanc and Stafford, 2010) internal public relations (Jacobs, Yu and Chavez, 2016) and employee communication (Argenti, 1996, p. 94; Smidts, Pruyn & Van Riel 2001, p. 1051). Furthermore, these authors state that a number of writers use Frank and Brownell's (1989) definition of internal communication: 'The communications transactions between individuals and/or groups at various levels and in different areas of specialisation that are intended to design and redesign organisations, to implement designs, and to coordinate day-to-day activities' (see, e.g. Smidts, Pruyn & Van Riel, 2001; Dolphin, 2005; Van Riel, 1997). Welch and Jackson (2007) propose a refined definition that identifies separate internal communication as stakeholder connection: 'The strategic management of interactions and relationships between stakeholders within organisations across several interrelated dimensions, including internal line manager communication, internal team peer communication, internal project peer communication and internal corporate communication.' However, in a more recent definition, Tkalac Verčič, Verčič & Sriramesh (2012), neglect internal stakeholder groups: 'the aspiration (starting from the vision and proceeding to policy and mission statement and eventually to strategy) of achieving a systematic analysis and distribution of information at all strata is simultaneously coordinated in the most efficient way possible.'

The prominent differences between these contemporary definitions, and the full range of definitions, indicate that this field is still struggling to define itself. The present thesis uses the next definition because it is frequently cited, used, and supported by several authors such as (Welch, 2015; Constantin & Baias, 2015; Welch & Jackson, 2007): 'The intercom process entails providing information to staff on the overall objectives of the organisation as well as the role of individual employees.' Moreover, Table 2-3 lists the most widely cited definitions in internal communication management and public relations management literature.

Table 2. 1 Summary of Internal Communication Definitions

Author/s	Definition
Van Riel (1997, p. 13)	‘The communications transactions between individuals and/or groups at various levels and in different areas of specialisation that are intended to design and redesign organisations, to implement designs, and to co-ordinate day-to-day activities.’
Welch & Jackson (2007, p. 186)	‘The strategic management of interactions and relationships between stakeholders within organisations across a number of interrelated dimensions, including internal line manager communication, internal team peer communication, internal project peer communication and internal corporate communication.’
Carriere & Bourque (2009)	‘The full spectrum of communication activities, both formal and informal, undertaken by an organisation’s members for the purpose of disseminating information to one or more audiences within the organisation.’
Bakker, Albrecht & Leiter (2011)	‘Internal communication is a part of the organisational context in which employees are engaged or disengaged.’
Tkalac Verčič, Verčič & Sriramesh (2012)	‘The aspiration of achieving a systematic analysis and distribution of information at all strata is simultaneously coordinated in the most efficient way possible.’

Based on the above definitions, four basic themes of internal communication are specified:

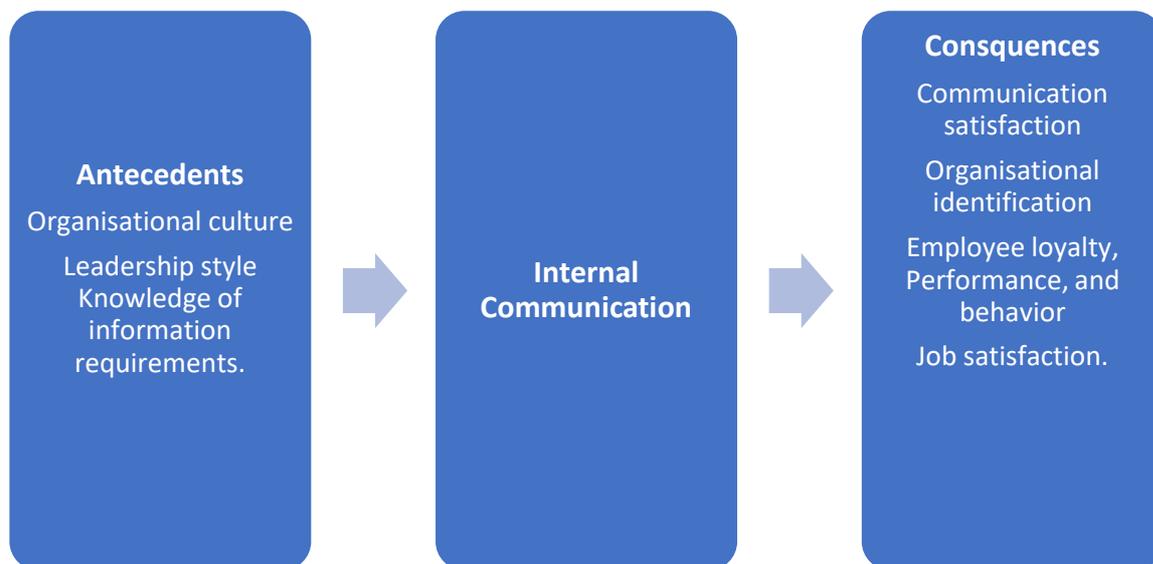
- 1- It is transactional in nature.
- 2- It is characterised by information exchange.
- 3- It is a process of management.
- 4- It features by flows of communication. (There are four main types of communication flow within a business: downward communication, upward communication, horizontal communication and multi-directional communication).

These definitions indicate the significance of internal communication as an essential function of exchanging information between stakeholders and employees to keep them informed about everything that is happening within the organisation.

2.2.2 Internal Communication Antecedents and Consequences

The origins of internal communication date back to the beginning of the industrial society in the late 19th century; it was used to substitute the loss in personal contact between employer and labourer (Haynes, 1922). According to Brown et al., (2005) the dawn of personnel departments in US firms after the First World War valued employee magazines as a valid form of communication. It can be said that the antecedent and consequences of internal communication have been the subject of numerous previous studies, neglecting to specify some aspect of the antecedents that affect this essential and vital process of internal communication within the organisation. Based on these few studies (e.g. Men, 2015; Johlke & Duhan, 2000), figure 2.2 shows that these precedents are linked with different consequences side by side.

Figure 2. 2 Summary of the Antecedents and Consequences of Internal Communication



Source: Adapted from Carriere and Bourque (2009) and Welch and Jackson (2007), Smidts et al. (2001).

Several academics and researchers have emphasised a positive connection between internal communication and employee behaviour, loyalty, and attitudes towards the organisation (Men, 2015), employee engagement (Verčič & Vokić, 2017), organisational commitment (Walden, Jung & Westerman, 2017), job satisfaction, communication satisfaction (Barfoot, Doherty & Blackburn, 2017), and organisational identification (Caesens, Stinglhamber & Luybaert, 2014). This impact can have the same consequences at an individual level and at an

organisational level; specifically, the impact can be the same on any level of an organisation's objectives.

Jiang and Men (2017) stress that internal communication is positively related to work outcomes and can confirm two essential relationships: organisational engagement and commitment to work. Constantin and Baias (2015) argue that one of the positive influences of effective internal communication within an organisation is that the information that employees obtain from management can be assessed themselves, thereby achieving job satisfaction and engagement in work, especially if the information is clear and accurate. These academics also stress that managers' assessment of the quantity and value of the information provided to employees before implementing the communication process is an essential precedent, for that process and that knowledge of the quality and quantity of information increases the chances of employees appreciating this information and also contributes to job satisfaction. Furthermore, Welch (2015), conducted a study on adequacy and sufficiency of information received by an employee from the organisation and their influence on individual behaviour and attitudes towards work. The outcomes showed the ability of the internal communication process to give the organisation a clear picture of the attitudes and behaviours of the employees towards this information (Welch, 2015; Constantin and Baias, 2015). These outcomes are usually positive and achieve mutually beneficial responses between staff and the organisation (Bedarkar & Pandita, 2014). This shows that useful and good quality of internal communication can create positive attitudes from managers and supervisors towards employees, leading to mutual benefits for the employee and the organisation (Caesens, Stinglhamber & Luypaert, 2014).

2.2.3 Dimensions of Internal Communication

Several organisational communication research outcomes suggest that internal communication is a multi-dimensional structure (Johlke & Duhan, 2000; Downs & Hazen 1977). In the study of internal communication, these dimensions must be used implicitly or explicitly for systematic communication research in order to create a systematic perspective on the dimensions of this implicit process. Many researchers have agreed on the importance of these dimensions and consider that they may provide a beneficial tool in reviewing the quality of internal communications. Table 2-4 lists the internal communication dimensions proposed by scholars.

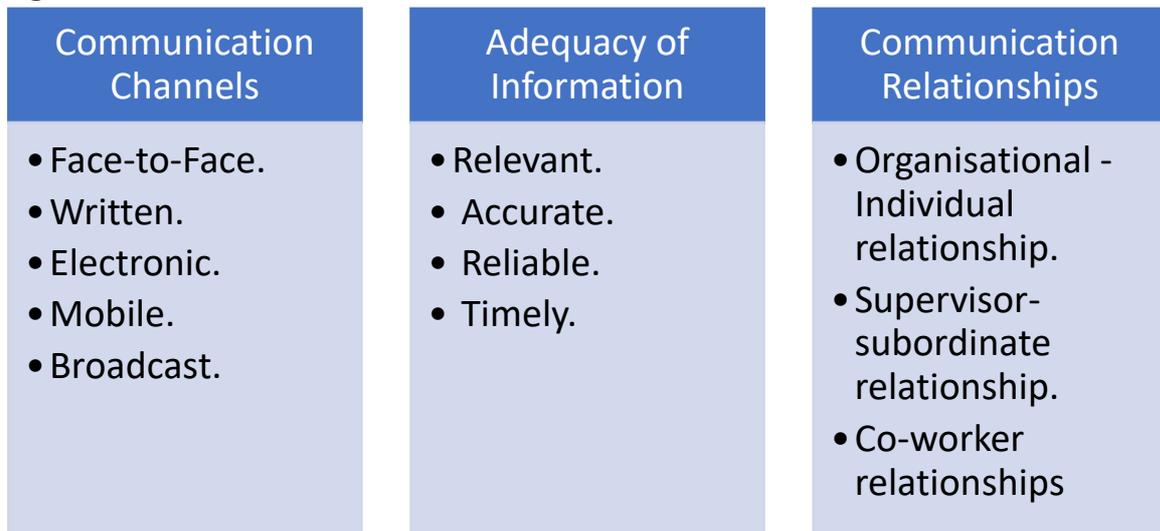
Table 2. 2 Dimensions of Internal Communication

Author/s	Number of Dimensions	Dimensions	Comments
Downs & Hazen (1977)	8	(1) Organisational climate. (2) Supervisor communication. (3) Organisational integration. (4) Media quality. (5) Horizontal communication. (6) Organisational perspective. (7) Subordinates communication. (8) Personal feedback.	Downs (1990) added two more dimensions to this, increasing the total to 10: (1) Interdepartmental communication; and (2) Top management communication.
Johlke & Duhan (2000)	4	(1) Communication frequency. (2) Communication mode. (3) Communication content. (4) Direction communication.	These dimensions have been tested in the context of supervisor and sales manager communication.
Gray & Laidlaw (2004)	2	(1) Communication at informational level.	Considered as related to the task or role of organisational activities
		(2) Communication at relational level.	Considers the relationships between subordinates and supervisors, personal feedback and informal communication, and information quality and forms.
Downs & Adrian (2004: p124)	3	(1) Adequacy of information exchange. (2) Communication channels. (3) Communication relationship.	The International Communication Association (ICA) shows that the organisation constitutes a successful communication pattern using these dimensions.
Maltz (2000)	3	1) Richness. 2) Spontaneity.	Face-to-face communication is the

		3) Speed.	richest mode.
			Spontaneous communication is likely to lead to a better understanding of issues by a receiver of novel information and improve perceptions of information quality.

In summary, information can be transmitted between the sender and the receiver using two types of channels: formal and informal. Conversely, the subject of communications itself is seen as both sides of the sender’s strategy to influence future position, as well as the amount of information flow. Concerning criteria and formats, the present study adopts the three dimensions of internal organisational communication proposed by the ICA, as illustrated in Figure 2.3.

Figure 2. 3 Dimensions of Internal Communication Used in this Research



2.2.3.1 Adequacy of Information

Many scholars consider the dimensions of internal communications as a vital tool in measuring the efficiency of such communications, and adequacy of information is seen as one of the most significant elements utilised to a raise the quality of organisational communications (Byrne and LeMay, 2006; Downs & Adrian, 2004; Johlke & Dunhan, 2000). Maltz (2000) found that the accuracy of the information ‘refers to whether the information is transmitted quickly enough to be utilised.’ Furthermore, Kim and Rhee (2011) define

information quality, as ‘whether the information is reliable, accurate, timely and relevant.’ Several scholars have empirically validated a strong link between the perceived quality of information and the degree to which information is used to make decisions (Maltz, 2000). For instance, Down and Adrian (2004) indicate that the quality of communication is an intervening variable between an employee, supervisor and organisation. According to Hawley (1995), ‘the organisation should review the information required at each stage of every process in its business to ensure that necessary and sufficient information is available as required for effective operation, and no more.’ Accuracy of information means that it is fair and unbiased.

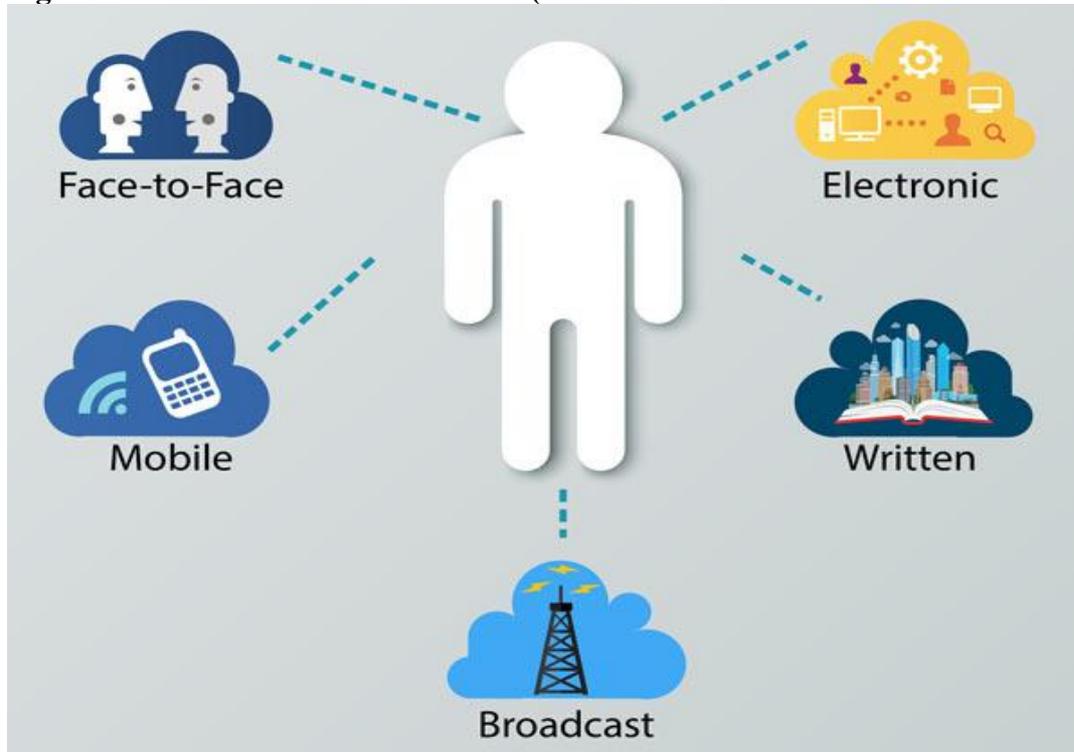
Avoiding errors in the communication process is crucial and affects the recipient’s understanding of information, which may lead to errors in utilising this information. The information that is related to the organisational policy and organisational development within an organisation and in the workplace is an essential supporting tool for achieving the objectives of the organisation (Doig, Doherty & Marples, 2001). The accuracy of information is an essential component of internal communication; in fact, it increases the quality of communication among all parties within the organisation, thus reducing the likelihood of using grapevine communication. In the work environment, employees need accurate and appropriate information to enable them to perform their jobs (Robinson & Thelen, 2017).

2.2.3.2 Communication Channels

An essential aspect of the communication process is the channel through which information is transmitted. A communication channel is defined as the method used to distribute a message; this can be considered as an essential variable and can play a vital role in facilitating information exchange. Communication channels have been classified into two main types: verbal and non-verbal communication. Verbal communication is defined as any oral or written means of transmitting information through speech. In contrast, nonverbal communication is defined as any part of communication that does not use words (such as hand movements, facial expressions, body language) or auditory elements (e.g. pitch, tone, volume, and speed) (McShane, Olekalns & Travaglione, 2012). This thesis is concerned with verbal communication channels only. Communication channels may include e-mails, letters, brochures, television advertising and social media posts. Each channel has its own unique set of characteristics that must be considered, including the cost to produce and distribute, speed of delivery, and the efficiency and effectiveness of reaching the intended audience (Maltz,

2000). Figure 2.4 illustrates the communication channels used to exchange information. Today, people have more choices for communication channels than ever before. Depending on the communication objectives, one channel may be more effective than another (Ziegele & Reinecke, 2017; Zhang et al., 2016; Berger et al., 2014). The impact of communication channels has garnered attention from many researchers and practitioners. Furthermore, scholars have begun exploring how to improve employees' efficiency in the work environment alongside the effectiveness of information transfer through appropriate communication channels (Zhang et al., 2016; Berger et al., 2014, Maltiz, 2000). The method that is selected can play an essential role in how the message is received and may affect the accuracy of information, although it is still one of the foundations for setting the features of communication (Ziegele & Reinecke, 2017).

Figure 2. 4 Communication Channels (source: 24 Hour Translation Services website)



2.2.3.3 Communication Relationships

The communication relationship is another vital element in determining the quality of communication. This relationship has been defined as all message exchanges that take place between people within a specific relationship context (Downs and Adrian 2004). Information can be easily transferred within the organisation when the communication between the parties is comfortable, thus overcoming the obstacles and barriers associated with the transmission of

such information. (Men, 2015). This study considers two relationships: 1) between organisations and individuals; 2) between supervisors and co-worker.

1) The Communication Relationship Between Organisations and Individuals

According to Muchinsky (1977), 'The communication pattern(s) used by the organisation has an immediate impact upon the individual's life within that same organisation and maybe a vital, yet currently unexplored, aspect of organisational climate.' Through social information processing and social exchange, organisational relations serve to shape organisation members' behaviours and attitudes, which translate into organisational outcomes (Denison, 1996; Salancik & Pfeffer, 1978). Indeed, prior studies have shown that organisational relations may affect a company's innovation, growth, aggregate productivity, and financial performance (e.g., Menges et al., 2011; Collins & Smith, 2006; Baer & Frese, 2003).

2) The Communication Relationship Between Supervisors and Co-worker

Although management communication scholars and practitioners have increasingly recognised the critical role of trust in leadership in influencing the effectiveness of internal communication, trust between co-worker has been virtually ignored (Halbesleben and Wheeler, 2015). The results of some studies show that a good connection between co-worker increases team performance and has a positive correlation with employee satisfaction (Lau & Liden, 2008). MacLeod and Clarke (2009), also note that the relationship of positive workmates promotes the quality of work and improves the individual creativity of the employees. Trust in the workplace yields positive results and improves the reciprocal process within an organisation (Garoon *et al.*, 2016). Furthermore, for decades, studies have confirmed that mutual trust between employees and managers leads to positive outcomes in work and improved employee behaviour (Halbesleben and Wheeler, 2015).

However, previous research has overlooked the role that co-worker play in influencing their peers and providing resources that meet the needs of a complex work environment and which successfully overcome difficulties (Slack, Corlett & Morris, 2015). The nature of work tasks requires cooperation and coordination between teams, and trust in each other to reach the desired organisational objectives (Jeong & Oh, 2017). In order to create trust, there needs to be a social environment, bearing in mind that there may be other factors within the organisation that can affect the trust process as well (Bisbe & Sivabalan, 2017; Sievert & Scholz, 2017, Garoon *et al.*, 2016). Therefore, trust in a co-worker is an essential factor in

effective decision-making within a team, and this indirectly affects individuals' behaviour in effective implementation of their work along with their attitude towards the organisation. Decisions have taken by group leaders regarding rewards, job opportunities, promotion opportunities and salary increases, which crucially affect members of the group and the environment in which they work (Lau & Liden, 2008). Some researchers suggest that the confidence of managers in an employee directly affects the confidence of co-worker. Mutual trust between co-worker encourages employees to help each other and makes them more willing to cooperate and engage because they appreciate that co-worker will reciprocate their support in the future. According to Blau (1964), trust among individuals helps facilitate social exchange.

Finally, when the level of trust among co-worker increases, it leads to more effort and willingness to work hard, with the knowledge that this will be rewarded (Halbesleben and Wheeler, 2015). Table 2-5 summarises the previous research on internal communication.

Table 2. 3 Summary of Academic Research on Internal Communication

Author/s and Year	IC Dimension/s Studied	Moderating or Mediating Variables	Organisational Outcome/s Studied	Methodology
Asif & Sargeant (2000)	Mode (informal and formal) and frequency	Tenure and management style (moderating)	Employee loyalty, shared vision, commitment, empowerment, and satisfaction	Qualitative Case study
Bambacas & Patrickson (2008)	Frequency and content	Listening habits, motivation, and perceptions	Employee and organisational commitment	Qualitative
Carriere & Bourque (2009)	Frequency, mode, content, and direction	Communication satisfaction (mediating)	Affective organisational commitment and job satisfaction	Survey
Chong (2007)	Content and mode	Organisational identification	Brand performance	Case study
Elving (2005)	Communication (no specific dimensions)	-	Organisational identification, readiness for	Conceptual

			change	
Smidts <i>et al.</i> (2001)	Mode and content	Communication climate (mediating)	Organisational identification	Survey
Hargie & Dickson (2007)	Communication content, mode, and direction	-	Employee awareness of organisational policies	Survey
Iyer & Israel (2012)	Communication satisfaction	-	Employee engagement	Survey
Kapoor (2010)	Content and mode	-	Employer branding	Qualitative
Mazzei (2010)	Content and mode	-	Impact on communication behaviors	Qualitative
Power & Rienstra (1999)	Content, mode, and direction	-	Impact on employee behaviors and attitudes	Case study
Punjaisri, Evanschitzky & Wilson (2009)	Mode and content	Brand identification, commitment, and loyalty (mediating)	Employee brand performance	Survey
Welch & Jackson (2007)	Content and mode	-	Employee belonging and commitment, job satisfaction, and employee engagement	Conceptual
White, Vanc & Stafford (2010)	Frequency, mode, and content	-	Information satisfaction and advocacy	Interviews
Sharma & Kamalanabhan (2012)	Mode, quality, and direction	Communication satisfaction (mediating)	Employee brand identification, loyalty, and commitment	Case study

Source: Adapted from Sharma and Kamalanabhan (2012).

2.3 Employee Engagement

Engagement is becoming one of the more popular paradigms to describe the way organisations try to collaborate with their stakeholders (Verčič & Vokić, 2017). Numerous industry studies have recognised internal communication as having a vital impact on employee engagement (Barfoot, Doherty, & Blackburn, 2017; MacLeod & Clarke, 2009; Truss *et al.*, 2006; Kahn, 1992). Employee engagement has become a ‘hot’ topic prioritised on the agenda of human resource professionals, and many researchers have proposed reasons why organisations need to pay attention to the concept of engagement (Jiang & Men, 2017; Men, 2014; Kim & Rhee, 2011). Employee engagement has been seen as one of the primary outcomes of internal communication, and it is the focus of academics and practitioners because they link it to individual and organisational results (Slack, Corlett & Morris, 2015).

Indeed, previous studies have recognised the role of internal communication in employee engagement and retention (Sievert, & Scholz, 2017; Mishra, Boynton & Mishra, 2014; Ruck & Welch, 2012). However, empirical studies that test the relationship between employee engagement and internal communication are scarce. Employee engagement refers to the value that the employee, the manager, and the organisation can share in the form of positive social relationships within the work environment (Caputo, Evangelista & Russo, 2016).

Furthermore, employee engagement can be considered as a central point in organisational science research (Ruck, Welch & Menara, 2017; Schaufeli, 2013). There are abundant studies to support the strong relationship between engagement, employee performance, and business outcomes (Walden, Jung, & Westerman, 2017; Verčič & Vokić, 2017). Employee engagement can be perceived as a conscious state of vitality, sincerity, and attraction to work (Singh, 2016; Slack, Corlett and Morris, 2015). This engagement revolves around the desire to perform the required task in an effective manner (Taneja, Sewell & Odom, 2015). Considering the consequences of employee engagement, such as higher work performance (Gruman & Saks, 2011), higher employee loyalty (Salanova, Agut & Peiro, 2005) and reduced absenteeism and turnover (Brunetto *et al.*, 2012), Schaufeli (2013) stresses that understanding what may drive an organisation to adopt engagement strategies is necessary in order to obtain the best outcomes from employees. Thus, the examination of employee engagement is an essential requirement to gain knowledge of their behaviour and attitudes towards the organisation.

Employee engagement has been seen as one of the primary outcomes of internal communication, and it is the focus of academics and practitioners because they link it to individual and organisational results (Mishra, Boynton & Mishra, 2014). Previous studies have recognised the role of internal communication in employee engagement and retention (Sievert, & Scholz, 2017; Ruck & Welch, 2012). However, empirical studies that test the relationship between employee engagement and internal communication are scarce. Furthermore, this relationship may be more implicit than demonstrated (Walden, Jung, & Westerman, 2017). Employee engagement refers to the value that the employee and the manager can share in the form of positive social relationships within the work environment (Slack, Corlett and Morris, 2015).

2.3.1 Defining Employee Engagement

The lack of a global definition of employee engagement is one of the most significant challenges in the academic literature and theoretical studies (Verčič & Vokić, 2017). The concept is a relatively recent one. Kahn (1990) is considered to be the first to have outlined the base for employee engagement, defining it as ‘the harnessing of organization members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively and emotionally during role performances.’ In this focus on the role of the individual and his or her presence or psychological presence (Kahn, 1992), Walden, Jung, & Westerman (2017) define engagement ‘as a state of immersion in work such that employees demonstrate enthusiasm for completing individual tasks while maintaining a deeply felt connection to their job role; it is best understood as a positive and fulfilling state of mind, characterised by dedication, vigour and absorption at work.’ Finally, according to Schaufeli, Taris & Bakker (2006), ‘engagement is about becoming engrossed in work and feeling invigorated by the task at hand.’ This last definition will be used in this research.

2.3.2 Employee Engagement and Commitment

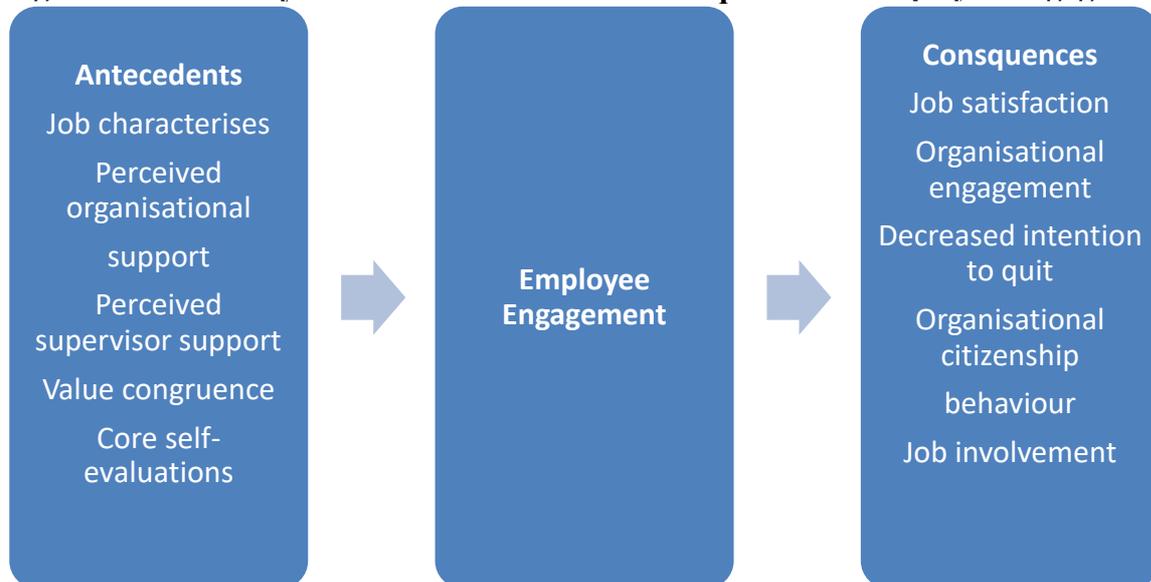
There is the potential for confusion between the definitions of employee engagement and organisational commitment. According to Jave et al., (2015) many elements of commitment resemble engagement and organisational behaviour; however, these authors admit that there is no exact match between them. Neither commitment nor organisational behaviour sufficiently reflects the two-way nature of engagement, with a direction towards the employer and a direction towards the employee. Schneider, Ehrhart & Macey (2013) take the view that commitment might be a facet of engagement, but it is not sufficient for engagement.

Armstrong and Taylor (2014) considered employee engagement and commitment as two constructs, whereby engagement is job-oriented, and commitment is organisation-oriented. Moreover, commitment is seen as employee loyalty and attachment to the organisation. It has been linked to the feelings of employees towards their organisation. In contrast, Saks (2006) argues that the difference between engagement and commitment is that engagement encompasses the effective use of behaviour and emotions as well as cognition. In addition, he proposes social exchange theory as a logical alternative to Kahn's (1990) psychological conditions to interpret employee engagement. The suggestion is that when employees receive economic resources and emotional and social support, they repay the organisation with their engagement.

2.3.3 Employee Engagement Antecedents and Consequences

Given contributions and academic research on the antecedents and consequences of employee engagement, Saks (2006) could be considered to be an earlier contributor on this subject. He also highlights perceived organisational support (POS) as an essential antecedent of engagement, arguing that 'when employees believe that their organisation is concerned about them and cares about their well-being, they are likely to respond by attempting to fulfil their obligations to their organisation by becoming more engaged.' Despite the confusion within the academic literature surrounding the concept of antecedents and consequences of employee engagement (see Albrecht et al., 2015), some researchers (e.g. Rich, Lepine & Crawford, 2010) have identified some engagement antecedents using engagement models from Saks (2006), which are included in Figure 2.5. In contrast, it appears that the consequences of engagement from organisations that show caring attitudes and address employees' concerns, create a culture of reciprocity, where care and attention have been rewarded with higher levels of engagement, as Bakker & Leiter (2010) acknowledge, the responses of employees' reactions, whether, on organisational practices, policies or the higher structures of the organisation affect their potential to experience engagement.

Figure 2. 5 Summary of the Antecedents and Consequences of Employee Engagement



Source: Adapted from Rich et al. (2010) and Saks (2006).

In his qualitative research, Kahn (1990) focuses on how personal engagement may be influenced by a person's experience within his or her work environment, which may lead to personal engagement or disengagement. It reveals the different conditions faced by employees within the workplace that drive them to express themselves physically and emotionally or to withdraw practically from the work environment. Moreover, Kahn proposes three psychological conditions attached to workplace engagement and disengagement: availability, safety and meaningfulness. Some scholars (see, e.g., Jeeve et al., 2015; Singh, 2016) have empirically examined these psychological conditions. The results of these studies showed that employees with higher levels of engagement had core self-evaluations, perceived organisational support and higher levels of value congruence (Rich, Lepine & Crawford, 2010).

2.3.4 Dimensions of Employee Engagement

According to Schaufeli, Taris & Bakker (2006), employee engagement consists of three dimensions: absorption (cognition), vigour (behaviour), and dedication (emotion). Table 2-6 below defines these dimensions.

Table 2.4 Definition of Employee Engagement Dimensions (Source: Schaufeli, Taris & Bakker, 2006)

Dimension	Defined
Vigour (Behaviour)	High levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties.
Dedication (Emotion)	Being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge.
Absorption (Cognition)	Being fully concentrated and happily engrossed in one's work, whereby time passes quickly, and one has difficulties with detaching oneself from work.

