



Faculty of Economics and Business

**Effects of Psychological Contract Breach Among University Employees
in Pakistan: Moderating Role of Perceived Organisational Support**

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Effects of Psychological Contract Breach Among University Employees in
Pakistan: Moderating Role of Perceived Organisational Support

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DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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ABSTRACT

Psychological contract is globally considered a framework to understand the employee-employer relationship. Breach of psychological contract leads to negative attitudes and behaviours. This thesis investigated the effects of psychological contract breach among university employees in Pakistan by using perceived organisational support as the moderating role, which has not been widely studied. This study was conducted using a sampling frame of five universities in Pakistan. Fish-bowl sampling technique was used and 1,230 university employees were used as the sample size for data collection with 739 participants taking part in this study. The data were analysed by using SPSS and AMOS (V-22) and structural equation modelling technique was used for data analyses. Reliability, validity, exploratory, confirmatory and moderation analyses were performed. The data showed that psychological contract breach led to turnover intention, job dissatisfaction and counterproductive work behaviour among university employees in Pakistan. The data results also showed that perceived organisational support moderated the relationship between psychological contract breach and turnover intention; whereas no moderation was shown between the relationship of psychological contract breach and job dissatisfaction and counterproductive work behaviour, which left a gap for future investigation. The results showed that the employees were found to be facing psychological contract breach regardless of qualification, age and gender.

Keywords: Psychological contract breach & perceived organisational support, job dissatisfaction, turnover intention, counterproductive work behaviour, structural equation modelling.

***Kesan Pelanggaran Kontrak Psikologi dalam Kalangan Pekerja Universiti di Pakistan:
Peranan Sokongan Organisasi Sebagai Moderator***

ABSTRAK

Di peringkat global, kontrak psikologi dianggap sebagai rangka untuk memahami hubungan pekerja-majikan. Pelanggaran kontrak psikologi menyebabkan sikap dan tingkah laku yang negatif. Tesis ini menyiasat kesan pelanggaran kontrak psikologi dalam kalangan pekerja universiti di Pakistan dengan memperhatikan peranan sokongan organisasi yang diertikan sebagai moderator, yang kurang diselidik oleh kajian-kajian lepas. Kajian ini menggunakan satu persampelan lima universiti dari empat wilayah dan ibu kota persekutuan iaitu Islamabad. Teknik pensampelan Fish-bowl telah digunakan. Untuk pengumpulan data, saiz sampel dikira sebanyak 1,230 pekerja universiti. Seramai 739 orang telah mengambil bahagian dalam kajian ini. Data telah dianalisa dengan menggunakan SPSS dan AMOS (V-22). Teknik pemodelan persamaan struktur telah digunakan untuk menganalisis data yang mantap. Kajian ini telah menjalankan analisis kebolehpercayaan, kesahihan, penerokaan, pengesahan dan kesederhanaan. Data menunjukkan bahawa pelanggaran kontrak psikologi membawa kepada niat penggantian, ketidakpuasan kerja dan kelakuan kerja yang tidak produktif dalam kalangan pekerja universiti di Pakistan. Hasil data juga menunjukkan bahawa sokongan organisasi memoderasikan hubungan antara pelanggaran kontrak psikologi dan perolehan serta ketidakpuasan kerja; sedangkan penyederhanaan antara hubungan pelanggaran kontrak psikologi dan tingkah laku yang tidak produktif telah dibuktikan tidak wujud, dan seterusnya meninggalkan jurang kajian untuk disiasat pada masa akan datang. Hasil kajian menunjukkan bahawa demografi tidak mempunyai sebarang hubungan dengan pelanggaran kontrak psikologi kerana kesemua pekerja didapati pernah

mengalami pelanggaran kontrak psikologi tanpa mengira kelayakan, umur dan jantina, yang juga memerlukan penyelidikan lanjut.

Kata kunci: *Pelanggaran kontrak psikologi dan sokongan organisasi yang diertikan, ketidakpuasan kerja, niat penggantian, kelakuan kerja yang tidak produktif, pemodelan persamaan struktur.*

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LIST OF ABBREVIATIONS

AMOS	Analysis of moment structures
CFA	Confirmatory factor analysis
CWB	Counterproductive work behaviour
EFA	Exploratory factor analysis
HPWS	High performance work systems
HRM	Human Resource Management
JS	Job dissatisfaction
MM	Measurement model
MFI	Model fit indices
PC	Psychological contract
PCB	Psychological contract breach
SEM	Structural equation modelling
SM	Structural model
SPSS	Statistical package for Social Science
SET	Social exchange theory
OST	Organisational support theory
TI	Turnover intentions

CHAPTER 1

INTRODUCTION

1.1 Study Background

Human resource management (HRM) is considered an important issue worldwide. That is why organisations take great care of their work ethics, competencies, knowledge, affiliations, business tactics, organisational restructuring, human resource information system, competence-based human resource practices, high performance work system, human resource shared services, virtual teams and HR score card (Bishnoi, 2016). Organisations face skills-proven employees if not well taken care of by employing apt HR practices (Hennicks, 2014).

As employee management is considered key to achieving competitive advantage, both HRM researchers and psychologists are carrying out research on psychological issues in order to better understand employee-employer relationships and to examine how psychological studies may help out HRM researchers to revamp workplace issues. Both organisational behaviour and HRM domains have contributed to the psychological contract research (Kutaula, 2014). Besides, for better employee-management, HRM researchers have taken into consideration on bridging constructs such as transitional variables to examine HRM and organisational functioning (Katou & Budhwar, 2012). The psychological contract is one such construct (Kutaula, 2014) that helps organisations in understanding employee-employer relationship at workplace attitude and behaviours (Kraak, Lunardo, Herrbach & Durrieu, 2017).

Psychological contract (breach, fulfilment and violation, herein called three dimensions) is used as a useful mechanism to study employee-employer relationship (Lee et al., 2011). Psychological contract is also used to better understand workers, processes, technology and workplace relationships (Morris et al., 2009). Psychological contract fulfilment leads to positive work attitudes and behaviours (Ahmad & Zafar, 2018) and psychological contract breach does vice versa (Saboor, Malik & Pracha, 2017; Khan, Zhiqiang, Sadick & Musah, 2018; Malik, Bakri, Ajmal & Malik, 2019).

Psychological contract breach occurs when employees feel betrayed by their employers. For example, the employers withdraw or change the expected benefit to the employees. Employees get dissatisfied, counterproductive and start thinking of leaving organisations if employers betray them. Researchers agree that a good employee-employer relationship depends on unbreached psychological contracts (Restubog, Bordia & Bordia, 2011; Conway et al., 2014; Restubog et al., 2015). Thus, it is held that if the employee's psychological contract is not breached, it helps organisations to achieve competitive advantage and earn better profits accordingly.

The three dimensions stated above are very significant as today's workplace environment has become dynamic and competitive where organisations are unaware of threats that may destroy their competitive advantage (Bishnoi, 2016). The psychological contract breach if not aptly managed could be a threat to employers' competitive advantage (Lambert, 2011). Literature shows that this psychologically uncertain environment at the workplace has emerged over the recent years on account of some inevitable techno-economic changes in the wake of globalisation, which have made employee management a big challenge for today's working environment.

Organisations have started focusing on psychological contract, which is considered a great mechanism to understand the employee-employer relationship (Dabos & Rousseau, 2013). Psychological contracts and effects thereto are pretty much significant since psychological contracts and employee-employer obligations have been reported beneficial for a healthy organisational environment (Ruokolainen et al., 2016). This means that psychological contracts support organisations in a number of ways.

Psychological contract breach creates a number of negative attitudes and behaviours such as job dissatisfaction and makes employees stressful. The psychological contract breach leads to turnover and unemployment. Unemployment is a global issue. Pakistan is no exception to rampant unemployment (Pakistan Bureau of Statistics, 2015) and workplace stress. Workplace stress creates negative effects, i.e. strains. Since, psychological contract breach has created negative job effects (Zhao et al., 2007; Bashir & Nasir, 2013), therefore, psychological contracts have great impact over such job attitudes and behaviours including affective commitment, turnover intention and job satisfaction. Such breach affects employee-employer relationships adversely and causes job dissatisfaction. In fact, organisations can better understand and address employee management issues if they keep their employees satisfied with their jobs.

Job satisfaction is considered one of the big issues in the workplace. High job dissatisfaction, which relates to employees' psychological-contracts, is caused by an inapt use of HRM practices (Ahmad et al., 2012) and affects employee-employer relationship. Few studies on job satisfaction have been conducted on employees in higher education institutions, especially in Pakistan, which is an under-researched progressing country (Bashir & Nasir, 2013). On contrary, rigorous research on job satisfaction has been carried out in the

developed world (Khan, Nawaz & Jan, 2012). Extant research shows that the literature on psychological contracts (Haque, Bhutto & Sarki, 2016) and job dissatisfaction is under-developed, especially in a non-Western context.

Keeping in view the importance of psychological problems, researchers even from marketing are doing research on psychological issues to understand workplace dynamics. Psychological contract has therefore bumped up as a novel explanatory framework to get insight into employee-employer workplace relationships (Dabos & Rousseau, 2013). Pakistan is facing workplace and governance issues, which are leading to unemployment.

There is considerable unemployment in Pakistan (Pakistan Bureau of Statistics, 2015). Pakistani employees bear considerable turnover intention on account of a number of factors including psychological contract breach (Malik & Khalid, 2016). Farooq (2016) held that Pakistan is facing governance issues for which unemployment exists in Pakistan. Standard of educational institutions is on the fall on account of unemployment and turnover (Khokhar & Zia-ur-Rehman, 2017). Psychological contract is considered one of the reasons for such negative attitudes and behaviours (Zhao et al., 2007). Practicing psychological contract research in Pakistan is very timely because employees, in general, are moving out from Pakistan for being psychologically dissatisfied (Abbasi & Younas, 2016; Sohail & Habib, 2016). Literature reveals that the complete effects of psychological contracts breach have not been studied widely because a large amount of research has been conducted to research the effects of psychological contract fulfilment (Ballou, 2013).

To sum up, this research aims to investigate the effects of psychological contract breach by using perceived organisational support as a moderator in a non-Western novel culture in order to examine the effects of psychological contract breach in Pakistan, which

is situated in a very tough geographic region in South Asia having a unique culture in four provinces viz., Punjab, Sindh, Khyber Pakhtoon Khaw (KPK) and Balochistan. Lahore, Karachi, Peshawar and Quetta are the respective capitals of these provinces. Justification to undertake this research is only applicable in five cities of all four provinces, which makes it difficult to collect data from across Pakistan (Ahmad & Masood, 2011), keeping in view the fragile law and order situation in Pakistan.

Population for this study is based on the university employees in Pakistan. University employees from Lahore, Karachi, Peshawar and Quetta can be considered a true representative sample of the target population for this research. Therefore, this research shall be conducted in five cities in Pakistan. To the best of the researcher's knowledge, no psychological contract breach study having constructs of the present study has so far been undertaken in this sector across the country.

Accordingly, Chapter 1 presents the study background, research motivation, research background, problem statement, research question, research objectives, research significance, research scope, chapter summary and organisation of the present research.

Section 1.2 discusses the problem statement.

1.2 Problem Statement

Government of Pakistan (GoP) has been struggling to upgrade the position of Pakistan among the 25 largest economies in the world by decreasing poverty, inflation and increasing per capita income, exports, literacy-rate, number of PhDs and a host of other performance indicators inter alia via its Vision-2025 (GoP, 2014b). However, a constant and rampant unemployment has been reported in Pakistan (Farooq, 2016). Pakistan is also facing

employee turnover (Rizwan et al., 2017) and poor employee retention in Pakistani universities (Akhtar et al., 2015). That is why, turnover and its intention have become a glaring issue even world over and in Pakistan (Jhatial, Mangi & Ghumro, 2012; Khan & Du, 2014) and its universities as well (Rahman & Nas, 2013).

Accordingly, the workplaces have become unsupportive where employees' psychological contracts are breached. Pakistan is no exception in this regard. On account of such unsupportive work conditions more than 72% employees have been reported dissatisfied with their jobs in Pakistan (Sohail & Habib, 2016) and employees have been reported to leaving Pakistani organisations (Abbasi & Younas, 2016). Employees are getting counterproductive in Pakistan on account of psychological contract breach (Malik et al., 2019) as well, which is a great concern for Pakistan and employees are opting for turnover (Stormbroek & Blomme, 2017; Wang et al., 2017; Xiong et al., 2017) in Pakistani universities as well (Ahmad & Masood, 2011; Rizwan et al., 2017).

Prior research on higher education institutions in Pakistan shows mixed results in higher education institutions in Pakistan (Malik, Nawab & Naeem, 2010). Although a majority of studies has been done on university teaching employees only (Khurram, 2009; Malik et al., 2010; Arif & Ilyas, 2013). This shows that research in general in relation to Pakistani university employees is limited and biased. Research on both the teaching and the administrative employees is important in running a higher education institution effectively. A recent study on psychological contract breach in academia of Pakistan has also recommended deeper investigation by altering a sample size in order to generalise results (Hussain et al., 2016).

Perceived organisational support to employees also is important in order to examine exchange and reciprocity relationship. Perceived organisational support makes employees satisfied (Khurram, 2009). Psychological outcomes should be studied along with counterproductive work behaviour, organisational support and various other constructs (Gulzar et al., 2014) in Pakistan in order to fully uncover psychological contract breach in relation to mediators and/or moderators (Costa & Neves, 2017), the turnover intention in universities in Pakistan (Saleem & Qamar, 2017) and job dissatisfaction in Pakistan. A deeper investigation employing moderating constructs may be a useful mechanism to understand and avoid job dissatisfaction in Pakistan (Shah, 2017).

Based on the above discussion, it is held that there exists knowledge, theoretical, empirical, contextual and methodological gaps in relation to the constructs of this research as the research constructs of the present study have not been investigated so far which needs investigations in order to check and curb the above-said negative job effects at workplaces in Pakistan (Asia) with the help of a moderator i.e. perceived organisational support in order to support Government of Pakistan achieve objective of Vision 2025. Section 1.3 presents the research questions of this study

1.3 Research Questions

Keeping in view the literature, discussion and dimensions highlighted in Section 1.1 and Section 1.2, the following research questions arise:

- i. Does psychological contract breach affect job satisfaction, turnover intention and counterproductive work behaviour among employees in Pakistani universities?

- ii. Does perceived organisational support moderate the relationship between psychological contract breach and its negative attitudes and behaviours such as job dissatisfaction, turnover intention and counterproductive work behaviour among employees in Pakistani universities?
- iii. Does psychological contract breach affect demographic factors such as qualification, gender and age of employees in Pakistani universities?

Research aims and objectives are highlighted in Section 1.4.

1.4 Research Objectives

The focal objective of this research is to investigate the effects of psychological contract breach, the moderating role of perceived organisational support and the role of demographics in relation to psychological contract breach in the non-Western context – Pakistani universities. Therefore, this study aims to meet the following objectives:

- i. To examine the effects of psychological contract breach among university employees in Pakistan.
- ii. To examine the role between perceived organisational support and psychological contract breach and its negative attitudes and behaviours such as job dissatisfaction, turnover intention, counterproductive work behaviour and among employees in Pakistani universities.
- iii. To examine if psychological contract breach affects demographic factors such as qualification, gender and age of employees in Pakistani universities?

1.5 Research Significance

Research significance puts forward the development in the contemporary body of knowledge that helps future researchers – both the academics and practitioners in managing workforce. Literature reveals that no such-like research model in the Asian context has been implemented especially in relation to psychological contract breach and the moderator of this study, which is perceived organisational support. Therefore, this study shall make the following significant contributions:

No study has empirically investigated the effects of psychological contract breach in the present study context and on the population meant for this study. Besides, a limited number of studies has investigated psychological contracts in depth in the non-Western context (Katou & Budhwar, 2012). This situation warrants further investigations because much is to be done in order to see how adverse effects of psychological contract breach can be lessened (Conway, Guest & Trenberth, 2011). Therefore, constructs like psychological contract breach with other job-constructs (Biswas, 2016) such as turnover intention (Blomme, Rheede & Tromp, 2010) turnover in association with job satisfaction (Chen et al., 2011) and counterproductive work behaviour in different settings and factors (Ahmed et al., 2013; Zaghini et al., 2016).

Such an investigation is necessary because Western results, which have been reported inconsistent even within the West (Golay, 2016) and also in Pakistan (Malik et al., 2010), cannot be generalised in order to compare findings in Asia with those in the West. In order to reach novel empirical findings, this research aims to examine the effects of psychological contract breach in a non-Western context – Pakistani universities.

Literature also shows that there are a number of other job constructs that should be used as mediators or moderators to understand job satisfaction and turnover intention mechanism (Mehmood et al., 2016). Accordingly, this research aims to use perceived organisational support as a moderator to critically examine if it moderates the effects of psychological contract breach and can be helpful in employee-employer management.

Contextually, more research is justified as the majority of research presents non-conforming findings/results (Schaupp, 2012). Besides, the majority of researches has been carried out in technologically developed-countries in the West (Katou & Budhwar, 2012; Agarwal & Bhargava, 2014) and some studies have investigated psychological contract breach of university employees (Buyukyilmaz & Cakmak, 2013). Therefore, this research aims to overcome this shortcoming by examining the effects of psychological contract breach in a university setting in Pakistan, which is a less researched region.

Theoretically, a research model must be supported by some relevant theories (Hair et al., 2010). Previous research depicts that researchers have employed theories, such as expectancy theory, self-determination theory, attribution theory, social contract theory, uncertainty management theory, psychological ownership theory, conservation of resources theory, control theory, affective event theory, signalling, theory, social information theory, cognitive dissonance theory, psychological contract theory, perceived organisational support theory and agency theory, in order to research psychological contract. Psychological contract studies mainly rely on only social exchange theory. Therefore, other theories may also be used to research this topic (Kutaula, 2014). Nonetheless, literature shows that only a few studies have employed the organisational support theory and the social exchange theory in researching for psychological contract breach and other constructs of the present research.

Nevertheless, a number of theories have been employed in countless studies from technologically advanced countries, which come to almost no more than one-third of the world population. Generalisation and application of such theories in the non-Western cultural-context seem unjustified. Therefore, this research aims to employ the social exchange and organisational support theories in order to better understand the psychological contract mechanism, as well as to overcome this shortcoming by using social exchange and organisational support theories.

Methodologically, empirical research should come up with novel empirical findings to provide a solution to an existing problem. Therefore, a robust methodology should be employed to research such findings with accuracy. A research is considered effective if it provides robust analyses and empirical findings. In this regard, structural equation modelling provides better analysis and path understanding (Kline, 2005). A few studies have used structural equation modelling method to study psychological contract breach in constructing the recent research on the employees of the Pakistani universities. Besides, only some studies have used questionnaires to investigate the psychological contract of university administrative employees. Similarly, little is known about the validation of the present study scales in Pakistan, especially Pakistani universities. Therefore, this research aims to fill this gap by using structural equation modelling and a questionnaire-based quantitative approach to study the effects of psychological contract breach, its effects and moderating role of perceived organisational support vis-a-vis the university employees in Pakistan. SEM-AMOS is used in confirmatory studies, which has also been used recently in a psychological contract breach research (Agarwal & Bhargava, 2013). Therefore, this research aims to use SEM-AMOS accordingly since this is also a confirmatory in nature.

It has also been observed that questionnaires on psychological contract breach, perceived organisational support, job dissatisfaction, turnover intention and counterproductive work behaviour have been developed and used in the Western culture. Results from the Western culture have been reported to be inconsistent (Golay, 2016), which cannot be generalised in the Asian culture (Agarwal & Bhargava, 2014). Accordingly, this research intends to overcome this shortcoming by using adapted scales in the non-Western region – Pakistani universities.

This study shall contribute to the global as well as the localised versions of research on effects of psychological contract breach. It shall also provide novel findings for implementation by government agencies, policy makers, managers, practitioners and future researchers in Pakistan and worldwide in relation to psychological contract (breach) for perceived organisational support as a moderator in the present study.

This study shall be a unique attempt to add to the social exchange and organisational support theories in relation to moderation model on psychological contract breach and perceived organisational support. Accordingly, this shall be another significance of this research study. This research study shall be significant as it will be the first empirical documentation on the effects of psychological contract breach to university employees, with special reference to the moderation of perceived organisational support on psychological contract breach in the Asian cultural context.

Workplace issues may better be understood via quantitative studies (Kish-Gephart et al., 2010); therefore, being quantitative in nature, this research shall make use of the structural equation modelling method associated with psychological contract breach. Data

collection shall be done through a questionnaire from employees, which has not been done in Pakistani universities and, hence, shall be a methodological novelty of this study.

This study shall be an objective and validated addition to the existing body of literature on the effects of psychological contract breach in relation to the university employees in a developing and under-researched country – Pakistan (Hussain et al., 2016) and also to the research scales. Accordingly, this study shall help practitioners and researchers to identify the nature of psychological contract breach, its effects and the role of perceived organisational support on psychological contract breach and effects thereof in the policy making on human resource management in Pakistan.

1.6 Research Scope

The present study aims to add the body of knowledge on psychological contracts, especially psychological contract breach. Therefore, the research scopes are detailed as below:

A majority of research on psychological contract has been conducted in the Western and non-Western countries with lack in understanding the effects of these contracts (Agarwal & Bhargava, 2014; Kutaula, 2014). Conducting psychological contract research in a non-Western context, i.e. Pakistan, is important for organisations, managers, policymakers and vice chancellors to understand the effects of such contracts and improve workplace performance by avoiding negative job attitudes and behaviours (Hussain et al., 2016).

The study shall take into consideration social exchange and perceived organisational support theories in a novel culture of Pakistan. Little has been done with reference to theories in Pakistan. In contrast, these theories have widely been applied in the West, i.e. 30% of the

world, as opposed to the non-Western context shall widen their scope and help researchers understand attitudes and behaviours of humans in this part of the world.

Pakistan is situated in a very strategic geographic region with four provinces, viz. Punjab, Sindh, KPK and Baluchistan and a capital, i.e. Islamabad. Accordingly, Lahore, Karachi, Peshawar and Quetta are the capitals of these provinces. All of these cities, being big cities in Pakistan, have the oldest and biggest universities. Justification to undertake this research in these five big cities is that it is very difficult to get data across Pakistan (Ahmad & Masood, 2011). University respondents from these cities can be considered a true representative sample of the target population for this research. Therefore, this research shall be conducted in the five big cities of Pakistan.

Very limited number of studies on higher education institutions and on both the teaching and the non-teaching employees have been conducted so far. Therefore, this study shall empirically and theoretically be novel and significant with a special reference to the psychological contract literature in relation to employees of higher education institutions in Pakistan.

1.7 Operational Definitions of Constructs

Five constructs will be used in this study. The constructs are: psychological contract breach, job satisfaction, turnover intention, counterproductive work behaviour and perceived organisational support. The operational definitions of the constructs are given hereunder:

1.7.1 Psychological Contract Breach

Psychological contract breach has been defined as “an employee's perception that his or her organisation has failed to fulfil one or more obligations associated with perceived

mutual promises” (Gakovic & Tetrick, 2003). Psychological contract breach shall be measured by using a 5-point Likert scale developed by Robinson and Morrison (2000).

1.7.2 Job Satisfaction

Job satisfaction has been defined by Locke (1976) as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences”. This study shall use this definition as operational definition. Job satisfaction shall be measured by using a 5-point (short) scale developed by Brayfield and Rothe (1951).

1.7.3 Turnover Intention

Mobley et al. (1978) defined turnover intention, which has been defined as “conceived to be a conscious and deliberate wilfulness to leave the organisation”. Turnover intention shall be measured by adapting a 6-item scale by Roodt (2004).

1.7.4 Counterproductive Work Behaviour

Operational definition of counterproductive work behaviour as an act that damages an organisation in four possible ways, i.e. ‘damaging the organisational-property’, ‘damaging the organisational-production’, ‘damaging the (senior and/or junior) colleagues by being aggressive’ and ‘damaging the organisational socio-political-image by disseminating fabricated-content about the organisation or its members’ will be used in this study. The definition has been adapted from Robinson and Bennett (1995). Counterproductive work behaviour shall be measured by adapting a 10-item short scale, which has been utilised by Spector, Bauer and Fox (2010).

1.7.5 Perceived Organisational Support

Perceived organisational support is a belief that employees pay back their organisation's positive attitudes and behaviour in case they think that their organisation takes care of their financial and non-financial rewards (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). The definition of perceived organisational support will be referred in this study. Perceived organisational support shall be measured by using a short 8-item scale derived from the main survey developed by Eisenberger et al. (1986).

1.8 Organisation of Research

Documenting a research is a process of bringing the disorganised data into the structure in line with the research-model of the research. Accordingly, the current doctoral research is organised as follows:

The purpose of Chapter 1 of this research is to cater on the introduction and subsequent exposition to the topic. Accordingly, this chapter provides the research background, problem statement, research questions, research objectives, research significance, context and research scope so that the reader may go through the whole research work by reading this chapter.

Chapter 2 gives literature review by providing the theoretical knowledge as the basis for the present study. Theories, factors, consequences and demographic aspects of outcomes of psychological contract breach have been discussed at a certain length. This chapter provides a good amount of literature in the Western, Asian and Pakistani contexts in relation to the effects of psychological contract breach. The discussion in this chapter engulfs the issues in terms of psychological contract breach in the developed and the developing countries over years. Besides, the important relevant studies that require future research on

such construct of this research, have also been mentioned therein. A number of theories have also been discussed along with the opted and selected theories for the present research along with justifications. Demographic factors constructs are also discussed in detail in this study. Accordingly, the development of the hypotheses is grounded before putting the theoretical framework of this research. Chapter summary is also provided at the end.

Chapter 3 highlights the research methodology employed in this research. With reference to the research design, since this research follows positivist paradigm, therefore, survey-based quantitative research approach, population and sampling, unit of analysis, data-collection method, research measures and scales, Likert scale, data collection and analysis are given with consideration therein. Chapter summary is given at the end of this chapter.

Chapter 4 caters information in relation to analysis of data with all constructs used in research question of this research in accordance with the employees of the universities in Pakistan. Statistical analyses have been shown with the help of certain tables and illustrations whereby descriptive section caters the ‘descriptive-statistics’ of the respondents and the constructs used in this research. This chapter also provides the information on SEM based exploratory factor analysis, confirmatory factor analysis, measurement model, structural model and moderation effects regarding constructs of the research at hand. Chapter summary is presented at the end of this chapter.

Chapter 5 discusses the hypotheses of the present research in combination with empirical-findings. This chapter further presents a tested and well-explained conclusion of this piece of research. This chapter has the study contribution, study limitations, study implications, future research directions and conclusion of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter consists of a review of the existing relevant literature, which ultimately brings forth evolution and development of the main construct of this research and a number of hypotheses thereto. Therefore, in this chapter, the types of psychological contracts have been mentioned. This chapter also elaborates other constructs of the research at hand in relation to the effects of the main construct. Contemporary studies have also been discussed at length therein. Chapter 2 also presents a number of theories and their association with the research constructs. Accordingly, this chapter holds a narrative and critical discussion on psychological contract breach, job satisfaction, turnover intention, counterproductive work behaviour and the perceived organisational support. Evolution and development of psychological contract concept, the types of psychological-contract, psychological contract fulfilment and breach along with psychological contract theories, effects of psychological contract breach such as job dissatisfaction, the turnover intention, counterproductive work behaviour and the perceived organisational support have also been given due consideration accordingly. A number of important studies on psychological contract breach inter alia other constructs of this study are mentioned in this chapter. Demographical factors, research hypotheses and theoretical framework are also discussed and presented herein. Finally, the chapter critique and summary are concluded in this chapter.

2.2 Evolution and Development of Psychological Contracts

Bernard (1938) debated the employee-employer reciprocity and exchange notion by employing equilibrium theory. March and Simon (1958) floated the idea of inducement and

exchange relationship (Conway & Briner, 2005). Menninger (1958) held psychological contract as both tangible and intangible rewards. Argyris (1960) came up with the term psychological work contract whereby he advocated that employee-employer relationship is based on mutuality (Tekleab & Taylor, 2003; Conway & Briner, 2005).

However, "a series of mutual expectations of which the parties to the relationship may not themselves be even dimly aware but which nonetheless govern their relationship to each other" were considered as psychological contract by Levinson et al. (1962). Nonetheless, these expectations should be mutually-exclusive: "these expectations not only cover how much work is to be performed for how much pay, but also involve the whole pattern of rights, privileges and obligations between worker and organisations" (Schein, 1965) otherwise such a situation gives vent to the psychological contract breach.

Historically speaking, psychological contract concept dwells on two approaches a) classical approach, which ranges from 1930 to 1960; b) modern approach, which started with the work of Rousseau (1989). Research reveals that the 1960s -1980s eras was dormant in terms of research on psychological contract (Roehling, 1997; Conway & Briner, 2005). Rousseau (1989) presented her supplementing work on psychological contracts which is also considered contemporary research on psychological contracts (Coyle-Shapiro & Prazefall, 2008) and which has been studied and followed by a number of researchers (Conway & Briner, 2009).

However, there was a paradigm shift in 1990s when employees were reported making a transition from the relational psychological contract to the transactional one in the wake of fast-growing dynamic competitions as an outcome of globalisation and effects thereof (Rousseau & Batt, 2007). Accordingly, the psychological contract gained overwhelming contemplation on account of employee-employer sensitive relationship (Rousseau, 2005).

Rousseau (1989) stipulated that the psychological contract as socio-emotional and cognito-psychological concern is: “an individual’s belief regarding the terms and conditions of a reciprocal exchange agreement between the focal person and another party”. Rousseau (1990) defined psychological contract as “an individual’s beliefs regarding reciprocal obligations”. Rousseau (2011) further stated that “a psychological contract is an individual’s system of beliefs, based on commitments expressed or implied, regarding an exchange agreement with another”. Relational psychological contracts bear positive job-effects whereas transactional psychological contracts give birth to the negative ones.

With regards to the psychological contract, the present-era researchers are divided into: a) Rousseau’s school of thought e.g. Robinson, Morrison, Kraatz, Guzzo, Noonan, Lewis-McClear, Taylor and Schalk, b) Conventionalists’ school of thought e.g. Guest, Herriot, Coyle-Shapiro, Manning and Kidd. The Rousseau’s school of thought debates about “employee-side” whereas the Conventionalists’ school of thought argues about employer-employee sides. This may be a reason that there is no consensus on a unanimous definition of the psychological contract (Cable, 2010). Such contracts, however, are formulated by both the employers and employees (Rousseau, 1995). Section 2.2.1 discusses the importance of psychological contracts.

