



# Determinants of Employee Readiness for Organisational Change

A Thesis Submitted for the Degree of Doctor of Philosophy

By

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## PhD Abstract

Organisations are continually confronting challenges to remain competitive and successful, which compels organisations to regularly re-evaluate their strategies, structures, policies, operations, processes and culture. Managing change effectively is however a main challenge in the change management domain because of massive human involvement. Thus, managers and change agents are eager to know how to encourage and effectively prepare employees for change situation. The aim of this doctoral study was to examine the determinant of employee readiness for organisational change. The objectives were to investigate employee commitment to the organisation and career and social relationships factors in public sector higher educational institutions of Pakistan where various change reforms has been introduced recently. This empirical study proceeded by a systematic review of literature that led to development of a conceptual model. The data was collected from a sample of teaching employees by using a survey questionnaire. Data was analysed using descriptive statistics and exploratory factor analysis run on statistical package for social sciences and confirmatory factor analysis on the structural equation modelling as well as on applied analysis of moment structure to assess the model fit of the study and hypotheses testing. Results showed that independent variables (emotional attachment, feeling of pride, pay/wages/rewards, promotion, job satisfaction, job involvement and social relationships in the workplace) were positively and significantly correlated to the dependent variable (readiness for organisational change). However, two variables i.e. supervisor and peer relations, and training and skills development were not found positive and significant to the readiness for organisational change. This study has methodological limitations, as it is a cross sectional study that used a survey questionnaire only in public sector higher education sector. This study provides empirical evidence for employee readiness predictor variables for organisational change. This study may contribute to the literature on change management, particularly for Pakistan, and may assist the management, change agents and practitioners of human resources management and development, and organisational behaviour in assessing, designing and evaluating new or existing programmes for organisational change.

**KEYWORDS:** organisational change, employee readiness, organisational commitment, career commitment, social relationships in the workplace.

## **Dedication**

This doctoral research effort is dedicated to my parents and my two elder brothers I never had the opportunity to know and understand due to circumstances beyond our control – may you rest in eternal peace

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## **Declarations**

This is to declare that:

- I am responsible for the work submitted in this thesis
- This work has written by me
- All verbatim extract have been distinguished and the sources specifically acknowledged
- During the preparation of this thesis, some papers were prepared as listed below.  
The remaining parts of the thesis have not yet been published.

- 1) Shah, N., and Irani, Z. (2009) *“Impact of Employees Psychological and Financial Predictors for Readiness to Organisational Change”*, European and Mediterranean Conference on Information Systems (EMCIS 2009), Izmir, Turkey, (CD-Proceedings).
  - 2) Shah, N. and Irani, Z. (2009) *“Investigating Employee Attitudes and Beliefs Using Commitment and Situational Factors”*, International Journal of Logistics System and Management (Paper Accepted).
  - 3) Shah, N., Irani, Z., and Shah, S. (2009) *“Measurement of Job Satisfaction of Employee Readiness for Organisational Change in the Public Sector Organisation”*, Human Relations (Paper Submitted).
  - 4) Shah, N., Irani, Z., and Shah, S. (2009) *“Readiness for Organisational Change: The Impact of Employees Affective and Individual Commitment”*, International Journal of Human Resources Management, (Paper Submitted).
  - 5) Shah, N., Irani, Z., and Shah, S. (2009) *“An Examination of the Career Commitment Antecedents of Employee Readiness for organisational Change”*, Journal of Organisational Change Management (Paper Submitted)
- This work has not been submitted within a degree programme at this or any other institutions.

**Signature:** -----

**Date:** -----

## Table of Contents

<b>PhD Abstract</b>	<b>i</b>
Dedication	ii
Acknowledgement	iii
Declarations	iv
Table of Contents	v
List of Appendices	ix
List of Figures	x
List of Graphs	xi
List of Tables	xii
List of Abbreviations	xiv
<b>Chapter One Introduction</b>	<b>1</b>
1.1 Introduction	1
1.2 Background and Scope of the Study	2
1.3 Aim and Objectives of the Study	4
1.4 The Context and the Respondent Base of the Study	4
1.5 Methodology and Methods Used	7
1.6 Contribution of the Study	11
1.7 Structure of the Thesis	13
<b>Chapter Two Literature Review</b>	<b>15</b>
2.1 Introduction	15
2.2 Organisational Change: An Overview	15
2.3 The Role of Employee in Organisational Change	18
2.3.1 Employee Readiness	21
2.3.2 Employee Resistance	27
2.4 Employee Readiness Studies in Organisational Change	28
2.5 The Notion of Commitment	36
2.5.1 Employee Commitment to the Organisation	37
2.5.2 Employee Career Commitment	39
2.6 Social Relationships in the Workplace	40
2.7 Gap in the Research	41
2.8 Conclusion	42

<b>Chapter Three</b>	<b>Setting of the Study</b> .....	<b>44</b>
3.1	Introduction .....	44
3.2	Pakistan: General Background.....	44
3.3	Structure of National Education System .....	45
3.3.1	National System of Higher Education .....	47
3.4	The Academic Hierarchy .....	48
3.5	Challenges for Higher Education .....	49
3.6	The Reforms in the Higher Education Sector .....	52
3.7	Conclusion .....	54
<b>Chapter Four</b>	<b>Conceptual Framework</b> .....	<b>56</b>
4.1	Introduction .....	56
4.2	Organisational Change and its Impacts on Employee .....	57
4.3	Conceptual Approach.....	59
4.4	Theoretical Framework .....	66
4.5	Commitment and its Impact on Employee.....	69
4.5.1	Employee Commitment to the Organisation .....	70
4.5.1.1	Affective Commitment.....	73
4.5.1.2	Instrumental Commitment.....	74
4.5.2	Employee Career Commitment .....	75
4.5.2.1	Individual Commitment .....	78
4.5.2.2	Situational Commitment.....	80
4.6	Social Relationships in the Workplace .....	80
4.7	Demography .....	81
4.8	Conclusion .....	81
<b>Chapter Five</b>	<b>Research Methodology</b> .....	<b>83</b>
5.1	Introduction .....	83
5.2	Research Philosophy .....	83
5.2.1	Research Approach Adopted for this Study .....	88
5.2.2	Justification for Quantitative Approach.....	89
5.2.3	Rationale for Quantitative Approach.....	90
5.3	Research Design.....	95
5.4	Research Instrument and Measurement Scale.....	99
5.4.1	Developing a Survey Questionnaire .....	99

5.4.2	Measurement Scales .....	104
5.4.2.1	Independent Variables .....	104
5.4.2.2	Dependent Variable .....	106
5.4.3	Data Triangulation .....	107
5.5	Pilot Study.....	108
5.6	Research Protocol.....	108
5.7	Planned Research Study Schedule .....	109
5.8	Reliability and Validity .....	110
5.9	Main Study .....	111
5.9.1	Population and Sampling .....	112
5.9.1.1	Targeted Samples .....	112
5.9.2	Data Collection Procedure .....	113
5.9.3	Data Coding, Cleaning and Entry .....	114
5.10	Data Analysis Techniques and Statistical Packages .....	114
5.10.1	Exploratory Factor Analysis and Reliability Assessment .....	115
5.10.2	Confirmatory Factor Analysis and Scale Validity .....	117
5.10.2.1	Scale validity.....	118
5.10.3	Structural Equation Modelling and Assessment of Model Fit.....	119
5.10.4	Hypotheses Testing.....	122
5.11	Ethical Consideration .....	124
5.12	Conclusion .....	125
<b>Chapter Six Pilot Study.....</b>		<b>126</b>
6.1	Introduction .....	126
6.2	Research Protocol.....	126
6.2.1	Introduction.....	126
6.2.2	Aim and Objectives .....	127
6.2.3	Hypotheses.....	127
6.2.4	Study Setting.....	128
6.2.5	Sample size .....	129
6.2.6	Research Methods and Design.....	129
6.2.7	Data Analysis.....	130
6.3	Pilot Study Methodology .....	130
6.4	Pilot Study Results and Data Analysis.....	131
6.4.1	Demographic details .....	131



6.4.2	Descriptive Statistics.....	133
6.4.3	Reliability.....	133
6.4.4	Pearson’s Correlations Analysis .....	133
6.5	Discussion .....	134
6.5.1	Employee Commitment to the Organisation .....	135
6.5.2	Employee Commitment to the Career .....	135
6.5.3	Social Relationships in the Workplace .....	136
6.6	Participants Comments on the Survey Questionnaire.....	136
6.7	Conclusion .....	137
<b>Chapter Seven Main Study Analysis and Findings .....</b>		<b>138</b>
7.1	Introduction.....	138
7.2	Data Management .....	138
7.3	Data Screening Prior to Analysis .....	139
7.3.1	Missing Data.....	140
7.3.2	Outliers.....	140
7.3.3	Normality, Linearity and Homoscedasticity .....	143
7.3.2.1	Normality.....	143
7.3.2.2	Linearity .....	146
7.3.2.3	Homoscedasticity .....	148
7.4	Demographic Characteristics and Relationships.....	150
7.5	Factor Loading and Data Analysis.....	154
7.5.1	Exploratory Factor Analysis .....	155
7.5.1.1	Eigenvalue .....	156
7.5.1.2	Scree Plot.....	159
7.5.2	Confirmatory Factor Analysis and Measurement Models.....	155
7.5.2.1	Discriminant Validity .....	173
7.5.3	Assessment of Model Fit .....	174
7.6	Hypotheses Testing .....	175
7.7	Conclusion .....	182
<b>Chapter Eight Discussion .....</b>		<b>184</b>
8.1	Introduction.....	184
8.2	Population and Sample Issue .....	184
8.3	Measurement Scale Purification .....	186

8.4	Determinants of Readiness for Organisational Change: Effects of Employee Commitment to the Organisation.....	188
8.5	Determinants of Readiness for Organisational Change: Effects of Employee Career Commitment.....	191
8.6	Social Relationships in the Workplace: A Determinant of Readiness for Organisational Change .....	197
8.7	Conclusion .....	198
<b>Chapter Nine Conclusions.....</b>		<b>199</b>
9.1	Introduction .....	199
9.2	Research Implications .....	200
9.2.1	Theoretical Implications .....	200
9.2.2	Practical Implications .....	202
9.2.3	Methodological Implications .....	204
9.3	Research Limitations.....	206
9.3.1	Theoretical Limitations.....	206
9.3.2	Methodological Limitations.....	207
9.4	Future Research Avenue .....	208
<b>References .....</b>		<b>211</b>

### List of Appendices

Appendix 1	Survey Questionnaire .....	239
Appendix 2	Covering Letter .....	244
Appendix 3	Research Consent Form .....	245
Appendix 4	Survey Questionnaire Coding and labelling .....	246
Appendix 5	Survey Questionnaire Coding and labelling .....	249
Appendix 6	Univariate Statistics .....	250

## List of Figures

Figure 2.1	Organisation Change Nomenclature .....	20
Figure 2.2	Employee Organisational and Career Commitment Factors.....	26
Figure 3.1	Academic Hierarchy of Public Sector Universities .....	49
Figure 4.1	Conceptual Framework .....	62
Figure 5.1	Deductive and Inductive Reasoning in Research.....	86
Figure 5.2	Research Design.....	97
Figure 7.1	Model .....	177

## List of Graphs

Graph 7.1	Inbox Plot.....	142
Graph 7.2	Scree Plot .....	159

## List of Tables

Table 2.1	Classification of Employee Readiness Factors .....	23
Table 2.2	Literature Review .....	29
Table 3.1	Structure of National Education System .....	46
Table 4.1	Change Message Factors.....	67
Table 4.2	Maslow’s Hierarchy Need Theory Factors .....	68
Table 4.3	Maslow’s Hierarchy of Need Level Compared to Employee’s Needs .....	69
Table 5.1	Summary of Philosophical Stance of Research Approach.....	85
Table 5.2	Key Features of Positivist and Phenomenological Paradigms.....	87
Table 5.3	Two Tradition of Social Science.....	88
Table 5.4	Readiness Studies.....	93
Table 5.5	Survey Questionnaire Items Relations with the Hypotheses and Variables . .....	103
Table 5.6	Purpose of the Pilot Survey.....	108
Table 5.7	Time Schedule for the Research Study .....	109
Table 6.1	Demographic Characteristics of Participants.....	132
Table 6.2	Coefficient Alpha and Correlations of Scales for Pilot Study .....	134
Table 7.1	Univariate and Multivariate Outliers Results.....	143
Table 7.2	Descriptive Statistics.....	145
Table 7.3	Tests of Normality.....	146
Table 7.4	Pearson’s Correlations .....	147
Table 7.5	Test of Homogeneity of Variances .....	148
Table 7.6	Demographic Characteristics of Participants.....	151
Table 7.7	Demographic Multi Analysis of Variances (MANOVA).....	153
Table 7.8	Communalities .....	156
Table 7.9	Total Variance Explained.....	157
Table 7.10	Factor Loading .....	158
Table 7.11	Factor Loading and Cronbach’s Alpha of Employee Readiness for Organisational Change Scale .....	161
Table 7.12	Factor Loading and Cronbach’s Alpha of Employee Commitment to the Organisation Scale .....	162
Table 7.13	Factor Loading and Cronbach’s Alpha of Employee Commitment to Career Scale .....	164
Table 7.14	Factor Loading and Cronbach’s Alpha of Social Relationships in the Workplace Scale.....	165

Table 7.15	Measurement Model of Employee Commitment to the Organisation Variables .....	167
Table 7.16	Convergent Validity of Employee Commitment to the Organisation Variables .....	167
Table 7.17	Internal Consistency of Employee Commitment to the Organisation Variables .....	168
Table 7.18	Measurement Model of Employee Commitment to the Career Variables.... .....	168
Table 7.19	Convergent Validity of Employee Career Commitment Variables .....	169
Table 7.20	Internal Consistency of Employees' Career Commitment Variables .....	170
Table 7.21	Measurement Model of Social Relationships in the Workplace Variable .... .....	170
Table 7.22	Convergent Validity of Social Relationships in the Workplace Variable..... .....	171
Table 7.23	Internal Consistency of Social Relationships in the Workplace Variable .... .....	171
Table 7.24	Measurement Model of Readiness for Organisational Change Variable	172
Table 7.25	Convergent Validity of Readiness for Organisational Change Variable	172
Table 7.26	Internal Consistency of Readiness for Organisational Change Variable	173
Table 7.27	Discriminant Validity.....	174
Table 7.28	Model Fit Indicators .....	175
Table 7.29	Regression Weights.....	178
Table 7.30	Summary of Results of Hypotheses Testing .....	182

## **List of Abbreviations**

AGFI	Adjusted Goodness of Fit Index
AJK	Azad Jammu and Kashmir
AMOS	Analysis of Moment Structure
BE	Bachelor of Engineering
BC	British Council
BTS	Barlett Test of Sphericity
CR	Critical Ratio
CACO	Career Commitment
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CM	Change Management
CV	Convergent validity
df	Degree of Freedom
DV	Discriminant validity
EFA	Exploratory Factor Analysis
EMAT	Emotional Attachment
FANA	Federal Administered Northern Area
FATA	Federal Administered Tribal Areas
FOPR	Feeling of pride
FRBE	Fringe Benefits
GDP	Gross Domestic Product
GFI	Goodness of Fit Index
GoP	Government of Pakistan
GNI	Gross National Income
HEC	Higher Education Commission
HEL	Higher Education Level
HRM	Human Resource Management
HSSC	Higher Secondary School Certificate
JOIN	Job Involvement
JOSA	Job Satisfaction

M	Mean
MANOVA	Multi Analysis of Variances
MBBS	Bachelor in Medicine and Bachelor in Surgery
ML	Maximum Likelihood
MPhil	Master of Philosophy
MS	Marital Status
MSc	Master of Sciences
MSA	Measure of Sample Adequacy
MTDF	Medium Term Development Framework
N	Number of Participants
ND	Number of Dependents
NFI	Normated Fit Index
NNFI	Non Normated Fit Index
NWFP	North West Frontier Province
OC	Organisational Change
OD	Organisational Development
PAWA	Pay/wages/Rewards
Ph.D	Doctor of Philosophy
PMTN	Promotion
PSO	Personal sense of obligation
RMSEA	Root Mean Square Error Approximation
ROCH	Readiness to organisational change
SE	Standard Error
SEM	Structural Equation Modelling
Sig.	Significant
SMC	Squared Multiple Correlations
SORE	Social Relationships in the Workplace
SPRE	Supervisor and Peer Relations
SPSS	Statistical Package for Social Sciences
SSC	Secondary School Certificate
TNRE	Tenure
TSDE	Training and Skills Development



TTS	Tenure Track System
UGC	University Grants Commission
UK	United Kingdom
USA	United States of America
VIF	Variance Inflation Factor
YPE	Years with present employer
$\alpha$	Cronbach's alpha
$\rho$	Composite Reliability
$\chi^2$	Chi square

# **Chapter One Introduction**

## **1.1 Introduction**

This chapter provides a brief outline of the overall study. This doctoral study is concerned to identify the determinants of employee readiness predictor variables for organisational change. In today's increasingly dynamic technological and communications networked environment, organisations are continually confronting challenges such as competition, development, general instability, mergers and reengineering of work processes. These forces challenge organisations to re-evaluate their strategies, structure, policies, operations, processes, and culture. In this situation, organisational change (OC) is unavoidable. Of great importance is the fact that humans have different individual life experiences, motivational levels, socio-demographic characteristics, knowledge, attitudes, support systems, values, and behavioural patterns which might involve painful learning and relearning and can create feelings of uneasiness and tension among employees. Thus, researchers and practitioners need to know as much as possible about employee readiness predictors so that management can endeavour to understand an individual's attitudes, beliefs and behaviours towards organisational change.

This research empirically investigates the relationships of employee commitment and social relationship factors with employee readiness for organisational change in public sector higher educational institutions in Pakistan. A brief description of the background and scope of the study is provided in this chapter, followed by the aim and objectives of the study. This chapter explains the context and the respondent base of the study, methodology and methods used, the contribution of the study, and finally, the structure of the thesis.

## **1.2 Background and Scope of the Study**

Change in organisation usually affects employee attitudes, behaviours and beliefs because of transferring a situation from the known to the unknown. This particular situation can develop uncertainty, strain and anxiety among employees. Thus, domain experts and researchers are concerned with how to deal with employees within organisations so that they can actively accept and become involved in change programmes. A review of the literature undertaken by this researcher has revealed that an individual's attitudes, beliefs, behaviours and response to organisational change are influenced by employee readiness factors (Armenakis *et al.*, 1993; Bernerth, 2004; Madsen *et al.*, 2005). These factors may be related to individual's psychological and financial predictors (Alvi and Ahmed, 1987; Chang, 1999; Goulet and Singh, 2002).

In fact, relationships between employee and employer develop on the basis of the work environment and mutual exchanges that can galvanise the individual to utilise his or her abilities, efforts, experiences and skills. The work environment may support an employee's developing commitment with the organisation because he or she sees the possibility of accomplishing their desires, needs and future expectations. By achieving these desires and needs, an employee can accept or identify with the organisation's goals and values. In addition, an employee can develop positive attitudes and behaviours when he or she understands the need for action. Accordingly, researchers and experts are interested to explore the factors which support employees for developing attitudes and behaviour for organisational change (Goulet and Singh, 2002; Yoon and Thye, 2002; Madsen *et al.*, 2005). This would be possible by analysing the factors related to an individual's commitment to the organisation and career. These factors are mostly applied to understand an individual's cognitive level towards the organisation (Goulet and Singh, 2002; Penely and Gould, 1998). On the basis of this conceptualisation, this research study has been developed on employee commitment to the organisation and career predictor variables which follow an individual's psychological and financial needs. According to Galais and Moser (2009) commitment to the organisation may be a way of satisfying a need for belonging and identifying. By applying this approach, management can encourage positive thoughts and feelings

among employees towards the organisation and their career which may support effective and successful change implementation.

The main focus of this study is on employee commitment to their organisation and career and social relationships in the workplace factors which are related to employee attitudes and behaviours (Goulet and Singh, 2002; Yoon and Thye, 2002; Madsen *et al.*, 2005). The literature on change management reveals that Madsen *et al.* (2005) were the first to examine the predictors of employee commitment to an organisation and found it to be positively and significantly related to readiness for organisational change. However, employees can develop positive feelings and thoughts on the basis of the employee career commitment as well. If an employee is satisfied with his or her career he or she will tend to show positive thoughts and feelings for changes in an organisation. In career development, employees always look to organisational support regarding the psychological and financial variables that may strengthen their future career.

This study was conducted in public sector higher educational institutions of Pakistan where the government of Pakistan has recently announced education reforms for the faculty members (Shami and Hussain, 2005; Siddiqui, 2006). Indeed, Pakistan is struggling with high inflation, low growth, corruption, politicisation, increased population, economic instability, repeated military intervention, gender relations, ethnicity, religion, and growth of media, industrialisation and decentralisation (Nadvi and Robinson, 2004). According to Alvi and Ahmed (1987) and Chang (1999) employees can develop their positive attitudes and behaviours through psychological and financial factors and these factors may be found to be important for individuals of Pakistan. Thus, these factors require employee attitudes and behaviours in the context of Pakistan to be examined, where the readiness predictors for change may be influenced by different socio-economic, political, religious and cultural factors (Fatima, 2002). This study is proposed to examine the employee commitment to the organisation and career and social relationships factor for employee attitudes and behaviours in the public sector higher educational institutions in Pakistan. The rationale for the proposed study is that recent organisational changes have been introduced in academic institutions

especially in public sector universities across the country and there has been resistance from employees.

### **1.3 Aim and Objectives of the Study**

Given the importance of employee readiness for organisational change, it is important to investigate further readiness determinants. The primary aim of this study is to develop a conceptual framework that explains how employees of public sector institutions of Pakistan develop their positive attitudes and behaviours regarding organisational change. The research aim is to investigate employee readiness determinants for organisational change. This doctoral study has three main research objectives.

1. To examine the relationship of employee commitment to the organisation, career and social relationships factors to readiness for organisational change.
2. To test the conceptual framework in Pakistan that will help the researcher to examine the external validity of western developed theories.
3. To examine employee commitment and social relationships predictor variables in higher educational institutions where change has been announced recently for the faculty members of the institutions in Pakistan.

### **1.4 The Context and the Respondent Base of the Study**

Much like business organisations, educational systems are affected by steadily increasing rates of technological, administrative and social change (Rosenblatt and Inbal, 1999). After World War II higher education institutions developed a unique position because of highly complex economic, social, political, and environmental challenges. To address these challenges, higher education institutions became more complex organisations through which these challenges can be met by teaching, research, and services functions performed by staff, faculty, and students. To become effective and successful, these institutions need to change in order to cope with these challenges.

Potentially society needs higher education for its development because learning is a process of development of the mind. To achieve the desired results the main focus has been laid on faculty who can perform effectively in higher educational institutions. These institutions desire loyal, knowledgeable, creative and enthusiastic faculty members to fulfil current needs. Faculty requires a broad set of skills, knowledge, teaching skills, and research in the field as well as relevant administrative and social skills. By developing these multi-skill approaches the faculty can potentially enrich students and contribute to social, economical, and development factors.

But due to increasing trends of computerisation, deregulation, and social integration which affect the nature of the teaching job, bringing to the front the need for new and innovative educational methodologies, including the need for teachers to integrate diverse bodies of knowledge, higher educational institutions are facing enormous challenges today (Salomon, 1993). These challenges require continuous and constant changes to improve the performance of educational institutions. To enhance the performance of institutions and growing professional stability within faculties, educational institutions have introduced career development strategies. These strategies are mostly concerned with faculty development programmes which can directly affect teaching and learning, promote scholarship and academic success, develop leaders and innovators, and influence the culture in which they work. Faculty development is to promote teaching as a scholarly activity and to create an educational climate that encourages and rewards educational leadership, innovation and excellence. In this regard researchers and practitioners have mainly focused on faculty development in respect of other organisational components due to enhancing the capacity of faculty to satisfactorily perform complex duties and to solve society's problems (Kopelman, 1985; Salomon, 1993).

Faculty development efforts are designed to facilitate faculty members' commitment to and ability to achieve both their own goals and their institution's goal. An effective faculty development programme will simultaneously and continuously attend to all the aspects that impact on the success of the faculty including faculty members' goals, the institution's goals and individual ability levels together with the institution's features

that inhibit or facilitate faculty members' ability to achieve their goals and collectively, the institutions. Faculty development literature consists of work commitment, motivation, performance, productivity, stress, satisfaction, turnover, and attitude (Shirom, 1994; Kopelman, 1985).

The ability of faculty to perform effectively depends upon his or her expectations when change is expected. During the change they may evaluate the situation in the light of their own needs, expectations, success probability, outcomes, and change behaviour in a given environment to adopt new changes. Researchers and practitioners are confused about the success of change because employees are in a continuous state of change. They can not anticipate human attitudes, behaviours and expectations which fluctuate from hour to hour and sometimes from moment to moment (Davis, 1979). They try to become aware of new possibilities every day. Each of these possibilities is assumed to have associated with it an approach or avoidance tendency and that choice is determined primarily by the faculty member's perceptions of the success and payoff associated with each tendency. Faculty members always assess the probability of success and the probability of payoffs, which brings a healthy scepticism to the situation.

This study is based on a conceptual framework that has been developed on the basis of employee need and expectation theory. More specifically, this research is investigating employee attitudes and behaviours in public sector higher educational institutions of Pakistan. There are no consistent links between overall human developments, wealth, gender, or education in the region, but many interlinked factors such as politics, culture, and governmental structures which affect each other. In order to transform Pakistan from an agriculture based economy to a knowledge economy, specific programmes (faculty development, improving access, promoting excellence in learning and research) particularly in higher education have been introduced as priority national programmes (Shami and Hussain, 2005; Siddiqui, 2006). In recent reforms, the main focus has been on faculty development (Mughal and Manzoor, 1999). Under the faculty development programme, faculty member grades were enhanced one step ahead of other government employees. For the promotion to the next grade, higher degrees such as Master of Philosophy (MPhil) or Doctor of Philosophy (PhD) and research publications are

compulsory. Furthermore, a tenure tracking system (TTS) was introduced which looks at faculty appointments and promotions. In this reform appointment of faculty will be on a contract basis and the evaluation process has also been changed which affects the relationships between faculty and management (this is discussed in the next chapter). This study seeks to investigate the employee commitment and social relationship factors based on these changes, in which the researcher attempts to understand employee attitudes and behaviours. In this regard a conceptual model has been developed to show the relationships of employee commitment to the organisation and career and social relationships in the workplace to the readiness for organisational change.

For this study, only public sector universities from all over Pakistan were included. The population included full time teaching employees including all categories of faculty members such that professors, associate professors, assistant professors, and lecturers. The targeted participants (n=518) of the main survey were faculty members, for which full information was obtained from the web site of the Higher Education Commission (HEC) of Pakistan and individual university web sites which were selected for this study. The researcher started the procedure by contacting a randomly selected sample of population to establish their willingness to participate in the research study and any queries regarding the instrument and privacy. After getting consent from the participants, a survey questionnaire containing a copy of the questionnaire and a covering letter prepared by the supervisors of the study were handed over either on personal visits or sent by post or email. Addresses and contact numbers of the participants were obtained from the higher education commission web site and from the respective university web sites or personal visits to universities. After two weeks the researcher contacted the participants reminding them to provide a response. Three reminders were issued. However, after sixty days or a third reminder, participants who did not respond were excluded from the study.

## **1.5 Methodology and Methods Used**

The aim of this research is to examine employee readiness predictor variables to understand the attitudes and behaviours towards organisational change in Pakistan. This



research study has been developed on the basis of a literature review and conceptual approach. With the support of a conceptual approach, hypotheses have been developed in relation to independent and dependent variables. The procedure adopted for this research followed a quantitative approach for data collection and analysis. According to Gilbert (2001, p-19), the positivism paradigm uses deduction, beginning with hypotheses. Hussey and Hussey (1997, p-55) suggested that the normal process under a positivistic paradigm is to study the literature to establish an appropriate theory and construct hypotheses. There are certain reasons for adopting a quantitative approach to data collection from the workplace. First, this study is going to measure the relationships between the variables. Second, the ontological position suggests the realist position. Third, the epistemology position allows independent observable facts. The fourth assumption is human nature in relation to environment. Finally, there are the methodological issues relating to measurement and identification of underlying themes.

Burrell and Morgan (1979, p-5) revealed that quantitative research seeks to explain and predict what happens in the social world by searching for patterns and causal relationships between its constituent elements. This method is more suitable when the object of the research is to gather data related to the frequency of occurrence of phenomena. According to Gilbert (2001, p-32), the aim is to develop valid and reliable ways of collecting “facts” about society, which can then be statistically analysed in order to produce explanations about how the social world operates.

Thus, this method can be applied to gain understanding of human attitudes and behaviours regarding information about people through objective values. This research is predominantly quantitative to collect data and test theories. Due to its descriptive nature, it adopts a quantitative approach and uses a survey method to gather data (Churchill, 1979).

The literature reveals that many well known researchers have adopted quantitative methods to collect data in change management domain to understand individual attitudes and behaviours. In this connection, Hanpachern *et al.* (1998) found the factors related to margin in life and demographic factors with readiness for organisational

change. By getting 131 survey questionnaires from a manufacturing company in the United States of America (USA), they found significant impact of job knowledge and skills, social relations in the workplace, organisational culture, and management leadership relationships to employee readiness. Cunningham *et al.* (2002) examined logistical and occupational risks of change, the ability to cope with change and to solve job related problems, social support; active vs. passive job constructs to influence readiness for change in healthcare organisations. In Canada, Madsen *et al.* (2005) were the first to describe significant relationships between employee readiness, organisational commitment and social relationships in the workplace. By applying survey questionnaire in four profit-oriented companies from northern Utah, Canada, Miller *et al.* (2006) focused on employee readiness for change by examining three workplace factors-management and leader relationships, job knowledge and skills, and job demands and found a significant influence on employee readiness for change. Rafferty and Simons (2006) focused on the factors that make readiness for two types of change like corporate transformation and fine-tuning. A recent research study conducted by Holt *et al.* (2007) received 464 questionnaire surveys from full-time employees in public and private companies in northern Utah. Researchers found that readiness for change is influenced by employees' beliefs of self-efficacy, appropriateness, management support, and personal valence.

The above literature reveals that employees and management have always needed to know the attitudes and behaviours regarding organisational change. By understanding the objectives, the majority of researchers have applied a positivist approach through survey questionnaires. Survey questionnaires can provide insight into individual perception and attitudes as well as organisational policies and practices (Baruch and Holtom, 2008, p-1140). According to Chen (2005, p-153) attitude measurement often involves asking respondents not just what they feel about a particular object, but what they believe about it. In positivist methodology, survey questionnaires use Likert scaling to measure the attitudes of individuals (Miller and Brewer, 2003) because the reliability of Likert scales tends to be good and partly because of the greater range of answers permitted to respondents (Oppenheim, 1992, p-200).

In this study, the researcher sought to examine employee commitment to the organisation and career predictors which are related to employee attitudes and behaviours towards his or her organisation and their vocation. The researcher applied a quantitative approach which is one of the major approaches in business and social sciences research methodology. This design is intended to enhance understanding of human attitudes, behaviours, and beliefs during change programmes. A quantitative approach focuses on what, where and when (Collis and Hussey 2003). Thus, this doctoral study addresses the following questions.

1. What impact does the employee commitment to the organisation factor have on employee readiness for organisational changes?
2. What impact does employee career commitment factor have on employee readiness for organisational changes?
3. What impact do employee's social relationships in the workplace have on readiness for organisational changes?