2.4 Trust

According to Schaufeli, Taris & Bakker (2006) employee engagement consists of three dimensions: absorption (cognition), vigour (behaviour), and dedication (emotion). Table 2-6 below defines these dimensions. The emergence of trust as an essential concept in many humanities has become the focus of interest of academics and practitioners in previous and recent times. However, the concept of trust has not been accurately explained (Dietz and Den, 2006). Trust, a key outcome of organisation relationships, is thought to be contingent on a 'party's level of confidence in and willingness to open oneself to the other party' (Hon & Grunig, 1999, p. 3). Grund (1996) argues that trust affords an organisation the 'benefit of the doubt in ambiguous situations' (p. 9). Furthermore, according to Hon and Grunig (1999), trust has three dimensions: integrity, dependability and competence. Scholars (McCorkindale, DiStaso & Carroll, 2013; Shockley-Zalabak & Ellis, 2006) argue that trust is multifaceted and easily affected by misinformation. Using survey data of international companies, Shockley-Zalabak and Ellis (2006) found that trust is intrinsic to normative practices and institutionalised values of an organisation. Moreover, these authors observed that trust was affected by, and resulted from, providing 'accurate information and demonstrating sincere and appropriate openness' (p. 49). Hence, Shockley-Zalabak and Ellis (2006) posit that trust is dynamic and fluid. Organisations must establish trust with stakeholders through ethical behaviour, and by adopting and communicating ethical values, including but not limited to honesty, integrity, and respect (Bowen, Call and Rajgopal, 2010). Furthermore, McCorkindale, DiStaso & Carroll (2013) assert that 'trust has also been found to influence how stakeholders rationalise information' (p. 501). Trust creates excellent advantages, although it needs a long time to develop, and once has been terminated, or damaged, it is hard

to recover (Uslaner and Brown, 2005). Therefore, attention must be given to understanding how trust is built alongside its impact on performance and productivity. In addition, more efforts should be made to maintain trust between management and employees.

2.4.1 Defining Trust

Obtaining a definition of trust and being universally accepted is difficult (Castaldo 2002; Mayer, Davis and Schoorman 1995; Schoorman, Mayer and Davis, 2007). According to Mishra (1996), trust is defined as ‘one party’s willingness to be vulnerable to another party based on the belief that the latter party is (a) competent, (b) open, (c) concerned and (d) reliable.’ Conversely, Mayer, Davis and Schoorman (1995), state that ‘trust is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action which is important to the trustor irrespective of their ability to monitor or control that other party.’ Furthermore, Rousseau *et al.* (1998) define trust as ‘a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another.’ Numerous definitions of trust have been given, although, none of them include all relevant characteristics. Table 2-7 below lists the definitions of organisational trust proposed by other researchers.

Table 2. 5 Definitions of Organisational Trust from Other Researchers

Author(s)/ Year	Definition	Explanation
Rousseau <i>et al.</i> , 1998	Organisational trust is a psychological state	It expresses the employees’ feeling from a psychological perspective’.
Dietz & Hartog 2006	Organisational trust has a condition: trustworthiness.	Trustworthiness refers to a quality that the trustee has. Scholars have different understandings of trustworthiness; in general, it includes ability, benevolence, integrity, and reliability.
Mayer <i>et al.</i> 1995; McAllister, 1995; Rousseau <i>et al.</i> , 1998	Risk-taking has been discussed as a core antecedent to, and outcome	Once a trust relationship is established, it cannot be certain that the trustee will have what he or she

	of, trust.	expected in return.
Stinglhamber, Cremer & Mercken, 2006	Organisational trust relates to an action: trusting.	Trusting is something that the trustor does.
Fulmer & Gelfand, 2012	‘shared psychological state among organisational members comprising’ willingness to accept vulnerability based on positive expectations of a specific other or others’	establishes of dynamic capabilities and shared psychological state

2.4.2 Organisation and Trust

The trust exists between and within organisations (Ganesan & Hess, 1997). Since individuals constitute organisations, trust at the individual level will reflect at all levels within the organisation, and thus will reflect on relations between organisations (Larson, 1992).

Having an on-going social relationship among organisation members may be considered the most important condition for building good trust amongst each other. However, the formal rules of an organisation may limit the success of this relationship (Erdem & Ozen, 2003). The essential factor in building an active link between team members and finding a related interaction is the trust in the components of this relationship (Dietz & Den, 2006). Poon (2006) defines the climate of trust as the extent to which members within the organisational social system ‘have positive expectations regarding the motives, intentions and prospective actions of other members. Thus, it represents a shared willingness to accept vulnerability to others in the organisation (Fulmer & Gelfand, 2012).

Furthermore, Collins & Smith (2006) identify trust as a social organising principle that entails two main benefits (Fainshmidt & Frazier, 2017). First, a climate for trust may facilitate stable and enduring social interaction patterns among organisation members. For instance, prior studies have shown that engagement, information sharing and citizenship behaviours are collaborative workplace behaviours and attitudes associated with trust (Colquitt *et al.*, 2007). Consequently, the climate for trust within an organisation is crucial to

intra-firm coordination processes (Stahl *et al.*, 2010). Secondly, the climate for trust motivates actors to contribute in new ways and to engage in change-oriented behaviours. Climate for trust also facilitates a willingness to change (Neves and Caetano, 2009) while encouraging learning through experimentation (Schilke, Reimann & Cook, 2015). In other words, climate for trust minimises concerns of vulnerability and allows employees to innovate. Conversely, when the climate for trust is low, employees are often ‘distracted from purposeful and efficient task pursuit’ (Menges *et al.*, 2011).

2.4.2.1 Trust in the Workplace

Trust in the organisation is the willingness of employees to be exposed to employer reactions. According to Tan & Lim (2009), this willingness can arise in the organisation if the information on the organisation's work is clear to the employees through formal and informal communication networks within the organisation.

2.4.2.2 Trust in the Supervisor

This concept is considered as employees’ acceptance that their behaviour and actions are controlled by their supervisor (McEvily, Perrone & Zaheer, 2003). Wong, Ngo & Wong (2003) state that trust in the supervisor entails ‘an employee’s positive expectations regarding their supervisor’s conduct and intentions, and is a form of dyadic or interpersonal trust,’ which ‘can be viewed as a psychological state comprising employees’ intention to accept vulnerability based upon expectations of positive intentions or behaviour of their supervisor.’

2.4.2.3 Trust in Co-worker

The trust in co-worker is that of mutual cooperative relationships and a positive bias among individuals working in terms of interdependence and sharing ideas, information and open communication between all parties, thus contributing to the achievement of common goals and objectives (Halbesleben & Wheeler, 2015). The definition of ‘co-worker refers to any member of an organisation having a working relationship with another employee and interacting with him, and they have one level of authority (Tan & Lim, 2009). McAllister (1995) distinguishes between two types of trust: cognitive trust and affective trust. Cognitive trust is based on a rational appraisal of performance-related information, e.g. an individual’s competence, ability and reliability in the past. Affective trust, on the other hand, develops over time from social interaction between two people and relies on the ‘emotional bonds between individuals’ with genuine care and mutual concern. In a high-quality exchange,

supervisors and subordinates engage in an interactive exchange process characterised by high levels of trust and support (Fainshmidt & Frazier, 2017).

The positive bilateral relationship between the supervisor and employees has an impact on co-worker trust between each other in several ways. First, subordinates may be more likely to stress the importance of friendships developed at work because they have experienced adequate bonding in the exchange process and are aware of the associated benefits. Second, these employees may feel motivated to engage in high levels of social exchange and to form an emotional attachment and close relationships with their co-worker (Chen *et al.*, 2013). Trust relationships between supervisors, employees and co-worker may spread positive emotions within the work environment (Lioukas & Reuer, 2015). In addition, empirical evidence shows that trust exchange is positively related to workplace friendships among co-worker (Heide & Simonsson, 2018). According to Halbesleben & Wheeler (2015), ‘controlling for relational demography and co-worker helping behaviours, they found that co-worker tended to place more trust in co-worker who were also trusted by the teams’ formal leaders than in co-worker who were less trusted by leaders. Furthermore, support has found that the relationship between leaders’ trust and co-worker trust is stronger when group performance is poor.’

There are three reasons for the importance of trust in co-worker. First, the nature of the team’s work and the linkage of tasks to each other, and the cooperation and coordination among them requires co-worker’s trust in each other to achieve their objectives (Chen *et al.*, 2013). Therefore, trust in co-worker is seen as a critical factor in the team and in making an active decision to implement the work (Van Lange, 2015). Second, due to the interdependence of employees’ tasks, mistakes and rewards are usually shared among team members. It may be inappropriate not to reward employees who have shown high efforts due to the mistakes of their co-worker. It is certain that when employees trust that their colleagues will do their best to work, this will increase their trust, and they will be more willing to work towards the team’s objectives, knowing that their efforts will be rewarded accordingly (Heide & Simonsson, 2018; Halbesleben & Wheeler, 2015; Lau & Liden, 2008).

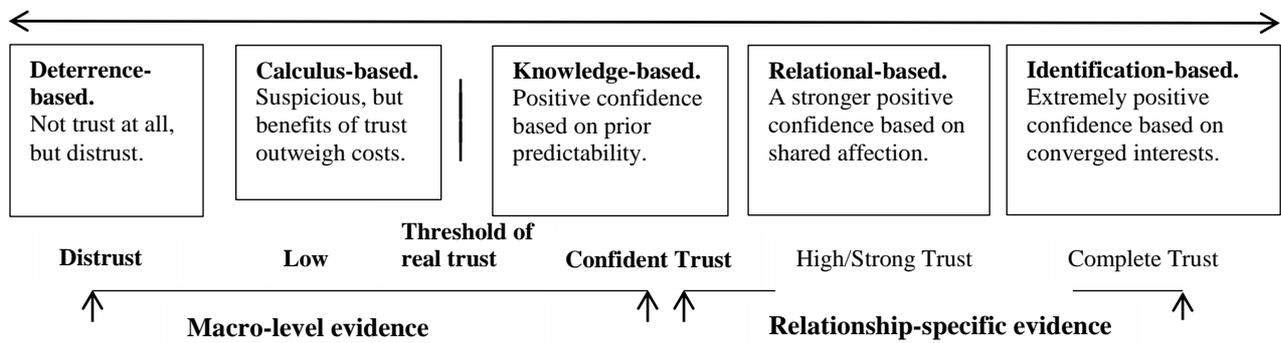
2.4.3 Dimensions of Trust

Many scientists consider that trust is based on two important dimensions: credibility and benevolence (e.g., Antonucci *et al.*, 2018; Lumineau, 2017; Chen *et al.*, 2013; Tan & Lim, 2009) based on Rempel, Holmes and Zanna (1985) who were the first to attempt to identify

the dimensions of trust. First, credibility involves the intention of the partner and his ability to deliver on promises, the fact that he can rely upon in services and the fact that his conduct is worthy of respect. The second dimension, benevolence, is based on the qualities and intentions of one partner towards the other partner, showing a real interest and caring for the other party through sacrifices and avoiding selfishness without having any profit goals (Ganesan & Hess, 1997). However, the following dimensions of trust have also been identified: honesty and sincerity, low level of caution, desire for a relationship, reliance on the other person, fairness of power, predicting a good relationship, predicting future behaviour, consistency in future behaviour, general harmony with others and potential future trust (Sullivan *et al.*, 1981). Furthermore, according to Gilbert & Tang (1998), four factors generate trust: open communication, giving employees a more significant share in decision-making, sharing valuable information and sharing real feelings and perceptions. Furthermore, understanding the difference between trust dimensions and levels of trust helps in understanding the power of trust (Van Lange, 2015).

Gefen's (2002) definition of trust includes three dimensions of belief: integrity, ability, and benevolence of the other reliable partner. The belief in integrity is interpreted as the belief that a trusted partner is committed to honesty and fulfilment and shows acceptable behaviour in the relationship between the parties. The belief in ability is the belief in the competence and skill of another trusted partner. Finally, the belief in benevolence is the belief that the reliable partner wants to do well for the other side, regardless of any other legitimate gains (Gefen, 2002). Moreover, Mayer, Davis and Schoorman (1995) also contribute to the classification of trust from an academic perspective: they classify trust based on cognition and affection. The affective factor is the belief in the other party's tendency towards benevolence, inspired by ethical virtues such as integrity and honesty (Ganesan & Hess, 1997). Finally, Dietz and Hartog (2006) examine to what extent trust in the organisation can contribute to the activation of the essential elements of trust relations in the workplace. They explain it as the degree in which one trusts another varies and is dependent on the continuity and strength of the relationship between parties. Figure 2.6 shows some dimensions of trust and their degrees.

Figure 2.6 The Continuum of Degrees of Intra-organisational Trust



(Source: from Dietz and Hartog, 2006).

2.4.4 Antecedents of Trust

Trust involves two exchange partners: the trustor and trustee. Table 2-8 defines both concepts.

Table 2. 6 The Two Exchange Partners of Trust

Concept	Definition
Trustor (Employees)	The partner who trusts
Trustee (Organisation and supervisor)	The partner who is trusted

(Source: Sichtmann, 2007)

Antecedents of trust have been discussed several times and tested empirically in many studies (e.g. Das, 2016; McCabe & Sambrook, 2014; Sichtmann, 2007; McKnight and Chervany, 2001). In brief, the precedents of trust so far are incomprehensible, while to develop effective participation programmes, managers need specific, simple results that can be applied to the work environment (Sichtmann, 2007). In addition, Tan & Tan (2000) conducted a longitudinal study of managers and employees and examined how managers can develop a working relationship with employees. The focus was on ‘the basis of trust in the workplace between the president and the subordinate.’ Ability was also one of those qualities, which included the knowledge and skills necessary to work, and the personal skills and general wisdom required to achieve the objectives of the organisation.

Mayer *et al.*'s (1995) model of organisational trust distinguishes two categories. The first is benevolence, which is defined as the desire of the trustee to do good to the trustor without

regard to the profitability benefits that may accrue from this work, including care, loyalty, openness, caring or supportiveness (Mayer *et al.*, 1995). Integrity is the second component, which means that the trustee commits to sound principles and ethics, including fairness, the fulfilment of promises and justice. Despite the importance of integrity and benevolence in building trust, it is not clear whether each of them has an independent effect on the levels of trust (Colquitt, Scott & LePine, 2007). If a trustee is perceived to have high levels of these two factors, he or she is likely to be deemed entirely trustworthy. In contrast, disruptions to these factors may result in undesirable results at the level of the trustor. Colquitt, Scott, and LePine (2007) evaluated 249 studies that examined the antecedents and consequences of trust. Their meta-analysis shows that the propensity to trust, defined as a willingness to cooperate with and to trust others, is one of the essential characteristics of internalisation of cultural norms and values. Moreover, they point out that propensity to trust is a significant predictor of trust, even when the trustworthiness forms have been considered simultaneously.

In another study, Huff and Kelley (2003) investigated organisational trust in seven countries, including individualist and collectivist societies. Note that individual cultures tend to trust the other side more strongly than collective cultures. These results show workers' unwillingness to trust in countries that are influenced by a collective culture, both internally and externally. It is consistent with Hofstede's theory and dimensions (1983), 'Individualism vs. collectivism (IDV): This index explores the degree to which people in society have integrated into groups. Findings have shown that trust is low in Saudi Arabian organisations.

Furthermore, Sichtmann (2007) conducted 308 interviews in Germany to verify the trust precursors and results within the organisation. The outcomes showed that in order to develop trust between the supplier and the consumer, two essential requirements must be met: competence in providing the service or the product, and the delivery of a product or service of high quality. 'Without being competent, a supplier cannot deliver good quality, therefore, a consumer will only trust a supplier if he is convinced that the supplier is competent enough to fulfil his or her demands.' Thus, consumer trust is positively affected by competence (Sichtmann, 2007). Persuasion of the trustor is another significant characteristic of trust. For example, if the content of the communication meets the expectations of the trustor, trust will emerge (McCabe & Sambrook, 2014). Despite the powerful influence of persuasion on the process of trust, persuasion may not always be applied to the production of trust (Gillespie, 2003). For example, an employee may trust his supervisor's ability to offer his performance

to others, but he may hesitate to share his issues or work-related issues with other parties (McCabe & Sambrook, 2014).

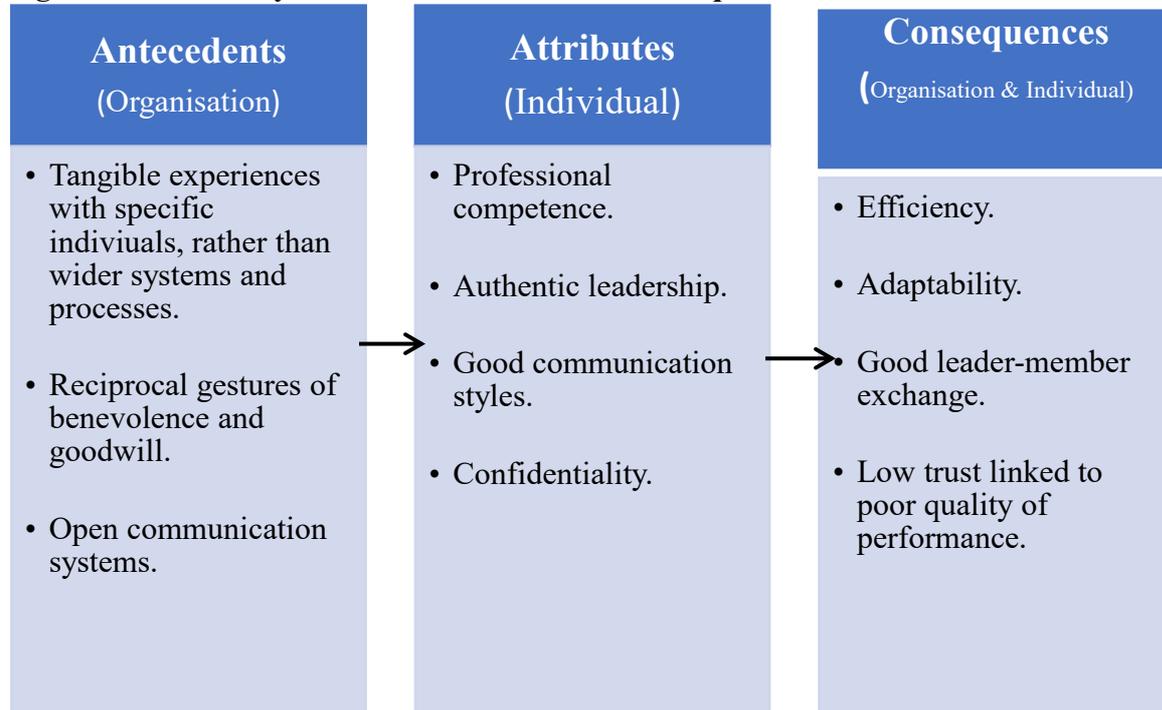
2.4.5 Consequences of Trust

In uncertain circumstances, trust tends to reduce risk and is a precise predictor of understanding risks and their results (Colquitt, Scott & LePine, 2007; Mayer *et al.*, 1995). It can benefit both an organisation and its employees (Dirks & Ferrin, 2002). Trusting relationships enhance employees' attitudes towards an organisation, including engagement and job satisfaction (Huff & Kelley, 2003). Trust has a positive relationship with engagement, organisational commitment and communication, openness, adjustment, efficiency and adaptability (McCabe & Sambrook, 2014; Moye & Henkin, 2006).

Conversely, low trust can lead to a 'greater amount of surveillance or monitoring of work in progress' (Mayer *et al.*, 1995). Laschinger and Finegan (2005) conducted a study on how trust affected the performance of nursing in Canadian health institutions. They found that low levels of trust between nurses and their manager led to lower levels of commitment, morale, and organisational performance, along with increased levels of stress, related to work. Hence, they state that the development of trust is a crucial leader activity. Furthermore, Tallman (2007) found that health care institutions that were exposed to change had low levels of trust within the organisation with higher levels of trust in supervisors, and the effect of these different levels impacted on the level of employees trust in senior management. An essential aspect of this study is that it shows the decisive role played by nursing directors in raising levels of trust in management in general (Chen *et al.*, 2013; Tallman, 2007).

Overall, the consequences of (high) trust found in the literature can be summarised as efficiency, adaptability, and excellent leader-member exchange, while low trust linked with poor quality of performance (McCabe & Sambrook, 2014). Studies also confirm the idea that trust provides a reduction in workers' turnover intention (Calnan, Rowe & Entwistle, 2006). McCabe & Sambrook (2014) note that employee trust within an organisation increases the chance of staying in the organisation, and that trust will increase the work performance of employees, who will therefore practice the profession for a more extended period. Figure 2.7 summarises the theoretical relationship between the antecedents and consequences of trust at individual, interpersonal and organisational levels.

Figure 2.7 Summary of the Antecedents and Consequences of Trust



(Source: McCabe & Sambrook, 2014).

2.4.6 Trust and Internal Communication

Communication is a critical element of effective teamwork (McCorkindale, DiStaso & Carroll, 2013). Organisation members must exchange information to ascertain other members' competence and intentions. Information is exchanged within the organisation through internal communication to ensure the efficiency and intentions of other members. Individuals must engage in communication to develop strategies and action plans in order to achieve the goals of the organisation. Several studies (e.g., Barry & Stewart, 1997; Hyatt & Ruddy, 1997) have shown that effectively gathering and exchanging information is essential for team performance. For example, Hill (1982) found that compared to a low-performing group of students, high-performing graduate and university students were more willing to express their ideas and showed a higher level of listening and trust, as well as feeling more comfortable with the overall work climate. In this vein, Breevaart *et al.* (2015) posit that trust in internal communication affects team performance, creative performance and effective communication among team members. According to Jacobs, Yu & Chavez (2016), effective internal communication leads to trust development and the exchange of needed information, creating trust in return. Furthermore, Iyer and Israel (2012) argue that internal communication enhances employees' trust in, and acceptance, of new policies and systems in the organisation (Mayeh, Ramayah & Mishra, 2016).

Yamaguchi (2009) argues that communication is essential in building trust in the workplace. Moreover, Thomas, Zolin and Hartman (2009) stress that communication has an impact on trust development, the exchange of information and the acceptance of the technology implementation environment. Overall, internal organisational communication can be seen as a highly significant factor in strengthening the trust relationship between an organisation and its employees (Mayer & Gavin 2005).

2.5 Social Exchange Theory (SET)

The most prominent model of the attitudes and behaviours of employees within the workplace is the social exchange theory (SET) (Blau, 1964). SET can be considered the foundation of other theories including trust (Fortin *et al.*, 2016), leadership studies (Cropanzano & Mitchell, 2005), organisational support theory and leader-member exchange theory (Schakett *et al.*, 2011). In addition, this theory has been utilised in various areas of interest, such as public relations, economics, organisational behaviour, human resources, sociology, organisational psychology and behaviour in the workplace. Thus, it is possible to state that the theory of social exchange can be used in different contexts within the workplace and in organisations.

SET states that people interact with one another and rely on commitments between themselves in the form of groups or individuals (Chaudhuri & Ghosh, 2012). Many authors (for example, Nembhard & Edmondson, 2006; Saks, 2006) agree that the obligations that arise within these relationships are the result of a series of individual interactions between each other and thus appear as a state of mutual interdependence among individuals or groups. Quality relationships within the work environment are believed to be one of the most important causes of mutual interactions between individuals or groups (Sluss & Ashforth, 2008). It is also believed that cooperation among individuals in the workplace could be enhanced by the interdependence process (Shiau & Luo, 2012). Moreover, SET states that the provision of resources of external value (e.g. resources from the organisation) can result in the emergence of engagement-related behaviours of employees with pro-behavioural and pro-social attitudes (Cook, Cheshire & Nakagawa, 2013).

Although SET is widely used, it has also been criticised by some researchers. For instance, Slack, Corlett & Morris, 2015) argue that SET is a vague and unclear theory that needs more empirical support, while DeConinck (2010) questions SET's ability to provide an integrated perspective of exchanges, positive relationships, and interactions within the workplace. In

contrast, Drezner (2009) considers SET to be one of the most important conceptual models for understanding the behaviour of individuals in the workplace. In their review of SET, Cropanzano & Mitchell (2005) call for more research to link the exchange relations in the workplace with the new and old concepts of SET. Therefore, SET has been used to support this study.

2.5.1 Social Exchange in the Workplace

Employees' relationships within the boundaries of their organisation include some of the numerous critical features of their time spent at work (Dutton & Ragins, 2007). These relationships may play an essential part in shaping the workplace environment (Schakett *et al.*, 2011), which may have a positive or negative effect on the employee beliefs and behaviours, depending on his or her perception of the values, support and definition derived from that organisation that is reflected in his or her professional life (Schneider, Ehrhart & Macey, 2013). Human relations management literature stresses that workplace relationships can play an active role in building and maintaining the workplace in order to achieve the goals of both individuals and the organisation (Marchington, 2015), and these relationships are considered to constitute the main concept in public relations literature (Tkalac Verčič, Verčič, Sriramesh, 2012). Researchers in human relations management within organisations focus on developing strategies to improve the relationship between internal stakeholders who hold various positions (Welch & Jackson, 2007). In the organisational context, relationships within the workplace can be considered as social exchanges, because individuals exchange different resources to establish positive and reciprocal relationships and to achieve their objectives (Jeong & Oh, 2017).

Researchers in the field of management typically conceptualise workplace relationships as an essential resource that employees utilise to make the most of their career (Slack, Corlett & Morris, 2015), or as a technique used to exchange resources (Schneider, Ehrhart & Macey, 2013). Moreover, management scholars have focused intensively on the nature and various forms of interpersonal exchanges within the organisation (Fortin *et al.*, 2016). The SET is seen among many other theoretical models as a broader theory of understanding and for demonstrating the relations between individuals in the workplace (Dutton & Ragins, 2017). Exchange in the workplace is one of the key assumptions of SET: resources are exchanged between individuals or groups within the boundaries of the organisation (Jeong & Oh, 2017; Fortin *et al.*, 2016; Schneider, Ehrhart & Macey, 2013).

2.5.2 Trust, Employee Engagement and SET

Homans (1958) views a social relationship as a series of repeated exchanges, hence a social behaviour, of the worth that is defined somewhat rationally as the difference between rewards and costs. Furthermore, trust is a fundamental part of associations among organisations and their stakeholders because it fosters business transactions or enhances customer satisfaction (Pirson & Malhotra, 2011). According to Blau (1964), ‘the immediate exchange processes cannot be understood without taking into account other exchange transactions that impinge on them.’

Moreover, SET arises initially from dyadic or small group interactions and perhaps works best in situations that generally satisfy these conditions. Further, SET has resulted in productive empirical applications to B2B relationships as well. Anderson and colleagues (Anderson & Bushman, 2002; Anderson & Dill, 2000) report that both the positive and negative exchange outcomes differently influence mutual dependence and trust, which in turn influence cooperation, satisfaction, commitment and engagement (Slack, Corlett & Morris, 2015). In addition, trust and engagement often develop from excellent communication and shared values, which tend to entail cooperation between partners, which is central to the relationship’s success. These elements play a role as vital mediating variables between an array of relationship sources and outcomes (Jose & Mampilly, 2012).

More recently, SET has been used to explain how a business partner arrives at the state of loyalty, trust and satisfaction (Schakett *et al.*, 2011). Furthermore, a comprehensive review reveals a variety of somewhat inconsistent ways to operationalize SET (Breevaart *et al.*, 2015; A. Agarwal, 2014). For example, the independent variables examined included, among others, trust, dependence, communication and norms (Uysal, 2016; Schoenherr, Narayanan & Narasimhan, 2015; Schilke, Reimann & Cook, 2015). Some researchers have conceptualised dependence as a variable moderating successful relationship (Jeng, DesAutels and Li, 2017) while others have modelled communication as a dependent variable (Slack, Corlett & Morris, 2015). Frequently used as a dependent variable, are trust (Ertürk & Vurgun, 2015) engagement and satisfaction (Karanges *et al.*, 2015; Breevaart *et al.*, 2015). These are just some examples to show how theoretically ambiguous SET is (Cropanzano and Mitchell, 2005) and how challenging it is to either apply the existing models or to construct one in order to explain other relevant relationship situations.

2.6 Employee Engagement and Organisational Change

Despite the need for inevitable changes, the organisation requires supportive tools to perform organisational changes. New considerable research has emerged in the organisation studies domain of work to investigate the relationship between engagement and change management (Van and Vermeeren, 2017). Multiple research sources consider employee engagement to be a primary antecedent to successfully implementing an organisational change initiative. If organisations are not implementing change for the sake of change, then it is fair to assume that their change initiative intends to improve some business component that will have an overall positive effect on organisational operations and business success (Swarnalatha & Prasanna, 2005). Therefore, it is understandable why researchers believe that increasing employee engagement or translating ‘employee potential into employee performance and business success,’ is so essential to the success of change management (Saks, 2006).

Vance (2006) completed a report for the Society of Human Resource Management (SHRM) in which he highlights common themes across compiled definitions. Vance states, ‘The greater an employee’s engagement, the more likely he or she is to go the extra mile and deliver excellent on-the-job performance.’ Therefore, if employees are engaged during a change management initiative, they are likely to have increased ‘buying’ and better performance; thus, supporting business success. In much of the research concerning change management strategies, employee engagement is listed as a primary function to the success of adequately implementing a change management initiative. Schmidt & Jackson (2005) state that the fourth step to a balanced culture, communication, is ‘where engagement, ownership, and empowerment are built.’ Goodman & Rousseau (2004) detail the reasoning behind the second step of linkage analysis, mapping the change pathway in order to identify obstacles, as a way to provide a ‘positive feedback system where knowledge sharing improves engagement performance, which leads to more knowledge sharing, which, in turn, accelerates knowledge sharing and the subsequent cycle.’ Price & Chahal (2005) list ‘communications and workforce engagement’ as step number four in their six-step process. Finally, Guy & Beauman (2005) highlight ‘engagement and alignment’ as one of the three main categories for successful change management. Table 2-7 shows the gap in literature regarding the relationship between trust, internal organisational communication and organisation engagement. It also indicates how the present research addresses this gap.

Table 2. 7 Literature Gap and How to Address it

Subject	Findings	Authors	Years	Literature gap	How does the present study fill this gap
Employee engagement, trust, and enterprise social networks (ESN)	Trust as a key factor for digital engagement via internal social media.	Sievert & Scholz	2017	The study is based on organisational culture theory and shows that trust as a corporate culture factor increases the opportunities for digital engagement via enterprise social networks (ESN); it considers organisational support only, neglecting the influences of supervisor support and co-worker support.	This study examines the relationship between internal organisational communication and organisation engagement in both organisational trust and supervisory trust based on social exchange theory.
Organisational communication and trust	a positive relation b/w trust and organisation communication	Thomas, <i>et al.</i>	2009	The researchers investigate the relationship between communication and trust using one dimension and consider the direct relationship between organisational communication and trust. There is a lack of research in the context of co-worker.	This research addresses the gap by investigating co-worker perceived trust as mediator of the relationship between internal communication and employee engagement, focusing on co-worker trust.
Becerra and Gupta	2003				
Shockley-Zalabak and Ellis	2006				
Social values (affiliation at work)	Studies have found that employees do not value social	Leuty & Hansen	2011	These studies found that employees' value social interaction less than	Considering these inconsistent findings, this study use trust as a social
Twenge <i>et al.</i>	2010				

	interaction as much as previous generations do.	Macky <i>et al.</i>	2008	previous generations. On other hand, others say that younger generations highly value social connection at work. There is a lack of research in the co-worker.	factor to investigate the relationship between employee engagement and internal organisational communication.
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2.7 Conclusion

The literature on trust and internal communication within organisations shows an emerging trend: that employees have distinct perceptions about distinct foci, and therefore have different behaviours and attitudes towards them. For instance, employees may have a different sense of satisfaction when they are communicating with supervisors and co-worker within the organisation (Ruck & Welch 2012). Scholars of trust take a similar view, stating that employees view trust in multiple entities, including the organisation as a whole and their direct supervisor (Iyer & Israel, 2012). Therefore, this study examines the relationship between co-worker and supervisors, as well as the organisation itself. Although there are significant contributions related to multiple perspectives in internal communication and organisational trust literature, these contributions have evolved independently from each other. In brief, this research does not identify the dimensions of communication solely; but also plans to expand the idea of the association within organisational communication and trust, in the framework of the theory of the exchange; and the relationship between supervisor and co-worker within the organisation.