2.2.1 Importance of Psychological Contracts

The importance of such unwritten contracts has been amplified these days (Haque, Bhutto & Sarki, 2016). The unwritten contracts, which also bear importance, have also been investigated, formulated and executed in organisation (Herriot et al., 1997). These unwritten contracts are further divided into relational contracts and transactional contracts (Conway & Briner, 2009). The former ones are based on non-fiscal and the latter ones are based on fiscal transaction. Likewise, the former ones are perpetual and long-lasting in nature as compared

to the latter ones which are short-lived. This is very important for research to manage psychological (relational and transactional) contracts as breaching such contracts leads to job-dissatisfaction which ultimately affects the employee-employer relationships (Zhao et al., 2007; Jensen, Opland & Ryan, 2010; Tomprou et al., 2012).

Breach of psychological contract carries undeniable importance especially with reference to workplace attitudes and behaviours, which are much needed for a good employee-employer relationship (Kraak et al., 2017). Therefore, organisations are bound to avoid breaching the psychological contract as this is a vital aspect for employee-satisfaction and performance (Gupta, Agarwal & Khatri, 2016). Researching psychological contracts in non-Western countries like Pakistan is valid as results from Western cultures cannot be generalised in here (Ahmad & Zafar, 2018). Dimensions of psychological contracts are explained in Section 2.3.

2.3 Dimensions of Psychological Contracts

In understanding the psychological contracts, two terms namely transactional contract and relational contract have been used by the past and contemporary researchers have used (Conway & Briner, 2009). Transactional contracts are based on a number of fiscal transactions and such types of contracts are always momentary in short lasting (Guchait, Cho & Meurs, 2015). On the other hand, relational contracts are based on employees' organisational-commitment: their wish to remain longer with an organisation. Organisations are concerned about relational contracts of the employees in order to satisfy them at the workplaces. The satisfied employees do not exhibit negative attitudes and behaviours (Rahman, Rehman, Imran & Aslam, 2017).

Relational psychological contract leads to employee satisfaction than the transactional contracts (Guchait et al., 2015). Since psychological contract and perceived organisational support contribute to employee retention (Walker, Accadia & Costa, 2016), together these two contributing factors are very important constructs. Since psychological contract research has been practiced more in the Western countries, it is now the right time for this important topic to be carried out in the non-Western context (Agarwal & Bhargava, 2014). Section 2.3.1 explains psychological contract breach.

2.3.1 Psychological Contract Breach

The psychological contract breach may be divided into two categories; a) procedural and b) distributive. A psychological contract breach occurs when employers do not do justice to the above types of breach and do not live up to the employees' expectations on their obligations about the terms and conditions of the employees' job (Rousseau, 1989; Eckerd et al., 2015; Haque et al., 2016; Kraak et al., 2017). Such breach causes severe damage to workers' mental-health (Penhaligon et al., 2013) and affects employee performance.

Breach of the psychological contract is a difficult situation for an organisation which leads towards negative job effects and ultimately affects the organisation's position among its competitors. Likewise, the employees who face psychological contract breach are unhappy and discontented (Kraak et al., 2017; Khan, Zhiqiang, Sadick & Musah, 2018; Akkermans, Bal & De Jong, 2019; Malik, Bakri, Ajmal & Malik, 2019); such employees, therefore will have an intention to leave the organisation (Malik & Khalid, 2016).

Meaning thereby, breach of the psychological contracts leads to negative job-outcomes (Haque et al., 2016; Kraak et al., 2017; Saboor et al., 2017) such as lessened organisational citizenship behaviour, job satisfaction and amplified-counterproductive work

behaviour and turnover intention. Importantly, employees always perceive psychological contract breach keeping in view their past employment experiences and their lessons learned from society (Rousseau, 2003). Employees create psychological contract breach for being dissatisfied with their working conditions especially job itself with them being considered to be inclined to negative job effects.

The psychological contract breach has also been reported very high in relation to the organisational changes such as downsizing, reorganisation and outsourcing (Sparrow & Cooper, 2012). It is pertinent to mention that employees with high reward demands, perceptions and hopes are more vulnerable to the psychological contract breach or violation. However, the employees, who have faced psychological contract breach, may tend to be constructive if they are provided with instrumental resources that means maximum fulfilment of their psychological contracts (Kiazad, Seibert & Kraimer, 2014). Psychological contract fulfilment has been given consideration and shared in Section 2.3.2.

2.3.2 Psychological Contract Fulfilment

On contrary, the state is called the psychological contract fulfilment when employers perform their part of the contract and meet the promises committed to employees (Kickul & Lester, 2001; Guest, 2016). Legally speaking, these promises are called ‘considerations’, which parties concerned are bound to extend to each other. Therefore, such promises are considered obligatory on the part of the employers (Virgolino et al., 2017). If these obligatory promises, though unwritten, are fulfilled, the employees stand satisfied with their organisations (Lub, Bal, Blomme & Schalk, 2015).

Thus, the new employees remain therewith far longer time (Rousseau, 1995). Therefore, this means that employee-employer positive association (fulfilment of the

psychological-contract) leads to high benchmarks-achievements (Dabos & Rousseau, 2004; Kutaula, 2014). Likewise, fulfilment of the psychological contract refers to the fulfilment of the both the relational and the transactional contracts (Conway & Briner, 2005). Accordingly, the psychological contract fulfilment leads to positive job-outcomes such as organisational-commitment, organisational citizenship behaviour, job satisfaction, etc. and vice versa (Zhao et al., 2007).

In this regard, fulfilment should be studied in both directions the relational and the transactional (Robinson et al., 1994). That means some extrinsic rewards such as employee-training, coaching and career development are considered both the relational and also the transactional. Notwithstanding, the psychological contract obligations and fulfilment thereof depend upon the culture specific laws and working condition therein (Robinson et al., 1994). The psychological contract violation has been discussed in Section 2.3.3.

2.3.3 Psychological Contract Violation

Referring back to Section 2.3.1 and Section 2.3.2, the psychological contract violation may be defined as the state when the organisation not only fails to fulfil its promises, but the perceived breach is substantial. Perceived breach refers to the cognition that one's organisation has failed to meet one or more obligations within one's psychological contract in a manner commensurate with one's contributions. Violation of psychological contract leads to negative job attitudes and behaviours (Zhao et al., 2007). Violation is the emotional and affective state that may, under certain conditions, follow from the beliefs that one's organisation has failed to adequately maintain the psychological contract (Morrison & Robinson, 1997). As a result, breach facing employees tends to create feelings of trust-

deficit, job-dissatisfaction, less-affective commitment and inflated-intentions to leave (Arshad & Sparrow, 2010).

Prior literature shows that human resource is considered as the most important resource for the organisational effectiveness. In human resource management employee-employer relationship has been studied by a number of researchers. These researchers have used a number of theories to explain the nature of this relationship and its mechanism. Organisational effectiveness mainly depends on high productivity. High productivity is achieved through having and retaining a good quality human resource. Human resource is retained with an organisation if its needs are properly met (Maslow, 1943). Psychological contract has emerged as an important and unique dimension to study employee-employer relationship and human resource retention. Psychological contract fulfilment helps organisations in retaining good human resource; whereas psychological contract breach damages employee-employer relationship and hence employees tend to have negative attitudes and behaviours. Therefore, this study aims to examine negative attitudes and behaviours through the lens of psychological contract breach.

Section 2.4 presents the effects of the psychological contract breach.

2.4 The Effects of Psychological Contract Breach

Employee reactions are considered outstanding for the growth, development or success and vice versa of an organisation because these reactions lead to inevitable positive and negative work behaviours; i.e. organisational citizenship behaviour, motivation, organisational-commitment, deviant work behaviour and turnover – overall commitment. Here, commitment means ‘being loyal to an organisation, holding organisational identity and wishing to be with the organisation longer’ (Lambert et al., 2007).

Keeping in view this aspect, the employees' job satisfaction naturally contributes to the efficiency of an organisation. Therefore, the employees' organisational behaviour plays an important role in the success or failure of the organisation (Khan & Khan, 2011). Especially, job satisfaction has been considered a key concern in the human resource management (Mehmood et al., 2016).

Accordingly, job satisfaction is deemed a critical and vital issue in the organisational behaviour and HRM because it leads to healthy work outcomes/effects. Also, it decreases negative work outcomes such as turnover, absenteeism and counterproductive work behaviour. In accordance with the importance of job satisfaction, there has been a growing concern to explore this area through the emphasis on its above mentioned positive and negative outcomes/effects (Rayton & Yalabik, 2014). Therefore, carefully designed and implemented HR practices and processes will make employees satisfied and the respective organisations may achieve their objectives and goals as the case (Mahmood et al., 2014).

An organisation's growth and development and also failure depends upon its employees' level of job satisfaction (Khan & Khan, 2011). Being a globally important topic for researchers over more than the recent one decade, impact of organisational-commitment and job satisfaction have widely been investigated with reference to the number of job constructs such as the psychological contract breach, the fulfilment and turnover. Keeping in view the importance of job satisfaction, Section 2.4.1 comes up with a discussion on job satisfaction from the perspective of dissatisfaction.

2.4.1 Job Satisfaction

The concept of job satisfaction was given due consideration by Maslow (1943) who introduced the needs hierarchy (theory) that was complemented by Taylor's scientific

management work treating the humans economic-men and in doing so money was considered the apex motivator in order to have job satisfaction. Likewise, job security, job autonomy and job responsibility are strongly associated with employee satisfaction and turnover.

Albeit job satisfaction is among one of the well-researched job constructs in the domain of human resource management yet there is no consensus on any clear-cut definition of the employees' job satisfaction. However, the available definition of employees' job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976).

Pakistan is an under-researched area with reference to employees' job satisfaction (Solangi et al., 2015) including the teachers and employees. This job dissatisfaction deteriorates such employees' organisational commitment (Ahmed et al., 2011; Saboor et al., 2017; Shah, 2017). There is no doubt that the citizenship behaviour in terms of 'employee-employer' relationship is based on the formers' job satisfaction (Mudor & Tooksoon, 2011; Kutaula, 2014). When employees' genuine needs or rights are ignored and denied by the latter, the former feel betrayed and dissatisfied and hence come to the turnover (Tnay, Othman, Siong & Lim, 2013).

Therefore, job satisfaction and employees' citizenship behaviour are strongly inter-related. That means, the employees stand satisfied and motivated if job itself is one's interest and this happens when the organisation concerned takes care of the employees' benefits. Keeping in view the strong and significant relationship between an organisation's employees' job satisfaction and their organisational commitment (Daneshfard & Ekvaniyan, 2012), the employees have been considered the most invaluable 'asset' for an organisation;

they may, if satisfied, bring good or, if dissatisfied, bad name to the organisation which may affect competitive advantages of the organisation and hence may affect profit maximisation and other organisational objectives accordingly (Elnaga & Imran, 2013).

Moreover, job dissatisfaction may lead to the negative job out-comes (Solangi & Mughal, 2015; Chan, Mai, Kuok & Kong, 2016; Mehmood et al., 2016). Dissatisfied employees opt for turnover intention and actual turnover (Tett & Meyer, 1993). Job dissatisfaction has been reported as the strongest predictor of turnover (intention) (Hennicks, 2014). Based on these arguments, it is held that job dissatisfaction is considered a strong predictor of turnover intention. It is, therefore, held that the agents of change – both the teachers or the administrators have to be provided with conducive and supportive work environments; developing their knowledge, skills, abilities and other characteristics so that organisations may have talented workers needed to achieve competitive advantages, be motivated and satisfied with their jobs.

Keeping in view employees' job satisfaction, there exist some positive effects of job satisfaction such as motivation, organisational citizenship behaviour, job involvement, job performance and also some negative outcomes of job dissatisfaction such as absenteeism, counterproductive work behaviour and turnover; therefore, it is a hard nut to crack to realise organisational goals and objectives if organisational employees are dissatisfied and demotivated (Saboor et al., 2017; Garg, Dar & Mishra, 2018; Westhuizen, Scheepers & Kele, 2018). Accordingly, it has become necessary that organisations keep employees' psychological contracts intact and undamaged by developing and promoting them at job places especially in universities (Malik, Nawab & Naeem, 2010; Hussain et al., 2016).

Aforesaid in view, the breach of psychological contract is considered very important construct that creates frustration in relation to ‘employees’ reflexes that ultimately leads to cynic behaviour, i.e. job-dissatisfaction, whereby the employees start developing negative job-behaviours like turnover intentions and counterproductive workplace behaviour.

Therefore, it is held that employees’ job satisfaction level shall be high if the promises of their psychological and emotional (or even legal) contracts are fulfilled and low if promises are broken (Zhao et al., 2007; Suazo, 2009). Hence, in order to keep employees satisfied and performing well, organisations must consider better rewards for them and in some cases, these rewards are not only fiscal in nature but non-fiscal as. Meaning thereby, the employees may be developed according to the technology shift, cultural and demographic traits because these constructs lead to job satisfaction (Khan & Khan, 2011).

Accordingly, job satisfaction may be divided into two categories such as job context, which may be considered extrinsic satisfaction and job-content, which may be considered as intrinsic satisfaction. On the whole, job satisfaction means the degree to which an organisation takes care of its employees whereas job performance means the degree to which an employee satisfies his/her organisation with his/her work out-put. Also, job performance means the degree to which a job is done in two directions namely well done badly done (Madan & Bajwa, 2016).

Organisations depute HR managers and specialists to carry-out performance appraisals of their employees to systematically judge employees’ task completion and activity culmination such as job satisfaction. By doing so, the organisations will know about knowledge, abilities and other characteristics of their employees (Jayarathna & Weerakkody,

2015). HRM-practices are considered an integral-part of employee's performance, which leads to job satisfaction (Hafeez & Akbar, 2015).

Hartmann and Rutherford (2015) studied the psychological contract breach antecedents and outcomes in connection with psychological climate, job satisfaction, job commitment and turnover of salespersons in the USA. In this study, it was found that psychological contract breach is an important aspect of employee-employer relationship. The study also verified that the employees are dissatisfied at the workplaces if their psychological contract is breached. Although the results of this study established that psychological contract breach affects employee-employer relationship and creates job dissatisfaction, yet the study was done in a Western context and its results cannot be generalised in a non-Western context.

Ahmad and Khan (2015) conducted a study on private sector schools in a city of a province in Pakistan. They found that psychological contract breach causes job dissatisfaction and turnover intention. However, there was an insignificant impact of psychological contract breach in turnover intention. The study was undertaken by involving a total of 380 teachers. The response rate was 72%. The study analysis was done by using SPSS. Although this study investigated psychological contract breach, yet it left a gap, i.e. testing effect of psychological contract on turnover. Moreover, this study could not take demographic factors into consideration while investigating psychological contract breach and job satisfaction and turnover intention. This study also could not be undertaken on a larger sample, i.e. province or country level, which limits generalisation of its results. Moreover, this study was done on schools only. Therefore, its results cannot be generalised at higher education level.

Psychological contract breach was meant differently in Sweden wherein Salenwall (2015) found that the nursing employees took psychological contract breach as an unpleasant and unwanted act. The psychological contract breach was present among all employees including managers, nurses and other staff. This Western study was qualitative in nature; hence, leaving a room for future research involving quantitative research design especially in the non-Western context where research on psychological contract is underdeveloped.

Yun-Ju and Young-Joong (2016) investigated the effect of psychological contract breach in relation to job satisfaction and turnover intention. A sample of 280 from a hotel was taken for this investigation. The results showed that psychological contract breach affected job satisfaction and led to turnover intention on the employees' part. The study used structural equation modelling as most of the quantitative studies, especially on psychological contract breach, have used this analysis technique in order to have robust results. This study paves a way for the future studies to investigate psychological contract breach in a novel culture, i.e. non-Western.

In Nigeria, Balogun, Esan, Ezeugwu and Orifa (2016) carried out a study on psychological contract breach in connection with job satisfaction and counterproductive work behaviour. The study found that psychological contract breach was seriously meant and retaliated by the police employees. The study suggested that employers must fulfil the psychological contract of their employees in order to keep them satisfied in terms of job satisfaction. This African study also could not take into account psychological contract breach fully, as the results could have been different if sample size of the study were larger than the original one.

Saboor et al. (2017) conducted a study in on psychological contract breach and job satisfaction in the higher education sector of Pakistan. The study was conducted in on a sample of 240 from an established university. The study used probability sampling technique. The study resulted that personnel department or employer must know the importance of psychological contract breach. Besides, the study held that managers should make realistic promises and keep them in order to avoid damages of psychological contract breach. Psychological contracts are very important to understand employee-employer relationship. Psychological contract has been considered a good lens to view this relationship. In this regard, this study was done in right direction, but its scope was limited since it was done only in one university, whose results cannot be generalised across Pakistan.

Westhuizen et al. (2018) conducted a study in South Africa on a sample size of 1029 participants. The investigated the relationship of job satisfaction between psychological contract breach and work engagement and organisational support. The result of the study showed that the employees could be engaged with their work if they are satisfied and had no psychological contract breach. The study showed an insignificant moderating relationship with reference to job satisfaction and psychological contract breach. This study established that job dissatisfaction causes low work engagement and psychological contract breach. This study also paves way on using organisational support as a moderator for psychological contract breach and job satisfaction. Prior literature showed that psychological contract breach caused some other negative attitudes and behaviours such as turnover intention and counterproductive work behaviour. However, this study could not take into account turnover intention and counterproductive work behaviour.

Bravo, Won and Chiu (2019) studied psychological contract breach regarding job satisfaction and turnover intention. The study was performed on a sample of 383 coaches. The breach concept was bifurcated into a) intentional breach, b) unintentional breach. The study found that breach causes job dissatisfaction and leads to turnover intention. The study found that breach was an unstated phenomenon which keep changing over time and in different situations; therefore, it must be managed in a good way. Although the study established that psychological contract breach causes job dissatisfaction, this study did not investigate other negative attitudes and behaviours of psychological contract.

Based on the literature cited above, it is held that the prior research studies have established that psychological contracts are used as a lens to understand the employee-employer relationship. Psychological contract breach leads to negative job attitudes and behaviours and, hence, it badly affects employee-employer relationship. Prior studies have given calls for future research in psychological contract breach in different contexts. It has also been established that organisational support should be used as a moderator to understand psychological contract breach mechanism with its negative attitudes and behaviours (Westhuizen et al., 2018). Besides, the prior literature shows that marginal studies have been conducted on psychological contract breach in universities. Therefore, the author was inclined to carrying out the study at hand.

In management sciences, Job satisfaction has been studied by a number of above stated and other researchers and a number of theories including social exchange have been used to explore it. The literature establishes that employee-employer relationship has its basis on job satisfaction. Job satisfaction is the basis of employee motivation. Motivated employees stay longer with an organisation and work effectively. The effective work leads

to high productivity. High productivity makes an organisation effective and efficient. The above stated literature shows that employees are getting demotivated and dissatisfied as their psychological contracts are not being fulfilled by their employers. This study aims to examine the relationship between psychological contract breach and job satisfaction keeping in view importance of job satisfaction. Section 2.4.2 presents an overview of turnover intention.

2.4.2 Turnover Intention

Turnover intention, which has been defined as “conceived to be a conscious and deliberate wilfulness to leave the organisation” (Mobley et al., 1978). There are many forms of turnover: voluntary or non-voluntary retirement, resignation, lay-off, termination and/or deputation, which ruin the organisation in terms of recruitment cost and productivity fluctuation. Turnover intention is a by-product of job dissatisfaction which leads to the actual turnover.

The world around is facing a recurring employee turnover on account of psychological contract breach, which is causing it very hard for the organisations to retain an inevitable capital and asset, i.e. human capital (Arshad, 2016; Malik & Khalid, 2016; Suarthana & Riana, 2016; Kraak et al., 2017). Hence, turnover along with intention thereto has become a great research concern for the business researcher worldwide (Wang, Wang & Gao, 2017), especially in relation to psychological contract breach (Xiong et al., 2017).

It is important to understand that there is a significant influence of psychological contract breach on employee turnover and also turnover intentions (Robinson & Morrison, 1995). This is because employees opt for leaving organisations if their psychological contracts are breached, which means, there would be turnover (also turnover intention) if the

social exchange gets imbalanced. Therefore, the social exchange theory has been considered the best fitting and the most suitable to the research on psychological contract breach or the reciprocity norms (especially the negative-exchange) as there must be a balance in the exchange relationship otherwise the job environment shall face negative job outcomes (Blau, 1964).

Social exchange theory is expected to support harmonious and easy-going employee-employer relationships which is much needed for a balanced social exchange wherein each party to a contract intends to compensate the other one in terms of cash or in-kind (Gouldner, 1960; Blau, 1996). Otherwise, a non-harmonious and imbalanced employee-employer relationship causes negative attitudes and behaviours such as turnover intention, decreased commitment level and lowered organisational citizenship behaviour on the part of employees (Cropanzano & Mitchell, 2005; Tourigny et al., 2013). Employees show-up positive behaviour and are productive if they are provided with apt HR policies and practices (Kehoe & Wright, 2013) which keep employees' psychological contract intact. This is because authority and responsibility go parallel; 'good for good and bad for bad' (Gouldner, 1960).

Accordingly, non-clarity of job content creates psychological perceptions and feelings (and, therefore, psychological contract breach occurs) which leads to turnover. Similarly, the researchers have maintained that turnover and turnover intentions are directly associated with each other and are considered causal to each other (Shacklock, Brunetto, Teo & Farr-Wharton, 2013).

Turnover has become a well-settled practice in the organisations on account of organisational frustration (that is a breach of psychological contract) (Malik et al., 2018). Such contracts are perceptions and beliefs in one's mind about the terms and conditions of

one's rights and his/her employer's duties/obligations (Robinson & Rousseau, 1994). If these contracts are positively met, employees remain motivated, satisfied with their organisation (Ahmad & Zafar, 2018) but if there exists a breach thereto the employees have many negative job attitudes and behaviours (Griep & Vantilborgh, 2018) and counterproductive work behaviour (Ma, Liu, Lasseben & Ma, 2019).

Keeping in view these arguments, it is held that factors such as job satisfaction and organisational commitment are associated with the turnover nevertheless the strongest precursor of turnover is the intention to quit (Malik & Khalid, 2016). Therefore, it is maintained that the psychological contract breach causes turnover intention (Malik & Khalid, 2016; Phuong, 2016), which leads to negative behaviours such as counterproductive work behaviour (Ma et al., 2019; Malik et al., 2019). In order to keep time test and skills proven human capital, employers must understand the causes of turnover (or its intention) (Saleem & Saleem, 2014).

Hartmann and Rutherford (2015) conducted a study on psychological contract breach by involving 308 salespersons. The study endorsed that psychological contract breach is a serious concern when it comes to employee-employer relationship. The study also found that psychological contract breach is inevitable if employees are dissatisfied at their workplaces. The psychologically dissatisfied employees opted for turnover intention. Although the study endorsed the importance of psychological contract breach, it could not focus on other dimensions of breach and its negative attitudes and behaviours.

Ahmad and Khan (2015) undertook a study on psychological contract breach and its impact on turnover intention and job satisfaction. The study was performed by using 276 valid responses from male and female instructors of a school in a city of Pakistan. Being a

quantitative study, data were analysed through SPSS. The study found an insignificant effect of psychological contract breach on turnover intention of these employees. The study, however, found a stronger effect of psychological contract breach on employee job satisfaction. As this study was conducted on school teachers only in one city, the results of this study cannot be generalised across the country. Besides, this study suggested that a deeper investigation into psychological contract breach and turnover intention be carried out. This study also suggested that demographic factor should also be taken into consideration while conducting future research on effects of psychological contract breach.

Malik and Khalid (2016) performed a study on psychological contract breach in relation to turnover intention among employees of banks in Pakistan. A total sample of 302 bank employees was used in the study and the finding that employees have work engagement if their psychological contract was not breached; resultantly, such employees avoided turnover intention if their psychological contract was fulfilled. Although the study investigated psychological contract breach, it was employees of only one city and that too of a bank. Therefore, the results of this study cannot be generalised across the country as the study itself suggested for deeper investigation in this context.

Santhanam et al. (2017) made an investigation regarding psychological contract breach and turnover intention along with effects of human resource management practices. The study was conducted by using 236 valid responses. This study suggested that organisations should watch psychological contract and human resource practices on regular basis in order to meet the employee's periodical needs. This study also recommended that demographic factors should also be investigated in connection with psychological contract studies. The study further suggested that psychological contract breach of the employees

must be avoided in order to retain time-tested and skills proven human capital. Although this study took psychological contract breach into consideration, this construct was investigated in hospitality. Therefore, the study itself suggested that a more precise examination of psychological contract breach should be undertaken by the future researchers.

Stormbroek and Blomme (2017) performed a study on psychological contracts and turnover intention in the Netherlands. The study used a sample of 132 Dutch employees and data were analysed through IBM SPSS. The study found that psychological contract breach causes turnover intention. The study further suggested more investigations into a number of constructs including turnover intention and demography. The study also recommended a larger sample size. This study tried to show the employee-employer relationship, but it was limited in terms of sample size. In addition, this study did not examine moderating role of constructs along with psychological contract breach.

Malik et al. (2018) investigated inter alia the role of psychological contract breach and turnover intention by using 320 sample size. The study was quantitative in nature and was conducted on five cities of the Punjab province. The study found that psychological contract breach causes turnover intention. The study asserted that there is a need to investigate the relationship between psychological contract breach and job satisfaction. The study also concluded that fulfilment of contract causes job satisfaction and job satisfaction causes employee retention and work engagement better. This study investigated a few constructs and suggested investigation into more constructs regarding psychological contract breach.

Khan et al. (2018) studied psychological contract breach, along with political skill and work ethic on perceived politics and job attitudes in the higher education sector in

Pakistan. A total sample of 310 respondents took part in the study and the data were analysed through PLS-SEM. The study concluded that psychological contract breach causes negative job attitudes and behaviours. The study also stated that psychological contract breach paved way to poor employee retention, high turnover intention with a number of negative job attitudes and behaviours. This was because the study was conducted on faculty members in a few public universities and. It is important to note that the study did not fully cover effects of psychological contract breach. Therefore, its generalisation across Pakistan would be unjust.

Organisations can have good human resource management if they stop employee turnover from them. The above literature shows that employee's turnover is a very important factor in human resource management. Employee turnover is an important consequence of employee job dissatisfaction. Employee-employer relationship can be strengthened by keeping employees satisfied and motivated. Satisfied employees do not opt for turnover. Employees can be kept satisfied and motivated if their psychological contract is not breached. Therefore, it is held that in the field of management psychological contract is pretty much important because this leads to negative attitudes and behaviours such as turnover intention and counterproductive work behaviour. The study at hand, therefore, aims to examine the relationship between psychological contract breach and turnover intention.

Section 2.4.3 discusses counterproductive work behaviour.

2.4.3 Counterproductive Work Behaviour

Employee-employer poor relations may call for workplace issues, which have since long been an important topic amongst researchers. Counterproductive work behaviour, which is also known as 'deviant work behaviour', is one of the above-said workplace issues.

More precisely, counterproductive work behaviour may be defined as “an individual’s violating substantial organisational norms which threatens organisational workers” and also may be the organisation’s well-being. There seems no agreement on the content jurisdiction of such behaviours as studies have shown a host of counterproductive work behaviours (Marcus et al., 2013). More specifically, embarrassment and frustration at the job-places lead to aggressive-outcomes (Dollard et al., 1939) like counterproductive work behaviour (Ma et al., 2019; Malik et al., 2019).

Because of such psychological disorder employees are becoming counterproductive and stand absent in Pakistan. Therefore, employees become counterproductive if they psychologically feel that their employers have cheated them. The psychological contract breach leads to negative work behaviours such as counterproductive work behaviour (Astrove et al., 2015). Psychological contract breach causes counterproductive work behaviour in Pakistani universities as well (Hussain et al., 2016).

Hussain (2014) conducted a study on IT sector of Pakistan. The study examined the connection between psychological contract breach and counterproductive work behaviour. The study found that lack of organisational commitment and psychological contract breach were problems in the IT sector of Pakistan. The study established that the employees tended to be negative in terms of attitudes and behaviours if their employers breached their psychological contract. Although this study was an investigation into psychological contract breach, it involved only one effect, i.e. counterproductive work behaviour. The results of this study cannot be generalised, as this could not dig deeper into psychological contract breach and its attitudes and behaviours in terms of employee-employer relationships.

In Iran, Fayyazi and Aslani (2015) conducted a study on psychological contract breach counterproductive work behaviours; mediating role of job satisfaction. The sample consisted of 265 respondents from an industrial firm. The study found that psychological contract breach caused counterproductive work behaviour. The study also stated that both the breach of psychological contract and meaning of such breach should be clear to the managers so that employee-employer relationship could be strengthened. Although this study investigated the impact of psychological contract breach, it could not fully paint the real picture of such breach and its negative attitudes and behaviours.

In Turkey, Özdemir and Demircioglu (2015) investigated psychological contract especially breach with counterproductive work behaviour. The study was quantitative and had 452 respondents based in Ankara. The study found that psychological contract breach significantly caused counterproductive work behaviour. It also suggested that more investigations regarding these constructs were needed in the education sector. The study was conducted on psychological contract and counterproductive work behaviour. However, it could not paint fuller picture and left a gap for future researchers to investigate job attitudes and behaviours more.

Balogun et al. (2016) investigated psychological contract breach and counterproductive work behaviours among police employees in Nigeria. The study employed a sample of 195 and data were analysed through SPSS. The study found that psychological contract caused job dissatisfaction which led to counterproductive work behaviour. The study stated that employees had no chance of leaving their job that was the reason that these employees got counterproductive work behaviour. Although this study tried to investigate psychological contract breach, it failed to take into account a fuller picture and

a larger sample size. Due to this reason, this results in this study cannot be generalised. Besides, this study also suggested further investigation regarding psychological contract breach along with a number of other constructs.

In Tanzania, Asantiel (2017) conducted a study by using a sample of 82 employees working at a city council. Demographic factors were also used in this study. The study found that the more the employees feel that when their psychological contract was breached, the more they were inclined to counterproductive work behaviour. The study suggested that it was important for the managers on behalf of organisations to keep the psychological contract of the employees and do realistic and attainable promises with them. The study also stated that psychological contract should be the primary focus of the managers working for/or on behalf of the organisations. This study was limited to psychological contract breach and counterproductive work behaviour and, therefore, left a gap for psychological contract breach and negative attitudes and behaviours especially turnover intention.

In China, Li and Chen (2018) investigated psychological contract breach with counterproductive work behaviour by using a total of 484 respondents. The study was done quantitatively and it used structural equation modelling for data analysis. The study found that psychological contract breach caused negative attitudes and behaviours such as counterproductive work behaviour. The results of this study cannot be generalised for the study as the sample was limited to only five companies in China and the effects of psychological contract breach were not fully investigated except that of counterproductive work behaviour.