The analysis of data for the main study consists of three major stages. In the first stage, the content and the relevance of the multi-item scales were refined on the basis of quantitative data gathered from the different sample populations. In the second, scales were validated using confirmatory factor analysis (CFA) via structural equation modelling (SEM). Lastly, hypotheses were tested using analysis of moment structure (AMOS) 16.0 version software in structural equation model.

Before conducting the main study, a pilot study was conducted to establish the reliability of multi-item scale development. A Cronbach's coefficient alpha ( $\alpha$ ) was applied to check the reliability of scales in the pilot study (Carmines and Zeller, 1979; Peter, 1979; Tabachnick and Fidell, 2007). In addition, the face validity of survey questionnaires was carried out through field experts. In this connection, a few surveys were sent to university professors to confirm the face validity. Moreover, for the main study survey questionnaire reliability and validity was assessed by applying exploratory factor analysis followed by confirmatory factor analysis. In order to assess the validity of scale, a confirmatory factor analysis was performed on the main survey data before

structural model testing (Diamantopoulos and Siguaw, 2000; Anderson and Gerbing, 1988; Hair *et al.*, 2006). However, the construct validity of the questionnaire was assessed by composite validity, Cronbach's alpha's reliability, and average variance extraction methods. Finally, the relationship between the constructs was tested by an analysis of moment structure via structural equation modelling.

Missing data, descriptive statistics, outlier examination, linearity test, normality of data, homoscedasticity, exploratory factor analysis and reliability analysis tests were dealt with using statistical package for social sciences (SPSS) 15.0 version for windows (Tabachnick and Fidell, 2007; Hair *et al.*, 2006). However, an analysis of moment structure (AMOS) 16.0 versions software was used to perform both the confirmatory factor analysis and the structural model testing (Hair *et al.*, 2006).

## **1.6 Contribution of the Study**

The contribution of this study is based on the development of a comprehensive theoretical framework that examines the factors that influence the individual attitudes and behaviours for organisational change in public sector higher educational institutions of Pakistan. To the best knowledge of the author, this is the first time such a theoretical framework has been tested empirically and theoretically. Previous studies that have been conducted in the area of employee readiness for organisational change did not focus on the employee career commitment factors and failed to develop the relationship with employee readiness for change. This study establishes an integrative theoretical framework that combines a set of factors of employee commitment that influence the employee positive attitudes and behaviours. The aim of this study was to investigate employee readiness predictor variables for developing positive attitudes and behaviours to organisational change. Several other contributions emerged from this research.

First, one of the distinctive contributions is the development of an integrated model based on Maslow's hierarchical need theory and Armenakis five key message components of employee readiness for organisational change. In the present study, an integrative model was developed that combines factors associated with employee

commitment to the organisation and career and social relationships in the workplace. These are emotional attachment, feeling of pride, personal sense of obligation, pay/wages/rewards, promotion, career commitment, job satisfaction, job involvement, supervisor and peer relations, training and skills development, social relationships in the workplace. Most previous studies have focused on the psychological, workplace, environmental, cultural and social factors and ignored other potential individual development factors. This is first study to the best knowledge of the researcher, that combines both psychological and financial factors that are relevant to individual factors.

Second, another contribution to knowledge is that it is the first study of its nature based on valuable data from Pakistan. In addition, the study contributed to the limited so far knowledge on how employees from Pakistan develop their attitudes and behaviours for organisational change. The conceptual framework was developed on the basis of employee attitudes, beliefs, and behaviours that can be developed by satisfying basic needs such that psychological and financial.

Third, in the literature it was found that most prior studies were conducted in organisations other than higher educational institutions. In this study, data was collected from the employees of public sector higher education institutions of Pakistan. This is the first such study reported in Pakistan's higher education institutions. The sample consisted of thirty three public sector universities from all over Pakistan out of an overall number of seventy eight. The sample is regarded as a good representation of public sector institutions of Pakistan.

Fourth, a strong point of the research relates to the fact that it brings empirical evidence from a relatively new cultural context taking into account that most of the preview studies have taken place in USA, Canada, UK and Australia. This is the first study reported on employee readiness for organisational change in the Pakistan context. This is significant in permitting a test of the wider validity of findings derived from research conducted in developed economies.

Finally, the results show that personal attributes are affecting the employee attitudes and behaviours to readiness for organisational change. This finding is a key contribution for a country like Pakistan. Although we could expect to find that personal attributes of employee would be influenced in developing attitudes and behaviours for organisational change, the findings have shown that external environment matters more for the attitudes and behaviours of Pakistani employees.

## **1.7 Structure of the Thesis**

This thesis has eight chapters along with references and appendices. The outlines are as follows:

**Chapter 1 Introduction** - The first chapter discusses the background and scope of the study, aims and objectives, the context and the respondent base of the study. It continues by presenting the methodology and methods adopted and contribution of the study.

**Chapter 2 Literature Review** – This chapter reviews existing literature on organisational change, the role of the employee in organisational change, employee readiness and resistance, employee commitment to the organisation and career commitment and social relationships in the workplace. It reveals extant studies in disciplines such as change management, organisational behaviour, and organisational development. Past studies on employee readiness predictors are then reviewed. Finally, a gap in the research is identified and discussed.

**Chapter 3 Conceptual Framework** – The construct of this chapter is to develop research hypotheses to examine employees' readiness predictors for organisational change. To address the hypotheses effectively, the researcher reviews and integrates subject areas such that organisational change and its impact on an individual employee, conceptual approach, theoretical frameworks, employees' commitment to the organisation and career, social relationships in the workplace and demography. This leads to the clarification of the research area and development of a conceptual approach

and a theoretical framework.

**Chapter 4 Research Methodology** – This includes a detailed discussion of the empirical research methodology including data collection and data analysis procedure. The data collection section is described in five parts as (a) data collection (b) sample selection and participation (c) developing the survey questionnaire (d) measurement scales and (e) pilot study. After that reliability and validity are discussed to justify the data. The chapter also discuss what kind of data is required to examine the variables. Then, data analysis processes and statistical techniques are selected to analyse the data. Finally, the research ethical issues are discussed to ensure the data is unbiased and can support generalisability. Conclusions are presented in this chapter.

**Chapter 5 Pilot Study** – This chapter present the pilot study analysis and the findings. It consists of the research protocol, pilot study methodology, pilot study results and data analysis; discussion, participants' comments on the survey questionnaire. Finally, conclusions and suggestions are presented.

**Chapter 6 Main Study Analysis and Findings** – This chapter presents the analysis and findings of the main survey. The chapter begins with data management, data screening, demographic characteristics, factor loading, exploratory factor analysis, and assessment of model fit. The chapter ends by showing the outcomes of hypotheses testing

**Chapter 7 Discussion** – The structure of this chapter is as follows. First, the population and sample issues, second, the results of scale purification are presented. Third, the findings of all hypotheses testing are reviewed and compared with past research. Finally, the results of social relationships in the workplace to readiness for organisational change are discussed.

**Chapter 8 Conclusions** – This chapter summarises the results of this study and the thesis. It discusses first the theoretical contribution of the thesis in terms of gaps in the research. Second, the managerial implications of the study's findings are described. This is followed by a discussion of the methodological and theoretical limitations of the research. Finally, future research directions are suggested.

## **Chapter Two      Literature Review**

### **2.1      Introduction**

The previous chapter provided a brief setting of the study. This chapter takes a detailed look from the extant literature on the issues that have direct affect on employee attitudes and behaviours to readiness for organisational change. Importantly, these insights highlight the fact that employee readiness for organisational change is imperative for successful implementation of organisational change programmes. The literature review covers sufficient ground to ensure a solid perspective on the factors that may support the development of positive employee attitudes and behaviours. The literature review is a critical analysis in business and management research, that shows the current state of the research topic is understood and supports any conceptual framework (Maylor and Blackmin, 2005, p-117). The literature review demonstrates a clear understanding of the research topic, identifies the major studies related to the research area, identifies the different points of the views on the research topic, draws clear and appropriate conclusions, and demonstrates the relevance and importance of the research problems (Hart, 1998, p-198).

A review of the literature on organisational change, employee role in organisational change, employee readiness and resistance, employee commitment to the organisation, career commitment and social relationships in the workplace is the focus of this chapter. It examines extant studies in disciplines such as change management, organisational behaviour, and organisational development. The chapter begins with an overview of organisational change and the role of employees in organisational change. Past studies on employee readiness predictors are then reviewed. Finally, the research gap is identified and discussed.

### **2.2      Organisational Change: An Overview**

Change is concerned with the development of organisation. It is used to solve the problems and challenges of the organisation. In organisation, most problems and



challenges are generated by competition, advanced technology, mergers, expansion, product quality maintenance, or enhancing employee efficiency on the one hand and rapid growth, new business ventures, exciting opportunities, innovations, and new leadership and management approaches (Madsen *et al.*, 2005, p-213) on the other.

Organisational change is defined by shifting from one stage to another or it is concerned with breaking down existing structures and creating new ones (Chonko, 2004). Barnett and Carroll (1995) defined it as a transformation between two points in time with the key ability to compare the organisation before and after the transformation. Change might be small or large but are concerned with improvement, variation, alteration or modification of something (Bennett, 2001). The source of change is both internal and external pressures associated with the expansion or need of businesses to respond to challenges. Internal change factors are concerned with organisational growth, while external factors are associated with issues like institutional and market volatility (Barnett and Carroll, 1995).

Potentially change in organisation is referred to as chaotic and dramatic (Gleick, 1987; Abrahamson, 2000), because transferring from a known to an unknown position can develop particular uncertainties, anxiety and ambiguities. In this position, employee can develop different thoughts, feelings and behaviours towards the situation which might involve painful learning and relearning and create a feeling of uneasiness and tension. It is important to remember that humans have different individual life experiences, motivational levels, socio-demographic characteristics, knowledge, attitudes, support systems, values, and behavioural patterns (Ilgen and Pulakos, 1999). Employees approach organisational change in different ways as some individuals perceive that it can provide opportunities for learning and growth, while others view it as a threat. Successful adjustment to change can result in higher levels of enthusiasm providing opportunities for learning and growth, while poor adjustment to change is characterised by feelings of uncertainty, frustration, alienation, and anxiety, particularly in relation to issues of job security, status, work tasks, co-worker relations, and reporting relationships (Ashford, 1988; Holt *et al.*, 2007). Thus, researchers and practitioners need to know the maximum level of employee readiness predictors so that management

can endeavour to understand the maximum level of individuals' beliefs, intentions and perceptions during implementation of change programmes.

Competing with important and often unknown challenges, managers of organisations are anxious to know how to survive for future and stay competitive. Change agents and practitioners suggest that an organisation must change its policies, strategies, structures, approaches, culture, and procedures to compete (Cummings and Worley, 2005). In the organisation, change may be small or large, quantum leap or incremental but requires proper attention because its consequences affect organisational performance, development, reputation, competition and future survival. Although in any sort of situation organisations require proper processes for controlling disruption and challenges.

Stress among employees can be disseminated by different factors like environment, culture, and situation. Employee response might be in favour or against, because of different feelings, thoughts and behaviours (Armenakis *et al.*, 1993; 1999). However, these feelings and perceptions can be learned by past experiences and demographic values. The literature reveals that stress due to organisational change is caused not only by the organisation but a prime source is employees within the organisation (Vakola and Nikolaou, 2005). Beliefs, behaviours and attitudes of different employees might be different in same job and the same place because of different individual perception levels. Thus, it is difficult for change promoters and practitioners to anticipate the individual employee disposition level to manage the change programme. The sole desire of the organisation is getting positive results to change initiatives, and in order to achieve that managers and change promoters need to know more employee readiness predictors.

The existing literature on change management supports the idea that main focus has been concentrated on employee attitudes, behaviours, perceptions and beliefs which depend upon past experience, current situation, and future perspectives (Armenakis *et al.*, 1993; Ilgen and Pulakos, 1999; Bernerth, 2004). Regarding attitudes and

behaviours, employee may have a positive or negative judgment of a change implemented by the organisation (Lines, 2005).

Within organisation, employees have been found to be a useful and successful source for mobilisation of organisational assets, while change management has explored the essential and dominant factors for sustaining organisational change programmes (Armenakis *et al.*, 1999; Smith, 2005; Susanto, 2008; Elias, 2009). Literature of change management adds the idea that before or during the launch of any change programme, change promoters and agents should develop employee positive attitudes, beliefs, and intentions towards the proposed organisational change (Armenakis *et al.*, 1993, Bernerth, 2004). Heracleous and Langham (1996) advocate that understanding of employee is imperative for managing change due to the subtle issues involved. Armenakis *et al.* (1993; 1999) point out that employee positive response is viable towards change because of the level of their involvement. Viewing employee as a centrifugal force, researchers in the main have focused on employee issues to support the development of positive behaviours and attitudes (Eby *et al.*, 2000; Cunningham *et al.*, 2002; Madsen *et al.*, 2005; Rafferty and Simons, 2006; Cinite *et al.*, 2009). These issues can be broadly classified into two categories like individual and workplace factors. Cunningham *et al.* (2002) advocate the idea that research on individual, process, and workplace factors in readiness for organisational change is important to success. The following section discusses the role of employee in organisational change.

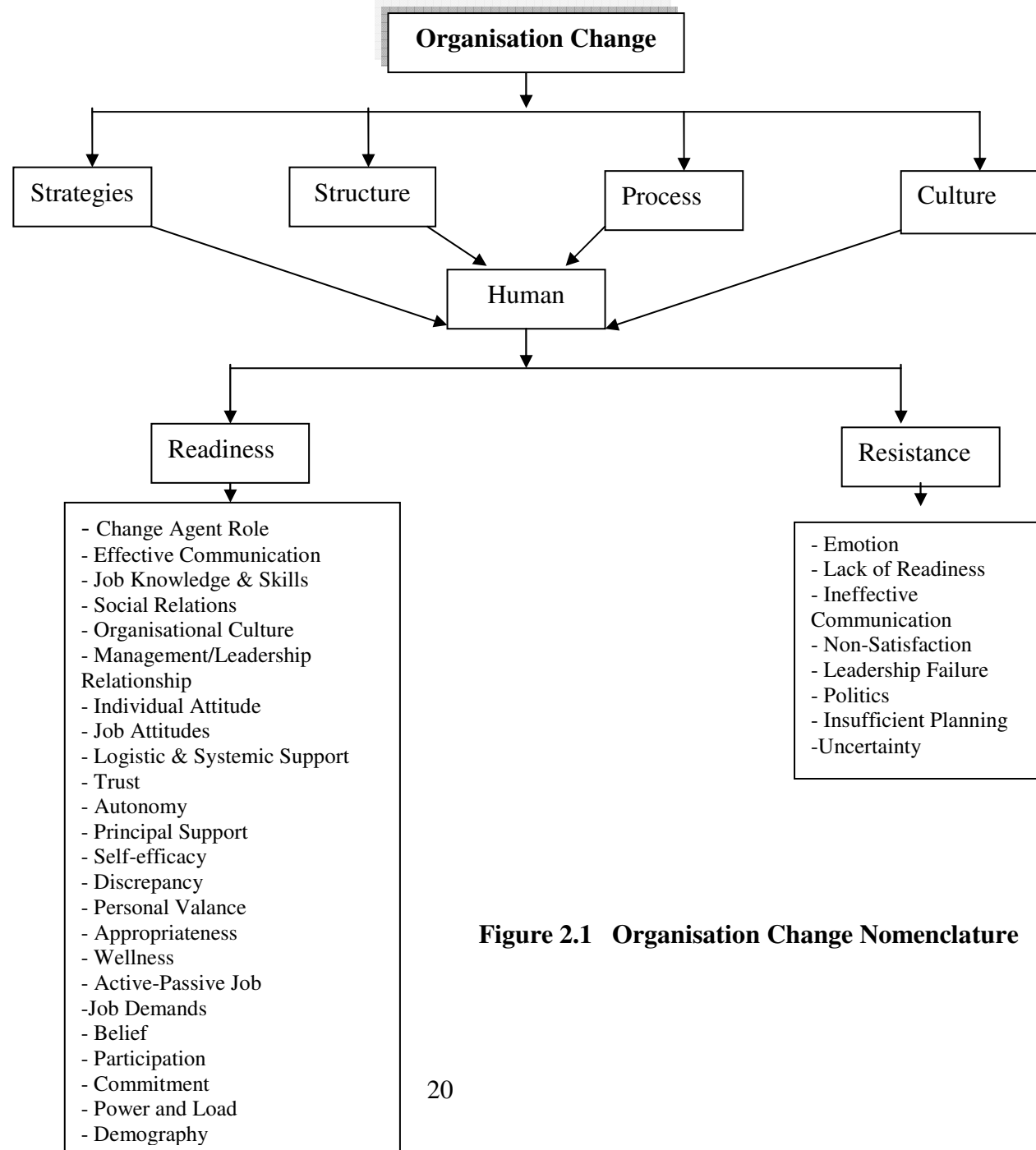
### **2.3 The Role of Employee in Organisational Change**

To achieve their objectives and goals in a challenging situation, organisations today need to change the status quo for future survival and staying competitive. This change might involve a transformation of strategies, cultures, structures, approaches, or processes that may overcome the challenges of organisations (Cummings and Worley, 2005). Potentially change involves tracking the new situation with respect to need and capability of the organisation. Researchers and practitioners are interested to know how to deal with unknown situations created by organisational change. Furthermore, domain literature describes that by changing the status quo or any transformation, those

primarily affected are employees whose response might be positive or negative (Armenakis *et al.*, 2001; Rafferty and Simons, 2006; Holt *et al.*, 2007). Although the literature points out that employee openness regarding acceptance and resistance depends upon their attitudes and behaviours with respect to the workplace and individual context (Figure 2.1).

The success of organisational change is often determined by employee attitudes and beliefs towards the change (Beer and Walton, 1990). According to Arnold *et al.* (1995, p-167) “Attitudes reflect a person’s tendency to feel, think or behave in a positive or negative manner towards the object of the attitude”. Many researchers like Eby *et al.* (2000); Kotter (1996); and Martin (1998) focused on positive attitudes and behaviours to promote effective change programmes. Vakola *et al.* (2003) argue that employee can be happy or excited or angry and fearful when confronted by change. It shows that the individual’s perceptions towards the new situation primarily affect organisational change goals and objectives.

To develop a positive response from employee towards change is imperative because of the sheer scale of involvement of individuals who have different experiences of life. Armenakis and Bedeian (1999, p-307) reported that “as open systems, organisations depend on human direction to succeed”. The response of employee towards change largely arises from his or her positive or negative perceptions. Employee positive response shows willingness towards change while negative reflects resistance. If employee response is negative, this means they don’t want to accept or believe and may intend to resist or quit. Given such a response, organisation might face threats from employee, high turnover rates, uncertainty, frustration, lower efficiency, anxiety, and a decline in output and decreased organisational commitment (Coch and French, 1948; Kotter and Schlesinger, 1979; Goldstein, 1988; Martin *et al.*, 2005). Conversely, a



**Figure 2.1 Organisation Change Nomenclature**

positive response shows employee readiness which can support the organisational change. This response may provide high commitment, low turnover, high performance and low absenteeism (Desplaces, 2005). Thus, in the domain of organisational change management, the human factor has been found to be the most crucial, complex and dominant factor in supporting effective and successful implementation of change in organisation (Armenakis *et al.*, 1993; Smith, 2005; 2006).

Change management literature shows that employee beliefs, perceptions and attitudes are critical in successful organisational change (Schalk *et al.*, 1998; Weber and Weber, 2001). Acceptance and resistance are affected by how the change is seen to affect the sense of the individual's identity in the organisation. Dirks *et al.* (1996, p-8) points out that "individuals will promote change efforts under conditions fulfilling their needs for self enhancement". The literature further points out that a positive employee response can be obtained by fulfilling basic needs such that financial and psychological (Alvi and Ahmed, 1987; Chang, 1999).

### **2.3.1 Employee Readiness**

As discussed in the previous section that organisational change affects individual perceptions that may be supportive or resistant (Armenakis and Bedeian, 1999). Support of employee shows readiness. Readiness is defined as a belief, intention, attitude and behaviour regarding the extent to which change is needed and the organisational capacity to achieve it successfully (Armenakis *et al.*, 1993; Rafferty and Simons, 2006; Susanto, 2008). Bernerth (2004) defines that readiness is a state of mind during the change process that reflects a willingness or receptiveness to changing the way one thinks. Before developing positive state of mind towards organisational change, employee needs to be able to visualise the current situation of the organisation and environment by comparing past and anticipated future perspectives.

Researchers believe that employee willingness and receptivity is essential for an organisation to implement change successfully (Hanpachern, *et al.*, 1998; Eby *et al.*, 2000; Jansen, 2000; Madsen *et al.*, 2005; Rafferty and Simon, 2006). Thus, it is necessary to know how to deal with employee before, during and after launching the organisational change programmes. During change, an employee possesses two options

such that positive or negative. Positive attitudes can underwrite the organisation development and future survival, while negative attitudes would be followed by frustration and resistance. In fact, the failure of a change programme would have a negative impact on the organisation as well as employee (Goldstein, 1988; Martin *et al.*, 2005). These negative impacts may include loss of time of managers and cost which can affect organisational performance, development, and reputation (Smith, 2005). Thus, researchers and practitioners are more interested in exploring possible employee readiness predictors galvanising the employees for effective and successful implementation of organisational change (Hanpachern, *et al.*, 1998; Eby *et al.*, 2000; Bernerth, 2004; Madsen *et al.*, 2005; Holt *et al.*, 2007).

Many researchers have made individuals the centre of analysis for the success of organisational change (Judge *et al.*, 1999). Over the past few decades it has been observed that this is how to get employee to embrace effective and successful change programmes (Armenakis *et al.*, 1993; Bernerth, 2004; Holt *et al.*, 2007; Cinite *et al.*, 2009). Many predictors like change agent role, proper process, need for change, capability of organisation, participation, culture, belief, environment, and commitment have been found to be related to employee readiness (Hanpachern *et al.*, 1998; Eby *et al.*, 2000; Cunningham *et al.*, 2002; Madsen *et al.*, 2005; Rafferty and Simons, 2006). These predictors can be categorised by individual, psychological, workplace, environmental, cultural and social factors. However, researcher further categorised these factors into two categories (individual and workplace factors) (Table 2.1). Ilgen and Pulakos (1999) and Desplaces (2005) have advocated that extent of certain individual and workplace characteristics may lead to the development of a positive attitude and behaviour towards change readiness.

**Table 2.1 Classification of Employee Readiness Factors**

<b>Category</b>	<b>Factor(s)</b>	<b>Reference(s)</b>
<b>1. Workplace Factors</b>	Active and Passive Job	Cunningham <i>et al.</i> (2002); Miller <i>et al.</i> (2006)
	Appropriateness	Armenakis and Harris (2002); Holt <i>et al.</i> (2007); Weber and Weber (2001)
	Change Efficacy	Armenakis and Harris (2002); Holt <i>et al.</i> (2007); Lehman <i>et al.</i> (2002)
	Communication	Holt <i>et al.</i> (2007); Armenakis and Fredenberger (1997); Wanberg and Banas (2000)
	Decision Latitude	Cunningham <i>et al.</i> (2002)
	Discrepancy	Armenakis and Harris (2002); Armenakis <i>et al.</i> (1993)
	Flexible Policies and Procedures	Rafferty and Simons (2006); Eby <i>et al.</i> (2000)
	Job Demands	Cunningham <i>et al.</i> (2002); Miller <i>et al.</i> (2006); Hanpachern <i>et al.</i> (1998)
	Job Knowledge and Skills	Miller <i>et al.</i> (2006); Hanpachern (1998); Cunningham <i>et al.</i> (2002)
	Logistic and System Support	Rafferty and Simons (2006); Eby <i>et al.</i> (2000)
	Management and Leadership Relationships	Miller <i>et al.</i> (2006); Hanpachern <i>et al.</i> (1998)
	Organisational Commitment	Madsen <i>et al.</i> (2005); (Elias, 2009)
	Organisational Culture	Hanpachern <i>et al.</i> (1998); Lehman <i>et al.</i> (2002); McNabb and Sepic (1995)
	Perceived Organisational Support	Rafferty and Simons (2006); Eby <i>et al.</i> (2000); Holt <i>et al.</i> (2007)
	Personal Valence	Armenakis and Harris (2002); Holt <i>et al.</i> (2007)
	<b>2. Individual Factors</b>	Social Relations at Workplace
Social Support		Cunningham <i>et al.</i> (2002); Wanberg and Banas (2000)
Wellness		Madsen (2003)
	Adaptability	Lehman <i>et al.</i> (2002)
	Autonomy	Weber and Weber (2001)

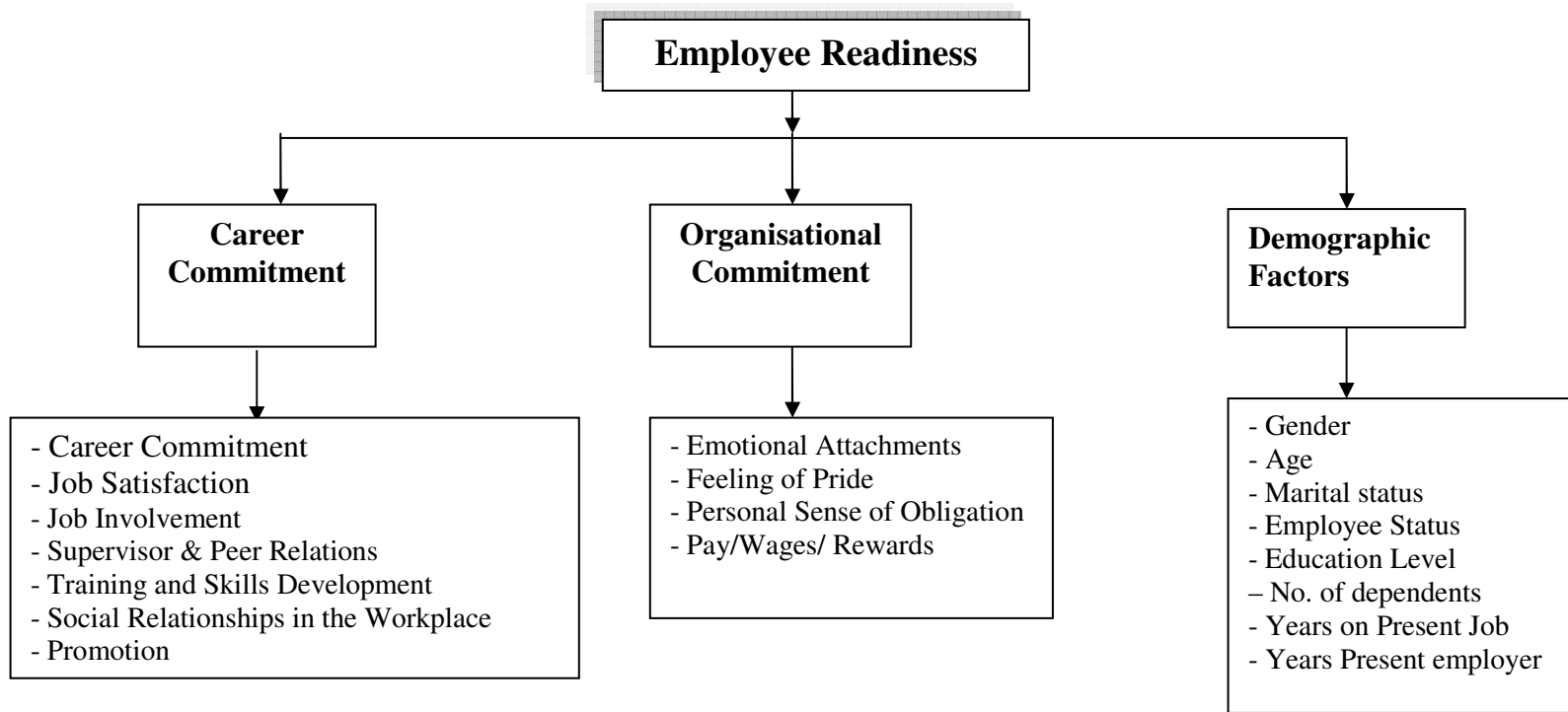


Beliefs	Peach <i>et al.</i> (2005)
Demography	Madsen <i>et al.</i> (2005); Holt <i>et al.</i> (2007); Weber and Weber (2001); Hanpachern <i>et al.</i> (1998); Wanberg and Banas (2000)
Depression	Cunningham <i>et al.</i> (2002)
Emotional Exhaustion	Cunningham <i>et al.</i> (2002)
General Attitude	Holt <i>et al.</i> (2007)
Intention to Quit	Wanberg and Banas (2000)
Self Efficacy	Cunningham <i>et al.</i> (2002); Eby <i>et al.</i> (2000); Wanberg and Banas (2000); Lehman <i>et al.</i> (2002); Rafferty and Simons (2006); Armenakis and Bedian (1999)
Job Satisfaction	Wanberg and Banas (2000)
Participation	Cunningham <i>et al.</i> (2002); Rafferty and Simons (2006); Eby <i>et al.</i> (2000); Weber and Weber (2001); Wanberg and Banas (2000); Armenakis and Fredenberger (1997)
Personal Resilience	Wanberg and Banas (2000)
Rebelliousness	Holt <i>et al.</i> (2007)
Skills Variety	Eby <i>et al.</i> (2000)
Supervisory Support	Weber and Weber (2001)
Team Work	Eby <i>et al.</i> (2000)
Trust (in Peers; management; Senior Leaders)	Rafferty and Simons (2006); Eby <i>et al.</i> (2000); Weber and Weber (2001)
Turnover	Wanberg and Banas (2000)
Work Irritation	Wanberg and Banas (2000)
Affective Commitment	Elias (2009)

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A large amount of literature is available on the employee readiness domain relating to individual and workplace factors (Weber and Weber, 2001; Cunningham *et al.*, 2002; Madsen *et al.*, 2005; Rafferty and Simon, 2006; Holt *et al.*, 2007; Elias, 2009). However, the impact of both factors can be envisaged by employee attitudes, beliefs, and perceptions. Indeed, individual factors are associated with personal and social aspects of individuals such as an active problem solving approach, beliefs, autonomy, depression, emotional exhaustion, demography, self-efficacy, locus of control (Weber and Weber, 2001; Cunningham *et al.*, 2002; Peach *et al.*, 2005; Madsen *et al.*, 2005). These characteristics show an individual's influence and support for reducing the uncertainty and ambiguity of the change process. Another important factor is the workplace which is related to the organisational environment, culture, and services. In the workplace factor employee hold expectations and assumptions which affect their perceptions regarding change. In the workplace factor, appropriateness, discrepancy, organisational commitment, social relationships in the workplace, job knowledge and skills, logistic and system support, social support, and wellness factors have been found in the literature (Wanberg and Banas, 2000; Armenakis and Harris, 2002; Cunningham *et al.*, 2002; Madsen, 2003; Miller *et al.*, 2006; Madsen *et al.*, 2005; Rafferty and Simon, 2006).

All these factors have been examined with different correlations and found more potential results for employee readiness during the implementation of organisational change. After extensive literature review this study focused to investigate more employee readiness predictors relating to individual and workplace factors (Figure 2.2), which may support to develop positive employee responses for effective and successful implementation of organisational change in Pakistan.



**Figure 2.2 Employee Organisational and Career Commitment Factors**

### 2.3.2 Employee Resistance

During organisational change, employee is likely to have two responses: either readiness or resistance. Readiness factors enhance employee willingness to embrace change while resistance can be assumed as a passive response. Chawla and Kelloway (2004, p-485) define resistance to change as “an adherence to any attitudes or behaviours that thwart organisational change goals.” A passive response may be the expression of the fear of loss of something valuable, a sense of loss of control caused by fear of an unknown situation, and fear of failure in the new situation which is likely to trigger the resistance to change (Tannenbaum and Hanna, 1985; Bridges, 1986; Jick, 1979; Dirks *et al.*, 1996; Chreim, 2002).