Chapter 3 Conceptual Framework

3.1 Introduction

This chapter discusses the development and examination of the research hypotheses related to trust between co-worker and supervisors, and employee engagement. In order to formulate the hypotheses, the researcher reviewed the following topics related to the subject under studies: co-worker trust, supervisor, internal communication and its influence on employee engagement, and workplace social relationships. This gave an understanding of the subject and helped to develop a conceptual approach and theoretical framework. The conceptual approach was derived from the theoretical framework and extensive examination of previous studies on the subject of organisation engagement.

Internal communication can be an essential factor in enhancing employee trust within an organisation through communicating effectively and by providing employees with the required information rapidly and accurately, thus facilitating communication between all parties in the organisation. Trust in a co-worker may play a vital role in facilitating work performance and in interpreting information that comes from managers in a positive way, which in turn will increase trust in the organisation. This literature review has covered the various dimensions of internal communication and the role of trust in the supervisor and co-worker in promoting engagement. The study focuses on confidence in internal communication as a factor in engaging employees, particularly in Saudi Arabia.

3.2 Internal Communication and its Impacts on Employee Engagement

Employees are considered one of the most critical assets and issues that concern human resource leaders in organisations. They are a group of relevant stakeholders as a human resource, and they have a strategic role in achieving the goals of the organisation. In order to recognise the importance of workplace communication, and to maintain a positive relationship with employees, many companies are keen to establish and develop internal communication programmes among their members at all organisation levels, and will therefore inform employees about issues within the organisation, will share information, and contribute to the development of the sense of community among employees. Internal communication can be described as a process utilised to encourage employees to facilitate the sharing information relationships inside companies (Ruck, Welch & Menara, 2017; Ruck & Welch, 2012; Tkalac Vercic, Vercic & Sriramesh, 2012; Welch, 2012). Internal communication is one of the most significant factors in maintaining a strong relationship

between the organisation and its staff. Therefore, to build a strong relationship with employees, organisations provide them with clear information about their roles and processes. This precise information is essential for strengthening the outputs of organisations and for effectively achieving their goals (Verčič & Vokić, 2017; Ruck & Welch, 2012; Tkalac Vercic, Vercic & Sriramesh, 2012; Welch, 2012).

During communication, the employee is the most critical element as an essential resource for an organisation; he can play a fundamental and vital part in achieving the organisation's goals (Park & Gursoy, 2012). Besides other components, unclear communication between the sender and the receiver may give the employee a false or ambiguous impression of the purpose of the message. This may create a communication gap in the organisation and with employees; which may then lead to conflict between objectives and the stakeholders' goals. Therefore, failure to establish clear communication will not only generate friction between the goals of the organisation and employees, but the exchange of trust information will also be lost. Given the fact that they are a mere human, employees may become uncomfortable (Ruck, Welch & Menara, 2017; Verčič & Vokić, 2017). Boies, Fiset & Gill (2015) emphasise that trust in internal communication affects team performance, creative performance and effective communication among team members (Boies, Fiset & Gill, 2015). According to Constantin & Baias (2015), effective internal communication leads to trust development and the exchange of needed information, creating trust in return.

To overcome the concern of co-worker trust related to understanding the role of internal communications in facilitating the exchange of information, researchers and practitioners have called for the study of internal communications as a critical element within organisation engagement and in the improvement of communication relationships to make an employee more effective (Lyons and Kuron, 2014). Concerning social exchange, a co-worker who has strong social tendencies expects to develop personal relationships with their superiors in the workplace and to influence the environment in which they work; they also want a good job (Chaudhuri and Ghosh, 2012). For example, if they receive help from their direct supervisor or organisation, they are likely to reward this assistance through engagement. Moreover, in some studies regarding co-worker characteristics, especially young employees, they prefer to communicate openly and frequently with their superiors and are at ease with new ways of communication using technology (Myers & Sadaghiani, 2010).

In this context, trust acquisition in internal communication is crucial to build a reciprocal relationship with the organisation and can play a significant role in employees' engagement (Quirke, 2017).

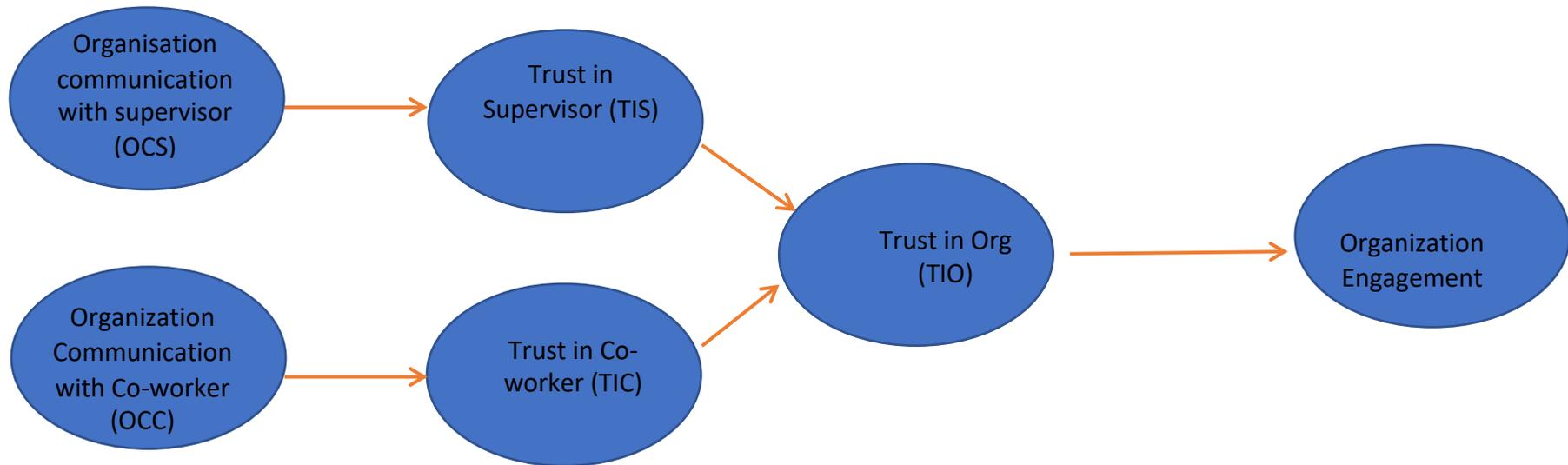
3.4 Model Development

This section uses the social exchange theory as an input to the development of the model used in this study. As explained previously, the purpose of this research is to fulfil the gaps in the social exchange literature by investigating the role of multifocal trust in social exchange relationships. It also examines the impact of internal organisational communication in the development of employee engagement.

In the view of the concept of social exchange, two phases of the reciprocal relationship can be drawn up within the working environment and practised through communication (Redmond, 2015). Therefore, a two-phase diagram has been produced. The first relationship is between the employee, the direct supervisor and the co-worker, and the second is between the employee and the organisation. In the first stage, the effective and satisfactory communication provided by the supervisor and co-worker creates the employee's trust in the parties to the relationship (e.g. trust in supervisor, trust in co-worker), which puts the association of social exchange into effect. In the second phase, trust is reflected by the trust of the individual member to the organisation as a whole.

It is possible that future transactions will continue, and they can do so for some time. As a result, previous transaction outcomes could affect the result of future transactions. In this case, the employee will engage in the organisation when they perceive that they can strongly rely upon it.

Figure 5. 1 Conceptual Framework



3.5 Research Hypotheses

Based on the research rationale, aims and objectives presented earlier, a set of research hypotheses were formulated to guide the research. The literature on organisational communication and trust shows that employees communicate by knowing people who feel comfortable interacting with them and by practicing different behaviours and attitudes toward these people, such as supervisors and co-worker (Thomas, Zolin & Hartman, 2009). Trust in the organisation results in positive performance; this may not be available in an environment of mistrust. Recently, many studies have shown that employee trust in supervisors yields positive results in work, including engagement (Walden, Jung & Westerman, 2017) low monitoring (Welch, 2011) high performance (Bakker, Albrecht & Leiter, 2011) commitment (Walden, Jung & Westerman, 2017) increased loyalty (Schaufeli, 2013), and decreased turnover (Barfoot, Doherty & Blackburn, 2017).

This study aims to obtain a broader perspective of the experiences of employees by explicitly acknowledging the role of co-worker and their relationship with each other as groups and individuals in enhancing trust between them as a group and with supervisors and managers, as well as the organisation itself. Therefore, this study not only examines communication, but also the integration of multiple research theories in the literature. It investigates the trust relationships between supervisors and co-worker.

The organisation's supervisors are seen as the most influential people because they are the focal point for both downward and upward aspects of communicating with stakeholders. Their behaviour strongly affects staff engagement with the organisation. Research in this field suggests that the supervisor has a prominent role in communication, developing relationships with employees, and in building a group-oriented engagement (Rich, Lepine & Crawford, 2010). Rodwell, McWilliams and Gulyas (2017) conducted a study on the quality of the relationship between managers and nurses and the impact of the characteristics of this relationship on trust, interaction and retention intention. They found that supervisors could maintain stable, well-functioning and more disciplined nursing teams if they had a thorough understanding of social exchange at work. In particular, adherence to a consistent level of quality of the relationship with the employees, and the supervisor's willingness to come to nurses' clinics were likely to improve nurse retention. Abu Bakar *et al.* (2009), also found

that encouraging co-worker to engage in the team comes from high levels of communication between supervisor and employee. Hence, the following hypotheses have been formulated.

Hypothesis 1: Supervisory communication is positively associated with supervisor trust.

Hypothesis 2: Co-worker communication is positively associated with co-worker's trust.

3.5.1 Trust in Individuals and in the Organisation

According to Chen et al. (2013), trust can be classified into two classes: (1) particular individuals or teams (e.g. supervisors and co-worker) and (2) generalised representatives (e.g. an organisation). In this study, three types of trust have been highlighted, which gives the research a more extensive scope: 'trust in supervisor,' 'trust in co-worker, and 'trust in the organisation.' Authors in various academic fields have proposed definitions for these concepts. (Thomas, Zolin & Hartman, 2009; Tan and Lim, 2009. Thomas, Zolin & Hartman (2009) define trust in supervisors as follows: 'when employees perceive that they are getting information from their supervisors and co-worker that is timely, accurate and relevant, they are more likely to feel less vulnerable and more able to rely on their co-worker and supervisors' (p. 302). Tan and Lim (2009) define trust in co-worker as 'the willingness of a person to be vulnerable to the actions of fellow co-worker whose behaviour and actions that person cannot control' (p.46). From the employee's point of view, organisational trust is a reflection of supervisors' interaction and daily behaviour with managers. Thus, employee's opinions related to trust are, therefore, subject to change based on supervisor behaviour and communication. Thomas, Zolin & Hartman (2009) notice that the high levels of employees' trust in the organisation has linked to the trust of the employee's in their supervisor. Furthermore, studies indicate that employee trust in a co-worker may lead to the improvement of trust in the organisation (Mishra, Boynton and Mishra, 2014). Those findings drive to the presumption that individual referent trust has correlated with trust in the organisation. The following hypotheses have been formulated:

Hypothesis 3: There is a positive relationship between supervisor trust and organisation trust.

Hypothesis 4: There is a positive relationship between in co-worker trust and organisation trust.

3.6 Organisational Engagement

The organisational engagement of any employee is usually based on an understanding of the organisation's positive and long-term goals, and his ability to develop professionally in the future of the company. Anitha (2014) recognises engagement as 'the level of commitment and involvement the employee has towards his organisation and its values.' Engagement is the ability and desire of the employee to help the organisation succeed and achieve its objectives and the extent to which the employee makes an effort and uses brainpower and energy (Iyer & Israel, 2012). Caputo, Evangelista & Russo (2016) stress that the engagement of the organisation gives a perception of the psychological relationship between the organisation and the employee. It is essential for those who work at management level to value the employee's organisational engagement, because workers tend to leave if they are uncommitted and replacing them may be expensive. Engagement is the decision to implement the plans of an organisation relating to its objectives and to working toward achieving them with all sincerity (Iyer & Israel, 2012).

Studies on organisational engagement have found other benefits associated with engagement. Bakker & Leiter (2010) found that high levels of engagement lead to improved job performance. In addition, research has shown that engagement could reflect individuals' organisational behaviours. Moreover, organisational effectiveness is the role of the employee's engagement in enhancing the organisation's reputation (Mishra, Boynton & Mishra, 2014). Organisational engagement has beneficial outcomes, not only for the organisation but also for the individuals themselves. Engaged employees can have the best opportunities within the organisation, such as a pay raise, promotion and developing job competency (Caesens, Stinglhamber & Luypaert, 2014; Saks, 2006). Therefore, employee engagement involves several benefits for both parties, and this must be enhanced because it is critical to the success of the organisation and the individual.

3.6.1 Trust and Organisational Engagement

For this research, trust is a voluntary relationship between two people and builds on the actions of the other party. Mayer, Davis & Schoorman (1995), define it as 'willingness of a party to be vulnerable to the actions of another party' (p. 712). Trust is the result of a harmonious and long-term relationship between two individuals or entities and allows the person or individual (employee) as an entity to rely on the promises and statements of another entity (supervisor or organisation). For example, the employee trusts that his supervisor will

be fair in dealing with him and in his decisions and that the supervisor will provide opportunities for career growth, the tools required to carry out his duties well, and understandable guidance on how to properly perform his duties. If these expectations have been met, the employee will likely make an effort and pay more attention to his work.

Conversely, if the employee does not trust his supervisor, he will likely take more time to complete his work, will frequently ask the supervisor for directions, or even seek a different career. Contact with the supervisor takes two directions – up and down – to convey information and decisions between senior management and individuals. The supervisor's responsibilities depend on his understanding and acceptance of the work ideas, the extent of his interest and attention, and on his ability to solve problems and provide guidance in overcoming job-related difficulties. According to previous studies, there is a correlation between engagement and trust in supervisors (Garoon et al., 2016). For instance, Macey and Schneider (2008) found that trust in managers predicted effective engagement and a marked emotional engagement. This means that positive relationships between supervisors and employees will enhance an individual's engagement. Thus, the following has been hypothesised:

Hypothesis 5: There is a positive relationship between supervisor trust and employee engagement.

Trust in co-worker is also linked to increased organisational support, low turnover intention and higher emotional engagement (Halbesleben & Wheeler, 2015; Lau and Liden, 2008). Tan and Lim (2009) explored trust in the organisation and trust in co-worker and found that trust in the organisation mediates both trust in co-worker and engagement. There is a high level of trust in the supervisor when making any changes in organisation trust. Employees may feel careless or unwilling to participate if they are uncertain about whether to trust their colleagues (Brunetto *et al.*, 2012). This feeling can arise when employees do not receive multiple or sufficient messages from colleagues on time. As accurate information gives employees a sense of membership and safety, the accuracy of the information exchanged is more critical for trust in the organisation.

Trust can be built based on the perception of the beliefs of the other person. These beliefs and perceptions have been shaped by information. Thus, providing information properly to the employee can strengthen the trust relationship with the organisation, whereas a lack of information may lead to lack of confidence. There are two dimensions of information sharing that are often discussed, namely; information adequacy and quality (Thomas, Zolin & Hartman, 2009).

Overall, if employees trust their organisation, this will result in their engagement with it. Furthermore, trust in the organisation enhances an individual's ability to engage in that organisation. Trust is recognised as the closest source of organisational engagement. Research has found that trust in the organisation is established if co-worker see the action and goals of the organisation as beneficial and vice versa (Macey and Schneider, 2008). According to Poon (2006) there is a disparity between the engagement of settled employees and temporary staff; staff who display great trust in superiors show more engagement in their organisation than temporary workers who are less secure in their jobs.

Thus, the following hypothesis has been formulated:

Hypothesis 6: There is a positive relationship between co-worker trust and employee engagement.

3.6.2 Organisational Communication and Organisational Engagement

Employees believe that when managers and supervisors are accurate and direct, they are trustworthy. In addition, adequate comments and timely explanations of decisions lead to significant levels of confidence (Walden, Jung and Westerman, 2017; Karanges *et al.*, 2015; Welch and Jackson, 2007). It is clear that when supervisors take enough time to explain their decision accurately, confidence is likely to increase (Iyer & Israel, 2012).

Lockwood (2007) states that 'lack of communication or poorly communicated information can lead to distrust, dissatisfaction, scepticism, cynicism and unwanted turnover.' This is even more relevant in times of crisis, as observed by Meyers & Holusha (1986), 'When a crisis occurs, employees are affected on a personal level, in ways and to an extent dissimilar to any other audience. Their immediate reaction is often to be 'stunned and lose a sense of common purpose and cohesiveness.' Gripped by fear, employees may stray from their sense of reality and turn inward, focusing exclusively on their personal needs and ignoring the

organisation's needs.' These thoughts lead to the conclusion that 'clear, concise, timely and honest communication is a very important management tool towards building employee engagement in organisations' (Lockwood, 2007).

It can be said that communication is a multi-dimensional construct, and communication scholars have become interested in how these dimensions affect employee engagement. Galletta *et al.* (2013) discovered that some of the vital factors closely related to employees' organisational engagements are: the relationship with supervisors, the climate of communication and relations with the principals. According to Chia (2005) 'trust and engagement are by-products of processes and policies which are designed to make the relationship satisfactory for both parties, such as open, appropriate, clear and timely communication' (p. 7). Failure to provide the necessary tools and support for the employee may result in reduced employee participation and performance before the actual departure of the employee (White, Vanc & Stafford, 2010). Moreover, it is possible to improve an employee's sense of involvement with the organisation by delivering high-quality task-related information.

There is a scarcity of study on the association among vertical and horizontal communication and its role in employee engagement. However, in order to improve and enhance the effectiveness of participation and staff performance, the importance of communication among co-worker cannot be neglected. Elving (2005) investigated the relationship between organisational engagement and horizontal and vertical communication. He found that although horizontal communication is informal, it is positively correlated with organisational engagement. Furthermore, Caputo, Evangelista and Russo (2016) found that, in addition to the communication relationship, the quality of the information received from co-worker is closely related to organisational engagement. Conclusions can also be drawn from management scholars. For instance, Thomas, Zolin and Hartman (2009) state that 'when employees perceive that they are getting information from their supervisors and co-worker that is timely, accurate and relevant, they are more likely to feel less vulnerable and more able to rely on their co-worker and supervisors' (p. 302). Thus, the following hypothesis has been formulated:

Hypothesis 7: Organisation trust is positively related to employee engagement.

3.7 The Role of Trust and Social Exchange Theory

The importance of quality communication between the supervisor and employees has recently become clear (Lioukas & Reuer, 2015). This relationship has become increasingly known as a leader-member exchange (Rodwell, McWilliams & Gulyas, 2017). The theory of social exchange is based on the exchange of members and supervisors. It can be expressed as a series of mutual interactions between two or several parties in the system of exchange and trust among these individuals (Cropanzano & Mitchell, 2005). Employees' perceptions of higher quality communication with their supervisors are associated with lower levels of intention to leave or higher levels of intention to stay; this has been shown in both qualitative studies (Schoenherr, Narayanan & Narasimhan, 2015) and quantitative studies (Schilke, Reimann & Cook, 2015; Galletta et al. 2013).

The correlations between the perceived quality of employees' communication with their supervisor and their different outcomes have been seen as another mechanism, especially the intention to leave (Rodwell, McWilliams & Gulyas, 2017). According to Denison & Mishra (1995) trust is perceived as one of the fundamentals of growing social exchange, helping to promote social exchange among individuals, mutual loyalty and goodwill. Trust, which is defined as 'concern' for each other's interests, can also be built through open communication (Mishra, Boynton & Mishra, 2014). Ki and Hon (2007) conclude that 'trust is one of the main constructs used to measure a successful relationship between parties' (p. 422) because it measures the levels of honesty and reliability. Communication is one critical factor influencing both trust and relationships, but in some cases 'management credibility and trust are under attack from confused and poorly integrated communications' (Quirke, 2017, p. 15). Therefore, if employees trust their superiors or supervisors, they are more likely to have a successful history of social exchange with them (Blau, 1964). These exchanges may create high reciprocal response expectations from the supervisor with feelings of engagement towards the organisation (Cropanzano & Mitchell, 2005). Thus, the model developed in this research suggests that employees and supervisors can exchange high-quality communication within an organisation through organisational trust, which in turn leads to organisation engagement.

In an organisation, the relationships between the supervisor, employee and co-worker should be utilised to improve organisational communication trust. Engagement is generally seen as an employee's trust in the significance of hard work and diligence (Garoon *et al.*, 2016). This association is beneficial for understanding the intention of the individual when assessing the employee's engagement in an organisation (Heide and Simonsson, 2018).

3.7.1 Social Relationships in the Workplace

It is likely that an employee who receives high levels of trust, whether from the supervisor or co-worker, will act voluntarily to support the organisation's goals. This trust is related to employee engagement directly or indirectly. According to trust literature, it is thought that social communication in an organisation also concentrates on the things, perceptions and attitudes of individuals within the organisation.

The individual within an organisation interacts with colleagues in several forms – subordinate, supervisor or peer – and his perceptions, feelings and attitudes may be negative or positive. Some researchers, such as Brunetto *et al.* (2012), and Taylor & Kent (2014), concentrate on the social relationships within an organisation regarding employee trust in colleagues and their role in enhancing trust in the supervisor and willingness to participate. Significant relationships have been found between them. Emphasis has also been placed on social relationships in terms of employees' sensations related to pleasure and hate, talking, interacting and working with colleagues. This study examines the relationship between supervisors, co-worker and organisations and trust.

The theory of social exchange emphasises that organisations have a lot of dealings and exchanges among their actors, known as mutual and social transactions (Blau 1964). These relationships involved in future obligations are called social exchanges. These future obligations are characterised by being undefined, which is in contrast to what is known as economic exchanges (Jose & Mampilly, 2012). It can be said that employees who have a future engagement are those who have high levels of trust in their organisation. Engagement is, therefore, one of the obligations that an employee brings back to his work environment when the latter is trustworthy. Prior research has shown that organisational engagement is positively related to trust within the organisation (Mishra, Boynton & Mishra, 2014; Galletta *et al.* 2013). Garoon *et al.* (2016) note that trust in the supervisor may possibly play the role of emotional engagement between an employee and the organisation. Recently, Mishra,

Boynton & Mishra (2014) found that the relationship mediated between emotional engagement and trust among co-worker. In conclusion, it is assumed that by influencing the perceived trust between employees and supervisors, organisational trust affects employee engagement.

3.8 Conclusion

The review of the literature on internal communication trust and engagement has revealed that employees' relationships with their supervisor and co-worker might affect their actions and behaviours, as well as the level of supervisor and organisation trust, thus determining the level of engagement in the organisation. However, these factors are dependent upon the range of trust in the internal communication between supervisors, employees and co-worker. Employees' relationships with co-worker can influence their trust in, and loyalty to, their supervisors, leading to improved organisational engagement. Therefore, it is mostly revealed by the influence of co-worker on job satisfaction variables and organisation engagement. Empirically, the positive influence of the co-worker has been found in the development of the relationship between employees and supervisors and their overall loyalty to the organisation. It may help to understand the trust in a relationship with co-worker and to enhance employee engagement, individual factors such as peer-to-peer relationships, communication skills between employees and supervisors and strengthening trust by disseminating information. Therefore, it is vital to identify and evaluate the role of trust between supervisors and co-worker in influencing employees' engagement toward the organisation.

Based on the above, the researcher has developed a conceptual framework, including the theory of social exchange, the Mannheim theory of generations. The theoretical approach highlights the role of trust in internal communication and supervisor and co-worker trust as critical drivers of employee engagement in an organisation. These factors have examined employee engagement in several aspects, such as absenteeism, turnover and quitting. However, studies have not adequately recognised the role of social constituents in interpreting the association between internal communication and better employee engagement. Moreover, most of the research related to trust in internal communication and engagement has been conducted in developed or Western countries, whereas few studies have considered Saudi Arabia in general and in particular, servicing public organisations.

Chapter 4 Research Methodology

4.1 Introduction

This study was developed based on a review of the literature on the subject of interest. The conceptual approach was evaluated in the previous chapter, and some hypotheses related to dependent and independent study variables were developed to support the theoretical concepts. This chapter discusses the choice of a suitable research method to ensure the validity of this study. It also includes a clear and comprehensive explanation of how this research was completed. The chapter first reviews the philosophical position of the study to in order to justify the reasons for adopting the research method. The discussion is limited to justifying the choice of the research strategy. The research scheme was designed based on the research method to follow up on the investigation, step by step, in a systematic process. In particular, this chapter explains the practical study methodology, including data collection and data analysis.

This chapter is divided into four main parts: (a) a research philosophy section, which discusses the difference between the research methods (quantitative and qualitative) and the researcher's way of thinking in the development of knowledge (research approach), which justifies the use of the quantitative data in this study; (b) a study design section; (c) data collection methods, including sample selection, improvement of participation in the survey and measurement areas; and (d) ethical issues, to ensure that the data were unbiased. The chapter ends with a conclusion.

4.2 Research Philosophy

Research philosophy refers to the way the researcher thinks about developing knowledge. According to Saunders & Lewis (2012) research philosophy is 'the way the researcher sees the world and guides the problem.' Mainly, the research principles guide the researcher on how to conduct the research and what it should achieve. This section addresses the researcher's philosophical opinion on the subject of the study and describes the choice of research methodology. The researcher's awareness of philosophical issues in various topics of the study is beneficial. The problematic issues faced by the researcher have a significant impact on the study in several forms, such as sample selection and data collection. The

essential concepts in a research philosophy are how we define the truth (ontology) and the way we know it or look for the truth (epistemology) (Gilbert, 2001).

There are two main models of research: positivism and interpretivism (Collis & Hussey, 2013). Each method has strengths and weaknesses that can influence a study in several areas.

Positivism is a philosophical theory that believes knowledge is 'positive' based on natural phenomena, their characteristics and their relations. Thus, information derived from sensory experience, which has been interpreted through reason and logic, constitutes the exclusive source of all specific knowledge (Saunders & Lewis, 2012). The position assumes that the correct instruction (stability or truth) exists only in this subsequent knowledge. This philosophical theory is interested in quantitative research and is usually seen in studies of social phenomena. This method is more suitable when the object of the research is to gather data related to the frequency of occurrence of phenomena. Sekaran and Bougie (2016, p-42) state that the aim is to gather 'facts' about society in sophisticated, correct, reliable and statistically comparable ways to analyse, and to arrive at explanations about how the social world works around us. This philosophy has led to the emergence of other social schools of thought, such as post-position philosophy, interpretive philosophy, demonstration and the monetary movement (Gilbert, 2001).

The second philosophy is phenomenology (interpretivism). Phenomimes were used first in the field of psychology to indicate the psychological phenomena (desire, perception, sensation) and manifestations of consciousness in its content. Phenomenology is based on the observation and description of the phenomenon as given. In its philosophical and ontological context phenomenology means defining the structure and general conditions of phenomena: specifically it is, the problem of emergence, of whatever phenomenon, which at first relates directly to consciousness. Phenomenology seeks to explain the world through the search for its possible conditions, or rather to form the experience, as the first encounter between the consciousness and the world, which is a previous meeting on every thought about the world. There are three trends in phenomenology: 1) Kant (1724-1804) monetary phenomenology, which seeks to define the possible conditions of objectivity framed by self-evidence and which defines the limits of absolute knowledge; 2) phenomenology of appearances, which is determined by the appearance of the object and its path towards absolute knowledge; and 3) foundation phenomenology, which seeks the possible conditions for every thought, expression, or measure, and contrary to the manifestations of the object seeks absolute

thought behind it. Foundation phenomenology looks for a base or a pillar that stems from, or is founded, or sees the existence of every phenomenon (Yin, 2003). Table 4.1 below summarises the two philosophies.

Table 4. 1 Summary of Research Philosophies

Positivism	Phenomenology (Interpretivism)
<ul style="list-style-type: none"> • Aims to develop valid and reliable ways of collecting ‘facts’ about society, which can then be statistically analysed to explain how the social world operates. 	<ul style="list-style-type: none"> • All kinds of science are found to serve the humankind. • Tries to understand the reality of phenomena. • Tries to interpret and understand human behaviours by knowing the values and systems that surround us.
<ul style="list-style-type: none"> • Assumes that society has objective social facts. • Objectivity. • Quantitative data. • Focus on events. • Search for causality and necessary enactment. 	<ul style="list-style-type: none"> • Realty is constructed through the meanings created by individuals. • Subjective meaning. • Qualitative data. • Focus on meanings.

Source: Easterby-Smith *et al.* (1991)

The method used by a researcher about the phenomenon under study is what determines the type of scientific approach followed. From the philosophical point of view, the model of the situation begins when the researcher reviews the previous studies related to the phenomenon, followed by the search for the appropriate theory and then the testing of hypotheses. The researcher also follows the method of interpretation of the phenomenon, and finally builds a comprehensive theory to include all facts (Yin, 2003). The interpretive research approach begins by witnessing phenomena, investigating ideas and patterns, forming relations, forming a theory, then supporting the theory and finally, improving hypotheses. The figure below illustrates the two different methods. Previous authors have recognised that every method belongs to a school of philosophy that is distinct from other schools. However, access to a

true, healthy, and reliable phenomenon is the ultimate goal of these schools of thought (Easterby-Smith *et al.*, 1991). The different features of the two models are shown in table 4.2.

Table 4. 2 Fundamental characteristics of positivism and interpretivism

Topics	Positivism	Interpretivism
Fundamental beliefs	<p>Absolute truth exists and can be stripped of human consciousness.</p> <ul style="list-style-type: none"> • The truth is accessed through understanding the relationships and laws that govern and connect the different variables. 	<p>There is no absolute truth, but multiple opinions differ according to human perception.</p> <p>Knowledge is accessed by exploring opinions.</p> <p>Uses qualitative methods to study phenomena in their surroundings, and resorts to repetition and comparison.</p>
Position of the researcher for the study	<ul style="list-style-type: none"> • No effect of the researcher, who must isolate himself and adopt full objectivity 	<p>Looks at the totality of each situation.</p> <p>Develops ideas through induction from data.</p> <p>Uses qualitative or multiple methods to establish different views of the phenomena.</p>
The appropriate Sample	Large samples.	Small samples in depth or over time.

Source: Easterby-Smith *et al.* (1991).

The research design applied for this study is based on the (hypothetico-deductive) method. This method starts from a literature review, theoretical framework, formulating hypotheses and making logical deductions from the results of the study (Sekaran, 2006). However, to select an appropriate method to carry out this research, it is necessary to define the three research approaches (inductive, deductive and abductive).

Inductive Approach

The inductive research method aims to establish limited generalisations about the distribution of, and patterns of association amongst, observed or measured characteristics of individuals and social phenomena. The Inductive approach to inquiry builds generalisations out of

observations of specific events. It starts with singular or particular statements and ends up with general or universal propositions (Gilbert, 2001). It presupposes that explanations about the workings of the world should be based on facts gained from pure, dispassionate and neutral observation, rather than on preconceived notions, that nature will reveal itself to a passively receptive mind (Saunders & Lewis, 2012). The Inductive strategy assumes that all science starts with observations that provide a secure basis from which knowledge can be derived and claims that reality impinges directly on the senses; hence there is a correspondence between sensory experiences, albeit extended by instrumentation and the objects of those experiences. The conclusion of an inductive argument makes claims that exceed what is contained in the premises and so promises to extend knowledge by going beyond actual experience (Ray, 2009). The more observations that demonstrate, a relationship between phenomena, is the higher the probability that the general statement is true. Verification of derived generalisations comes through observations about particular phenomena that appear to support it (Sekaran & Bougie, 2016). Inductive reasoning works the other way, moving from specific observations to broader generalisations and theories. Informally, researchers sometimes call this a 'bottom-up' approach.