In the field of management science, counterproductive work behaviour has been studied by a number of researchers by using a number of theories in order to examine its

causes and effects. Prior literature shows that counterproductive work behaviour is an important factor in human resource management. It has already been established that counterproductive work behaviour is exhibited by the employees when they are dissatisfied with their employers. A dissatisfied employee may exhibit a number of counterproductive work behaviours whereby the employee can harm organisational resources and effects the fellow workers. The literature shows that satisfied employees become productive and stay longer with their organisations. Dissatisfied employees become less/least productive and may have turnover intentions or actual turnover. Counterproductive work behaviours can be curbed by providing the employees with job satisfaction and by not breaching their psychological contract. The study at hand intends to examine the relationship between psychological contract breach and counterproductive work behaviour. Section 2.5 sheds light on perceived organisational support.

2.5 Perceived Organisational Support

Perceived organisational support is a belief refers to employees paying back their organisation's positive treatment in case they think that their organisation takes care of their financial and non-financial rewards (Eisenberger et al., 1986; Kurtessis et al., 2015). Organisational support makes employees satisfied (Saleem & Saleem, 2014) and therefore creates a positive impact on employees' psychological contract (Liu et al., 2015; Virgolino et al., 2017).

Researchers have held that perceived organisational support influences such constructs and, therefore, reduce turnover and intention thereof (Guchait, Cho & Meurs, 2015; Kim & Barak, 2015; Madden, Mathias & Madden, 2015). Perceived organisational support moderates and/or mediates relationships between counterproductive work behaviour

and other negative attitudes and behaviours (Shantz, Alfes & Latham, 2016; Palmer et al., 2017; Vatankhah, Javid & Raoofi, 2017). Studies are encouraged to use moderators in relation to negative attitudes and behaviours in order to better understand such constructs.

Paillé and Raineri (2015) made an enquiry into perceived organisational support and psychological contract breach inter alia other constructs. The study used Canadian clerical employees. The study was quantitative, which used a sample of 651. The study found that organisations should provide their employees perceived organisational support to avoid psychological contract breach. Although this study tried to investigate perceived organisational support along with psychological contract breach, the focus of this study was insufficient. The employers may implement their policies in true letter and spirit if they could monitor and manage psychological contract of their employees.

In India, Guchait et al. (2015) investigated perceived organisational support regarding relational and transactional contracts in terms of their effect on the turnover intention. The study, which was conducted on restaurant workers, found that perceived organisational support caused relational contract. The relational contract had more impact on turnover intention of the employees than the transactional contract. The results of this study cannot be generalised as the sample was only focused on restaurant workers and that too in India.

Brown and Roloff (2015) looked into the relationship of perceived organisational support with organisational communication, organisational citizenship behaviour and burnout among school employees of about 46 states. The study was quantitative and involved a sample of 461 school teachers. The study found that the fulfilment of psychological contracts and perceived organisational support made employees have positive

job behaviour such as organisational citizenship behaviour. Although this study too investigated these relationships, the study results cannot be generalised to the non-Western context. Furthermore, the study took school teachers into consideration whereas results from employees of higher education could be different.

Gupta et al. (2016) took perceive organisational support inter alia work engagement, affective commitment, organisational citizenship behaviour and psychological contract breach. This quantitative study was performed on the health sector employees by involving a sample of 750 nurses. The study found that perceived organisational support had an impact on work related job outcomes. The study further stated that perceived organisational support helped in curtailing psychological contract breach. The study was conducted only on nurses and that in the health sector of only India; therefore, its results cannot be generalised in the education sector elsewhere.

In Australia, Walker et al. (2016) performed a study regarding volunteers' retention and psychological contract breach. The study used a sample of 721 volunteers from a number of organisations. The study found that perceived organisational support was lesser impactful than psychological contract breach in terms of volunteer's retention strategy. However, volunteers took into consideration organisational support before making a decision on turnover intention. That means volunteers support the organisation if the organisation supports them. This situation refers to the social exchange theory (Blau, 1964) and organisational support theory (Eisenberger et al., 1986). This study was about volunteers and therefore, its results cannot be generalised regarding employees contextually.

Virgolino et al. (2017) investigated perceived organisational support in a moderated relationship with psychological contract (violation), perceived organisational justice burnout

on employee's performance among Portuguese employees. This quantitative study used sample of 407 employees and data were analysed through structural equation modelling. The study found that perceived organisational support moderated some of the workplace relationships. This established that perceived organisational support moderate workplace attitudes and behaviours, which needs a deeper investigation in this regard.

Using organisational support theory and social exchange theory, Ahmad and Zafar (2018) made an investigation into psychological contract fulfilment and organisational citizenship behaviour wherein mediating role of perceived organisational support was checked between these two constructs. The study was quantitative and used 523 hotel employees from Pakistan. Results of this study cannot be generalised across Pakistan as the study was conducted on hotel employees, whose responses could be different from those of higher education employees.

The above stated literature establishes that human resource management is a very important factor on the field of management. Organisational effectiveness depends on high productivity. This high productivity depends on retention of high skilled workforce for a longer time period. The problem arises when organisations fail to perform their part of psychological contract and hence employees become dissatisfied. Accordingly, such employees opt for a number of negative/counterproductive work behaviours for example but not limited to turnover behaviour and damaging organisational resources. The counterproductive employees not only harm the organisation and its resources but also leave the organisation eventually. Perceived organisational support meets the employees' psychological contract. Employees are satisfied if are supported by the organisations. The

present study aims to examine the moderating role of perceived organisational support with psychological contract breach and the attitudes and the behaviours of this study.

2.6 Critique on Psychological Contract Breach Literature

Nations want alma maters to contribute to the national development, which needs retention of time-tested and skills proven employees. However, employee retention has become a great considerable issue for the developing nations, especially in the higher education section (Akhtar et al., 2015). On account of poor managerial policies and practices, unemployment has emerged as a great problem for the developing world. Pakistan is no exception to poor- employee-retention issue (Farooq, 2016). Literature reveals that many psychological issues may pave way to such unemployment and psychological contract breach and turnover are some of them. The psychological contract breach takes place in conjunction with a host of factors (De Jong, Rigotti & Mulder, 2017). Prior research results are reported to be inconsistent even within west (Golay, 2016). Additionally, non-Western research results have also been reported inconsistent with the Western results (Madipelli, Sarma & Chinnappaiah, 2013).

Employees in Pakistan are dissatisfied with their jobs (Sohail & Habib, 2016) and there is a constant turnover in Pakistan (Abbasi & Younas, 2016) especially higher education institutions in Pakistan (Rizwan et al., 2017). Employee turnover is considered a big psychological problem even in universities (Ng'ethe et al., 2012), which needs to be curbed in order to avoid it. The main cause of such turnover and job dissatisfaction especially in Pakistan is a psychological disorder (i.e. psychological contract breach), which leads to recurring job dissatisfaction and turnover intention. Organisations spend huge amounts of money on account of this high turnover (Stewart et al., 2011), which can be saved if

organisations provide genuine support to their employees and do not breach their psychological contract.

Since psychological contract breach is hard to be avoided by organisations; therefore, organisations are constantly trying to understand breach mechanism that may curb negative effects (Restubog et al., 2013). However, little is known about the effects of psychological contract breach (Ballou, 2013), especially among younger employees (Agarwal & Bhargava, 2013) and in universities (Buyukyilmaz & Cakmak, 2013) and in different sectors (Conway et al., 2014).

Much has been recommended to be explored especially in higher education institution to make these institutions achieve their objectives by keeping their employees satisfied (Tahir et al., 2014) especially regarding university employee management, if universities want to be the learning organisations (Gentle & Clifton, 2017). Psychological studies could use mediators and/or moderators to research psychological contracts (Conway & Coyle-Shapiro, 2012; Priesemuth & Taylor, 2016).

Besides, prior literature shows that HRM practices play an important role in psychological contracts but little studies have examined such practices with psychological contract studies (Kutaula, 2014), especially in a multidimensional perspective (Kraak et al., 2017). A deeper investigation is needed with contextual constructs like perceived support, leadership and also HRM systems as moderators in order to investigate negative outcomes and relationships (Palmer et al., 2017) in order to make organisations supportive.

Organisational support theory works similar to social exchange theory. Both theories keep the employee-employer exchange relationship balanced. Employees help organisations as part of their obligation, if organisations support them socio-economically and socio-

emotionally in perceived organisation theory. Employees get committed to their organisations in exchange for support and benefits in social exchange theory. Organisations may extend such benefits in terms of cash or in-kind (Cropanzano & Mitchell, 2005). Physical and emotional employee-needs are at the heart of organisational support theory (Meyer, Becker & Van Dick, 2006) so are with social exchange theory (Blau, 1964; Cropanzano & Mitchell, 2005). Organisational support and social exchange theories equally contribute to psychological contracts (Ahmad & Zafar, 2018).

Additionally, organisational support theory posits that employees get satisfied and work better for an organisation, if such organisation cares for the employees by catering them financial and non-financial rewards. Similarly, the social exchange theory maintains that employee exchange what they get from their organisations. The employees work better if the organisations take care of their benefits practically (Blau, 1964). Perceived organisational support has also been studied with turnover and/or its intention, whereby researchers have held that perceived organisational support influences such constructs and therefore reduces turnover and intention thereof (Islam et al., 2013; Kim & Barak, 2015; Madden, Mathias & Madden, 2015).

Perceived organisational support moderates and also mediates relationships between counterproductive work behaviour and a number of other negative attitudes and behaviours (Alfes & Latham, 2016; Palmer et al., 2017; Shantz, Vatankhah et al., 2017). Studies should use a number of moderators in relation to negative attitudes and behaviours in order to better understand such constructs. A study, which used perceived organisational support as a moderator with psychological contract fulfilment, has proposed using moderators including perceived organisational support with psychological contract studies in order to better

understand the employee-employer relationship (Conway & Coyle-Shapiro, 2012). Researchers believe that psychological contracts should be investigated in different dimensions by using a number of moderators (Virgolino, Coelho & Ribeiro, 2017) and other contextual constructs such as perceived organisational support to better understand psychological contract breach and effects thereof (Suazo & Turnley, 2010).

Besides, a recent study suggests that psychological contract breach mechanism may be investigated on a larger sample in Pakistani higher education institutions (Hussain et al., 2016). Since employee retention is an alarming issue for Pakistani universities, therefore, Akhtar et al. (2015) recommend deeper psychological issues related investigation, which provides viable findings, on a larger sample size so that the wholesale employee turnover in Pakistan could be avoided. Accordingly, this study aims to investigate the role of perceived organisational support as a moderator with psychological contract breach and negative effects in order to see how/if perceived organisational support moderates such effects.

Considering these motivational factors in relation to the short-comings in literature, this research aims to study the effects of psychological contract breach and the moderating role of perceived organisational support in a non-Western context – Pakistani universities in order to come up with novel results for the better policy making and implementation thereof.

Keeping in view the above cited studies, it has been observed that the psychological contract breach affects employees' attitudes and behaviours. However, only a small number of studies have examined the effects and relationships of the psychological contract breach in job dissatisfaction, turnover intention and counterproductive work behaviour together especially by using perceived organisational support as moderator and in a non-Western cultural context, which is the justification for a gap in research regarding such constructs.

Therefore, the instant study's purpose is to examine such relationships, effects and context especially in the educational institutions in Pakistan.

2.7 Theoretical Framework

A research must be guided by some relevant theory (Hair et al., 2010). There are a number of theories but this study has used social exchange theory and organisational support theory being relevant to the objectives of the study.

2.7.1 Social Exchange Theory

The social exchange theory (Blau, 1964) has commonly been known as the grand theory and has been utilised to investigate the employee-employer exchange relationship (Cropanzano & Mitchell, 2005; Saboor et al., 2017; Malik et al., 2018). Positive employee-employee relationship is based on employers' concern for their employees' well-being and promotion.

Accordingly, employees pay back to their employers in terms of positive job attitudes, which lead to organisational development and growth. Hence, the extent of reciprocity and exchange are considered directly proportionate to each other (Cropanzano & Galić et al., 2016; Malik et al., 2018). Keeping in view the worldwide popularity and importance of the social exchange theory, a group of researchers have used this theory in other fields of research like sociology (Blau, 1964).

2.7.2 Organisational Support Theory

Organisational support theory works similar to social exchange theory. Both theories are considered grand theories to keep the employee-employer give-and-take relationship balanced (Gupta et al., 2016). Organisational support has its origin in the social exchange

(Cropanzano & Mitchell, 2005). Therefore, social exchange is a grand theory. Social exchange means overt and covert exchanges between workplace parties to a contract, i.e. employee and employer. On the other hand, organisational support means quality exchange between employee and employer. Employees help organisations on the basis of their felt obligation if organisations support them socio-economically and socio-emotionally in perceived organisation theory.

Perceived organisational support mainly relies on employees' perception of whether their organisation has treated them positively or negatively. Employees maintain a balance of exchange with their organisation keeping in view organisational treatment towards them. Employees help an organisation achieve its objectives if they are treated fairly by the organisation and they opt for negative outcomes if they think that the organisation is being unfair to them (Kurtessis et al., 2015). This shows that perceived organisational support enhances positive attitude and behaviours and reduces the negative ones (Eisenberger & Stinglhamber, 2011).

Since psychological contract breach leads to negative effects; therefore, social exchange theory (Blau, 1964) best suit such studies (Ravlin et al., 2012; Ng et al., 2014) as social exchange explains the psychological contracts far better (Rousseau, 1989; Morrison & Robinson, 1997; Conway & Briner, 2005; Cropanzano & Mitchell, 2005). Accordingly, literature shows that a vast majority of studies have employed social exchange theory when researching the psychological contract and outcomes thereof (Tekleab et al., 2005; Wang et al., 2017). Social exchange theory and organisational support theory equally contribute to psychological contracts of the employees (Ahmad & Zafar, 2018). Nevertheless, it has been observed from the literature that a small number of studies have employed both the

organisational support theory and the social exchange theory to study psychological contract breach and other constructs in the organisations in the non-Western context. Hence, this research shall make a novel contribution to the theory in relation to psychological contract breach with reference to the organisational support and the social exchange theories as have already been used by Ahmad and Zafar (2018). Section 2.9 deals with demographical factors.

2.8 Demographical Factors

2.8.1 Qualification

Demographic factors are important to examine correlations (Iwu, 2013). Factors such as qualification, age and gender are known to be certain demographics. Literature shows that age and gender have been examined by a number of studies (Iwu, 2013; Adams, Quagraine & Klobodu, 2014), while qualification has been paid a little attention. A recent research also incorporated demographic-factors and concluded that senior-employees are facing the psychological contract breach in organisations (Galić et al., 2016).

Demographic factors have been reported to having strong association with negative job attitudes and behaviours (Bal & Smit, 2012). Older employees bear less reactive attitude toward psychological contract breach than the younger employees (Sharif, Wahab & Sarip, 2017). In this regard, it has been observed that the lesser the qualification greater the job-problems and workplace issues whereas employees' qualification has positive association with organisational-productivity (Odunlami & Matthew, 2014).

Demographical factors also determine negative job attitudes/behaviour. Demographic factors may have association with the psychological contract breach (Phuong, 2016). Such factors inter alia qualification should be used to examine its relationship in relation to a number of variables including psychological contract breach (Ahmad & Khan,

2015). Since a majority of studies has been conducted in the west (Katou & Budhwar, 2012), therefore, generalising the results and theories in the non-Western context would be an unwise attempt. Accordingly, this study takes into account qualification, age and gender to examine their association with psychological contract breach.

2.8.2 Age

Organisational outcomes and age have since long been associated with positive or negative relationships in organisational and psychological research studies. For example, age has positively been associated with organisational commitment and job satisfaction. However, the negative association has been reported between age and burnout (Wu et al., 2007). On the other hand, age inter alia other demographic variables have been found having zero association with the job behaviours.

Psychological contract breach is felt differently by employees having different demographic background (Bal & Smith, 2012). Employees having more age tend to have stronger association with their organisations than the younger employees (Adams, et al., 2014). Veteran employees have stronger relational contract with their organisations than the juvenile ones (Bal & Kooij, 2011).

Western literature exhibits that age has an association with psychological contract breach and its effects (Lub et al., 2012; Bal, Lange, Jansen & Velde, 2013). With reference to research in Pakistan, demographics have been reported to be significant with relation to the psychological contract breach (Ahmad & Khan, 2015) because results with reference to psychological contract breach are uneven regarding age of the employees. Since a majority of studies has been conducted in the west (Katou & Budhwar, 2012; Agarwal & Bhargava,

2013a), therefore, generalisation of results and theories in the non-Western context would be an unwise attempt.

Hence, it is held that age needs to be used to examine its relationship in relation to a number of variables (Ng & Feldman, 2009; Kooij, Jansen, Dikkers & De Lange, 2010) including the psychological contract breach (Sharif et al., 2017). Therefore, this situation warrants that age should be studied in relation to the psychological contract breach in a novel-context.

2.8.3 Gender

Gender has been a concern of great significance in management as well as psychological contract research. Different personalities both men and women having different demographic factors have different psychological contract (Iwu, 2013). Although organisations have been actively discussing on employment equality for both the male and female employees, female employees have been reported to be earning a low pay. Male employees have significant transactional contract whereas the female employee have relational contract (Adams et al., 2014). It has been observed that female employees are more prone to experiencing emotional exhaustion. As a result, female employees have been reported feeling dissatisfied with their jobs (Burke & Matthiesen, 2009).

Male employees and female employees have same psychological expectations from their employers. Employees senior in age tend to have relational contract and employees junior in age have transactional contract with their organisations (Adams et al., 2014). Due to this reason, demographics should be investigated in relation to psychological contract breach with reference to research in Pakistan (Ahmad & Khan, 2015). Demographic variables can be controlled (Chen et al., 2011) in order to reduce error term and to increase

the explanatory power of the research model. Literature reflects the control variables as prospective causes of extraneous variance (Restubog et al., 2011).

2.9 Hypotheses Development

Psychological contract breach makes employees dissatisfied and such employees become transactional especially in the wake of global cost cutting scenario (Rousseau & Batt, 2007). Psychological contract breach gives birth to a host of negative job-outcomes (Zhao et al., 2007) such as turnover and turnover intention, job dissatisfaction, counterproductive work behaviour.

A review of literature shows that the psychological contract breach causes negative attitudes such as turnover intention, job dissatisfaction and behaviours such as counterproductive work behaviour and decreased organisational citizenship behaviour and it affects organisational performance. Keeping this as a motivation, this research intends to investigate psychological contract breach in relation to its effects especially employees' job dissatisfaction in the universities in Pakistan. Therefore, the first hypothesis of the research is:

H_{a1}: The psychological contract breach has an effect over job satisfaction.

Psychological contract breach leads to job satisfaction. Job satisfaction is among one of the causes of employee turnover (Nwobia & Aljohani, 2017; Ali et al., 2018). Turnover intention is 'conceived to be a conscious and deliberate wilfulness to leave the organisation' (Mobley et al., 1978). Such an intention finally reaches the actual-turnover which hampers an organisation and its performers significantly and as a consequence employee opt for actual turnover. Stronger psychological contract and commitment paves way for the better

employee-employer relations (Robinson & Morrison, 1995; Allen & Meyer, 1997). Negative job outcomes are obvious if employee-employer bond is weak and uncertain. Such uncertainty reflects employees' turnover intention (Blomme et al., 2010) which is directly proportional to the actual-turnover (Shacklock et al., 2013). Therefore, organisations have to take care of employee's psychological contract if employees are required not to opt for turnover intention (or actual turnover) (Kraak et al., 2016). Turnover (intention) is an outcome of psychological contract breach since there is a positive relationship between both the constructs (Rousseau, 2011). Universities play a vital role in nation building. This role cannot be played effectively if employees therein are dissatisfied. Literature reveals that job dissatisfaction and turnover is caused by psychological contract breach (Hennicks, 2014; Bravo, Won & Chiu, 2019). Knowing relationship between psychological contract breach and turnover intention is important in order to suggest how could an organisation avoid negative job outcome. Hence the present research comes up with the second research hypothesis is mentioned below:

H_{a2}: The psychological contract breach has a significant effect over turnover intention.

Fox, Spector and Miles (2001) defined counterproductive work behaviour as a behaviour showing 'aggression, interpersonal conflict, sabotage and theft' counterproductive behaviour not only affects organisations but also their members. Research has shown that the psychological contract breach causes employees to be counterproductive and that's why such employees no longer remain as good organisational citizens (Astrov et al., 2015). Organisations want high performance but psychological contract breach causes counterproductive work behaviour which affects organisational performance.

In order to better perform, organisations should encourage their employees because employees withdraw organisational citizenship behaviour (and be counterproductive) if they experience the breach of psychological contract (Zhao et al., 2007; Arshad & Sparrow, 2010) and such employees reciprocate their performance accordingly (Kiazad et al., 2014). The psychological contract breach, which is a negative job-construct, entices counterproductive work behaviour (Bordia et al., 2008; Ahmad et al., 2016).

Universities play a vital role in nation building. This role cannot be played effective if employees are dissatisfied. Literature reveals that turnover is caused by the psychological contract breach which leads to counter productive work behaviour. Therefore, responding to calls from Jam et al. (2011), Ahmed et al. (2013), Galić et al. (2016), Zaghini et al. (2016) and Hussain et al. (2016), this research comes up with the third research hypothesis for university employees in Pakistan is stated below:

H_{a3}: The psychological contract breach has a significant effect over counterproductive work behaviour.

Literature shows that psychological contract breach leads to negative effects. Such negative effects obviously lead to further negative effects. Research has shown that moderators are used to examine their relationships in improving employee-employer relationships. A moderator reflects as to when and how an independent variable influences a dependent variable which may increase or decrease the strengths between variables. Moderating effects are reflected in the form of an interaction between the independent and the moderating variable (Baron & Kenny, 1986).

Perceived organisational behaviour has been defined as employees' psychological understanding as to how fair their employer is in relation to their efforts for the organisation.

Perceived organisational support generally is studied based on organisational support theory (Eisenberger et al., 1986). There is an overwhelming reliance on organisational support theory because it studies employee-employer relationships from employees' angle and is used to study effects of a number of constructs (Riggle, Edmondson & Hansen, 2009; Kurtessis et al., 2015).

Organisational support theory works somehow similar to social exchange theory. Both of these theories keep employee-employer give and take relationship balanced. The psychological contracts are about employee-employer social exchange, mutual duties and the extent to which such exchange and duties are fulfilled. Such mutual duties reflect expressed organisational promises and implied individual's expectations (Rousseau, 1995). Individual's expectations relate to perceived organisational support. Breach of such expectations/promises are negatively associated to perceived organisational support (Aselage & Eisenberger, 2003).

Accordingly, this study aims to investigate the role of perceived organisational support as a moderator with psychological contract breach and its effects. Literature shows that little is known about using perceived organisational support with psychological contract breach (Gupta et al., 2016). However, a recent study, which used perceived organisational support as a moderator with psychological contract fulfilment, has proposed using a number of moderators along with perceived organisational support with psychological contract studies in order to better understand the employee-employer relationships. This research study, therefore, aims to investigate moderating role of perceived organisational support between psychological contract breach and job dissatisfaction, turnover intention and

counterproductive work behaviour. Therefore, this research comes up with its fourth, fifth and sixth hypotheses as below:

H_{a4}: Perceived organisational support moderates association between the psychological contract breach and job dissatisfaction.

H_{a5}: Perceived organisational support moderates association between the psychological contract breach and turnover intention.

H_{a6}: Perceived organisational support moderates association between the psychological contract breach and counterproductive work behaviour.

Qualification of employees leads to better organisation productivity (Odunlami & Matthew, 2014). With psychological contract breach, age and gender have been given due consideration. There is lack of research on association of psychological contract breach with qualification. Studying role of demographical variables with reference to psychological contract breach (Ahmad & Khan, 2015; Phuong, 2016) and also in general reveals novel aspects of the employee-employer relationship and a number of factors at the workplaces. Therefore, this research comes up with its seventh hypothesis as under:

H_{a7}: Psychological contract breach has significant relationship with qualification.

There is no agreement as to if age has a significant relationship with the job attitudes and/or behaviours. In this context, Wu et al. (2007) state that there is a negative relationship between age and job attitudes. Age along with other demographic variables has been reported to having zero relationship with the job behaviours. Literature shows that age has an impact over psychological contract breach and its effects (Ng & Feldman, 2009; Bal et al., 2010; Lub et al., 2012; Bal et al., 2013).

Senior in age employees have better contracts with their present employers and such employees do not believe that they could have same contract with other employers (Ng & Feldman, 2009). Age should be used to examine its relationship in relation to a number of variables (Kooij et al., 2010) including the psychological contract breach (Sharif et al., 2017). Prior results in relation to the top psychological contract breach studies are inconsistent regarding age of the employees (Bal et al., 2010).

Literature shows that there is no agreement as to if age has a significant relationship with the job attitudes and/or behaviours. Therefore, studying the relationship between psychological contract breach and age could provide a better insight as to if such breach has any relationship with age or not (Ahmad & Khan, 2015). Besides, a majority of studies has been performed in the west (Katou & Budhwar, 2012; Agarwal & Bhargava, 2013a), whose generalization in terms of results and also theories in the non-western context is unjustified. Accordingly, this study presents its eighth hypothesis as under:

H_{a8}: Psychological contract breach has significant relationship with age.

Literature shows that management research has considered gender as a significant construct to study because female employees have been reported to be low-paid (Adams et al., 2014; Iwu, 2013). This is why organisations have been concerned about equal opportunity employment keeping in view the care for female employees. Female employees have been reported to be more prone to emotional exhaustion, which makes female employees dissatisfied with their jobs (Burke & Matthiesen, 2009). Antoniou et al. (2006) support the above statement by saying that “female teachers experienced significantly higher levels of occupational stress, specifically with regard to interaction with students and colleagues, workload, students’ progress and emotional exhaustion”.

Psychological contract breach causes turnover intention/turnover, job dissatisfaction and counterproductive work behaviours. The relationship between gender and psychological contract has been considered important. Turnover and gender have significant relationship with each other. It has also been known that both the males and the females opt for the turnover. Lodha and Pathak (2017) also considered the impact of gender on psychological contract very much important especially in academic organisations at the country level. Ahmad and Khan (2015) also stated that demographics play an important role in terms of job behaviours. Psychological contract/expectation of both the male and the female employees is similar to each other (Adams et al., 2014). Therefore, this research comes up with its ninth hypothesis as under:

H_{a9}: Psychological contract breach has significant relationship with gender.

2.10 Conceptual Framework

Psychological contract breach leads to negative job attitudes and effects (Hussain et al., 2016). Perceived organisational support moderates and mediates the relationships between counterproductive work behaviour and a number of other negative attitudes and behaviours (Shantz, Alfes & Latham, 2016; Palmer et al., 2017; Vatankhah et al., 2017).

Therefore, this study has taken into account a conceptual framework wherein psychological contract breach is the independent variable, while job satisfaction, turnover intention and counterproductive work behaviour are the dependent variables and perceived organisational support is the moderating variable. Figure 2.1 presents a detailed presentation of the conceptual framework. Respondents of this study were the university employees in Pakistan.

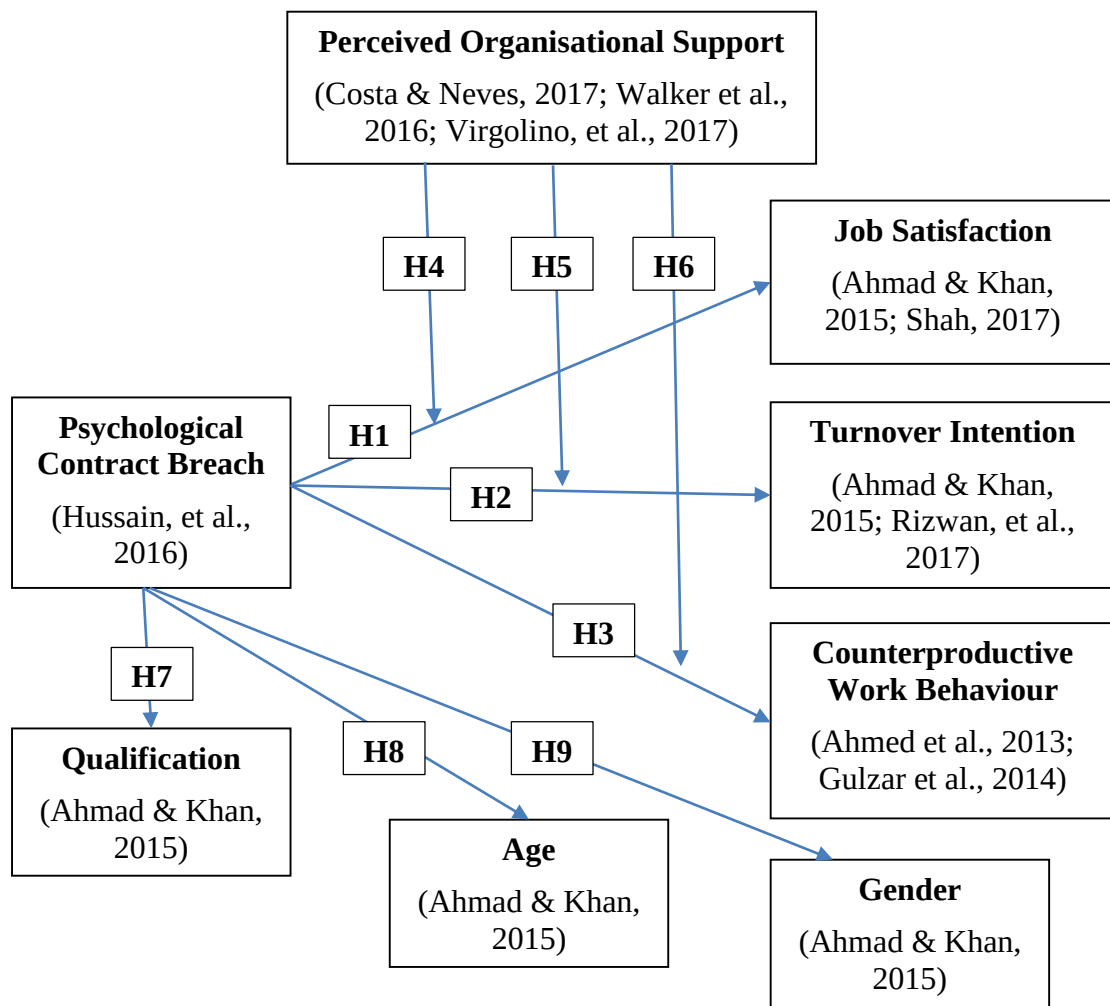


Figure 2.1: Conceptual Framework (CF)

2.11 Chapter Summary

Chapter 2 starts with an introduction about different elements therein. This chapter reviews the literature on psychological contracts and leads to definition, evolution and development of psychological contract breach. This chapter also provides information about the types of psychological-contracts: fulfilment, breach and violation. Thereafter, the psychological contract breach and its effects in relation to workplace have been detailed and proposed hypotheses have also been stated therein. Literature critique has been stated in this chapter thereafter. In order to support this research in term of theory, some apt theories and

the theories for this research have also been discussed. Demographic variables such as qualification, age and gender have also been elaborated to an extent along with hypotheses thereto.