In the literature employee resistance might be better viewed as comprising two components such that attitudinal and behavioural responses to change. In attitudinal resistance to change, an employee response depends on psychological rejection of change on the basis of need, whereas behavioural resistance probably relates to individual behaviours that reflect unwillingness to support the change or unwillingness to stay with the organisation through this troubled time (lack of commitment to change) (Chawla and Kelloway, 2004). According to Dent and Goldberg (1999) people do not necessarily resist change, but instead resist the loss of status, pay, or comfort that may be associated with it. The response manifesting itself as by anger or fear constitutes resistance to change. According to Bove and Hede (2001) an organisation gets resistance since the change process involves going from a known to an unknown situation which makes individuals uncertain. Thus employee can develop different thoughts, beliefs, and attitudes regarding the organisational change. Many researchers have urged the importance of employee perceptions regarding organisational change (Kotter, 1995; Armenaki *et al.*, 1999; Holt *et al.*, 2007; Elias, 2009). They argue that most of the failures of change programmes are due to human factors which are directly related to individual and workplace determinants. Through these factors, employee may develop positive attitudes and behaviours that can indicate an employee satisfaction with relation to the organisation (Martin *et al.*, 2006).

## 2.4 Employee Readiness Studies in Organisational Change

Regardless of the need for and inevitable changes, organisation needs supportive mechanisms to implement organisational changes. Over the past few decades, considerable research has been conducted in the domain of change management (Armenakis *et al.*, 1993; Cunningham *et al.*, 2002; Vokala *et al.*, 2004; Chawla and Kelloway, 2004; Peach *et al.*, 2005; Madsen *et al.*, 2005; Rafferty and Simon, 2006; Holt *et al.*, 2007; Erturk, 2008; Cinite *et al.*, 2009). Many aspects of organisational change have been observed and analysed by applying different theories, models, conceptual and empirical studies. The literature advocates that employee readiness factor has been found more effective and successful for implementation of organisational change programmes (Eby *et al.*, 2000; Armenakis and Harris, 2002; Cunningham *et al.*, 2002; Madsen *et al.*, 2005; Rafferty and Simon, 2006). Several authors have concluded that organisational vitality depends upon employees who are persistently pushed to implement organisational change (Armenakis *et al.*, 1993; 1999; Chawla and Kelloway, 2004; Jones *et al.*, 2005; Cinite *et al.*, 2009). However, in literature employee has been found to be more complex and sensitive, thus, employee perceptions, beliefs, and attitudes have been considered as a critical and imperative factors in successful change programmes (Armenakis *et al.*, 1993; Weber and Weber, 2001). In this regard change management experts and practitioners have often urged the exploration of the different possible employee readiness factors in different combination to minimise employee resistance (Hanpachern *et al.*, 1998; Cunningham *et al.*, 2002; Madsen *et al.*, 2005; Rafferty and Simon, 2006; Erturk, 2008; Cinite *et al.*, 2009).

A substantial amount of literature has been found in the domain of change management which has mainly focused on various possible readiness predictors (Table 2.2). Many theories, models, influencing strategies, and determinants have been determined to focus on employee readiness perspectives. The literature describes employee readiness predictors such that change efficacy, communications, job demands, job knowledge and skills, logistic and system support, organisational commitment, participation, social relations at workplace, job satisfaction, participation and many more factors prevail in support of change programmes (Eby *et al.*, 2000; Wanberg and Banas, 2000; Cunningham *et al.*, 2002; Chawla and Kelloway, 2004; Peach *et al.*, 2005; Madsen *et al.*, 2005; Rafferty and Simon, 2006). Indeed, these factors have been positive

**Table 2.2 Literature Review**

<b>Description</b>	<b>Author's Name (s) &amp; Years</b>	<b>Place</b>	<b>Findings</b>
Size and Structure in Complex Organisations	Mileti <i>et al.</i> (1977)	USA	By applying Blau's formal theory of differentiation findings suggests altering and extending the explanatory scheme. Suggests establishing propositions may be unique to organisational type that may support several alternative propositions about organisational growth and change.
Creating Readiness for Organisational Change	Armenakis <i>et al.</i> (1993)	USA	By combining the urgency and capability of organisation influence strategies, change agents play an effective role in change readiness.
Modelling Internal Organisational Change	Barnett and Carroll (1995)	USA	Process and content show the greatest potential for resolving the situation during organisational change. Models that comprise both are useful to solve the problem. Thus models can be used to test social science theories and evaluate the change programmes.
The View from the Top: Senior Executives' Perceptions of Changing Management Practices in UK Companies	Ezzamel <i>et al.</i> (1996)	UK	In UK corporate sector senior managers perceive rapid and continuous change. It is found that change is a question of degree not a radical break with past practices.
Building the People's capacity for change	Wright and Thompsen (1997)	USA	The real force for change is employee readiness that can make possible successful organisational change.
Presenteeism, Power and Organisational Change: Long Hours as a Career Barrier and the Impact on the Working Lives of Women Managers	Simpson (1998)	UK	In male dominated organisations, restructuring leads to increased workloads and pressure of long working hours. Presenteeism also founded to be gendered. Being managed by women, it is seen as a form of 'male resistance' to their presence that may impose heavy costs on women.
Comparing Change Readiness, Quality Improvement, and Cost Management among Veterans Administration, For Profit, and Non-profit Hospitals	West (1998)	USA	Developed model and the matrix combination to offer a framework for managers to pursue organisational change and operational innovation within organisation.
Five symbolic roles of the external consultant: Integrating change, power and symbolism	Kaarst-Brown (1999)		During organisational change process power and politics have been accepted as often detrimental elements.
Changing the "whole system" in the public sector	White (2000)	UK	In organisations, change reforms show attempts to cope with a turbulent environment. This study explores the implication of process for changing the whole system for public sector organisations.

Perceptions of organisational readiness for change: Factors related to employees' reactions to the implementation of team bases selling	Eby <i>et al.</i> (2000)	USA	Examined large-scale change where individual attitudes and preferences, work group and job attitudes, and contextual variables of employees found effective for readiness. Trust in management is not positively related with employee readiness for change.
Tools and Techniques to facilitate change	Bechtel and Squires (2001)	USA	Internal organisational development or training professionals can be done by change programme. It depends upon mindful planning with support of tools and techniques that can facilitate this. Key success depends upon thinking holistically and focusing on the critical success factor to understand all of the change implications.
Skill-Biased Organisational change? Evidence from a panel of British and French Establishments	Caroli and Reenen (2001)	France	Organisational change and skills are complementary. It reduces the demand for unskilled workers and is negatively associated with increases in regional skill price differentials. It also leads to greater productivity increases in establishments with larger initial skill endowments. Technical change is complementary as an independent role but not related to technological change.
Crafting a change message to create transformational readiness.	Armenakis and Harris (2002)	USA	Discrepancy, appropriateness, efficacy, principal support, and personal valence, strategy of message conveying, participation and persuasive communication create readiness for organisational change
Readiness for organisational change: A longitudinal study of workplace, psychological and behavioural correlates	Cunningham <i>et al.</i> (2002)	Canada	Employees achieve readiness with active jobs, an active job problem-solving style and job change self-efficacy factors. An active approach to job problem-solving with higher job change self-efficacy scores reported a higher readiness for change.
Managing Change and Changing managers from ABC to XYZ	Burnes (2003)	UK	Organisational changes develop managerial development in parallel with benefits. Study emphasis that managerial development and change should run in parallel where managers should develop strategic strategies for success in competitiveness.
Wellness in the Workplace: Preparing Employees for change	Madsen (2003)	Canada	Employee's performance is related with organisational performance. By improving the physical, emotional, spiritual, social, and intellectual wellness, organisational performance can be heightened.
The role of emotional intelligence and personality variables on attitudes toward	Vokala <i>et al.</i> (2004)	Greece	Individual character is critical for success of change. Relationship of individual emotions and personality trait found

organisational change			significant towards change.
Expanding Our Understanding of the Change Message	Bernerth (2004)	USA	By applying theoretical foundation of Armenakis' employee readiness model, researcher found that employee readiness factor is critical for success of organisational change process. Presented theoretical foundation of model including appropriateness, self-efficacy, principal support, discrepancy and personal valance.
Predicting openness and commitment to change	Chawla and Kelloway (2004)	Canada	Results found that communication, trust, and job security is predicted on openness. Participation predicted trust directly or indirectly but predicted openness to change only indirectly. While turnover predicted negatively by openness and trust.
Achieving readiness for organisational change	Smith (2005)	Australia	Employees of the organisation are key factor for success or resistance in effective organisational change programmes.
The role of psychological climate in facilitating employee adjustment during organisational change	Martin <i>et al.</i> (2005)	Australia	By applying theoretical model of employee study found that employee's perceptions of the organisation and environment have positive results that appraise change favourably. Study suggests that a favourable environment reported better adjustment in terms of higher job satisfaction, psychological well-being and organisational commitment, and lower absenteeism and turnover intentions.
Status differences in employee adjustment during organisational change	Martin <i>et al.</i> (2005)	Australia	Upper level staff reported more positive attitudes than clinical staff during change, across a range of indicators. Study found that managers who felt more in control of the situation appraised change as more stressful than non managers.
Beliefs Underlying Employee Readiness to Support A Building Relations	Peach <i>et al.</i> (2005)	Australia	Significant differences found between employees with moderate compared to high intentions to engage in change supportive behaviours on a range of beliefs.
A Multilevel Approach to Individual Readiness to Change	Desplaces (2005)	UK	By applying theoretical and testable individual model explored both objective and subjective context of change which determine the employee readiness towards success of change.
Readiness for Organisational Change: Do Organisational Commitment and Social Relationships in the Workplace Make a Difference?	Madsen <i>et al.</i> (2005)	Canada	By examining the data study found significant relationships between employee readiness, organisational commitment and social relationships at the workplace. Study further found relationships between readiness and



			number of children, social relationships and gender and organisational commitment and employee age, educational level and gender.
Continuing professional development and workplace learning	Smith (2006)	Australia	In organisation, change is to be assumed imperative and constant factor.
Postscripts to change: survivors' retrospective views of organisational changes	Chreim (2006)	Canada	Changing identify and enhancing the role of employees and organisation
Exploring the implications of vision, appropriateness, and execution of organisational change	Cole <i>et al.</i> (2006)	USA	Study found to predict managers, job satisfaction, turnover intentions and role ambiguity by three-way interaction between change vision clarity change appropriateness, and change execution.
Readiness for change: Implementations on Employees' Relationship with Management, Job Knowledge and Skills, and Job Demands	Miller <i>et al.</i> (2006)	Canada	All three workplace factors have an influence on employees' readiness for change. But employees' relationship with their managers is the strongest predictor of readiness for change.
An examination of the antecedents of readiness for fine-tuning and corporate transformation changes	Rafferty and Simons (2006)	Australia	Employees have different approaches for different types of change. Results suggest that trust in peers and logistical and system support displayed for fine-tuning change, while, trust in senior leaders and self efficacy displayed strong positive relationships with readiness for corporate transformation changes. One important finding is that participation in change was not significantly concerned with readiness for corporate transformation changes
Readiness for Organisational Change: The Systematic Development of a Scale	Holt <i>et al.</i> (2007)	Canada	Readiness for change is influenced by employees' beliefs of self-efficacy, appropriateness, management support, and personal valence.
Utilizing the theory of planned behaviour to inform change management	Jimmieson <i>et al.</i> (2008)	Australia	Results found that employees' attitudes, subjective norms, and perceived control were predicted to intention to carry out organisational change.
A trust-based approach to promote employees' openness to organisational change in Turkey	Erturk (2008)	Turkey	Results indicated that trust in supervisors mediate the relationship between openness and managerial communications and partially mediated with openness and participation.
Measurement of Perceived Organisational Readiness for Change in the Public Sector	Cinite <i>et al.</i> (2009)	Canada	Readiness for change can be obtained by conceptualising three factors such that commitment of senior managers to the change, competence of change agents and the support of immediate managers.

implicated in reducing employee resistance and enhancing readiness. However, literature emphasises the need to explore more employee readiness predictors with different correlations (Armenakis *et al.*, 1993; Hanpachern *et al.*, 1998; Cunningham *et al.*, 2002; Bernerth, 2004; Madsen *et al.*, 2005; Rafferty and Simons, 2006; Cinite *et al.*, 2009).

Armenakis *et al.* (1993) argued in a conceptual research paper that the role of change agents and management strategies in term of beliefs, attitudes and intentions of employee reflected the urgency and employee readiness for necessary changes. According to Armenakis and Harris (2002) there are five factors including discrepancy, appropriateness, efficacy, principal support, and personal valence given by Armenakis *et al.* (1999) that are helpful in creating readiness for organisation change. This paper encourages researchers on change theoretically and as well as empirically to understand the models and also by encouraging change agents to apply these five factors for change readiness. By applying the theoretical foundation, Bernerth (2004) described the components of the model set out by Armenakis *et al.* (1999) such as discrepancy, appropriateness, efficacy, principal support, and personal valence can serve as a tool for a successful organisational change programme. In addition, Bernerth (2004) described that organisational leaders must be proactive to implement the change effective and successfully and this can be possible through enhancing employee readiness.

Hanpachern *et al.* (1998) applied survey questionnaire to manufacturing company in the USA. From 131 respondents, they found positive and significant relationships of employee openness with employee margin in life factors such that job knowledge and skills, social relations in the workplace, organisational culture, and management leadership relationships and demographic variables. West (1998) measured organisational performance in USA by developing three dimensions including change readiness, quality improvement, and cost management. A developed model and a matrix combined to offer a framework for managers to pursue organisational change and operational innovation within an organisation. Results found that veteran administration hospitals work differently than other organisations. This model presents an organisational change process in hospitals.

Cunningham *et al.* (2002) examined the logistical and occupational risks of change, ability to cope with change and to solve job-related problems, social support, and active vs. passive job construct as they influence readiness for organisational change in healthcare. By getting 654 completed surveys from Canadian teaching hospitals, they found that workers who have an active approach to solving job problems with higher job change self-efficacy are more ready for change. Active jobs that have higher demands and greater decision latitude also tend to show more readiness for organisational change.

An employee readiness can be achieved by improving physical, emotional, spiritual, social, and intellectual wellness explored by Madsen (2003). She worked on the role of employee wellness as it affects employee readiness to initiate, accept, and participate in change. The research revealed that organisations can increase performance through individual readiness for change, because individual performance is related with organisational performance.

Madsen *et al.* (2005) found significant relationships between employee readiness, organisational commitment and social relationships in the workplace in their Canadian study. Results also described the relationships between readiness and the number of children, social relationships and gender and organisational commitment and employee age, educational level and gender.

Peach *et al.* (2005) worked on the theory of planned behaviour as a framework for understanding employee readiness for change. This study identified the fundamental beliefs which distinguish between those who intend and do not intend to perform the behaviour under investigation. By using a survey questionnaire this research was conducted among local government employees in Australia and consists of 149 participants to assess their behavioural, normative, and control beliefs regarding change. Significant differences were found between employees with moderate compared to high intentions to engage in change supportive behaviours on a range of beliefs.

By applying a theoretical and testable individual model, Desplaces (2005) examined both the objective and subjective context of change which determines employee readiness towards change. Antecedents relates with both context showing their

significance and relationship to understanding individual readiness during organisational change. Results suggest that both objective and subjective context of change determine the employee readiness for change.

Miller *et al.* (2006) focused on employee readiness for change by applying three workplace factors such that management and leader relationships, job knowledge and skills, and job demands. By applying a survey to four profit-oriented companies from northern Utah, Canada, the researchers found that these workplace factors had a significant influence on employee readiness for change. But employee relationship with their managers was the strongest predictor of readiness for change.

Rafferty and Simons (2006) focused on the factors that create readiness for two types of change like corporate transformation and fine-tuning in five Australian organisations. Findings suggested that trust and self-efficacy play an important role in senior managers for corporate transformation changes. While in fine-tuning trust in peers, and logistical and system support antecedents showed a strong, positive relationship with readiness. One important finding was that participation in change was not significantly concerned with readiness for corporate transformation changes.

A study conducted by Holt *et al.* (2007) received 464 questionnaire surveys from full-time employees in four public and private companies in two areas of northern Utah, Canada. Researchers found that readiness for change was influenced by employee beliefs of self-efficacy, appropriateness, management support, and personal valence.

Using structured questionnaires, 878 employees from a public sector organisation in Turkey, Erturk (2008) found through structural equation modelling that trust in supervisors mediates between managerial communication and openness to change and a partial relation was found between participation and openness to change via trust in supervisors.

Cinite *et al.* (2009) conducted a study recently in five Canadian public sector organisations to measure perceived organisational readiness for change in the public sector. Using structural equation modelling techniques, researchers found a perceived readiness for change from three sub-constructs such that commitment of senior

managers to the change, competence of the change agent and support of the immediate manager.

From the above literature review, it was found that mostly researchers focused on employee readiness predictor variables for developing positive attitudes and behaviours for organisational change. A large number of factors with different correlations have been investigated (Table 2.2). The literature reveals that Madsen *et al.* (2005) were the first to examine the predictors of employee commitment to the organisation and found support for organisational change. It is important to note here that career commitment is related to the employee attitudes and behaviours (Goulet and Singh, 2002). The research has largely neglected the links between employee career commitment and employee readiness for organisational change. By applying employee commitment to the organisation and career factors, this study focused to examine employee attitudes and behaviours for organisational change. According to the literature reviewed, this may be first study in the domain of change management to examine employee career commitment factors along with employee commitment to the organisation to understand the employee attitudes, beliefs, and behaviours to readiness for organisational change. In developing countries like Pakistan change methods adopted by western culture should be used as a body of knowledge in the domestic situation (Fatima, 2002; Alvi and Ahmed, 1988). Fatima (2002) further described in her paper relevant changes in Pakistani organisations, emphasising that change agent need to demonstrate by both reasons and emotions that the source of resistance of vested interest emanates from strictly personal rather than professional or organisational reasons. Once the vested interest is exposed by employee and organisation, it is easy to manage such feelings and actions to realign their heads and hearts with the changed organisational requirement.

## **2.5 The Notion of Commitment**

Commitment is defined as one's motivation to work in a particular vocation or as an act of commitment to trust or pledge to something or someone, (Hall, 1971; Merriam-Webster, 1999). The concept of commitment has widely been used to find out individual attitudes and behaviours in the workplace. Over the past three decades commitment has been dominated in the literature as behaviour and used in terms of careers, organisations, norms, identification, morals, work, jobs, and job involvement

(Reilly and Orsak, 1991). In organisation and social fields the term is recognised as a predictor of much behaviour including absenteeism, turnover, job satisfaction, employee readiness and organisational citizenship behaviour. From a behavioural aspect the main focus is on employee turnover (Bartol, 1979; Blau and Boal, 1987; Huselid and Day, 1991; Park and Kim, 2009), absenteeism (Gellatly, 1995; Sagie, 1998) and organisational citizenship behaviour (Mathiew and Zajak, 1990; Schappe, 1998).

It is important to note that commitment and organisational change became antecedents of each other thus further research in the area is warranted (Coleman *et al.*, 1999; Madsen *et al.*, 2005). In organisational change, employee of an organisation can create new sets of expectations to meet changing situations, attitudes and behaviours that are outcomes of a process in which individual compare realities and expectations. Employee commitment is attitudes and behaviours to the organisation because of privileges like fringe benefits, salary, tenure, promotion, employee identity. On the basis of these privileges employee integration increases and they become more loyal to an organisation. Employee who receives encouragement and rewards for change are more likely to act voluntarily in support of organisational change goals contributing to overall organisational effectiveness (Organ, 1988; Van yperen *et al.*, 1999). In the academic literature of commitment, employee commitment to the organisation and career commitment seem often to run in parallel.

### **2.5.1 Employee Commitment to the Organisation**

The important component of commitment is organisational commitment which has multi dimensional approach may be interpreted in different ways. In the literature, the term has been treated as a pattern of behaviours or attitudes towards an organisation (Liou and Nyhan, 1994). It creates employee beliefs and willingness towards the goals of organisation. It is widely accepted that the degree of organisational commitment and job performance are positively related (Mowday *et al.*, 1974), whereas tardiness, absenteeism, and turnover (Steers, 1977; Hom *et al.*, 1979) are inversely related. According to Zangaro (2001) a person who is committed to an organisation should be dedicated and have a strong belief in the organisation goal and values. Penley and Gould (1988) focused on organisational commitment from two viewpoints, instrumental

and affective. The instrumental view is concerned with the system of compensation and rewards received by an individual in return for that person's accomplishment within an organisation. The affective view relates to a person's emotional attachment, feeling of pride and personal sense of obligation to perform their duties within the organisation. It can be developed by work experience such as job challenge, degree of autonomy, and a variety of skills. These job characteristics have been found to be strongly and positively associated to affective commitment among employees from a wide variety of organisation (Dunham *et al.*, 1994).

Moreover, employee and organisation have mutual interests based on certain needs, desires, and expectations. Organisation provides an environment to employee related to expectations and demands that induce employee to utilise their knowledge, skills and experiences. This environment creates commitment to the organisation because the employee needs can be fulfilled by the organisation. Most studies related to commitment have been conducted in developed economies but few attempts have been made in Pakistan (Alvi & Ahmed; 1987; Chang, 1999; Madsen *et al.*, 2005). According to Chang (1999); Goulet and Singh (2002), employee commitment is enhanced by fulfilling the psychological and financial needs. This study focuses on employee in an underprivileged and developing economy Pakistan, where individuals expect only the satisfaction of their needs from their organisation. With the help of instrumental and affective factors of organisational commitment, this study seeks to examine employee commitment to the organisation towards employee readiness for organisational change. According to Madsen *et al.* (2005), there is no direct study which links employee organisational commitment and readiness for organisational change. However, some studies have shown an indirect correlation. Such as Eby *et al.* (2000); Weber and Weber (2001) worked on employee involvement in an organisation for readiness to organisation change. While others (Good *et al.*, 1996; Zangaro, 2001; Goulet and Singh, 2002) have also worked on career and organisational commitment with job satisfaction, job involvement etc., which are linked in an indirect way with readiness.

### **2.5.2 Employee Career Commitment**

A career is an evolving sequence of a person's work experiences over time. It relates to the individual's perceived sequence of vocation, occupation or profession that person occupies over time (Hall, 1976; Solomon *et al.*, 1986). An individual's attitude towards his or her career is described as career commitment (Chang, 1999). It is recognised as a form of work commitment (Morrow, 1993). The conceptual definition of career commitment is one's attitude towards one's vocation or profession (Blau, 1985). It can be characterised by the development of personal career goals and the individual's attachment to, identification with and involvement in those goals (Colarelli and Bishop, 1990).

Individuals with a strong degree of career commitment may show higher levels of expectations and requirements from the organisation with which they have forged relationships. It also implies that highly career committed individuals may be more motivated when their expectations are satisfied by the organisation than those who are less committed. Career commitment seems to be an important factor for career progression and development that is relevant to practical concerns of individual and organisation to excel in their occupations or jobs. Moreover, career commitment involves self generated goals and commitment to one's own career which is influenced by number of factors such as personal, behavioural and environmental decisions (London, 1983). If an employee commits to a career she or he would pursue career goals in spite of obstacles and setbacks otherwise, they make a career change rather than persevere in achieving career objectives (Colarelli and Bishop, 1990).

Indeed, a career involves trade offs between security and risk and between individual success and family, and peoples' career behaviour may interact with culture. The literature shows that employee attachment, identification and involvement depend upon extrinsic and intrinsic outcomes such as pay, promotion, appraisal, and satisfaction that can refer to one's motivation to work in a chosen vocation (Hall, 1971). According to Poon (2004) career commitment is predicated on objective career success in form of salary level and subjective career success in the form of career satisfaction. Most of the research has focused on individual factors that influence career commitment such as job involvement and organisational commitment (Blau, 1985; McGinnis and Morrow,



1990); situational factors (organisational uncertainty, fear of job loss and job fit) used by Goulet and Singh (2002) along with organisational commitment, job satisfaction and involvement because the economic and organisational situation (downsizing and restructuring) may have an impact on career commitment (Morrow, 1990; Hall and Associates, 1986). Thus career commitment is reflected by individual and situational factors which affect career motivation or construct behaviour (London, 1983). These two factors examined by Goulet and Singh (2002) consist of job involvement, organisational commitment, need for achievement, work ethic and job satisfaction for the individual and fear of losing the job and job fit as the situational factor.

After reviewing the literature, it was found that no research has been found which relates to employee career commitment and employee readiness for organisational change (refer section 2.4). Although, career commitment is related with individual's attitudes and behaviours towards his or her career, thus it was proposed that employee may be developed their positive attitudes and behaviours on the basis of commitment to the organisation as well as career. Thus, this study focused on employee career commitment to career predictors such that job satisfaction, job involvement, supervisors and peers relations, training and skills development, and promotion factors to examine employee attitudes and behaviours for organisational change.

## **2.6 Social Relationships in the Workplace**

Employee, who receive encouragement and rewards for change, are more likely to act voluntarily in support of organisational change goals contributing to overall organisational effectiveness (Organ, 1988; Van yperen *et al.*, 1999). Such encouragement and rewards are directly or indirectly related to employee commitment to the organisation or career. Though, previous discussion focuses on employee commitment to the organisation and career to readiness for organisational change while it is believed that social relationships in the workplace also focuses on employee feelings, attitudes, and perceptions. In organisation, employee interacts with colleagues in the form of subordinates, peers or supervisors but feelings, attitudes and perceptions may be positive or negative. Hanpachern *et al.* (1998) and Madsen *et al.* (2005) focused on social relationships with employee readiness for change and found a significant correlation between them. This study also focuses on employee likes and dislikes and

enjoyment related to talking, interacting and working in social relationships factor. According to the literature there is no relevant study except (Hanpachern *et al.*, 1998; Madsen *et al.*, 2005) while many authors have reported indirectly like Eby *et al.* (2000); Weber and Weber (2001); Cunningham *et al.* (2002).

## **2.7 Gap in the Research**

This review of the literature reveals several directions for further research in the field of change management. First there has been long debate over the impact of organisational change on employee. Some authors such that Cunningham *et al.* (2002); Madsen *et al.* (2005); Miller *et al.* (2006); Holt *et al.* (2007) suggest that employee attitudes and behaviours can be developed by organisational factors and others argue that individual factors are more essential for that (Wanberg and Banas, 2000; Eby 2000; Lehman *et al.*, 2002; Peach *et al.*, 2005; Elias, 2009). However, these issues are important and require extensive study because these factors provide support in developing employee attitudes and behaviours.

A number of researchers Hanpachern *et al.* (1998); Eby *et al.* (2000); Madsen *et al.* (2005); Rafferty and Simons (2006); and Elias (2009), have investigated the relative influence of employee readiness predictors to develop attitudes, beliefs and behaviours to organisational change. Although it is true that researchers have worked on micro level issues in change management, there is still a need to learn more. This study examines employee readiness determinants for organisational change to support and strengthen the existing literature.

Most studies on employee readiness for organisational change have focused individual, psychological, workplace, environmental, cultural and social factors. An important aspect of this is that commitment and organisational change became antecedents of each other thus further research in the area is warranted (Coleman *et al.*, 1999; Madsen *et al.*, 2005). A study on employee commitment to the organisation along with social relationships in the workplace was conducted for the first time by Madsen *et al.* (2005). The research has largely neglected the link between employee career commitment and employee readiness for organisational change. This study seeks to fill this void and to examine the employee commitment to the organisation and career predictor for change

readiness.

Most research work has been done in developed or western cultural work settings. Less research work has been found so far in developing countries like Pakistan. This requires more attention by researchers and practitioners to establish employee readiness predictors in different work settings environments and cultures. In Pakistan, change methods adopted by western cultures should be used as a body of knowledge in the domestic situation (Fatima, 2002). In this study the variables have been chosen to justify the study in an underprivileged and developing economy where employee expects only the satisfaction of their basic needs from their organisations. According to Alvi and Ahmed (1987) and Chang, 1999, employee commitment is enhanced by fulfilling the psychological and financial needs along with others in Pakistan. Attempts to fill this gap are considered vital as it helps researchers to understand employee attitudes, beliefs and behaviours in a less affluent country which may help to generalise the studies for all.

Further, although most studies have been conducted in different organisations like health, financial, manufacturing and service oriented, there is a need to know employee attitudes, beliefs and behaviours in educational institutions. This study examines employee readiness determinants in public higher education institutions of Pakistan.

## **2.8 Conclusion**

Through general competition, instability, mergers, expansion, technology and other internal or external reasons, today organisations have to change strategies, structure, policies, approaches, procedures, products or management to deal with this situation. Change might be small or large, quantum or incremental but requires proper attention. Its consequences can affect the organisation's performance, development, reputation and survival as well as wasting managerial energy and organisational expenditure and costs. The literature reveals that change today is more complex and rapid than ever before, thus it needs more timely and appropriate attention. The literature in the change management domain has concluded that the employee readiness factor is the most important for effective and successful implementation of organisational change. Although employee has different characteristics, motivational approaches, knowledge, values and behaviours, however, their reaction depends upon his or her attitudes, beliefs

and intentions. Employee readiness depends upon their proximal perception that can vary according to different experiences, internal and external environmental factors, knowledge, and future expectations as well. The literature available on employee readiness factors has been classified into two categories such that individual and workplace. Individual factors are related to personal, psychological and social aspects having a positive influence on employee for reducing the uncertainties of change programmes. In fact, employee can develop their expectations and assumptions on the basis of workplace environments. In workplace factors researchers have included the organisational environment, culture, and facilities factors. By examining these factors in different combinations, researchers have found significant results during the implementation of change programmes. The majority of published research work has been conducted in developed countries such that Australia, Canada, UK, and USA where organisational culture, environment and employee behavioural approaches are different than in less developing country such that Pakistan. To the knowledge of this researcher, there are hardly any studies which have been conducted in Pakistan focusing on employee commitment to the organisation and career predictors along with social relationships in the workplace for change readiness. Therefore, there is a need for such a study.

The researcher therefore intended to examine employee commitment to the organisation and career factors which are related to employee attitudes and behaviours for organisational change. The literature suggests that if employees are satisfied with their organisation or career they may change their attitudes and behaviours during implementation of organisation change programmes. A few researchers have examined organisational commitment as an employee readiness predictor and found positive results. Nevertheless, the career commitment factor, which is one of the most important factors in individual attitudes and behaviours, has not been investigated so far in relation to employee readiness. In addition, some other factors like social relationships in the workplace and demographic variables can also be significant in a particular culture and environment. Thus, this study was developed to examine employee attitudes and behaviours for organisational change in public sector higher educational institutions of Pakistan. The justification of this research is that government of Pakistan has been introduced reforms in public sector universities. The next chapter is related to the study settings.

## **Chapter Three    Setting of the Study**

### **3.1    Introduction**

The study was conducted in Pakistan where new reforms have been announced by the government for public sector higher educational institutions. A brief description of the setting of the study is provided. Consequently this chapter describes the structure of the national education system, the national system of higher education, the academic hierarchy, the challenges for higher education, the reforms in the higher education sector, and finally concludes with a description of career culture.