Deductive Approach

The hypotheticodeductive approach is the reverse of an inductive one. It begins explicitly with a tentative hypothesis or set of hypotheses that form a theory, which could provide a possible answer or explanation for a particular problem, then proceeds to use observations to test the hypotheses rigorously. The deductive argument moves from premises, at least one of which is a general or universal statement, to a conclusion that is a singular statement. Deductive propositions form a hierarchy from theoretical to observational; from abstract to concrete. The deductivism accepts that observation is guided and presupposed by the theory (Malhotra, 2017). Deductive reasoning works from the more general to the more specific. Sometimes this is informally called a 'top-down' approach.

Abductive Approach

The Abductive research strategy in comber involves constructing theories that have derived from social actors' language, meanings and accounts in the context of everyday activities. Such research begins by describing these activities and meanings and then deriving from them categories and concepts that can form the basis of an understanding of the problem at hand (Timmermans & Tavory, 2012). The abductive approach is used by Interpretivism to

produce scientific accounts of social life by drawing on the concepts and meanings used by social actors and the activities in which they engage. Whilst the inductive research strategy can be used to answer ‘what’ questions and the deductive strategies can be used to answer ‘why’ questions, the abductive strategy can answer both types of questions. However, it answers ‘why’ question by producing an understanding rather than an explanation, and by providing reasons rather than causes (Malhotra, 2017). Abduction acknowledges that human behaviour depends on how individuals interpret the conditions in which they find themselves and accepts that it is essential to have a description of the social world on its own terms. It is the task of the social scientist to discover and describe this world from an ‘insider’ view and not impose an ‘outsider’ view. Abduction is applied when attempting to move from lay accounts of everyday life to technical, scientific or expert descriptions of that social life. Abduction is a developing strategy with on-going debate on how best to move from lay language to technical language. There are differences of opinion about retaining the integrity of the phenomena when moving first-order constructs (people’s views and explanations), to second-order constructs (the social scientist’s interpretations). The comparison of the three approaches researched are summarised in Table 4.3, as shown below.

Table 4.3 Comparison of the Different Research Approaches

Deductive	Reproductive	Abductive
To test theories, to eliminate false ones and corroborate the survivor	To discover underlying mechanisms to explain observed regularities	To describe and understand social life in terms of social actors’ meaning and motives
Cautious or subtle realist	Depth or subtle realist	Idealist or subtle realist
Falsifications, Conventionalism	Neo-realism	Constructionism
Identify a regularity that needs to be explained	Document and model a regularity and motives	Discover everyday lay concept, meanings
Construct a theory and deduce hypotheses	Describe the context and possible mechanisms	Produce a technical account from lay accounts
Test hypotheses by matching them with data explanation in the context	Establish which mechanism provide the best	Develop a theory and elaborate it iteratively

Source: Malhotra, (2017).

The researcher needs to choose the correct methodology before launching his study. It noted that both positivism and interpretivism approaches have weaknesses and strengths (Yin, 2003). Economic positivism is rapid and can include a greater area of the community, but its approach to data gathering is not flexible. While data collection methods have been seen in phenomenology, they tend to be more regular than they are unnatural. This approach promotes the pure knowledge of people's thoughts and beliefs. One weakness of this method is that it requires more sources and requires a long time span for collecting data. It is also

seen as requiring analysis and interpretation that are more difficult than a positive approach (Saunders and Bezzina, 2015).

The philosophy of research depends on the theory of knowledge and ontology. Since this philosophy depends on the researcher's relationship with the tools used and methods adopted through the researcher, also the actuality to uncover or understand the reality (Sekaran & Bougie, 2016). The epistemology theory of knowledge depends on the belief in the independence of observers. In this research, both paradigms of research discussed are based on objective and external ontology.

4.3 Research Approach Adopted for the Study

This study measures the relationship between independent and dependent variables. The research started with a review of a large amount of literature related to the research problem. Although both methods are acceptable to use, according to the conceptual approach, a quantitative method has been adopted for both data collection and data analysis for several reasons. First, this study considers variables and tests the association among them, which requires a quantitative approach. The second reason relates to the study's ontological position, which requires factual social data. Third, one of the advantages of using a quantitative approach is that data can be collected completed anonymously. It is recommended for investigating a sensitive subject that people may not want to talk about it. This study considers mutual trust between supervisors, co-worker, and organisations, which the researcher believes is a sensitive subject. The fourth reason for adopting a quantitative method is about the nature of human beings, depending on the environment to which they belong. Finally, this approach offers a relatively quick way of gathering data from many people simultaneously. In this study, data has been obtained by using the survey questionnaire. The study was conducted in the Ministry of Labour and Social Development of Saudi Arabia. To complete the survey, the reliability of the questionnaire, language and the time it would take, was determined by conducting a pilot study and analysing the resulting data using scientific research tools. The hypotheses were also tested.

4.3.1 Justification of the Quantitative Approach

Quantitative research looks for the causes and facts from the relationships between variables so that a cause-and-effect link can be identified between these variables. It thus becomes possible to arrive at accurate predictions about the phenomena under study. Furthermore,

quantitative research aims to test experimental variables whilst controlling or adjusting the intercept variables that appear in the study context. Thus, the relationships between variables can be generalised and predictable in similar fields or research communities. Quantitative research aims to test theories, and researchers work in a standard way, by defining a method that already exists in the literature and obtaining the necessary concepts and definitions. The relations between the variables are assumed, and the data are collected and analysed statistically. Based on the obtained results, the hypotheses are accepted or rejected, followed by the theory itself. In quantitative research, the study is designed and hypothesised, and the variables are described along with the measurement method.

Furthermore, it has noted that concepts used in quantitative research are defined procedurally, so hypotheses identified from the beginning have been tested. The researcher must make sure that the measures used, such as a survey, are correct and consistent by using the tests of honesty and consistency. The data are collected and categorised quantitatively or digitally, and then statistical analysis is conducted to yield the results.

The present study was carried out in the Ministry of Labour and Social Development Sector in Saudi Arabia, where employees can develop their behaviours and attitudes based on the quality of the internal communication and the degree of trust between the supervisor and co-worker within the organisation. Therefore, an approach was needed that enabled the researcher to understand the attitudes and beliefs of employees from multiple perspectives.

4.3.2 The Rationale for Using a Quantitative Approach

Trust in internal communication is essential in developing relationships within the organisation and strengthening employee engagement. Human engagement in the labour force and individual differences of employees are due to personal life experiences and differences in knowledge, behaviour and beliefs; these factors put the current organisations in front of new challenges. Information needs to be shared effectively, and trust needs to be built so that individuals can form reciprocal relationships with each other in the workplace. The literature supports that trust is based primarily on the perceptions and attitudes of employees and their beliefs in dealing with communication with supervisors or co-worker inside or outside the organisation.

An employee can have a variety of feedback in the case of poor quality of communication within an organisation. Effective communication with supervisors and clarity of the message can provide more significant opportunities for participation, growth and learning, thus enhancing the power of engagement. At the same time, unclear or confusing communication leads to feelings of frustration, uncertainty and anxiety, significantly affecting individual engagement and thus leading to faster turnover or quitting. Therefore, researchers and practitioners are eager to learn about employees' behaviour and attitudes towards internal communication within the organisation.

In the field of internal communication, employee engagement is associated with attitudes of trust and behaviours that are supportive of trust (Barfoot, Doherty, & Blackburn, 2016; MacLeod & Clarke, 2009). Schaufeli (2013) stresses that engagement is a mental state of mind linked to the employee's willingness to help achieve and share an organisation's goals in ways that support the strength of the relationship between the parties and the exchange of benefits. Many academic researchers want to learn how to enhance employee involvement to maximise engagement.

4.4 Design of the Research

This research aims to investigate employee engagement within the organisation, career relations, and social relations in the workplace as an independent variable, along with internal communication trust in the organisation as a dependent variable. First, the literature on the subject of the study was reviewed to identify any research gaps; and to promote perception in the field of study. It noted that employee engagement could develop through trust in internal communication. In this sense, researchers have empirically examined employee engagement factors and the role of trust, and found positive results (Rodwell, McWilliams & Gulyas, 2017). However, the role of employees' trust in their supervisors has not yet been examined concerning employee engagement. This study aims to investigate employees' trust in their supervisor and the organisation by examining employees' behaviours and attitudes concerning trust in internal communication. The study also analyses the elements that affect employee engagement. This research is currently being conducted in public sector institutions in Saudi Arabia, where many recent changes in the system of work have taken place.

The design and development of this research took place at clearly interrelated stages and was based on the assumption that the studies are related to each other. Each stage begins after

completion of the previous phase. For the research to be successful, attention must be paid to the design because it helps to define the framework and limits, and helps to show the study coherently and logically (Saunders & Bezzina, 2015).

The design of this research is based on the literature related to the subject of the study. The theoretical framework and the formulation of the hypothesis that helps the researcher to achieve logical results have been created. This method of deduction in the development of hypotheses helps the researcher conduct the research and address the research problem (Collis & Hussey, 2013). Figure 4.3 lists the step-by-step process used to conduct the present study.

The first step of the research was to define a specific research strategy by starting an in-depth study of previous literature related to the subject. This increased the researcher's understanding of all aspects of the research topic and helped to confirm the knowledge gap. The researcher then developed a conceptual model to apply the research and identify the factors associated with trust in internal communication as an effective factor in employee participation. Following this, the data was collected, and the assumptions of the study validated. A quantitative approach was used for data collection and analysis.

Based on the above, it can be said that the data collection approach used in this study was the quantitative approach, with the use of a questionnaire (survey method). In the positive approach, a Likert scale was used because it is reliable and gives a clear measure of the ideas and beliefs of the respondents on the subject of the research (Sekaran & Bougie, 2016).

Given the need to apply the quantitative approach to the collection and analysis of data for this study, the use of this strategy is important for the following reasons:

To facilitate data collection and coordination for the research:

1. To set the specific timeline of the study.
2. To ensure the correctness of data collection using the scientific approach.
3. To follow the scientific approach to developing knowledge.

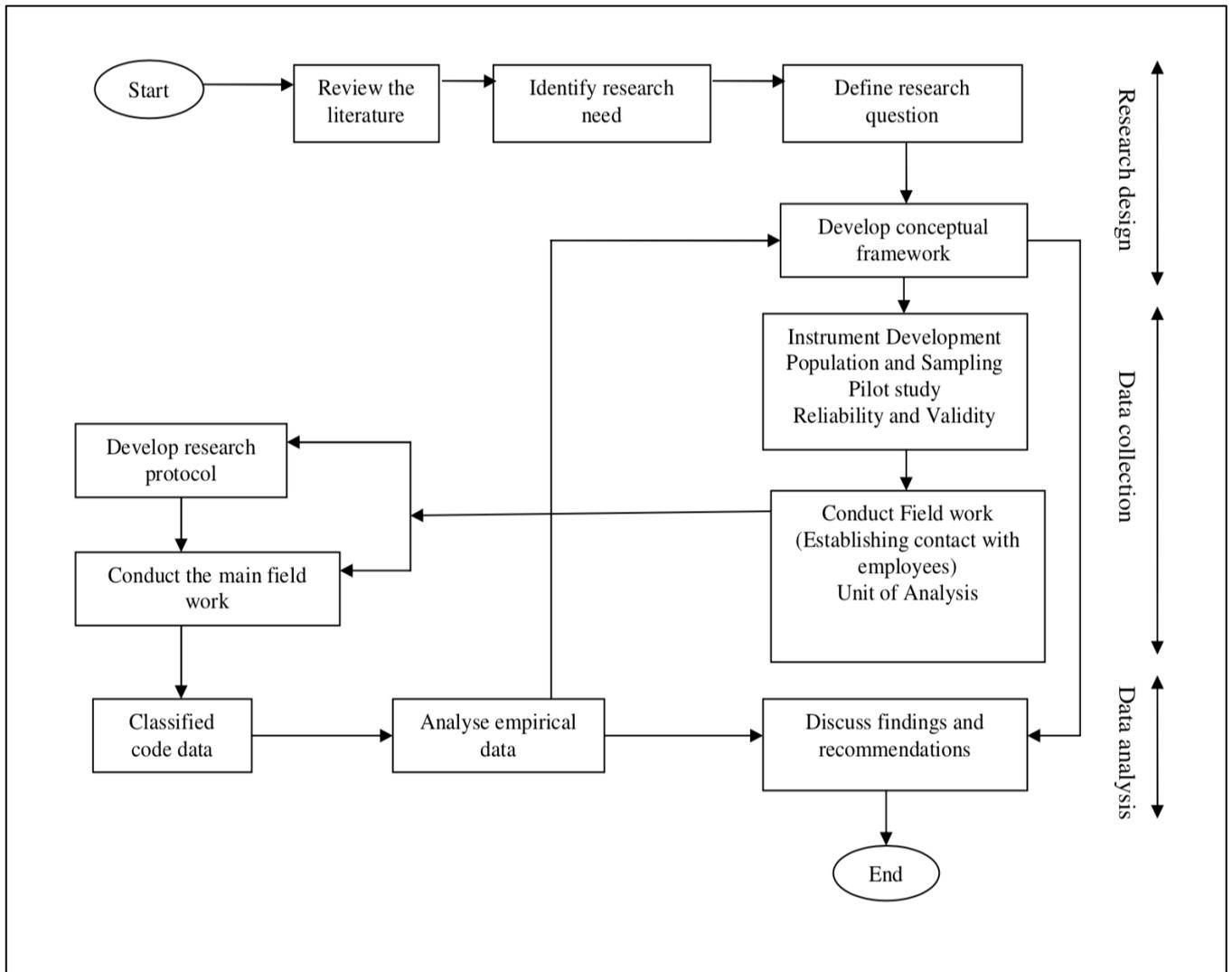


Figure 4. 1 Research Design

4.5 Research Methods

Public service institutions were analysed using a survey questionnaire, consisting of a series of questions about the factors leading to the evolution of organisation engagement. In addition, information was collected on the Ministry of Labour and Social Development through the website, office documents, circulars, archives and newspaper reports in Saudi Arabia.

The researcher verified the validity of the questionnaire by considering the contextual aspect of the questions before collecting the data. Also, the researcher tested the validity of the questionnaire by examining the tools used in collecting the data. A pilot study was conducted to ensure that the internal context and the items and language of the questionnaire were

correct and logical. This entailed presenting the questionnaire to the academic supervisor at the university and some experts and academicians.

The researcher used Standard Error of the Mean (SEM) to measure the standard deviation for the distribution of the sample combined with the estimation method. According to the IBM SPSS site, ‘when you conduct research, you’re probably already using factor and regression analyses in your work. Structural equation modelling (sometimes called path analysis) can help you gain additional insight into causal models and explore the interaction effects and pathways between variables. SEM lets you more rigorously test whether your data support your hypothesis. It creates more precise models, which sets the research apart, increasing the chances of getting published. IBM SPSS Amos is the perfect modelling tool for a variety of purposes, including social sciences, the study of how socioeconomic status, organisational membership and other determinants influence differences in voting behaviour and political engagement’ (SPSS Amos Site, 2018).

4.5.1 Questionnaires

Questionnaires are more widely used in scientific research compared with other methods because they are used to interpret relationships between variables. Most previous studies on the subject of this research have used survey tools for data collection, which is considered an effective way to identify variables and collect data (Saunders, Lewis & Thornhill, 2007). According to Hussey and Hussey (1997) the purpose of a survey is to know the feeling, belief, or orientation of a particular group of individuals at a specific time. The focus of the present study is employees’ beliefs and behaviours regarding confidence in internal communication and its impact on employee engagement in the organisation. Employee engagement is influenced by trust in supervisors and colleagues; therefore, the survey could ask respondents about their feelings in this regard. A Likert scale is a measurement used to understand the ideas and beliefs of respondents regarding a phenomenon or problem (Nemoto & Beglar, 2014). A Likert scale was applied in this study because it has many advantages, the most important being that it gives good reliability since it allows a greater range of permissible responses to the sample. The development of a survey questionnaire depends on the type of information required. Survey questionnaires can clarify individuals’ perspectives and their attitudes and understanding of organisational practices within the workplace (Saunders and Lewis, 2012).

There are different ways to manage questionnaires in terms of time, potential response, quality, and cost. A comparison of three styles of administering a questionnaire – via Internet, by mail, and via delivery and collection method – showed that the delivery and collection method achieved a higher response rate of about 50% to sometimes 98% (Collis & Hussey, 2013). Therefore, the collection of data through delivery and collection of questionnaires is an economical and practical solution.

Hence, the researcher decided to apply the delivery and collection process to gather quantitative data. Considering Saudi culture, the researcher implemented two methods to distribute the questionnaire, as individual distribution was found to be a more effective and practical method of enhancing responses, rather than arranging a telephone survey or an e-survey. Whilst conducting the first method, the researcher went to the employees in person and accompanied the department managers in handing over the questionnaires to each employee. In the second method, the researcher placed the questionnaires in the office of the department managers to be distributed during the most convenient times for employees. This was also done for cases when it was difficult to distribute the survey directly, such as in the private departments, which do not allow the entry of non-employees, as well as women's sections. However, this method required the researcher to consume a lot of time distributing and receiving the questionnaires. Each respondent had to complete all the questions in a matter of days, and then the researcher came and collected them after one or two weeks. This enabled the researcher to deliver 700 questionnaires to the sample required.

The target sample included Saudi employees of government institutions that provide services to citizens. Specifically, the study examined the employees of the Ministry of Labour and Social Affairs, with a focus on co-worker trust. The researcher did not include employees who had been at work for less than one year, because the researcher believes that their engagement and organisational trust would likely not be fully developed, and their understanding of the internal communication satisfaction would not yet be complete. Saudi employees were chosen for the sample because of the association among the variables in a non-Westerly context and to fill the research gap.

4.5.2 Content of the Questionnaires

Each questionnaire started with a pre-approval form explaining the research, and the advantages and disadvantages to which participants were exposed. It also informed them that

all data received would be for research purposes only. Confidentiality and anonymity were guaranteed. Moreover, individual responses were not revealed due to ethical and moral considerations. This study was explanatory and required data to examine the relationship between research variables (engagement and trust in internal organisational communication). Thus, the variables in this study are classified into two kinds, which are illustrated in table 4.3 below.

Table 4. 3 The study data type

Data types	Explanation
The dependent variable	Organisational engagement is the primary dependent variable; it changes in response to trust in internal organisational communication.
Independent variables	Organisational communication and trust both affect Organisational engagement.

In general, respondents were asked to rate their views using a 5-point Likert scale (with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). Although the 5-point scales would be relatively quick to use, they were classified as inappropriate as respondents could not express their views adequately. Most researchers prefer the 5- and 7-point scales, because the single number gives the respondents a middle number as neutral, thus giving greater freedom to the target sample of choice when their answers are not certain (Nemoto & Beglar, 2014). In this study, the researcher needed to understand employees' genuine feelings about the association between engagement and organisational communication trust. Therefore, participants were not forced to answer positively or negatively. All the constructs are measured on a 5-point Likert scale, ranging from 1 strongly disagree to 5 strongly agree.

The questionnaire survey comprised four parts. Section - 1 asked about the participants' characteristics and demographics (Annex 1). Specifically, five questions concerned demographic characteristics, such as gender, age, management level, current employment status, education level and current years of employment. According to Sekaran & Bougie (2016) demographic elements help to determine an employee's situation. In addition, this research depends on the context of the organisation, since the number of individuals who know each other and work with each other may affect their trust relationship. Therefore, the

survey also asked about the length of the tenure of the employee (in years) with the current organisation.

Section - 2 concerned organisational communication in the workplace. These questions adapted from the International Communication Association (ICA) (Downs and Adrian 2004: p-124). It aimed to learn employees' perceptions of this communication. Specifically, respondents were asked to indicate their level of satisfaction with organisational communication with their direct supervisor and co-worker. The questionnaire used 14 items to collect data on employee engagement of organisation communication with direct supervisors, and 15 questions to collect data on their perceptions of institutional communication with their colleagues. Three dimensions of organisational communication were considered in the questionnaire: communication channels, adequacy of information, and communication relationship. Table 4.4 presents the questionnaire items.

➤ **Communication Satisfaction with Supervisors**

Elements	Measured	Number of items	Items
Communication relationship	Satisfaction communication with supervisor.	3	<ol style="list-style-type: none"> 1. I and my supervisor always share opinions, ideas, and feelings toward work and life. 2. I feel easy and comfortable when I communicate with my supervisor. 3. While I disagree with my supervisor, I would still support his decisions.
Adequacy of information	Perceived adequacy of information. Asking about the timeliness and amount of information concerning different types of information received by supervisor.	6	<ol style="list-style-type: none"> 1. How well I am doing job. 2. Roles and responsibilities. 3. Mistakes and failures of my organisation. 4. How I am being judged. 5. Promotion and advancement opportunities in my organisation. 6. Important new product, service, or program developments in my organisation.
Communication channels receive from Supervisor	Employee satisfaction with the amount of information received through 5 different types of communication channels (telephone, face-to-face, written notes, social media, email).	5	<ol style="list-style-type: none"> 1. You're satisfied with face to face communication with supervisors. 2. You're satisfied with Telephone communication with supervisors. 3. You're satisfied with written memos, letters and notices from supervisors. 4. You're satisfied with the information you get through email from supervisors.

			5. your satisfied with the information you get through social media application from supervisors.
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➤ **Communication satisfaction with co-worker**

Elements	Measured	Number of items	Items
Communication relationship	Satisfaction communication relationship	4	<ol style="list-style-type: none"> 1. My colleagues helped me solving work-related problems. 2. My colleagues encouraged my work. 3. My colleagues cooperated well with me at work. 4. My colleagues interact/relate after work.
Adequacy of information	Perceived adequacy of information. Asking about the timeliness and amount of different types of information received.	6	<ol style="list-style-type: none"> 1. My job duties. 2. Roles and responsibilities. 3. Mistakes and failures of my organisation. 4. How organisation decisions are made that affect my job. 5. Promotion and advancement opportunities in my organisation. 6. Important new product, service, or program.
Communication channels	Employee satisfaction with the amount of information received through 5 different types of communication channels (telephone, face-to-face, written notes, social media, email).	5	<ol style="list-style-type: none"> 1. You're satisfied with face-to-face communication with co-worker. 2. You're satisfied with Telephone communication with co-worker. 3. You're satisfied with written memos, letters and notices from co-worker. 4. You're satisfied with the information you get through email from co-worker. 5. You're satisfied with the information you get through social media application from co-worker.

In section - 3 of the questionnaire, participants were asked about their views on the organisational engagement. This was based on questionnaires developed by Meyer and Allen (1997), which are widely used and have high reliability.

➤ **Organisational Engagement**

Element	Measured	Number of items	Scale
Engagement	The employee's emotional attachment to, identification with, and involvement in the organisation.	6	1. I feel a strong sense of belonging to organisation. 2. I really feel as if this organisation's problems are my own problem. 3. I would be very happy to spend the rest of my career with this organisation. 4. I feel "emotionally attached" to this organisation. 5. I feel an obligation to remain with my current employer. 6. This organisation deserves my loyalty.

Section - 4 of the questionnaire measured organisational trust developed by Ferrer's Workplace Trust Survey (WTS). This evaluates the general beliefs of the goodwill of the engagement in the organisation, as well as the degree to which they trust the various actors in the company. It does not only evaluate trust in the organisation, but it can measure internal referrals within the organisation at various levels of the authority, including trust in immediate supervisors and trust in co-worker.

➤ **Trust Variants**

Elements	Measured	Number of items	Items
Trust in the organisation	<p>Participants' trust in their organisation.</p> <p>This included affective, cognitive, behavioural, and normative items.</p>	6	<ol style="list-style-type: none"> 1. I honestly express my opinion at the organisation with the knowledge that employee views are valued. 2. I think that the organisation offers a supportive environment. 3. I believe that the organisation recognizes and rewards employees' skills and abilities. 4. It is generally accepted that the organisation takes care of employee interests. 5. I perform knowing that the organisation will recognize my work. 6. I think that processes within the organisation are fair.
Trust in co-worker	<p>Participants' trust in their co-worker</p>	5	<ol style="list-style-type: none"> 1. I feel that I can trust my co-workers to do their jobs well. 2. I proceed with the knowledge that my co-worker is considerate of my interests. 3. I believe that my co-workers support me if I have problems. 4. I feel that co-workers are truthful in their dealings with me. 5. I will act on the foundation that my co-workers display ethical behavior.
Trust in supervisor	<p>Participants' trust in their direct Supervisor.</p>	6	<ol style="list-style-type: none"> 1. I act on the basis that my manager display integrity in his actions. 2. I think that my manager appreciates and reward when I perform well. 3. I feel comfortable to work with my manager. 4. I believe that my supervisor follows through promises with action. 5. I feel that my manager is available when needed. 6. I believe that my manager keeps personal discussion confidential.

The survey elements were correlated with variables, which were used to test the hypotheses. The researcher tried to gain a deep understanding of respondents by capturing their perceptions regarding trust, engagement, and the role of internal organisational communication. All the answers were considered, and the elements linked with them, and efforts were made to exclude biases during the preparation of the questionnaire. For example, some questions may relate to the supervisor-employee relationship in which the respondent may appear to be emotionally aligned with his supervisor.

4.6 Pilot Study

Pilot studies are used in the early stages of any scientific research. They are the basis on which field studies are built, and they are prepared for the conditions in which scientific research will be conducted. A pilot study can have many advantages for a questionnaire. For example, the researcher can test the questionnaire wording, layout and sequencing; assess the rate of response; examine the survey process and gain experience with participants. According to Lancaster, Dodd & Williamson (2004) pilot studies serve to resolve many issues related to search questions before the beginning of the primary survey and to examine all dimensions of the problem or phenomenon being studied. This distinguishes it from the descriptive studies and from the diagnostic studies, which work to collect data specific phenomenon accurately. It is the first step in the social search series (Van Teijlingen & Hundley, 2001). It comes after the exploratory study phase right at the beginning and is appropriate in this study.

The researcher conducted a pilot study before performing the main survey questionnaire. Initial drafts of the questionnaires (in both English and Arabic) were presented to academics, including research supervisors at Brunel University in the UK and the Human Resources Officer at the Ministry of Labour and Social Development in Saudi Arabia. Based on the results, suggestions, and contributions made by experienced people, practitioners, and the university supervisor, the final version of the questionnaire was developed. The researcher ensured that the final questionnaire was simple, clear and fairly designed, and tried to avoid the main or very complex, emotional, or ambiguous questions, or double projection. The questionnaire was refined to be ready for submission.

The pilot study aimed to verify the clarity of the tool and to ensure that it was easy to complete before being administered to a large sample. The literature suggests that a pilot study sample for surveys should comprise between 10 and 30 participants (Van Teijlingen & Hundley, 2001). Therefore, 20 copies of the questionnaire were directly delivered and collected on 11th March 2018 among an appropriate sample of participants from the same government institution. All 20 of the sample participants returned the questionnaire, representing a 100% rate of response. This could be because Saudi employees do not easily turn down requests made in person. The longest time it took to answer the questionnaire was 15 minutes, the minimum 10 minutes, and the average 12 minutes. The following table (4.2) presents information gathered from the pilot survey.

Table 4. 4 Demographic Characteristics of Pilot Participants

Demographic characteristic	Category	Frequency	Percentage
Gender	Male	12	60 %
	Female	8	40 %
Age	Under 29 years old	4	20 %
	29-39 years old	10	50 %
	40-49 years old	3	15 %
	Over 50 years old	3	15 %
Highest level of education	High school diploma	3	15 %
	High diploma college degree	7	35 %
	Bachelor's	9	45 %
	Graduate school degree (master's, PhD)	1	5 %
Years spent working for the organisation	1 to 3 years	6	30 %
	3 to 5 years	4	20 %
	5 to 7 years	4	20 %
	7 to 10 years	5	25 %
	Over 10 years	1	5 %
Management level	Normal worker	16	80 %
	Supervisor	3	15 %
	Medium manager level	1	5 %
	Top manager level	0	0

- **Reliability and Validity**

Reliability refers to consistency. Although the questionnaire is valid and must be reliable, this is not sufficient on its own (Roberts, Priest & Traynor, 2006). Inner consistency indicates the homogeneity of elements in a measurement or the extent to which the element responses are correlated with the sum of the test points (Heale & Twycross, 2015). This measures the consistency of responses across either all questions or a subset of questions from the survey. Cronbach's alpha (α) was used to calculate the homogeneity of the data. Reliability for the pilot study was tested on a random sample of 20 employees. Table (4.3) shows the reliability of the constructs.

Table 4. 5 Reliability of the Constructs for the Pilot Study

Constructs	No. of Items	Pilot Study Cronbach's Alpha (α)
Communication relationship with immediate supervisor	5	0.72
Satisfaction with the information I receive from my supervisor	6	0.92
Satisfaction with the channel through which I receive information from my supervisor	5	0.72
Communication relationship with co-workers	4	0.92
Satisfaction with the amount of information I receive from my co-workers	6	0.89
Satisfaction with the channel through which I receive information from my co-workers	5	0.93
Organisational engagement	6	0.93
Trust in the organisation	6	0.91
Trust in co-workers	5	0.97
Trust in immediate supervisors	6	0.95

The pilot study proved that the measure of organisational communication with the supervisor has a positive and significant correlation with confidence in interpersonal communication and social relations in the workplace ($P < .01$). The study also showed that trust in co-workers is strongly and positively correlated with the measure of organisational communication trust scale at the level of $P < .05$. Also, there is a significant positive correlation between supervisor trust and employee engagement in the organisation, and a positive correlation between trust in interpersonal communication and social relations in the workplace scales at the level of $P < .01$. Table 4.3 shows all the relations.

4.7 The Main Study Analysis

After the pilot, the main study was conducted among employees of the public sector at the Ministry of Labour and Social Development in Saudi Arabia. This section explains the samples that were targeted in the study, population, and data collection method.

4.7.1 Sampling and Population

The sample represents the actual group of individuals participating in the study, whereas, a population is a group of people with specific characteristics large, and the statistical community may be hypothetical. The sample will always be a subset of the study population (Gilbert, 2001). To collect data, a representative sample should be selected from the target population. The use of samples for experimental studies is important in order to make the required positive comparison (Collis & Hussey, 2013). According to Sekaran & Bougie (2016) the sample helps to provide accurate information about the target sample.

In this study, a random sample of full-time employees was taken from the Ministry of Labour and Social Development in Saudi Arabia. The government has recently announced some reforms in public sector institutions. About 2,000 employees work in this institution, while the public sector as a whole employs 1.52 million individuals (Ministry of Civil Service in Saudi Arabia, 2017). In this study, all levels of positions (head managers, managers, supervisors, and workers) were engaged proportionately. The researcher contacted each department through departmental supervisors before submitting the questionnaire, to explain the purpose of the research, the tools used, and the question of privacy. Department managers were given copies of the questionnaire to distribute to participants.

4.7.2 Target Sample

The target sample in this study comprised employees of the Ministry of Labour and Development in Saudi Arabia. A large sample helps to conduct a multivariate analysis of confirmed factors (Gilbert, 2001). Questions answered by the target sample included demographic information, engagement, supervisors and co-workers trust.

4.7.3 Data Coding, Cleaning and Entry

The researcher tried to code the data in a clear way to facilitate processing by different statistical programmes. To achieve the aim of the coding process, the researcher must

perform this process systematically, using numbers and symbols together according to the nature of the data. He must also avoid human errors during this process. Any human errors must be removed from the data during the input into the computer, especially if the number of respondents is large.