CHAPTER 3

METHODOLOGY

3.1 Introduction

Methodology means the general principle of research. Methodology may also be meant as the main philosophy of research (Dawson, 2002). From methodological point of view, this research, being quantitative in nature, shall employ a survey design by using self-administered questionnaire with the help of enumerators. The study questionnaire comprises items related to psychological contract breach, job dissatisfaction, turnover intention, counterproductive work behaviour and organisational perceived support as the constructs. Data shall be analysed by using Statistical Package for Social Sciences (SPSS V-21) and Structural Equation Modelling Analysis of Moment Structures (SEM AMOS V-22).

This chapter, accordingly, encapsulates the overall research design, i.e. research paradigms/philosophies, research design and method, population and sampling, unit of analysis, pre-test and pilot research, data collection method, research measures and scales, Likert scale, data measurement and analyses process, justification for using SEM AMOS and chapter summary. Section 3.2 explains research methodology and various dimensions thereto.

3.2 Research Methods

Research methods mean data collection tools (Dawson, 2002). Research methods may also be meant as techniques needed to carry out a piece of research. Meanwhile, research methodology means involving a host of research techniques in general such as case research, archival research, survey research, focused groups and interviews and theory

building to solve a research problem. These methods were chosen in accordance with the nature of a research. In terms of nature of the study, there are explanatory and exploratory studies in management research (Bryman & Bell, 2011).

Management research employs deductive and inductive approaches to study constructs. The former tests hypotheses and indicates some findings; however, the latter builds-up a theory on the basis of data and findings (Saunders, Lewis & Thornhil, 2007). Nevertheless, the present research, being an exploratory one in nature, is guided by objectivism and positivism and hypothetico-deductive research approach. Survey approach has been adopted in this study.

A research study needs cost effective, faster and unbiased data (Weible & Wallace, 1998); therefore, the present research uses a paper-based questionnaire. This research aims to be an objective attempt as it will measure all the constructs on the basis of structured questionnaire, which is a cost-effective data collection tool.

3.3 Research Paradigm

Research paradigm determines the data collection and analysis mode and the relationship between the researcher and the research. There is a number of research paradigms such as positivism, interpretivism, realism and pragmatism. Research paradigms depend upon research philosophies, which lead to conducting a research based on knowledge development and nature of knowledge known as epistemology and ontology.

From epistemological assumption, it is clear that social reality is absolutely objective in nature, because it gets structured with the help of measurable constructs. Ontology on the other hand speaks of nature of reality as objective and unbiased. Objectivists believe that

reality always is external (objective) of the researcher (and others) and it gets formed keeping in view ontological perspective (Tuli, 2010).

This research is a deductive logic that employs positivist paradigm that uses an objective questionnaire to get an objective reality, i.e. results, which could be generalised in relation to the constructs of this study. This study being quantitative in nature shall employ hypothetico-deductive approach, which is a step-by-step process of data analysis guided by the objectives of the study.

However, research paradigm, which is considered a driving impetus in social science research, involves three philosophical assumptions; a) epistemology, b) ontology and c) axiology (Saunders et al., 2007). These assumptions are discussed in Section 3.3.1.

3.3.1 Epistemology

Epistemology refers to what creates considerable or acceptable knowledge, how can we get to knowledge (Cohen et al., 2013). Epistemology is further divided into three categories; a) positivism, b) realism and c) interpretivism. The positivists rely on valid knowledge, which according to them, is observable and quantifiable. Well-structured methodologies are employed so that they could better analyse data statistically, whose results can be generalised for future research. Positivism is recommended for business research (Saunders et al., 2007). However, the realists believe in what they see/feel through their senses/sensations.

There are two types of realists; a) the direct realists and b) the indirect realists (Saunders et al., 2007). The former ones believe in the world around as it exists; their understanding about world's knowledge is moderately even or stable. On the other hand, the

indirect realists believe in the bottom line of the knowledge and reality around. These realists do not believe in viewable direct images or objects but they postulate that humans believe images and knowledge on the basis of sensation and not the actual image and knowledge (Saunders et al., 2007).

On contrary, interpretivists are the social researchers, who behave like artists. They put their foot into others' shoes and feel the pain. Meaning thereby that they empathise a situation exactly how others believe and understand. They take and report issues and interpret them in accordance with the feelings of the people facing such issues (Saunders et al., 2007).

From the ontological and epistemological in fact philosophical point of view, this study is conducted to investigate what psychological contract breach is all about and where it comes from; besides, the study shall also take into account the same investigation about psychological contract breach and job dissatisfaction, turnover intentions and counterproductive work behaviour. Prior literature has shown that the psychological contracts were initially studies in terms of reciprocation. Literature has revealed that psychological contracts and their outcomes have been at the heart of social exchange theory and organisational support theory. The social exchange theory posits that employees exchange what they get from their employers. Organisational support theory stipulates that employees exchange well if supported by their organisations. The present study shall be a valid investigation about the knowledge, i.e. the psychological contracts and their outcomes and how this knowledge evolved and supported in terms the social exchange and the organisational support theories.

3.3.2 Ontology

Ontology clarifies what is reality, i.e. knowledge and is used to look at a social phenomenon (Cohen et al., 2013). Ontology studies social portent (signs) by considering it as an entity. For instance, ontology refers to how we reach considerable knowledge (Saunders et al., 2007). This study is quantitative; therefore, the ontology of this study shall be objective as the researcher shall be external of the responses. Ontology deals with nature of knowledge, i.e. reality (Easterby-Smith et al., 2012).

3.3.3 Axiology

Axiology demands researchers to save the respondents/participants from any probable harm after they extend their personal and private opinion about any question-item of the questionnaire (Saunders et al., 2007). The data from the respondents should be taken well-informed, i.e. they should be asked if they want to participate in the research or otherwise; they should be clearly told as to how to fill in the questionnaires; as to how long this activity can take; they should be told that data gathered from them shall only be used for the research purpose; their privacy/names/organisations or any identity shall not be disclosed to any party; and they would not be at harm in any way for being part of a research. Therefore, researchers have considered axiological considerations, such as informed consent, anonymity, privacy and benefit, important. Accordingly, axiology is very important in relation to getting unbiased and honest opinions from the respondents (Saunders et al., 2007).

3.3.4 Justification for Using Positivism

This study at hand is quantitative in nature. Philosophically speaking, the quantitative research studies use positivism. Lambert (2015) states that “Creswell (2009) recommends

using a quantitative approach to address research problems which require “(a) identification of factors that influence an outcome, (b) the utility of an intervention, or (c) understanding the best predictors of outcomes” or testing a theory.”

Positivism is considered the most reliable and oldest paradigm in social sciences which produces full length and unbiased results, especially when the research undertakes theory and causal relationships testing (hypotheses testing). Positivist approach, quantitative method and deductive reasoning are part and parcel to each other (Kusumawardhani, 2013).

Saleh (2006) also holds that “the quantitative methods is conventionally based on the positivist approach to explore scientific inquiry of the phenomena”. Since this is a quantitative study, the positivist approach is employed. In social sciences, the use of positivism is not only undeniable but also inevitable despite facing criticisms. Besides, the use of positivism herein is justified as researchers have already recommended and employed positivist approach while conducting psychological contract research (Ballou, 2013; Kutaula, 2014).

Since this research study aims to test relationships and theories, therefore, based on ontological and epistemological stances (what is knowledge and where it comes from), the research at hand opts for the positivist paradigm, which has been widely used in HR literature (Kutaula, 2014).

3.4 Quantitative vs Qualitative Research

Quantitative studies employ survey technique wherein data results can be generalised and data reliability and validity can be examined (Tuli, 2010). Bryman and Bell (2011) suggest that issues such as subjectivity, replicability, generalisability and transparency can

be avoided by conducting quantitative studies; where making inferences is viable (Bartlett, Kortlik & Higgins, 2001). On the other hand, Finn et al. (2000) make a comparison of both approaches of research and finally state that although qualitative research can seek an in-depth research information from a very small sample, which is an advantage of qualitative research approach yet quantitative approach suits a study meant for theory testing. Therefore, no method whether quantitative or qualitative is superior to each other, but it is the objective(s) of a study that determine(s) which method best suits it.

3.5 Research Design

Sekaran and Bougie (2016) state that the research design means a road map of research that helps in data collection, measurement and analysis in order to answer research questions. Research design is all about a framework in relation to methods of data collection and subsequent analysis (Bryman & Bell, 2011). Research design explains how a researcher answers question such as what, when and how. Research design is the road map of a research project, which may also be called a blueprint or known as a statistical and operational design of a research project. Research design helps a researcher reaching a decision. Research design also complements social science research by employing a number of elements such as sample size and sampling procedure, data collection tool and an apt data analysis methodology in order to make a research study effective and viable (Sarantakos, 2005).

Research method has a great significance for a research as it impacts the data-collection process and analyses thereto; however, qualitative and quantitative research methods stand equal when it comes to social science research (Vogt, Gardner & Haeffele, 2012). Such studies paint a diametrical picture of a research study by testing hypotheses and theories (Cohen et al., 2013).

All research studies entail sundry limitations and bias is to be minimised in the field of social sciences (Podsakoff, MacKenzie & Podsakoff, 2012). However, the choice of research design enhances prospects of getting reliable and valid findings (Farrelly, 2013). In this regard, the interview method, i.e. qualitative technique, has reliability and validity issues. Survey research design, however, fits a research that evaluates behaviours/attitudes. Such a research employs sampling and population technique in order to get to better findings in relation to cause and effect of a number of constructs (Creswell, 2003).

Structural equation modelling (SEM) based multivariate analysis shall also be conducted. Since the present research is causal in nature, hence, it has been held that structural equation modelling can be best carried out with cause and effect analysis and path analysis (Kline, 2005). Moreover, SEM has so far been employed in relation to two techniques: a) covariance-based, abbreviated as CR-SEM (Jöreskog, 1978); and b) partial least square, abbreviated as PLS-SEM. The former is employed to “estimate model parameters so that the discrepancy between the estimated and sample covariance matrices is minimised”; whereas, the latter is used as it “maximises the explained variance of the endogenous latent variables by estimating partial model relationships in an iterative sequence of ordinary least squares (OLS) regressions” (Hair et al., 2012).

However, co-variance based structural equation modelling based and also based on partial least square equally have weaknesses and none of them is loftier/superior but either may be used depending on data nature, research objectives and model frame. Accordingly, covariance based structural equation modelling is opted for if a research examines relationships or effect (Reinartz, Haenlein & Henseler, 2009).

Therefore, survey research design which employs hypothetico-deductive research method (Sekaran & Bougie, 2016). This method is known to the best answer research question in a sequential way. Since the present research is psychological in nature; therefore, covariance related structural equation modelling shall be employed in this research to investigate effects/relationships of psychological contract breach inter alia other constructs of the research in relation to employees in the Pakistani academia.

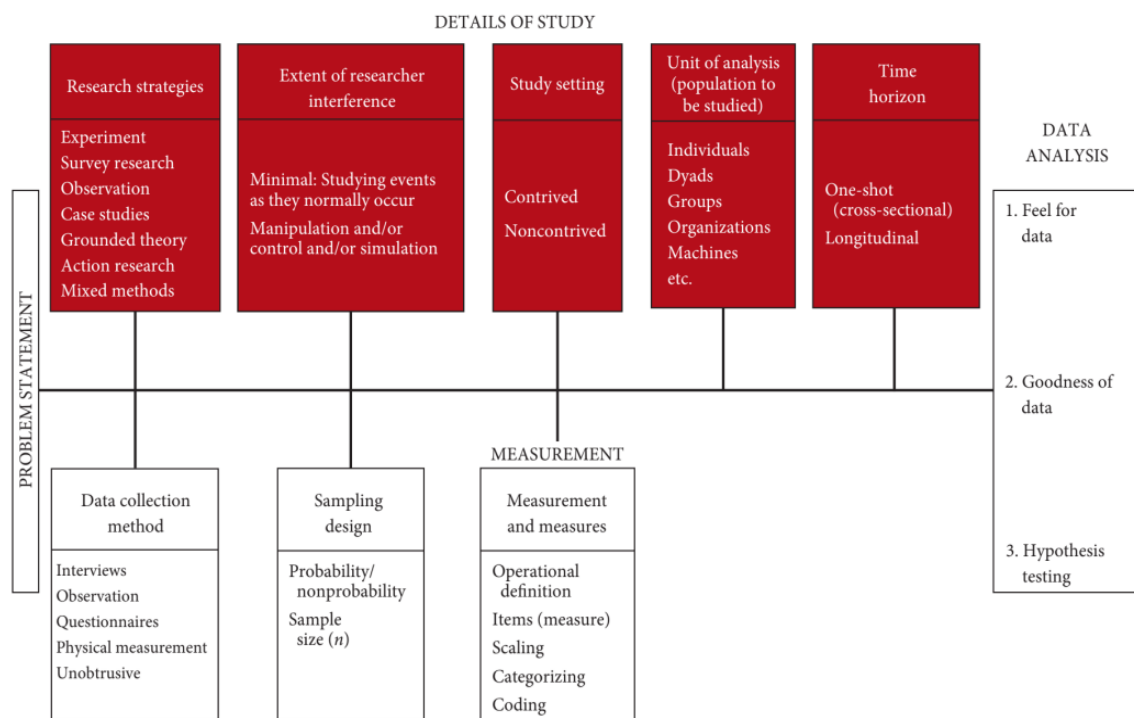


Figure 3.1: The Research Design
(Source: Sekaran & Bougie, 2016)

3.5.1 Population and Sampling Frame

Easterby-Smith et al. (2012) defined population as “the term ‘population’ refers to the whole set of entities that decisions relate to; while the term ‘sample’ refers to the sub-set of those entities from which evidence is gathered”. Sampling frame, however, may be meant as “the listing of all units in population, from which sample is selected” (Bryman & Bell,

2011). The population for the proposed study was university employees, i.e. 25,908 (GoP, 2014a) in Pakistan.

Sampling frame could be from four universities in four cities of Pakistan (Khan, Zhiqiang, Sadick & Musah, 2018). Accordingly, the sampling frame was five universities' employees in five cities of Pakistan. Names of the universities were not disclosed in terms of anonymity condition and as has been done in Khan et al. (2018). The sampling frame was 4,067, i.e. total employees university (A) = 826 and sample drawn = 269, total employees university (B)= 1589 and sample drawn 319, total employees university (C)=308 and sample drawn 174, total employees university (D) = 302 and sample drawn 179, total employees university (E)=1042 and sample drawn=289 ($269+319+174+179+289= 1230$) in five big cities of Pakistan. For each university, the sample was randomly selected by using fish-bowl sampling.

The proposed survey was drafted in Urdu (the native language) and back translated in English language. The questionnaire was got checked by two senior researchers, who were also English language instructors and native Urdu speakers, there was no difference found in both expressions. Although the native language is proposed by some researchers yet some researchers in Pakistan [and also in India (Agarwal & Bhargava, 2014)], where native language is other than English, have used English for drafting questionnaire as employees can understand English language well there (Ghafoor, 2014; Syed, Arain & Schalk, 2015). The researcher used translation method to check if the language of the questionnaire was easy to understand clearly. It was easy and clear to understand.

This survey was conducted in the representative universities in five big cities for cost and law and order concerns. Population for this research was from the universities in

Pakistan. Sampling frame involved five universities, i.e. one each from four provinces and one from the Federal Capital.

Sample size shall be determined on the basis of Yamane (1967) formula; $n = \frac{N}{1+N(e)^2}$.

Whereas ‘n’ stands for sample size, ‘N’ stands for population while ‘e’ stands for error limit. Error limit for this study was 0.05. Confidence level was 95%. Yamane (1967) formula, instead of Krejcie and Morgan’s table or G*power, was used being the oldest and reliable one (Israel, 1992).

Keeping in view objectives of the present study and the above discussion, this study aimed to use simple random probability sampling technique that had been recommended by (Bryman & Bell, 2011; Acharya et al., 2013; Awang et al., 2016; Haque et al., 2016).

3.5.2 Sample Size

According to Anderson, Sweeney and Shalliams (2011), “a population is the set of all elements of interest in a particular research”. Anderson et al. (2011) further explain that ‘a sample is a subset of the population’. Sample also means choosing a small number of individuals, which is handy and manageable, from the targeted population to participate in a research study in order to make inferences about the target population (Bhattacharjee, 2012).

A careful selection of sample helps researchers to find generalisable results for the whole population, however, results might be misleading and ungeneralisable if a sample is selected carelessly (Dawson, 2002; Bhattacharjee, 2012). Social science studies human behaviours and their relationships. For this purpose, it is unfeasible and costly to reach each individual in a target population.

Therefore, a sub-set called representative sample of the same population (frame) is chosen so that the results of these studies may be generalised for the whole population. Sampling frame is normally the accessible portion of the target population and a sample is derived from this sampling frame (Bhattacharjee, 2012).

There are different opinions from the researchers on what a sample size should be. However, some issues such as time, cost, non-response, heterogeneity, relative/absolute sample and nature of the study must be considered seriously while selecting a sample size (Bryman & Bell, 2011). The varying opinions in relation to sample size are; a sample of 100 are considered 'small', while a sample between 100-200 is considered medium whereas a sample greater than 200 is considered large (Kline, 2005), as cited in Jafri (2014).

In fact, a literature review shows lack of one agreed upon method of sample selection. Nevertheless, the representation of a sample relies on three-factors such as a) sampling methods, sample size and sample response-rate (Acharya et al., 2013). However, the present study drew a large sample size, i.e. more than 400 respondents, suitable for the SEM analysis.

3.5.3 Sampling

Sampling has two main categories: a) probability sampling and b) non-probability/purposive sampling (Dawson, 2002). Probability sampling is considered to be the simplest while unbiased sampling is a simple random sampling technique. Simple random sampling technique is thought to be unbiased, where each individual from a population has an equal chance of getting selected into a sample (a small group of the same population). Within probability sampling method, simple random has been considered the best one. In simple random sampling technique, a number of other techniques such as

systematic, stratified, cluster, matched pairs and multi-stage sampling are available for use in social science (Bhattacharjee, 2012).

Simple random is the best and simplest sampling technique of all (Bhattacharjee, 2012) because “in simple random sampling each unit of the target population gets an equal probability of being included in the selected sample” (Bryman & Bell, 2011). This technique carries high level of internal and external validity. Besides, this technique makes data analysis easier (Acharya et al., 2013). Levels or steps in creating simple random sampling are classified such as identifying target population, selecting a sampling frame, listing of total population, selecting mandatory sample and using either a table or computer to generate random numbers (Bryman & Bell, 2011).

Besides, the probability sampling is fairly recommended for parametric tests (for normal distribution data) and such like studies accordingly (Awang et al., 2016) also for psychological contract breach in Pakistan especially in relation to counterproductive work behaviour (Ahmed et al., 2013). Galić et al. (2016) recommend altering sampling technique for psychological contract studies. Besides, literature reveals that survey research and probability sampling are part and parcel to each other. However, this technique garners heavy costs, nevertheless, this technique facilitates population in terms of their time and knowledge (Acharya et al., 2013). Thus, researcher may opt for simple random technique for psychological issues if the study comprises a few cities (Haque et al., 2016).

3.5.4 Unit of Analysis

Unit of analysis is considered to be either an individual or organisation or a specific culture. Such unit denotes where from a particular set of data is collected and analysed (Bryman & Bell, 2011). Unit of analysis should be carefully selected in accordance with the

objectives of a study. This process is very critical as having a wrong selection of the unit of analysis may lead to wrong inferences and incorrect results (Bryman & Bell, 2011).

Therefore, the target individual/sample should very be carefully selected otherwise the results of a study shall be biased. Therefore, researcher is required to use their impartial judgement of what organisation/individuals he/she selects as a sample (Bhattacharjee, 2012). The present research aims to evaluate effects of the psychological contract breach among the university employees in Pakistan, therefore, the unit of analysis shall be the individuals from five universities in five big cities in Pakistan. Literature shows that it lacks responses from such a unique sample whose feedback may be of great help to employers, managers, supervisors, policymakers, the Higher Education Commission of Pakistan and Government of Pakistan.

3.5.5 Pre-Test and Pilot Study

Business research frequently undertakes pre-tests to see if the instrument/questionnaire has any grammatical or lingual issues especially in a regional research study (Zikmund, 2003; Pallant, 2011). Convenience sampling may be used for pre-test (Bryman & Bell, 2011). In accordance with the recommendation of Bryman and Bell (2011), the adapted questionnaire was proofread by two English language experts in order to avoid errors, omissions, dual meaning, unambiguous and unclear words or phrases. Back to back translation from English to Urdu and vice versa was also done.

Accordingly, the developed instrument was administered on 20 teaching and administrative practitioners in the universities in Islamabad to get their suggestions, as well as to check and improve the face validity of the instrument/questionnaire. As many as 13 responses were received representing 65%. The pre-test responses revealed that the 10-point

Likert Scale and reverse coded items were not suggested by the teaching and administrative practitioners. This is because the reversed coded items can lead to confusion. For instance, the reversed coded items are not recommended for use on the respondents if English is their second language (Morgan & Cluett, 2016). The questionnaire was accordingly modified and used for the pilot study. The original scale and the adapted scale are provided in the Appendices of this study.

In order to check and increase reliability and validity of the questionnaire, a pilot study on a small chunk of participants from the study population is conducted. However, this chunk is not opted for the study sample. A pilot study can opt for taking 50 respondents (Shah, 2009); nevertheless, about 20 participants would be sufficient for conducting a pilot research. Literature shows that a study can take even five participants for a pilot study, but these participants must not be a part of the main sample.

Taking an average of the above-said number of participants, the adapted questionnaire was administered to 35 university teaching and administrative practitioners in Islamabad Pakistan. The questionnaire was used to find out if the language of the questionnaire is understood by them and if the instrument truly measures what it is designed to measure.

Out of 35 questionnaires, 27 questionnaires were obtained with a response rate at 77%. Cronbach's alpha for the overall instrument was 0.89; whereas Cronbach's alpha for the Scales respectively was; a) Psychological Contract Breach 0.73, b) Perceived Organisational Support 0.84, c) Job Dissatisfaction 0.85, d) Turnover Intentions 0.92 and e) Counterproductive Work Behaviour 0.88. The pilot study shows a 'good to go' ahead sign. Scale wise Alpha reliability is shown in Table 3.1.

Table 3.1: Pilot Test Scale-wise Alpha Reliability

S. No.	Scale	No. of items	Pilot Test Reliability
1.	Psychological Contract Breach	5	0.73
2.	Perceived Organisational Support	8	0.84
3.	Job Dissatisfaction	5	0.85
4.	Turnover Intentions	6	0.92
5.	Counterproductive Work Behaviour	10	0.88

3.6 Data Collection Method

A review of literature revealed that a number of data collection methods were available for the social science researchers. However, some commonly used data collection methods could be observation method, face-to-face, email and telephone interviews and survey methods (Bryman & Bell, 2011; Bhattacharjee, 2012). Cross-sectional (survey method) and longitudinal data collection were considered for being equally good for social science research; however, the former held an edge over the latter if/when data were needed in a short span of time with minimal resource (Kutaula, 2014).

The steps in conducting a survey included; a) sampling frame, b) mode of administration, c) developing questions, d) reviewing questions and face validity, e) piloting and revising questions, f) finalising questionnaire, g) drawing sample from population, h) administering questionnaire to sample, i) entering data of completed questionnaires and j) analysing and interpreting findings (Bryman, 2012). Self-administered questionnaire was deemed to be the most apt data collection method because it contains well documented

benefits. There could be three (03) and/or more items per constructs in the questionnaire (Kutaula, 2014).

Since this research was about psychological constructs, wherein relationships were measured, therefore, a self-administered survey was employed with the help of enumerators, which is an effective data collection method. Besides, data collection through questionnaire survey suited psychological contract studies (Adams, 2011). The response rate indicated above 50% which satisfied the research needs (Shah, 2009). The questionnaire was administered by the researcher and enumerators to save time.

In order to save participants from physical fatigue, the expected time to fill this questionnaire was no more than approximately 15-20 minutes which was reasonable. Besides, in order to conduct an ethical research, the respondents were asked for a formal consent to participate in this research activity. Also, these participants were informed that this research study was for academic use and there was no potential harm to them or their jobs if they participated in this research. Besides, the participants were also assured that their names/identities would not be disclosed to anyone and their responses would be destroyed after 5 years of the completion of this research as per UNIMAS Rules. Bias error was a problem in using 5-point Likert Scale and data collection. Response error is a problem in such data collection method. In order to avoid common method bias, Harman's (1967) single factor testing method was used wherein the scale items were entered into principle component with varimax rotation. All items were loaded on a single factor which showed that there was no bias found. Response error was tested through independent sample t-test by taking first 50 and last 50 responses. Result showed no meaningful difference in both the groups. Hence, there was no response error.

3.7 Questionnaire Development

This study was quantitative in nature; therefore, an adapted questionnaire was used for data collection process. This questionnaire was divided into six sub-sections. However, in order to get rid of validity issues, already used scales/instruments were adapted for this research. These scales were also be pre-tested by twenty subject matter experts. The scheme of the questionnaire was carried out as below:

3.7.1 Psychological Contract Breach (Section-A)

This study the psychological contract breach was measured by adapting and using a five-item scale developed by Robinson and Morrison (2000). This scale had before been used on 5-point Likert scale. A 5-point Likert scale helped respondents express their feedback in a best way (Wani & Masih, 2016). The scale items are mentioned in the Appendix A.

3.7.2 Perceived Organisational Support (Section-B)

This study used perceived organisational support was measured by using a short 8-item scale derived from the main survey developed by Eisenberger et al. (1986). Short version scale was equally good as that of the main survey (Rhoades & Eisenberger, 2002). This scale had formerly been employed in research using 1-5- and 1-7-point Likert scales. However, a 5-point Likert scale was used to help respondents express their feedback in the best way (Wani & Masih, 2016). Therefore, a 5-point Likert Scale was used in this study to collect data. The Scale items are mentioned in Appendix A.

3.7.3 Job Satisfaction (Section-C)

A 5-point Likert Scale helps respondents express their feedback in the best way (Wani & Masih, 2016). Accordingly, job dissatisfaction was measured in this study by adopting a 5-item short scale taken from the scale developed by Brayfield and Rothe (1951). For instance, a 5-point Likert scale was used in this study to collect data keeping in view the above said advantage. The scale items are mentioned in Appendix A.

3.7.4 Turnover intention (Section-D)

Turnover intention was measured by adapting a 6-item scale developed by Roodt (2004). A 5-point Likert scale helped respondents express their feedback in the best way (Wani & Masih, 2016). Therefore, a 5-point Likert scale was used in this study to collect data. The scale items are mentioned in Appendix A.

3.7.5 Counterproductive Work behaviour (Section-E)

Counterproductive work behaviour scale has formerly been employed in research using 'frequency scale'. However, this research aimed to measure counterproductive work behaviour at a 5-point Likert scale to collect data because a 5-point Likert scale allows respondents express their feedback in a good way (Wani & Masih, 2016). Counterproductive work behaviour was measured by adapting a 10-item short scale which had been used by Spector, Bauer and Fox (2010). The scale items are mentioned in Appendix A.

Table 3.2: Research Scales' Source Summary

Section	Constructs		No of Items	Source
A	Psychological Contract Breach		5	Robinson and Morrison (2000)
B	Perceived Support	Organisational	8	Eisenberger et al. (1986)
C	Job Satisfaction		5	Brayfield and Rothe (1951)
D	Turnover Intention		6	Roodt (2004)
E	Counterproductive Behaviour	Work	10	Spector et al. (2010)

3.8 Likert Scale

Likert scale (Likert, 1932) has widely been used for quantitative research studies for data collection precision, not only in the technologically advanced countries but also in almost all the parts of the world. In this regard, Hair et al. (2009) suggested that “Likert type scales are best suited for research designs that use self-administered surveys, personal interviews or online methods”.

Whereas, a 5-point Likert scale helps respondents express their feedback in a best way (Wani & Masih, 2016). Extant literature has widely employed five (5) point Likert scale and questionnaire method (Bux, 2016). Using more than one scale could create understanding problems for the respondents and can create missing data. Extant literature showed that the scales used herein used Frequency and Likert Scales. However, the use of a

standard scale for all the constructs had been suggested by Shu (2010). Therefore, the following 5-point Likert Scale was employed in this research:

Table 3.3: Likert Scale

Strongly Disagree (SD)	Disagree (D)	Neutral (N)	Agree (A)	Strongly Agree (SA)
1	2	3	4	5

3.9 Data Collection Schedule and Analysis Technique

The data for the present study were collected during September 2017 – June 2018. The data from the Federal Capital, Khyber Pakhtoon Khaw (KPK) and Punjab were collected by the researcher himself, whereas the data from Sindh and Balochistan was collected by two enumerators. Before keying-in data into the SPSS, all the variables were named and defined as suggested by the extant research (Lambert, 2015). Version 22 of the SPSS known as both; a) Statistical Packages for Social Sciences and b) Statistical Package and Service Solution, was used along with Version 22 of AMOS. SPSS was used because it is a smart data screening software (Tabachnick, Fidell & Osterlind, 2001).

The use of AMOS was recommended by Hair et al. (2011) for use on the studies that test theories and have covariance between relationships. This study also was confirmatory in nature which was meant for theory testing. Therefore, AMOS was opted in this study.

3.9.1 Data Screening Process

In this section, data screening activities such as missing data remedy, outliers' detection and descriptive statistics are explained. The present study is quantitative in nature as the data were collected through a self-administered questionnaire by employing

enumerators for two provinces of Pakistan, i.e. Balochistan and Sindh. Data from the rest of the three provinces were collected by the researcher himself.

3.9.2 Missing Data Remedy

Mistakes of data key-in during data collection process could lead to missing data problem. Literature shows that the remedy to missing data is a big concern in research, as missing data creates can affect data analysis. As much as ten (10%) missing data may be ignored (Hair et al., 2006). There is a technique viz. ‘mean substitution’ to treat such missing data (Schumacker & Lomax, 2004).

3.9.3 Outliers’ Detection

Outliers are the extreme negative or positive data values (Anderson et al., 2009). For instance, outliers create problems, miscalculations in estimation process of model, parameters and standard errors. Such values could be less than -4 and more than +4 (Hair et al., 2006). Deletion of such cases is recommended in order to avoid problems in the statistical analysis of data (Pallant, 2007). Standardised values such as z-score are normally used to see outliers (Shu, 2010).