### **3.2    Pakistan: General Background**

Pakistan became independent on 14<sup>th</sup> August, 1947. It is located in the region of South Asia bordering the Arabian Sea, between India on the East and Iran and Afghanistan on the West and China in the North. The country is one of the most densely populated countries, comprising 162 million people, making it the world's sixth most populous country and second most populous in the South Asia region (World Bank, 2006). According to Sawahel (2009), Pakistan has a high proportion of young people, about eighty five million below the age of 19, or 54% of the total population. Pakistan is divided into four provinces. These are Punjab, Sindh, North West Frontier Province (NWFP), and Baluchistan. The country consists of four territories namely as Islamabad capital territory, Azad Jammu and Kashmir (AJK), Federal Administered Northern Areas (FANA) and Federally Administered Tribal Areas (FATA) (World Bank, 2006). Its gross national income (GNI) per capita is US\$2700 in 2008, which places it at the 156<sup>th</sup> rank in the world (World Bank, 2009).

In Pakistan, there are no consistent links between overall human developments, wealth, gender, or education (Oxfam, 2006). Politics, culture, society and governmental structures affect the development of country and especially the education system. In the 21<sup>st</sup> century, with the emergence of globalisation and increasing global competition, education is an important factor that plays a leading role in human development, and is becoming one of the defining enterprises. In the fast changing and competitive world, education and technology are the important factors for respectable survival and the progress of Pakistan (Shami and Hussain, 2005). According to Memon (2007, p-47), the

functions of the educational institutions are to develop the people physically, mentally, psychologically, socially and spiritually. However, the education sector in the Pakistan suffers from insufficient financial input, low levels of efficiency for implementation of programmes, and poor quality of management, monitoring, supervision and teaching. As a result, Pakistan has one of the lowest rates of literacy in the world, and the lowest among countries of comparative resources and social or economic situations (Memon, 2007). Thus, the government of Pakistan initiated to make reforms in the sector of education for the benefit of social development and reducing poverty in the society.

### **3.3 Structure of the National Education System**

Because of changes in technology, labour market patterns and general global environment today, education is a basic need of society and is considered as a very important investment in human and economic development (National Education Policy, 2009). Education is considered as a technological, scientific and social improvement of a country but it depends upon the quality of education (Mohanthy, 2000; Haider, 2008). Thus, today education has been given importance and priority in Pakistan.

Both public and private sector institutions in Pakistan are source of education, and public sector is the major source. In public sector institutions, the educational system is highly centralised and it is a statutory requirement for all to follow a national curriculum. The education system has been divided into three levels (Table 3.1) including elementary education, secondary education and tertiary education (Shami and Hussain, 2005). In elementary education both primary and middle educations have been considered. Primary education is provided by primary schools over five years and middle stage education is provided at the age of 10 years of children for three years. After elementary education, the next stage is secondary education which consist on two stage such that secondary and higher secondary. Secondary stage of education is provided by secondary schools. It covers two years from 14-15 year old cohort of children. There is a Secondary Schools Certificate (SSC) examination at the end of the tenth class and is conducted by the Boards of Intermediate and Secondary Education through out the country (Shami and Hussain, 2005, p-2). After passing secondary stage of education, a student can be enrolled for higher secondary education which is provided by colleges or higher secondary schools.

**Table 3.1 Structure of National Education System**

<b>Level/Stage</b>	<b>Class</b>	<b>Duration</b>	<b>Age on Entry</b>
<b>1.Elementary</b>			
Primary	I-V	5 years	5 years
Middle	VI-VIII	3 years	10 years
<b>2. Secondary</b>			
Secondary	IX-X	2 years	13 years
Higher Secondary	XI-XII	2 years	15 years
<b>3. Tertiary</b>			
Undergraduate	XII-XIV	2 years	17 years
Postgraduate	XV-XVI	2 years	19 years

Source: Adopted from Shami and Hussain, (2005, p-3)

The students follow a two year programme of study at higher secondary level, which leads to the higher secondary school certificate (HSSC) and is a pre requisite for entrance to university or an institution of higher education (Shami and Hussain, 2005). After this education a student can either join professional university or institution that is agriculture, engineering, medical or general universities. There are a few colleges that provide higher education but are affiliated with some universities, or that the government has authorised to grant degree of higher education. Universities in Pakistan offer undergraduate, graduate and postgraduate programmes of studies in general and professional education. Before higher education commission reforms (refer section 3.7) honours bachelor degree was considered for three years but now it extends to four year programmes. The master degree programmes in arts and science are of two years if student passed bachelor of two year from college side. However if student passed honours degree of four year, this is now counted as equal to a masters degree. The minimum degree of Master of Philosophy or Master of Science (M. Phil or MS) is two years but if student passed four year honours degree then M. Phil or MS is of one year. The doctor of philosophy (PhD) degree is offered by research as well as by the course work with research for three years.

### **3.3.1 National System of Higher Education**

Higher education has always been an important component and is recognised as a dominant factor for economic, capital and social investment of a country (Barnet, 1990). In the emerging knowledge economy, higher education is a great source of any country development. Society needs higher education for its development because the world has been transformed into knowledge economies which are known as the engine for socio-economic development because important natural resources have greatly diminished. Considering the entire issue of development in a holistic manner, it thus becomes apparent that “Higher Education” serves as the engine of change that not only impacts economic development, but also serves to strengthen the entire system of education (MTDF2005-10, 2005, p-1).

The education sector in Pakistan has been divided into three levels (primary, secondary and tertiary) (refer section 3.3). Tertiary education is imparted mostly by universities or colleges which are affiliated with any university or government given special status to issue degrees. Tertiary education is known as a higher education which has been divided into sector wise such that engineering, medical, agriculture and general including arts, natural science, social science, commerce, business, law, pharmacy, computer and information system. Both public and private sectors are involved to provide higher education under the supervision of higher education commission of Pakistan. However, public sector is more dominant sector to provide education and majority of the student are attending the public institutions. According to higher education commission’s statistical booklet on higher education Pakistan, at present 10,471 full time faculty members are working in sixty eight public sector universities of Pakistan (HEC, no date a).

In Pakistan higher education institutions offer undergraduate, graduate and postgraduate programmes of studies in general and professional education. Engineering universities offer bachelor of engineering (B.E), master of engineering (M.E), master of philosophy (M. Phil) and doctor of philosophy (PhD) degrees. In medical universities, they offer bachelor of medicine and bachelor of surgery (MBBS) degrees. Agriculture universities provide engineering, bachelor and master degrees in agriculture sector. However, in general universities, many programmes (Bachelor, Masters, M. Phil and PhD) are

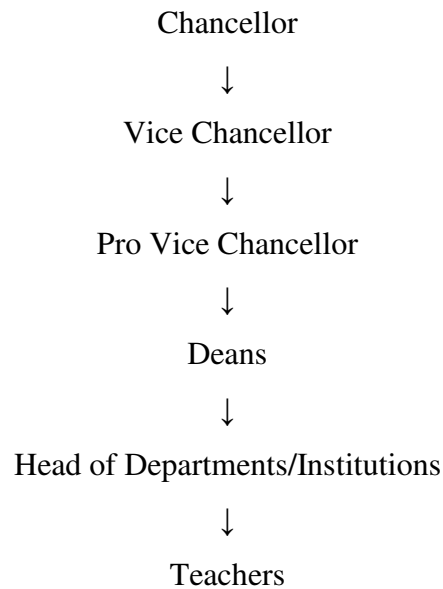


offered in many fields such as arts, natural science, social science, commerce, business, law, pharmacy, computer and information system. The basic requirement for getting admission for higher educational institution is twelve year education (Five years of primary, three years of middle, two years of secondary and two years of higher secondary education) (Shami and Hussain, 2005).

### **3.4 The Academic Hierarchy**

In Pakistan, the source of higher education is both public and private sector universities however, public sector is known as major source of higher education. These universities are controlled by ministry of education, ministry of health, ministry of sciences and technology and higher education commission of Pakistan (Previously known as university grants commission). However, the governance and managerial hierarchy of the public sector universities is a legacy of the colonial past where the structures and positions are modelled on public sector British universities basis. In public sector universities, two parallel hierarchies' (administrative and academic) are working in the structure. In the administrative hierarchy, Chancellor is followed by a Vice Chancellor (known as Chief Executive Officer), Registrar, Treasurer, Provost, and Controller of Examination. In addition to administrative hierarchy, universities have academic hierarchy like Chancellor, Vice Chancellor, Pro Vice Chancellor, Deans, Head of Departments or Institutions, and Teachers (Figure 3.1).

**Figure 3.1 Academic Hierarchy of Public Sector Universities**



In public sector universities Chancellors are head of state or provinces. If universities are in federal territory, the head of state (President) is Chancellor of those universities. Like that in province, Governors are the Chancellors of the respective provinces universities. In this system, the chancellor can appoint any person as a vice Chancellor on the recommendation of body consisted on three persons for four years tenure. In Public Sector University, Vice Chancellor position is responsible for looking after the administrative as well as academic matters of the university. In academic hierarchy, the Dean who is responsible purely academic is the authority to look after their faculties. His or her selection criteria is from the most three senior professors in the faculty for three years. Deans are followed by head of departments or institutions of faculty known as academic head of their respective departments or institutions. Selection of the head is on the basis of most three seniors from the departments or institutions for three years.

### **3.5 Challenges for Higher Education**

Today, people of Pakistan are facing multidimensional problems such that cultural, political, ethnicity, population, religious, financial, and terrorism as a general and higher education as a particular. These problems may be population explosion, lack of resources, less participation of private sector, scarcity of qualified man power, inconsistency in the policies of various regimes, political instability, inefficient

educational management system, wastage of resources, and poor implementation of policies and programmes (Hays, 1987; Sharif *et al.*, 2007). According to Mughal and Manzoor (1999), in higher education so many factors such as institutions, students' mobility, qualified teachers availability, globalisation of economy have direct impact on the higher education. Despite all these issues, the Pakistani government is striving to improve the higher education in relation to the development of knowledge economy. Thus, the purpose of higher education is not only to provide knowledge but have deeper meaning and objectives. In this context people of Pakistan are striving to pursue higher education in order to help the country to compete with any other nation of the world.

After rising to power in 1999, General Pervez Musharraf (military ruler of the country) started a series of reforms especially in the higher education sector. This corresponded with broader international support from development and donor communities for investment in higher education (Osama *et al.*, 2009). Thus, in 2001, the Government of Pakistan (GoP) initiated a process of reforms in the higher education sector and formed a task force to analyse the current condition of their education sector and to recommend necessary changes. The task force was consisted on different group of people. Two persons were as its co chairmen including one businessman cum educationist who is running a successful private university and the second was the president of a leading private medical university in the country. In addition, fifteen members were vice chancellors of different universities of the country. Seven vice chancellors were from public sector universities, among which only three were PhD. The rest of members were retired army officers who were appointed as a vice chancellor of different universities. Other than these, bureaucrats and few teachers from private sector universities were included. Thus the task force was the composition of different groups including educationists, retired army officers and bureaucrats who are suppose to be having an efficient and effective knowledge and expertise in the field. (Obaid, 2006)

In fact, objectives assigned to the task force were, “to review higher education in Pakistan and recommend ways of improving qualities” (Government of Pakistan, 2002). The task force made some surprising discoveries like only 2.6% of 17-23 year olds were enrolled in an institution of higher education in Pakistan compared with 6.2% in India, 12.7% in Iran and 68% in South Korea. The task force identified one challenge which is chronic underfunding of higher education. The total public funding of 41 public sector

universities was a meagre Rs3.9 billion per annum (US\$55 million in 2001). This amounted to a mere 0.1% of the country's gross domestic product (GDP) (World Bank, 2006). The national allocation for university research was only Rs40 million (Osama *et al.*, 2009). Apart from this issue, other issues discovered by the task force were a lack of political will for the role education, ineffective governance systems, political interference in university administration, weak institutional leadership and, at the university level, a lack of performance culture and accountability (Osama *et al.*, 2009).

Government of Pakistan recognise the current problems of higher education in Pakistan. After the recommendations of the task force, the higher education commission recognised the following fundamental problems facing higher education in Pakistan (MTDF2005-10, 2005, p-iii).

- a. Access – At present only 2.9% of our students aged between 18 and 23 years have access to higher education.
- b. Quality - The present quality of higher education is very low. Not a single university of Pakistan is ranked among the top 500 in the world. According to Clark (2005, p-56), the main cause of this deplorable state of higher education is seen as insufficient education and training of faculty. Of 7000 faculty member, only about 25 percent, or 1700 in all of Pakistan, have PhDs. This is very low for a country of 160 million people.
- c. Infrastructure – Each public sector university will need its departments to be upgraded in terms of availability of books, journal, scientific equipment, consumables, teaching aids and high speed internet connectivity as well as sports and other facilities to provide the requisite environment for quality education.

In addition to these challenges, higher education sector itself identified the following issues in its policy document Medium Term Development Framework (MTDF)2005-10 (2005, P-6): -

- i. Poor standard of faculty and lack of training/capacity building.
- ii. Low enrolment in higher education

- iii. Minimal relevance of higher education to national needs and lack of compatibility to international standards
- iv. Low quality of research and lack of relevance to national requirement
- v. Poor governance of Universities

### **3.6 The Reforms in the Higher Education Sector**

Education is being considered a key to change and progress because of closed link with development (Memon, 2007). It increases the economic, social and political adjustment of the individual in the society and assists harmonious development to raise productivity and efficiency of the individual. Like other developing countries, the situation of the higher education sector in Pakistan is not very encouraging and human aspect of development has not been given due consideration in the past. Thus, it demands special attention in order to improve higher education for developing nation.

The higher education system is currently undergoing major changes in Pakistan (Siddiqui, 2006). Government of Pakistan has planned to improve higher education at the centre of the economic planning and this is expected to provide greater opportunities and choices to improve the individual's lives (Shami and Hussain, 2005). In the emerging knowledge economy, nations that fail at creating a decent learning environment will lag behind, and may end up becoming virtual colonies of those that do succeed in this regard (Shami and Hussain, 2005). All over the world universities are guiding and cooperating with industrial and agricultural development organisation and they are developing their economics rapidly and meaningfully (Memon, 2007, p-47).

In Pakistan, higher educational system is narrow, uneven, and fragile, where low access, large disparities, poor quality, and weak performance are evident. According to World Bank Report (2006), Pakistan is lagging in the education sector from those countries that has similar levels of development. It is only in the early 2000s that the powerful potential of a healthy higher education subsector began to be recognised by the highest authority (World Bank, 2006, p-5). However, Pakistan has a long history of reforms but mostly they failed. According to a draft prepared by The Boston Group, (2002, p-15), besides a spew of repeated constitutional reforms and constitution making (as evidenced

by two quasi-constitutions in 1948 and 1985, three full fledged constitutions in 1956, 1962, and 1973, and four supra-constitutional frameworks introduced by military rulers in 1958, 1969, 1977, and 1999), the country has witnessed repeated attempts to introduce agricultural and land reforms (1953, 1958, 1969,1972) administrative reforms (1959, 1973), local government reforms (1962, 2000), industrial reforms (1972), financial sector reforms (1972), and many others.

Recognising the above problems and challenges facing higher education in Pakistan, higher education commission (HEC) has set out a strategic plan to improve the state of higher education in the country. According to MTDE2005-10 (2005) core strategic aims are:

- a. Faculty Development
- b. Improving Access
- c. Promoting Excellence in Learning and Research
- d. Relevance to the Economy and Development

The aim of the first plan is to improve the quality of teaching and research through the teaching skills and academic qualification of faculty members. A series of recommendation has been given by the task force including calling for a huge jump in public funding for universities from Rs3.9 billion in 2001- 02 to Rs21.7 billion in 2005-06 (World Bank, 2006), which is unprecedented in the country's history. Special attention has been given in areas of scholarships, fellowships, and teachers' promotion. In this connection the HEC launched programmes for human resources development, research, and physical infrastructure. Human resources took the lion's share with 5,000 new PhDs at local universities over five years and more than 2000 foreign PhD scholarships has been sponsored to study abroad. Based on the task force recommendations, the Ministry of Education enacted the University Model Act. This act proposed radical changes in different areas of the universities including changes to the University Grants Commission (UGC), the Senate and the Syndicate. The act also proposed changes to working conditions of teachers and functional responsibilities of various administrative positions. According to Sawahel (2009) the then Federal Minister

of Education said “The reform process has included a number of innovative steps for promoting human resource development and enhancing capacity building with the aim to establish a world class faculty, expand access and improve the quality and relevance of higher education and research to economic growth and sustainable development”.

According to Osama *et al.* (2009), the success of reforms must not be measured by the number of grants made or PhDs awarded, rather it should be judged on whether it is creating a culture of research driven not by financial incentives, and by a genuine desire to create new knowledge and to enable the broader society to reap the benefits. So far the impetus claims have caused a 400% increase in the number of papers published in international journals by Pakistani universities (Osama *et al.*, 2009). It also takes credit for the appearance of three Pakistani universities among a popular top six hundred chart of world universities with Pakistan a rising star in five fields of science and engineering and external endorsements by evaluation teams the British Councils (BC), the World Bank and USAID (Osama *et al.*, 2009). In the past five years, forty seven new universities and degree awarding institutions have been established, almost tripling the enrolments, while fifty six universities were linked with fibre optic and international research networks (Sawahel, 2009). However, these reforms faced a lot of opposition from various stakeholders particularly from the public sector university teachers (Sawahel, 2009 and Osama *et al.*, 2009). From financial incentives, faculty members criticised the deep divisions between winners and losers in a two tier salary structure (Osama *et al.*, 2009). Despite this resistance, the HEC seems to have changed the culture of Pakistani academia considerably over the past five years (USAID, 2008).

### **3.7 Conclusion**

This chapter attempted to review the context of study. The main body of this chapter focuses on back ground of the country such that Pakistan where this research conducted, structure of national education system, national system of higher education, the academic hierarchy, challenges for higher education, and reforms in the higher education sector. The country has given importance to higher education and recognised it as a dominant factor for economic and social development. In Pakistan, both public and private sector institutions are involved but public sector is known as the major source of education. However, public sector institutions are highly centralised and it is

statutory requirement for all to follow a national curriculum. Due to a lower performance of public sector higher educational institutions, the government initiated a process of reforms and recognised the recommendations of a task force in respect of faculty development, improving access, promoting excellence in learning and research, relevance to the economy and development of task force. However, these reforms faced a lot of opposition from various stake holders particularly from the public sector university teachers. Despite the resistance, the government intends to further change the culture of Pakistani academia considerably.



## **Chapter Four      Conceptual Framework**

### **4.1      Introduction**

This research examines employee readiness determinant to build up employee positive beliefs, intentions, behaviours, attitudes, and expectations during organisational change. In literature review chapter researcher proposes that employee can be developed positive attitudes and behaviours on the basis of their commitment to the organisation and career along with social relationships in the workplace factors. The conceptual approach for this research study is based on a broad theoretical framework and the study examines employee readiness predictors for organisational change in public sector higher educational institution of Pakistan.

Regardless of the need for and inevitable change in organisations, predictors can be used as a support and source for management in developing policies, strategies and planning before implementing successful organisational change programmes. In the change management domain, various determinants of employee readiness have already been explored to infer for effective implementation of change programmes in different ways, different times and at different places (Chapter Two Literature Review Table 2.2). This study focuses on employee psychological and financial predictors of commitment which were found in literature to help in developing employee attitudes beliefs, and behaviours particularly in Pakistan.

The purpose of this chapter is to develop research hypotheses to examine the employee readiness determinants for organisational change. To address the hypotheses effectively, the researcher reviews and integrate subject areas such that organisational change and its impact on an individual employee, conceptual approach, theoretical frameworks, employees' commitment to their organisation and career, social relationships in the workplace and demography. This will clarify the research area and development of a conceptual approach and a theoretical framework for this study.

## **4.2 Organisational Change and its Impacts on Employee**

Change in organisation is quite inevitable due to tremendous internal and external environmental pressures. These challenges or pressures can direct an organisation to apply ‘therapy’ in the form of alterations, modifications or variations to its structures, policies, strategies, approaches, or culture. Change in an organisation is, in fact, an adaptation of new ideas or behaviours that can be defined in many ways like transformation of an organisation between two points in time (Barnett and Carroll, 1995) or planned or unplanned transformation in the structure, technology and people of an organisation (Greenberg and Baron, 2002). However, its impact on an organisation and its business might be positive or negative. Thus, it is necessary to act according to the situation created by any external or internal organisational forces to promote business as well as ensure future survival. By taking such action, organisations must create a difference such that they can compare between the two different times.

During organisational change, employee is the most acutely affected element. Apart from other components, employee might be given the wrong impression or are unclear because of diverting from a known to an unknown situation during organisational change. Being a major resource of an organisation, employee can play a central and active role in change activities which may be planned or unplanned. The reaction of employee may be developed according to his or her perceptions which are supported by his or her skills, experiences, opportunities, benefits, and commitment. Looking at the reality, change in organisation seems to be largely an essential, exciting, critical and complex activity because it often occurs more rapidly, in greater volume, and is more complex than ever before (Bennett, 2001). Thus, developing employee cognition levels or reducing employee resistance is a critical issue in the change management domain. Being mere humans, they might become uneasy, disbelieving and stressed. Indeed the employee’s position in this situation becomes more fragile and they have to decide a future line of action in order to either support or resist the change.

To overcome the employee anxiety regarding change programmes, management and change agents focus on foreseen challenges faced by employee during implementation of organisational change. Academic researchers and organisational practitioners have extensively advocated employee readiness predictors as an imperative source for

controlling the situation properly (Armenakis *et al.*, 1993, Bernerth, 2004; Holt *et al.*, 2007; Cinite *et al.*, 2009). According to the literature employee readiness factors have a significant impact in preparing them mentally and physically for immediate action (Madsen, 2003). By applying readiness predictors, before announcing change programmes, management can develop employee attitudes, beliefs, and behaviours that can support the organisation in formulating supportive policies and strategies to stop resistance by employees (Bernerth, 2004; Miller *et al.*, 2006). Thus, employee readiness factors have been empirically found effective and useful in relation to preparing employees for organisational change in general (Eby *et al.*, 2000; Cunningham *et al.*, 2002; Rafferty and Simons, 2006).

In the change management domain, the term employee readiness is defined as an employee's beliefs, thoughts, and behaviours to accept the needs and capability of an organisation. It is known as a cognitive precursor to behaviours of either resistance or support (Armenakis *et al.*, 1993). In fact, employee's cognitive precursor to behaviours usually reveals his or her attitudes, beliefs, and intentions towards organisational change. Simultaneously, readiness is similar to Lewin's (1951) concept of unfreezing, reflecting an employee's beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organisation's capacity to successfully make these changes.

Whatever the reason, quantity or speed of what is to be changed the most significant concern among experts is how to deal with the uncertainty created during or after implementing organisational change programmes. Various theories, models and predictors have been applied by researchers to control the situation and reduce employee resistance (Armenakis *et al.*, 1993; Desplaces, 2005; Rafferty and Simons, 2006). In this regard, researchers and practitioners have focused on employee readiness predictors to develop employee positive feelings and attitudes. And now, more readiness predictors in different correlations are being demanded to increase the effectiveness of change programmes (Madsen *et al.*, 2005).

### 4.3 Conceptual Approach

Organisational change has been considered a vague and unknown situation which may develop uncertainty and anxiety among employees (Armenakis *et al.*, 19993; Ilgen and Pulakos, 1999). Employee can be affected by a range of different factors like individual life experiences, socio-demographic characteristics, knowledge and skills, attitudes, values, and behavioural patterns. In addition, employee can be affected by internal and external factors as well as social factors. Thus, employee can develop different feelings, thoughts, beliefs, behaviours and attitudes towards organisational change on the basis the level of organisational support and their own perceptions. In this regard, change management agents and academic researchers are concerned with how to deal with employee so that they can actively accept and become involved in the organisational change. Researchers like Tetenbaum (1998); Cunningham *et al.* (2002) emphasised that organisations must consider employee readiness predictors in change management before developing policies and strategies to cope with the situation.

In any given organisation where change is to be implemented, employee could be mislead and unclear about the change. An employee's response may be either active or passive but can be critical and serious for the management. In active behaviour, employees commonly become positive to organisational change because they perceive new opportunities for development and progression. On the other hand, passive behaviour relates with those employees who become reluctant to the organisational change as they view the change as an uncertain situation and source of stress. This perception indicates unsuccessful change efforts by the organisation and may lead to decreased morale and productivity and increased turnover or subsequent organisational failures.

A passive reaction to the change can create tension among employees, who may have to undergo painful unlearning and relearning processes (Schein, 1996). Therefore, organisation needs to formulate policies or strategies on the basis of facts in both planned and unplanned organisational change. In this way, management can develop positive perception levels among employees before introducing the organisational change. However, it could be simpler when the management knows the employee readiness predictors (Eby *et al.*, 2000; Desplaces, 2005; Madsen *et al.*, 2005) which can

be the foundation of such policies or strategies. Thus, researchers and experts have largely concentrated on employee readiness predictors in different correlations to develop employee active response. By applying this nomenclature, management can understand employee thoughts, beliefs, and intentions before or during implementation of change and focus on preparing employee mentally and physically for inevitable changes.

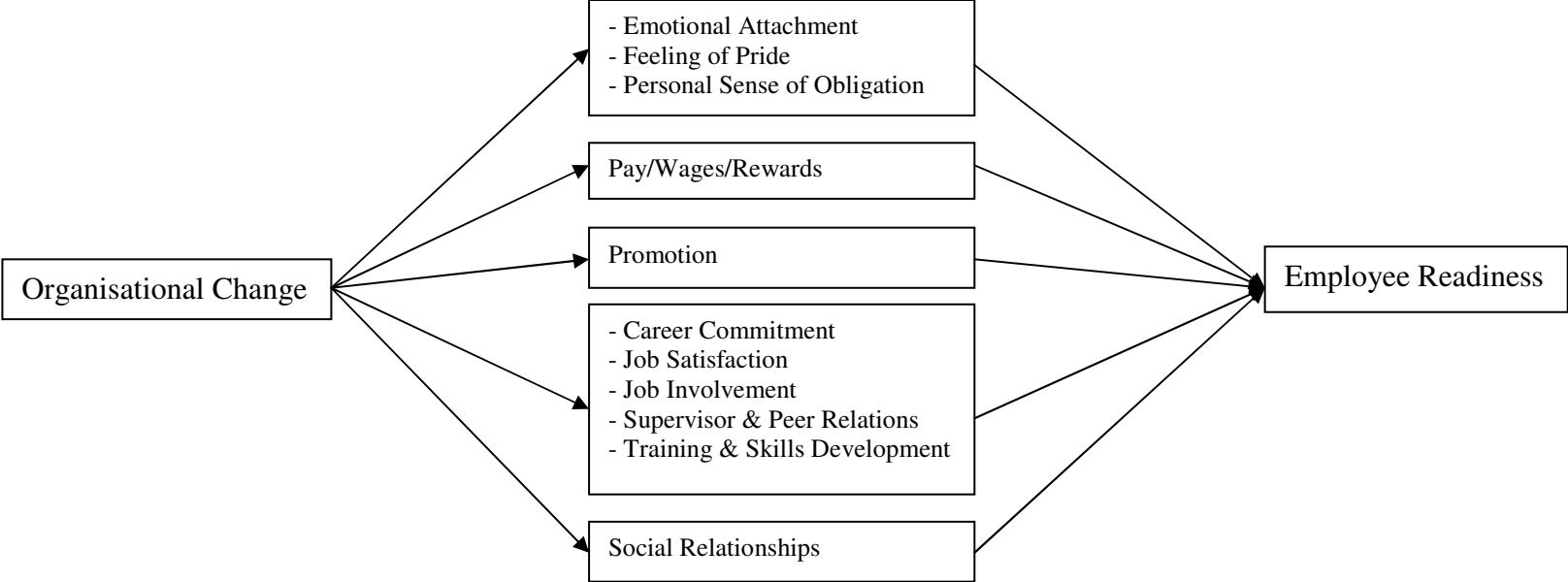
In this regard, this study focuses on employee commitment to the organisation and their career and social relationships in the workplace factors to develop individual beliefs, attitudes, and behaviours to the organisational change. The literature on change management reveals that Madsen *et al.* (2005) were the first to examine the predictors of employee commitment to the organisation. Results of the study showed a positive relationship between employee attitudes and behaviours and readiness for organisational change. It is important to note here that career commitment is related to the employee attitudes and behaviours (Goulet and Singh, 2002). The research has largely neglected the links between employee career commitment and employee readiness for organisational change. By applying both factors (affective and instrumental), management can achieve more positive results because the literature on commitment supports both factors simultaneously (Goulet and Singh, 2002; Yoon and Thye, 2002). Thus, this research study considers both employee dimensions of organisational commitment (affective and instrumental) along with employee career commitment. According to the literature this researcher has reviewed, this may be first study in the domain of change management to examine employee career commitment factors along with employee commitment to the organisation to understand the employee attitudes, beliefs, and behaviours to readiness for organisational change. In fact, career commitment is related to an individual's attitudes and behaviours towards his or her career. The literature in the career commitment domain reveals that if an employee is committed to his or her career, he or she can progress to a higher level within the organisation (Hall, 1976; Colarelli and Bishop, 1990). Using this concept, the researcher examines employee commitment to the organisation along with career predictors which might be effective in developing positive attitudes, beliefs, and behaviours.

The growing globalisation of business has led to an increasing need to implement organisational strategies that transcend national boundaries (Hampel and Martinsons,

2009, p-459). This research study has been conducted in Pakistan where psychological and financial factors are regarded as more important than in others for developing positive attitudes and behaviours (Chang, 1999; Alvi and Ahmed, 1987). Thus, the research has focused on those elements of an organisation which can provide an active and supportive role in developing individual's perception level in the context of Pakistan. In this study, the predictors (Figure 4.1) were applied to employee readiness for organisational change. Regardless of the need for and inevitability of change in the organisation, different theories, models and conceptual approaches and frameworks were applied to ascertain employee readiness. On the basis of conceptualisation, this research study has been developed on employee commitment to the organisation and career predictor variables which follow the individual's psychological and financial needs. According to Galais and Moser (2009) commitment to the organisation may be way of satisfying a need for belonging and identifying. By applying this approach, management can develop positive thoughts and feelings among employees towards the organisation and career.

In organisational terms, commitment has largely been used to understand employee behaviours, thinkings and attitudes towards organisation or work (Oliver, 1990). In this domain the term seeks the nature and quality of the relationship between the employee and employer and sense of attachment to their action. The relationship of individual with the organisation shows their beliefs, willingness, and desire to remain with the organisation. Thus, the commitment factor can be applied to understand the individual's response for organisational change.

**Figure 4.1 Conceptual Framework**



In fact, the relationship between employee and employer develops on the basis of the work environment and mutual exchanges that can galvanise the individual to utilise his or her abilities, efforts, experiences and skills. The work environment and exchanges may support employee developing commitment with the organisation because she or he sees the possibility of accomplishing desires, needs and future expectations. By achieving their needs and expectations, employee accepts or identifies with the organisation's goals and values. In addition, an employee can develop positive attitudes and behaviours when she or he knows about the organisation's ability and need for action. Thus, academic researchers and practitioners try to explore the factors which may support to employee for developing their mind, attitudes, intentions and beliefs for organisational change. This could be possible by analysing the factors related to the individual's commitment to the organisation and career. These factors are mostly applied to understand the individual's cognition level towards the organisation.

To develop an individual's cognition level, it is essential for management to communicate the organisational change messages regarding the need and capability of organisation when to making any changes. By communicating these change messages, management mainly focuses on assisting employees to understand the organisation's goals in the form of the need for and efficacy of change programmes. Because understanding the need and capability of organisations can lead to developing positive beliefs and behaviours in change programmes. However, employee usually develops relationships on the basis of psychological and financial benefits which are normally related to employee commitment to the organisation and his or her career.