4.8 Reliability and Validity in Main Research

Reliability and validity are two technical characteristics that indicate the quality and utility of the test. They are the two most essential characteristics of the test. Researchers should examine these features when evaluating the suitability of the test for their use (Heale & Twycross, 2015). Reliability refers to how the test measures the characteristic reliably or consistently. It determines whether, if the person tests again, he or she will obtain a similar test result or a completely different one. A test that yields similar scores to a person who repeats the test to measure an attribute or characteristic is considered reliable (Roberts, Priest & Traynor, 2006). Reliable assessment tools produce reliable, replicable, and consistent information about people. To accurately interpret the scores of the test, perform useful employment or career decisions, the researcher needs reliable tools (Gilbert, 2001). This research examines factors for data processing, and then the analysis of the proven factors is used to verify the range of variables used in the study. The correlation between the variables of the research indicates that some aspects can be measured in the same original dimension (Orcher, 2016). Reliability and validity are among the most important topics of interest to researchers in terms of their impact on the results and the ability to disseminate them. Reliability and validity are related to the tools used in the research, their ability to measure their instruments, and the accuracy of the readings taken from these instruments. Therefore, more about reliability and validity will be discussed.

The statistical test manuals provide a report called the standard error of measurement. It gives the margin of error that one should expect in an individual test score because of the perfect reliability of the test. The standard error of measurement is the degree of confidence that the 'real' result of a person falls within a specific range of grades. For example, the standard error of measurement 2 indicates that the correct conclusion may locate in two points in either direction of the result it receives on the test. This means that if the individual gets 91 in the test, there is a good chance that the 'true' degree of the person falls between 89 and 93. The standard measurement error is useful for the accuracy of individual test scores. The smaller the standard measurement error is, the more precise the measurements are.

Validity is the most critical issue in choosing the test. Validity is defined as the extent to which a concept is accurately measured in a quantitative study. It can indicate if the attribute measured by the test relates to functional qualifications and requirements. Furthermore, validity gives meaning to test scores and indicates a link between test performance and functionality. It is essential to understand the differences between reliability and validity. The validity shows how good a test is for a particular situation. Reliability indicates how reliable this test is. One cannot draw correct conclusions from the test result unless one is sure the test is reliable. Even when the test is reliable, it may not be valid (Heale & Twycross, 2015). The validity of the test relevant to the standard is measured by the validity factor. It is reported that between 0 and 1.00 reflects the size of the relationship 'r' between the test and the measurement of the function (criterion). The higher the coefficient of validity, the greater the confidence one can obtain in the predictions made from the test results. However, one test cannot fully predict job performance because success depends on many different factors. Therefore, the validity coefficients rarely exceed .50, unlike the reliability coefficients $r = .40$. (Desimone, 2009).

Table 4. 6 General Guidance for the Interpretation of Validity Factors

Validity coefficient	Interpretation
More than .35	It is very useful
.21 - .35.	It is likely to be useful
.20.	Depends on circumstances
Less than .11.	Unlikely to be useful

Source: Desimone (2009).

As a general rule, the greater the validity factor, the more useful it would be to use the test. The validity coefficients are from $r = .21$ to $r = .35$ for a single test. In contrast, Heale & Twycross (2015) define stability on a precision scale as the ability of the instrument to give the same results if the same measurement is repeated several times in the same circumstances. In most cases, consistency is a correlation coefficient and is the extent to which readings of repeated measurement results are correlated. In many studies where a

measuring instrument is used for the first time, it is tested on specific people and then re-tested on the same people again. Then a coefficient of correlation between the measurement results is calculated comparing the first time with the next time. It is evident that if the instrument is highly credible, the results of the following times will be identical or applicable with the results of the first measurement. Also, consistency depends on internal consistency, which means that questions are all addressed in a general-purpose to be measured.

Roberts, Priest & Traynor (2006) define reliability as the ability of tools used in research to measure the intended instruments. For example, community-based research may examine the prevalence of depression using questionnaires, so the questionnaire must measure depression rather than anxiety or stress. To verify the credibility of the tools used in the research, it must meet several conditions or criteria. The simplest one is the sincerity of the arbitrator because the arbitrator is a competent person in this field and has the scientific and practical background that qualifies him to evaluate questions in the questionnaire and ensure that they measure what it was they intended to measure. Thus, the researcher can point out in his research that he has used the arbitrators as a way of assessing the reliability of the instrument. Types of reliability can be summarised in the table (4.5) as follows.

Table 4. 7 Types of Reliability

Reliability Types	Explanation
Test-retest	Reliability is a measure of reliability obtained by administering the same test twice over a period of time to a group of individuals.
Parallel forms reliability	Is a measure of reliability obtained by administering different versions of an assessment tool (both versions must contain items that probe the same construct, skill, knowledge base, etc.) to the same group of individuals
Inter-rater reliability	Is a measure of reliability used to assess the degree to which different judges or raters agree in their assessment decisions? It is useful because human observers will not necessarily interpret answers the same way; evaluators may disagree as to how well specific responses or material demonstrate knowledge of the constructor skill being assessed.

(Source from: Reliability and Validity of Measurement by Price, P.C., Chiang, I.C.A. and Jhangiani, R., 2018).

There are some statistical methods to measure stability, the most common of which is Cronbach’s alpha. The use of Cronbach’s alpha method relies on internal consistency and

gives an idea of the consistency of questions with each other and with all questions in general. There is also a split-half method. The Cronbach's alpha method is most commonly used when compared to split-half method because it is based on fragmentation more than one fraction and frequently measures the faults between those parts instead of measuring the correlation between only two halves. In general, the judgment of stability depends on the correlation coefficient obtained from the statistical analysis. Many researchers consider that the correlation coefficient that exceeds 0.8 means that the instrument can be used.

To measure the reliability component, the researcher applied the Cronbach's alpha factor to the questionnaire (Collis & Hussey, 2013). To evaluate the validity of the questionnaire, two methods were used. The first method was to ensure that the participants answered the questionnaire accurately (Nemoto & Beglar, 2014). The second method is to make sure that those who did not return the questionnaire were given the same value as the respondents. The validity remains low because it focuses on precision in measurement. However, the validity of this research is high because the methods used are reliable and have been tested by several prominent researchers (Collis and Hussey, 2013, Gilbert, 2001). Table (4.6) demonstrates the reliability of the constructs used in the pilot study and the main study.

Table 4. 8 Reliability of the Constructs

Constructs	No. of Items	Pilot Study Cronbach's Alpha (α)	Main Study Cronbach's Alpha (α)
Communication relationship with immediate supervisor	3	0.729	0.783
Satisfaction with the information I receive from my supervisor	6	0.926	0.943
Satisfaction with the channel through which I receive information from my supervisor	5	0.952	0.938
Communication relationship with co-workers	4	0.925	0.898
Satisfaction with the amount of information I receive from my co-workers	6	0.898	0.906
Satisfaction with the channel through which I receive information from my co-workers	5	0.930	0.891
Organisational Engagement	6	0.932	0.908
Trust in the organisation	6	0.913	0.894
Trust in co-workers	5	0.972	0.887
Trust in immediate supervisors	6	0.955	0.894

Due to low reliability in the pilot study, five items were removed from the main questionnaires, where the Cronbach value was less than 0.7. These removed items are shown in the following table (4.7).

Table 4. 9 Items Removed from the Questionnaire due to low Reliability in Pilot Study

Construct name	Items removed	Reasons
Communication relationship with immediate supervisor	<ul style="list-style-type: none"> • There is contact with my supervisor after working hours to engage in social activities, such as going out together for dinner or coffee away from work. • I know the family members of my supervisor and there is personal contact between myself and them. • I execute my supervisor's orders without restriction or condition. 	<p>Perhaps the question of information, personal life and sharing of communication relationships of participants gives a feeling of uneasiness and confusion</p>
Communication relationship with co-workers	<ul style="list-style-type: none"> • My colleagues help me with problems in my personal life. 	<p>There were differences of opinion in the pilot study on this phrase. It had different connotations, which gave a low degree of reliability and validity, which led to its deletion from this axis.</p>
Organisational engagement	<ul style="list-style-type: none"> • I do not feel it is right to leave my organisation now, even if it is to my advantage. 	<p>It could be that the Saudis may not favour unpleasant words and negative emotions associated with them, such as "unconditional obedience" or "guilty". Most respondents chose "totally disagree" to respond to the questions containing these words.</p>

As a result of the low degree of reliability and validity of these items, the questionnaire was modified and approved for the main study.

4.9 Factor Analysis

Factor analysis was defined as a set of statistical methods aimed at reducing the number of variables or data related to a particular phenomenon (Orcher, 2016). It is a multivariate statistical method used in data analysis and variance matrices for variables and their multiplication variables (Saunders & Bezzina, 2015). The objective is to clarify the relationships between these variables, resulting in several new or assumed variables. This analysis aims to analyse a set of correlation coefficients between several variables and to reduce them to a smaller number of factors. This helps to understand the structure of the correlation matrix or the common variation through fewer factors (Bryman, 2016). Two types of global analysis can be distinguished. The first is called exploratory factor analysis (EFA), which can be used to uncover the underlying structure of a relatively large set of variables. EFA is a technique within factor analysis whose overarching goal is to identify the underlying relationships between measured variables. It also helps to explore empirical data to identify characteristics of attributes and relationships without a specific data model. It generates a structure, model, and hypotheses. The second-factor analysis is called confirmatory factor analysis (CFA).

4.9.1 Confirmatory Factor Analysis and Scale Validity

CFA is the next step after EFA to determine the factor structure of a dataset. It is used to ascertain the structural honesty of the study scale, to ascertain the hypotheses of the global structure, to verify the validity of the model, and to ensure that it conforms to the study data (Collis and Hussey, 2013). CFA requires some additional hypotheses that relate (usually) to zero-point locations that reflect previous assumptions. It is necessary to include all estimates in a timely manner in the planning process so that the CFA tends to be more structured than the EFA (Orcher, 2016).

The validity of a construct is a major condition for the validity of the theoretical test (Noble & Smith, 2015). Therefore, the analysis of factors is one of the most significant tests that confirm the validity of the construction of the model, which ensures that the theoretical meaning can be applied to all indicators (Saunders & Lewis, 2012). The CFA factors are generally used to determine the reliability index by calculating the alpha coefficient for a combined test of one-dimensional elements. According to Bryman (2016) the composite result may be affected by other factors if any of the individual items are two-dimensional.

4.9.2 Structural Equation Modelling

After validating and developing the measurement scale, structural equation modelling (SEM) was used to test the hypotheses. SEM refers to a variety of mathematical models, computer algorithms, and statistical methods that suit the structure of data networks (Hair *et al.* 2006). SEM includes empirical analysis, path analysis, partial micro-squares of pathways, and potential modelling of growth (Van Teijlingen & Hundley, 2001). The concept related to structural models in econometrics should not be confused with structural models in the economy. Structural equation models are often used to evaluate ‘invisible’ structures (Tabachnick and Fidell, 2007). The correlations between constructs of a structural equation model can be estimated independently of regression equations or through more participatory methods. The use of SEM in social sciences is often justified by its ability to determine the relationships between the unobservable structures (latent variables) of observed variables (Hair *et al.*, 2006).

4.9.3 Chi-Square Test

Chi-Square is a statistical test that is applied to study the relationship between two variables to determine if there is a relationship between the two variables. A Chi-Square analysis can be performed on the data collected by the researcher in different ways, such as questionnaires, so that the relationship between the variables studied is studied. This study includes the relationship between 1) the quality and effectiveness of communication within the employee’s co-worker and supervisor; and 2) employee engagement. In this case, if there is a relationship between the two variables, we can say that the two variables are related. The nature of the relationship is that; the more direct, the higher the variable of the other is, or the reverse (the higher the variance of the other or vice versa). However, the nature of the relationship cannot be defined by the Chi-Square test only, where additional tests are required to be applied in order to determine if there is a relationship between the variables under study.

4.10 Ethical Considerations

When conducting research among people, ethical issues must be considered. The preservation of human rights is one of the researcher’s top priorities when the human element is included. The researcher must respect people’s privacy and maintain the confidentiality of information and accuracy. The ethical standards for scientific research were applied in all stages of this study. This can be seen in the steps taken by the researcher before collecting the data. For

example, permission was obtained from the government institution understudy at an early date. The departmental managers were contacted and given all information related to the study and its objectives. The survey questions were explained to supervisors and employees clearly and without any ambiguity. The research questions were presented with an explanatory letter to each participant randomly when visiting each department for distribution. Participants were voluntarily involved and given the freedom to complete the questionnaire if they wished. They were asked not to write their names on the questionnaire and told that the responses were confidential and that they would not be identified during the study period or later.

All data is kept in a secure location and will not be shared with any of the participants, managers, or supervisors. Permission was obtained from the ethics committee at Brunel University before collecting data. In accordance with the university policy, the research ethics form, prepared by the committee, was signed by the researcher and his research supervisor at Brunel University. Also, the approval of the Brunel ethics committee was attached to the questionnaire before completing the form, which included the name of the study, the name of the researcher, the name of the faculty, the purpose of the study and the confidentiality of the participants' information in a clear and understandable manner (Annex 2).

4.10 Conclusion

This chapter discussed the rationale for two important types of research models such as positives and phenomena. The philosophical dimensions of each model were discussed in this chapter. It has been noted that many researchers in previous studies in the field of management studies and business applied the positive approach in their research. The positivist approach was therefore used as a suitable approach to this study. The researcher targeted the public sector employees working in the Ministry of Labour and Social Development in Saudi Arabia as a target sample to collect the study data through a questionnaire that was prepared and distributed on the target sample by the direct random selection method. A questionnaire survey was used to collect data from employees of the Ministry of Labour and Development of Saudi Arabia. Research design and content of the questionnaires was discussed, and the questionnaire included four sections: 'Internal communication trust,' 'employee trust in supervisors and co-workers,' 'employee engagement,' and 'social relations in the organisation.' Another section asked for

demographic information, such as gender, age, present employment status, highest education level and years spent in the present job. A pilot study was conducted prior to the main study to measure the reliability and validity of the questionnaire. In this chapter, the steps for sample selection, participation, data collection and methods of analysis were discussed using appropriate measurement tools. When the data collection phase was completed, it was cleaned, encoded and inserted into the statistical package for social sciences (SPSS) version 20 for Windows system. Statistical analysis techniques, such as analysis of exploratory factors were also discussed, and factors were confirmed via confirmatory factor analysis on the basis of structural equation modelling (SEM). The use of the AMOS v.22 program was discussed to assess the suitability of the model and its validity to study and test hypotheses.

Chapter 5 Analysis and Findings

5.1 Introduction

This chapter discusses and analyses the association between the dependent and independent variables measured in the main study. The study has adopted quantitative methods in which a survey questionnaire was applied to obtain the data. This chapter covers the data management, data analysis methods, participants' demographic characteristics, data reliability, hypothesis testing and the findings.

5.2 Managing the Data

This study was conducted during the period of March 2018 to June 2018. Participants in the study were randomly selected from the public sector named the Ministry of Labour and Development, which hosted 600 employees. The participants were from different levels of positions, such as top managers, lower managers, supervisors and ordinary employees. During the data collection, the researcher took systematic measures to manage this stage, such as alerting participants when their questionnaire was late by five days or more. The participants were free to fill in the questionnaire at any time and place. The participation of males and females was considered in this study.

This study is based on data analysis of exploratory factors and descriptive statistics evaluation using SPSS version 20.0 for Windows. AMOS version 22.0 was used to determine an appropriate model for the study and factors were confirmed by an analysis based on structural equation modelling (SEM).

All the participants' responses were entered into SPSS and converted into numbers to make it easier for SPSS to handle and process them. The questionnaires were placed in columns and rows (Annex 3). The variables were abbreviated with the cryptographic elements encoded in numbers. Similarly, the label column question elements were written in brief. The value section in the column was developed from '0', which means no presented information, then '1' ('Strongly disagree') to '5' ('Strongly agree') on a 5-point Likert scale, and '1' ('not very satisfied') to '5' ('very satisfied') on a 5-point Likert scale.

After data entry, the dependent and independent variables were coded, which consisted of a series of grouped question items (Annex 4). Finally, the data were cleaned using descriptive statistical tests to find out the responses to each question according to the column section entry to confirm the correct point Likert scale number entry.

5.3 Screening Data Before Analysis

Before analysing the participants' responses, it is necessary to ascertain the accuracy of the data. One of the problems facing the researcher in this process is to ensure that the data file is entered accurately and that it is correct. The researcher must also be aware of the problem of data loss, extreme and linear values, and the natural state that affects the research variables. The purpose of testing the data before analysing it is to detect the non-actual data that give incorrect results (Van Teijlingen & Hundley, 2001). For an honest analysis of key data, these issues must be considered and resolved (Tabachnick & Fidell, 2007).

5.3.1 Missing Data

Missing data is one of the most common problems in data analysis. Attention has been paid to the treatment of missing data, with a focus on the quality standards based on which scientific research is assessed, especially with the increasing number of computerised statistical programmes that address research data and the multiple ways in which missing data can be dealt with. Therefore, examination and comparison are still required in order to reach scientific results that enable researchers to choose a method to deal with lost data, which is needed to improve the output of statistical methods, compared with statistical methods where lost data is not compensated for. Enriching the outputs and integrating the collected data and the process of compensating through existing data, ultimately serve the primary purpose of this study, in order to arrive at the correct conclusions about the phenomenon studied (Allison, 2003). A common and recurrent research problem when data collection or analysis is incomplete is the loss of part of the sample data. Enders (2010), notes that missing data in survey research is often a problem which is given little attention or importance and does not correspond to the size of its negative impact on the results. This is often underestimated by the researcher. The researcher may leave missing data untouched and ignore its impact on data analysis, either because of a lack of understanding of the importance of the problem, or because of a lack of understanding of solutions to the problem (Allison, 2003).

Some researchers resort to the elimination of any questionnaires that have only partially been answered and analyse only those who responded to all questions. This means a reduction in the sample size, which negatively affects the statistical strength and brings in doubt the sample's representativeness of society. The number of individuals who are excluded before the analysis should be low, but this leads to a loss of information, thus increasing the likelihood of bias (Lancaster, Dodd and Williamson, 2004).

The data collected on the phenomenon studied requires an appropriate statistical method for analysis in order to reach accurate results, leading to explanations and making appropriate decisions. Missing data are problematic; statistical methods assume complete information about all variables included in the analysis. A relatively small number of missing data on some variables can significantly reduce sample size. As a result, the accuracy of the confidence intervals is affected, the statistical strength is weakened and the estimation parameter is biased (Gilbert, 2001).

There are many ways to deal with missing data such as the method of deletion. To calculate missing data to be processed, and to help the researcher complete the data before analysing it, either take the wrong value in the correction key, or delete it and not count it in the results, or offset the estimated value of the missing value through observed data (Sekaran & Bougie, 2016). The SPSS packet was used to find the missing data in this study, which represented less than 5% of all data. Thus, 13 samples out of 330 samples (1.3%) were removed, which did not affect the outcome of the analysis.

5.3.2 Outliers

Outlier values are elements or processes whose characteristics differ from the majority. This is often the result of errors in the use of a measure function. To avoid affecting the results of the analysis and the accuracy of the model we design, we may often have to delete them – but according to scientific methods, and not randomly.

There are many methods to identify outliers. According to Enders (2010), the researcher used the following methods of dealing with missing data:

- 1) Expectation-maximization Algorithm (EM);
- 2) Complete-case analysis;

3) Available-case analysis;

4) Calculate the value of compensation through the averages Imputation Mean.

Moreover, Aggarwal & Yu (2008), point out two methods to detect outlier data. The first method is to detect outlier trends and distance them from observations, and then to use traditional estimates. Values can be detected graphically when we draw the graph EIS (the standard error of observations) against Y_i . The points outside $+2$ are extreme values. The second method to detect outlier values in data is to take a large area in statistical research, because statistical inference based on natural distribution is sensitive to outlier values. Although there are different ways, most of them share two main points: one is to give less weight to the outlier observations to minimise their impact, and the other is to use the repetition method.

The effect of outliers can be learned in full data analysis and then analysis of data except extreme values compared to the mean absolute percentage error (MAPE) are measured in both cases. Outlier values can be eliminated if they are due to the error of recording observations or the status of devices. More data should be collected to bring the decisions closer to reality. There are three methods to detect outliers (Tabachnick and Fidell, 2007; Hair *et al.*, 2006, p-73 and Field, 2006): Univariate detection; Bivariate detection; Multivariate detection.

Univariate outliers are cases with an extreme value on one variable, which can be identified by examining the distribution of observations for each variable (Hair *et al.*, 2006). By applying a distribution test, outliers can be detected with those cases falling at the outer ranges of the distribution or by applying z scores test in which cases with standardised scores in excess of 3.29 ($p < .001$, two tailed test) are potential outliers (Tabachnick and Fidell, 2007). According to Tabachnick and Fidell, (2007, p-73) the extremeness of a standardised score depends on the size of the sample; with a very large N , a few standardised scores in excess of 3.29 are expected.

Bivariate outliers can be identified by applying a pair of variables jointly in a scatter plot whereby, case(s) falling markedly outside the range of the other observations will be seen as isolated points (Hair *et al.*, 2006).

Multivariate outliers are a combination of scores on two or more variables. It is a better solution than bivariate because of a large number of graphs and limited numbers of variable observations. Thus, for the multidimensional position of variables, the multivariate detection method of dealing with outliers is more useful. According to Hair *et al.* (2006) and Field (2006) multivariate outliers can be identified by Mahalanobis D² measure, in which assessment of each observation can be executed across a set of variables. In this test if D²/df (degree of freedom) value exceeds 2.5 in small samples and 3 or 4 in large samples it can be designated as a possible outlier (Hair, *et al.*, 2006, p-75).

Outliers cannot be categorically characterised as either beneficial or problematic (Hair, *et al.* 2006) but they can bias the mean and inflate the standard deviations (Field & Hole, 2003). Thus, the researcher should be aware of such values because they bias the model research fit to the data (Field, 2006). This research study applied a graphical method for detecting the univariate outliers and Mahalanobis's distance case was applied for finding multivariate outliers to confirm their effect on the objectives of the study. 5 univariate outliers were found which have been marked with an asterisk and also compared with the multivariate outlier tests by Mahalanobis's distance test, which confirmed the samples (Table 5.1).

Table 5. 1 Univariate and Multivariate Outliers Results

Univariate Outliers	Multivariate Outliers		
Case with standard values exceeding + 2.5	Case with a value of D²/df Greater than 2.5 (df =5) ^a		
	Case	D ²	D ² /df
OSC 138, 334	138	43.78	3.38
OCC No Cases	195	35.02.	2.69
TIS No Cases	334	35.68.	2.74
TIC 85, 161, 195			
TIO No Cases			
OE No Cases			

a. Mahalanobis D² value based on the 6 variable perceptions.

Note: OSC = Organizational Supervisor Communication; OCC = Organizational Co-worker Communication; TIS = Trust in Supervisor; TIC = Trust in Co-workers; TIO = Trust in Organisation; OE = Organizational Engagement.

5.3.3 Linearity

Linearity means the correlation between variables, which is represented by a straight line. In data analysis, it is important to know the level of relationship of variables. An implicit assumption of all multivariate techniques is based on co-relational measures of association, including multiple regression, logistic regression, factor analysis, and structural equation modelling, is linearity (Hair *et al.*, 2006, p-85). Thus, examining the relationships of variables is important to identify any departures that may affect the correlation. In statistics, linearity can be measured by Pearson's correlations or by a scatter plot (Field, 2006; Tabachnick and Fidell, 2007; Hair *et al.*, 2006). This study applied Pearson's correlations and found that all independent variables significantly positively correlated to the dependent variable (Table 5.2). Results of this test showed that all variables are linear with each other.

Table 5. 2 Pearson's Correlations

	OSC	OCC	TIS	TIC	TIO	OE
OSC	1					
OCC	.568**	1				
TIS	.586**	.670**	1			
TIC	.571**	.598**	.558**	1		
TIO	.599**	.673**	.563**	.510**	1	
OE	.535**	.803**	.674**	.708**	.683**	1

* $p < .05$; ** $p < .01$

Note: OSC = Organizational Supervisor Communication; OCC = Organizational Co-worker Communication; TIS = Trust in Supervisor; TIC = Trust in Co-workers; TIO = Trust in Organisation; OE = Organizational Engagement.

5.4 Demographic Characteristics and Relationships

The main study was completed within five months, which shows the interest of participants in the issue has been studied. As mentioned in the previous chapter, the data for the main study was collected from Saudi Arabia. The characteristics of the respondents such as age, gender, present employment status, higher education level, years in the current job and years with the present employer have been asked in the questionnaire. Demographic details of the participants in (Table 5.3) are analysed below.

- **Gender**

Table (5.3) below shows the participants' demographic data; 45.8% (116) were male and 54.2% (137) were female. This may indicate that females are more inclined to share information about the work environment and are more cooperative.

- **Age**

Only 6.3% of participants were younger than 29, while 64.4% were 29-39, indicating that most participants were young generation. Furthermore, 22.5% (57) were 40-49 and 6.7% (17) were older than 50. This percentage indicates that some participants were in a senior management position.

- **Education**

Table (5.3) below shows the participants' education data. Most held a bachelor's degree (47%, n=114). Furthermore, 20.9% (53) had a high school diploma and a high college diploma, respectively, and 11.1% (28) had a high-level degree (master's or PhD). This means that many employees in the public sector are highly educated and indicates that the government is seeking to develop various sectors of the state.

- **Numbers of Years at Work**

Many of the participants had been in their present organisation for 5-7 years (26.9%, n=68). Those who had been there for 3-5 years and for 7-10 years represented 20.2% (n=51) respectively, while 21.3% (n=54) had been there for over 10 years. Therefore, they were likely to be familiar with the concepts of organisational communication, trust and organisational engagement. In contrast, the minority had been at the organisation for 1-3 years (11.5%, n=29).

- **Management Positions**

Table (5.3) shows the participants' management level. The majority of participants were normal workers (52%, n=132), while 19% (n=48) were in medium management, 17% (n=43) were in the supervisor level, and 11.9% (n=30) were in top management.

Table 5. 3 The Participants' Demographic Details

Demographic Characteristic	Category	Frequency	Percentage
Gender	Male	116	45.8 %
	Female	137	54.2 %
Age	Under 29 years old	16	6.3 %
	29-39 years old	163	64.4 %
	40-49 years old	57	22.5 %
	Over 50 years old	17	6.7 %
Highest level of education	High school diploma	53	20.9 %
	High diploma college degree	53	20.9 %
	Bachelor	119	47 %
	Graduate school degree (master's, PhD)	28	11.1 %
Time spent working for this organisation	1 to 3 years	29	11.5 %
	3 to 5 years	51	20.2 %
	5 to 7 years	68	26.9 %
	7 to 10 years	51	20.2 %
	Over 10 years	54	21.3 %
Management level?	Normal workers	132	52.2 %
	Supervisor	43	17 %
	Medium management level	48	19 %
	Top management level	30	11.9 %

5.5 Factor Loading and Data Analysis

Factor analysis techniques were used for data reduction, which identifies groups or clusters of variables. The factor that produces group variables shows the relationship of variables to the factor or data reduction. However, the exploratory factor analysis technique is used for 'take what the data give you,' whereas, confirmatory factor analysis techniques involve grouping variables together on a factor or the precise number of factors for testing hypotheses (Hair *et al.*, 2006, p-104). Initially, this study applied exploratory factor analysis to take data in a group for a factor and then applied confirmatory factor analysis techniques to confirm the group of measurement variables related to a factor for examining the hypotheses. The

existence of clusters of large correlation coefficients between subsets of variables suggests that those variables could be measuring aspects of the same underlying dimension (Field, 2006, p-620). SPSS for Windows was applied for exploratory factor analysis.

5.5.1 Principal Components Analysis

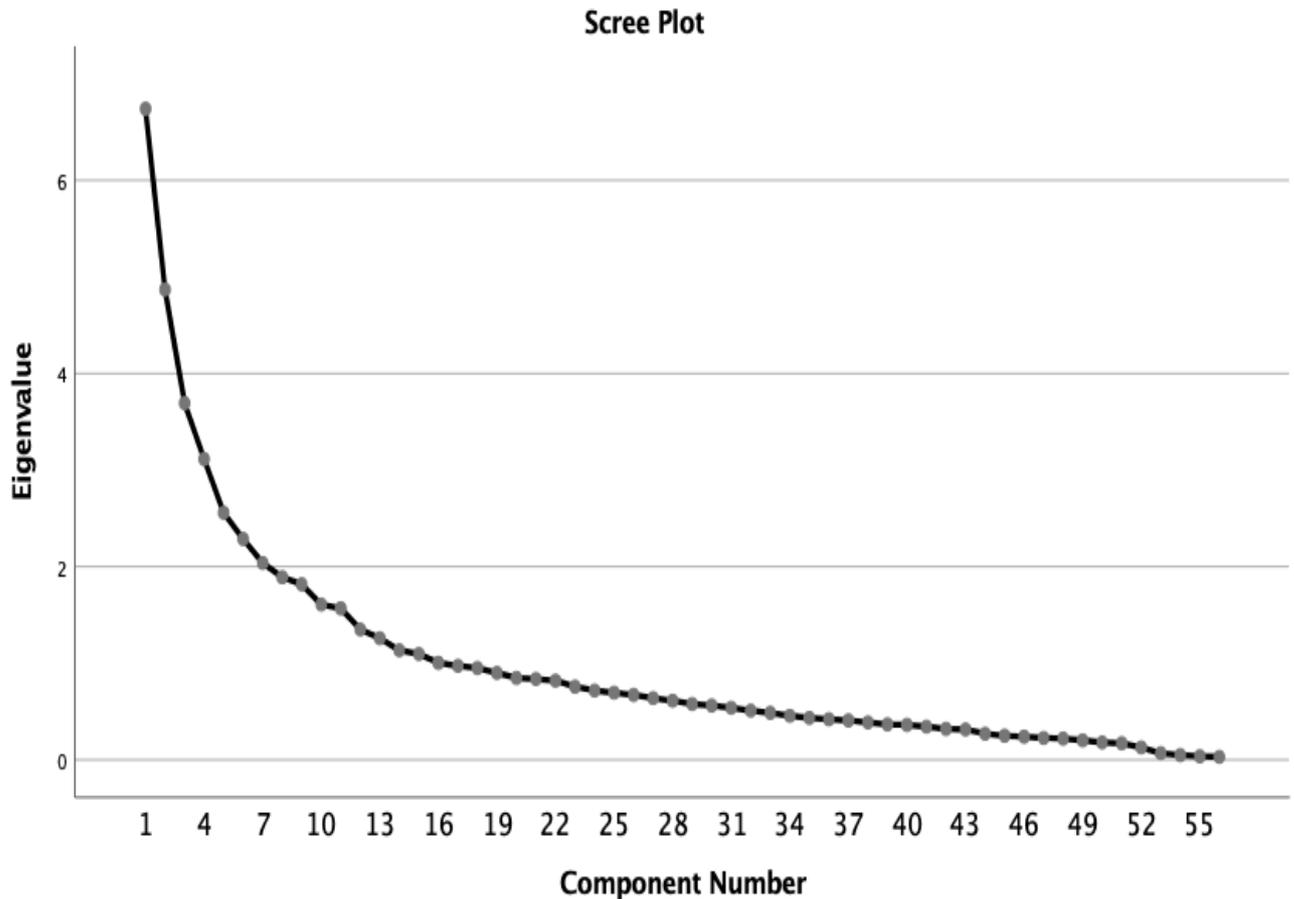
Numerous procedures are available for factor extraction and rotation in SPSS. Among these, the principal component extraction method is most common and a default in SPSS programmes to extract maximum variance from the data set with each component (Tabachnick & Fidell, 2007, p-634). Principal component extraction is the linear combination of observed variables that separate subjects by maximising the variance of their component score (Tabachnick & Fidell, 2007, p-635).