3.9.4 Normality Test

As a core and conventional assumption, data normality (Bai & Ng, 2005) was employed in this study. Normality stands defined as the ‘degree to which the distribution of the sample data corresponds to a normal distribution’ (Hair et al., 2006). A number of steps were taken into consideration to determine normality of data which incorporated drawing of scree plots explicitly showing important and unimportant factors, calculation of skewness and kurtosis and performing Kolmogorov–Smirnov Test (Hair et al., 2007). Distribution of data with extreme positive or negative values of skewness and kurtosis indicates ‘data non-normality’ which could affect analysis. Normality of data may be checked through two reflectors, i.e. skewness and kurtosis, whose values if greater than 3 and 8, respectively, could be of great problems in the data analysis (Kline, 2005). Normality should also be checked by employing data reliability and validity tests.

3.10 Construct Reliability

In the business research, reliability, which is measured through Cronbach’s Alpha, of a construct shows whether the generated results are generalizable or not (Nunnally, 1978; Kline, 2005). Reliability shows, how consistent a scale internally is. Literature shows that Cronbach’s Alpha is normally used to check the internal consistency of a scale (Cronbach, 1951; Kline, 2005; Solangi & Mughal, 2015). The acceptable value of Cronbach’s Alpha should be above 0.70 (Nunnally & Bernstein, 1994).

3.11 Construct Validity

A construct stands valid if it measures what actually it should measure (Pallant, 2005). A construct stands valid if it exactly measures the phenomena, as it is supposed to

measure which may be seen by calculating correlation through constructs. Kline (2005) recommends that the value of correlation should be above 0.30.

3.12 Factor Analysis Testing

Data matrix should have appropriate correlation so that factor analysis may be conducted. This condition may be met through four methods which clarify that the data matrix bear sufficient correlation. These methods are; Correlation Matrix Evaluation, Anti-image Correlation Matrix Evaluation, Bartlett's Test of Sphercity Evaluation, Kaiser Meyer Olkin Measure of Sampling Adequacy Evaluation.

3.12.1 Correlation Matrix Evaluation

Correlation Matrix Evaluation makes it clear if the data matrix has sufficient correlation or not. Factor analysis becomes unfitting if the Correlation Matrix Evaluation has low correlation. Low values for the Correlation Matrix in data range between 0.10 to 0.30 (Hardy & Bryman, 2009). Correlation Matrix Evaluation is better if its values are larger than 0.30. The factor analysis vice versa stands inapt (Pallant, 2007).

3.12.2 Anti-image Correlation Matrix Evaluation

Anti-image Correlation Matrix Evaluation explains whether or not the data have unexplained correlation at a higher rate (Hair et al., 2006). Such an investigation establishes if the data suit the factor analysis or not (Tabachnick, Fidell & Osterlind, 2001). The low partial correlation is considered good for data analysis (Field, 2009).

3.12.3 Bartlett's Test of Sphercity Evaluation

Bartlett's Test of Sphercity Evaluation is an investigation that examines if there is a meaningful correlation among constructs. The value of this investigation in the data matrix

should be less than 0.05 in order to move onto factor analysis (Hinton, Brownlow & McMurray, 2004).

3.12.4 Kaiser-Meyer-Olkin Measure of Sampling Adequacy Evaluation

Kaiser-Meyer-Olkin (KMO) test helps researchers look at the adequacy of the study sample. Furthermore, KMO examines intensity or inter-correlation among variables. KMO ranges from 0-10. The value of KMO test is considered unacceptable if below 0.50, whereas higher the values of KMO are safer to move onto factor analysis. The value of KMO should be around 0.80 (Kaiser & Rice, 1974).

3.13 Basics of Structural Equation Modelling (SEM)

3.13.1 Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis helps researcher in exploring the unobserved variables viz. constructs, factors and latent variables (Zhang, 2014). Kline (2005) defined EFA as “a class of procedures that include centroid, principal component and principal axis factor analysis, among many others, that differ in the statistical criteria used to derive factors”. Bolen (2002) stated that “In exploratory factor analysis, the factors are extracted from the data without specifying the number and pattern of loadings between the observed variables and the latent factor variables”.

Similarly, Schumacker and Lomax (2004) explained that “the research explores how many factors there are, whether the factors are correlated, or which observed variables appear to be the best measure are factors”. EFA is considered good technique to figure out the weakest indicators, which are to be deleted from the data/model (Zhang, 2014) in order to reach a better model that is fit through factor analysis. There are two factor analysis techniques viz. the component and the common factor analysis in the EFA. Common factor

analysis, which reveals the interrelationship between/among variables, is comprehensive, easy-to-use and preferred.

3.13.2 Factor Extraction in Principal Component Analysis

Factor extraction in the Principal Component Analysis helps the researchers in extracting the minimum number of factors, of which could be used to show the interrelationship among a pack of variables. Hair et al. (2006) suggest that factor extraction could be undertaken through three ways viz. latent root criterion, percentage of variance criterion and scree test.

3.13.2.1 Latent Root Criterion

Latent Root Examination is also called Kaiser's criterion wherein the factor, which have latent root or eigenvalue of more than 1, are retained for the data analysis (Hardy & Bryman, 2004). That means that the factors, which cause variance of more than one variable, are used for the next stage of data analysis.

3.13.2.2 Percentage of Variance Criterion

Percentage of variance criterion concerns the derived factor. The derived factor is supposed to ensure that such factors contribute in explaining a certain amount of variance. The amount of variance should be around sixty percent of the total variance (Hair et al., 2006).

3.13.2.3 Scree Test

Stewart (1981) explains the scree test as “a straight edge is laid across the bottom portion of the roots to see where they form an approximately straight line. The point where the factors curve above the straight line gives the number of factors, with the last factor being

the one whose eigenvalue immediately proceeds the straight line”. Scree test is a graph presentation of the eigenvalue and the cut-off point where the curve gets fattened out.

3.13.3 Factor Rotation

By employing factor rotation, researchers can get to simpler and meaningful factor solutions. Researchers normally use orthogonal factor rotation and oblique factor rotation (Bryman & Cramer, 2005).

3.13.3.1 Orthogonal Rotation

Orthogonal Rotation makes the factor uncorrelated (Bryman & Cramer, 2005). It is easier to explain output of orthogonal rotation (Tabachnick & Fidell, 2001). There are three orthogonal rotation methods viz. Quartimax, Varimax and Equimax. The present study used Varimax rotation method as it has been recommended to be the most useful and easier method of simplifying the columns of the data matrix (Meyers et al., 2006).

3.13.3.2 Oblique Factor Rotation

Oblique and orthogonal rotations result in similar ways; however, interpretation of results in the oblique rotation is not simple (Meyers et al., 2006). Besides, oblique rotations are used for the theory building (Stewart, 1981). Therefore, the orthogonal (Varimax) rotation was considered in the present study.

3.13.4 Factor Interpretation

Factor loadings should be checked in order to examine ‘factors’ and ‘variables’ correlations meaning thereby that the higher the factor loadings the higher the interrelationship between factors and variables. Factor loadings between 3-4 are considered the lowest level of interpretation, factor loadings above five or even five are considered significant and seventy percent or above factor loadings are considered extremely well (Hair

et al., 2006). Sample size of a study determines if the factor loadings are apt or not. The bigger the sample size, the smaller the factor loadings should be. In this regard, Hair et al. (2006) suggested a criterion which has been explained in Table 3.4.

Table 3.4: Sample Size and Factor Loadings Significance Criterion

Factor Loadings	Sample Size	Factor Loadings	Sample Size
.30	350	.55	100
.35	250	.60	85
.40	200	.65	70
.45	150	.70	60
.50	120	.75	50

Source: Hair et al., 2006.

3.13.5 Unidimensionality Analysis

Unidimensionality analysis are done to examine if the measurement instrument is unidimensional or not. The instrument is said to be unidimensional if all of the items of a factor load on the very same factor. The items that load on more than one factor should be deleted in order to keep the instrument/scale unidimensional (Hair et al., 2006).

3.13.6 Exploratory Factor Analysis PCB

The psychological contract breach was measured using five (5) items. Correlations matrix was conducted and it was found that most of the correlations were above the threshold, i.e. 0.30 as suggested by previous researchers (Pallant, 2007; Hardy & Bryman, 2009). Items appearing to be disassociated with other items are removed (Tabachnick & Fidell, 2007) otherwise retained.

3.14 Steps in Structural Equation Modelling

The extant literature show that structural equation modelling is better than other choices for hypothesis testing. Prior research has overwhelmingly used structural equation modelling (Agarwal & Bhargava, 2013; Guchait et al., 2015; Xiong et al., 2017). Structural equation modelling has been defined by Byrne (2001) as “a statistical methodology that takes a confirmatory (i.e. hypothesis-testing) approach to the analysis of a structural theory bearing on some phenomenon”.

Jöreskog and Sörbom (1993) further explained structural equation modelling and stated that the testing of the structural model, i.e. the testing of the initially specified theory, may be meaningless unless it is first established that the measurement holds. For instance, if the chosen indicators for a construct do not measure that construct, the specified theory must be modified before it can be tested. Therefore, the measurement model should be tested before the structural relationships are tested.

3.14.1 Model Specification

Schumacker and Lomax (2004) state that model specification is required through using extant literature, knowledge, information and pertinent theories. Accordingly, keeping in view the assumptions suggested by Byrne (2001), the available research on the psychological contract breach was reviewed and subsequently the exploratory factor analysis was conducted to specify the model of the present study.

3.14.2 Model Identification

Model identification is a mandatory requirement in the structural equation modelling. In this regard, Kline (2005) states that a model stands identified in case it reaches a unique estimate for the parameters. In order to have a unique solution to the to be identified model,

researchers are required to have enough pertinent information to derive such solution (Diamantopoulos & Siguaw, 2000). In order to identify a model a method viz. t-rule is used (Kelloway, 1998). In the t-rule method, Byrne (2001) suggests that the number of variances and covariances are required to be equal or greater than the number of parameters used in a model. The model stands identified if this condition is met (Byrne, 2001).

3.14.3 Model Fit Indices (MFI)

Schumacker and Lomax (2004) suggest that a model is perfectly fine if the sample data supports it. The extant literature shows that a number of fit indices are used for the sample data to consider model fitness. The fit indices used in the existing research are but not limited to goodness of fit index, comparative fit index, normed fit index, normed chi-square, root mean square error of approximation, standardised root mean residual. The fit indices have been explained through Section 3.14.3.1 to Section 3.14.3.6.

3.14.3.1 Goodness of Fit Index (GFI)

The goodness of fit index (GFI) is a fit, wherein the weight ratio in a sample covariance accounts for an estimated covariance matrix in a population, which normally is analogous to R^2 in a multiple regression analysis. The value of goodness of fit index should be above 0.90 so that model fit is achieved (Kline, 2005). However, a value of .80 is acceptable if the study sample size is a larger one.

3.14.3.2 Comparative Fit Index (CFI)

The comparative fit index (CFI) is a measuring tool that measures a relative enhancement in the fit of a model by comparing it with the independent model (Kline, 2005). The acceptable value of CFI should be above 0.90 (Hu & Bentler, 1999; Arbuckle, 2010).

3.14.3.3 Normed Fit Index (NFI)

Hair et al. (2006) state that the normed fit index (NFI) is a measuring tool that measures the difference of the χ^2 in terms of fitted and independent model divided by χ^2 in terms of the independent model. The value of NFI more than .90 is considered a good fit (Kelloway, 1998).

3.14.3.4 Normed Chi-square

Prior research has shown that normed chi-square is reflected as (χ^2/df) . The chi-square is a ratio of the χ^2 in relation to the model's degree of freedom. Chi-square is a tool that quantifies covariance's difference in relation to the observed and estimated covariances. Kline (2005) suggest that the value of normed chi-square should be less than 3.0 in terms of a fit and/or acceptable fit.

3.14.3.5 Root Mean Square Error of Approximation (RMSEA)

Root mean square error of approximation (RMSEA) is a tool used for measuring approximate fit (MacCallum, Browne & Sugawara, 1996; Hair et al., 2006). RMSEA is best fit if its value is close to one, it is a good fit it ranges between 0 to .05, it is mediocre fit if its value is reported between .08 to .10 and it is a poor fit if its values cross .10 (MacCallum et al., 1996). Prior literature shows that the value of RMSEA is acceptable even if it is .097.

3.14.3.6 Standardised Root Mean Square Residual (SRMR)

Standardised Root Mean Square Residual (SRMR) is a complete fit of badness based on the fitted residuals. SRMR less than .05 is considered a good fit (Hu & Bentler, 1999). SRMR if is close to zero is considered a best fit. SRMR value around .10 is considered still acceptable (Kline, 2005).

3.14.4 Model Modification

Byrne (2001) states that a model is modified in order to better fit a fit in relation to a sample data set by highlighting shortcoming of the model. Model modifications are not needed if the model is already fit. However, two methods are adopted to fit a model in case it is not fit. The methods are; a) modification indices and b) standardised residuals (Diamantopoulos & Siguaw, 2000).

3.14.4.1 Modification Indices

Modification indices refer to an expected decrease in the chi-square value of a model in case an already fixed parameter is set free in the next run. Hair et al. (2006) states that a small modification index reflects an apt model fit whereas a large modification index reveals a poor model fit. Schumacker and Lomax (2004) suggest that these modifications are made part and parcel to the interpretation of the expected statistical parameter change.

3.14.4.2 Standardised Residuals

Jöreskog and Sörbom (1993) defined standardised residual as the residuals that are divided by their standard errors. Diamantopoulos and Siguaw (2000) held that a value more than 2.5 of the standardised residuals reflects mis-fitness of a model.

3.14.5 Construct Convergent and Discriminant Validity

Construct convergent and discriminant validity should meet the Fornell and Larcker (1981) criterion, which means that the factors must be distinctive from one another.

3.14.6 Measurement Model

Measurement model, which shows if the scale items are internally consistent or not, is run to examine model data fit. Measurement model is also known as pooled confirmatory factor analysis, which allows one factor loading on only one factor which shows

dimensionality of the data as well (Marsh et al., 2009). Confirmatory factor analysis is carried out to confirm convergent validity and also to assess latent structures. More specifically, convergent validity is assessed on the basis of standardised factor loadings which should be more than .50 (Hair et al., 2006), verified on the basis of average variance extracted (AVE) which should be equal and/or more than 0.50 (Fornell & Larcker, 1981) and examined through Cronbach's alpha reliability which should be equal and/or more than 0.70.

Tabacknick and Fidell (2007) state that in structural equation modelling hypotheses testing is done. In this process, individual confirmatory factor analysis known as individual measurement model are also performed to see the fitness of the sample data in relation to the proposed model.

3.15 Justification for Using SEM-AMOS

Assumptions to used structural equation modelling (SEM) are that the present study is a study for theory testing, a study based on covariances and a study that has reflective constructs. Appropriate sample size, missing data and multivariate normality were proposed to be taken into consideration before using SEM. SEM was considered a wide ranged and complete package of data analysis techniques for model testing in a better way sans limitation as were associated with other data analysis techniques (Tomarken & Waller, 2005). SEM was a strong statistical package which tested hypotheses very well (Meyers et al., 2013).

More precisely, psychological, sociological and business studies had employed SEM as a coveted technique. SEM, which was a second-generation analysis technique, allowed handling of a large number of variables. This technique is more robust than the first-generation analysis technique (Hair et al., 2014).

There were a number of psychological contract related studies which had used structural equation modelling technique (Zhang & Agarwal, 2009; Agarwal & Bhargava, 2013; Biswas, 2016). Since this research was psychological in nature, therefore, it employed structural equation modelling, which was considered a family of robust statistical techniques and analyses (Kline, 2005).

Moreover, structural equation modelling suited such studies because it had performed variance and covariance analyses, assigned regression weights, created correlations in a process called estimation. Structural equation modelling was considered a best multivariate technique (Pallant, 2007; Tabacknick & Fidell, 2007). The structure equation modelling, which had five stages, namely model specification, model identification, model estimation, model fitness and model manipulation, made better analyses (Kline, 2005) and this technique also catered with robust statistical analyses, i.e. estimation and testing of relationships among/between variables (Byrne, 2001).

While inspecting the model and data fitness through structural equation modelling, there were three fit indices which were a must to be performed: a) absolute fit indices; b) incremental/comparative fit indices; and c) parsimony fit indices (Holmes-Smith, Coote & Cunningham, 2006; Nadri & Hasbee, 2016). However, with reference to inspecting a good fit, there were some standing values which were considered a rule of thumb (Byrne, 2001) nonetheless, fit indices entailed a number of evaluation problems (Kline, 2005) and that was why researchers did not suggest one standard for model fitness values.

Similarly, in order to perform moderation fitness, CFI, TLI and χ^2 might be preferred. Nevertheless, some researchers considered only three fit indices i.e. RMSEA, CFI and TLI as overall fit. Nonetheless, only RMSEA, TLI, IFI, CFI and χ^2 might be considered as fit indices for a research (Hulland et al., 1996). However, researchers had opined that it

was very hard to get all of these fit indices in a research (Hulland et al., 1996; Holmes-Smith et al., 2006).

This was pertinent to remember that the values of χ^2 were less than 2, RMSEA between 0.05 and 0.08, whereas the values of IFI, CFI and TLI were not less than 0.90 (Hulland et al., 1996; Kline, 2005; Holmes-Smith et al., 2006). χ^2 was be okay if its value was 3 or thereunder (Iacobucci, 2010). Hence, a model fitness was made through IFI (Bollen, 1989a), CFI (Bentler, 1990), TLI (Tucker & Lewis, 1973) and RMSEA (Byrne, 2001). The data might get instable due to large sample size and in such cases values, of the GFI, NFI and CFI could be compromised a bit as ‘rule of thumb’, are not hard and fast rules. SEM could use at least 3 indicator variables and ‘maximum likelihood method of estimation’ especially in the academic or industry related conceptual models (Iacobucci, 2010).

The objective of the present research was to test effects/relationships among different constructs. SEM is widely known for doing estimate and examining relationships among a number of constructs. SEM was used in the present study because the literature revealed that SEM carries out data analysis by employing confirmatory rather than exploratory approach. SEM is considered a robust technique to carry out assessment and correction in relation to measurement error. Apart from that, SEM is a better choice to test variable relationships, hypotheses and path analysis (Bux, 2016). SEM provided room for using different measures for a number of study constructs (Byrne, 2001).

Literature revealed that SEM-AMOS was used in a study which tested a theory and employed covariance analysis. SEM-AMOS was also used to test relationships of different constructs in a study. On contrary, PLS-SEM might be used if; a) a study predicted or identified new constructs, b) the sample size was small, c) the structural model had both the

reflective and the formative constructs, d) the model carried many indicators and was complex in nature, e) the data was not normally distributed (Hair et al., 2014).

Keeping in view the relevance and justification of using SEM-AMOS to study effects of psychological contract breach, researchers such as Agarwal and Bhargava (2013), Guchait et al. (2015), Xiong et al. (2017) have also used SEM AMOS in relation to effects of the psychological contract breach. The use of SEM AMOS for quantitative studies in Pakistan has also been recommended by Jhatial et al. (2012). Therefore, this study aimed to use SEM AMOS to examine the effects of the psychological contract breach. Section 3.16 provides the chapter summary.

3.16 Chapter Summary

This chapter, accordingly, discusses research methodology, research paradigms/philosophies, research design, population and sampling, unit of analysis, data collection method, research measures and scales, Likert scale, data measurement and analyses process and justification for using SEM AMOS.

CHAPTER 4

CONCLUSION AND RECOMMENDATIONS

4.1 Introduction

There are a number of research approaches used in the social sciences. Keeping in view, the objectives of the study choice of research approach and research strategy is the researcher's responsibility (Sarantakos, 2005). This thesis opted for positivism approach together with survey research strategy in relation to the objectives and requirements of this study. This chapter begins with a data collection schedule and technique employed to carry out data analysis. Thereafter, questionnaire response rate has been presented. The data screening process, i.e. treatment of the missing data, checks for the outliers and multivariate outliers are explained. In order to see relationship between two variables, correlation test is explained in detail. Besides, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) have also duly been explained. Measurement Model, Structural Model, Moderation Effects including Effect Size have also been explained in this chapter. This chapter concludes with the chapter summary.

4.2 Data Collection Schedule and Analysis Technique

This study used self-administered questionnaire method to collect data. Simple random sampling technique was used to select respondents. The data for the present study were collected during September 2017 – June 2018. The data from the Federal Capital, Khyber Pakhtoon Khaw (KPK) and Punjab were collected by the researcher himself, whereas the data from Sindh and Balochistan were collected by two enumerators. Before keying-in data into the SPSS, all the variables were named and defined as suggested by the extant research (Lambert, 2015). Version 21 of the SPSS known as both; Statistical Packages

for Social Sciences and Statistical Package and Service Solution, was used along with Version 22 of AMOS. SPSS was used because it is a smart data screening software (Tabachnick, Fidell & Osterlind, 2001). The use of AMOS was recommended by Hair et al. (2011) for the studies testing theories and having covariance-based relationships. Therefore, AMOS was opted in this study.

4.3 Questionnaire Response Rate

As stated above, this study was quantitative wherein the data were gathered from the university employees of four cities and the Federal Capital of Pakistan. After having done pre-testing and finding it satisfactory, the data was collected over a period of 10 months starting from September 2017 to June 2018. In this regard, lists of employees were sought from the respective universities. Using Yamane (1967) formula viz. $n = \frac{N}{1+N(e)^2}$, a large sample size needed for the SEM analysis, was calculated and a total of 1230 questionnaires were disseminated among teaching and administrative employees (sample) of the universities within these locations as per sample size. The response rate for the present study was 60 %, which was a good response rate in a developing country such as Pakistan.

From 1230 questionnaires, 25 responses received were incomplete (having more than 10% missing data), which were discarded, whereas about 369 respondents did not reply even after a continuous follow up by the researcher and the enumerators. During Confirmatory Factor Analysis, 97 responses were deleted on the basis of Mahalanobis D^2 test. Therefore, 739 complete and valid responses were considered for the next stage, i.e. data analysis and showed the original and received response rates. The data were collected at a single point in time from all the participants of the universities concerned which eliminates test such as non-response.

Table 4.1: Original Responses vs Received Responses

University's Province	Sample Allocation		Final Responses	
	Number of participants	Percentage %	No.	%
Islamabad	174	14.14	125	71.83
Punjab	319	25.93	205	64.26
Sindh	289	23.49	145	50.17
KPK	269	21.86	169	62.82
Balochistan	179	14.55	95	53.07
Total	1230	100	739	60

4.4 Data Screening Process

The present study was quantitative in nature that's why data was collected through a self-administered questionnaire by employing enumerators for two provinces of Pakistan, namely Balochistan and Sindh. Data from rest of three provinces were collected by the researcher himself. The data was screened for potential statistical errors regarding normality, outliers and missing values. In order to avoid common method bias, Harman's (1967) single factor test was performed. All items of the instrument were entered into the principle component analysis via varimax rotation. The items loaded on the very factor. Therefore, it was ascertained that there was no sign of common method bias. Likewise, non-response error test known as independent sample t-test was also performed in order to examine any difference in the first 50 and last 50 responses. The test resulted in no significant 0.05 level difference in the mean of both the first 50 and the last 50 responses' groups. As there was no meaningful difference of response from both the groups, therefore, non-response error

was not found in the data. The exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) also confirmed that the data was fit for further analysis.

4.4.1 Missing Data Remedy

There was more than ten percent missing data in 25 questionnaires returned from the participants; therefore, these questionnaires were discarded and not used for the data analysis. Besides, a case wise check for the missing data was made to ensure that the data is not missing. Also, descriptive statistics viz., frequency distribution, mean and standard deviation was performed to check the missing data in pursuance of the recommendations made by Meyers et al. (2013).

4.4.2 Outliers' Detection

For the present study, the standardised data having values within the range of -4 and +4 was used. Mahalanobis (D^2) method was used and as many as ninety-seven (97) multivariate potential outliers were detected while conducting Confirmatory Factor Analysis, which were deleted to avoid data non-normality issue and to reach a good model fit. There were a few more outliers in the data which were retained to generalise the results in relation to the entire population (Anderson et al., 2009). Table 4.2 shows the values for outliers.

Table 4.2: Z-Scores

S. No.	Constructs' Z-Scores	Minimum	Maximum
1.	Psychological Contract Breach	-3.66	1.07
2.	Perceived Organisational Support	-3.00	1.55
3.	Job Satisfaction	-3.54	1.48
4.	Turnover Intention	-3.93	1.66
5.	Counterproductive Work Behaviour	-2.32	2.02

4.4.3 Normality Test

Normality stands defined as the ‘degree to which the distribution of the sample data corresponds to a normal distribution’ (Hair et al., 2006). The values of skewness and kurtosis if are greater than 3 and 8 respectively could be of great problems in the data analysis (Kline, 2005). A number of steps were taken into consideration to determine normality of data which incorporated drawing of scree plots explicitly showing important and unimportant factors, calculation of skewness and kurtosis and performing Kolmogorov–Smirnov Test (Hair et al., 2007).

Table 4.3: Descriptive Statistics

S. No.	Variable	Min	Max	Mean	St. Dev.	Skewness	Kurtosis
1.	PCB	1	5	4.3800	.58826	-.849	.296
2.	POS	1	5	4.1149	.58451	-.577	.081
3.	JS	1	5	4.0747	.62508	-.209	-.345
4.	TIS	1	5	4.0679	.56624	-.260	.002
5.	CWB	1	5	3.6813	.65235	.206	-.510

Normality test is recommended in order to reduce estimation error and filter out skewed data. Table 4.3 shows the descriptive analysis conducted for normality test. Such frequency tables help researchers check responses against questions received and know the practical distribution of data. As recommended by Pallant (2011), analysis of measures of shape viz. kurtosis and skewness were conducted through SPSS V-22. The values of kurtosis and skewness were within the recommended values. Data was screened by checking the missing data and outliers. Analysis of central tendency and measures of dispersion were also carried out. The values of central tendency and measures of dispersion were also within the recommended range. Based on these tests, the data was found normal; therefore, it was used for further analysis in the SEM.

4.5 Respondent's Profile

Profile of the participants does not impact the study's analysis; however, such an information provides a general information to the readers about the participants' gender, age, qualification level and designation. There were 634 male participants which come to 75.8% and 202 female participants with reference to gender, which comes up to 24.2% of the total sample size.

There were four (4) age groups used in this study, namely 50 years and above, 41-50 years, 31-40 years and 20-30 years. Accordingly, as many as 29 participants represented by 3.5% were 50 years and above. A total of 198 participants representing 23.7% were from 41-50 years' age group. The third age group, which was the highest in participation, ranged from 31-40 years were 606 with 72.5%. The last and least age group was 20-30 years' consisting of 3 participants which came to 0.4% of the total sample size.

There were four qualification levels used for this study, i.e. PhD, MPhil/Equivalent, Master/Equivalent and Bachelors/Equivalent. A total of 490 participants were PhDs, which

came to 66.30% of the total sample size. MPhil/Equivalent participants were 118 in number and 15.96 % in percent. Participants having qualification level up to Masters/Equivalent were 92 with 12.44 % of the total sample size. However, 39 participants obtained their qualification level up to Bachelors/Equivalent, which came to 5.27% of the total sample size.

There were five (5) designations, viz. Professor, Associate Professor, Assistant Professor, Lecturer and Administrative/Technical Officer, used in the present study. The number of Professors was 29, which makes 3.92 %. The number of Associate Professor was 58 making 7.84 %. The number of Assistant Professor was 421 making 56.96 %.

Moreover, there were a total of 11 Lecturers which make 1.48 %. The last group, i.e. Administrative/Technical Officers were 220 in number with 29.76 %. The demographic details showed that a majority of the participants was males, the majority of the age group was 31-40 years, the majority of qualification was PhD and the majority of designation was Assistant Professor. Table 4.4 shows the breakdown of the participants' profile.

Table 4.4: Participants' Profile

S. No.	Demographics	Frequency	Percentage (%)
1.	Gender:		
	Male:	536	72.53
	Female	203	27.46
	Total	739	100
2.	Age:		
	50 Years and above	29	3.92
	41-50 Years	198	26.79
	31-40 Years	509	68.86

Table 4.4 continued

	20-30 Years	3	0.40
	Total	739	100
3. Qualification:			
	PhD	508	68.74
	MPhil/Equivalent	11	1.48
	Masters/Equivalent	178	24.08
	Bachelors/Equivalent	42	5.68
	Total	739	100
4. Designation:			
	Professor	29	3.92
	Associate Professor	58	7.84
	Assistant Professor	421	56.96
	Lecturer	11	1.48
	Administrative/Technical Officer	220	29.76
	Total	739	100

4.6 Construct Reliability

The construct reliability of the present study was tested. Scale-wise construct reliability is presented in Table 4.5.

Table 4.5: Reliability Test

S. No.	Construct	Items	Reliability
1.	Psychological Contract Breach	5	0.91
2.	Perceived Organisational Support	8	0.86
3.	Job Satisfaction	5	0.85
4.	Turnover Intention	6	0.81
5.	Counterproductive Work Behaviour	10	0.92
Instrument Reliability		34	0.87

Table 4.5 shows reliability test measures viz., Psychological Contract Breach was 0.91, Perceived Organisational Support was 0.86, Job Satisfaction was 0.85, Turnover Intention was 0.81 and Counterproductive Work Behaviour was 0.92. The overall reliability of the scale used for this research study was 0.87. The above values showed that all of them met the reliability criterion suggested by Nunnally and Bernstein (1994).

4.7 Construct Validity

The present study measured the validity of the construct via correlation matrix evaluation and it was found that all the construct items, except two, i.e. 0.21 (JS-TIS) and 0.26 (TIS-CWB), were significantly correlated. Studies have shown that marginally low correlations are acceptable if rest of the correlations are good (Gupta et al., 2016; Kraak, Lunardo, Herrbach & Durrieu, 2017; Griep & Vantilborgh, 2018). The correlation matrix is shown in Table 4.6.

Table 4.6: Correlation Matrix

S. No.	Constructs	PCB	POS	JS	TIS	CWB
1.	PCB	1				
2.	POS	0.34	1			
3.	JS	0.34	0.36	1		
4.	TIS	0.44	0.38	0.21	1	
5.	CWB	0.56	0.80	0.82	0.26	1

Note: PCB= Psychological Contract Breach, POS= Perceived Organisational Support, JS= Job Satisfaction, TIS= Turnover Intention, CWB=Counterproductive Work Behaviour.

4.8 Factor Analysis Testing

Data matrix should have appropriate correlation so that factor analysis may be conducted. This condition may be met through four methods which clarify that the data matrix bear sufficient correlation. These methods are; Correlation Matrix Evaluation, Anti-image Correlation Matrix Evaluation, Bartlett's Test of Sphericity Evaluation, Kaiser Meyer Olkin Measure of Sampling Adequacy Evaluation. Exploratory factor analysis as shown in Section 4.9 were conducted. The results of EFA were acceptable.