In the commitment domain, the main emphasis has been on employee commitment to the organisation and career which is related to developing an employee's positive behaviours, beliefs and attitudes. This development is possible when individuals satisfy their psychological and financial needs. In organisational behaviour literature, the commitment factor has been found to be relevant to an individual's needs and future expectations. By accomplishing these desires employee can develop positive attitudes and behaviours for management.

Employee commitment to the organisation has been defined as emotional attachment, feeling of pride, a sense of obligation, as well as salary, rewards and compensation



factors to work in an organisation (Buchanan, 1974; Cook and Wall, 1980; Penley and Gould, 1988; Cohen, 1996; Madsen *et al.*, 2005). Through these factors employee develop thoughts and feelings which encourage them to maintain their working relationship with the organisation. In employee organisational commitment domain literature, the main focus has been to understand employee career, identification, morals, work, job involvement, turnover, job satisfaction, and readiness behaviour (Gellatly, 1995; Madsen *et al.*, 2005). Thus, this dimension of commitment can be applied to know the individual's attitudes and behaviours towards the organisation when management intends to make changes.

In organisational commitment two main dimensions (affective and instrumental) have been applied to measure the individual's attitudes and behaviours (Allen and Meyer, 1990; Penley and Gould, 1988; Liou and Nyhan, 1994). These factors have a positive relationship with employee attachment to an organisation. Affective commitment is related to the individual's psychological attachment while instrumental commitment is related to financial attachment to the organisation. Both forms of commitment are useful for developing positive attitudes and behaviours for organisational change because employee want to develop relationships on the basis of accomplishment of his or her needs, expectations and future progression and development. Variables used in this domain support understanding the individual's benefits and expectations provided by the organisation. Indeed, these factors are related to salary, rewards, emotional attachment, a feeling of pride, and personal sense of obligation. By analysing these variables, the researcher is interested to measure employee attitudes beliefs, and behaviours that show loyalty and attachment to the organisational goals and objectives.

Besides employee commitment to the organisation, employee can develop positive feelings and thoughts on the basis of career commitment as well. If an employee is satisfied with his or her career and positive thoughts and feelings for the organisation, they will tend to accept changes. In career development, employee always looks for organisational support regarding the psychological and financial variables that can strengthen their future career. Generally psychological factors have been perceived to have a stronger relationship with individual satisfaction, attitudes, and well being (Baltes *et al.*, 2009). Career commitment has been applied for measuring the individual's cognition level. In this domain a number of variables have been examined

and found a relationship between employee and employer on the basis of career. In the literature, the consequence of career commitment or lack of it has been found as turnover, absenteeism, or job satisfaction (Good *et al.*, 1996; Wiener and Vardi, 1980; Yoon and Thye, 2002). Thus, the career commitment factor can be applied for change management to measure the employee readiness for organisational change.

In career commitment two factors (individual and situational) commonly apply for measuring the individual's perception level towards his or her career (Judge *et al.*, 1995; Chang, 1999; Poon, 2004; Goulet and Singh, 2002). Individual factors are related with psychological aspects of individual based on job satisfaction, job involvement, training and skills development, and supervisor and peer relationships (Blau, 1985; Childs and Klimoski, 1986; Dreher and Bretz, 199; Judge *et al.*, 1995; Goulet and Singh, 2002). Situational factors are related to financial aspects of the organisation related to an employee's promotion and tenure (Judge *et al.*, 1995; Chang, 1999; Poon, 2004; Goulet and Singh, 2002). Employee generally perceive individual and situational factors because both support the individual psychologically and financially to develop positive cognition to the organisation. Thus, through these variables employee can decide to stay or not with the organisation because career commitment is related to an individual's career satisfaction.

Social relationships in the workplace also affect the individual's attitudes and behaviours towards organisational change programmes. If an employee develops social relationships with their managers, peer and subordinate, she or he may show positive cognition levels towards the organisation. However, an employee interacts with colleagues in the form of subordinate, peer or supervisor his or her feelings, attitudes and perceptions may be different. But with social interaction, management can understand the individual's cognition towards his or her work. In social relationships managers can understand the employee likes dislikes and enjoyment as a result of talking, interacting and working with them.

Apart from these factors, there are also some external factors such that demographical elements applied to understand the individual's perception level. In the literature many researchers have examined readiness predictors with the support of external factors (Hanpachern *et al.*, 1998; Madsen *et al.*, 2005; Miller *et al.*, 2006). These factors are

related to the demography of the employee in which researchers have included such variables as gender, age, marital status, employment status, and highest educational level, number of dependents, years in present job, and years with present employer.

By applying this conceptual approach, the researcher is interested to examine the employee commitment to the organisation and career factors in order to understand employee attitudes, beliefs and behaviours for organisational change. This study was conducted in Pakistan where the main focus of an employee is on his or her psychological and financial aspects. Therefore the variables used in this study are related with the employee psychological and financial aspects that may support the development of positive attitudes and behaviours. Apart from this concept, social relationships in the workplace were applied to know the individual cognition level. In addition, some external factors were also applied to understand the level of attitudes and behaviours.

#### **4.4 Theoretical Framework**

This empirical study examined readiness predictors to know employee attitudes and behaviours for effective and successful implementation of organisational change. These predictors might have a large impact on employee attitudes, behaviours and beliefs towards organisational change. In the change management domain, various theories have been applied to gain in-depth insight to measuring employee attitudes and behaviours, and change readiness. These theories have mostly been applied in developed or western countries. But this empirical research study was conducted in Pakistan. In this study the researcher applied the theoretical model given by Armenakis *et al.* (1993; 99) and Maslow's Need theory (1954). Unlike other change theories, these theories have focused on particular issues rather than general issues about organisational change. Thus, the application of these studies could help to a great extent in the analysis and in-depth reflection in the proposed study.

Having different cognition levels, experiences, culture, habits, skills and mental processes, an employee reaction might be different to even the same change message (Armenakis *et al.*, 1993; Cummings and Worley, 2005). Thus, Armenakis *et al.* (1993) urge that before announcing or implementing changes in an organisation, management

must communicate the change messages accurately, effectively and in a timely manner. Besides, change agents must inform five key message components including self-efficacy, principal support, discrepancy, appropriateness, and personal valence (Armenakis *et al.*, 1999), which can provide greater clarity among employees of the change issues (Madsen *et al.*, 2005). These factors defined in (Table 4.1) will clarify the needs and capability of an organisation undertaking a change programme as well as making clear the benefits of the change to individual employee. With honest and open organisational communication, management can build a trustworthy relationship offering a sense of belonging to the employees.

**Table 4.1 Change Message Factors**

<b>Factor</b>	<b>Definition</b>
<b>Self-efficacy</b>	Confidence in individual and group's ability to make the change succeed.
<b>Principal support</b>	Key organisational leaders support this particular change.
<b>Discrepancy</b>	A gap between the current state and an ideal state.
<b>Appropriateness</b>	The correct reaction to fix the gap identified by discrepancy.
<b>Personal Valence</b>	Clarifies the intrinsic and extrinsic benefits of the change

Adapted from Bernerth (2004, p-41)

Commitment and its determinants have widely been studied from a number of theoretical perspectives. This research study supports Maslow's need theory (1954) in analysing the psychological and financial factors for employee change readiness. In this theoretical framework, Maslow's hierarchy of needs informs the development of a human needs hierarchy in developing attitudes and behaviours. This conceptual framework can refer to individual's psychological and financial needs, which might change an employee cognition level in Pakistan especially in public sector higher educational institutions. This theory posits that individual seek to meet a hierarchy of needs in order to obtain goals that are determined by their needs. Five hierarchy levels (Table 4.2) of this theory are organised in such a way that they are built on the previous level(s).

Anyone who reaches the fifth (highest) level is healthy physiologically and able to fully

realise his or her own potential however, to attain this level he or she must first have satisfied all the basic needs for everyday living, that is, all the needs within the first four levels of the hierarchy (Sullivan and Decker, 1992). But, researchers do not believe that one level of need must be satisfied before the next level of need emerge, as proposed by Maslow (McClelland, 1965; Alderfer, 1969; Pinder, 1998). However, this theory has become less popular with rising weight on cognitive processes rather than on underlying needs (Spector, 1997). Above researchers have objection on the Maslow’s hierarchy needs approach. It is believed that man’s needs are not one or restricted to a particular level. According to Au *et al.* (2002, p-459) that disagreement on the number of level and the categorisation of needs do exist among human beings, and that these affect their values, behaviours, and attitudes. In fact, needs are dynamic and at one time many other needs to be satisfied rather than restricting to one level. Likewise, it is difficult to ascertain that who has reached to which level. There may be individuals who may settle for lower job satisfaction or salaries but for higher future career benefits. But this is just an approach, no approach of motivation can satisfy all problems or could answer all questions.

**Table 4.2 Maslow’s Hierarchy Need Theory Factors**

<b>Factor</b>	<b>Definition</b>
<b>Psychological needs</b>	Satisfying basic needs such as food, shelter, and protection from personal harm.
<b>Safety needs</b>	Need to avoid danger and deprivation such as job and body security
<b>Belong to a socio group needs</b>	Personal acceptance by others, belonging to a group such as friends and family
<b>Self esteem and status needs</b>	Desire for recognition; gaining self respect such as confidence, achievement, respect of and by others
<b>Self actualization need</b>	The drive towards self fulfilment such as creativity, problem solving, acceptance of facts

Source: Adapted from Cole *et al.* (2006); Zangaro (2001)

Table 4.3 depicts the application of Maslow’s theory to employee readiness in Pakistan. The antecedents of the proposed study are concerned with employee psychological and financial needs that parallel the needs identified in Maslow’s hierarchy. The variables of

each antecedent contribute to an individual commitment towards organisation and their career that can develop positive attitudes and behaviours during organisational change. If individual needs are satisfied, they will feel comfortable in their relationship with the organisation and may play a positive and active role in organisational programmes. Therefore, the employee is self actualised since his or her physiological and financial needs for security, socialisation, and esteem are met.

**Table 4.3 Maslow’s Hierarchy of Need Level Compared to Employee’s Needs**

<b>Employee’s Needs</b>	<b>Maslow’s Hierarchy of Need Levels</b>
Pay/Wages/Rewards	Level 1: Psychological need
Promotion/Tenure	Level 2: Need for safety
Social Relationships in Workplace, Supervisor and Peer relations	Level 3: Need for belonging
Job satisfaction, Job involvement, Personal sense of obligation	Level 4: Self-esteem
Training and skills development	Level 5: Self-actualisation

Source: developed by researcher

#### **4.5 Commitment and its Impact on Employee**

Commitment has been conceptualised as the attitudinal and behavioural aspect of employee towards organisations or work in the domain of organisational behaviour and social relations (Meyer *et al.*, 1989; Oliver, 1990). The attitudinal approach seeks to establish the nature and quality of relationships between the employee and an organisation (Oliver, 1990). This approach shows the individual’s attachment in terms of beliefs, willingness, and desire to maintain membership of an organisation. In commitment domain, behavioural approach is developed on the basis of an individual’s sense of attachment not an organisation but to their actions (Oliver, 1990). In this approach, individual maintains their relationships on the basis of rewards, salary, wage, compensation, tenure, promotion or any other financial benefits which may be lost if the individual leaves the organisation. Academic researchers and practitioners have attempted to show the relationship of commitment with an individual behaviours and attitudes towards his or her work and work environment (Gaertner and Nollen, 1989; Gautam *et al.*, 2001). Thus, higher level of commitment is related to higher levels of

employee satisfaction, progression and development.

In the organisational domain, the term commitment has been defined as an act of behaviours, beliefs, and attitudes towards a pledge, vocation, or organisation in regard to how she or he tends to be assigned (Hall, 1971; Merriam-Webster, 1999; Yoon and Thye, 2002). The concept has been applied to measure the individual attitudes and behaviours in the workplace. Over the past many decades, commitment has dominated in the literature on organisational behaviour and social relations. In this domain various factors have been used to identify and understand employee careers, norms, identification, morale, work, jobs, job involvement, absenteeism, turnover, job satisfaction, readiness and organisational citizenship behaviour (Reilly and Orsak, 1991; Gellatly, 1995; Madsen *et al.*, 2005). These determinants have positive or negative impacts on the relationship between individual and an organisation. In this domain various dimensions such that personal attributes relating to psychological aspects and exchange based measures concerned with financial aspects of the individual have been found to support the employee cognition and belief levels towards the organisation and organisational work (Judge *et al.*, 1995; Chang, 1999; Goulet and Singh, 2002; Poon, 2004).

In the literature, commitment has been focused as attitudinal and behavioural approaches to employee readiness for organisational change (Weber and Weber, 2001; Madsen *et al.*, 2005). Indeed, commitment develops on the basis of expectations and benefits provided by an organisation. It is through these mechanisms that employee try to forge relationships with the organisation. In this regard researchers have expended a great deal of effort to identifying and analysing purposeful determinants of employee commitment which may support to develop positive perception. Thus, this research focused on employee commitment to the organisation and career and social relationships in the workplace factors in order to understand employee attitudes and behaviours for organisational change.

#### **4.5.1 Employee Commitment to the Organisation**

Employee commitment has been treated as active and positive behaviours and attitudes

towards his or her organisation. Mowday *et al.* (1979) define the term organisational commitment as an individual identification, loyalty, or involvement, which is characterised by beliefs, willingness, and membership with the organisation. Zangaro (2001, p-14) described it as the act of pledging or promising to fulfil an obligation to someone or something at a future date. In organisation, employee beliefs, attitudes and behaviours can develop when the he or she knows about the organisational goals and objectives. In developing employee positive perception regarding the organisation, employee commitment plays an important role. It shows loyalty, identification and involvement with the goals and values of the organisation (Buchanan, 1974; Cook and Wall, 1980). Thus, academic and practitioner researchers in this domain are interested in employee commitment, because of the individual's perception of trust, and pledge to the organisation. In general, employee commitment to the organisation includes a belief in the organisation's goals and values that indicate strong identification, involvement, and loyalty to the organisation. In order to develop this, it is essential that employee and the organisation understand their mutual interests will be served for the future. However, these relationships can be developed simply on the strength of the mutual interests between organisation and employee on the basis of certain needs, desires, and expectations.

Indeed, organisations perceive the need to provide an environment to employee related to expectations and demands as employee can utilise their ability, efforts, and skills. Such an environment is feasible when management knows about the individual's expectations, needs and desires. Many researchers and practitioners have tried to explore possible predictors relating to developing a supportive environment for employee (Penley and Gould, 1988; Allen and Meyer, 1990; Yoon and Thye, 2002).

In this regard, the organisational commitment concept has been used as a multi-dimensional concept in the domain of commitment (Allen and Meyer, 1990). In previous research, employee commitment to the organisation has been used as a predictor of behaviours like absenteeism, turnover, and organisational citizenship behaviours (Price and Mueller, 1986; Sagie, 1997; Schappe, 1998). According to Good *et al.* (1996) and Yoon and Thye (2002) the organisational commitment concept develops with organisational support, job satisfaction, job involvement, loyalty, or on the other hand, turnover and anxiety. In the literature, organisational commitment and



job performance have been positively related (Mowday *et al.*, 1974), while tardiness, absenteeism, and turnover (Steers, 1977; Hom *et al.*, 1979; Wiener and Vardi, 1980) are inversely related. Thus, the term can be applied for individual's attitudes and behaviours because in previous research it has been used to know the individual's cognition levels. Hence, the main concern of this researcher is to find the predictor variables that may support the development of individual positive attitudes and behaviours in change situation. These predictors may help at the time of any alteration, variation, or modification within the organisation.

Employee develops their attitudes and behaviours on the basis of psychological and financial needs (Alvi and Ahmed, 1987; Chang, 1999). These psychological and financial aspects develop employee commitment to the organisation. Allen and Meyer (1990) empirically supported the concept by analysing the affective, continuance, and normative component to measure employee commitment to the organisation. In this study affective and normative components have been treated as a psychological aspect of employee, while the continuance component is a part of the financial aspect of employee. Gautam *et al.* (2001) supported that these three concepts reflect an individual's psychological and financial status. Thus, affective commitment of employee is related to his or her emotional attachment, identification, and involvement with the organisation. Continuance commitment is based on costs, while normative is concerned with feelings of obligation to remain with an organisation. In the literature, Penley and Gould (1988) describe employee psychological and financial aspects by instrumental and affective factors of employee commitment. Many researchers like Etzioni (1961) and Weiner (1982) have used organisational commitment with calculative, moral and alienative factors to measure employee commitment to the organisation. Calculative commitment is treated as instrumental form of organisational commitment which is related to financial aspects of an employee and moral and alienative commitment are treated as affective forms of organisational commitment which is related to psychological aspects of employee. In view of the above studies, there are two main dimensions of employee commitment to the organisation such that affective and instrumental which are related to the individual's psychological and financial aspects which can affect to employee in developing their attitudes and behaviours towards the organisational change.

#### 4.5.1.1 Affective Commitment

An employee develops relationships with an organisation on the basis of reputation, recognition, expectations and future development and progression. Affective commitment is one of the most important and supportive element of employee commitment to the organisation, and relates to individual involvement, loyalty, and attachment. In the commitment domain, employee affective commitment has been known by different names like normative, moral and alienative commitment (Allen and Meyer, 1990; Penley and Gould, 1988). Meyer and Allen (1984, p-375) define affective commitment as positive feelings of identification with, attachment to, and involvement in the work organisation. In this domain, researchers include job characteristics such as job challenge, variety of skills and degree of autonomy (Gautam *et al.*, 2001) which is related to the psychological aspect of employee. The factors which may develop employee's affective commitment include recognition, trust, name and fame, emotion, experience and reputation of the organisation. With the passage of time, attitudes and behaviours can be developed by employee when she or he fully understands the organisational goals and values for the future. In commitment literature Penley and Gould (1988) described moral and alienative factors as an affective aspect of employee which is linked with employee emotional attachment, feeling of pride and personal sense of obligation.

Previous discussion reveals that employee attachment and identification with the organisation is concerned with understanding of organisational goals and values. Through it, employee can understand the organisational needs and capabilities that can support developing cognition levels. Affective commitment is one of the most important aspects of employee which reveal the individual's behaviour by his or her attachment to and relationship with the organisation. In the affective commitment domain many predictors have been examined to measure the employee commitment to the organisation. It includes job characteristics (Dunham *et al.*, 1994), participation in decision-making (Kim and Mauborgne, 1998), good communication (Konovsky and Cropanzano, 1991), autonomy, task significance, task identity, skill variety, supervisory feedback, organisational dependability, perceived participatory management (Steer, 1977; Mottaz, 1988), identification, involvement, and loyalty (Allen and Meyer, 1990). These variables are directly or indirectly used to measure the individual attitudes and

behaviours towards the organisation. Indeed, the result of these behavioural aspects of commitment is employee retention (Mathieu and Zajac, 1990; Meyer *et al.*, 1993), attendance, job performance and organisational citizenship behaviour (Herscovitch and Meyer, 2002). However, age and tenure and other demographic factors may affect individual attitudes and behaviour towards the organisation. In the literature, Penley and Gould (1988) conceptualised moral and alienative items to establish employee behavioural relationship with the organisation. By applying these factors, management can understand the employee attachment, feeling of pride, and sense of obligation. In the organisational behaviour domain, employee emotional attachment is concerned with affection for the organisation, feeling of pride is concerned with the identification which focuses on connection with the organisation and personal sense of obligation is concerned with involvement which is the psychological absorption in the activities of one's role. With the help of Cook and Wall (1980); Penley and Gould (1988); Oliver (1990); Poon (2004), this researcher examines the following hypotheses to measure employee attitudes and behaviours for organisational change programmes.

***Hypothesis 1:** There is a significant positive relationship between a feeling of pride and employee readiness for organisational change*

***Hypothesis 2:** There is a significant positive relationship between emotional attachment and employee readiness for organisational change*

***Hypothesis 3:** There is a significant positive relationship between personal sense of obligation and employee readiness for organisational change*

#### **4.5.1.2 Instrumental Commitment**

Apart from emotional attachment to the organisation, employee can be induced by financial support of the organisation to exchange his or her ability, skills, and energies. The instrumental commitment concept is widely known as continuance commitment which is forged on the basis of costs of an organisation. It can develop as a result of any action or event that can increase the costs of leaving the organisation (Penley and Gould, 1988). Penley and Gould (1988, p-44) define that employee exchanging his or

her contribution for the inducements provided by the organisation. Instrumental commitment is related to the extent to which employee feel committed to their organisation by virtue of the costs that they feel are associated with leaving (Meyer and Allen, 1984, p-375). This concept focuses on pay/wages/rewards and fringe benefits or any compensation in return for individual services for an organisation. This concept largely supports individual and organisational finances which can be resolved by mutual understanding of need by employee and organisation. Domain researchers and practitioners have advocated instrumental commitment factors as essential for gauging the relationship between employee and his or her organisation. Various researchers have applied this dimension of employee to know how employee forges relationships with organisation (Allen and Meyer, 1990; Liou and Nyhan, 1994; Cohen, 1996). With the help of individual commitment factors, this study has developed the following hypothesis to examine employee attitudes and behaviours towards organisational changes.

***Hypothesis 4:** There is a significant positive relationship between pay/wages/rewards and employee readiness for organisational change.*

According to Madsen *et al.* (2005) there is no direct study which relates employee organisational commitment with readiness for organisational change. However, a few studies have been connected with an indirect correlation. Such as Eby *et al.* (2000); Weber and Weber (2001) worked on employee involvement in an organisation to establish change readiness.

#### **4.5.2 Employee Career Commitment**

In the organisational behaviour domain, the term commitment has been adopted to understand employee attitudes and behaviours regarding his or her work organisation or work. Employee develops positive attitudes and behaviours towards organisation or work via a supportive organisational environment and psychological and financial satisfaction. These factors are related to understanding the employee feelings and thoughts. Researchers and practitioners have conceptualised the term career commitment to develop positive attitudes and behaviours of employee by career. This

dimension of commitment provides the staying power to strengthen business and professional relationships. It is one of the important concepts of work commitment associated with employee development and progression in the career field. According to Chang (1999) career commitment is an individual's attitude towards his or her career. Conceptually, it is defined as one's attitude towards one's vocation, including profession (Blau, 1985, p-278). This concept can be characterised by the development of personal career goals and the individual's attachment to, identification with and involvement in those goals (Colarelli and Bishop, 1990). In brief, career commitment refers to one's motivation to work in a chosen vocation (Hall, 1971)

Employee can develop attitudes and behaviours on the basis of career commitment, where people make a significant investment in their careers (Poon, 2004). In organisation, individual develops relationships with the organisation on the basis of career goals and future expectations. However, individual's relationships and motivation can be supported by extrinsic and intrinsic benefits provided by the organisation. An extrinsic benefit is where the employee always looks to the outcome of his or her career such as pay and promotion while the intrinsic outcomes of career success depend upon a person's appraisal of his or her own success (Judge *et al.*, 1995). On the basis of mutual understanding, employee of an organisation may develop attachment to, identification with and involvement in the activities of an organisation.

In past studies, researchers found that employee who commit to a career tend to develop attitudes consistent with that commitment (Kiesler, 1971; Carson *et al.*, 1999). An examination of the literature on career success revealed several individual difference factors that influence career success including demographic variables (Gattiker and Larwood, 1988), dispositional traits, motivation and political influence behaviours (Seibert *et al.*, 1999; O'Reilly and Chatman, 1986; Judge and Bretz, 1994). Individuals may be attributed by cognitive ability, job satisfaction, job involvement, education and job tenure that have been demonstrated to predict career success (Childs and Klimoski, 1986; Dreher and Bretz, 1991; Judge *et al.*, 1995).

Individual with a strong degree of career commitment may show higher levels of expectations and requirements from the organisation with which they forge relationships. It also implies that highly career committed individuals may be more

motivated when their expectations are satisfied than those who are less committed. In the organisational behaviour domain, career commitment seems to be an important factor for career progression and development where it is relevant to the practical concerns of individual and organisation to excel in occupations or jobs. Moreover, career commitment involves self generated goals and commitments to one's own career which is influenced by a number of factors such as personal, environmental, and behavioural decisions (London, 1983). If an employee is committed to his or her career he or she would pursue career goals in spite of obstacles and setbacks and if they do not, then they make a career change rather than persist in achieving career objectives (Colarelli and Bishop, 1990).

Indeed, a career involves trade-offs between security and risk and between individual success and family, and people's career behaviour interacts with culture. The literature shows that employee attachment, identification and involvement depend upon extrinsic and intrinsic outcomes such as pay, promotion, appraisal, and satisfaction that refer to one's motivation to work in a chosen vocation (Hall, 1971; Judge *et al.*, 1995). Poon (2004) reveals that career commitment is predicted by objective and subjective career success. Objective career success is in the form of salary level and subjective career success takes the form of career satisfaction. This concept is related to the employee psychological and financial aspects that can be related to the individual's cognition. On the basis of this perception career commitment may support developing positive attitudes and behaviours by the employee towards change.

Career commitment is affected by individual and situational factors which affect career motivation or construct behaviour regarding work (London, 1983). In the domain of organisational behaviour most researchers have focused on individual and situational factors to measure employee career commitment (Blau, 1985; McGinnis and Morrow, 1990; Goulet and Singh, 2002). These two dimensions have been applied to measure the impact of career commitment on employee (Morrow, 1993; Hall and Associates, 1986). By using individual and situational factors, this research study examines employee attitudes towards their career. This concept may support the development of positive employee attitudes and behaviour towards organisational change.

#### 4.5.2.1 Individual Commitment

Employee develops interests on the basis of his or her personal characteristics like needs, interests, development, and future expectations. These elements are potentially related to a person's career and associated with three career domains such that career identity, career insight, and career resilience (London, 1986). These three dimensions can identify the individual's attitudes towards career motivation, strengths, development and persistence of career motivation. Most academic researchers and practitioners have focused on individual factors such as job involvement, job satisfaction and organisational commitment which have a positive influence on career commitment (McGinnis and Morrow, 1990; Blau, 1999). To develop individual's perceptions, employee personal variables can affect their loyalty and involvement. In career commitment literature this concept has largely been revealed by variables of job satisfaction, job involvement, work ethics, and organisational commitment (Morrow, 1983; London, 1983; Goulet and Singh, 2002). Empirically, these variables have been found positive in developing the relationship of employee with his or her career. Indeed, these factors can support employee to prepare psychologically for their career. To know the individual's psychological perceptions regarding his or her career, individual factors like job satisfaction, job involvement, supervisor and peer relations, and training and skills development may support the development of employee attitudes and behaviours during change.

Job satisfaction has been defined by Agho *et al.* (1992) as the degree to which an employee likes their work. It is related to employee active feelings to his or her job with specific aspects, such as pay, supervision, morale, and opportunity for advancement (McNeese-Smith, 1997; Kangas *et al.*, 1999). These feeling can be generated when an organisation provides all facilities and benefits to promote employee development and progression. Job satisfaction provides the degree of an individual's feelings with his or her current job (Chang and Chang, 2007). In the literature, the job satisfaction variable has been widely applied by researchers to measure employee attitudes and behaviours towards his or her career (Blau, 1985; Goulet and Singh, 2002; Gregory *et al.*, 2007).

In career commitment, the job involvement factor is defined as an employee's attachment to a job (London, 1983). In job involvement, an employee can be identified

by his or her job which shows the importance of the job relative to the individual's life. This factor is involved with the individual's psychological behaviour which can show individual's attitudes and behaviours. Buchanan (1974); Blau (1985); Cohen (1996); Cherniss (1991) applied job involvement to know employee commitment to the career.

In organisation, supervisor and peer relationships have been applied to understand employee attitudes and behaviours in the organisation. It is commonly regarded as one's belief in the importance of hard work and frugality (Morrow, 1993). This relationship is useful to understand the employee intention when she or he applied to re mapped the work commitment constellation (Morrow, 1993). Porter *et al.* (1974); Goulet and Singh (2002) applied this term to know career commitment and found positive results.

In career development literature, mostly researchers emphasised on training as an employee skills development (Gaertner and Nollen, 1989; Chang, 1999). In fact, training and skills of employee followed competence and development in the organisation. By using these career commitment factors management can develop positive attitudes and behaviours of employee during organisational change programmes. On the basis of this perception, the researcher has developed the following hypotheses.

***Hypothesis 5:*** *There is a significant positive relationship between career commitment factor and employee readiness for organisational change.*

***Hypothesis 6:*** *There is a significant positive relationship between job satisfaction and employee readiness for organisational change.*

***Hypothesis 7:*** *There is a significant positive relationship between job involvement and employee readiness for organisational change.*

***Hypothesis 8:*** *There is a significant positive relationship between supervisor and peer relations and employee readiness for organisational change.*

***Hypothesis 9:*** *There is a significant positive relationship between training and skills development and employee readiness for organisational change.*



#### **4.5.2.2 Situational Commitment**

In career commitment, the situational factor plays an important role in developing an employee attitudes and behaviours. Situational factors relate to the relationship between employee and the organisation on the basis of an agreement to provide services. In this domain, researchers have mostly described employee promotion or tenure (Chang, 1999; Goulet and Singh, 2002; Poon, 2004). In the current situation where economic, financial, competitive and environment dimensions are fragile, these variables can affect individual's cognition level. Employee has no lifelong contract with the employer and this may create uncertainty among employees. This feeling grows among employees when economic and organisational forces necessitate downsizing and restructuring (Morrow, 1993; Hall and Associates, 1986). Many elements of the work environment like job contract, fear of job loss, job fit and organisational uncertainty are likely to be important to develop career motivation. In the situational factor Goulet and Singh (2002) used variables like organisational uncertainty, fear of job loss and job fit factors to know the employee cognition level towards the individual's career commitment. With the support of Porter *et al.* (1974); Gaertner and Nollen (1989); Chang (1999); Goulet and Singh (2002) the researcher intends to examine the situational factor such that promotion to measure employee attitudes and behaviours to career commitment. This may lead to employee change readiness.

***Hypotheses 10:** There is a significant positive relationship between promotion and employee readiness for organisational change.*

#### **4.6 Social Relationships in the Workplace**

Employee, who receives encouragement and rewards for change, is more likely to act voluntarily in support of organisational change goals thus contributing to overall organisational effectiveness (Organ, 1988; Van yperen *et al.*, 1999). Such encouragement and rewards are directly or indirectly related to employee career or organisational commitment. Although the previous construct focuses on individual commitment to the organisation and career during change it is believed that social relationships in the workplace also focus on employee feelings, attitudes, and perceptions. Employee interacts with colleagues in the form of subordinate, peer or

supervisor but feelings, attitudes and perceptions may be either positive or negative. Hanpachern *et al.* (1998) and Madsen *et al.* (2005) focused on social relationships related to employee readiness and found a significant correlation between them. In social relationships this study also focuses on employee likes, dislikes and enjoyment related to talking, interacting and working with colleagues. According to the literature there is no relevant study except (Hanpachern *et al.*, 1998; Madsen *et al.*, 2005) while many authors have reported indirectly like Eby *et al.* (2000); Weber and Weber (2001); Cunningham *et al.* (2002). In this study, social relationships in the workplace have been hypothesised as follows:

***Hypothesis 11:** There is a significant positive relationship between social relationships in the workplace and employee readiness for organisational change.*

#### **4.7 Demography**

Apart from the above predictors, demography may also play an important role in the domain of organisational behaviour. To develop individual attitudes, beliefs, and behaviours this factor is to be counted as an imperative for developing individual's cognition. In the literature these factors are known as extra related or family situation factors and include different variables like age, gender, marital status, tenure in company, tenure in position, job status, spouse, children, education (Mottaz, 1988; Madsen *et al.*, 2005). In career commitment, this factor has a mixed response on individual decisions. Aryee and Tan (1992) describe that family situations do not have any significant effect on career commitment. But most researchers and practitioners claim that extra work related factors commonly affect commitment because of family dependency (Blau, 1985; Madsen *et al.*, 2005). However, with increasing dependency and the associated need for financial resources, employee may actually become more committed to their personal careers (Goulet and Singh, 2002).