Although several methods are available to assess the adequacy of extraction and the number of factors, the most common are Eigenvalues and Scree plot.

5.5.1.2 Scree Plot

In identifying the extraction factors by eigenvalues, a scree plot is commonly used to confirm the maximum number of factors. Logically, factors should be extracted with high eigenvalues, but this can also be achieved by plotting a scree graph. The Scree test is derived by plotting the latent roots against the number of factors in their order of extraction, and the shape of the resulting curve is used to evaluate the cut-off point (Hair *et al.*, 2006, p-120). Usually the scree plot negatively decreases; the eigenvalue is highest for the first factor and moderate but decreasing for the next few factors before reaching small values for the last several factors (Tabachnick & Fidell, 2007, p-644). By applying a scree plot test on data to confirm the extracted factors through eigenvalues, the researcher confirmed the same number of factors (Graph 5.1).

Graph 5.1 Scree Plot



The Kaiser-Meyer-Olkin value was .880, exceeding the recommended value of 0.6 and the Bartlett Test of Sphericity reached a statistical significance, thus supporting the forcibility of correlation matrix. Table 4.5 reveals the rotated component matrix of the scale. Principal Component Analysis showed the presence of ten components with eigenvalues exceeding 1, explaining 23.10%, 8.69%, 6.59%, 5.56%, 4.56%, 4.08%, 3.63%, 3.37%, 3.24%, and 2.87% of the variance respectively (Table 4.5). The scree plot revealed a clear-cut off of these components. To aid in the interpretation of the ten components a Varimax Rotation was performed. The rotated solution revealed the presence of a simple structure showing a number of strong loading, with all variables loading on components. After developing the factors' internal consistency, each loaded factor was assessed by Cronbach's alpha measure. The following clusters of items were specified for the most relevant dimensions of the elements.

Factor 1 – Organisational Communication with Supervisor (OCS), indicate their level of satisfaction with organisational communication with their direct supervisor used 14 items of organisational communication with direct supervisors which was developed by Downs & Adrian (2004: p124) for Internal communication and by using the International Communication Association (ICA) scale for organisation communication, applying factor loading (Table 5.4).

Table 5. 4 Factor Loading and Cronbach’s Alpha of Organisational Communication with Supervisor Scale

Factors and Related Items	Factor Loading	Cronbach Alpha
Communication relationship with Supervisor:		.91
I and my supervisor always share opinions, ideas	.78	
I feel easy and comfortable when I communicate with my supervisor	.72	
While I disagree with my supervisor, I would still support his decisions	.76	
Satisfaction with information receive from Supervisor		.95
How well I am doing my job	.83	
Roles and responsibilities	.76	
Mistakes and failures of my organisation	.73	
How I am being judged	.81	
Promotion and advancement opportunities in my organisation	.78	
Important new product, service, or program developments in my organisation	.72	.97
Satisfaction with channel you receive infromation from supervisor		
Satisfied with the amount of information you get through face to face	.75	
Satisfied with the information you get through Telephone	.78	
Satisfied with the information you get through written memos, letters and notices	.82	
Satisfied with the information you get through email	.81	
Satisfied with the information you get through social media application	.75	

Factor 2 - Organisational Communication with Co-worker (OCC), indicate their level of satisfaction with organisational communication with their co-workers using 14 items of organisational communication with direct supervisors which was developed by Downs &

Adrian (2004: p124) for Internal communication and by using the International Communication Association (ICA) scale for organisation communication, applying factor loading (Table 5.5).

Table 5. 5 Factor Loading and Cronbach’s Alpha of Organisational Communication with Co-worker Scale

Factors and Related Items	Factor Loading	Cronbach Alpha
Communication relationship with Co-worker		.93
My colleagues helped me solving work-related problems.	.78	
My colleagues encouraged my work.	.75	
My colleagues cooperated well with me at work.	.80	
My colleagues interact/relate after work.		.90
My colleagues helped me solving work-related problems	.72	
My colleagues encouraged my work	.74	
My colleagues cooperated well with me at work	.77	
How I am being judged	.81	
Promotion and advancement opportunities in my organisation	.78	
My colleagues interact/relate after work	.76	.96
Satisfaction with channel you receive information from Co-worker		
Satisfied with the amount of information you get through face to face	.79	
Satisfied with the information you get through Telephone	.86	
Satisfied with the information you get through written memos, letters and notices	.77	
Satisfied with the information you get through email	.72	
Satisfied with the information you get through social media application	.85	

Factor 3 – Organisational Engagement (OE): This factor covers employees’ emotional attachment to, identification with, and involvement in, the organisational (Schaufeli, Taris & Bakker, 2006). A six-item scale was applied, developed by Meyer & Allen (1997), alongside factor analysis conducted by Mathews & Shepherd (2002) in factor loading. In applying factor loading at .5 (Field, 2006), no item was excluded (Table 5.6).

Table 5. 6 Factor Loading and Cronbach’s Alpha of Organisational Engagement Scale

Factors and Related Items	Factor Loading	Cronbach Alpha
I feel a strong sense of belonging to my organisation	.77	.90
I really feel as if this organisation's problems are my own problem	.82	
I would be very happy to spend the rest of my career with this organisation	.81	
I feel “emotionally attached” to this organisation	.80	
I feel an obligation to remain with my current employer	.76	
This organisation deserves my loyalty	.74	

Factor 4 – Trust in Organisation (TIO): This factor covers trust in the organisation, trust in supervisors (TIS) and trust in co-workers (TIC). A 17 items scale was applied, developed by Ferres’ Workplace Trust Survey (WTS) with factor analysis conducted by Mathews and Shepherd (2002) in factor loading. In applying factor loading at .5 (Field, 2006) no item was excluded (Table 5.7).

Table 5. 7 Factor Loading and Cronbach’s Alpha of Organisational Trust Scale

Factors and Related Items	Factor Loading	Cronbach Alpha
Trust in the organisation:		.92
I honestly express my opinion at the organisation....	.75	
I think that the organisation offers a supportive environment.	.82	
I believe that the organisation recognizes and rewards...	.81	
It is generally accepted that the organisation takes care...	.76	
I perform knowing that the organisation will recognize my work.	.83	
I think that processes within the organisation are fair.	.81	
Trust in the co-workers		.94
I feel that I can trust my co-workers to do their jobs well.	.74	
I proceed with the knowledge that my co-workers are considerate of my interests.	.78	
I believe that my co-workers support me if I have problems.	.72	
I feel that co-workers are truthful in their dealings with me.	.79	
I will act on the foundation that my co-workers display ethical behavior.	.82	

Trust in immediate supervisor:		
I act on the basis that my manager display integrity in his actions	.75	.91
I think that my manager appreciates and reward when I perform well.	.78	
I feel comfortable to work with my manager.	.78	
I believe that my supervisor follows through promises with action.	.79	
I feel that my manager is available when needed.	.82	
I believe that my manager keeps personal discussion confidential.	.83	

Factors structured above (Table 5.4, 5.5, 5.6, 5.7) were conducted to establish employees' communication for organisational engagement predictor variables. The factors which had eigenvalues greater than 1 were preserved. The measure of sampling adequacy (MSA = .880) (Kaiser, 1974) and Bartlett Test of Sphericity (BTS = 12575.554, P = 0.000) demonstrated that exploratory factor analysis was applied correctly. The amount of variance explained by these factors was 75.89% (Hair *et al.*, 2006). Cronbach's alpha for each factor confirmed that the items in each factor were internally consistent (Nunnally, 1978). This result indicated that these factors could be considered as the basis for the confirmatory factor analysis (CFA) application. According to Anderson & Gerbing (1988, p-421) casual relations between the underlying constructs and their related indicators should be specified properly by confirmatory factor analysis before imposing any casual relations among the constructs. In the next stage confirmatory factor analysis was performed to assess the convergent and construct validity of scales.

5.5.2 Confirmatory Factor Analysis and Measurement Models

Confirmatory factor analysis (CFA) is a technique usually employed to confirm *a priori* hypothesis about the relationship between a set of measurement items and their respective factors (Netemeyer *et al.*, 2003, p-148). Anderson & Gerbing (1988, p-422) recommend a two-step approach in structural equation modelling which allows testing of the significance of all pattern coefficients and provides a particularly useful framework for formal comparisons of the substantive model of interest with the next likely theoretical alternatives. When applying the measurement model assessment approach, first the validity of the

construct was tested by confirmatory factor analysis (Hair *et al.*, 2006). Then, the relationships between the constructs were examined via structural equation modelling.

5.5.2.1 Convergent Validity Analysis

The validity of a construct is an essential condition for further theory testing and development. Thus, confirmatory factor analysis is used as a stricter assessment of construct validity to ensure that its indicators empirically capture the theoretical meaning of a construct. By applying this approach, the researcher assessed how well all the manifest variables of the same construct relate to each other (Anderson & Gerbing, 1988, Hair *et al.*, 2006). Furthermore, measurement model assessment by confirmatory factor analysis confirmed the overall validity of the model with nomological validity, whereby goodness of fit indices of measurement models were used.

After applying the maximum likelihood estimation method for confirmatory factor analysis in measurement model, first run for organisational communication with supervisor scale elements, the model fit measures indicated a valid three-factor solution. All of the items for all factors were retained. Table (5.9) shows the results of measurement model structure results. Fit indices of model such that Chi-square (χ^2) demonstrated a good fit, root mean square error of approximation (RMSEA = .042), and goodness of fit measure (GFI = .977) showed a good model fit (Hair *et al.*, 2006). Further, incremental fit indices such that normated fit index (NFI = .972), non-normated fit index (NNFI = .983), normated comparative fit index (CFI = .986) also showed a good model fit (Hair *et al.*, 2006). It was concluded that the measurement model of these three factors was nomological valid.

Table 5. 8 Measurement Model of Organisational Communication with Supervisor Variables

Model Fit Indicators*	χ^2	DF	CFI	GFI	NFI	RMSEA
	65.750	32	.98	.97	.97	.042

* χ^2 – Chi square; df – degree of freedom; RMSEA – Root mean square error of approximation; GFI – Goodness of fit index; NFI – Normated fit index; CFI – Comparative fit index

Assessing convergent validity of Organisational Communication with supervisor scale measurement model, t value was applied, which showed as a critical ratio in the measurement model (Table 5.10) (Bagozzi *et al.*, 1991; Chau, 1997). All the t values of the items were significantly greater than the critical value of 1.96 at the 0.99 confidence level and all indicators showed higher individual squared multiple correlations (Reliabilities) than 0.50.

Table 5.9 Convergent Validity of Organisational Communication with Supervisor Variables

Variables	SMC*	t-value
Communication relationship with Supervisor (CRS)		
My supervisor and I always share opinions, ideas, and feelings toward work and life.	.71	19.52
I feel easy and comfortable when I communicate with my supervisor	.68	18.66
While I disagree with my supervisor, I would still support his decisions	.72	17.63
Satisfaction with information I receive from Supervisor (AIS)		
How well I am doing my job	.75	19.08
Roles and responsibilities	.76	20.05
Mistakes and failures of my organisation	.70	17.09
How I am being judged	.75	16.34
Promotion and advancement opportunities in my organisation	.78	16.85
Important new product, service, or program developments in my organisation	.72	18.35
Satisfaction with channel you receive information from supervisor		
Satisfied with the amount of information you get through face to face	.65	16.85
Satisfied with the information you get through Telephone	.68	19.39
Satisfied with the information you get through written memos, letters and notices	.72	15.35
Satisfied with the information you get through email	.71	18.45
Satisfied with the information you get through social media application	.73	16.95

*SMC – Squared multiple correlation

Furthermore, all three constructs had high composite reliabilities ($\rho > 0.70$) (Table 5.11). The Cronbach's alpha was above the criterion value ($\alpha_{CRS} = 0.91 > .70$, $\alpha_{AIS} = 0.95 > .70$, $\alpha_{CCS} = 0.97 > .70$) and the average variance extracted for each construct was above 0.50 (Fornell & Larcker, 1981).

Table 5. 10 Internal Consistency of Organisation Communication with Supervisor Variables

Variables	Composite Reliability (ρ)	Cronbach's alpha (α)	Average Variance Extracted (AVE)
Communication relationship with Supervisor	.92	.91	.67
Satisfaction with information I receive from Supervisor	.95	.93	.64
Satisfaction with channel I receive from Supervisor	.97	.97	.68

Next, Organisational Communication with co-worker employee scale elements were tested for measuring the unit-dimensionality of factors by confirmative factor analysis. Overall, assessment of the measurement model showed that all five factors, which were extracted via exploratory factor analysis, were fit for the scale. To confirm the nomological validity of scale, element fits tests were assessed and found fit (Table 5.12). Fit indices of model (RMSEA = .051; GFI = .982) showed a good model fit (Hair *et al.*, 2006). Further, incremental fit indices (NFI = .989; CFI = .966) also showed a good model fit (Doll *et al.*, 1994; Hair *et al.*, 2006).

Table 5. 11 Measurement Model of Organisational Communication with Co-worker Variables

Model Fit Indicators*	χ^2	DF	CFI	GFI	NFI	RMSEA
	65.750	41	.96	.98	.98	.051

* χ^2 – Chi square; df – degree of freedom; RMSEA – Root mean square error of approximation; GFI – Goodness of fit index; NFI – Normated fit index; CFI – Comparative fit index

Convergent validity of Organisational Communication with co-worker scale measurement model was assessed by t value (Bagozzi *et al.*, 1991; Chau, 1997). In this model t-value was shown in critical ratio (Table 5.13). However, t values of all items were significantly greater than the critical value of 1.96 at the 0.95 confidence level and all indicators showed higher individual squared multiple correlations (reliabilities) than 0.50.

Table 5. 12 Convergent Validity of Organisational Communication with Co-worker Variables

Variables	SMC*	t-value
Communication relationship with co-worker (CRC)		
My colleagues helped me solving work-related problems	.65	20.67
My colleagues encouraged my work	.78	16.66
My colleagues cooperated well with me at work	.72	17.75
My colleagues interact/relate after work	.67	18.45
Satisfaction with information received from co-worker (AIC)		
My job duties	.75	19.08
Roles and responsibilities	.61	16.39
Mistakes and failures of my organisation	.63	17.09
How organisation decisions are made that affect my job	.75	16.39
Promotion and advancement opportunities in my organisation	.78	16.85
Important new product, service, or program developments in organisation	.72	17.63
Satisfaction with the channel received information from co-worker (ACC)		
Satisfied with the amount of information you get through face to face	.80	17.72
Satisfied with the information you get through telephone	.64	18.54
Satisfied with the information you get through written memos, letters and notices	.63	26.63
Satisfied with the information you get through email	.76	19.08
Satisfied with the information you get through social media application	.78	17.39

*SMC – Squared multiple correlation

Furthermore, all three constructs had high composite reliabilities ($\rho > 0.70$) (Table 5.14). The Cronbach's alphas were above the criterion value ($\alpha_{CRC} = 0.93 > .70$, $\alpha_{AIC} = 0.90 > .70$, $\alpha_{ACC} = 0.69 > .70$ and the average variance extracted for each construct was above 0.50 (Fornell and Larcker, 1981).

Table 5. 13 Internal Consistency of Organisation Communication with Co-worker Variables

Variables	Composite Reliability (ρ)	Cronbach's alpha (α)	Average Variance Extracted (AVE)
Communication relationship with Co-worker	.93	.93	.68
Satisfaction with information I receive from Co-worker	.90	.90	.64
Satisfaction with channel I receive from Co-worker	.96	.96	.67

The next scale is Organisational Engagement (OE), which consisted of a single factor with six latent variables. Measurement of the unit-dimensionality of the factor by confirmative factor analysis test was conducted. Confirmation of the nomological validity of scale element fits tests was assessed and found fit (Table 5.15). Fit indices of model (RMSEA = .073; GFI = .987, NFI = .988 and CFI = .993) showed a perfect model fit (Hair *et al.*, 2006; Doll *et al.*, 1994).

Table 5. 14 Measurement Model of Organisational Engagement Variable

Model Fit Indicators*	χ^2	DF	CFI	GFI	NFI	RMSEA
	56.740	43	.99	.98	.98	.073

* χ^2 – Chi square; df – degree of freedom; RMSEA – Root mean square error of approximation; GFI – Goodness of fit index; NFI – Normated fit index; CFI – Comparative fit index

Convergent validity of organisational engagement scale measurement model was assessed by t-value (Bagozzi *et al.*, 1991; Chau, 1997). In this model t-value was shown in critical ratio (Table 5.16). However, t values of all items were significantly greater than the critical value of 1.96 at the 0.95 confidence level and all indicators showed higher individual reliabilities (Squared Multiple Correlations) than 0.50.

Table 5. 15 Convergent Validity of Organisational Engagement Variable

Variables	SMC*	t-value
Organisational Engagement		
I feel a strong sense of belonging to my organisation	.62	18.67
I really feel as if this organisation's problems are my own problem	.68	16.75
I feel “emotionally attached” to this organisation	.68	21.75
I feel an obligation to remain with my current employer	.78	19.08
This organisation deserves my loyalty	.75	16.95

*SMC – Squared Multiple Correlation

Furthermore, the construct had high composite reliability ($\rho > 0.70$) (Table 5.17). The Cronbach’s alphas were above the criterion value ($\alpha_{OE} = 0.867 > .70$) (Nunnally, 1978) and the average variance extracted for each construct was above 0.50 (Fornell & Larcker, 1981).

Table 5. 16 Internal Consistency of Organisational Engagement Variable

Variables	Composite Reliability (ρ)	Cronbach’s alpha (α)	Average Variance Extracted (AVE)
Organisational Engagement	.90	.90	.67

Finally, the Trust in Organisation (TIO) factor covers trust in the organisation, trust in the supervisor (TIS) and trust in co-workers (TIC). This was assessed by confirmatory factor analysis. The goodness of fit indices evidenced that the measurement model was valid, thereby confirming nomological validity (Table 5.15). The RMSEA measure was .081, which is within the acceptable range of 0.05 and 0.08 (Garver & Mentzer, 1999), and NFI, CFI were above the 0.95 threshold value and GFI were above critical value (Hair *et al.*, 2006; Doll *et al.*, 1994; Garver and Mentzer, 1999) (Table 5.18). All of the items were retained.

Table 5. 17 Measurement Model of Trust in Organisation Variable

Model Fit Indicators*	χ^2	DF	CFI	GFI	NFI	RMSEA
	68.402	42	.98	.95	.98	.081

* χ^2 – Chi square; df – degree of freedom; RMSEA – Root mean square error of approximation; GFI – Goodness of fit index; NFI – Normated fit index; CFI – Comparative fit index

The results of the confirmatory factor analysis application of this scale showed that the convergent validity was satisfied. All t-values of the manifest variables were higher than the critical value of 1.96 at the 0.95 confidence level (Bagozzi *et al.*, 1991; Chau, 1997) (Table 5.19). Almost all indicators' square multiple correlations were such that individual reliability was above the threshold value of 0.50.

Table 5. 18 Convergent Validity of Trust in Organisation Variable

Variables	SMC *	t-value
Trust in Organisation		
I honestly express my opinion at the organisation with the knowledge that employee views are valued	.74	22.64
I believe that the organisation recognizes and rewards employees' skills and abilities	.68	21.88
It is generally accepted that the organisation takes care of employee interests	.79	22.48
I perform knowing that the organisation will recognize my work	.62	20.05
I think that processes within the organisation are fair	.71	26.10
Trust in Co-workers	.75	19.94
I feel that I can trust my co-workers to do their jobs well	.61	21.69
I proceed with the knowledge that my co-workers are considerate of my interests	.63	17.09
I believe that my co-workers support me if I have problems	.73	22.53
I feel that co-workers are truthful in their dealings with me	.68	23.01
I will act on the foundation that my co-workers display ethical behavior	.76	18.27
Trust in Supervisor		
I act on the basis that my manager display integrity in his actions	.76	21.56
I think that my manager appreciates and reward when I perform well	.64	19.03
I feel comfortable to work with my manager	.78	20.52
I believe that my supervisor follows through promises with action	.61	26.05
I feel that my manager is available when needed	.80	20.35
I believe that my manager keeps personal discussion confidential	.72	18.96

*SMC – Squared multiple correlation

Construct showed high composite reliability ($\rho > 0.70$) and the average variance extracted for the factor was above 0.50 (Fornell and Larcker, 1981). Additionally, Cronbach alpha was above the criterion value ($\alpha_{TIO} = 0.92 > .70$, $\alpha_{TIC} = 0.94 > .70$, $\alpha_{TIS} = 0.90 > .70$), thereby exceeding the threshold value of .70 (Table 5.20).

Table 5. 19 Internal Consistency of Trust in Organisation Variable

Variables	Composite Reliability (ρ)	Cronbach's alpha (α)	Average Variance Extracted (AVE)
Trust in Organisation	.92	.92	.68
Trust in Co-workers	.94	.94	.69
Trust in Supervisor	.90	.90	.67

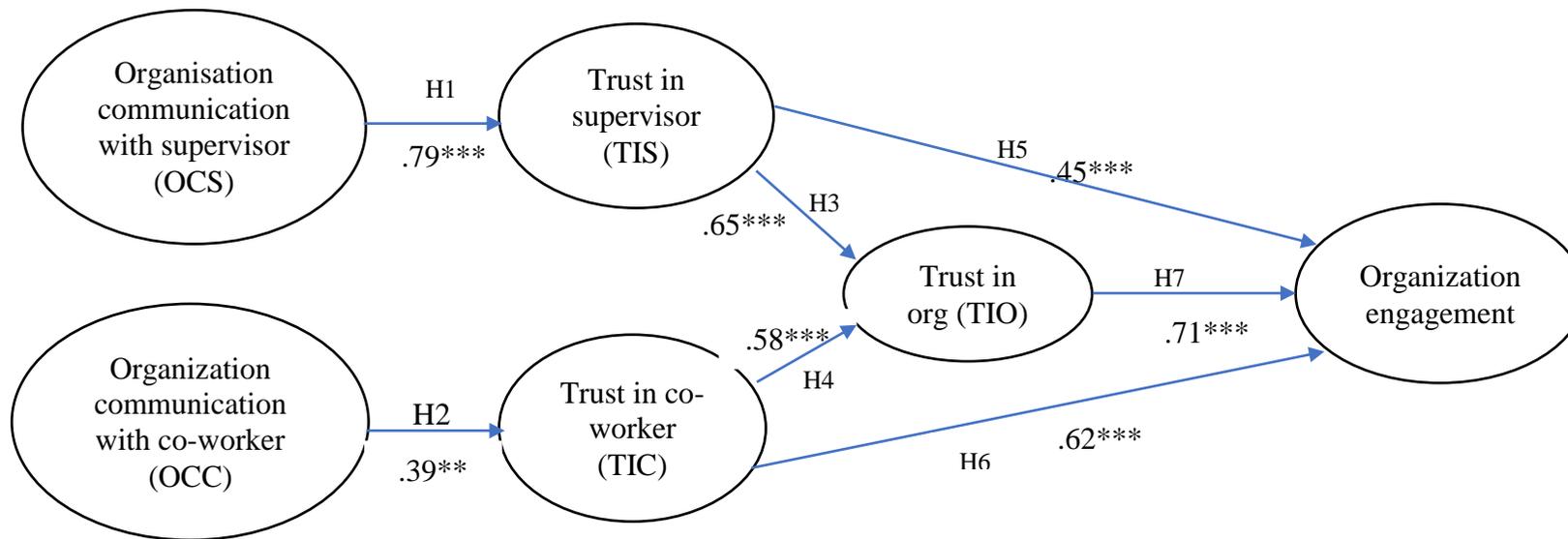
5.5.2.2 Discriminant Validity

Discriminant validity is one part of assessing construct validity in confirmatory factor analysis. It is the extent to which a construct is truly distinct from other constructs (Hair *et al.*, 2006, p-778). By using average variance extracted, discriminant validity can be measured (Fornell and Larcker, 1981 and Hair *et al.*, 2006).

Results of average variance extracted should be greater than the squared correlation estimates (Fornell and Larcker, 1981; Hair *et al.*, 2006, p-778). By using this approach, the researcher found discriminant validity in all latent constructs (Table 5.20). The results showed that values of all average variance extracted were greater than relevant squared correlation estimates, thereby confirming discriminant validity.

In summary, the overall results of construct validity using nomological, convergent and discriminant validity assessment of the measurement model provided statistically and theoretically valid constructs. Thus, the underlying latent variables for the structural equation model testing stage were robustly established.

Figure 5.1 The Structural Model



* 90% $p < 0.5$
** 95% $p < 0.01$
*** 99% $p < 0.001$

Table 5. 20 Estimation Results of the Conceptual Model

Path	Hypotheses	Sign	Estimates	p-value	Result
OCS → TIS	H1	+	.79	***	Accept
OCC → TIC	H2	+	.39	**	Accept
TIS → TIO	H3	+	.65	***	Accept
TIC → TIO	H4	+	.58	***	Accept
TIS → OE	H5	+	.45	***	Accept
TIC → OE	H6	+	.62	***	Accept
TIO → OE	H7	+	.71	***	Accept

*** Regression is significant at 0.001 level ($p < 0.001$).

The first hypothesis proposed in the conceptual model postulates that organisation communication with the supervisor positively influences trust in the supervisor and suggests that when a supervisor is using a satisfactory communication, in a timely manner, channelled with employees, then there is greater trust in the supervisor relationship. These findings demonstrate that the hypothesised impact of supervisor communication on supervisor trust is significant and thus hypothesis H1 is confirm. The result (H1: $\beta = 0.79$, $p < 0.001$) indicates that the high level of supervisor communication (relationship, timely and satisfaction channel) is positively related to supervisor trust in the relationship.

Hypothesis H2 postulates that organisation communication with co-workers was found to be positively and significantly related to trust in the co-workers. This means that when individuals practice an effective communication relationship within an organisation and communicate the information in a timely manner using the appropriate channel of communication, the levels of co-worker trust relationship will improve. The positive effects of co-worker communication on co-worker trust (H2: $\beta = 0.39$, $p < 0.05$).

Hypotheses H3 and H4 postulate a positive effect of trust in supervisors was found to be a positive and significant effect of the trust in the organisation. When an employee trusts his supervisor and receives equal assessment, the level of trust in an organisation will improve. The findings suggest that the positive effects of supervisor trust on an organisation is significant (H3: $\beta = 0.65$, $p < 0.001$), hence hypothesis H3 is supported. Similarly, hypothesis H4 posits a positive relationship between co-worker trust and organisational trust. When employees perceive a high relationship of trust, the trust relationship between co-worker and

the organisation is likely to perform well. The findings suggest that the positive effect of co-worker trust, on organisational trust, is significant (H4: $\beta = 0.58$, $p < 0.001$), hence hypothesis H4 is supported. Thus, the findings support hypotheses H3 and H4.

Hypotheses H5 and H6 postulate that trust in supervisors and trust in co-workers positively influences organisational engagement. Hypothesis H5 and H6 suggests that when there is a high level of trust between the supervisor and co-worker, the level of organisation engagement will be increased. The findings demonstrate that the positive effect of supervisor trust and co-worker trust on organisational engagement is significant (H5: $\beta = 0.45$, $p < 0.001$) and (H6: $\beta = 0.62$, $p < 0.001$), hence hypothesis H5 and H6 are supported.

Finally, hypothesis H7 describes a positive path between trust in an organisation and in employee engagement. It assumes that when organisation trust is occurred, employee engagement will improve. The hypothesised impact of satisfaction on performance proved to be significant. The result (H7: $\beta = 0.71$, $p < 0.001$) indicates that organisational trust can be used as a positive indicator of employee engagement; therefore, hypothesis H7 is accepted.

5.7 Differences Among Demographic Groups

As explained in the previous chapter, this research analysed responses from 317 employees in a public organisation in Saudi Arabia, namely the Ministry of Labour and Social Development, including various demographic characteristics. The demographic status is expected to have an impact on staff perceptions of communication between co-workers, supervisors, trust and organisational engagement. In the next section, the different demographics of the sample will be compared to the six scales and their sub-scales.

5.7.1 Differences between Genders

Two gender groups exist: male and female. A t-test was used to assess whether the results of the two gender groups were statistically different on the scales of organisational communication, trust, organisational engagement and their sub-scales. (Table 5.21) below presents the outcomes of the t-test.

Table 5. 21 Demographic Differences by Gender

Variables	Mean		t	sig.	Multiple Differences
	Male	Female			
1.Supervisory communication	3.60	3.46	1.941	0.053	Nil
Supervisory communication relationship	3.57	3.22	3.077	0.002	Male>Female
Adequacy of information from supervisors	3.55	3.48	1.020	0.309	Nil
Communication channels with supervisors	3.70	3.56	1.628	0.105	Nil
2.Co-worker communication	3.74	3.58	2.624	0.009	Male>Female
Co-worker communication relationship	3.75	3.50	2.545	0.012	Male>Female
Adequacy of information from co-workers	3.73	3.63	1.311	0.191	Nil
Communication channels with co-workers	3.76	3.57	2.589	0.010	Male>Female
3.Trust in supervisors	3.74	3.57	1.912	0.057	Nil
4.Trust in co-workers	3.32	3.53	2.467	0.014	Male<Female
5.Trust in the organisation	3.71	3.66	0.675	0.500	Nil
6. Organisational engagement.	3.73	3.61	1.605	0.110	Nil

As shown in (Table 5.22), 5 of the 14 dimensions showed differences between the gender groups. These include the sub-scales of supervisory communication relationships and co-worker communication, and the sub-scales relate to trust in co-workers and communication channels with co-workers.

The results illustrate that males scored significantly higher than females on all dimensions. For example, notable differences can be seen in employees' satisfaction with supervisory communication between males and females. In comparison with the females, male employees recorded higher levels of supervisory connection and its sub-scales of supervisory communication relationships, adequacy of information from the supervisor and communication channels with the supervisor. A difference was also found between the genders in the six main dimensions of co-worker's communication.

5.7.2 Differences between Age Groups

The variable of age was divided into four groups: below 29, 30 to 39, 40 to 49 and over 50. An ANOVA was conducted to test how age influenced different employee perceptions of the six constructs and their sub-scales; the results are shown in (Table 5.23). Differences were

found in employees' responses to the three constructs, except in six components: the supervisory communication relationship sub-scales, communication channels with supervisor sub-scale, co-worker communication, co-worker communication relationship, trust in co-workers and trust in supervisors. Employees between the ages of 40 and 49 (group C) scored highest, followed by employees aged 30-40 (group B), and the older group D (over 50) had the lowest scores in all dimensions. This supports the findings of an existing study that was conducted in Saudi Arabia context (Mahdi & Al-Dera, 2013), which found a difference between age groups regarding affective communication.

The differences in these results can be explained by the fact that aged 30-40 (group B) has different characteristics than previous generations. The results showed that group B were less satisfied with organisational communication, leading to lower levels of engagement and trust in the workplace compared to the previous generation who showed high satisfaction with organisational communication. This confirms that group B's loyalty to work is lower than other generations' and is characterised by high turnover. To deal with this group, new strategies commensurated with the characteristics of this generation are needed. High levels of encouraging engagement plans must be created. Organisations must take advantage of the younger generation in the long term and minimise turnover.