4.8.1 Correlation Matrix Evaluation

Correlation Matrix Evaluation makes it clear if the data matrix has sufficient correlation or not. Factor analysis becomes unfitting if the Correlation Matrix Evaluation has low correlation. Low values for the Correlation Matrix in data range between 0.10 and 0.30 (Hardy & Bryman, 2009). Correlation Matrix Evaluation is better if its values are larger than .30. The factor analysis vice versa stands inapt (Pallant, 2007). Table 4.6 shows that correlation for the present study was generally good enough.

4.8.2 Anti-image Correlation Matrix Evaluation

For the present study, all the anti-image values had low partial correlation therefore the data was fit enough to move onto factor analysis.

4.8.3 Bartlett's Test of Sphericity Evaluation

Bartlett's Test of Sphericity Evaluation is an investigation that examines a meaningful correlation among constructs. The value of this investigation in the data matrix should be less than 0.05 in order to move onto factor analysis (Hinton et al., 2004). Therefore, the present study met the threshold for the factor analysis.

4.8.4 Kaiser Meyer Olkin Measure of Sampling Adequacy Evaluation

The KMO for the present study ranged between 0.74-0.90 which is considered good; therefore, it was an indication to move onto factor analysis.

4.9 Basics of Structural Equation Modelling (SEM)

4.9.1 Exploratory Factor Analysis (EFA)

The present study used the component factor analysis. Section 4.9.2 explains factor extractions in component factor analysis.

4.9.2 Factor Extraction in Principal Component Analysis

Factor extraction in the Principal Component Analysis helps the researchers in extracting the minimum number of factors, which could be used to show interrelationship among a pack of variables. Hair et al. (2006) suggest that factor extraction could be undertaken through three ways viz. latent root criterion, percentage of variance criterion and scree test.

4.9.2.1 Latent Root Criterion

Latent Root Examination is also called Kaiser's criterion wherein the factor, which have latent root or eigenvalue of more than 1, are retained for the data analysis (Hardy & Bryman, 2004). That means that the factors, which cause variance of more than one variable, are used for the next stage of data analysis. The present study met the latent root criterion.

4.9.2.2 Percentage of Variance Criterion

Percentage of variance criterion concerns the derived factor. The derived factor is supposed to ensure that such factors contribute in explaining a certain amount of variance. The amount of variance should be around sixty percent of the total variance (Hair et al., 2006). The present study met the percentage of variance criterion as overall variance was more than (60) sixty percent.

4.9.2.3 Percentage of Variance Criterion

Stewart (1981) explains the scree test as "a straight edge is laid across the bottom portion of the roots to see where they form an approximately straight line. The point where the factors curve above the straight line gives the number of factors, the last factor being the one whose eigenvalue immediately proceeds the straight line". Scree test is a graph presentation of the eigenvalue and the cut-off point where the curve gets fattened out. The scree test was performed and found fit for data analysis.

4.9.3 Factor Rotation

By employing factor rotation, researchers can obtain simpler and meaningful factor solutions Researchers normally use the orthogonal factor rotation and oblique factor rotation (Bryman & Cramer, 2005). Therefore, varimax factor rotation was undertaken in the present study.

4.9.3.1 Orthogonal Rotation

Orthogonal Rotation makes the factor uncorrelated (Bryman & Cramer, 2005). It is easier to explain output of orthogonal rotation (Tabachnick & Fidell, 2001). There are three orthogonal rotation methods viz. Quartimax, Varimax and Equimax. The present study used Varimax rotation method as it has been recommended to be the most useful and easier method of simplifying the columns of the data matrix (Meyers et al., 2006).

4.9.3.2 Oblique Factor Rotation

Oblique and orthogonal rotations result in similar ways; however, interpretation of results in the oblique rotation is not simple (Meyers et al., 2006). Besides, oblique rotations are used for the theory building (Stewart, 1981). Therefore, the orthogonal (Varimax) rotation was used in the present study.

4.9.4 Factor Interpretation

Factor loadings should be checked in order to examine ‘factors’ and ‘variables’ correlations meaning thereby that the higher the factor loadings the higher the interrelationship between factors and variables. Factor loadings between 3-4 are considered the lowest level of interpretation, factor loadings above five or even five are considered significant and seventy percent or above factor loadings are considered extremely well (Hair et al., 2006). Sample size of a study determines if the factor loadings are apt or not. The bigger the sample size, the smaller the factor loadings should be. In this regard, Hair et al. (2006) suggested a criterion which has been explained in Table 4.7.

Table 4.7: Sample Size and Factor Loadings Significance Criterion

Factor Loadings	Sample Size	Factor Loadings	Sample Size
.30	350	.55	100
.35	250	.60	85
.40	200	.65	70
.45	150	.70	60
.50	120	.75	50

Source: Hair et al., 2006.

4.9.5 Unidimensionality Analysis

The present study has deleted a number of items, which loaded on more than one factor, in pursuance of the suggestions by Hair et al. (2006). All of the rest of items, which aptly loaded, were retained and hence the scale stood unidimensional.

4.9.6 Exploratory Factor Analysis PCB

The psychological contract breach was measured using five (5) items. Correlations matrix was conducted and it was found that most of the correlations were above the threshold, i.e. 0.30 as suggested by Pallant (2007) and Hardy and Bryman (2009). All the items of the PCB showed robust correlation therefore no deletion of items was done in the present study. Majority of anti-image partial correlation matrices for PCB were also low, which showed that the data were apt for the factor analysis. KMO, Bartlett's Test of Sphericity for PCB was also conducted. The KMO was 0.745, chi-square was 5479, df was 10 and significance level (p-value) was .000. All communalities were above 0.4., eigenvalue was above 1, Varimax rotation was used and all items loaded on single component. The results are presented in Table 4.8 to Table 4.11.

Table 4.8: Inter Item Correlation (PCB)

Construct	PCB1	PCB2	PCB3	PCB4	PCB5
PCB_1	1.000				
PCB_2	.640	1.000			
PCB_3	.624	.482	1.000		
PCB_4	.715	.878	.559	1.000	
PCB_5	.995	.636	.622	.717	1.000

Table 4.9: Covariance (PCB)

Covariance		PCB1	PCB2	PCB3	PCB4	PCB5
Covariance	PCB_1	.009	-.006	-.005	.004	-.009
	PCB_2	-.006	.225	.015	-.158	.006
	PCB_3	-.005	.015	.583	-.052	.001
	PCB_4	.004	-.158	-.052	.181	-.006
	PCB_5	-.009	.006	.001	-.006	.009
Anti-image Correlation	PCB_1	.695a	-.130	-.067	.095	-.989
	PCB_2	-.130	.738a	.040	-.781	.124
	PCB_3	-.067	.040	.977a	-.160	.010
	PCB_4	.095	-.781	-.160	.760a	-.142
	PCB_5	-.989	.124	.010	-.142	.694a

Note: Symbol “a” measures of Sampling Adequacy (MSA).

Table 4.10: KMO and Bartlett's Test of Sphericity (PCB)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.745
Bartlett's Test of Sphericity	Approx. Chi-Square	5479.080
	Df	10
	Sig.	.000

Table 4.11: Exploratory Factor Analysis (PCB)

Item Codes	PCB Items	Factor Loadings	Variance Explained	Cronbach Alpha
PCB1	Almost all of the promises made by my employer during recruitment have been fulfilled/kept so far.	1.00	75.36% Extraction method was principal component analysis	.91
PCB2	I feel that my master/employer has come through in fulfilling the promises made to me when I was hired.	.64		
PCB3	So far, my master/employer has done an excellent job of fulfilling its promises to me.	.62		
PCB4	I have not received everything promised to me in exchange for my contributions.	.72		
PCB5	My employer has broken many of its promises to me even though I've upheld my side of the deal.	1.00		

4.9.7 Exploratory Factor Analysis POS

The perceived organisational support was measured using eight (8) items. Correlations matrix was conducted and it was found that most of the correlations were above the threshold, i.e. 0.30 as suggested by Pallant (2007) and Hardy and Bryman (2009). All the items of the POS showed robust correlation. Majority of anti-image partial correlation matrices for POS were also low that showed that the data were apt for the factor analysis. KMO, Bartlett's Test of Sphericity for POS was also conducted. The KMO was 0.893, chi-square was 2528, df was 28 and significance level (p-value) was .000. All communalities were above 0.4., eigenvalue was above 1, Varimax rotation was used and all items loaded on single component. POS1 and POS8 were removed having low loadings. The results are presented in Table 4.12 to Table 4.15.

Table 4.12: Inter Item Correlation (POS)

Correlation	POS1	POS2	POS3	POS4	POS5	POS6	POS7	POS8
POS1	1.000							
POS2	.245	1.000	.					
POS3	.206	.504	1.000					
POS4	.094	.521	.646	1.000				
POS5	.220	.467	.614	.566	1.000			
POS6	.153	.529	.582	.629	.616	1.000		
POS7	.180	.496	.507	.521	.460	.484	1.000	
POS8	.220	.437	.460	.505	.472	.439	.616	1.000

Table 4.13: KMO and Bartlett's Test of Sphericity (POS)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.893
Bartlett's Test of Sphericity	Approx. Chi-Square	2528.058
	Df	28
	Sig.	.000

Table 4.14: Exploratory Factor Analysis (POS)

		POS1	POS2	POS3	POS4	POS5	POS6	POS7	POS8
Anti-image Covariance	POS1	.895	-.108	-.053	.089	-.062	.011	-.003	-.075
	POS2	-.108	.587	-.051	-.070	-.023	-.095	-.093	-.031
	POS3	-.053	-.051	.456	-.137	-.126	-.053	-.056	-.006
	POS4	.089	-.070	-.137	.433	-.046	-.117	-.042	-.072
	POS5	-.062	-.023	-.126	-.046	.490	-.139	-.008	-.065
	POS6	.011	-.095	-.053	-.117	-.139	.467	-.039	.000
	POS7	-.003	-.093	-.056	-.042	-.008	-.039	.516	-.217
	POS8	-.075	-.031	-.006	-.072	-.065	.000	-.217	.546
Anti-image Correlation	POS1	.791 ^a	-.149	-.083	.143	-.094	.016	-.004	-.107
	POS2	-.149	.929 ^a	-.098	-.138	-.042	-.182	-.169	-.054
	POS3	-.083	-.098	.901 ^a	-.309	-.266	-.114	-.115	-.013
	POS4	.143	-.138	-.309	.889 ^a	-.099	-.260	-.089	-.149
	POS5	-.094	-.042	-.266	-.099	.903 ^a	-.291	-.016	-.126
	POS6	.016	-.182	-.114	-.260	-.291	.900 ^a	-.080	.001
	POS7	-.004	-.169	-.115	-.089	-.016	-.080	.880 ^a	-.408
	POS8	-.107	-.054	-.013	-.149	-.126	.001	-.408	.873 ^a

Note: Symbol “a” measures of Sampling Adequacy (MSA).

Table 4.15: Exploratory Factor Analysis (JS)

Item Codes	PCB Items	Factor Loadings	Variance Explained	Cronbach Alpha
POS2	My university shows very little concern for me.	.66	53% Extraction method was principal component analysis	.86
POS3	My university cares about my general satisfaction at work.	.78		
POS4	Even if I did the best job possible, my university would fail to notice.	.80		
POS5	My university takes pride in my accomplishments at work.	.75		
POS6	My university would ignore any complaint from me.	.79		
POS7	My university would ignore any complaint from me.	.66		

4.9.8 Exploratory Factor Analysis (JS)

Job satisfaction was measured using eight (8) items. Correlations matrix was conducted and it was found that most of the correlations were above the threshold, i.e. 0.30 as suggested by previous researchers (Pallant, 2007; Hardy & Bryman, 2009). All the items of the JS showed robust correlation. Majority of anti-image partial correlation matrices for JS were also low, which showed that the data were apt for the factor analysis. KMO, Bartlett's Test of Sphericity for JS was also conducted. The KMO was 0.747, chi-square was 2202, df was 10 and significance level (p-value) was .000. All communalities were above 0.4, eigenvalue was above 1, Varimax rotation was used and all items loaded on single

component; therefore, no item was removed. The results are presented in Table 4.16 to Table 4.19.

Table 4.16: Inter Item Correlation (JS)

Correlation	JS1	JS2	JS3	JS4	JS5
JS1	1.000				
JS2	.826	1.000			
JS3	.553	.491	1.000		
JS4	.518	.549	.528	1.000	
JS5	.459	.465	.676	.704	1.000

Table 4.17: KMO and Bartlett's Test of Sphericity (JS)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.747
Bartlett's Test of Sphericity	Approx. Chi-Square	2202.154
	Df	10
	Sig.	.000

Table 4.18: Anti Image Matrices (JS)

		JS1	JS2	JS3	JS4	JS5
	JS1	.288	-.214	-.098	-.021	.019
Anti-image	JS2	-.214	.297	.011	-.068	-.012
Covariance	JS3	-.098	.011	.468	.005	-.204
	JS4	-.021	-.068	.005	.440	-.214

	JS5	.019	-.012	-.204	-.214	.374
Anti-image	JS1	.704 ^a	-.733	-.266	-.059	.059
Correlation	JS2	-.733	.715 ^a	.030	-.187	-.035

Table 4.18 continued

	JS3	-.266	.030	.805 ^a	.011	-.488
	JS4	-.059	-.187	.011	.809 ^a	-.528
	JS5	.059	-.035	-.488	-.528	.726 ^a

Note: Symbol “a” measures of Sampling Adequacy (MSA).

Table 4.19: Exploratory Factor Analysis (JS)

Item Codes	JS Items	Factor Loadings	Variance Explained	Cronbach Alpha
JS1	I consider my job rather unpleasant.	.89	66% Extraction method was principal component analysis	.86
JS2	I feel fairly well satisfied with my present job.	.93		
JS3	Most days I am enthusiastic about my work.	.53		
JS4	Each day of work seems like it shall never end.	.59		
JS5	I find real enjoyment in my work.	.51		

4.9.9 Exploratory Factor Analysis (TIS)

In order to examine dimensionality, exploratory factor analysis was conducted (Treiblmaier & Filzmoser, 2010). The turnover intention was measured using six (6) items. Correlations matrix was conducted and it was found that most of the correlations were above

the threshold, i.e. 0.30 as suggested by Pallant 2007 and Hardy and Bryman (2009). Items appearing to be disassociated with other items were removed (Tabachnick & Fidell, 2007), otherwise retained. All the items of the TIS showed robust correlation. Majority of anti-image partial correlation matrices for TIS were also low, showing that the data were apt for the factor analysis. KMO, Bartlett's Test of Sphericity for JS was also conducted. The KMO was 0.747, chi-square was 2245, df was 15 and significance level (p-value) was .000. All communalities were above 0.4., eigenvalue was above 1, varimax rotation was used and all items loaded on a single component. However, TIS1 and TIS6 having low loadings were removed. The results are presented in Table 4.20 to Table 4.23.

Table 4.20: Inter Item Correlation (TIS)

Correlation	TIS1	TIS2	TIS3	TIS4	TIS5	TIS6
TIS1	1.000					
TIS2	.818	1.000				
TIS3	.590	.510	1.000			
TIS4	.557	.583	.516	1.000		
TIS5	.491	.477	.674	.694	1.000	
TIS6	.005	-.035	.029	-.049	.904	1.000

Table 4.21: KMO and Bartlett's Test of Sphericity (TIS)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.747
Bartlett's Test of Sphericity	Approx. Chi-Square	2245
	Df	15
	Sig.	.000

Table 4.22: Anti Image Matrices (TIS)

		TIS1	TIS2	TIS3	TIS4	TIS5	TIS6
Anti-image Covariance	TIS1	.289	-.208	-.108	-.029	.014	.003
	TIS2	-.208	.307	.006	-.080	-.001	-.019
	TIS3	-.108	.006	.455	.022	-.205	.019
	TIS4	-.029	-.080	.022	.432	-.208	-.032
	TIS5	.014	-.001	-.205	-.208	.380	-.041
	TIS6	.003	-.019	.019	-.032	-.041	.969
Anti-image Correlation	TIS1	.730 ^a	-.698	-.297	-.082	.043	.005
	TIS2	-.698	.738 ^a	.017	-.219	-.003	-.035
	TIS3	-.297	.017	.800 ^a	.048	-.492	.029
	TIS4	-.082	-.219	.048	.815 ^a	-.513	-.049
	TIS5	.043	-.003	-.492	-.513	.736 ^a	-.067
	TIS6	.005	-.035	.029	-.049	-.067	.904 ^a

Note: Symbol “a” measures of Sampling Adequacy (MSA).

Table 4.23: Exploratory Factor Analysis (TIS)

Item Codes	TIS Items	Factor Loadings	Variance Explained	Cronbach Alpha
TIS2	My job is satisfying in fulfilling my personal needs.	.76	56% Extraction method was principal component analysis	.81
TIS3	I'm often frustrated when not given the opportunity at work to achieve my personal work-related goals.	.70		
TIS4	I often dream about getting another job that shall better suit my personal needs.	.74		
TIS5	I'm likely to accept another job at the same compensation level if I'm offered by another organisation.	.95		

4.9.10 Exploratory Factor Analysis CWB

The counterproductive work behaviour was measured using ten (10) items. Correlations matrix was conducted and it was found that most of the correlations were above the threshold, i.e. 0.30 as suggested by previous researchers (Pallant, 2007; Hardy & Bryman, 2009). All the items of the CWB showed robust correlation. Majority of anti-image partial correlation matrices for CWB were also low, indicating that the data was apt for the factor analysis. KMO, Bartlett's Test of Sphericity for CWB was also conducted. The KMO was 0.916, chi-square was 3994, df was 45 and significance level (p-value) was .000. All communalities were above 0.4, eigenvalue was above 1, Varimax rotation was used and all items loaded on single component. However, CWB10 having low loadings was removed.

The rest of the items were retained as they had strong factor loadings. The CWB results are presented in Table 4.24 to Table 4.27.

Table 4.24: Correlation Matrix CWB

Correlation	CWB 1	CWB 2	CWB 3	CWB 4	CWB 5	CWB 6	CWB 7	CWB 8	CWB 9	CWB 10
CW1	1.000									
CW2	.495	1.000								
CW3	.477	.554	1.000							
CW4	.498	.496	.573	1.000						
CW5	.528	.485	.505	.598	1.000					
CW6	.514	.472	.511	.501	.563	1.000				
CW7	.614	.480	.512	.545	.532	.530	1.000			
CW8	.479	.328	.320	.364	.369	.329	.387	1.000		
CW9	.732	.478	.493	.555	.538	.513	.549	.687	1.000	
CW10	.507	.554	.476	.596	.568	.527	.548	.414	.558	1.000

Table 4.25: KMO and Bartlett's Test of Sphericity (CWB)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.916
Bartlett's Test of Sphericity	Approx. Chi-Square	3994
	Df	45
	Sig.	.000

Table 4.26: Anti Image Matrices (CWB)

		CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB
		1	2	3	4	5	6	7	8	9	10
Anti-image Covariance	CWB1	.383	-.052	-.005	.014	-.034	-.032	-.118	.024	-.152	.008
	CWB2	-.052	.552	-.141	-.019	-.029	-.033	-.018	-.002	.000	-.116
	CWB3	-.005	-.141	.526	-.114	-.032	-.077	-.057	.011	-.024	.016
	CWB4	.014	-.019	-.114	.464	-.107	-.010	-.056	.021	-.050	-.101
	CWB5	-.034	-.029	-.032	-.107	.490	-.106	-.036	-.006	-.017	-.070
	CWB6	-.032	-.033	-.077	-.010	-.106	.541	-.066	.023	-.029	-.062
	CWB7	-.118	-.018	-.057	-.056	-.036	-.066	.489	-.019	.005	-.066
	CWB8	.024	-.002	.011	.021	-.006	.023	-.019	.522	-.203	-.035
	CWB9	-.152	.000	-.024	-.050	-.017	-.029	.005	-.203	.282	-.032
	CWB10	.008	-.116	.016	-.101	-.070	-.062	-.066	-.035	-.032	.474
Anti-image Correlation	CWB1	.893 ^a	-.112	-.010	.033	-.079	-.071	-.273	.055	-.463	.019
	CWB2	-.112	.937 ^a	-.262	-.038	-.055	-.061	-.035	-.004	-.001	-.227
	CWB3	-.010	-.262	.931 ^a	-.231	-.063	-.145	-.113	.020	-.063	.033
	CWB4	.033	-.038	-.231	.931 ^a	-.224	-.021	-.119	.042	-.138	-.215
	CWB5	-.079	-.055	-.063	-.224	.949 ^a	-.205	-.074	-.011	-.045	-.144
	CWB6	-.071	-.061	-.145	-.021	-.205	.953 ^a	-.128	.043	-.075	-.122
	CWB7	-.273	-.035	-.113	-.119	-.074	-.128	.945 ^a	-.038	.014	-.136
	CWB8	.055	-.004	.020	.042	-.011	.043	-.038	.846 ^a	-.529	-.070
	CWB9	-.463	-.001	-.063	-.138	-.045	-.075	.014	-.529	.847 ^a	-.087
	CWB10	.019	-.227	.033	-.215	-.144	-.122	-.136	-.070	-.087	.938 ^a

Note: Symbol “a” measures of Sampling Adequacy (MSA).

Table 4.27: Exploratory Factor Analysis (CWB)

Item Codes	TIS Items	Factor Loadings	Variance Explained	Cronbach Alpha
CWB1	I purposely waste my Master's/employer's materials/supplies.	.75	55% Extraction method was principal component analysis	.91
CWB2	I complain about insignificant things at work.	.67		
CWB3	I tell people outside the job what a bad place I work for.	.70		
CWB4	I come to work late without permission.	.73		
CWB5	I stay home from work and said I were sick when I weren't.	.74		
CWB6	I insult someone about their job performance.	.72		
CWB7	I make fun of someone's personal life.	.75		
CWB8	I ignore someone at work.	.52		
CWB9	I start an argument with someone at work.	.74		

4.10 Steps in Structural Equation Modelling

The present study developed and tested both the measurement model and the structural model in terms of structural equation modelling accordingly.

4.10.1 Model Specification

Accordingly, keeping in view the assumptions suggested by Byrne (2001), the available research on the psychological contract breach was reviewed and subsequently the exploratory factor analysis was conducted to specify the model of the present study.

4.10.2 Model Identification

In order to identify a model a method viz., t-rule is used (Kelloway, 1998). In the t-rule method, Byrne (2001) suggested that the number of variances and covariances were required to be equal or greater than the number of parameters used in a model. The model stood were identified in accordance with the condition suggested by Byrne (2001).

4.10.3 Model Fit Indices (MFI)

The fit indices used in the existing research were goodness of fit index, comparative fit index, normed fit index, normed chi-square, root mean square error of approximation and standardised root mean residual. The fit indices are explained through Section 4.10.3.1 to Section 4.10.3.6.

4.10.3.1 Goodness of Fit Index (GFI)

The value of GFI for the present study was 0.91 which was above the acceptable threshold.

4.10.3.2 Comparative Fit Index (CFI)

The value of CFI for the present study was 0.95, which was above the acceptable threshold.

4.10.3.3 Normed Fit Index (NFI)

The value of NFI for the present study was recorded as 0.93, which shows a good model fit.

4.10.3.4 Normed Chi-square

The value of normed chi-square for the present study was less than 3.0, which is acceptable.

4.10.3.5 Root Mean Square Error of Approximation (RMSEA)

RMSEA for the present study was .049 which is considered a good fit.

4.10.4 Model Modification

Byrne (2001) states that a model is modified in order to better fit a fit in relation to a sample data set by highlighting shortcoming of the model. Model modifications are not needed if the model is already fit. However, two methods are adopted to fit a model in case it's not fit. The methods are a) modification indices and b) standardised residuals (Diamantopoulos & Siguaw, 2000).

4.10.4.1 Modification Indices

Modification indices means an expected decrease in the chi-square value of a model in case already fixed parameter is set free in the next run. Hair et al. (2006) states that a small modification index reflects an apt model fit, whereas a large modification index reveals a poor model fit. Schumacker and Lomax (2004) suggest that these modifications are made part and parcel to the interpretation of the expected statistical parameter change.

4.10.4.2 Standardised Residuals

Jöreskog and Sörbom (1993) defined standardised residual as the residuals that are divided by their standard errors. Diamantopoulos and Siguaw (2000) held that a value more than 2.5 of the standardised residuals reflects mis-fitness of a model. The standardised residual value was less than 2.5.

4.10.5 Construct Convergent and Discriminant Validity

Convergent validity shows how positively one item of the same scale is correlated with another item of the same scale. Average variance extracted (AVE) test is conducted in order to check if all items of a scale are positively correlated with each other or not. The value of AVE should be above 0.50. The constructs of this study met the criterion in relation to convergent and discriminant validity criteria shown in Table 4.28. Table 4.28 shows that the CR and AVE values were acceptable having more than 0.80 and 0.50 values respectively (Hair et al., 2006). The bold-faced values in Table 4.29 are the square roots of the average variance extracted (AVE) known as Fornell-Larcker criterion and beneath these values are the construct correlations which must be less than the bold-faced values in order to achieve the discriminant validity of the constructs (Awang, 2015). The requirement for the convergent validity and discriminant validity was met.

Table 4.28: Construct Convergent and Discriminant Validity

	CR	AVE	MSV	ASV	POS	CWB	JS	PCB	TIS
POS	0.879	0.549	0.151	0.071	0.741				
CWB	0.806	0.509	0.002	0.001	-0.012	0.714			
JS	0.830	0.511	0.156	0.083	0.389	0.043	0.715		
PCB	0.903	0.661	0.156	0.055	0.221	0.002	0.395	0.813	
TIS	0.869	0.626	0.085	0.031	0.292	0.027	0.150	0.125	0.791

4.10.6 Measurement Model

Individual, pooled measurement and structural measurement models were tested through IBM AMOS V-22. The confirmatory factor analysis was conducted, then factor items, standardised loadings, average variance were extracted and composite reliability were presented in Table 4.29.

Table 4.29: Measurement Model Pooled Confirmatory Factor Analysis)

Factor Item	Standardised Loadings	AVE	CR
PCB1	1.00		
PCB2	.64		
PCB3	.62	0.661	0.903
PCB4	.72		
PCB5	1.00		
POS2	.67		
POS3	.79		
POS4	.79	0.549	0.879
POS5	.75		
POS6	.78		
POS7	.67		
JS1	.89		
JS2	.92	0.511	0.830
JS3	.54		
JS4	.59		

Table 4.29 continued

JS5	.51				
TIS2	.75				
TIS3	.71				
TIS4	.75		0.626		0.869
TIS5	.93				
CWB1	.75				
CWB2	.68				
CWB3	.70				
CWB4	.73				
CWB5	.74		0.509		0.806
CWB6	.72				
CWB7	.75				
CWB8	.52				
CWB9	.74				
Model Fit Indices	Final				
	CMIN/DF	RMSEA	TLI	CFI	GFI
	(χ^2/df)				
	2.806	0.039	0.97	0.97	0.93

Cross loadings were above 0.05 which are acceptable in a large sample like the one (739) of the present study. CR values were above 0.07, which are good and in accordance with the recommendations of Nunnally and Bernstein (1994). POS1, POS8, TIS1, TIS6 and CWB10 were removed having low loadings. The model was made fit by co-varying factor

items. Fit indices were; p-value, 0.000, RMSEA 0.039, GFI 0.93, CFI 0.97, TLI 0.97, NFI 0.94, RFI 0.93 and chi-sq/df 2.806.

Table 4.29 shows CR above 0.40. AVE for the items was above 0.50 which is acceptable as the values for the C.R were more than 0.60 (Fornell & Larcker, 1981). The values of AVE showed an apt convergent validity. The maximum correlations were acceptable considering the sample size of the present study and the values are shown in Figure 4.1.

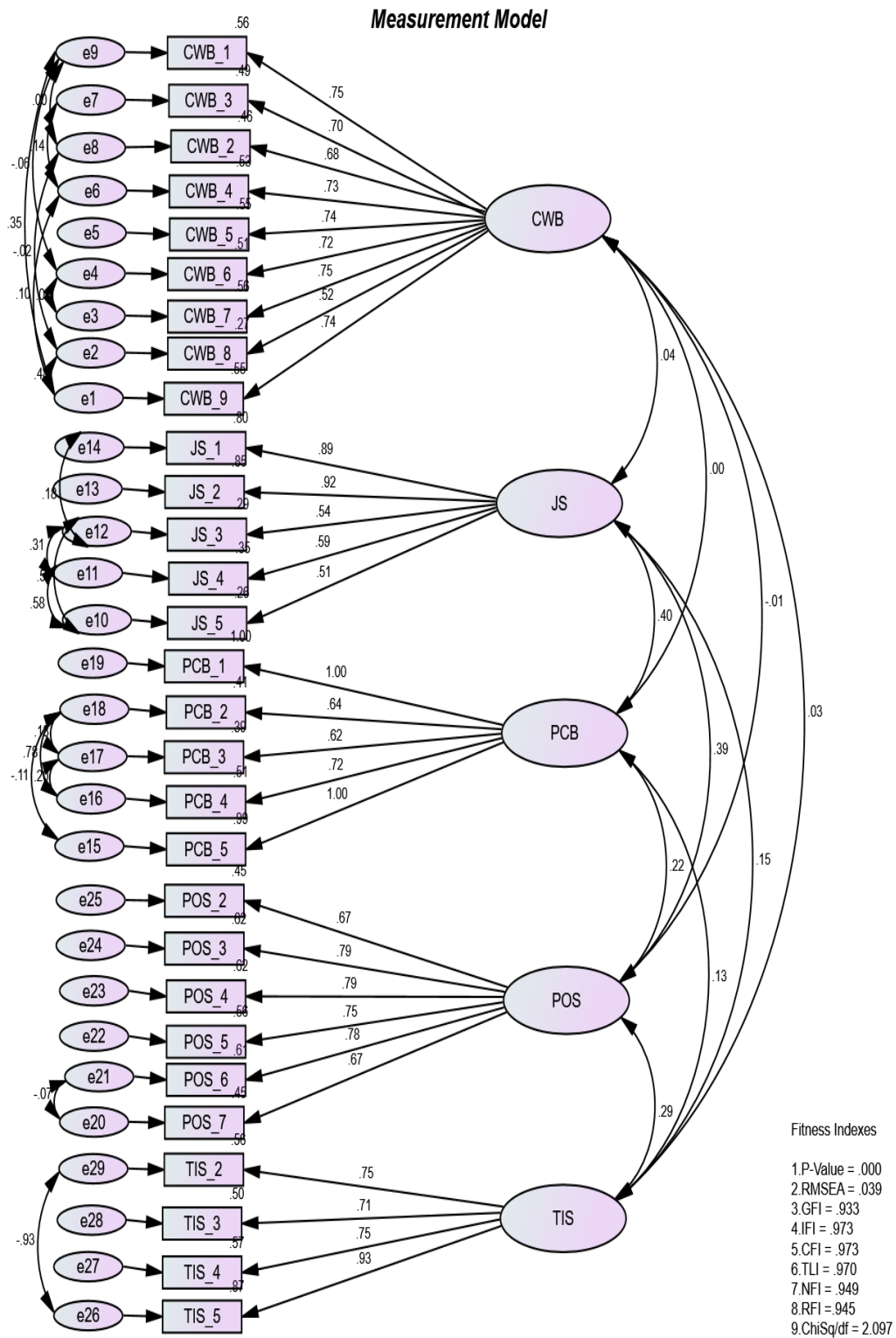


Figure 4.1: Measurement Model

4.11 Structural Model

Structural model was tested using AMOS (V.22). Table 4.30 shows that relationship between PCB and JS, TIS and CWB was significant having a p-value 0.00.