#### **4.8 Conclusion**

The review of the literature on employee readiness for organisational change undertaken by this researcher has revealed that an individual's beliefs, behaviours and responses to organisational change are influenced by psychological and financial factors. However,

these factors are dependent upon employee commitment to the organisation and career. Therefore, it is important to identify and assess the psychological and financial factors to employee readiness for organisational change. In this regard, the researcher has developed a conceptual framework, which is based on different theories such as Armenakis's change messages and five component message theories and Maslow's Need theory. The conceptual approach encompasses a number of factors (individual, situational, instrumental and affective). These factors have been studied with regard to employee response towards various issues related to job satisfaction, turnover, attachment, identification and absenteeism but not about employee readiness for organisational change. Moreover, most of the research about employee change readiness has been undertaken in the developed or western world and there are hardly any studies reported from Pakistan in general and academic organisations in particular.

The researcher has therefore developed a few hypotheses on the basis of the conceptual approach to examine the impact of psychological and financial factors of commitment on employee readiness and intends to examine the hypotheses in public sector higher educational sector in Pakistan. The justification for the proposed study is that recent organisational changes have been introduced in academic organisations, especially in public sector universities across the country, and there has been resistance from employees.

## **Chapter Five      Research Methodology**

### **5.1      Introduction**

The method section of research study is concerned with the choice of appropriate methodology by which the validity of research is judged. Thus, it requires a clear and comprehensive rationalisation of how the study is to be done and why particular procedures were preferred. This research has been developed on the basis of a literature review and conceptual approach which is previously discussed. With the support of the conceptual approach a few hypotheses have been developed in relation to independent and dependent variables. In order to select a methodological approach, initially, a philosophical stance was reviewed to understand the relationship and justification of approach which has been adopted. This justification may lead to an explanation for the use of the methods adopted. The discussion is to be confined to the selection of a research strategy and justification of the adoption of a strategy for the purpose of theory testing. Drawing on research approach, a research design has been established to follow the study step by step in a systematic way. The researcher discusses in detail the empirical research methodology including data collection and data analysis. The data collection section is described in five parts as (a) data collection (b) sample selection and participation (c) developing the survey questionnaire (d) measurement scales and (e) pilot study. After that reliability and validity are discussed to justify the data. The chapter also discusses what kind of data is required for examining the variables. Then, data analysis processes and statistical techniques are selected to analyse the data. Finally, the research ethical issues discussed to ensure the data is unbiased and can support generalisability. Conclusions are the final component of this chapter.

### **5.2      Research Philosophy**

Research philosophy means the way a researcher thinks about the development of knowledge. This section is concerned with the philosophical stance of the researcher, in which, the method to be adopted for the research is decided. It is useful when a researcher knows about the philosophical issues of different research fields. These issues affect the research in several ways like data collection and data analysis. In the methodology domain, there are two main research paradigms, namely positivist and

phenomenological (Easterby *et al.*, 1991; Hussey and Hussey, 1997). Positivist is well known as scientific and is quantitative and phenomenological is known as non-positivist and qualitative. Both paradigms have positive and negative impacts on different fields of research in one way or another but the main concern is same. However, in order to select an appropriate method to carry out this research, it is necessary to define both approaches.

The positivist approach is concerned with numerical data collection for understanding human behaviours. This method can be applied to gain understanding of human attitudes and behaviours in the way it reveals information about people through objective values. According to Hussey and Hussey (1997), the positivistic paradigm is concerned with the facts or causes of social phenomena. In this paradigm, researchers apply the language of theories, variables, and hypotheses. Being a scientific approach, it deals with the numbers in an objective fashion and applies statistical methods for analysis. Burrell and Morgan (1979, p-5) revealed that quantitative research seeks to explain and predict what happens in the social world by searching for regularities and casual relationships between its constituent elements. This method is more suitable when the object of the research is to gather data related to the frequency of occurrence of phenomena. According to Gilbert (2001, p-32), the aim is to develop valid and reliable ways of collecting “facts” about society, which can then be statistically analysed in order to produce explanations about how the social world operates.

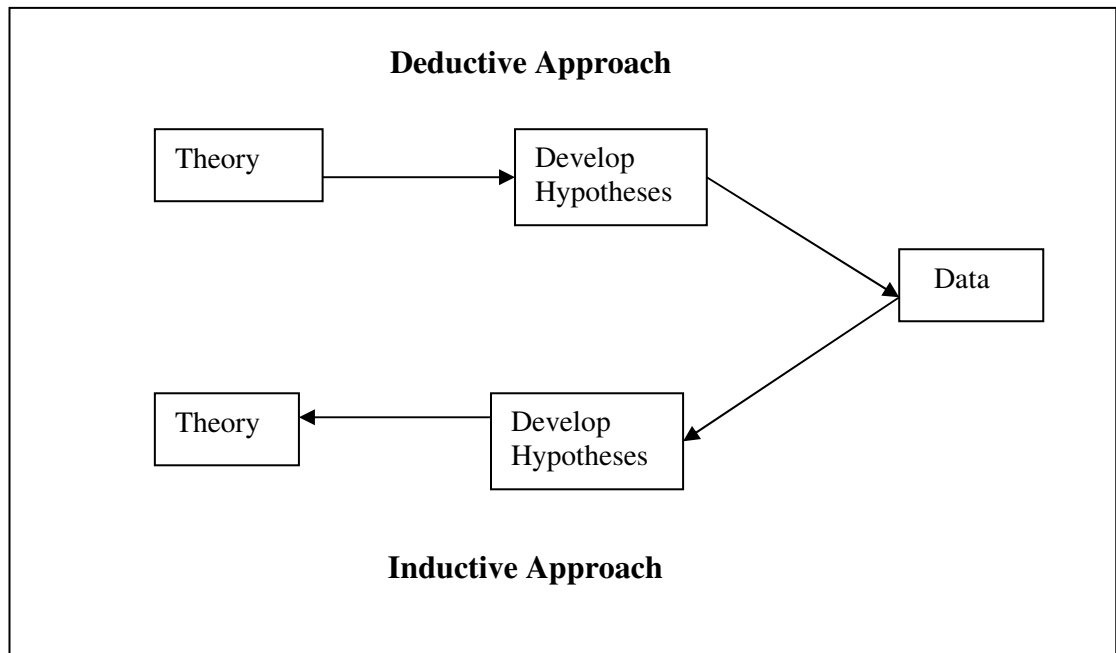
The second view of research is qualitative research which is concerned with descriptive data collection for understanding human behaviours. The qualitative research approach is well known as a phenomenological, subjective, or non-positivist approach related to the nature of reality. This method can be applied to gain deep understanding of human behaviours with regard to revealing people’s values, interpretive schemes and belief systems (Cavana *et al.*, 2001). The subjective state of the individual centred in this philosophy is the attempt to understand how and why phenomena occur (Sharif, 2004). This research approach attempts to define actuality in descriptive ways as it is perceived by participants to describe meaningful human actions (Sarantakos, 1993). By this method, data collection is viewed as an alternative to positivism which relies on interpretive research (Neuman, 2000; Anonymous, 2003). However, the philosophical stance of both approaches is summarised in Table 5.1 as shown below.

**Table 5.1 Summary of Philosophical Stance of Research Approach**

<b>Approach</b>	<b>Description</b>	<b>References</b>
<b>Positivist</b>	To develop valid and reliable ways of collecting “facts” about society, this can then be statistically analysed in order to produce explanations about how the social world operates.	Gilbert (2001)
<b>Phenomenological</b>	To gain deep understanding of human behaviour by revealing people’s values, interpretive schemes and belief systems.	Cavana <i>et al.</i> (2001)

Both traditions were revealed in their pure forms and found not only different but were mutually exclusive (Gilbert, 2001). From a philosophical stance, a positivism paradigm uses deduction, beginning with theory developing hypotheses and collecting data while the phenomenological follows induction, the process of finding a case and observing relationships and finally constructing a general theory to cover all cases. According to Cavana *et al.* (2001) quantitative design start from support of the theory, developing hypotheses, collecting and analysing data and then accepting or rejecting hypotheses. However, the phenomenological research method starts from observing phenomena, analysing patterns and themes, formulating relationships, and then developing a theory, support for the theory, and developing hypotheses as shown in Figure 5.1.

**Figure 5.1 Deductive and Inductive Reasoning in Research**



It has been realised in literature that research methodology has a related philosophy within the different schools of thought. Ultimately the aim of approach is to develop valid and reliable facts from society. However, Easterby-Smith *et al.* (1991, p-27) observed and found different features of these two main different paradigms such that positivism and phenomenological as shown in Table 5.2.

It is important to select the correct methodological paradigm in order to appreciate methods and decisions that can be controversial. It is observed that both methods have some strengths and weaknesses which was well defined by Amaratunga *et al.* (2002) that the positivist approach is faster and more economical and can cover a wide range of population, while the data collection method is inflexible. In the phenomenological paradigm data gathering methods are seen as more natural than artificial. This method supports easy understanding of people's meanings and ideas. From the point of view of weaknesses, it can be tedious and requires more sources for data collection. It is more difficult in analysis and interpretation than the positivist approach.

**Table 5.2 Key Features of Positivist and Phenomenological Paradigms**

<b>Theme</b>	<b>Positivist Paradigm</b>	<b>Phenomenological Paradigm</b>
<b>Basic Beliefs</b>	The world is external and objective.	The world is socially constructed and subjective.
	Observer is independent.	Observer is part of what is observed.
	Science is value free.	Science is driven by human interest.
<b>Research Should</b>	Focus on facts.	Focus on meanings.
	Look for causality and fundamental laws.	Try to understand what is happening.
	Reduce phenomena to simplest elements.	Look at the totality of each situation.
<b>Preferred method in the research</b>	Formulate hypotheses and test them.	Develop ideas through induction from data.
	Operational single concepts, so that they can be measured.	Using multiple methods to establish different views of the phenomena.
	Taking large samples.	Small samples investigated in depth or over time.

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

In research, philosophy depends upon the ontology, epistemology, human nature and methodology which relate to reality, the relationship between reality and the researcher, and the techniques used by the researcher to discover the reality, respectively (Healy and Perry, 2000). The researcher has discussed both paradigms of research in which the positivism paradigm is based on the ontology of the world that is external and objective, while the epistemology is based on the belief that observers are independent. According to Burrell and Morgan (1979), there are four pairs of assumptions of both subjective and objective paradigms in social science research. From an ontological assumption, the main concern is on the very nature or essence of the social phenomena that is to be investigated. In this assumption, a nominalist looks at social reality while an objectivist at realist position. In epistemology, there is an assumption that the researcher is concerned with the nature and forms. Whereas a subjective approach is based on the



experience and insight of a personal nature and objectivist approach is observable and is hard in the research domain. The third assumption is human nature in relationship to human beings and the environment. In this approach, subjectivists consider individuals as initiator and voluntaristic, while objectivists portray their environment as determinist. Finally, there are methodological issues related to measurement and identification of underlying themes. In the above approach, subjectivists try to understand individual behaviour which may be as ideographic while the objectivist is characterised by procedures and methods which may be designed to discover a general law is referred to as nomothetic. Table 5.3 given by Cohen *et al.* (2000, p-7) shows different research methods which influence the choice of methodologies.

**Table 5.3 Two Tradition of Social Science**

The Subjectivist Approach to Social Science		The Objectivist Approach to Social Science	
Nominalism	←	Ontology	→ Realism
Anti-positivism	←	Epistemology	→ Positivism
Voluntarism	←	Human Nature	→ Determinism
Idiographic	←	Methodology	→ Nomothetic

Source: Cohen *et al.* (2000, p-7)

### 5.2.1 Research Approach Adopted for this Study

This research study measures the relationship between independent and dependent variables. Initially, the research started from the review of large amount of literature and developed a conceptual approach for the empirical examination. According to conceptual approach and with the support of theories, this research has developed hypotheses to examine the relations between independent and dependent variables. The procedure adopted for this research follows a quantitative approach for data collection and analysis. According to Gilbert (2001, p-19), the positivism paradigm uses deduction, beginning with hypotheses. Hussey and Hussey (1997, p-55) defined the normal process under a positivistic paradigm is to study the literature to establish an

appropriate theory and construct hypotheses. There are certain reasons to adopt a quantitative approach for data collection from the workplace. First, this study is going to measure the relationships between the variables. Second, the ontological position suggests the realist position that requires social facts. Third, the epistemological position allows independent observable facts in society. The fourth assumption is human nature in relation to human beings according to their environment as determinism. Finally, there are methodological issues relating to measurement and identification of underlying themes. In this approach the objectivist is characterised by procedures and methods which may be designed to discover general laws which is referred as nomothetic.

This research consists of an empirical study in which a survey questionnaire has been applied for data collection. This study was conducted in higher educational institutions of Pakistan where data was collected from a sample of faculty members such that professors, associate professors, assistant professors, and lecturers. For analysing the data, statistical measures were applied to test the hypotheses in relation to independent and dependent variables. Before collecting the data a pilot study was conducted to measure the survey questionnaire reliability, language used in the questionnaire and time horizon to complete the survey.

### **5.2.2 Justification for Quantitative Approach**

The epistemology focuses strongly on hard human facts and causes. This research approach emphasises realism of context and the use of quantitative methods of research such as facts and causes of social phenomena. It assumes that the social world is composed of relatively concrete empirical artefacts that can be identified, studied and measured through approaches derived from natural sciences. Thus, for the purpose of conducting this research, it was felt that understanding the nature of 'individual behaviour' demanded a more contextually oriented study perspective. The conceptual approach presented in chapter four reports several behaviours and attitudes that can influence the individual during organisational change. These factors indicate that there are many organisational, environmental and social issues. Thus, this research was conducted in the higher education system of Pakistan where employee can develop

attitudes and behaviours on the basis of psychological and financial needs. There is, therefore, a need for a research approach that allows the researcher to understand the beliefs and thoughts of employees from psychological and financial points of view.

### **5.2.3 Rationale for Quantitative Approach**

Change is concerned with the development of organisation which requires proper handling the situation because of human involvement. Transferring from a known to an unknown situation can develop uncertainties and ambiguities for employee because of differences in individual life experiences, motivational levels, socio-demographic characteristics, knowledge, attitudes, and behavioural patterns. The literature supports the idea that the main focus has been on employee attitudes, perceptions and beliefs in change situations.

Employee can have a variety of reactions to change. Successful adjustment to change can provide opportunities for learning and growth, while poor adjustment is characterised by feelings of uncertainty, frustration, alienation, and anxiety. Thus researchers and practitioners are anxious to know employees attitudes and behaviour towards change. According to Arnold *et al.* (1995, p-167) “Attitudes reflect a person’s tendency to feel, think or behave in a positive or negative manner towards the object of the attitude”. Many researchers like Eby *et al.* (2000); Kotter (1996); Martin (1998) focused on positive attitudes to effective change programmes.

In the change domain employee readiness has been associated with individual attitudes and behaviours that may be supportive or resistant (Armenakis and Bedeian, 1999). Bernerth (2004) argues that readiness is a state of mind during the change process that reflects a willingness or receptiveness to changing the way one thinks. Researchers and practitioners need to know how to deal with employee before, during and after launching change programmes.

Over the past few decades many predictors have been found to relate to employee readiness. By applying a survey questionnaire on 758 samples in four profit-oriented companies from northern Utah, Canada, Miller *et al.* (2006) focused on employee readiness for organisational change by influencing workplace factors such that

management and leader relationships, job knowledge and skills, and job demands and found a significant influence on employee readiness for change. By getting 131 survey samples from a manufacturing company in the USA, Hanpachern *et al.* (1998) found that margin in life and demographic variables of employee are related to readiness for change including job knowledge and skills, social relationships in the workplace, organisational culture, and management and leadership relationships which all have a significant relation to readiness for change. Rafferty and Simons (2006) focused on the factors that make readiness for two types of change such that corporate transformation and fine tuning in five Australian organisations including public sector organisations such that utilities and agencies. Cunningham *et al.* (2002) examined logistical and occupational risks of change, ability to cope with change and to solve job related problems, social support, active and passive job construct as they influence readiness for organisational change in healthcare organisation in Canada. Madsen *et al.* (2005) worked in four profits oriented companies from northern Utah, Canada. They found first time significant relationships between employee readiness, organisational and career commitment and social relationships in the workplace. A recent research study conducted by Holt *et al.* (2007) received 464 questionnaire surveys from full-time employees in four public and private companies in northern Utah, Canada. Researchers found that readiness for change is influenced by employee beliefs of self efficacy, appropriateness, management support, and personal valence.

The above literature shows that both employee and management need to know the attitudes and behaviours regarding organisational change. By knowing their objective, the majority of the researchers have applied a positivist approach through survey questionnaires (Table 5.4). In literature, Eby *et al.* (2000) applied survey questionnaire to sales organisation in the USA. From 300 sample respondents, response rate was 39%. In a study, Cunningham *et al.* (2002) examined the logistical and occupational risks of change, solve job-related problems, social support, and active vs. passive job construct to influence readiness for organisational change in Canadian healthcare organisations. They distributed 880 surveys to participants and getting 74% response rate. Peach *et al.* (2005) conducted study among local government in Australia by using survey questionnaire to 180 samples. Erturk (2008) applied questionnaire to 878 employees from a public sector organisation in Turkey and got response 35%.

Survey questionnaire can provide information into individual perceptions and attitudes as well as organisational policies and practices (Baruch and Holtom, 2008, p-1140). According to Chen (2005, p-153) attitude measurement often involves asking respondents not just what they feel about a particular object, but what they believe about it. In positivist methodology, a survey questionnaire uses Likert scaling to measure the attitudes of individuals (Miller and Brewer, 2003) because the reliability of Likert scales tends to be good and partly because of the greater range of answers permitted to respondents (Oppenheim, 1992, p-200).

In this study, the researcher intends to examine employee commitment to organisation and career predictors which are related to the employee attitudes and behaviours towards his or her organisation and vocation. It is the intention to apply a quantitative approach which is one of the major approaches in business and social sciences research methodology. This design is aimed at understanding human attitudes, behaviours, and beliefs during change programmes. Quantitative focuses on what, where and when (Collis and Hussey 2003). It addresses the following questions related to this study:

1. What impact does employee commitment to the organisation have on employee readiness for organisational change?
2. What impact does employee career commitment have on employee readiness for organisational change?
3. What impact do employee social relationships in the workplace have on readiness for organisational change?

**Table 5.4 Readiness Studies**

<b>Paper Description</b>	<b>Author's Name (s) &amp; Years</b>	<b>Place</b>	<b>Organisation Type</b>	<b>Sample Size</b>	<b>Response Rate</b>	<b>Used Instrument</b>
Creating Readiness for Organisational Change	Armenakis <i>et al.</i> (1993)	USA	-----	-----	-----	Descriptive
Changing the “whole system” in the public sector	White (2000)	UK	Public Sector	-----	-----	Case Study
Perceptions of organisational readiness for change: Factors related to employees' reactions to the implementation of team bases selling	Eby <i>et al.</i> (2000)	USA	Sales Organisation	300	39%	Survey Questionnaire
Crafting a change message to create transformational readiness.	Armenakis and Harris (2002)	USA	Public Sector	-----	-----	Case Study
Readiness for organisational change: A longitudinal study of workplace, psychological and behavioural correlates	Cunningham <i>et al.</i> (2002)	Canada	Teaching Hospitals Human Resource department	880	74%	Survey Questionnaire
Managing Change and Changing managers from ABC to XYZ	Burnes (2003)	UK	Engineering Company	-----	-----	Case Study
The role of emotional intelligence and personality variables on attitudes toward organisational change	Vokala <i>et al.</i> (2004)	Greece	Public and Private Organisations	350	39%	Survey Questionnaire
Expanding Our Understanding of the Change Message	Bernerth (2004)	USA	-----	-----	-----	Descriptive
Predicting openness and commitment to change	Chawla and Kelloway (2004)	Canada	Public Sector Organisations	541	34.75%	Questionnaire

The role of psychological climate in facilitating employee adjustment during organisational change	Martin <i>et al.</i> (2005)	Australia	Public Hospitals	779	49%	Questionnaire and Interview
Beliefs Underlying Employee Readiness to Support A Building Relations	Peach <i>et al.</i> (2005)	Australia	Local Government	180	84%	Survey Questionnaire
Readiness for Organisational Change: Do Organisational Commitment and Social Relationships in the Workplace Make a Difference?	Madsen <i>et al.</i> (2005)	Canada	Profit and Non Profit Organisation	758	61%	Survey Questionnaire
Exploring the implications of vision, appropriateness, and execution of organisational change	Cole <i>et al.</i> (2006)	USA	Manufacturing Companies	244	89%	Survey Questionnaire
Readiness for change: Implementations on Employees' Relationship with Management, Job Knowledge and Skills, and Job Demands	Miller <i>et al.</i> (2006)	Canada	Profit Organisations	758	60%	Survey Questionnaire
An examination of the antecedents of readiness for fine-tuning and corporate transformation changes	Rafferty and Simons (2006)	Australia	Public Sector Organisations	311	39%	Survey Questionnaire
Readiness for Organisational Change: The Systematic Development of a Scale	Holt <i>et al.</i> (2007)	Canada	Public & Private Sector Organisations	498	53%	Survey Questionnaire
A trust-based approach to promote employees' openness to organisational change in Turkey	Erturk (2008)	Turkey	Public Sector Organisation	2500	35%	Survey Questionnaire
Measurement of Perceived Organisational Readiness for Change in the Public Sector	Cinite <i>et al.</i> (2009)	Canada	Public Sector Organisation	742	59%	Survey Questionnaire

### 5.3 Research Design

This research attempts to examine independent variables such that employee commitment to the organisation and career and social relationships in the workplace with dependent variable such that employee readiness for organisation change. Initially, the literature was reviewed to explore gap in the research and develop an understanding of the investigation domain. It was observed that employee can develop attitudes and behaviours on the basis of commitment. From that point of view, researchers have empirically examined employee commitment factors to readiness for change and found positive results (Madsen *et al.*, 2005). However, employee career commitment has not been examined to employee readiness for change readiness so far. By applying employee commitment to the organisation and career, the researcher attempts to examine employee attitudes and behaviours towards change. This research has been conducted in higher educational institutions of Pakistan where changes have been announced recently. Faculty members of these institutions are resisting these changes. Thus, this research explores which factors can influence the development of positive attitudes and behaviours for the change.

For this research, a research design has been developed to focus the research step by step. In fact, the research design is based on a research model that is rooted in the assumption that research is perceived as a sequence of steps closely interrelated, and the success of one step is dependent on completion of the preceding step (Sarantakos, 1993). Although, research design helps to draw boundaries for the research in defining the study setting, type of investigation that needs to be carried out, the unit of analysis and other relevant issues related to research, Hussey and Hussey (1997) argued that the research process can only be successful if the researcher makes the right choices in the research design.

The research design applied for this study is based on the hypothetico-deductive method. This method starts from a literature review, theoretical framework, formulating hypotheses and making logical deductions from the results of the study (Sekaran, 2006). The hypothetico-deductive method broadly divides a research design into a series of



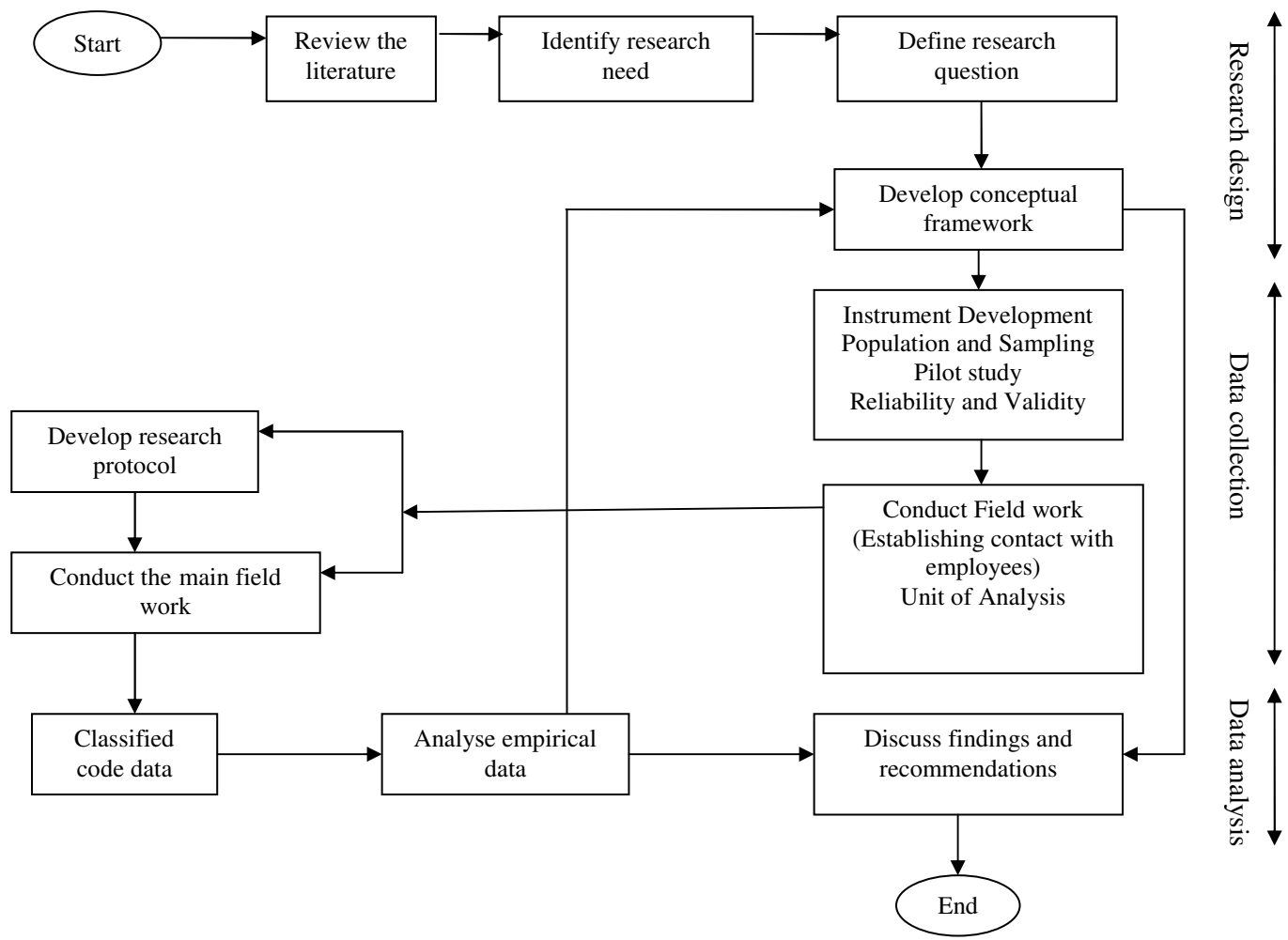
steps that lead to answering the research questions (Neuman, 1995). Figure 5.2 lists the step-by-step process that will be used to conduct the study.

This research design describes the hypothetico-method that leads to answering the research questions and justifies the hypotheses. The research process started with extensive literature review helping the researcher to create an awareness of the research domain. Through establishing a gap in the literature, an understanding was developed of the research domain. After finding the gap and developing understanding of the research in the literature, a conceptual model was developed to represent the intended empirical research. In the conceptual model several factors have been connected regarding understanding of employee attitudes and behaviours in a change situation. To test the model, data is required to validate the research hypotheses. The type of data has been determined as quantitative, the epistemology stance determined, and a research strategy identified.

In view of the above discussion, the research follows the positivist philosophical approach for data collection. According to Cohen *et al.* (2000), the positivist approach starts from the literature review and develops hypotheses on the basis of a conceptual framework. Thus, in this philosophical stance, data can be collected by a survey questionnaire. According to Chen (2005, p-153), attitudes measurement often involves asking respondents not just what they feel about a particular object, but what they believe about it. In positivist methodology, survey questionnaires use Likert scaling to measure the attitudes of individuals (Miller and Brewer, 2003) because the reliability of Likert scales tends to be good and partly because of the greater range of answers permitted to respondents (Oppenheim, 1992, p-200).

Based on the need of research for empirical study, it was decided that this research design used quantitative research methods as a strategy for theory testing. This research design follows a plan of action or protocol because of important tool for various following reasons.

1. To put the task of data collection in a manageable format.
2. To ensure that required data are gathered.



**Figure 5.2 Research Design**

3. To ensure that the research follows a particular schedule.
4. To follow the path by which knowledge was developed.

Within the protocol, a quantitative research method has been developed to gather data as required for the analysis of the higher educational institutions. The method is in the form of a survey questionnaire, in which there is a series of questions relating to the factors that can develop perception of employees during organisational change. In addition to the survey questionnaire, data has been collected through office documents such that notifications, circulars, newspaper archives, minutes of meetings, consultancy reports, and the website of the Higher Education Commission (HEC) of Pakistan.

A survey questionnaire needs to develop a protocol and address ethical issues before collecting the full scale data. Initially, to assess the reliability and validity of the instrument, a pilot study was conducted to check internal consistency, questionnaire items, language and time taken to complete it and validity was measured through field experts. In this connection a few surveys were sent to university professors and experts for confirming the face validity. Data collection included fieldwork and the implementation of the workplace survey. Data is to be analysed by using descriptive statistics, statistical package for social sciences (SPSS) version 15.0 for Windows and structural equation modelling (SEM) which applied analysis of moment objectives (AMOS) 16.0 version software. The study concludes with an extensive discussion and findings suggesting recommendations for future research and limitations.

It is important to note that neither the positivist nor the phenomenological approach can be categorised as being superior to the other. However, the validity of the approach depends upon the objectives of the research question(s). Moreover, it would be unrealistic to imply that a fine divide exists between a management researcher adopting a positivist or phenomenological approach. Hussey and Hussey (1997) noted that some scholars prefer to use the term interpretivist rather than phenomenology to minimise confusion between research philosophy and methodological approach.

## **5.4 Research Instrument and Measurement Scale**

This empirical study to test the hypotheses was developed in chapter four of this study. Data for this study was collected from public sector universities by a survey questionnaire. In the domain of employee readiness for organisational change, many researchers have used survey instruments to collect the data. Among them are Rafferty and Simons (2006) who worked on an examination of the antecedents of readiness for fine tuning and transformation change, Miller *et al.* (2006) studied readiness for change by looking at the implications on employee relationship with management, job knowledge and skills, and job demands, and Madsen *et al.* (2005) in their study on readiness for organisational change, 'Do organisational commitment and social relationships in the workplace make a difference?'. All these researchers applied survey questionnaires to collect the data which is an efficient way for collecting data for specific variables of interest (Hussey and Hussey, 1997; Bove and Hede, 2001). According to Verschuren and Doorewaard (1999), the survey's aim is to find out what a selected group of individuals think, feel, or do. However, this research study is concerned to know the employee attitudes, behaviours, and beliefs about the issues created by changes in the organisation. Actually, attitudes are influenced by beliefs, which can involve asking respondents about what they feel about a particular object. In survey questionnaires, a Likert scale is commonly used to measure attitudes (Miller and Brewer, 2003). According to Oppenheim (1992, p-200), the Likert scale was adopted in the survey partly because the reliability of Likert scales tends to be good and partly because of the greater range of answers permitted to respondents. By applying a survey questionnaire, a large amount of people can be involved in the research because it is an easy and economical tool with which to collect the data. By applying the same precedent, this study applied a survey questionnaire to collect data. The discussion regarding survey questionnaires is given in the following section.