Table 5. 22 Demographic Differences by Age Group

Variables	Mean				f	sig.	Multiple Differences
	(A) Under 29 years old	(B) 29- 39 years old	(C) 40- 49 years old	(D) Over 50 years old			
1. Supervisory communication	3.24	3.49	3.68	3.56	3.524	0.016	C>D>B>A
Supervisory communication relationship	2.93	3.37	3.52	3.45	1.797	0.148	Nil
Adequacy of information from supervisors	3.22	3.46	3.71	3.61	4.181	0.007	C>D>B>A
Communication channels with supervisors	3.47	3.63	3.70	3.50	0.658	0.579	Nil
2. Co-worker communication	3.36	3.66	3.71	3.64	2.095	0.101	Nil
Co-worker communication relationship	3.49	3.58	3.74	3.62	0.744	0.527	Nil
Adequacy of information from co-workers	3.29	3.73	3.63	3.58	3.171	0.025	B>C>D> A
Communication channels with co-workers	3.36	3.62	3.80	3.78	3.042	0.030	C>D>B>A

3.Trust in supervisors	3.29	3.65	3.73	3.66	1.832	0.142	Nil
4.Trust in co-workers	3.36	3.38	3.54	3.69	1.729	0.162	Nil
5.Trust in the organisation	3.48	3.63	3.84	3.86	2.809	0.040	D>C>B>A
6. Organisational engagement.	3.27	3.73	3.63	3.58	3.428	0.018	B>C>D> A

5.7.3 Differences between Levels of Education

Education variables have been divided into four groups: high school diploma, high diploma college degree, bachelor's degree and graduate degree (master's or PhD). An ANOVA was conducted to test the impact of education on the employees' perceptions of the three constructs and their sub-scales. The results of the ANOVA are shown in (Table 5.24).

Table 5. 23 Demographic Differences by Education Level

Variables	Mean				f	sig.	Multiple Differences
	(A) High school diploma	(B) High diploma college degree	(C) Bachelor	(D) Graduate school degree (master's, PhD)			
1.Supervisory communication	3.45	3.39	3.57	3.70	2.750	0.043	D>C>A>B
Supervisory communication relationship	3.25	3.26	3.555	3.13	2.808	0.040	C>B>A>D
Adequacy of information from supervisors	3.43	3.39	3.54	3.80	3.282	0.022	D>C>A>B
Communication channels with supervisors	3.61	3.46	3.67	3.78	1.589	0.192	Nil
2.Co-worker communication	3.58	3.57	3.70	3.74	1.523	0.209	Nil
Co-worker communication relationship	3.55	3.28	3.78	3.68	5.278	0.002	C>D>A>B
Adequacy of information from	3.58	3.74	3.66	3.78	0.99	0.39	

co-workers					1	8	Nil
Communication channels with co-workers	3.63	3.56	3.70	3.72	0.82 7	0.48 0	Nil
3.Trust in supervisors	3.49	3.58	3.74	3.70	1.82 1	0.14 4	Nil
4.Trust in co-workers	3.38	3.33	3.44	3.73	2.36 2	0.07 2	Nil
5.Trust in the organisation	3.65	3.84	3.59	3.82	2.56 6	0.05 5	Nil
6. Organisational engagement.	3.58	3.72	3.66	3.78	0.95 1	0.41 6	Nil

As shown in (Table 5.24) most measurements don't show any differences; only the four dimensions of supervisory communication, co-worker communication relationship and adequacy of information from co-workers showed significant diversity. In all sub-scales and overall scores of supervisory communication, co-worker communication, trust in supervisors, trust in co-workers, trust in the organisation, organisational engagement and employees with a medium level of education (i.e. three- or four-year college degree) gave an average score to their organisation, whereas employees with graduate higher degrees (master's or PhD) gave a high score rating to their organisation for each component. Employees with the lowest education level (high school diploma and high diploma college) gave the lowest score. Hence, the score compares to the level of education.

Employees with master's or doctoral degrees showed higher engagement than those from groups with other levels of education. These conclusions can be explained by the fact that employees with a higher level of education are more likely to feel an ethical obligation to stay with an organisation. The results are quite similar to those of other studies conducted in Saudi Arabia context (Al-Ahmadi, 2002), which report that highly educated employees gave a high score to their organisation, while employees with the lowest level of education gave the low scores.

5.7.4 Difference between Duration of Workplace Experience

The ANOVA (Table 5.25) produced several significant variations between the work experience groups. Only two dimensions did not show any essential diversity: trust in the organisation and organisational engagement. Employees who had worked for the organisation for more than 10 years group (E) scored the highest in all dimensions. The second group (C)

had 5 to 7 years of working experience, and group (D) had 7 to 10 years of experience. Both groups C and D gave an average score. The notable result between these two groups concerned organisational engagement and its sub-scales of engagement; they also showed more trust in their supervisors and had more adequacy of information from co-workers.

Employees who had worked from 1 to 3 (A) and from 3 to 5 (B) years had the lowest score in most elements' measurement. However, they scored above average in each dimension. This could be because they considered all elements to be at an acceptable level. Respondents with 1 to 3 years of work experience were seen to be the most satisfied with communication channels with their supervisors and supervisory communication, and they showed the highest normative commitment. The results are similar to those of other studies conducted in Saudi Arabia context (Al-Ahmadi, 2002), which report that job satisfaction is positively correlated with years of experience.

Table 5. 24 Demographic Differences by Experience Level

Variables	Mean					f	sig.	Multiple Differences
	(A) 1 to 3 years	(B) 3 to 5 years	(C) 5 to 7 years	(D) 7 to 10 years	(E) Over 10 years			
1. Supervisory communication	3.43	3.23	3.548	3.57	3.76	7.321	0.000	E>D>C>A>B
Supervisory communication relationship	2.69	3.09	3.39	3.51	3.89	11.645	0.000	E>D>C>B>A
Adequacy of information from supervisors	3.50	3.21	3.51	3.61	3.71	5.572	0.000	E>D>C>A>B
Communication channels with supervisors	3.66	3.39	3.73	3.51	3.81	3.228	0.013	E>C>A>D>B
2. Co-worker communication	3.44	3.41	3.70	3.69	3.90	9.209	0.000	E>C>D>A>B
Co-worker communication relationship	3.28	3.45	3.54	3.67	3.99	5.491	0.000	E>D>C>B>A
Adequacy of information from co-workers	3.56	3.37	3.79	3.70	3.85	6.219	0.000	E>C>D>A>B
Communication channels with co-workers	3.37	3.43	3.73	3.69	3.90	6.553	0.000	E>C>D>B>A
3. Trust in supervisors	3.39	3.44	3.73	3.66	3.86	3.894	0.004	E>C>D>B>A
4. Trust in co-workers	3.45	3.26	3.47	3.41	3.56	1.296	0.272	NIL
5. Trust in the organisation	3.57	3.55	3.66	3.70	3.88	2.383	0.052	NIL
6. Organisational Engagement	3.53	3.35	3.78	3.72	3.85	6.854	0.000	E>C>D>A>B

5.7.5 Difference between Management Levels

This study considered employees from four different managerial levels of the organisation: normal workers, supervisors, medium management level and top management level.

An ANOVA test was conducted to test the impact of various levels of education on the employees' perceptions of the three constructs and their sub-scales. The results of the ANOVA are shown in (Table 5.26) below.

Table 5. 25 Demographic Differences by Management Level

Variables	Mean				f	sig.	Multiple Differences
	(A) Normal workers	(B) Supervisor	(C) Medium manager level	(D) Top manager level			
1. Supervisory communication	3.55	3.54	3.43	3.50	0.680	0.565	NIL
Supervisory communication relationship	3.50	3.55	3.13	3.26	2.119	0.098	NIL
Adequacy of information from supervisors	3.55	3.47	3.46	3.49	0.378	0.769	NIL
Communication channels with supervisors	3.62	3.72	3.52	3.68	0.635	0.593	NIL
2. Co-worker communication	3.66	3.78	3.48	3.71	3.024	0.030	B>D>A>C
Co-worker communication relationship	3.68	3.77	3.27	3.65	4.238	0.006	B>A>D>C
Adequacy of information from co-workers	3.64	3.79	3.61	3.76	1.089	0.354	NIL
Communication channels with co-workers	3.67	3.79	3.49	3.68	2.099	0.101	NIL
3. Trust in supervisors	3.63	3.80	3.44	3.82	2.952	0.033	D>B>A>C
4. Trust in co-workers	3.37	3.43	3.52	3.59	1.143	0.332	NIL
5. Trust in the organisation	3.66	3.76	3.59	3.83	1.232	0.299	NIL
6. Organisational engagement.	3.64	3.77	3.60	3.74	0.880	0.452	NIL

The results of the ANOVA test demonstrate that in most components, the employees of the four managerial groups have no different responses, except when comparing the components of co-worker communication, relationship with co-worker and trust in the supervisor.

Employees in a supervisor position gave a higher score than those in co-worker communication, co-worker relationship dimensions and trust in the supervisor. In contrast, those working at a medium management level gave the lowest score (3.2). This could be explained by the restrictions medium managers feel they have on the amount of time they are able to spend speaking with colleagues due to their work role responsibilities. The results are quite different from those of other studies conducted in Saudi context (Yavas, Luqmani &

Quraeshi, 1990), which report that management levels of the organisation were found to be similar in their engagement and commitment to their organisation.

5.8 Conclusion

This chapter discussed the results of the measuring tools and matched the model of the relationships between the variables of the study. The theory selected for this study and the examination of hypotheses was discussed. The chapter also discussed the data collection and missing and outlier data. These subjects were explained in a focused manner and made available for analysis. Linear testing was used to ensure the accuracy of the data and to arrive at real and reliable results to provide realistic solutions to the problem of study. Exploratory factor analysis was used to determine the relationship between the variables. The chapter also provided the means and standard deviations of the six main constructs (supervisory communication, co-worker communication, trust in supervisors, trust in co-workers, trust in the organisation and organisational engagement) and their sub-scales (77 questions). Subsequently, a correlation analysis was applied using AMOS version 22 software. Values from the structural model and standard estimation were used to test each hypothesis, and the findings supported all hypotheses with direct and moderate correlation coefficients. Exploratory factors were analysed, and the measurement scale was examined to analyse the confirmation factor (CFA).

The reliability, stability, and validity of the measuring instrument have been confirmed. The results showed that the measures were satisfactory. It was noted that dependent and independent variables were statistically positive. It was also observed that all dependent variables, such as trust in internal communication and trust in co-workers and supervisors, showed a significant positive correlation with the independent variable. Therefore, trust in co-workers was a strong mediator. Specifically, 78% of the total effect of trust in co-workers on organisational engagement was mediated by trust in the organisation. The impact of trust in supervisors on organisational engagement is also mediated by trust in the organisation.

The results also showed that young employees trust supervisor communication more. Hence, if supervisors provide accurate and clear information about work and assist them, these employees are likely to trust them. In addition, the young employees preferred to use more than one channel of communication within the organisation. The results also showed the impact of the social relations of the young generation in the workplace: it strengthens the communication with all parties. This supports the theory of social exchange that shows that young employees appreciated communication reciprocity and they rely on social networks of

communication to achieving this, whether inside or outside the organisation. If employee relationship management is considered to be a continuous action that occurs over time, it is essential to start carefully thinking about the actions in this process. Engagement is not a consistent state. It is a situation, as Meyer and Allen (1991, 1997) discussed, through everyday experiences in the workplace. From a public perception, this research highlights the essential role of co-worker's communication trust in enhancing employee engagement in the workplace. Institutions must improve communication elements with this group, and continually deliver communications that are considered effective, comprehensive, and relevant to daily business demands.

Chapter 6: Discussion

6.1 Introduction

This study aimed to investigate the role of trust in internal communication in the development of employee engagement in the organisation. The study examined the association and the impact of independent variables – such as internal communication; trust among employees and in supervisors, co-workers and the organisation; and social associations in the workplace – on a dependent variable: employee engagement. The data for this cross-sectional study were obtained from a public sector institution in the Kingdom of Saudi Arabia. The results showed that internal communication relationships and relationships between co-workers were factors of employee engagement. A direct association of trust was seen between the supervisor and employee in social association within the workplace. These unforeseen outcomes will be covered in this chapter.

This chapter discusses the sample and population, followed by the purification of the results. Next, the results of the hypothesis tests will be presented and compared with previous studies. Lastly, the chapter will cover the effects of social association among co-workers and employee engagement in the organisation.

6.2 Population and Sample

This study was conducted in a government institution in Saudi Arabia, namely the Ministry of Labour and Social Development. This organisation has a total of 5,760 employees (Saudi Civil service, 2017). A random sample was used to collect data (Polit & Beck, 2008) from full-time employees in different age groups and at all levels, such as top management, medium management, supervisors and normal employees. A total of 600 questionnaires were distributed, and 330 were returned, indicating a good rate of response of 55.6%. Thus, this sample is well represented, and the response rate was satisfactory because participation was voluntary.

In social science research, missing data should be given high importance. The use of the average variance is one of many ways in dealing with missing answers to questions and thus can be excluded from the sample analysis and considered from the missing data (Enders, 2010). In this study, 13 out of 330 respondents (1.4%) did not answer some questions. However, this amount of missing data did not affect the results of the analysis. These 13 incomplete questionnaires were deleted and tested to find the outlier values. Outlier values cannot be categorically described as useful or problematic, but they can increase the value of

the standard deviation and form the mean bias (Iyer & Israel, 2012). Subsequently, the study was restricted to 253 questionnaires for final analysis.

6.3 Purification of the Measuring Scale

A knowledge measure was developed that as internal communication and employee engagement, trust between supervisors and co-workers, and social relations in the workplace are primarily based on conceptual articles. Therefore, the operationalization and validation of the concepts in this study are the first issue that will be discussed in this chapter. In the pilot study, in order to evaluate the questionnaire content and confirm its validity, respondents were asked to write comments on questions and feedback about it. In addition, the survey tool was evaluated by the university's expert in field research.

Data reduction used developed standards such as confirmatory factor analysis (CFA) and exploratory factor analysis (EFA) and several statistical tests like discriminant validity (DV), average variance extracted (AVE), convergent validity (CV), Cronbach's alpha reliability (α), and composite reliability (ρ). As a result, valid and reliable standards were tested theoretically and practically, and the hypothesis testing was performed using a reliable scale. Despite this, some thoughts were formed on the scaling improvement and clarifying issues related to the research subject, which will be presented as follows.

In general, the reliability and validity of the measuring instrument were proven and used to test the hypotheses. In order to enhance the questionnaire, several recommendations were obtained from the pilot study participants. The first was to introduce social media as a preferred method of communication between the managers or direct supervisors and the employees. Second, in the demographic scale, although the target group was male and female, the choice of gender and age, which had been undefined to reduce the bias of the study, was reduced to a particular gender or category. Thirdly, under the education level, the secondary certificate was identified as the lowest educational certificate for the sample because a high school degree is a minimum requirement for basic appointment in government jobs. Finally, the term 'direct manager' was inserted instead of 'direct supervisor' because the meaning is close and made the questionnaire clearer. Participants suggested that this term should be used with all questions so that they could be easily understood.

Almost all the dimensions of this study are consistent with those reported in the literature. The validity of the questionnaire was assessed by knowing the importance of each question and by evaluating its design (by identifies the axis to which it belongs) and its standard error.

The CFA was conducted to test the validity of the set of axes, providing six measurement models for six latent variables.

In brief, the confirmatory factor analysis (CFA) can confirm two main ideas. First, it is essential that the context of measurement and its relevance be related to the validity of inference (Lancaster, Dodd & Williamson, 2004). Thus, the most important thing is to make sure that another country has the same context. Moreover, if the same context exists in other countries, their elements may be different and may have a different form (Anderson & Gerbing, 1988). Second, to ensure that modified standards can be applied, it is essential to evaluate exterior validity as well as interior standards such as validity and reliability (Roberts, Priest & Traynor, 2006). However, the researcher assessed the validity of construction, which is a prerequisite for further theoretical testing and development (Heale & Twycross, 2015).

6.4 Internal Communication Trust and Employee Engagement

The main purpose of this study was to propose and examine a model connecting organisational communication (information adequacy, communication relationships and communication channels) and organisational engagement, as well as to assess the potential mediating influence of trust between supervisors and co-workers in organisations in a population of employees in a Saudi public sector. All the formulated hypotheses were supported.

Out of the three dimensions of organisational communication, information adequacy appeared to have the strongest relationship with engagement, followed by communication relationships and communication channels. Information adequacy was also a stronger direct predictor of engagement than communication support. The measures of information adequacy included assessments of how employees perceive updates about their work and progress from supervisors and co-workers, as well as information about the organisation's benefits and goals. This suggests that adequate and on-going communication from an organisation to its employees about both individual issues (for example job performance) and organisational issues (for example the company's achievements) is strongly related to communication trust and organisational engagement. Overall, trust in internal communication had a statistically significant and positive relationship with employee engagement in the organisation. The association of each factor of internal communication with employee engagement was further observed to be statistically important. This implies that additional points remain similar; the

more trustworthy and open internal communication in the workplace is perceived to be, the more employees will engage in the organisation.

In the literature, employee engagement has been seen as organisational behaviour towards work or an organisation (Anitha, 2014). There are two approaches: the behavioural approach depends on the employee's sense of relevance to the work rather than the organisation, whereas the attitudinal approach examines the character and essence of the individual's association with the organisation or work (Garoon *et al.*, 2016). Thus, the researchers' interest is in using trust in communication as one of the essential factors influencing the attitude and behaviour of employee engagement in the organisation, whether directly or indirectly (Heide & Simonsson, 2018; Lumineau, 2017; Mayeh, Ramayah and Mishra, 2016).

The central theme in the conceptual framework of this study shows that the expectations and benefits received by the employee from the organisation affect the development of positive attitudes and behaviours of that employee towards the company. Ruck & Welch (2012) and Tkalac, Verčič & Sriramesh (2012) stress that meeting the employee's psychosocial needs may provide him with satisfaction. The present study was applied to one of the employees' psychological and social factors; trust in internal communication between the supervisors, co-workers and organisation, in order to examine employee attitudes and behaviours concerning organisational engagement. Barfoot, Doherty & Blackburn (2017) Kim and Rhee (2011) and Welch and Jackson (2007) empirically support this concept, examining employee behaviour and attitudes towards engagement by using social factor analysis. In the literature, academics and practitioners have applied a range of psychological, social and normative elements as factors to measure employee engagement (Barfoot, Doherty, & Blackburn, 2016; MacLeod & Clarke, 2009; Truss et al., 2006; Kahn, 1992).

6.4.1 Organisational Communication and Trust

The results suggested that three dimensions of organisational communication were positively related to trust: adequacy of information, communication relationships and communication channels. This result corresponds with prior research (Mishra, Boynton & Mishra, 2014), which concluded that communication was useful in inspiring trust at both organisational and individual levels.

The outcomes were evaluated for the corresponding character of the three communication elements to employee engagement. The results showed a positive association with the independent variable, such as trust. A test of trust in co-workers ($r = .4086$, $p < 0.01$)

indicated a positive contribution to trust in supervisors. This finding can be accepted on the basis that the employee develops social exchange in the workplace based on trust (Thomas, Zolin & Hartman, 2009) in the organisation. In previous research, trust was assessed as an important factor in understanding the behaviours of employees in exchanges within the organisation and found a positive effect towards the supervisor and co-workers (Mishra, Boynton & Mishra, 2014; Thomas, Zolin & Hartman, 2009).

6.4.1.1 Supervisory Communication and Trust in Supervisors

This study is considered to be one of the few studies that examine the use of the three dimensions of communication (communication relationship, adequacy of information, communication channels) within effective supervisory communication, which has a positive correlation with the trust of the supervisor. The outcomes revealed that trust in a supervisor was extremely relevant to the adequacy of information communication relationships and communication channels ($H1: \beta = 0.79, p < 0.001$).

The main aim of communication is to circulate information (Downs & Adrian, 2004). This study considered three dimensions of the adequacy of information: type of information, timing and accuracy. Fourteen items were designated to measure this variable. 'The quantity of information regarding how my job is related to how problems are being handled' had the highest correlation with trust in the supervisor. In contrast, the question regarding 'the number of information about the errors and mistakes of the situation' had the lowest correlation with the latter. This finding suggests that those supervisors who can offer information around the immediate working environment of employees will generally be considered trustworthy. Information linked to larger projects, the organisation's financial position and its failures might be regarded not so much as an advantage, but rather as a tactic to evaluate group performance (Singh, 2016). Conversely, employees will forfeit their trust in supervisors who are unable to help subordinates resolve dilemmas or present useful and professional information on the project.

Also, a reliable communication tool has been found to be a vital contribution to developing a trusting environment within the organisation. The results showed that compared with telephone, letters and e-mail communication channels, face-to-face communication was the most significant predictor of trust. This outcome is in line with the findings of Ziegele & Reinecke (2017), that face-to-face communication has a more comprehensive influence concerning the promotion of interpersonal trust-building mechanisms. The choice of communication channels has a fundamental impact on employees' perception of their trust in

the supervisor. Communication practitioners contend that when dealing with complicated and urgent matters, face-to-face communication can produce excellent results due to the quick response and additional nonverbal information. Besides this, it provides an opportunity for employees to recognise their supervisors' characteristics and leadership at close range, thus allowing the employees to evaluate to what extent they can trust in their supervisors. In this research, the results supported H1 (supervisory communication is associated positively with supervisor trust).

This result also confirms and increases the knowledge of organisations in Saudi Arabia (Singh, 2016). Caputo, Evangelista & Russo (2016) stressed that the quality of information exchanged gives a strong indication of trust in communication between supervisors and co-workers. However, the quality of information has not been accurately identified. The present study identified that information about opportunities; various kinds of information and the quantity of this information could also affect trust, which increases the understanding of which type of information is essential for employees to improve trust.

In brief, results showed that employing the three dimensions of communication (communication relationship, adequacy of information, and communication channels) with effective supervisory communication has a positive correlation with the supervisor's trust. This result may explain individuals' effective communication as a support and enhancement of the relationship between employee and supervisor and the opportunity to bring distance between the parties (supervisor and employee).

6.4.1.2 Co-workers Communication and Trust in Co-workers

Co-workers' relationships can play an essential role in influencing trust in the work environment because interpersonal relationships represent a network of diverse exchanges between any parties and have a significant impact on the organisation engagement. Prior researches have shown that positive peer relationships provide a source of essential reward for employees, prevent job-related stress, and decrease work anxiety and turnover (Halbesleben & Wheeler, 2015). Scholars have also suggested that developing trust at the individual level is necessary for enhancing employees' working attitude by developing adequate engagement and citizenship behaviour (Lau & Liden, 2008; Tan & Lim, 2009). Although the significance of co-worker trust has been recognised (Heide & Simonsson, 2018), how to grow co-workers' trust has not yet received systematic theoretical attention (Jiang & Men, 2017; Halbesleben & Wheeler, 2015). In this research, the results supported H2 (*co-worker communication is positively associated with trust in co-workers*). Thomas,

Zolin & Hartman (2009) found two dimensions of communication that determine trust in a co-worker: the amount of information and the quality of information. In this study, the research was expanded by considering three dimensions of communication (communication channels, information adequacy and communication relationship), given not only previous studies but also other aspects of communication.

The outcomes of this research showed that trust in co-workers was closely associated with the communication channel, information adequacy and communication relationship H2:($\beta = 0.39, p < 0.05$). Of the questions related to the adequacy of information, ‘the amount of information about job duties’ was strongly correlated with trust in co-workers, while ‘information about benefits and wages’ had the weakest relationship with confidence in co-workers. These results indicate that direct help and guidance on job duties are essential to gain confidence in a co-worker, more so than giving only general information. However, it is worth noting that the use of horizontal, rather than vertical, communication in the transmission of information can cause this communication between colleagues to be unnoticed by transmitting gossip, rumours and non-valid information within the work environment, and resisting change and changing attitudes towards the organisation.

The data shows that face-to-face communication creates an excellent opportunity for trust in co-workers. However, the development of rapid technological communication seemed to create another opportunity to communicate more than face-to-face or by telephone, especially among the young generation. In order to enhance trust among these employees, more non-verbal information can be provided.

6.4.2 Trust in Supervisors and Trust in the Organisation

The results concerning *H*, (*show there is a positive relationship between supervisor trust and organisation trust* ($\beta = 0.65, p < 0.001$)). When the supervisor’s personality and behaviour are assessed correctly, this will undoubtedly enhance the level of trust in the organisation. The results confirm the existence of great links between trust in co-workers and trust in the organisation. In addition, this research showed that trust in the supervisor directly affects trust in the organisation. The reason for this effect is because the higher authorities of the organisation make the selection of supervisors, and then the supervisor implements the decisions on behalf of the senior management of the organisation. The credibility of the supervisors in senior management has a significant effect on the improvement of the trust environment in the organisation. The data also shows that providing necessary information about the organisation regarding development plans, job training, administration and

financial advantages, is one of the determinants of trust in the organisation. This finding is confirmed by previous research (White, Vanc & Stafford, 2010), which showed that the sharing of information, compensation systems and training opportunities associated with performance are positively related to trust.

6.4.3 Trust in Co-workers and Trust in the Organisation

The results support *H4* (*there is a positive relationship between co-worker's trust and organization trust*) ($\beta = 0.58, p < 0.001$). The findings revealed that trust in co-workers played an essential role in developing trust in the organisation. This result is in line with the empirical research by Ferres (2002) that confirmed the relationship between trust in co-workers and trust in the organisation. The results indicate that workers tend to trust the organisation when they see colleagues at work as collaborators who encourage each other. However, the results also revealed that trust in the supervisor had a higher impact on trust in the organisation than trust in co-workers did. This is because the supervisor works with the employees on a daily basis. He provides accurate information to individuals on the organisation's policies, strategy and change system, and evaluates employees' performance at work. Employees, therefore, consider supervisors to represent the organisation and the supreme authority (Schultz *et al.*, 2012). As such, the trust relationship between employees and supervisors becomes more important than the trust relationship between co-workers in developing a climate of trust within the organisation. Also, the results indicate that the number of trustworthy employees affects the trustworthiness of the organisation. In other words, if the majority of individuals are not trustworthy, teamwork and organisational adherence can be destroyed.

6.4.4 Trust and Organisational Engagement

The outcomes of this research illustrate that trust at an organisational level predicts organisational engagement. Trust in the organisation can be considered the first level in the engagement scale. The influence of trust in co-workers is less than the trust in supervisors on employee's engagement. The influence of trust in co-workers is less than the trust in supervisors on employee's engagement. The findings confirm the scholars' notion of trust that trust significantly contributes to engagement (Garoon *et al.*, 2016; Mishra, Boynton & Mishra 2014; Ruck & Welch, 2012).

6.4.4.1 Trust in Supervisors and Organisational Engagement

The results showed that trust in supervisors has positively correlated with organisation engagement. This indicates that if employees have high trust in their supervisor, they will have excellent engagement. This supports Jiang and Men's (2017) findings. The more employees trust their supervisors, the more they feel engaged in the organisation.

This study considered previous research that focused on the association between trust in co-workers and supervisors, and employee engagement in the organisation. It also considered engagement, which consists of three concepts of organisational engagement in a model that has been adopted and developed by several researchers (Walden *et al.*, 2017; Verčič & Vokić, 2017; Jiang & Men, 2017). The results showed that emotional engagement and trust in the supervisor had the essential relationship, indicating that employees who felt their supervisors were trustworthy showed a strong desire to engage in their job. Compared with emotional engagement, it is clear that trust in the supervisor had less impact, but the engagement was significant ($H5: \beta = 0.45, p < 0.001$). According to Meyer and Allen (1997), engagement points to the fact that loyalty to the organisation is considered an ethical belief. Based on this definition, the evidence of the positive trust relationship between the supervisor and employees may indicate that the employee becomes more loyal to the supervisor. In this research, the results accept *H5 (there is a positive relationship between supervisor trust and employee engagement)* and approved the importance of trust in the supervisor on organisational engagement. Furthermore, this conclusion validates and extends current theory for Saudi organisations (Bodrick, 2017).

6.4.4.2 Trust in Co-workers and Organisational Engagement

It was mentioned in the literature review that trust in co-workers played a significant role in organisational support and emotional engagement, and it reduced employees' turnover

intentions (Jiang and Men, 2017; Halbesleben & Wheeler, 2015; Tan & Lim, 2009). The outcomes of this research showed, as expected, that employee trust in co-workers gave a positive indication of organisational engagement (H6: $\beta = 0.62$, $p < 0.001$). This outcome means that employees are engaged in the organisation and are more likely to stay when trust in co-workers is high. In this research, the results accept *H6: (there is a positive relationship between co-worker trust and employee engagement)*.

6.4.4.3 Trust in the Workplace and Organisational Engagement

In line with previous research (Jeong & Oh, 2017; Slack, Corlett, & Morris, 2015; Schoenherr, Narayanan & Narasimhan, 2015) it can be said that trust in the organisation is one of the important factors of organisational engagement (H7: $\beta = 0.71$, $p < 0.001$). This indicates that employees are more likely to be engaged in the organisation when their trust in the organisation is more significant. Hence, the results support *H7 (organisation trust is positively related to organisational engagement)*. This conclusion shows that the highest level of trust in the organisation improves employee confidence in the organisation as a whole. Thus, the higher the levels of trust in the organisation, the greater the employee's belief that the organisation will fulfil its obligations in the future. Under the context of employee engagement in the organisation, the most significant impact on employees' trust in the organisation is their trust in supervisors and co-workers. Many researchers have tried to prove that emotional engagement is positively related to trust in the organisation (Jeong & Oh, 2017; Slack, Corlett, & Morris, 2015; Mishra, Boynton & Mishra, 2014). However, limited research has investigated the association between engagement and trust in the organisation. The present research supports this correlation by highlighting the impact of the employee's engagement on trust in the organisation. This study is the first of its kind, which deals with the relationship between organisational engagement and internal communication trust between employee, supervisor and co-workers in a Saudi organisation. The results showed that trust at both individual and organisational levels leads to active engagement, and trust in any organisation has a role in enhancing employees' engagement in the organisation, while trust in co-workers had the weakest role. Hence, it can be stated that trust at an organisational level had more impact on employee engagement. It is also remarkable that the supervisor has more impact on employee engagement than co-workers do.

6.4.5 Organisational Communication and Organisational Engagement

This study was based on research about the role of trust in internal communication and employee engagement (Kim and Rhee, 2011; Johlke & Duhan, 2000) and the model of engagement in the workplace. Organisations are generally advised to acknowledge the advantages of social exchange relationships in the workplace when giving employees support and providing them with useful sources of information.

Communication regarding related progress within the organisation and individual tasks provides a sense of commitment in one's work, which develops into a sense of engagement (Ruck & Welch, 2012). The model emphasises the importance of the organisational communication climate and messages at the personal level as predictors of employee-organisational relations. This emphasises that the organisation communication system leads to the flow of information to suit the needs of the organisation. Furthermore, the organisation should be concerned with enhancing trust in communication between employees and colleagues in order to improve employee engagement, to strengthen the mutual exchange between the employees, supervisors and the organisation, and to build a long-term relationship with them. The results of this study show a strong positive relationship between the organisation's internal communication and employee engagement. Thus, it can be said that Saudi managers who communicate with employees and who are clearly more satisfied with the process of internal communication, show more engagement and loyalty towards their organisations, and vice versa. The next section will discuss the relationship between organisational engagement and communication between co-workers and supervisors.

6.4.5.1 Supervisory Communication and Organisational Engagement

This research examined internal communication and its three dimensions: the adequacy of information, communication channels and the communication relationship. In line with the results of previous studies (Westerman, 2017; Verčič & Vokić, 2017; Barfoot, Doherty, & Blackburn, 2016; Welch, 2011) the results show that the perceptions of employees are affected by these dimensions, which account for 67.5% of the variation in engagement. In this study, the adequacy of information was one of the most effective ways of predicting organisational engagement. Three aspects of information adequacy included the amount of information, the type of information, and the timing of the information. The results showed that employees showed greater involvement by communicating with supervisors if they were given accurate, varied and timely information, as they felt appreciated and respected. It also

noted that the communication channels were the most frequent dimension, where the impact of modern communication, apparently on the means of communication within the organisation has a definite effect on engagement. This gives a clear indication of the importance of new communication channels and their significant role in the timely transfer of information to generate engagement. Regarding the third dimension, the communication relationship, it is clear that communication and social activity after work between supervisors and employees and between colleagues, does not facilitate organisational engagement. In contrast, the sharing of ideas, opinions and feelings among staff and supervisors is likely to lead to engagement.