Table 4.30: Direct Effects of PCB on JS, TIS and CWB

Effects			Estimates	S. E.	C.R	P-Values	Alternate Hypothesis
ZMeanPCB	---->	ZMeanJS	.346	.037	9.911	***	Supported
ZMeanPCB	---->	ZMeanCWB	.155	.040	4.227	***	Supported
ZMeanPCB	---->	ZMeanTIS	.157	.39	4.291	***	Supported

Note: PCB= psychological contract breach, JS= job satisfaction, TIS= turnover intention, CWB= counterproductive work behaviour.

The structural model was run with the help of AMOS (V.22). The initial model fitness was fit as shown in Figure 4.2 with a p-value 0.000.

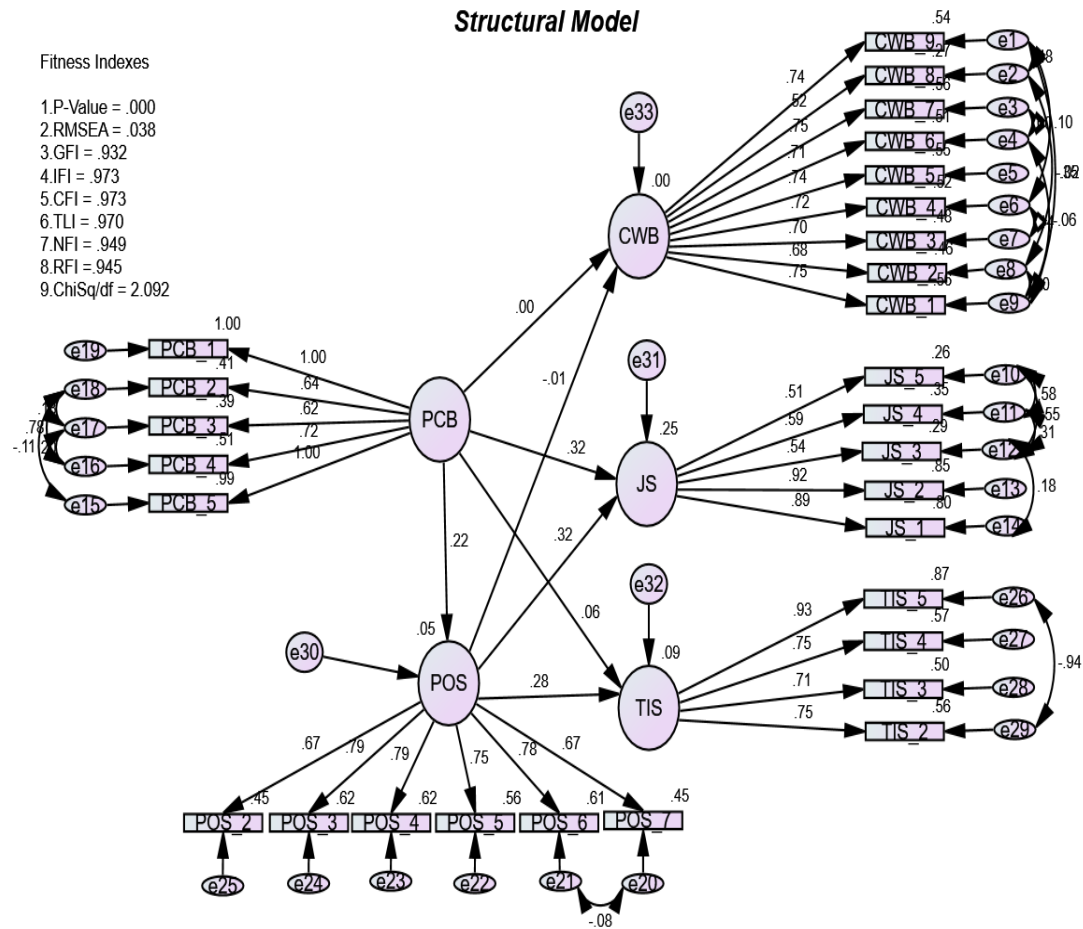


Figure 4.2: Structural Model

4.12 Moderating Effects

Perceived organisational support was used in this study as a moderator, which enhances positive job attitudes and behaviour. As guided by Awang (2014), the moderating effect of perceived organisational support was checked by using IBM AMOS V-22. Results as shown in Table 4.30 reflected that direct effect of PCB towards JS, TIS and CWB was significant having a p-value of .000. The moderating effect of POS between PCB and TIS was significant with a p-value of .010. However, the moderating effects of POS among PCB, JS and CWB was insignificant having p-values of 0.783 and 0.923 respectively. Table 4.31 shows the moderation results.

Table 4.31: Moderation Effects

Effects			Estimates	S. E.	C.R	P-Values
ZMeanPCB	---->	ZMeanJS	.346	.037	9.911	***
ZMeanPCB	---->	ZMeanCWB	.155	.040	4.227	***
ZMeanPCB	---->	ZMeanTIS	.157	.39	4.291	***
Moderation	---->	ZMeanTIS	.094	.035	2.559	.010
Moderation	---->	ZMeanJS	-.010	.033	-.276	.783
Moderation	---->	ZMeanCWB	-.004	.036	-.096	.923

The path diagram of the moderation test with unstandardised estimates has been shown in Figure 4.2. The moderation effects were examined using regression analysis. A two-way plotter in the Stats Tool Tab was used to discern/examine the interaction/moderation effects. The moderating effects of POS among PCB and JS, TIS and CWB had shown in Figure 4.3, which showed that POS did not moderate the relationship among PCB, JS and CWB, however, the results showed that POS did moderate the relationship between PCB and TIS.

Moderation Test

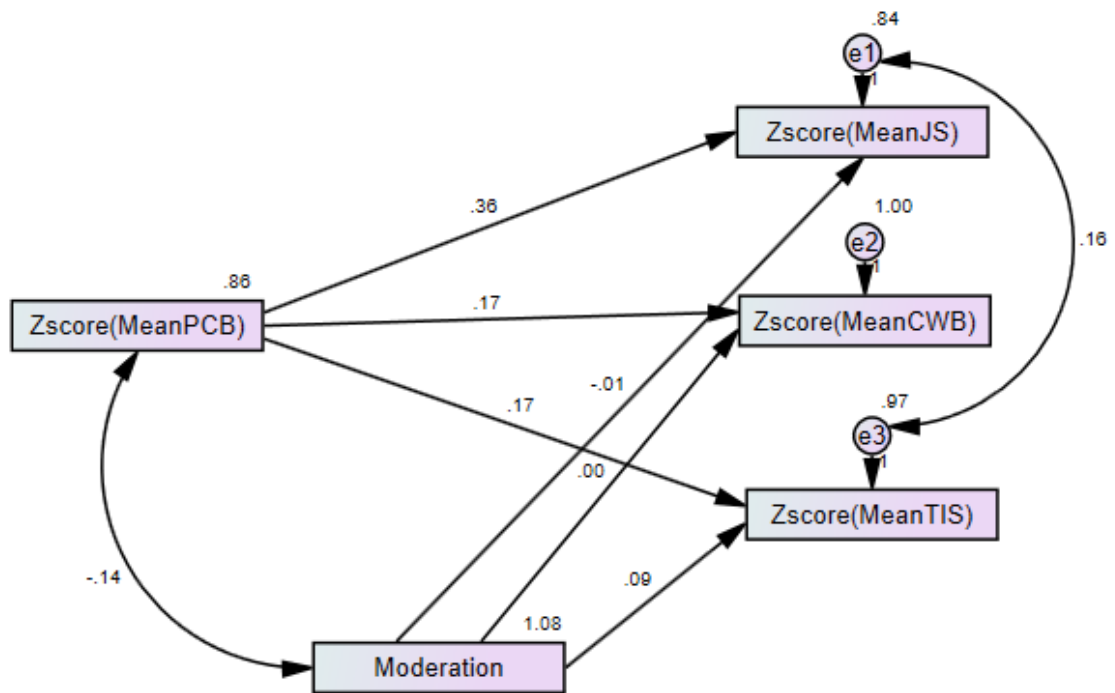


Figure 4.3: Moderation Test

The 2-way plotter showing moderation effects of POS between PCB and CWB are shown in Figure 4.4. The test result showed that POS did not moderate the relationship between PCB and CWB.

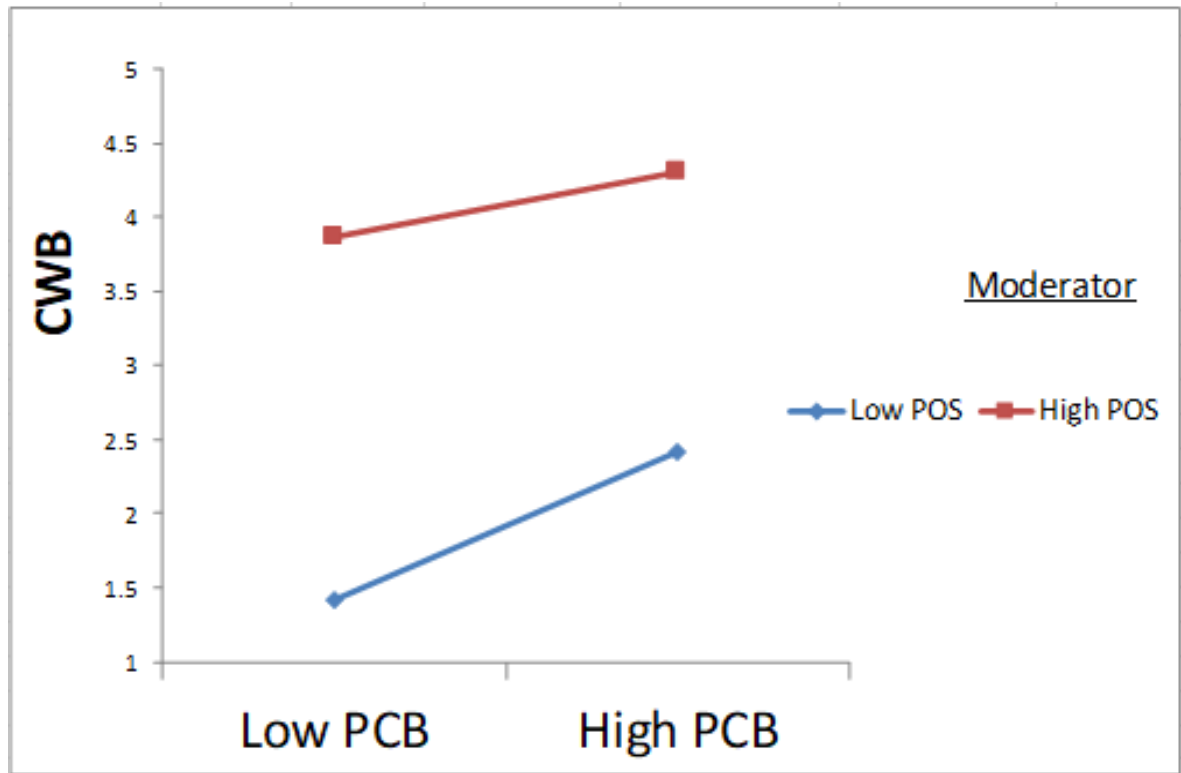


Figure 4.4: 2-Way Plotter PCB and CWB

The 2-way plotters showing moderation effects of POS between PCB and JS are shown in Figure 4.5. The test result showed that POS did not moderate the relationship between PCB and JS.

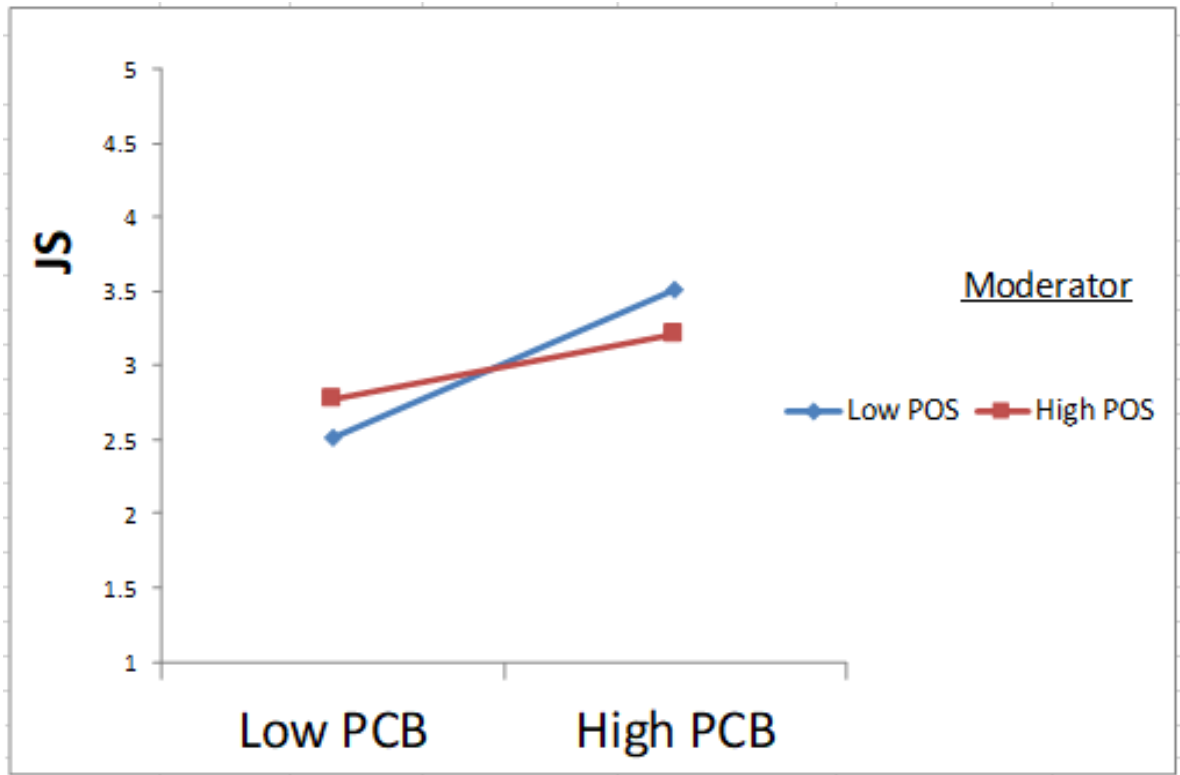


Figure 4.5: 2-Way Plotter PCB and JS

The 2-way plotters showing moderation effects of POS between PCB and TIS are shown in Figure 4.6. The test result showed that POS did moderate the relationship between PCB and TIS.

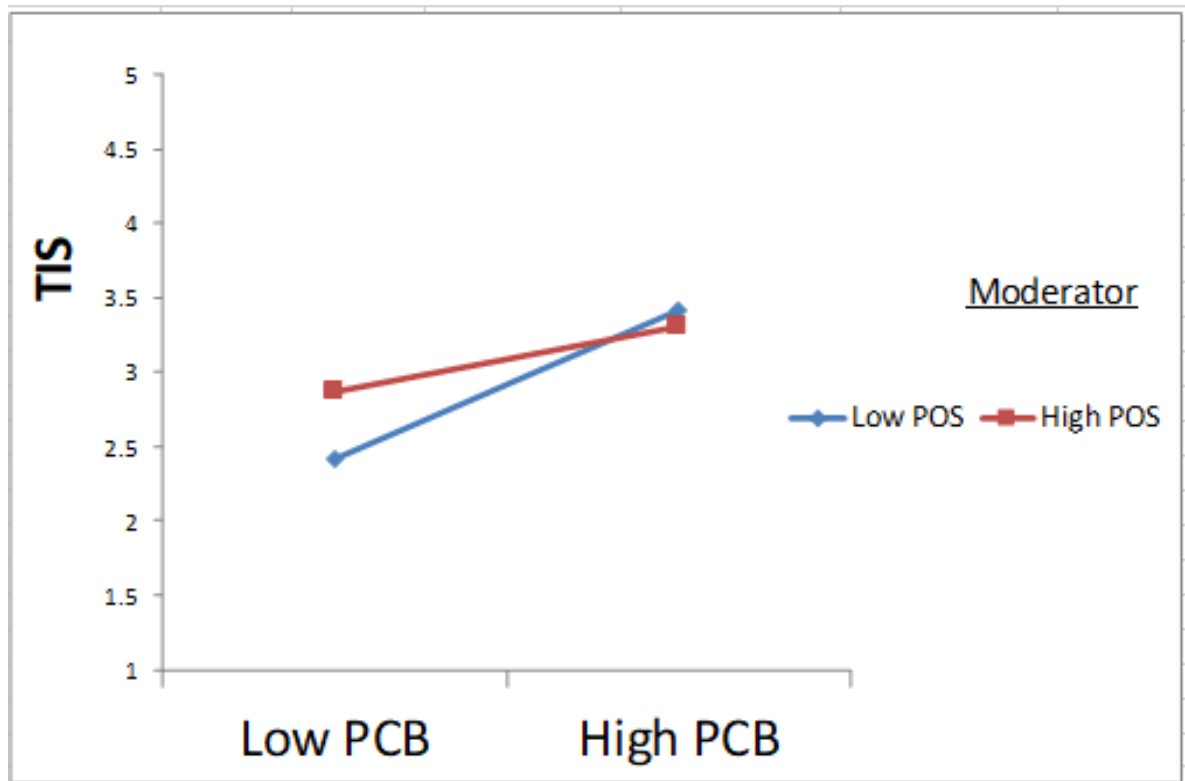


Figure 4.6: 2-Way Plotter PCB and TIS

4.13 Hypotheses Summary

All the hypotheses were tested using AMOS (V.22). The direct effects' results showed that PCB significantly affected the relationship towards JS, TIS and CWB. However, the moderation effects' results showed that POS significantly moderates the relationship between PCB and TIS. Nonetheless, POS did not significantly moderate the relationship among PCB, JS and CWB. Summary of the direct and moderation effects are shown in Table 4.32.

Table 4.32: Summary of the Hypotheses-I

Effects	St. Regression	St. Error	Cr. Value	P-Values	H _a		
PCB --->	---->	JS	.346	.037	9.911	***	Supported
PCB --->	---->	CWB	.155	.040	4.227	***	Supported
PCB --->	---->	TIS	.157	.39	4.291	***	Supported
Moderation	---->	TIS	.094	.035	2.559	.010	Supported

Table 4.32 shows that PCB did significantly affect JS, TIS and CWB. POS significantly moderated between PCB and TIS. POS do not significantly moderate the relationship among PCB, JS and CWB. Accordingly, Section 4.14 shows whether the hypotheses of the present study are supported or unsupported.

4.14 Hypotheses Analysis

Hypothesis testing/analysis were conducted as results of the measurement model and the structural model confirmed that the theoretical model was fit for the hypotheses testing, which was done via structural equation modelling (SEM). Confidence level was 95%. The first hypothesis of the present study was that ‘psychological contract breach has a significant effect over job dissatisfaction’. The results as shown in Table 4.33 shows that there was a significant effect of PCB over JS with a p-value 0.000. The second hypothesis of the study was that ‘psychological contract breach has a significant effect over turnover intention’. The results showed that there was a significant effect of PCB over TIS with a p-value 0.000. The third hypothesis of the study was that ‘psychological contract breach has a significant effect counterproductive work behaviour’. The results showed that there was a significant effect of PCB over CWB with a p-value 0.000. The fourth hypothesis of the study was that ‘perceived organisational support moderates association between psychological contract breach and

job-dissatisfaction’. The results as shown in Table 4.33 indicated that POS did not moderate the relationship between PCB and JS with a p-value 0.783. The fifth hypothesis of the study was that ‘perceived organisational support moderates association between psychological contract breach and turnover intention’. The results showed that POS significantly moderated the relationship between PCB and TIS with a p-value 0.010. The sixth hypothesis of the study was that ‘perceived organisational support moderates association between psychological contract breach and counterproductive work behaviour’. The results showed that POS did not significantly moderate the relationship between PCB and CWB with a p-value 0.923. Table 4.33 shows the hypothesis result in terms of supported or unsupported.

Table 4.33: Summary of the Hypotheses-II

Hypotheses			Result
ZMeanPCB	---->	ZMeanJS	Supported
ZMeanPCB	---->	ZMeanCWB	Supported
ZMeanPCB	---->	ZMeanTIS	Supported
Moderation	---->	ZMeanTIS	Supported
Moderation	---->	ZMeanJS	Not supported
Moderation	---->	ZMeanCWB	Not supported
PCB	---->	Qualification	Not supported
PCB	---->	Age	Not supported
PCB	---->	Gender	Not supported

4.15 Discussion on Empirical Findings

4.15.1 First Finding

The psychological contract breach has a significant effect over job dissatisfaction.

Reciprocation, which leads to motivation and regulates employees' attitudes and behaviours, is at the heart of employee-employer relationship, which means employees were satisfied if organisations meet their psychological concerns, i.e. psychological contract (Levinson, 1965). However, the psychological contract breach is meant as a resource loss as well (Garg et al., 2018), which appears when employers fail to meet unwritten expectations of their employees (Solinger et al., 2016; Balogun et al., 2017).

The psychological contract breach leads to the negative exchange. Such an exchange is reciprocated within employee-employer relationship (Conway & Briner, 2005). Employees do not get loyal and productive for the employers if they are dissatisfied with their employers. In the UK, psychological contract breach does affect job satisfaction and work performance (Rayton & Yalabik, 2014); in the Netherlands, psychological contract breach has positively been reported to job dissatisfaction (Bal et al., 2012); in the Greek context, the psychological contract breach gives birth to job dissatisfaction (Antonaki & Trivellas, 2014), in Indian perspective, the breach of psychological contract leads to negative job attitudes and behaviours and job dissatisfaction is one such attitude (Agarwal & Bhargava, 2013).

The first hypothesis of this study was that psychological contract breach has a significant effect over job satisfaction. The empirical results of the current study revealed that there was a significant effect of psychological contract breach over job (dis)satisfaction with p-value as 0.000, estimates 0.346, S.E. 0.037, C.R. 9.911. The results of the present

study proved to be consistent with the results of the other studies on psychological contract breach and job satisfaction, which held that psychological contract breach had a significant relationship with job satisfaction (Rayton & Yalabik, 2014; Galić et al., 2016).

The present study was significant to be undertaken in order to examine the effect of the psychological contract breach over job satisfaction in the Pakistani context as these dimensions, being pretty much important from organisational point of view, had already been examined across the world. The prior research had established that employees became dissatisfied with their jobs if their psychological contract was breached (Solinger et al., 2016).

The results of the present study have validated the results of the previous studies meaning thereby that psychological contract breach does affect job satisfaction and makes employees dissatisfied in Pakistan too (Saboor et al., 2017; Khan et al., 2018; Malik et al., 2018), which is an alarming situation for the Pakistani employers as well. Pakistani employers and managers should know what psychological contract is about so that they could be proactive in meeting its requirements, i.e. unwritten expectations, to mitigate the potential negative attitudes and behaviours.

4.15.2 Second Finding

Psychological contract breach has a significant effect over turnover intention.

Blau (1964) advocated that employees get along with an organisation if the organisation provides them psychologically feasible environment. In contrast, employees tend to leave an organisation that do not meet their psychological needs, i.e. in this study, psychological contract. Breach of psychological contract makes the employees demotivated

and, therefore, they bear turnover intentions. Therefore, it is of importance for the organisations not to breach the psychological contract of their employees.

By doing so, the organisation would be successful in achieving their goals and among them but on the top are having competitive advantage and profit maximisation. Employees exchange with their organisation what the organisations extend to them, i.e. good for good and bad for bad, as stated by Blau (1964) through the Social Exchange Theory. Employees exchange all implicit and explicit reactions with their organisations. Such employees perform well if their psychological needs are not breached, otherwise the situation comes to vice versa (Shore et al., 2006).

The second hypothesis of this study was ‘psychological contract breach has a significant effect over turnover intention’. Employees switch over jobs because of a number of reasons and psychological contract breach is one such but alarming reason thereto. In this regard, a number of studies have depicted that psychological contract breach is positively associated with turnover intention (Lv et al., 2016; Malik et al., 2018; Akkermans et al., 2019).

The second hypothesis of this study was that psychological contract breach has a significant effect over turnover intention. The results of the present study showed a significant positive relationship between psychological contract breach and turnover intention with p-value 0.000, estimates .157, S.E. 0.39 and C.R 4.291. The empirical result of this study also proved to be consistent with the other studies in relation to effects of psychological contract breach and turnover (Wang et al., 2017; Xiong et al., 2017; Malik et al., 2018).

The present study was significant to be undertaken in order to examine the effect of psychological contract breach over turnover intention in the Pakistani context as these dimensions have already been examined across the world. Even the recent ones have established that employees get intention to job turnover if their psychological contract is breached (Malik et al., 2018; Sheehan et al., 2019).

The results of the present study have validated the results of the previous studies meaning thereby that the psychological contract breach does affect job satisfaction and makes employees dissatisfied in Pakistan too. Therefore, undertaking the present study in the Pakistani context was very much important to know the ontology and epistemology of knowledge and mechanism of the psychological contract breach and turnover intention. The present study shall provide an evidence about significance of the psychological contract breach in relation to turnover intentions to the researchers, employers and practitioners in Pakistan in particular and the world in general.

Employees could properly be guided about their job conditions and rewards whatsoever at the time when they are inducted to an organisation. This strategy may help avoid psychological contract breach and its negative attitudes and behaviour at the workplaces (Galić et al., 2016).

4.15.3 Third Finding

The psychological contract breach has a significant effect over counterproductive work behaviour.

Bennett and Robinson (2000) held that “voluntary behaviour of organisational members that violates significant organisational norms and in doing so, threatens the well-being of the organisation and/or its members”. By being counterproductive, employee tend

to be negative towards an organisation and its operation. By doing so, such employees damage the overall performance, which is a must for profit maximisation, of the organisation.

Counterproductive work behaviour damages an organisation in four possible ways, namely ‘damaging the organisational property’, ‘damaging the organisational-production’, ‘damaging the (senior and/or junior) colleagues by being aggressive’ and ‘damaging the organisational socio-political image by disseminating fabricated content about the organisation or its members’.

The third hypothesis of this study was ‘the psychological contract breach has a significant effect over counterproductive work behaviour’. Organisations suffer from low productivity and other organisational problems including facing counterproductive work behaviour of employees if psychological contract of such employees is breached (Marcus et al., 2013). Meaning thereby that the counterproductive behaviour seriously affects organisation’s overall environment and hence productivity which is very much important for the organisations to curb to the maximum extent. Holding this view, the psychological contract breach leads to counterproductive work behaviours, a host of researchers have focused on this problem to help assist organisations get a better productivity and motivated human resource (Li & Chen, 2018; Malik et al., 2019; Ma et al., 2019).

The third hypothesis of this study was that psychological contract breach has a significant effect over counterproductive work behaviour. The results of the present study showed a significant positive relationship between psychological contract breach and turnover intention with p-value 0.000, estimates 0.155, S.E. 0.40 and C.R 4.227. The empirical results of this study proved to be consistent with the other such like studies which held that psychological contract breach leads to negative work behaviours such as

counterproductive work behaviour (Astrove et al., 2015) in Pakistani context, i.e. universities (Hussain et al., 2016).

Taking up the present study in the Pakistani context was significant in order to analyse and compare its results with the previous studies. The present study proved it to be important as it validated the results of the previous studies in a novel culture such as Pakistan. This showed that psychological contract breach was equally important an aspect for Pakistani employers to know about so that the employer could be able to avoid negative attitudes and behaviours at the job places.

The present study claimed that the psychological contract of the employees in Pakistan should also be fulfilled to make the workforce motivated and performance oriented as has been done in the world in order to make organisations achieve profit maximisation through a motivated human capital that is meant for high productivity and competitive advantage. Pakistani employers and manager should know unwritten expectations, to mitigate the potential negative attitudes and behaviours (Saboor et al., 2017).

4.15.4 Fourth Finding

Perceived organisational support moderates association between the psychological contract breach and job-satisfaction.

Perceived organisational support has been defined as in order to meet socioemotional needs and to assess the organisation's readiness to reward increased efforts, employees form general beliefs concerning how much the organisation values their contributions and cares about their 'well-being' with the help of organisational support theory (Eisenberger et al., 1986).

Perceived organisational support is also meant as how fair, supportive, reward awarding job conditions are provided by an employer to an employee (Rhoades & Eisenberger, 2002). Prior literature has shown that employees bear negative attitudes and behaviours if organisations fail to provide them support, i.e. psychological contract fulfilment, otherwise employees tend to be demotivated and bear negative attitudes and behaviours on account of their psychological contract breach.

The psychological contract breach makes the employees have negative attitudes and behaviours and get dissatisfied whereas organisational support bridges this gap and keeps employees satisfied and motivated. Organisational support, if provided to the employees, helps organisations retain such motivated employees required for effective and efficient productivity which is needed to achieve the organisational goals. However, perceived organisational support from organisational and supervisory context works as a motivational factor for the employees and makes the employees bear positive attitudes and behaviours.

Job dissatisfaction is one such factor that organisational support eliminates (Laschinger et al., 2011). Therefore, the fourth hypothesis of this study was ‘perceived organisational support moderates association between the psychological contract breach and job satisfaction’, which means that the perceived organisational support is negatively associated with the relationship vis-a-vis the psychological contract breach and job dissatisfaction. The hypothesis was developed in connection with a number of studies (Aselage & Eisenberger, 2003; Khurram, 2009; Priesemuth & Taylor, 2016).

The fourth hypothesis of this study was that perceived organisational support moderates the relationship between psychological contract breach and job satisfaction. The empirical results as shown in Figure. 4.5 of the present study showed that perceived organisational support did not moderate the relationship between psychological contract

breach and job dissatisfaction. Therefore, the results of the present study left a gap for the future researchers to investigate the reasons and factors associated with moderation effects of perceived organisational support between the psychological contract breach and job dissatisfaction.