### **5.4.1 Developing a Survey Questionnaire**

The process of developing a survey questionnaire is based on what kind of information is needed. In order to examine the hypotheses developed for this research, a survey questionnaire was proposed for data collection. A survey questionnaire can provide insight into individual perceptions and attitudes as well as organisational policies and

practices (Baruch and Holtom, 2008, p-1140) According to the philosophical stance which is discussed in the second section of this chapter, a positivist approach can be applied for data collection to examine the individual's attitudes and behaviours. Thus, for this research, a survey questionnaire has been adapted for data collection which possesses many options of Likert scaling for the variety of choice for the respondent (Appendix 1).

This research focuses on individual attitudes, behaviours and beliefs which can support management to develop employee readiness for organisational change. An individual's perception can be developed by fulfilling basic needs such that psychological and financial. In this regard, a conceptual model has been developed by employing employee commitment to the organisation and career factors. This research focuses on employee commitment to the organisation factors such that affective (emotional attachment, feeling of pride and personal sense of attachment), instrumental (pay/wages/rewards) and career commitment factors such that individuals (job satisfaction, job involvement, supervisor and peer relations, training and skills development) and situational (promotion) factors to know employee attitudes and behaviours for organisational change.

This is a cross sectional study in which data would be collected at one time from the random sample of people to test the hypotheses. In this research both independent and dependent variables have been carried out at the same time. The survey instrument which is used for this study has five sections.

Section "A" is concerned with the demography of participants, providing information about participants' personal attributes (Appendix 1). Eight items from question numbers 1 to 8 are concerned with the demography. These variables such that gender, age range, marital status, present employment status, highest educational level, number of dependents, years in present job and years with present employer have been applied as an intervene which may affect the level of commitment and readiness. Many researchers like Weber and Weber (2001); Madsen *et al.* (2005); Holt *et al.* (2007) applied demographical factors to know the context of individuals.

Section "B" of survey comprises 14 items (9-22) (Appendix 1). This section brings the

information about the individual's response to the change. These questionnaire items have been applied by Miller *et al.* (2006) and Madsen *et al.* (2005) to employee readiness for organisational change. Reliability (Cronbach's alpha) of these items was .81 and .82 respectively in previous research. This data provided information about the attitudes and behaviours they have developed regarding the organisational change programme. This section reflects the individual understands of the line of action for organisational change.

Section "C" comprises of 15 items (23-36) which provide information about employee commitment to the organisation (Appendix 1). Survey questionnaire items from 23 to 31 are concerned with affective commitment comprising emotional attachment, feeling of pride and personal sense of obligation factors. All these questions show the employees psychological perception regarding commitment to the organisation. These survey items have been developed by Cook and Wall (1980) and a factor analysis conducted by Mathews and Shepherd (2002), stated that "the analysis of conducted in this study has demonstrated that a three factor structure can be best fit to the data" (p-374). These items were applied by Madsen *et al.* (2005) and found Cronbach's alpha of .81. Instrumental factors of this commitment comprise pay/wages/rewards and fringe benefits. For this, questions 32 to 36 provide information about the instrumental commitment to the organisation. These survey items have been applied by Yoon and Thye (2002) for distributive justice related to financial factors and found Cronbach's alpha of .81.

Section "D" of the survey comprises 33 items (37-69) (Appendix 1). This section provides information about employee career commitment. Questions 37 to 44 are generally related with employee career commitment. These questionnaire items were developed by Blau (1985) and applied by various researchers like McGinnis and Morrow (1990) and Aryee and Tan (1992) to measure employee career commitment. Goulet and Singh (2002) applied these items to examine individual commitment and found a reliability alpha of .82. However, career commitment has been divided into two parts (situational and individual) in this study. For situational, one factor was examined such that promotion. Information regarding promotion was obtained by questions 45 - 47. These questionnaire items were developed by Gaertner and Nollen (1989) to measure employee perception about promotion and applied by Chang (1999) who found

reliability alpha .73. The data was used to measure individual career commitment from situational perspectives. The second component of this commitment is related with factors like job satisfaction which comprises items (48-54) developed by Brayfield and Rothe (1951). Reliability alpha computed .77 and was corrected by the Spearman-Brown formula to .87. The second factor is job involvement which comprises items (55-59) selected from Kanungo's (1982) nine items and applied by Goulet and Singh (2002). Reliability alpha computed .86. The third factor is supervisor and peer relations which comprise items (60-65) developed by Gaertner and Nollen (1989). These items were applied by Chang (1999) and reliability alpha computed .92. The last factor for this section is training and skills development which comprised items (66-70) developed by Gaertner and Nollen (1989). These items were applied by Chang (1999) and reliability alpha computed .72.

In the last, section "E" comprises four questions (71-74) (Appendix 1). This section relates to social relationships in the workplace. These survey items have been adapted from the four-item social relationships subscale of Hanpachern's Revised Margin in Life Scale (1998). These original items were modified by Stevenson in 1982. These scales has been applied by Madsen *et al.* (2005) and found positive results and a Cronbach's alpha of .70.

Survey items are related with the variables, which have been used to develop the hypotheses for the study (Chapter Four). Items adapted in the instrument have been applied to get information about the variables for analysing the hypotheses. However, a few items are concerned with the background information like demography (Table 5.5). The researcher has tried to adapt the survey questionnaire which must be partial to get in depth perception of employees. All elements which turn to biases have been considered during development of the survey questionnaire. For example a few questions are related to the positive impacts of change on individuals in which respondents may provide expressly emotional behaviour. However, negative aspects of questions are also employed to express the response. Such balance in the questionnaire may provide reliability and validate data for this research.

**Table 5.5 Survey Questionnaire Items Relations with the Hypotheses and Variables**

<b>Hypothesis</b>	<b>Variables</b>	<b>Relevant Questions Items</b>
Background Questions	Demography	Q. 1 to 8
Employee Readiness for Change	Employee Readiness	Q. 9 to 22
<b>H1:</b> There is a significant positive relationship between emotional attachment and employee readiness for organisational change	Emotional Attachment	Q. 23 to 25
<b>H2:</b> There is a significant positive relationship between feeling of pride and employee readiness for organisational change	Feeling of Pride	Q. 26 to 28
<b>H3:</b> There is a significant positive relationship between personal sense of obligation and employee readiness for organisational change	Personal Sense of Obligation	Q. 29 to 31
<b>H4:</b> There is a significant positive relationship between pay/wages/rewards and employee readiness for organisational change	Pay/Wages/Rewards	Q. 32 to 36
<b>H5:</b> There is a significant positive relationship between career commitment and employee readiness for organisational change	Career Commitment	Q. 37 to 44
<b>H6:</b> There is a significant positive relationship between promotions and employee readiness for organisational change	Promotion	Q. 45 to 47
<b>H7:</b> There is a significant positive relationship between job satisfaction and employee readiness for organisational change	Job Satisfaction	Q. 48 to 54
<b>H8:</b> There is a significant positive relationship between job involvement and employee readiness for organisational change	Job Involvement	Q. 55 to 59
<b>H9:</b> There is a significant positive relationships between supervisor and peer relations and employee readiness for	Supervisor and Peer Relations	Q. 60 to 65



organisational change

**H10:** There is a significant relationship between training and skills development and employee readiness for organisational change

Training and Skills Development Q. 66 to 70

**H11:** There is significant relationships between social relationships in the workplace and employee readiness for organisational change

Social Relationships in the workplace Q. 71 – 74

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## 5.4.2 Measurement Scales

In this research, independent and dependent variables were used to measure the employee attitudes, behaviours, beliefs, and perception regarding their readiness for organisational change. Readiness for change variable was served as a dependent variable, and employee commitment to the organisation and career and social relationships in the workplace factors served as independent variables. In addition, other variables were included such as gender, age range, marital status, present employment status, highest educational level, and number of dependents, years in present job and years with present employer. In this study, four existing scales were adopted: readiness for organisational change, employee commitment to the organisation, employee career commitment, and social relationships in the workplace. These adapted scales were tested by a pilot study from faculty members in higher education in Pakistan, who are pursuing doctor of philosophy (PhD) studies in United Kingdom (UK). Personal visits and email contacts were made to the participants to participate in the survey. The purpose of the pilot study was to enable the researcher to identify poor wording in questions and time taken to complete the survey. After measuring the reliability and validity of the instrument, it was applied to collect data for the main study from faculty members of higher educational institutions in Pakistan.

### 5.4.2.1 Independent Variables

To assess individual attitudes, behaviours, beliefs, and perceptions, the following independent variables of employees' commitment to the organisation and career and social relationships in the workplace were selected.

***Emotional attachment (EMAT)***

Three-item scale developed by Cook and Wall (1980) and factor analysis conducted by Mathews and Shepherd (2002) with a five-point Likert Scale (Strongly Disagree, Strongly Agree) was applied.

***Feeling of pride (FOPR)***

Three-item scale developed by Cook and Wall (1980) and factor analysis conducted by Mathews and Shepherd (2002) with a five-point Likert Scale (Strongly Disagree, Strongly Agree) was applied.

***Personal sense of obligation (PSO)***

Three-item scale developed by Cook and Wall (1980) and factor analysis conducted by Mathews and Shepherd (2002) with a five-point Likert Scale (Strongly Disagree, Strongly Agree) was applied.

***Pay/Wages/Rewards (PAWA)***

Pay/wages/rewards were measured by applying a five-item scale with a five-point Likert Scale (Strongly Disagree to Strongly Agree) from Price and Muller (1986) modified by Yoon and Thye (2002).

***Career Commitment (CACO)***

Eight items with a five-point Likert Scale (Strongly Disagree, Strongly Agree) from Blau (1985) was used to measure the employees' career commitment.

***Promotion (PMTN)***

Three items with a five-point Likert Scale (Strongly Disagree, Strongly Agree) was used by Chang (1999) based on Gaertner and Nollen (1989) study used to measure the employee's perception about promotion within the university.

***Job Satisfaction (JOSA)***

Seven items with a five-point Likert Scale (Strongly Disagree, Strongly Agree) from Brayfield and Rothe (1951) used to measure the employee's job satisfaction.

#### ***Job Involvement (JOIN)***

By using Blau (1985) a five-item scale based on Kanungo's (1982) study was used to measure the job involvement with a five-point Likert Scale (Strongly Disagree, Strongly Agree).

#### ***Supervisor and Peer Relations (SPRE)***

Six well-known items with a five-point Likert Scale (Strongly Disagree, Strongly Agree) concerning the employee's perception of supervisor support and advice on the employee's career measured from Gaertner and Nollen (1989) was applied.

#### ***Training and Skills Development (TSDE)***

This variable measured by four items (where three items were applied by Chang (1999)) based on Gaertner and Nollen (1989) with a five-point Likert Scale (Strongly Disagree, Strongly Agree) and one item was developed by the researcher.

#### ***Social Relationships in the Workplace (SORE)***

A four-item with five-point (Strongly Disagree to Strongly Agree) scale was used to measure social relationships in the workplace. The scale was adapted from the five-item relationships subscales of Hanpachern's Revised Margin in Life scale (1998), which itself had been modified from the original published survey by Stevenson in 1982. The four items for this scale were extracted from a Revised Margin in Life scale with eight subscales, one of which was social relationships in the workplace.

#### ***Demography***

The participant would be asked to tick the appropriate box in the demographic section of the questionnaire. Demographics included gender, age range, marital status, present employment status, highest educational level, number of dependents, years in their present job and years with present employer.

#### **5.4.2.2 Dependent Variable**

##### ***Readiness for Organisational Change (ROCH)***

Fourteen items applied by Madsen *et al.* (2005) based on Hanpachern's original fourteen-item Readiness for Change Scale (with slightly alterations), which was based

in part on McNabb and Sepic (1995). Participants were asked to tick one of seven numbers on a Likert scale (1 = Very Unlikely and 7 = Very Likely).

### **5.4.3 Data Triangulation**

Data triangulation refers to the use of more than one form of data in order to enhance confidence in findings. In social and behavioural sciences research, it is found as a source of reducing bias. Thus, it is important to retrieve more than one data that can strengthen the object to process the facts for appropriate results. Flick (2002) reveals that validation of data can be done by triangulation tools because it is collected by more than one source. There are five types of triangulation.

- i. Data triangulation: refers to the variety of data at different times and social situations used in the study.
- ii. Investigator triangulation: refers to collecting the same data type from a single source by several researchers.
- iii. Theory triangulation: refers to interpreting the same data set with multiple perspectives.
- iv. Methodological triangulation: refers to use of multiple research strategies for a single problem.
- v. Interdisciplinary triangulation: refers to investigate more than one discipline issues.

In this research to make more reliable and validate findings, data triangulation was applied. The researcher applied different sources of data like theory triangulation which refers the same set of data from multiple perspectives. Thus, the survey questionnaire applied in this research is contained in different sections which were correlated with desired objects. This questionnaire comprises five sections which were interpreted with multiple perspectives like employees commitment to the organisation and career variables relates to employee readiness for organisational change or demographic variables to the readiness for organisational change. In addition, the researcher employed documents, newspaper archives and other written sources of data which could be synthesised to compare with survey data. By employing these sources the researcher could increase the reliability and validity of findings.

## 5.5 Pilot Study

In business research study, a pilot study is a very common exercise before carrying out a survey questionnaire. According to Ticehurst and Veal (2000, p-151), a pilot study is important (Table 5.6 below).

**Table 5.6 Purpose of the Pilot Survey**

<b>ID</b>	<b>Purpose</b>	<b>Applicable</b>
1	Testing questionnaire wording	Yes
2	Testing questionnaire sequencing	Yes
3	Testing questionnaire layout	Yes
4	Gaining familiarity with respondent	No
5	Testing fieldwork requirement	No
6	Testing and training fieldworkers	No
7	Estimating response rate	Yes
8	Estimating questionnaire completion time	Yes
9	Testing analysis procedure	Yes

**Source:** Adapted from Ticehurst and Veal (2000, p-151)

A pilot study is common practice in business research for developing the instrument which shows the survey instrument reliability and validity. Initially, for assessing reliability of the instrument, Cronbach's alpha was analysed and face validity of the survey questionnaire was done through field experts. In this connection, a few surveys were sent to university professors and research experts for confirming the face validity. Through that, the study researcher is able to fine-tune questions, ensure accuracy of language and responses. According to Kriel (2006, p-109), pre-testing allows the testing of most aspects of the questionnaire with respect to time taken, ease of completion and ease of data collection.

## 5.6 Research Protocol

Research protocol is an essential part of research which describes the methods, procedures and general rules followed for data collection. It is an instrument which is

concerned with systematic review and a piece of original research (Holloway and Mooney, 2004). Through this instrument, it was ensured that the research study was smoothly and successfully conducted. Indeed, the use of this instrument is to gather reliable data. According to Remenyi *et al.* (1998), a research protocol is important to increase the consistency of data collection and focus the process of data collection. For developing a research protocol, Holloway and Mooney (2004) described several stages including: an introduction, aims and objectives of the study, hypotheses, setting and the calculation of sample size, research methodology and design, methods used in the statistical analysis, and study schedule. For details refer to next chapter.

### 5.7 Planned Research Study Schedule

**Table 5.7 Time Schedule for the Research Study**

Study Phase	Activity	Period
<b>Pilot Study</b>	Apply for ethical approval	May, 08
	Contact with participants for their consent	June, 08
	Send the survey instrument to participants	June, 08
	Data coding, entry and cleaning and data analysis	July, 08
	Writing pilot study results	August, 08
<b>Main Study</b>	Contact with participants for their consent	September, 08
	Send the survey instrument to participants	September to November, 08
	Data coding, entry and cleaning	December to January, 09
	Data analysis	February to April, 09
	Writing main study results and conclusions	May to August, 09
Thesis submission	November, 09	

## **5.8 Reliability and Validity**

Reliability of the research is concerned with the credibility of data collection. Reliability demonstrates procedures, focuses on the accuracy of measurement and the ability to repeat the research. If the same procedure is to be repeated, findings must be same. Thus, it is well known as repeatability and consistency over time. According to Yen (1994), the extent to which the research is replicable and the research findings can be repeated determines the reliability of a research study. Robson (1993) described subject error and bias and observer error and bias threats which may affect data reliability. Subject error is concerned with the neutral time and date to carry out the data, while subject bias is related to the pressure of authority to say what they want. Observer error is concerned with the structure of the instrument, while observer bias is related to how the data collector interprets the instrument.

In this research, a positivist approach has been adopted which is an efficient way to collect data for specific variables of interest (Collis and Hussey, 2003). The survey questionnaire was developed to get data from public sector higher educational institution employees. All participants are well qualified because the appointment requirement is at least a Masters' degree in the country. Contact addresses and numbers were given in covering letter if participants encountered any problem (Appendix 2). It was assured that data would be confidential that can reduce the subject bias. Since the questionnaire was designed in a survey format it did not face any observer error or bias. Furthermore, items of the survey instrument reliability could be measured by the internal consistency method (Hussey and Hussey, 1997). This study applied Cronbach's coefficient alpha to measure the internal reliability of survey. Further the survey was assessed by senior experts which is also a well-known method applied to measure internal consistency of survey questionnaire.

Validity of the research is concerned with the extent of research findings which represent what is really happening (Collis and Hussey 2003). There are two ways to establish the validity such that internal and external. By internal validity, the researcher establishes the phenomena and develops the confidence with which inferences about real life experience can be made (Reige, 2003). External validity is concerned with the generalisability of certain findings. For this approach, replication logic would be used

for the questionnaire survey. By means of replication, a theory can be tested a second or even more times and the same results should occur (Yin, 1994, p-35; Lincoln and Guba, 1985, p-291). According to Cresswell (2003, p-171), external validity threats occur when the experimenter draws incorrect inferences from the sample data to other persons, other settings and past or future situations. Construct validity establishes measures for the theoretical concepts adopted by researchers in which it can be assured that constructs are closely aligned to their real life context (Yin, 1994).

In this research, the survey questionnaire was used for data collection whose validity was assessed in two ways. According to Belson (1986, p-534-535), first, whether respondents who completed questionnaires did so accurately, and second, whether those who fail to return their questionnaires would have given the same distribution of answers as did the returnees. In the positivistic paradigm, validity remains in danger of being low, as compared to phenomenological paradigm, because it focuses on the precision of measurement (Hussey and Hussey, 1997). The danger of low validity in this research is constrained due to methods and theories used and tested frequently by prominent researchers (Cunningham *et al.*, 2002; Madsen *et al.*, 2005; Rafferty and Simons, 2006). According to Hussey and Hussey (1997), generalisability is the extent to which conclusions can be made about one thing based on information about another. If a question can be misunderstood, the information is said to be of low validity. In order to avoid low validity a pilot study was conducted before full scale data collection. Through the pilot study the time horizon was measured and language or any other misconceptions were removed.

## **5.9 Main Study**

Main study was followed by pilot study in which reliability and validity of survey instrument was assessed and confirmed. The main study was conducted in public sector higher educational institutions of Pakistan. In this section, the discussion about population and sample, targeted samples and the data collection procedure has been defined.



### **5.9.1 Population and Sampling**

Population is a set of all elements (Gilbert, 2001). From the population samples were selected in an attempt to collect data that can be representative of the whole target population. Sampling is important for an empirical study that uses a positivistic approach (Hussey and Hussey, 1997). It is a fraction of subjects drawn from a population. Sekaran (2006) reveals that sampling offers detailed information that deal with small number of units. For this empirical study, a random sampling has been done from faculty members of public higher education institutions in Pakistan.

This study was conducted in higher educational institutions of Pakistan. Only faculty members of public sector universities were included in the study, where, recently, the government has announced changes for faculty members of public sector universities. The total population of public sector universities in Pakistan is 10,471 in all sixty eight public sector universities (HEC, no date a). It was decided to restrict the population sample for two main reasons: time and distance. To maintain anonymity the name of universities has not been identified. The population for this study included full time teaching employees of higher education institutions in Pakistan. In this study, all categories of faculty members (professors, associate professors, assistant professors, and lecturers) were involved proportionately. This proportion can reduce the bias of data and also increase the anonymity of different categories of members. Before sending the survey questionnaire to participants, the researcher contacted them for any queries regarding the instrument and privacy. Then the survey questionnaire was handed over either by personal visits or sent by post or email. Addresses and contact numbers of faculty members were obtained from the higher education commission web site and the respective university web sites or personal visits to universities. A postal or electronic mailing survey questionnaire packet contained the questionnaire and a covering letter prepared by the supervisors of the study.

#### **5.9.1.1 Targeted Samples**

The targeted participants of the main survey were faculty members of higher educational institutions of Pakistan. Only public sector universities from all over the country where 10,471 teaching faculty members in all sixty eight universities are

working were involved. In this study a large sample of the population was selected from all categories of employees. The main reason for selecting a large sample was the requirement for chosen analysis techniques such that confirmatory factor analysis and multi-variances analysis (Powpaka, 1998). Questions include readiness for organisational change, employee commitment to the organisation, employee career commitment, social relationships in the workplace and demographic information were answered by all categories of faculty members.

As discussed in the previous section, survey research is one of the most established ways of collecting data. It became popular due to its convenience of handling during World War I and II and grew steadily since the 1970s (Neuman, 1995; Hussey and Hussey, 1997). Researchers who use survey questionnaires rely on highly structured questionnaires. The present study was cross sectional and conducted in higher education institutions where data was collected appropriately by the survey questionnaire method and covered a large population in the sample.

### **5.9.2 Data Collection Procedure**

The researcher started the procedure by contacting a randomly selected sample of the population to ask for their willingness to participate in the research study and any queries regarding the instrument and privacy (Appendix 3). After getting consent from the participants, a set of survey questionnaire along covering letter prepared by the supervisors of the study were handed over by personal visits or sent by postal or email. Robson (1993) describes subject error and bias which is concerned with a neutral time and date to carry out data collection, while subject bias is related to the pressure of authority to say what they want. By adopting this procedure, any bias in data collection was minimised. All the contact numbers and addresses of the participants were collected from the higher education commission or respective university web site or personal visits to universities.

After two weeks, the researcher contacted participants reminding them to respond. This procedure was followed three times. However, after a third reminder, participants who did not respond were excluded from the study.

In survey research, a probability sampling method is generally more appropriate than a non probability one because ‘the resulting sample is likely to provide a representative cross section of the whole (Denscombe, 2002, p-12). Furthermore, researchers can make unambiguous statements about ‘the accuracy and validity of the findings from the survey by reference to the degree of error or bias which may be present in it as measured by well understood statistical methods’ (Baker, 2002, p-106).

Several constraints were faced by the researcher while collecting this data from all over the country. The law and order situation in urban as well as rural areas confined the researcher to collecting the survey through personal visits. Shortage of electricity disturbed the participants in responding to the survey by email. Thus, the response rate by email was very small. At the time of conducting the main study, most universities were closed due to the winter vacation. Thus, it took more time to collect responses. However, the response rate was above fifty per cent which is satisfactory for the research. Finally, a small number of questionnaire packets were sent out again due to the loss during delivery. The researcher ended the survey 16 weeks after the first distribution.

### **5.9.3 Data Coding, Cleaning and Entry**

Coding of data involves translating entries on the questionnaire to letters or numbers. It is necessary to establish guides for translating responses. After coding the data, it was processed for easy recording. Data recording involves transferring information from questionnaires or code sheets to computer files for processing purposes. In fact, this is an easy way to find objectives from the data. But the researcher has to be sure to avoid errors during processing the data. To overcome human errors data must be cleaned which involves double checking the data entries on the computer files, particularly if there are large numbers of respondents.

### **5.10 Data Analysis Techniques and Statistical Packages**

The analysis of data for the main study consists of three major stages. In the first stage, the content and the relevance of the multi-item scales were refined on the basis of quantitative data gathered from the different population samples. In the second, scales

were validated using confirmatory factor analysis (CFA) via structural equation modelling (SEM). Lastly, hypotheses were tested using analysis of moment structure (AMOS) 16.0 version software in structural equation model. In this section, the features of each technique will be discussed and the rationale for the selection of these techniques will be provided.

Before conducting the main study, a pilot study was conducted to find the reliability of multi item scale development. A Cronbach's coefficient alpha ( $\alpha$ ) was applied to check the reliability of scales in the pilot study (Carmines and Zeller, 1979; Peter, 1979; Tabachnick and Fidell, 2007). In addition, face validity of the survey questionnaire was done through field experts. In this connection, a few surveys were sent to university professors for confirming the face validity. Moreover, for the main study survey questionnaire reliability and validity was assessed by applying exploratory factor analysis followed by confirmatory factor analysis. In order to assess the validity of scale, a confirmatory factor analysis was performed on the main survey data before structural model testing (Diamantopoulos and Siguaw, 2000; Anderson and Gerbing, 1988; Hair *et al.*, 2006). However, construct validity of the questionnaire was assessed by composite validity, Cronbach's alpha reliability, and average variance extracted methods. Finally, the relationship between constructs was tested by analysis of moment structure (AMOS) though structural equation modelling (SEM).

The treatment of missing data, descriptive statistics, outlier examination, linearity test, normality of data, homoscedasticity, exploratory factor analysis and reliability analysis tests was carried out by using statistical package for social sciences (SPSS) 15.0 version for Windows (Tabachnick and Fidell, 2007; Hair *et al.*, 2006). However, analysis of moment structure (AMOS) 16.0 versions software was used to perform both the confirmatory factor analysis and the structural model testing (Hair *et al.*, 2006).

#### **5.10.1 Exploratory Factor Analysis and Reliability Assessment**

Exploratory factor analysis is a method of factor loading into groups to extract underlying latent factors. It is technique used for "take what the data gives you" and involves grouping variables together on a factor or the precise number of factors (Hair *et al.*, 2006, p-104). It is widely used in social science research to identify the latent

factors and summarising and reducing a large set of observed variables to a smaller number of factors that account for co-variation (Hair *et al.*, 2006; Tabachnick and Fidell, 2007). In this domain this technique is effective for further testing of structural models (Hair *et al.*, 2006; Joreskog and Sorbom, 1996). Initially, this study applied exploratory factor analysis to take data in a group for a factor and then apply confirmatory factor analysis techniques to confirm the group of measurement variables related to the factor for examining the hypotheses. The existence of clusters of large correlation coefficients between subsets of variables suggests that those variables could be measuring aspects of the same underlying dimension (Field, 2006, p-620).

The researcher applied exploratory factor analysis SPSS version 15.0 for Windows to extract factors in which numerous methods are available for factor extraction and rotation. Among these, the principal component extract method which is the most common and default in SPSS programme was used to extract minimum set of variables accounted for the maximum variance in the data (Tabachnick and Fidell, 2007). Several ways are available to assess the adequacy of extraction and the number of factors but most the common are Eigenvalues greater than one and Scree plot. Before going to extract factors, it is important to calculate the variability in scores (the variance) for any given measures (or variables) (Field, 2006). According to Heir *et al.* (2007, p-102), communality is the total amount of variance an original variable shares with all other variables included in the analysis. A variable that has no variance would have a communality of 1; a variable that shares nothing with other variables would have a communality of 0 (Field, 2006, p-630). Communality can be calculated from factor loading in which a model containing multiple constructs with communalities of less than .5 are required and for a larger sample size less than .7 is required (Heir *et al.*, 2007). This research applied variables with a communality value above .5.

In order to achieve the best possible interpretation of the factors, the varimax rotation method was used. Rotation is important to select for improving the interpretability and scientific utility of the solution. It is used to maximise high correlations between factors and variables and minimise low ones. Rotation means discriminating between factors exactly where it implies (Hair *et al.*, 2006). This study applies a varimax of orthogonal techniques which is most commonly used in rotation for maximising variance. According to Tabachnick and Fidell (2007, p-620) the goal of varimax rotation is to

maximize the variance of factor loading by making high loadings higher and low ones lower for each factor. The factor loadings above +/- .50 were considered practically significant (Hair *et al.*, 2006).

In this study for reliability assessment, Cronbach's alpha technique was applied to the factors derived from the exploratory factor analysis to test the internal consistency of factors (Churchill, 1979; Peter, 1979; Litwin, 1995; De Vaus, 2002). Result values equal to or above 0.70 were considered to be an acceptable level of reliability (Nunnally, 1978; De Vaus, 2002).

### **5.10.2 Confirmatory Factor Analysis and Scale Validity**

Confirmatory factor analysis (CFA) is a technique usually employed to confirm *a priori* hypotheses about the relationship between a set of measurement items and their respective factors (Netemeyer *et al.*, 2003, p-148). It is used to test whether the pre-specified relationships on the basis of the theory are present in the data (Hair *et al.*, 2006). It is the number of common factors or latent constructs needed to account for the correlation among observed variables. Factor analysis, indeed, reveals underlying dimensions at which variables seem grouped together in a meaningful way. This could be achieved by looking for variables that correlate highly with a group of other variables, but do not correlate with variables outside that group (Field, 2006, p-621).

The validity of a construct is an essential condition for further theory testing and development (Carmines and Zeller, 1979; Steenkamp and Trijp, 1991). Thus, confirmatory factor analysis is used as a stricter assessment of construct validity to ensure that the theoretical meaning of a construct is empirically captured by its indicators (Bagozzi *et al.*, 1991; Steenkamp and Trijp, 1991). It is generally used to test the uni-dimensionality of a scale which is important for two reasons. First, the calculation of coefficient alpha (an indicator of reliability) is meaningful only for a uni-dimensional set of items (Cortina, 1993; Clark and Watson, 1995). Second, the calculation of composite scores to be used in a covariance structure model or other type of analysis is appropriate when individual items are uni-dimensional (Floyd and Widaman, 1995; Neuberg *et al.*, 1997). According to Netemeyer *et al.* (2003, p-26), if

any individual items are not uni-dimensional, the summed (composite) score will also contain the effect of other factors on which the item loaded.

#### 5.10.2.1 Scale validity

Scale validity refers to the extent to which an operational measure truly reflects the concept being investigated or the extent to which the latent construct is the underlying cause of item co-variation (De Vellis, 2003, p-49). Thus, it is essential to finalise the measurement scale in the research. Four types of validity applied by Netemeyer *et al.* (2003) and Morgan *et al.* (2004) for assessment have been used in this study.

- 1) Content validity – the extent to which the elements of measurement scales are relevant to and representative of the targeted construct for a particular assessment purpose.
- 2) Face validity – an assessment that items of a scale adequately measure the construct of interest.
- 3) Convergent validity – the extent to which independent measures of the same construct converge or are highly correlated.
- 4) Discriminant validity – the extent to which constructs diverge from the other operationalisations for which the construct is conceptually distinct.

All these steps were observed for confirming the validity of scale in this research. Content and face validity was assessed in the pilot study in which fifty participants were asked about the items. In addition, the instrument was assessed through experts or field researchers in the university (Hardesty and Bearden, 2004) at the initial stage of research. Experts were asked to comment on the lists of scale items. Third and fourth such that convergent and discriminant validity were assessed by confirmatory factor analysis (Anderson and Gerbings, 1988, p-416). Convergent validity (CV) can be assessed by an item's own reliability, composite reliability, and average variance extracted (Anderson and Gerbings, 1988; Babin *et al.*, 2000). In addition, convergent validity can be assessed by examining whether the factor loading of items (such that pattern coefficient) in their respective constructs are large (equal to or greater than 0.5) and statistical significant (Joreskog and Sorbom, 1996).