6.4.5.2 Co-worker Communication and Organisational Engagement

The outcomes of this study reveal that communication among co-workers also enhances employee engagement within the organisation. Excellent communication between co-workers may be considered as a contributing factor to an employee staying with the organisation. Furthermore, the employee may feel that investing time and effort in developing a high-quality relationship with a co-worker has excellent value. Co-workers are most likely to be trusted as a source of information about the organisation because employees believe that supervisors may not reveal all information, especially if it relates to sensitive matters and has negative consequences for employees.

In this study, it is interesting to note that supervisory communication showed strength in predicting organisational engagement from peer communication, indicating that the three dimensions of communication between employees have a stronger impact on emotional involvement than engagement. This conclusion is compatible with the results of a study by Men (2014) in which supervisory communication emerged as a more influential factor than any other indicator. Alternatively, the present results are consistent with the conclusion that vertical communication is more likely to be involved than horizontal communication. This supports Mishra, Boynton & Mishra's (2014) assumption that an employee is more likely to engage in the organisation if he has sufficient information to perform his task, and if he obtained information about the work directly from the supervisor instead of a colleague. It is assumed that the personal relationships between individuals are influential in horizontal communication. However, this contradicts the conclusion that communication between co-workers can be considered a stronger indicator of organisational engagement than the influence of a supervisor. A possible explanation for this difference is the significant influence of trust on relationships within organisations.

The results showed that employees of the Ministry of Labour and Social Development were using additional open communication due to a sense of trust. Previous researches assessed the feeling of trust in individuals in order to understand employee attitudes and behaviours towards the organisation (Jeong & Oh, 2017; Stinglhamber, Cremer & Mercken, 2006) positive results are reported.

6.5 Building a Bond with New Generation (Millennial)

The results showed that millennial employees of the Ministry of Labour and Social Development rely more on social relationship factors than other factors to build trust in the workplace and turn employee engagement. It can be claimed that, based on the communication relationship element, there has been an increased interest in millennial employees. This generation values modern communication and relies upon it in their social exchange relationship in the workplace; this has been reflected in their behaviours, and they have become more loyal and engaged in the organisation. It is also possible to say that millennials are the most willing to exchange open information and relations in the workplace, as a result of their high trust in supervisors and co-workers. Schilke, Reimann & Cook (2015) state that intangible social exchange such as trust plays an essential role in facilitating tasks and motivating employees to engage in and stay with the company. This also confirms that millennial employees are satisfied by the intangible reward and mutual trust between them and colleagues and supervisors, which was explored by Schneider, Ehrhart and Macey (2013). It can be said that when organisations conduct trustworthy and effective communications with employees, this leads to employee engagement (Tan & Lim, 2009). This means that if Saudi Millennial employees trust the organisation, the communication between members within the organisation is likely to be effective, and information exchanged between them is likely to be open. This strongly indicates that the employees' participants in this study have a high level of trust in the organisation's goals and values and are ready to do more to achieve them. At the same time, the organisation also has a great willingness to keep millennial employees (McCorkindale, DiStaso & Carroll, 2013).

A gap between millennial and older generations, in the way they communicate and interact within organisations, has encouraged practitioners and academics to find a suitable strategy for the critical phases of communication and interaction between these generations in the workplace. This study builds on previous literature on the preferred communication methods of the millennial generation for interaction and openness in work-related communication (see Chaudhuri & Ghosh, 2012; Myers & Sadaghiani, 2010). The results suggest that companies should pay attention to millennial' communication expectations and employees should assist

at all stages of communication by assessing employee performance and providing feedback on communication outcomes and effectiveness. Furthermore, organisations should pay attention to the diversity of communication tools within the workplace, such as personal and virtual meetings and social networking sites, in order to ensure that employees stay on task, and should send clear expectations about business performance, which is essential for employee engagement. Organisations can improve millennial' engagement and their relationship with them by intensifying attention paid to this group's need for information in the workplace. Most millennial are in the early stages of their careers; this facilitates a long-term strategy to improve their engagement and keep them within the company (Walden, Jung & Westerman 2017). Furthermore, trust in the communication between co-workers and supervisors can be considered a vital element in the active and clear exchange of information in the working life of millennial (Gallicano, Curtin & Matthews, 2012).

6.6 Conclusion

This chapter has discussed the outcomes of the sample and population; measurement scales purification and testing the hypotheses. All hypotheses and sub-hypotheses developed in the framework based on prior literature have been examined, and some prospective studies have been presented. The issue of dimensions and factors applied in this research might be enhanced by recognising personal beliefs and actions regarding organisational engagement.

In line with previous studies, horizontal communication (employee with co-workers) and vertical communication (employee with supervisors and the organisation) are found to be essential factors that affect employee trust in the organisation and to contribute significantly to employees' engagement in Saudi organisations. In addition, communicating with co-workers has a significant effect on the employee, but the influence of the supervisor is considered stronger in terms of employee engagement. If organisations provide suitable information to employees, the following essential outcomes are expected: they will focus on the task required from them and they will be committed to a productive relationship with their supervisors. It is also possible that the level of engagement and communication within the workplace is equal to the level of trust in the internal communication between members of the organisation.

Results indicated that employees in the investigated organisation are highly satisfied with supervision and co-workers. In contrast, they are slightly satisfied with work conditions and job security, but they have low satisfaction with information received from the supervisor and co-workers regarding pay and promotional facets of the job. Results further demonstrated that

employees in the investigated organisation are remaining with their current organisation because they want to do so, or because they have to do so.

Modern communication programmes provide an open flow of information for both employees and supervisors and can thus be considered a useful element in assessing the voice of employees throughout the organisation. When modern communication is applied with trust among all parties in the social network, the organisation is likely to increase in employees' engagement and loyalty to the organisation, and mutual and lasting relationships are likely to be maintained.

Chapter 7 Conclusion

7.1 Introduction

This study investigates the relationship between internal communication, trust and engagement in the Saudi public sector due to recent reforms and changes in the country's leadership strategy and new management. Due to the employees' entry into the labour market and their access to high management positions, there is a growing interest in studying the behaviour and attitudes of employees in the workplace on a global scale in developed countries. The new employees' generation has different characteristics than previous generations in terms of communication use, technology and other fields. The increasing interest in advanced communication technology, mergers and acquisitions and mega-business projects, the rapid rise in employees and the opportunities and innovations at the level of Saudi government institutions all require a new leadership and management approach that maximises these changes in order to reach the highest leadership objectives in all fields. However, little research has investigated the association between organisational communication, trust and engagement in these institutions.

This research has aimed to develop a systematic and comprehensive concept of the role of communication on the horizontal and vertical levels of the behaviour and attitudes of employees within the state's public institutions. The purpose of this research was to develop a conceptual framework to measure the relative association of communication factors with the social and psychological perspective of employees. The main hypotheses and sub-hypotheses have been developed along with the theoretical framework. A quantitative approach was used in the form of a questionnaire to test the hypotheses. The target population in this study was employees from the public sector in the Kingdom of Saudi Arabia. The 300 participants were from various departments and administrative positions in the Ministry of Labour and Social Development. Structural equation modelling techniques, including AMOS software, were applied to test the primary and sub-hypotheses. This section first discusses the theoretical contributions of the thesis concerning gaps in the literature. Secondly, the practical implications of the research are illustrated. This is accompanied by a review of the methodological and theoretical limitations of this study. Finally, a recommendation for future research is provided.

7.2 Research Contributions

A conceptual framework was developed of employee beliefs and behaviours in the Saudi public sector organisation after evaluating current literature in the domain of internal

communication, trust and engagement. Relationships between these factors were examined, to systematically and subsequently create and test a set of hypotheses. The study investigated the impact of co-worker trust, supervisors' trust, and organisational trust on employee engagement. In the framework, the direct influence of supervisor trust, co-worker trust, organisation trust and social relationship communication in the workplace factors for organisational engagement, was investigated. This understanding was conceptualised based on prior studies (Jiang & Men, 2017; Brunetto *et al.*, 2012; Kim & Rhee, 2011).

Statistically, the outcomes supported all hypotheses. In general, it was found that trust in co-workers was positively related to trust in supervisors, and organisation trust was positively related to employee engagement. The relative strength of the contact distance has found to be useful and essential in increasing the trust in supervisors and co-workers, thus affecting employee engagement. In addition, it has found that social communication relations among employees in the workplace were positively and significantly associated with trust in organisational engagement. Results also showed that employees are concerned with modern communication networks at work and rely on them for communication between all parties in the vertical and horizontal directions. This result supports the development of employee communication methods within the organisation, especially in Saudi Arabia public sector.

7.2.1 Theoretical Contributions

Statistical results showed that all hypotheses were accepted. Overall, employee engagement toward the organisation factors has found to be significantly and positively correlated to trust in co-workers, supervisors and organisational trust. The relative power of the co-worker trust factor has found to be positive and significant to organisation engagement. However, two elements, such as information about important new products, services or program developments and promotion, and advancement opportunities were having a low significant impact on employee engagement. Furthermore, employee social relationships in the workplace have also found to be positively and significantly correlated with organisational engagement. This finding also supports the development of employee attitudes and trust beliefs, particularly in Saudi Arabia.

The novelty of this research is based on the development of a comprehensive theoretical framework. It examines the factors that influence employee engagement in the workplace. Prior studies on organisational engagement focus on the role of supervisor trust and organisational trust and neglect the role of co-worker trust in an organisation. Therefore, it is

possible to claim that this research is the first of its type to empirically and theoretically test the framework. Hence, this study makes several theoretical contributions.

The first contribution to knowledge is that this research is the first empirical study that contributes to engagement literature by combining three trust variables into one framework with social exchange theory, which enhances literature in employee engagement. This theory matches the reality of information exchange and relationships within the workplace. In addition, the role of communication trust as an intangible factor affects employee engagement and the trust between supervisors, co-workers and organisations in a more comprehensive way.

The second contribution to knowledge is that this study is about trust in a co-worker. While some research has examined the effects of trust in organisational communication and organisational management, such as psychological factors, workplace policies, culture and the supervisor's personality, they have ignored the role of other factors, such as trust in a co-worker. This is in response to the employee's need for a trust communication process between the organisation, supervisor and co-worker, using the preferred and available channels. From the perspective of theory building, understanding co-worker requirements concerning communication within the organisation can help to improve the interaction between colleagues and supervisors, which in turn may lead to maintaining relations with the organisation and developing a long-term partnership with it. This study contributes significantly to understanding the influence of co-workers in the workplace, communication relationship and organisational engagement, which has been neglected by many researchers and practitioners.

The third contribution to knowledge is that this empirical study provides evidence from a relatively Saudi cultural context since most previous research has been conducted in the US, Australia and Canada. This is the first study recorded on co-worker's internal communication, trust and organisational engagement in the Saudi public sector. This study examined the sector of government services, and it is one of the first to report essential data from the common area of Saudi public institutions. In addition, it assesses the state of trust and engagement with their supervisors and within the organisation through internal communication methods. Investigating a social institution was necessary in order to apply the results to other public sector organisations.

7.2.2 Practical Contributions

It is essential to investigate the elements that impact workers' engagement via communications. Eventually, the relationships between co-workers and supervisors influence individual attitudes and behaviours because these are the primary source of information within the organisation. The results of this research have many practical implications. Valuable suggestions for supervisors and practitioners are presented below.

Firstly, the results of this research suggest that employee relationships with supervisors and co-workers are crucial. These outcomes showed that co-workers and supervisors partake information with the employee around most of the occupation progressions. Furthermore, the outcomes indicate that attention must be paid to applying effective internal communications to improve employee attitudes and behaviours in order to improve trust and engagement in the workplace. Indeed, the employee requires advice from co-workers to improve his future work. Results showed that in the public sector institutions of Saudi Arabia, co-workers and supervisors do not share information with others about promotion and advancement opportunities. Therefore, it is recommended that co-workers and supervisors who have previous knowledge, skills or information must interact with others to improve employees' trust in the institution. In contrast, the employee must be trustworthy towards their co-workers.

Secondly, the research highlights the significance of using psychological elements for employee engagement and trust in organisational communication. The outcomes revealed that employees of government sector organisations in Saudi Arabia promote their pleasant feelings and actions from emotional elements such as trust and job engagement. In addition, employees possibly increased to engage effectively and significantly when they realised that the work met their emotional and trust-related needs. Organisations realise the advantages of a relationship when delivering support and providing employees with useful resources. Communications about work developments related to employee functions within the workplace and individual employee tasks increase the sense of engagement in work, which appears to include full attendance, enrichment in a profession and interest in going to work. Furthermore, these outcomes prove and extend current knowledge about institutions in Saudi Arabia. Thus, it can be said that if employees hold an emotional trust relationship with their co-workers, supervisors and organisation, they are more likely to engage.

The third practical contribution is that the social relations between individuals may promote employee engagement through trust in supervisors and co-workers. According to this study's respondents, positive social relations in the workplace can facilitate the transfer and movement of information among all parties in the organisation. In the public sector institutions in Saudi Arabia, this factor was found to increase trust in information exchange and to work with their co-workers and supervisors. The results suggest that social relations in the organisation could strengthen information exchange to be trust worthier for organisational engagement in public sector organisations in Saudi Arabia.

Finally, this research proposes that trust should be integrated and developed in administrative and applied studies due to the positive association between trust and organisational communication at the level of supervisors, co-workers and the organisation. Although trust is challenging to build and maintain, especially when the current levels of trust are low, it is possible, and it is an essential advantage in building relationships and achieving excellent results. In addition, it may be beneficial to know what forms of communication are understood and accepted by employees, especially for senior management. In turn, this could help them to exchange information shared with colleagues and supervisors quickly and smoothly and may motivate employees to engage. Effective communication practices, such as maintaining an open and harmonious communication relationship, adopting different communication channels and providing timely work information, can create a high level of trust for the employee. It is also possible to say that young employees depend on their sense of belonging and engagement in the quality of informal, social and emotional interactions with co-workers. Colleagues who support the young generation in the workplace have a good communication relationship with their supervisors. Therefore, it is recommended that managers in Saudi Arabia seek the trust of all employees, especially young employees, by practising behaviours that promote trust, such as showing genuine interest and making suggestions for developing their professional work, making promises and using appropriate communication channels for all parties.

7.2.3 Methodology Contribution

This study is one of the few studies aimed at testing internal communication trust dimensions and employee engagement outside the Western cultural setup – namely, in Saudi Arabia. Engagement researchers (Taylor & Kent, 2014; Men, 2014; Brunetto *et al.*, 2012; Kim & Rhee, 2011; Welch, 2011; Gruman & Saks, 2011) have highlighted employee engagement in the working environments of developed countries. The present study bridges the gaps in

global studies by examining the influence of trust in co-workers on trust in supervisors and the organisation, and their impact on organisational engagement in cross-cultural job environments. Therefore, it could be beneficial in generalising the outcomes. Testing the internal communication dimensions and engagement in Saudi Arabia could provide a new perspective in the literature, as the Saudi society and social context are significantly different from Western culture (Al Alhareth, Al Alhareth & Al Dighrir, 2015). The results of the study suggest that employee communication trust is necessary and can develop similarly in Western countries and GCC cultures. The study showed that Saudi employees sharing the same beliefs about engagement and trust in their general sense was discussed in previous literature. Also, the conceptual framework illustrates the impact of trust in the organisation's internal communication on employee engagement, which emphasises that individual concepts can be utilised effectively in academics research in other countries as well.

7.3 Study Limitations

7.3.1 Theoretical Limitations

Despite the encouraging outcomes, some limitations must be addressed that could be remedied in further investigation. The fact that employee communications and engagement were tested in public organisations, in particular, could hinder the generalisability of the study. Employees in non-public sector organisations may have different reactions. Hence, these variables must be examined in different divisions in a similar society to increase generalisability.

The second limitation is the use of single-source data. However, according to Enders (2010) the importance of this matter depends on the kind of variables studied and the study question. According to Brunetto *et al.* (2012) trust in other party depends on the individual's perception and the extent to which he or she evaluates his or her self-perceived, which can be used to assess the level of trust towards the other party. Prior studies in internal communication trust and employees' engagement have relied particularly on individual-recorded data to acknowledge employees' beliefs and responses towards trust (Barfoot, Doherty, & Blackburn, 2016; Welch, 2011).

The third limitation is that because this study tested internal communication and employee's engagement simultaneously with social relationships in the organisation, a significant sample with various jobs would improve the results. The growing phenomenon of employees turnover, lack of loyalty, lack of dependence on a single institution through their careers and

reliance on social media and communication technology to build interpersonal relationships in the workplace can be considered as challenges facing organisations in both the public and private sectors, along with identifying factors that contribute to engaging this generation. Therefore, attention must be paid at a global level to the factors that contribute to the engagement and loyalty regarding the development objectives of the organisation. Therefore, additional investigations are required to comprehend and examine the characteristics, attitudes, beliefs and behaviour of this generation in order to address these challenges.

7.3.2 Methodological Limitations

Although the appropriate methodology was applied to examine the research problem, some methodological limitations must be discussed. First, the data used in the study were based on one type of questionnaire, and they were recorded at one specific point in time. There are, therefore concerns about bias, which is that participants in a study begin changing their habits and activities in order to become better. Individual data taken at a specified time may be heavily influenced by participants, as these data are a self-reported single data, which has been collected at a single point in time, thus, it may reflect a spurious relationship of employees' engagement and their social relationship within the organisation (Bryman, 2016). Furthermore, since the data of this study were obtained only once at a specified time, it is challenging to derive causal relationships between the variables and their results. Longitudinal studies contribute to understanding the perceptions and behaviours of individuals towards a long-term phenomenon. Future research could use longitudinal studies to measure the dimensions of communication and confidence in co-workers and their impact on participation; this may yield far better results.

The second limitation is that this study examined public sector organisations in Saudi Arabia, which limits the probability of generalising the outcomes of the research (Al-Ahmadi, 2002). It also imposes restrictions on the outcome of the study, especially for organisations in developed and Western countries that follow clear policies in their structure.

The fourth constraint relates to the voluntary participation of the respondents and the impact on their answers. The researcher gave them the freedom to complete the questionnaire anywhere, inside or outside the workplace. Therefore, other external factors, such as the environment may have had an impact on their answers.

Finally, the questionnaire method for collecting data may have led to a standard bias of the sample, as has been reported in other studies utilising a similar method. There may be a problem with the survey because data were collected from one source and at a single point in time.

7.4 Future Research

The researcher believes that the three most important dimensions of organisational communication are communication channels, communication relationships and information adequacy. Future studies may help to improve the theoretical model for this study around additional dimensions, such as Maltz's (2000) three dimensions of organisational communication – richness, spontaneity and speed – to strengthen the measurement of organisational communication.

This study investigated the relationship between internal communication trust, co-worker and supervisor trust, and social relations in the workplace. Future research could also examine trust as a critical factor for millennial' digital engagement via internal social media (Sievert & Scholz, 2017).

Future research could also apply the same elements and communication dimensions used in this research with a change management topic. This may develop a theoretical model regarding the role of trust in co-workers and supervisors for effective change management and to reduce resistance in organisations.

Furthermore, future studies could adopt a mixed method for data collection, such as survey questionnaires alongside in-depth interviews. This could yield further information regarding internal communication trust and employee engagement.

Finally, this research investigated a one-way relationship between engagement, trust and communication. Future studies could be conducted to examine a relationship in the opposite direction between these elements: for example, organisational engagement could lead to trust, which could result in creating useful communication.

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Annexe 1 Survey Questionnaire

Survey for Organisational Communication, Trust and Employee Engagement (English version)

DELIVERY AND COLLECTION QUESTIONNAIRE

Research Title: the impact of trust in internal communication on employee engagement in Saudi Arabia public sector

Conceptual definitions used for the study

- Trust in the workplace: The willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the trustor irrespective of the ability to monitor or control that other party.
- Organisational Internal Communication: A social process of interaction and /or interpretation that gives sense and meaning to social reality, organisational actions, events and organisational roles and process.
- Organisational Engagement: A high level of identification with an organisation's goals and values, willingness to exert extra effort for the benefit of the organisation, and a strong desire to maintain membership in the organization.
- Co-worker: A work colleague. It could be colleague within your workgroup/department or in another workgroup/department. Not a supervisor or manager.
- Supervisor: A leader in direct charge of most of your work focus who you report to as outlined in an organisational chart.

Survey instructions

Questions below are not a test. There is no right or wrong answer here. Please indicate your level of agreement by checking the number that best reflects your perception of yourself.

There may be questions which appear irrelevant or impertinent. However, it is necessary for this study that all questions are answered, as the questionnaire is designed to achieve research objectives, and it is hoped not to offend respondents in any way. If there are questions which you are unwilling or unable to answer, skip them and continue answering the remainder of the questions. Remember that both your identity and your answers will remain strictly confidential.

PART ONE-General Information

Respondent Details:

Following questions are to obtain demographic information about you. For each of questions below, please circular the response that best describes you:

1. What is your gender?

- 1) Male
- 2) Female

2. What is your age?

- 1) Under 29 years old
- 2) 29-39 years old
- 3) 40-49 years old
- 4) Over 50 years old

3. What is your highest level of education?

- 1) High school diploma
- 2) High diploma college degree
- 3) Bachelor
- 4) Graduate school degree (Master, Doctor)

4. How long have you worked for this organisation?

- 1) 1 to 3 years
- 2) 3 to 5 years
- 3) 5 to 7 years
- 4) 7 to 10 years
- 5) Over ten years

5. What is your management level?

- 1) Normal Workers
- 2) Supervisor
- 3) Medium manager level
- 4) Top manager level

End of Part One

PART TWO

Organisational communication issue in the workplace

Next questions are to obtain your perception of organisational communication toward your organisation.

A. For each of the questions below, please circle the response that best characterizes how you feel about the statement:

Communication relationship with immediate supervisor	Strongly disagree	Disagree	neutral	agree	Strongly agree
1. I and my supervisor always share opinions, ideas, and feelings toward work and life.	1	2	3	4	5
2. I feel easy and comfortable when I communicate with my supervisor.	1	2	3	4	5
3. While I disagree with my supervisor, I would still support his decisions.	1	2	3	4	5

Communication relationship with a co-worker (colleagues):

1. My colleagues helped me solving work-related problems.	1	2	3	4	5
2. My colleagues encouraged my work.	1	2	3	4	5
3. My colleagues cooperated well with me at work.	1	2	3	4	5
4. My colleagues interact/relate after work.	1	2	3	4	5

B. Indicate the extent to which information from the following sources is usually timely:

Objectives	Very Untimely	Untimely	Neutral	Timely	Very Timely
1. What is the level of timeliness with which you get information from your co-workers?	1	2	3	4	5
2. What is the level of timeliness with which you get information from your supervisor?	1	2	3	4	5

C. Listed below are several kinds of information often associated with a person's job. Please indicate how satisfied you are with the amount and/or quality of each kind of information by circling the appropriate number at the right:

Satisfactory with the information I receive <u>from my supervisor</u>	Very Unsatisfied	Unsatisfied	neutral	Satisfied	Very Satisfied
1. How well I am doing job.	1	2	3	4	5
2. Roles and responsibilities.	1	2	3	4	5
3. Mistakes and failures of my organisation.	1	2	3	4	5
4. How I am being judged.	1	2	3	4	5
5. Promotion and advancement opportunities in my organisation.	1	2	3	4	5
6. Important new product, service, or program developments in my organisation.	1	2	3	4	5

Satisfactory with the amount of information I receive <u>from my co-workers</u> (Colleagues)	Very Unsatisfied	Unsatisfied	neutral	Satisfied	Very Satisfied
1. My job duties.	1	2	3	4	5
2. Roles and responsibilities.	1	2	3	4	5
3. Mistakes and failures of my organisation.	1	2	3	4	5
4. How organisation decisions are made that affect my job	1	2	3	4	5
5. Promotion and advancement opportunities in my organisation.	1	2	3	4	5
6. Important new product, service, or program...	1	2	3	4	5

D. The list below is a variety of channels through which messages are transmitted. Please indicate how satisfied you are with the information you receive through that channel by circling the appropriate number at the right:

Satisfactory with the channel you receive information <u>from your supervisor</u>	Very Unsatisfied	Unsatisfied	neutral	Satisfied	Very Satisfied
1. To what extent are you satisfied with the amount of information you get through face to face communication with your supervisors.	1	2	3	4	5
2. To what extent are you satisfied with the information you get through Telephone communication with your supervisors.	1	2	3	4	5
3. To what extent are you satisfied with the information you get through written memos, letters and notices from your supervisors.	1	2	3	4	5
4. To what extent are you satisfied with the information you get through email from your supervisors.	1	2	3	4	5
5. To what extent are you satisfied with the information you get through social media application from supervisors.	1	2	3	4	5

Satisfactory with the channel you receive information from your co-worker

	Very Unsatisfied	Unsatisfied	neutral	Satisfied	Very Satisfied
1. To what extent are you satisfied with the information you get through face to face communication with your co-worker.	1	2	3	4	5
2. To what extent are you satisfied with the information you get through Telephone communication with your co-worker.	1	2	3	4	5
3. To what extent are you satisfied with the information you get through written memos, letters and notices from your co-worker.	1	2	3	4	5
4. To what extent are you satisfied with the amount of information you get through email from your co-worker.	1	2	3	4	5
5. To what extent are you satisfied with the information you get through social media application from your co-worker.	1	2	3	4	5

1. Indicate your overall satisfaction with the communication with your supervisors and co-workers in your organisation:

Overall satisfaction	Very dissatisfactory	dissatisfactory	neutral	satisfactory	Very satisfactory
1. Indicate your overall satisfaction with the communication with your supervisors.	1	2	3	4	5
2. Indicate your overall satisfaction with the communication with your co-workers.	1	2	3	4	5

End of Part 2

PART THREE- Organisational engagement in the workplace

Next questions are designed to obtain your perception towards your organisational engagement. Please read and answer each of the following questions carefully for accurate evaluation. Circle the answer that best represents your opinion:

Organisational engagement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel a strong sense of belonging to my organisation.	1	2	3	4	5
2. I really feel as if this organisation's problems are my own problem.	1	2	3	4	5
3. I would be very happy to spend the rest of my career with this organisation.	1	2	3	4	5
4. I feel "emotionally attached" to this organisation.	1	2	3	4	5
5. I feel an obligation to remain with my current employer.	1	2	3	4	5
6. This organisation deserves my loyalty.	1	2	3	4	5

End of Part 3

PART FOUR-Trust issue in the workplace

Next questions are designed to obtain your percept of Trust in your organisation.

Please read and answer each of the following questions carefully for accurate evaluation. Circle the answer that best represents your opinion:

Trust in the organisation	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I honestly express my opinion at the organisation with the knowledge that employee views are valued.	1	2	3	4	5
2. I think that the organisation offers a supportive environment.	1	2	3	4	5
3. I believe that the organisation recognizes and rewards employees' skills and abilities.	1	2	3	4	5
4. It is generally accepted that the organisation takes care of employee interests.	1	2	3	4	5
5. I perform knowing that the organisation will recognize my work.	1	2	3	4	5
6. I think that processes within the organisation are fair.	1	2	3	4	5
Trust in the co-workers	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel that I can trust my co-workers to do their jobs well.	1	2	3	4	5
2. I proceed with the knowledge that my co-workers are considerate of my interests.	1	2	3	4	5
3. I believe that my co-workers support me if I have problems.	1	2	3	4	5
4. I feel that co-workers are truthful in their dealings with me.	1	2	3	4	5
5. I will act on the foundation that my co-workers display ethical behavior.	1	2	3	4	5

Trust in immediate supervisors	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I act on the basis that my manager display integrity in his actions.	1	2	3	4	5
2. I think that my manager appreciates and reward when I perform well.	1	2	3	4	5
3. I feel comfortable to work with my manager.	1	2	3	4	5
4. I believe that my supervisor follows through promises with action.	1	2	3	4	5
5. I feel that my manager is available when needed.	1	2	3	4	5
6. I believe that my manager keeps personal discussion confidential.	1	2	3	4	5

End of Part 4.

Thank you for taking the time to complete this questionnaire.

Annexe 2 Covering Letter



Dear Director of Human Resources Department in the Ministry of Labour and Social Development

I am Mazen Aljaber, a doctoral student at Brunel University London, my research is considering the impact of trust in internal communication on employee engagement.

As a part of my study I conducted a survey questionnaire to ask the staff of these Ministry about what they think regarding the impact of trust in internal communication on employee engagement.

This research aims to increase the attention to the important of internal communication trust in workplace on employee engagement.

I will highly appreciate it if you are able to help me to fill in the questionnaire and distribute it on your work colleagues at the Ministry; it takes roughly 15 minutes of your time.

The questionnaire is attached.

Many thanks,

Mazen Ali Aljaber

PhD Researcher,

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Annexe 3 Research Consent Form



College of Business, Arts and Social Sciences, Business School

PARTICIPANT INFORMATION SHEET

Study title

Dimensions of internal communication for Organisation engagement; the role of co-worker's trust

Invitation Paragraph

You are invited to participate in a research study titled "**Dimensions of internal communication for Organisation engagement; the role of co-worker's trust**". This study is being conducted by Mazen Aljaber and his research committee from Brunel Business School at Brunel University. The present research available concerning to what extent internal communication trust at the workplace is able to help the public-sector organisations to improve the performance and employee engagement. In this study, you will be asked to complete a survey questionnaire. Your participation in this study is voluntary and you are free to withdraw your participation from this study at any time.

What is the purpose of the study?

The purpose of this study is to investigate the impact of internal organisational communication variables (e.g. accuracy of information, communication relationship and communication channels) on employee engagement, whilst exploring the mediating role of trust. It also aims to develop a framework to test the relationship between organisational trust in internal communication and employee engagement. This will provide a better understanding of how trust in internal communications is able to improve employee engagement in their organisation.

Why have I been invited to participate?

You have been invited to participate in this study considering your work experience in the public-sector in Saudi Arabia. All the Ministry of Labour and Social Development employees are invited to fill in the questionnaire.

Do I have to take part?

Your participation in this study is voluntary, it will take roughly 15 minutes of your time and you are free to withdraw your participation from this study at any time.

What will happen to me if I take part?

While you will not experience any direct benefits from participation, I am asking you to complete the questionnaire, your participation is highly appreciated. Information collected in this study will help in providing a better understanding of the importance of employing communication trust in the workplace.

What do I have to do?

By completing and submitting this survey, you are indicating your consent to participate in the study. Your participation is highly appreciated.

What are the possible disadvantages and risks of taking part?

There are no risks associated with participating in this study.

What if something goes wrong?

If you have a complaint about your experience, please do not hesitate to contact the Chair of the College of Business, Arts and Social Sciences Research Ethics Committee.

Will my taking part in this study be kept confidential?

The survey collects no identifying information of any respondent. All the responses in the survey will be recorded anonymously and kept confidentially. Data will be stored on a Brunel university server and it is password protected. The data will be destroyed when no longer required.

What will happen to the results of the research study?

All the findings from this study will be part reported as a part of my thesis. The data will be used just for research purposes.

Who is organising and funding the research?

Brunel Business School is organising this research and all expenses of it borne by the researcher.

What are the indemnity arrangements?

Brunel provides appropriate insurance cover for research which has received ethical approval.

Who has reviewed the study?

This study was reviewed by the College of Business, Arts and Social Sciences Research Ethics Committee.

Passage on the University's commitment to the UK Concordat on Research Integrity

Brunel University is committed to compliance with the Universities UK Research Integrity Concordat. You are entitled to expect the highest level of integrity from our researchers during the course of their research.

**Contact for further information and complaints
Researcher**

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Brunel University

Annexe 4 Survey Questionnaire Coding and labelling

OCS = supervisory communication;

OCRS = supervisory communication relationship;

AIS = adequacy of information from supervisors;

CCS = communication channels with supervisors;

OCC = co-worker communication;

OCRC = co-worker communication relationship;

AIC = adequacy of information from co-workers;

CCC = communication channels with co-workers;

AE = affective engagement;

NE = normative engagement;

TIS = trust in supervisors;

TIC = trust in co-workers;

TIO = trust in the organisation;

OE = organisational engagement.