Previous studies have shown that employees need organisational rewards, which complement their psychological contracts. The organisations that do not deny rewards to their employees don't do breach of their psychological contracts. By doing so, the organisations keep their employees satisfied at the job places, which ultimately increases performance level of the employees and creates positive work environment meant for employee retention (Peterson, 2015). Social exchange theory and perceived organisational support theory posit that employees exchange with their employers what they get from them, i.e. care for care and support for support and vice versa. Pakistani employers and manager should know the mechanism between perceived organisational support and psychological contract breach in order to mitigate the potential negative attitudes and behaviours (Saboor et al., 2017).

4.15.5 Fifth Finding

Perceived organisational support moderate association between the psychological contract breach and turnover intention.

Social exchange theory posits that employees get satisfied at the job places if employers meet their expectations otherwise the employees bear negative attitudes and behaviours such as turnover (Blau, 1964). Organisational support theory posits that employees get motivated and satisfied at the job places if organisations and/or supervisors provide reward in other words support to their employees otherwise employees bear negative

attitudes and behaviours (Eisenberger et al., 1986). Organisational support theory has its origin in the social exchange theory (Cropanzano & Mitchell, 2005).

The fifth hypothesis of this study was ‘perceived organisational support moderates association between psychological contract breach and turnover intention’, which means that the perceived organisational support is negatively associated with the relationship in relation to the psychological contract breach and turnover intention. The hypothesis was developed in connection with a number of studies (Khurram, 2009; Virgolino et al., 2017; Harris & Kacmar, 2018).

The fifth hypothesis of the study was that perceived organisational support moderates the association between psychological contract breach and turnover intention. The empirical results as shown in Figure 4.6 of the present study showed that perceived organisational support moderated the relationship between the psychological contract breach and turnover intention with a p-value 0.010, estimates 0.094, S.E. 0.35 and C.R. 2.559. The result shows that organisational support reduces turnover intention. Hence the finding is consistent with (Rhoades & Eisenberger, 2002; Riggle et al., 2009; Harris & Kacmar, 2018).

The present study claimed that the psychological contract of the employees in Pakistan also be fulfilled to make the workforce motivated and performance oriented as has been done in the world in order to make organisations achieve profit maximisation through retain a motivated human capital meant for high productivity and competitive advantage. Pakistani employers and manager should know turnover intentions and psychological contract breach mechanism so that they could be proactive in meeting employees’ requirements in order to make the employees exhibit positive job attitudes and behaviours (Saboor et al., 2017).

4.15.6 Sixth Finding

Perceived organisational support moderate association between the psychological contract breach and counterproductive work behaviour.

Bennett and Robinson (2000) held that “voluntary behaviour of organisational members that violates significant organisational norms and in doing so, threatens the well-being of the organisation and/or its members”. By being counterproductive, employee tends to have a negative perception towards an organisation and its operation. By doing so, such employees damage the overall performance, which is a must for profit maximisation, of the organisation.

The sixth hypothesis of this study was ‘perceived organisational support moderates association between the psychological contract breach and counterproductive work behaviour’, which means that the perceived organisational support is negatively associated with the relationship between the psychological contract breach and counterproductive work behaviour.

The sixth hypothesis of the study was that the perceived organisational support moderates the association between psychological contract breach and counterproductive work behaviour. University employees with higher education level have been reported to be committed employees (Shen, 2010). Although perceived organisational support leads to positive attitudes and behaviours (Gupta et al., 2016) yet empirical results of the present study as shown in Figure 4.4 showed that perceived organisational support did not moderate the relationship between the psychological contract breach and counterproductive work behaviour. Therefore, this finding is inconsistent with prior research (Riggle et al., 2009; Harris & Kacmar, 2018).

The present study claimed that psychological contract of the employees in Pakistan also be fulfilled to make the workforce motivated and performance oriented as has been done in the world in order to make organisations achieve profit maximisation through retain a motivated human capital meant for high productivity and competitive advantage. Pakistani employers and manager should know the importance and mechanism of counterproductive work behaviour and psychological contract breach so that the employers and managers may reduce the potential negative attitudes and behaviours (Saboor et al., 2017).

4.15.7 Seventh Finding

Education plays an important role at the workplaces when understanding attitudes and behaviours of the employees (Murrmann & Lee, 2009). The more the education level employees have the better workplace perceptions they bear. That is why employees with higher education have been said to have better level of commitment (Shen, 2010), which shows they are less affected by the psychological contract breach. Employees with better qualification perform well (Odunlami & Matthew, 2014). Better performing employees have better psychological contacts.

The seventh hypothesis of the study was that psychological contract breach has a significant effect over qualification. However, significance level of education in relation to the constructs of the present study shows insignificant values such as .562, .452, .874, .329 and .245, all of which are more than the alpha value, i.e. 0.05. Based on the results of Ha7, the present study reflects that there is no difference with reference to qualification of employees regarding psychological contract breach. That means all employees are suffering from psychological contract breach regardless of their qualification.

The results of the present study do not validate the results of the previous literature (Murrmann & Lee, 2009; Galić et al., 2016), therefore, leaving a gap for future researchers

to further explore the association of qualification and psychological contract breach and job attitudes and behaviours (Bellou, 2009; Ahmad & Khan, 2014; Agarwal & Bhargava, 2013).

4.15.8 Eighth Finding

Prior literature shows that age plays a significant role in streamlining employees' behaviour and organisational research (Ng & Feldman, 2009; Bal et al., 2012). The older the employees the lesser negative attitudes and behaviours they bear because with age they get emotionally tolerant (Bal et al., 2012). Employees senior in age have better psychological contract with their employers (Adams et al., 2014).

That means the younger employees are reactive and intolerant to their expectations' breach, i.e. psychological contract; nevertheless, the older employees tolerate such feelings and avoid being negative towards their organisations (Bordia et al., 2008). Younger employees bear high expectations from their employers than the older ones but with the passage of time they adapt to realistic job environment.

Based on the results of H_{a8} i.e. psychological contract breach has a significant effect over age, the present study does not support the results of the prior studies as almost all of the employees in the present study have been reported to be suffering from psychological contract breach and negative attitudes and behaviours regardless of their age. All of the ANOVA findings such as .138, .519, .280, .056 and .405 of the present study have been insignificant for age as the significance values have been over 0.05.

The present study does not validate the prior literature regarding psychological contract breach and age (Galić et al., 2016). The study, however, validates the recommendation of Ahmad and Khan (2015) that demographic factors may be investigated.

The study also validates that different employees have different demographic factors but same perception of psychological contracts (Iwu, 2013).

Studying about demographics/age is of importance since the age has been researched less especially in relation to psychological contract breach (Ahmad & Khan, 2015). Therefore, it is pretty much important for the researchers and practitioners in Pakistan to know about psychological contract breach and as to how it leads to negative attitudes and behaviours in relation to age so that workplace environment may be improved from philosophical point of view. Managers and practitioners should understand the importance of the psychological contract breach and its negative effects on the demographics of the employees. The present study, therefore, leaves a gap for the future researchers to further single out as to why age has not played an importance role in determining work attitudes and behaviours in Pakistani context.

4.15.9 Ninth Finding

Blomme, et al. (2010) stated that male's and female's psychological contract differs from each other. Females are more prone to having negative attitudes than males because they face workplace conflicts more than males. The psychological contract breach and negative attitudes are said to have an undeniable association. Different personalities from both genders have same psychological expectations from their employers (Adams et al., 2014).

Gender is considered a socially designated role, attribute and behaviour mean for males and females by a society. Prior literature shows that female employees' retention is a problem at the workplaces. Gender, therefore, is considered an important element to be studied with the psychological contract breach (Iwu, 2013). Older employees tend to have a stronger psychological contract than the younger workforce (Adams et al., 2014).

The ninth hypothesis of the study was that psychological contract breach has a significant effect over gender. However, results of the present study do not validate the results of the prior studies and show a different pattern of female employees in relation to psychological contract breach and negative attitudes and behaviours. The study found no significance based on its t-test results, i.e. 0.909, 0.134, 0.129, 0.718 and 0.080, meaning thereby that all of the significance values have been reported to be more than the alpha values such as 0.05, which leave a gap for future researchers to explore more on the relationship between psychological contract breach and gender.

The present study does not validate the results of the prior literature regarding psychological contract breach and gender (Blomme et al., 2010). This study validates the result of Adams et. al (2014) that different personalities (men/women) have same expectations i.e. psychological contract from their employers. This study also validates that demographic factor be further examined in order to examine their association with psychological contract breach, which has also been recommended by Ahmad and Khan (2015). Accordingly, the present study claims that the managers and practitioners especially in Pakistan should know the impact of the psychological contract breach on gender in order to better retain the apt workforce.

4.16 Chapter Summary

Chapter 4 contains introduction, data collection schedule and analysis technique, questionnaire response rate, data screening process, respondents' profile, construct reliability and validity, factor analysis aptness testing, basics of structural equation modelling, steps in structural equation modelling, measurement model, structural model, moderating effects, hypotheses summary, hypotheses' analysis and discussion on the empirical findings.

CHAPTER 5

CONCLUSION

5.1 Introduction

Psychological contracts are considered to be one of the best mechanisms to study employee-employer relationship. Although employee-employer relationship has been studied in a host of studies yet research on this relationship with reference to psychological contracts have been dormant for decades. The late 1990s witnessed renaissance of research on psychological contracts. Moderating role of perceived organisational support has never been examined along with psychological contract breach and its negative outcomes.

The objective of the present study was to examine the effects of psychological contract breach on job outcomes such as turnover intention, job satisfaction and counterproductive work behaviour. Another objective of this study was to examine the moderating role of perceived organisational support between the relationship, i.e. psychological contract breach and turnover intention, job satisfaction and counterproductive work behaviour. The findings of this study reflected significant direct effects of psychological contract breach towards turnover intention, job satisfaction and counterproductive work behaviour. However, the moderating effect of only one relationship, i.e. perceived organisational support between psychological contract breach and turnover intention, was significant and the moderating effect of perceived organisational support between psychological contract breach and job satisfaction and counterproductive work behaviour was insignificant.

In pursuance of a host of studies regarding psychological contract breach and also keeping in view the nature of researcher's objective role in this research, the study at hand

used quantitative research approach by involving positivism paradigm. The data were collected through a self-administered questionnaire from a sampling frame of universities five cities of Pakistan. Based on the recommendations from past researchers, simple random sampling technique was used to ascertain the sample size. Data collection was made through a 5-point Likert scale-oriented questionnaire. The questionnaire was refined by a pre-test and pilot. The rectified questionnaire was distributed to a sample of 1230 from the sampling frame. As many as 739 valid responses were received. Accordingly, data were analysed with the help of SPSS and AMOS and that too as per guidance from a number of research articles.

This chapter sums up the conclusion for the study. The conclusion contains discussion on findings, a discussion about effects of psychological contract breach, perceived organisational support, job dissatisfaction, turnover intention and counterproductive work behaviour and the relationships thereof. This chapter elaborates the contributions this study has made. Limitations of research and future research directions have also been detailed in order to pave way for the future researchers in the psychological contract domain. The researcher believes that the findings of this study shall broaden theoretical knowledge and understanding for the constructs of the study. Section 5.2 presents the discussion on the study findings.

5.2 Discussion on Findings

Prior literature has established that psychological contract breach leads to resource loss, which appears when employers fail to meet unwritten expectations of their employees. Literature also shows that although a number of researchers has studied psychological contract breach yet much is needed to be explored in relation to psychological contract breach.

The empirical findings of the current study revealed that there was a significant effect of psychological contract breach over job satisfaction. The results of the present study proved to be consistent with the results of the other studies on psychological contract breach and job satisfaction (see Chapter 2), which held that psychological contract breach had a significant relationship with job satisfaction. The results of the present study have validated the results of the previous studies that psychological contract breach causes job dissatisfaction (see Chapter 2).

Prior literature has also showed that psychological contract breach has a significant effect over turnover intention. Employees switch over jobs because of a number of reasons and psychological contract breach is one such but alarming reason thereto. In this regard, a number of studies have depicted that psychological contract breach is positively associated with turnover intention. This study findings showed a significant positive relationship between psychological contract breach and turnover intention. The empirical result of this study also proved to be consistent with the other studies in relation to effects of psychological contract breach and turnover (see Chapter 2). The present study was significant to be undertaken in order to examine the effect of psychological contract breach over turnover intention in the Pakistani context as these dimensions have already been examined across the world. The prior research has proved that employees get intention to job turnover if their psychological contract is breached.

The findings of the present study have validated the results of the previous studies on psychological contract breach and turnover intention (see Chapter 2). The study findings suggest that employees should properly be guided about their job conditions and rewards whatsoever at the time when they are inducted to an organisation. This strategy may help

avoid psychological contract breach and its negative attitudes and behaviour at the workplaces.

The extant literature shows that psychological contract breach has a significant effect over counterproductive work behaviour. Organisations suffer from low productivity and other organisational problems including facing counterproductive work behaviour of employees if psychological contract of such employees is breached. Psychological contract breach leads to counterproductive work behaviours; therefore, a host of researchers have focused on this problem to help assist organisations get a better productivity and motivated human resource (see Chapter 2). The empirical findings of this study showed a significant positive relationship between psychological contract breach and turnover intention.

The findings proved to be consistent with other such like studies, which held that psychological contract breach leads to negative work behaviours such as counterproductive work behaviour in Pakistani context, i.e. universities. Pakistani employers and manager should know unwritten expectations, to mitigate the potential negative attitudes and behaviours.

The psychological contract breach makes the employees have negative attitudes and behaviours and get dissatisfied, whereas organisational support bridges this gap and keeps employees satisfied and motivated. Organisational support, if provided to the employees, helps organisations retain such motivated employees required for effective and efficient productivity which is needed to achieve the organisational goals. Job dissatisfaction is one such factor that organisational support eliminates.

This study suggested that perceived organisational support moderates association between the psychological contract breach and job satisfaction. This research study was

conducted in connection with a number of studies (see the conceptual framework of the study). However, the empirical findings of the present study showed that perceived organisational support did not moderate the relationship between psychological contract breach and job satisfaction.

Social exchange theory and perceived organisational support theory posit that employees exchange with their employers what they get from them, i.e. care for care and support for support and vice versa. Social exchange theory posits that employees get satisfied at the job places if employers meet their expectations otherwise the employees bear negative attitudes and behaviours such as turnover. The study findings validated that organisations face negative attitudes and behaviours if they breach psychological contract of their employees. The constructs of this study (pl see conceptual framework) were unique and relevant with reference to their relationship with social exchange and organisational support theories; therefore, findings of this study are a contribution to both the theories.

The present study suggested that perceived organisational support moderates association between psychological contract breach and turnover intention. The empirical findings of the present study showed that perceived organisational support moderated the relationship between the psychological contract breach and turnover intention. The finding of this study is unique and a good contribution to the psychological contract breach, turnover intention and perceived organisational support moderated literature. This finding is unique in nature and is a contribution to the body of knowledge regarding perceived organisational support and turnover intention.

The present study suggested that perceived organisational support moderates association between the psychological contract breach and counterproductive work behaviour. Although perceived organisational support leads to positive attitudes and

behaviours yet empirical results of the present study showed that perceived organisational support did not moderate the relationship between the psychological contract breach and counterproductive work behaviour. Therefore, the finding suggests to investigate this relationship further. This finding is novel for the future researchers to examine this relationship further.

Education plays an important role at the workplaces when understanding attitudes and behaviours of the employees. The more the education level employees have the better workplace perceptions they bear. That is why employees with higher education have been said to have better level of commitment, which shows they are less affected by the psychological contract breach. However, significance level of education in relation to the constructs of the present study shows insignificant findings. That means all employees are suffering from psychological contract breach regardless of their qualification.

The findings of the present study did not validate the results of the previous literature, therefore, leaving a gap for future researchers to further explore on the association of qualification and psychological contract breach, job attitudes and behaviours. Literature also shows that qualification has not rigorously been research especially with psychological contract breach.

Prior literature shows that age plays a significant role in streamlining employees' behaviour and organisational research. The older the employees the lesser negative attitudes and behaviours they bear because with age they get emotionally tolerant. Younger employees bear high expectations from their employers than the older ones but with the passage of time they adapt to realistic job environment. Findings of the present study did not support the results of the prior studies as almost all of the employees in the present study had been reported to be suffering from psychological contract breach and negative attitudes and

behaviours regardless of their age. The present study did not validate the prior literature regarding psychological contract breach and age. Hence, this finding is unique to further examine this relationship.

Gender is considered a socially designated role, attribute and behaviour mean for males and females by a society. Prior literature shows that female employees' retention is a problem at the workplaces. Gender, therefore, is considered an important element to be studied with the psychological contract breach as female employees tend to leave organisations earlier than male employees do. Females are more prone to having negative attitudes than males because they face workplace conflicts more than males. The psychological contract breach and negative attitudes are said to have an undeniable association.

However, findings of the present study did not validate the results of the prior studies and showed a different pattern of female employees in relation to psychological contract breach and negative attitudes and behaviours. The study found no significance based on its t-test results. Therefore, the present study did not validate the results of the prior literature regarding psychological contract breach and gender. Therefore, the study's findings suggest further exploration regarding this relationship.

5.3 Study Contribution

There is a significant contribution of this study in relation to the effects of the psychological contract breach on job satisfaction, turnover intention and counterproductive work behaviour and also with reference to the moderating role of perceived organisational support among relationships of these constructs. The study aimed to examine the relationship of these constructs by employing social exchange theory and organisational support theory. Both the theories examine psychological contracts well but prior studies on psychological

contracts mainly relied on social exchange theory. Social exchange theory alone is not enough to examine psychological contracts (Ahmad & Zafar, 2018). The study opted for quantitative approach to meet its aim and objectives.

The present study has contributed towards concept, content and context in relation to the relationship between psychological contract breach, job satisfaction, turnover intention and moderating role of perceived organisational support with reference to social exchange theory and perceived organisational support theory. Keeping in view the contributions mentioned in the first chapter of this study, this study has made the following contributions accordingly:

The researcher assures that this study is a maiden attempt to research the effects of the psychological contract breach in terms of job satisfaction, turnover intention, counterproductive work behaviour with the moderating role of perceived organisational support by using a recommended set of theories, namely social exchange theory and organisational support theory. Therefore, this study has filled the theoretical gap through its conceptual framework.

The researcher believes that study setting is unique, where the proposed model has been tested as an evidence from academia of Pakistan. Therefore, the study has contributed to psychological contracts and perceived organisational support (as a moderator) from Pakistani context.

The researcher states that this study is a unique attempt to investigate the psychological contract breach across Pakistani higher educational institutions regarding the present constructs. The study has tested constructs such as the psychological contract breach, job satisfaction, turnover intention, counterproductive work behaviour and perceived

organisational support with the help of triangulation of social exchange theory and perceived organisational support theory.

Keeping literature review into consideration, the researcher claims that this study is a unique study that has used all the constructs' scale in relation to the conceptual framework of this study based in the Pakistani context.

In view of the literature review, the researcher believes that this study is a unique study that has used a different research method, i.e. the use of IBM AMOS with respect to the conceptual framework used in this study.

The researcher also states that this study is a unique study that has brought empirical results on the basis of the conceptual framework of this study, which are expected to be used by managers, policy makers and practitioners not only in Pakistani but also in the world's context.

Reflecting back to its research questions, objectives of this study have been met as it has empirically tested its conceptual framework and has achieved a good fit for the goodness of fit index.

5.4 Study Limitations

Although this study has made a number of useful contributions to research in relation to the study's conceptual framework and theoretical framework yet there are a number of limitations that need to be addressed. All studies have limitations even if they have rigorously been done. The study limitations are listed below:

This study has investigated effects of psychological contract breach in relation to job satisfaction, turnover intention and counterproductive work behaviour; whereas more variable/factors such as but not limited to work life balance, work-performance, employee

motivation, organisational citizenship behaviour and many others could be involved to better understand the effects of psychological contract breach in universities in Pakistan and other sectors as well.

The present study has used perceived organisational support as moderator vis-à-vis this study's conceptual framework whereas the role of a number of other moderators such as but not limited to demographics, organisational citizenship behaviour, training and development, leadership style, culture and supervisor support could also be examined herein.

The study at hand has used simple random sampling technique for data collection which is another limitation of this study. Other sampling techniques such as quota-sampling may facilitate data collection methods. The study used organisational support and social exchange theories to study effects of psychological contract breach. Use of social exchange theory with affective event theory may get a different and may be of better understanding of these effects. This study was quantitative in nature, which is a limitation of this study. A mixed method approach and/or longitudinal study could compensate this limitation.

5.5 Study Implications

Psychological contracts prove to be first perception making tool for the employees. Therefore, managers are required to understand the importance of psychological contracts and make realistic promises and meet them accordingly. Employees shall have confidence in their organisation if their psychological contract is not breach.

Therefore, first implication of this study is meant for the managers and policy makers at the universities in Pakistan. The managers and policy makers must know their role and role of psychological contract fulfilment in order to avoid breach of psychological contract of their employees and keep them have positive attitudes and behaviours. The managers and

the policy makers shall help their organisations in achieving competitive advantage and profit maximisation if they are able to retain good human resource by avoiding breach of psychological contract and providing perceived organisational support.

Second implication of this study is for managers, policy-makers should seriously understand the psychological contract breach and its negative effects so that they could know the importance of promises and their breach well to avoid negative attitudes and behaviours at the workplaces.

Third implication of this study is for the organisations, i.e. universities. The universities should better understand that they can retain the best human capital, i.e. an asset, if they do not breach psychological contract of their employees. The Pakistani organisations must make relational contracts with their employees by supporting them through all viable manners and means. Finally, managers and organisations must understand the importance of job satisfaction towards psychological contract breach and work engagement.

5.6 Future Research Directions

The present study has taken into consideration psychological contract breach in relation to job dissatisfaction, turnover intention and counterproductive work behaviour: moderating role of perceived organisational support. Prior literature shows a number of other factors and dimensions used therein. Therefore, this study recommends that future research be carried out to better understand psychological contracts and their effects on employees' attitudes and behaviours as under:

The psychological contract breach may vary from sector to sector; therefore, future researcher should investigate the effects of psychological contract breach in other sectors of Pakistan and abroad in the present context and additional contexts. Future researchers should

explore more effects of the psychological contract breach and/or fulfilment in order to understand the effects on employee-employer relationship in academia and other sectors in Pakistan and abroad.

This study has used perceived organisational support as a moderator, however, future studies should use a wide range of constructs as moderators and mediators such as but not limited to training and development, organisational citizenship behaviour, demographic factors and psychological contract fulfilment to better understand the breach and/or fulfilment of the psychological contracts in Pakistan.

This research study has investigated the psychological contract breach by using cross-sectional research design whereas future research may use mixed method research design to get better insight into such contracts and their effects on employee-employer relationship in academia and other sectors in Pakistan. The mixed method shall have both the objective and subjective insight into the respondents' response. Besides, mixed method shall compare the quantitative and qualitative research findings.

This study has investigated three effects, namely job satisfaction, turnover intention and counterproductive work behaviour. Future researchers should trace and investigate other probable effects both as the attitudes and behaviours in relation to psychological contract breach.

5.7 Conclusion

The present study proposed a conceptual framework containing the psychological contract breach as a predictor/latent/exogenous variable and job dissatisfaction, turnover intention and counter productive work behaviour as the effects, whereas perceived

organisational support was used as a moderator. The conceptually presented framework was tested in terms of the relationships by using AMOS (V.22).

Empirical results in relation to direct effects were found consistent with others studies on the psychological contract breach. Besides, the results showed a significant moderating relationship of perceived organisational support between psychological contract breach and turnover intention. However, the results confuted any moderating effects of perceived organisational support between the relationship of psychological contract breach, job dissatisfaction and counterproductive work behaviour.

The results in relation to moderation in particular and overall in general need further investigation so that the very important relationship, i.e. employee-employer relationship, be further investigated for better understanding to strengthen this relationship, which is badly needed for healthy organisational environment and behaviour that contribute to employee satisfaction and lead to employee retention, high productivity, profit maximisation and achievement of organisational goals sequentially.

This study has achieved its research objectives stated in Chapter 1 as it has successfully discussed and tested the hypothesised relationships. Exploratory factor analysis, confirmatory factor analysis and structural equation modelling analysis were performed in order to test these relationships and hypotheses. The empirical results have validated some of the hypothesised relationships, whereas some of the relationships have not been supported, which leave a gap to be investigated by future researchers in the psychological contract breach and/or fulfilment domain.

The variables used in the conceptual framework of this study have not been explored in universities and other sectors in Pakistan, leaving a sound gap in literature. Perceived

organisational support has been concluded to be a meaningful moderator between the relationships of psychological contract breach, job dissatisfaction and counterproductive work behaviour. This study contributes to the research field on psychological contracts in general and psychological contract breach in particular and has successfully handled the loopholes mentioned in the research problem of the study.

The first three hypotheses of the study were that psychological contract breach has a significant effect over job satisfaction, turnover intention and counterproductive work behaviour. Prior literature shows that psychological contract fulfilment plays an important role in employees' engagement and stops turnover. Psychological contract fulfilment intrinsically motivates employees and makes human resource management effective). Consequently, this effectively contributes towards human resource management. Psychological contract fulfilment contributes to extrinsic motivation as well because fulfilment of such contracts makes employees good organisational citizens). Psychological contracts also help employees in their decision-making process, especially with regard to leaving or staying with an organisation).

This shows that psychological contract is an important domain that serves as a good tool for human resource management. Breach of psychological contract damages an organisation in terms of human capital loss that leads to compromised efficiency, low productivity, affected performance, damaged competitive advantage and undesired profits. This thereby means that organisations are severely affected by all means if they breach the psychological contract of their employees.

The hypotheses number four, five and six were that perceived organisational support moderates the association between psychological contract breach and job satisfaction, turnover intention and counterproductive work behaviour. Interestingly, the study findings

revealed that perceived organisational support did moderate the proposed relationship; however, it did not moderate the rest of two proposed relationships. The study also showed that psychological contract breach did not have a significant effect over qualification, age and gender leaving a gap for further research these constructs and demographic factors.

This study finally holds that breach of psychological contract badly damages human motivation factor, human decision-making factor and affects human resource management. Therefore, conducting this study, in a Pakistani context in particular and the world in general, is a good attempt to explore the effects of psychological contract breach and moderation effect of perceived organisational support.

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APPENDICES

UNIVERSITI MALAYSIA SARAWAK (UNIMAS), SARAWAK, MALAYSIA

QUESTIONNAIRE



Effects of Psychological Contract Breach Among University Employees in Pakistan:

Moderating Role of Perceived Organisational Support

Dear Madam/Sir,

The objective of this survey is to investigate “Effects of Psychological Contract Breach Among University Employees in Pakistan: Moderating Role of Perceived Organisational Support.” The information obtained through this survey/questionnaire shall strictly be kept confidential and shall solely be used for this study only and NO ONE shall know your names, responses and identities.

This questionnaire consists of 6 Sections: Section-A “Psychological Contract Breach”, Section-B “Perceived Organisational Support”, Section-C “Job Satisfaction”, Section-D “Turnover Intention”, Section-E “Counterproductive Work Behaviour” and Section-F “Personal Information”.

This questionnaire will take about 20 minutes to fill it. If you agree to fill out this questionnaire for only academic purpose, kindly answer the questions (from 1-5) in Section A to Section F below by encircling each question-item. Please feel free to contact me in case of any confusion/ misunderstanding about the statements.

(RANA HUMAYUN IHSAN)

Candidate for Doctor of Philosophy

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94300 Kota Samarahan, Sarawak

Email: rananust@gmail.com

Please click the number that best describes your degree of agreement/disagreement on each statement below in all items of this questionnaire. You may click any option from options 1-5 as under:

Section A: Robinson and Morrison (2000)

Strongly Disagreed (SD)	Disagreed (D)	Neutral (N)	Agreed (A)	Strongly Agreed (SA)
1	2	3	4	5

S. No	Questions/Items	1	2	3	4	5
PCB1	Almost all of the promises made by my employer during recruitment have been fulfilled/kept so far.					
PCB2	I feel that my master/employer has come through in fulfilling the promises made to me when I was hired.					
PCB3	So far my master/employer has done an excellent job of fulfilling its promises to me.					
PCB4	I have received everything promised to me in exchange for my contributions.					
PCB5	My employer has broken many of its promises to me even though I've upheld my side of the deal					

Section B: Eisenberger et al. (1986)

S. No	Questions/Items	1	2	3	4	5
POS1	My university really cares about my well-being.					
POS2	My university shows very little concern for me.					
POS3	My university cares about my general satisfaction at work.					
POS4	Even if I did the best job possible, my university would fail to notice.					
POS5	My university takes pride in my accomplishments at work.					
POS6	My university would ignore any complaint from me.					
POS7	My university fails to appreciate any extra effort from me.					
POS8	My university values my contribution to its well-being.					

Section C: Brayfiled and Rothe (1951)

S. No	Questions/Items	1	2	3	4	5
JS1	I feel well satisfied with my present job.					
JS2	I am enthusiastic about my work mostly.					
JS3	Each day at job seems like it shall never end.					
JS4	I find real pleasure in my job.					
JS5	My job is rather unpleasant for me.					

Section D: Roodt (2004)

S. No	Questions/Items	1	2	3	4	5
TIS1	Most of the times I think to leave my job.					
TIS2	My job is satisfying in meeting my personal needs.					
TIS3	I'm often frustrated when not given an opportunity at job to achieve my work-related goals.					
TIS4	I often think of getting another job that shall better suit my personal needs.					
TIS5	I may accept another job at the same pay level if I'm offered by another university.					
TIS6	I often look forward to having another day at work.					

Section E: Spector, Bauer and Fox (2010)

S. No	Questions/Items	1	2	3	4	5
CWB1	I waste my Master's/employer's materials deliberately.					
CWB2	I complain about petty issues at work.					
CWB3	I tell people outside the job that I work for a bad university.					
CWB4	I come to job late without permission.					
CWB5	I stay home from job and say that I'm sick when I'm not.					
CWB6	I insult colleagues when not performing well.					
CWB7	I make fun of colleagues' personal life.					
CWB8	I ignore colleagues at work.					
CWB9	I start an argument with colleagues at work.					
CWB10	I insult or make fun of colleagues at work.					

Personal Information:

Please tick the option that applies to you in the following box:

Gender		Age Group	Qualification	Your Designation
☒ Male ☐ Female		☐ 20-30	☐ Bachelor/ Equivalent	1. Professor
		☐ 31-40	☐ Master/ Equivalent	2. Associate Professor
		☐ 41-50	☐ MPhil/ MS/ Equivale	3. Assistant Professor
		☐ 51-60	☐ PhD/ Equivalent	4. Lecturer
				5. Administrative / Technical Officer

Thank you for your invaluable input, cooperation and time!