Construct validity examines validity by investigating the measurement item to see if it reflects the latent construct which it is designed to measure. Discriminant validity (DV) is one part of assessing construct validity in confirmatory factor analysis. It is the extent to which a construct is truly distinct from another construct (Hair *et al.*, 2006, P-778). By using average variance extracted, discriminant validity can be measured (Fornell and Larcker, 1981 and Hair *et al.*, 2006).

### **5.10.3 Structural Equation Modelling and Assessment of Model Fit**

Structural equation modelling is a technique that allows a set of relationships between independent variables (either continuous or discrete) and dependent variables. According to Hair *et al.* (2006, p-22) structural equation modelling provides the appropriate and most efficient estimation technique for a series of separate multiple regression equations estimated simultaneously. It is developed by two components such that the measurement model and structural model which aims to find overall model fit as to confirm the consistency of a theoretical model and the estimated model (Diamantopoulos and Siguaw, 2000; Hair *et al.*, 2006; Tabachnick and Fidell, 2007). In statistics, many methods are available to develop overall model fit on the basis of both incremental and absolute goodness of fit measures. Diamantopoulos and Siguaw (2000, p-83) state that sample size, estimation procedure, model complexity, violation of underlying assumptions of multivariate normality and variable independence can be superior to others under different conditions. This study applied model testing using two separate stages as recommended by Anderson and Gerbing (1982; 1988). One stage is structural model testing that shows the casual relationships between latent constructs (Chau, 1997; Anderson and Gerbing, 1988; Diamantopoulos and Siguaw, 2000). Before going to this stage, developing the measurement model is essential to confirm the relationships between a construct and its indicators. This model is assisted by confirmatory factor analysis (Chau, 1997; Anderson and Gerbing, 1988; Diamantopoulos and Siguaw, 2000). In order to assess measurement scales through construct validity the following criteria should be assessed: 1) unidimensionality of a construct (Anderson and Gerbing, 1988; Steenkamp and Trijp, 1991), 2) reliability, 3)



convergent validity, 4) discriminant validity, 5) nomological validity (Anderson and Gerbing, 1988; Steenkamp and Trijp, 1991; Peter, 1981).

Uni-dimensionality of a construct should be achieved before any attempt at further theory testing (Anderson and Gerbing, 1988) since it demonstrates that the multiple indicators of a construct are internally consistent and externally distinct from other measures. CFA ensures that a construct is uni-dimensional so that it is composed of a set of logical (theoretical) indicators (Hair *et al.*, 2006; Hattie, 1985) (more details in CFA section of this chapter). Nomological validity refers to the examination of the hypothesised relationships between a construct and the empirical links between indicators and their underlying dimensions (Peter, 1981; Peter and Churchill, 1986). In addition, utilisation of the goodness of fit indices is useful for assessing nomological validity. The remaining factor is referred in the previous section.

After estimating the measurement model, the structural model is applied to show the casual relationships among the variables. The overall fit of the structural model confirms the consistency of a theoretical model and the estimated model which is based on the observed values (Diamantopoulos and Siguaaw, 2000; Hair *et al.*, 2006). In statistics, there are so many methods to test the overall model fit, however no one method can provide an absolute assurance of model fit. Kline (1998, p-130) recommended at least four tests such that chi-square; GFI, NFI, or CFI; NNFI; and SRMR. However, most common fit indices are chi-square ( $\chi^2$ ), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), and Root Mean Square Error Approximation (RMSEA).

The chi-square statistics ( $\chi^2$ ) is the most common fit test in structural equation modelling. Diamantopoulos and Siguaaw (2000, p-83) state that it is a test of perfection, in which the null hypothesis is that the model fits the population data perfectly. In this test the null hypothesis is rejected when it is statistically significant. Chi-square value is computed as  $(N - 1) F_{\min}$  where  $N$  is the sample size,  $F_{\min}$  is the value of the fitting function and the relevant degree of freedom calculates as  $\frac{1}{2} k (k + 1) - t$ , where  $k$  is a number of observed variables and  $t$  is the number of parameters to be estimated (Diamantopoulos and Siguaaw, 2000, p-83). In AMOS software, the results of chi-square test shows in the form of CMIN (minimum discrepancy).

Goodness of fit index is a measure of the relative amount of variance and covariance. It is a non statistical measure which indicates the overall degree of fit (Hair *et al.*, 2006). It compares the squared residuals predicted with the observed value. The possible range of GFI value is 0 to 1 with higher values indicating better fit (Hair *et al.*, 2006, p-747). Values ranging from .80 to .89 are indicative of reasonable fit (Doll *et al.*, 1994). Values between .90 and 1.00 are considered to be a good fit (Diamantopoulos and Siguaw, 2000).

The adjusted goodness of fit index (AGFI) is an extended version of GFI that is adjusted by the ratio between the degree of freedom for the proposed model and the degree of freedom available (Hair *et al.*, 2006, p-747). Value .90 or above are considered to be a good fit and ranging from .80 to .89 are considered to be a reasonable fit (Doll *et al.*, 1994; Hair *et al.*, 2006).

Incremental fit measures compare the fit of the targeted model with a null model in which the variables are uncorrelated (Diamantopoulos and Siguaw, 2000; Hair *et al.*, 2006). Some of the most common incremental fit measures are normated fit index (NFI), non normated fit index (NNFI) and normated comparative fit index (CFI).

The normated fit index compares the base model with the suggested model without considering the degree of freedom. It is computed as  $(\chi^2_{\text{null}} - \chi^2_{\text{proposed}}) / \chi^2_{\text{null}}$  where  $\chi^2$  is chi-square value (Hair *et al.*, 2006). It can have values between 0 and 1. Even though there is not an absolute threshold value, .90 and above is mostly recommended as an indication of good fit (Hair *et al.*, 2006).

The non-normated fit index (NNFI) compares the null and the proposed model by taking the degree of freedom of both models into consideration. It is calculated as  $[(\chi^2_{\text{null}} / \text{df}_{\text{null}}) - (\chi^2_{\text{proposed}} / \text{df}_{\text{proposed}})] / (\chi^2_{\text{null}} / \text{df}_{\text{null}})$  where  $\chi^2$  is chi-square value and df is degree of freedom (Hair *et al.*, 2006). Unlike all the indices in incremental fit indices, NNFI take greater than 1.0 (Diamantopoulos and Siguaw, 2000). However, the recommended level of good fit value is the same (.90 and above is as accepted good fit) (Doll *et al.*, 1994; Hair *et al.*, 2006).

The normated comparative fit index (CFI) is another relative fit index which is more appropriate when analysis is run on a smaller sample size (Hair *et al.*, 2006). Value 0.90 and above are usually considered to be a good fit (Muller, 1996).

In this thesis, the two-step approaches such that measurement and structural model was adopted. This was suggested by Anderson and Gerbing (1988) in which first model such that structural model was preceded by the estimation of the measurement model. This model approach allows the researcher to establish valid constructs to be put into further theory testing to prove casual relationships between them. Second model is structural equation model which confirm the pre specified links between the endogenous and exogenous variables and is running a simulated multiple regression analysis (Hair *et al.*, 2006).

#### **5.10.4 Hypotheses Testing**

After the development and validation of measurement scales, the hypotheses were tested using the structural equation model (SEM). To predict the output of variables structural equation modelling is seen as the most robust method in social science and psychological domain. It is an appropriate and widely used method for investigating the relationship between a dependent variable and two or more independent variables due to its well developed underlying statistical theory (Motgomery *et al.*, 2001, p-xii; Hair *et al.*, 2006). Based on the structural model, the research hypotheses were tested from the standardised estimate and t value (critical ratio). For data analysis, the researcher employed AMOS 16.0 for Windows software to examine the model for the hypotheses. According to Cohen *et al.* (2000, p-117-124 and Hair *et al.* (2006), the following assumption were examined.

1. Descriptive statistics (including the examination of potential outliers) – this is to give an overview about the aggregated data to be employed in the analysis. The investigation of potential outliers is particularly important because their existence may distort an estimation of regression coefficients and representation of the relationships in a sample (Hair *et al.*, 2006, p-220). For this outliers were examined in SPSS 15.0 for Windows (Next Chapter).

2. Multi-collinearity – this refers to the relationship between two (collinearity) or more (multi-collinearity) independent variables in a regression model. Ideally it is desirable to have a number of independent variables highly correlated with the dependent variable, but with little correlation among them. When there is a substantial degree of multi-collinearity, the process for separating the effects of independent variables becomes more difficult. In other words, it makes the consideration of the contribution of each independent variable difficult because the effects of independent variables are confounded. To diagnose this potential problem the researcher employed SPSS 15.0 for Windows to compare the condition index and variance inflation factor (VIF) of the model with suggested threshold values (Hair *et al.*, 2006).
3. Normality of Residuals – for any value of independent variable X, the residuals around the regression line are assumed to be normally distributed. The violation of the normality assumption will affect the statistical significance tests especially in small samples. Furthermore, the normality of the residuals often is a signal of other problems in the regression model such as misspecification (using an incorrect regression model) (Cohen *et al.*, 2000, p-120). Kurtosis and Skewness test (Field, 2006; Tabachnick and Fidell, 2007; Hair *et al.*, 2006), Kolmogorov and Shapiro method test (Field, 2006) and histogram of all variables data along with normality distribution also normal Q-Q plot of data was used to assess the normality of residuals(Next Chapter).
4. Homoscedasticity – for any value of an independent variable X, homoscedasticity refers to the condition whereby conditional variance of the residuals around the regression line is constant (Lewis-Beck, 1993, p-18). Conditional variances represent the variability of the residuals around the predicted value for a specified value of X. Homoscedasticity is an essential assumption because its violation will lead to incorrect estimations of the standard errors as well as significant tests. In this study, the researcher used Levene’s test of homogeneity of variance in SPSS 15.0 for the Windows to confirm the results of variability of dependent variables with independent variables (Tabachnick and Fidell, 2007).

After important assumption had been evaluated, the researcher tested the significance of parameters estimated (e.g. overall model fit, significance of coefficient, etc.) and interpreted the results accordingly.

### **5.11 Ethical Consideration**

Ethical issues play an important role when research is to be conducted among human subjects. According to Neuman (1995), the researcher must protect human rights, guide them and supervise the interests of people. Christians (2000) stated the minimum considerations such that informed consent, privacy and confidentiality, and accuracy. In this research, all ethical requirements were followed throughout all phases of the research. Before collecting data, permission was granted by the relevant organisations. Addresses of faculty members were obtained from university websites or from the administration of the respective organisation. The survey questionnaire along with supervisors' letter was provided by personal visits or post or email addresses. The participants were asked to participate voluntarily and given the chance to withdraw from participation if they chose to do so. Participants were told that answering and returning the questionnaire assumed their consent to participate in this study. All participants were assured that anonymity and confidentiality of the responses was guaranteed. Also, the participants were told not to write their names on the questionnaires and data was coded to ensure anonymity and confidentiality throughout the research process.

Brunel University Ethics Committee guided the issues in this study, which adhered to the expectations of the Ethics Committee. According to the Ethics Policy Guidelines, a Brunel Business School Research Ethics Form must be signed by researcher and followed by the research supervisor. This form was signed by the researcher and supervisors which were submitted to the academic programme office. Moreover, a consent form was attached with the questionnaires which described the title of research study, the researcher and school name, purpose of the research, and what was involved in participation in a way that could be clearly understood by the respondents prior to filling in the questionnaire (Appendix 3).

## 5.12 Conclusion

This chapter provides the rationale behind the combination of two important research paradigms such that positivists and phenomenological. In this regard, a philosophical stance of both paradigms has been developed in this chapter. It is observed that attitudes and behaviours of individual can be measured by a positivist approach. Thus, many researchers in the domain of business performance and strategic management have applied a positivist approach. Therefore, a positivist approach was considered to be an appropriate approach for this research. Data for this study was collected from employees of higher educational institutions of Pakistan through a survey questionnaire. The survey instrument is structured in five sections such that 'employee readiness for organisational change', 'employee commitment to the organisation', 'employee career commitment', 'social relationships in the workplace' along with 'demographic questions', which include information about gender, age, marital status, present employment status, highest educational level, number of dependents, years in their present job, and years with present employer. A pilot study was conducted to measure the reliability and validity of the questionnaire before the actual full scale study. Details of practical considerations such as sampling and participation, measurement scales and data analysis procedure were also discussed in this chapter. Upon completion of the study, the data was cleaned, coded and entered on to the statistical package for social sciences (SPSS) version 15.0 for Windows. Analytical techniques included descriptive statistics and exploratory factor analysis was discussed briefly. After exploratory factor analysis, factors were confirmed via confirmatory factor analysis on the basis of structural equation modelling (SEM). It is used as a stricter assessment of construct validity to ensure that the theoretical meaning of a construct was empirically captured by its indicators. Then an assessment of model fit of the study by AMOS 16.0 version of software and tested hypotheses was discussed. The researcher discussed the measurement model at the individual level and used the maximum likelihood estimation procedure for all structural models. Five goodness of fit indices were revealed to assess the model fit of measurement models such that Chi-square ( $\chi^2$ ); root mean square error of approximation (RMSEA); goodness of fit index (GFI); non-normated fit index (NNFI); and comparative fit index (CFI). Finally the ethical issues involved in this study were also presented.

## **Chapter Six      Pilot Study**

### **6.1      Introduction**

This pilot study began by measuring the reliability of the survey questionnaire, which was to be applied for data collection in the main field study. The conceptual framework of this study was developed on the basis of employee commitment to the organisation, career commitment, and social relationships in the workplace factors to examine the employee attitudes and behaviours to readiness for organisational change. In this pilot study, five main scales such that employee readiness for organisational change, employee commitment to the organisation, employee career commitment, social relationships in the workplace and demographic factors were tested. A pilot study is a common practice in business research to assess the survey instrument reliability. In this connection fifty survey questionnaires were sent to university employees who are doing PhD studies in the United Kingdom (UK). The reliability of the survey instrument was computed by applying Cronbach's coefficient alpha and inter-correlations of scales was measured by Pearson's correlations. In this study a research protocol was developed to ensure systematic review and to show original work. Before analysing the pilot study the data research protocol is defined as follows

### **6.2      Research Protocol**

Research protocol requires a defined arrangement of the study. In business research, it is an important tool which can be used to establish the systematic review and new piece of research. This instrument may ensure successful and smooth run of the study. In research, building research protocol is one of the difficult tasks but need several stages such that study introduction, aim and objectives, hypotheses, setting and the calculation of sample size, research methodology and design, methods used in the statistical analysis, and study schedule (Holloway and Mooney, 2004).

#### **6.2.1      Introduction**

In the history of organisational development, change has been thought of as an important factor in the development of organisations. The pace of change has increased

to deal with increasing challenges such as competition, technology, communication, development, general instability, mergers, and reengineering. Such challenges emerged rapidly during the emergence of the global economy in the late 1980s and 1990s. The past few decades have been seen increasingly rapid advances in the field of change management mainly focused on the issues of effective and successful implementation of changes. This requires proper handling of the situation because of human involvement that can develop uncertainties and ambiguities due to changing from a known to an unknown situation as well as individual differences in their lives. Thus, getting positive consequences, management need to understand employee attitudes, beliefs and behaviours towards organisational change programmes.

### **6.2.2 Aim and Objectives**

The aim of this research is to examine employee readiness determinants which may support in developing employee attitudes and behaviours for organisational change. It is observed that employees can develop positive attitudes and behaviours on the basis of psychological and financial needs. Thus, this research focuses on employee commitment to the organisation and career factors which are related to the individual psychological and financial needs.

### **6.2.3 Hypotheses**

In organisational change, employee perceptions can be developed on the basis of psychological and financial needs. The literature reveals that both needs can be obtained by employee commitment to the organisation and their career. In this regard, a conceptual approach has been developed to identify employee responses towards organisational change. Various predictor variables such that feeling of pride, emotional attachment, personal sense of obligation, pay/wages/rewards, fringe benefits, promotion, job satisfaction, job involvement, career commitment, supervisor and peer relations, training and skills development, and social relationships in the workplace have been related in a way to examine employee attitudes and behaviours to readiness for organisational change. On the basis of the conceptual model a few hypotheses have been developed as noted below.



*H1: There is a significant positive relationship between feeling of pride and employee readiness for organisational change.*

*H2: There is a significant positive relationship between emotional attachment and employee readiness for organisational change.*

*H3: There is a significant positive relationship between personal sense of obligation and employee readiness for organisational change.*

*H4: There is a significant positive relationship between pays/wages/rewards and employee readiness for organisational change.*

*H5: There is a significant positive relationship between promotion and employee readiness for organisational change.*

*H6: There is a significant positive relationship between career commitment and employee readiness for organisational change.*

*H7: There is a significant positive relationship between job satisfaction and employee readiness for organisational change.*

*H8: There is a significant positive relationship between job involvement and employee readiness for organisational change.*

*H9: There is a significant positive relationship between supervisor and peer relations and employee readiness for organisational change.*

*H10: There is a significant positive relationship between employees training and skills development and employee readiness for organisational change.*

*H11: There is a significant positive relationship between social relationships in the workplace and employee readiness for organisational change.*

#### **6.2.4 Study Setting**

This research was conducted in public sector higher educational institutions in Pakistan where changes have been announced for faculty members in the recent past. Teaching staff members of these institutions are going through these changes. By applying the survey questionnaire this study examined employee attitudes and behaviours to readiness for organisational change.

### **6.2.5 Sample size**

The total population is 10,471 in all sixty eight public sector higher educational institutions in Pakistan (HEC, no date a). For data collection, a random sampling was done among full time faculty members of all categories such that professors, associate professors, assistant professors, and lecturers. The quantity of participants was proportionate according to category. Before sending a survey questionnaire to participants, the researcher contacted them for any queries regarding the instrument and privacy. Then the survey questionnaire was handed over by personal visits or sent by post or email. Addresses and contact numbers of faculty members were obtained from the respective university web sites or personal visits to universities. A postal or email survey questionnaire packet contained a copy of the survey questionnaire and a covering letter prepared by the supervisors of the study.

### **6.2.6 Research Methods and Design**

This is a cross sectional study to examine the relationships of independent variables to a dependent variable. It is observed that relationship of two variables can be measured through a positivist approach. In this regard, a systematic research design was developed to describe the hypothetico-method that leads to answering the research questions and justifies the hypotheses. The research process started with an extensive literature review to find gaps in the research and an understanding of the research domain. After that, a conceptual approach was developed to represent the intended empirical research. To test the model, data is required to validate the research hypotheses. The type of data was determined as quantitative, the epistemology stance determined, and a research strategy identified. Quantitative data can be collected by survey questionnaire which was developed relating to the factors applied in the conceptual model. Before the full scale study, a pilot study is to be conducted to measure the reliability and the face validity of the questionnaire was done via field experts at the university. Ethical issues were considered for data collection in which participant participation was voluntary. At any time they could withdraw and were told not to write their names on the questionnaires to ensure anonymity and confidentiality throughout the research process.

### **6.2.7 Data Analysis**

In this study quantitative data was collected from the employees of public sector higher educational institutions of Pakistan. In the business research domain, the statistical package for social sciences (SPSS) has been applied widely to infer results. Recently many researchers in social sciences studies have applied this package and found relationships of predictor variables (Cinite *et al.*, 2009; Park and Kim, 2009, Elias, 2009). In this study, data was analysed by applying SPSS version 15.0 for Windows. Through this package a number of statistical tests including descriptive statistics and correlations test were analysed from the data of the study. In descriptive statistics, frequencies, means, and standard deviations were used to describe the sample (demographics) and general results. While for alpha reliability, Pearson's correlations and exploratory factor analysis package was also applied to infer results. This technique is widely used to assess the relationship of predictor variables (Cinite *et al.*, 2009; Elias, 2009). The pilot study concludes with an extensive discussion, findings and suggested recommendations for future research.

### **6.3 Pilot Study Methodology**

The pilot study was undertaken between June and July in 2008. The survey questionnaire was distributed to fifty participants who were selected by random sampling. The participants were academics employed by public sector universities in Pakistan currently doing PhD or post doctorate studies in the United Kingdom (UK). Before sending the survey questionnaire to participants, the researcher contacted them for any queries regarding the instrument and privacy. Then a survey questionnaire was handed over either during personal visits or sent by post or email. Addresses and contact numbers of participants were obtained from colleagues doing PhD studies in different universities in the UK. A postal or email questionnaire survey packet contained a copy of the survey questionnaire and a covering letter prepared by the supervisors of the study.

Pilot study data was analysed using SPSS (version 15.0 for Windows). Before analysing data, the questionnaire items were coded in the SPSS programme. A few survey items such that 24, 25, 26 and 30 were in the organisational commitment scale, item numbers

38, 40 and 44 were in career commitment and item number 73 on social relationships in the workplace were coded in reverse. Descriptive statistics like as frequencies, mean, and standard deviations were calculated for all variables.

#### **6.4 Pilot Study Results and Data Analysis**

The pilot study was completed within two months. Of the fifty questionnaires distributed among faculty members from twelve different public sector universities in Pakistan, forty seven were returned, which shows a response rate of 94%. Minimum time taken was ten minutes and maximum sixty minutes. But the average time was nineteen minutes to complete the survey questionnaire.

##### **6.4.1 Demographic details**

Demographic details of the participants (Table 6.1) show that 77% (n=36) participants were male and 47 % (n=22) were between 31 to 40 years of age. A majority (75%, n=35) of the participants were married and most of them (28%, n=13) had 3 to 4 dependents. The majority of respondents comprised lecturers (49%, n=23) and assistant professors (34%, n=16). Some 70 percent (n=33) had a Master's degree as highest educational qualification. The majority of respondents (36%, n=17) had remained in their present job for 6 to 10 years and most of them (32%, n=15) were working for their present employer for the same period.

**Table 6.1 Demographic Characteristics of Participants**

Demographic	Category	Frequencies
Gender	Male	36
	Female	11
Age	21-30	14
	31-40	22
	41-50	8
	51-60	3
Marital Status	Single	12
	Married	35
Present Employment Status	Lecturer	23
	Assistant Professor	16
	Associate Professor	2
	Professor	6
Highest Educational Level	Masters Degree	33
	MS/M. Phil Degree	9
	Ph. D Degree	5
Number of Dependents	1-2	9
	3-4	13
	5-6	12
	7 +	5
	None	8
Years in present job	< 1 year	4
	1-5 years	13
	6-10 years	17
	11-15 years	6
	16-20 years	4
	21 and more	3
Years with present employer	< 1 year	2
	1-5 years	12
	6-10 years	15
	11-15 years	9
	16-20 years	5
	21 and more	4

#### **6.4.2 Descriptive Statistics**

In this pilot study, overall, participants perceived themselves as generally open and ready for change with a statistical mean (M) of  $5.44 \pm 0.86$  on a seven point Likert scale of Very Unlikely (1) to Very Likely (7). The participants appeared to be fully committed to their organisations (M =  $3.50 \pm 0.66$ ) and career (M =  $3.55 \pm 0.68$ ) on a five-point Likert scale of Strongly Disagree (1) to Strongly Agree (5). However, the variable social relationships in the workplace was also good with a statistical mean (M =  $3.78 \pm 0.37$ ) on a five-point Likert scale of Strongly Disagree (1) to Strongly Agree (5).

#### **6.4.3 Reliability**

Overall reliability of scales used in this survey questionnaire was found 0.924 that shows higher internal consistency among the scales. However, the reliability of individual scales was found different from each other and varied from 0.698 to 0.887 (Table 6.2), which shows that each scale has an individual internal consistency. This shows that the survey instrument has a high level of internal consistency (Field, 2006). Thus, the survey instrument can be reliably used to examine employees' attitudes and behaviours for readiness to organisational change.

#### **6.4.4 Pearson's Correlations Analysis**

Significant correlations between the scales were determined at two levels such that  $p=0.05$  and  $p=0.01$  (Table 6.2). In this pilot study, the organisational commitment scale is found to be significantly and positively correlated ( $P<.01$ ) with career commitment, and social relationships in the workplace (Table 5.2). The organisational commitment is also significantly and positively correlated with readiness for organisational change scale at the level of  $P<.05$ . The career commitment scale is significantly and positively correlated with employees' commitment to the organisation, social relationships in the workplace and readiness for organisational change scales at the level of  $p<.01$ . Pearson's correlation value of career commitment scale is highly correlated with organisational commitment and social relationships in the workplace.

The social relationships in the workplace scale is significantly and positively correlated ( $p < .001$ ) with all other scales except employee readiness for organisational change, which had no correlation whatsoever with this scale.

**Table 6.2 Coefficient Alpha and Correlations of Scales for Pilot Study**

Variable	Cronbach's Alpha	1	2	3	4
1. Organisational Commitment	0.803	----			
2. Career Commitment	0.887	.612**	----		
3. Social Relationships	0.698	.441**	.642**	----	
4. Readiness to Change	0.753	.355*	.475**	.283	----

**Notes:** Total N = 47; \* $p < .05$ ; \*\* $p < .01$  (two-tailed);

## 6.5 Discussion

The purpose of this pilot study was to know the reliability of various scales included in this survey questionnaire, which was to be applied in the main field study to examine employee attitudes, beliefs, and behaviours to readiness for organisational change. The questionnaire was developed with five main scales such that demography, organisational commitment, career commitment, social relationships in the workplace and readiness for organisational change.

Madsen *et al.* (2005) recommended that organisational commitment and social relationships in the workplace predictor variables can be used to understand employee attitudes and behaviours to readiness for organisational change. This was supported by Penely and Gould (1988) and Yoon and Thye (2002) to ascertain employee attitudes and behaviours through employee commitment to the organisation. In addition, Blau (1985); Collarelli and Bishop (1990) and Chang (1999) have reported that employee attitudes, behaviours and beliefs can be measured by their commitment to their career. Therefore the present survey questionnaire was developed on the basis of studies mentioned above and pilot tested it.

In this pilot study, overall results of the scales were found highly reliable, as indicated by Cronbach's  $\alpha$  (.924), which shows high internal consistency among the various

scales included in this survey questionnaire. However, reliability of individual scales differed from each other.

### **6.5.1 Employee Commitment to the Organisation**

Employee commitment to the organisation scale was found reliable which reveals that this scale has internal consistency for examining employee reaction to change. This finding is in agreement with previous studies (Madsen, *et al.*, 2005; Penely and Gould, 1988; Yoon and Thye, 2002). The statistical mean of this scale also showed employee openness and readiness for organisational change. Thus, the scale can be applied to ascertain employee attitudes and behaviours regarding readiness for change.

Madsen *et al.* (2005), Gaertner and Nollen (1989) and Gautam *et al.* (2001) reported that employee attitudes and behaviours can be examined by his or her commitment to the organisation. The results of this pilot study also show that employee commitment to the organisation scale is significantly and positively correlated with other scales such that career commitment, social relationships in the workplace, and employee readiness for organisational change.

### **6.5.2 Employee Commitment to the Career**

This scale has been applied by many researchers such as Goulet and Singh (2002) and Chang (1999) to know an individual's intentions and beliefs for career and they found positive results. We also used this scale in this pilot and found that the reliability of employee career commitment scale was high which revealed higher internal consistency of the instrument items. In addition, the statistical mean of this scale also showed that employee of organisations can be ready and open to change when they are committed to their career.

In this scale participant's response to the factors are related to situational and individual commitments. According to Judges *et al.* (1995); Goulet and Singh (2002) and Poon (2004) employee can develop positive attitudes and behaviours for an organisation on the basis of the situational factor. In addition, the literature also shows that employee can develop positive attitudes on the basis of individual commitment (Penely and



Gould, 2002; London, 1985; Collarly and Bishop, 1990; Agho *et al.*, 1992). This was confirmed in our pilot study, which shows that employee career commitment has a positive relationship to the readiness for organisational change.

### **6.5.3 Social Relationships in the Workplace**

Employee can develop positive attitudes and behaviours through social relationships in the workplace (Weber and Weber, 2001; Hanpachern *et al.*, 1998; Eby *et al.*, 2000; Madsen *et al.*, 2005). The researcher therefore studied the relationship of employee social relationships in the workplace to readiness for organisational change. Interestingly, the researcher did not find any significant correlation between this scale and readiness for change. This means that social relationships in the workplace may not facilitate an individual to be more willing and open to organisational change. However, it was found that employee who had positive social relationships in their organisation felt more commitment to the organisation and their career.

## **6.6 Participants Comments on the Survey Questionnaire**

In this pilot study, a few suggestions were received from participants to make clearer and strengthen the survey questionnaire. Participants suggested writing the term 'university' instead of 'organisation', which may make it clearer for participants to provide a response for his or her university. In the demography scale, the option for gender and marital status should be open. This suggestion can reduce gender bias. In the item on highest educational level, Bachelor of Engineering (B.E) and Bachelor in Medicine and Bachelor in Surgery (MBBS) were included. In fact, this study was to be conducted in different universities in Pakistan including professional and general universities. Thus for medical and engineering universities, the basic requirement for appointment is a bachelor's degree and so this option should be included in the relevant question. In the readiness for organisational change scale the phrase 'my willingness or openness' was applied once to all items at the beginning. Participants suggested putting this phrase with all questions which might be more easily understandable. However, participants agreed on the simple language in the survey instrument and format of the questionnaire items.

## **6.7 Conclusion**

This pilot study revealed higher internal consistency of all scales and positively significant correlations between different scales included in the developed and piloted survey questionnaire, which therefore can be applied to examine employee attitudes and behaviours to readiness for organisational change. Of particular interest was the finding that social relationships in the workplace, despite satisfactory coefficient alpha reliability, may not be significantly correlated with readiness for organisational change as revealed in this pilot study. However, there was a need to confirm these findings using this survey instrument in a full scale study in the field.

## **Chapter Seven Main Study Analysis and Findings**

### **7.1 Introduction**

In order to achieve the research objectives this chapter is concerned with analysing and uncovering the relationships between independent and dependent variables. The previous chapters provided the details about the research methodology and significant portion was dedicated to methods used in the study. Since the study adopted quantitative methods in which a survey questionnaire was applied to obtain the data. This chapter consist on analysing the data with subsequent discussions. Based on quantitative data, various statistical techniques based on statistical package for social sciences (SPSS) version 15.0 and structural equation modelling (SEM) based on AMOS (version 16.0) software were used to analyse the data. This chapter comprises the following sections such that introduction, data management, data screening prior to analysis, demographic characteristics, factor loading and data analysis, hypotheses testing, and conclusions.

### **7.2 Data Management**

This study was undertaken from September 2008 to January 2009. The survey questionnaire was distributed by post, email and personal visits to 1000 participants who were selected by random sampling from thirty three public sector universities of Pakistan. The participants were all academics (faculty members) such that Professors, Associate Professors, Assistant Professors, and Lecturers. In the random sampling, all categories of employees were considered proportionately. During data collection, due process was followed like sending reminders (at least three) to non respondents after fifteen days. No any participants were forced to fill the form at particular time or in a particular place. All participants were free to respond at any time and anywhere. However, the ratio of male and female participants was considered in random sampling.

This study is primarily based on statistical package for social sciences (SPSS) version 15.0 for Windows to assess the descriptive statistics and exploratory factor analysis. After exploratory factor analysis, factors were confirmed via confirmatory factor analysis on the basis of structural equation modelling (SEM). Then analysis of moment

(AMOS) version 16.0 software was applied to assess the model fit of the study. SPSS programmes, deal with quantitative data to run the objects, thus all responses of participants were entered according to the numeric response value. Before entering the data into SPSS spreadsheet columns and rows were developed by coding of question items (Appendix 4). Therefore, any information about the case can be identified across the data editor. In the name column of SPSS, questionnaire items were coded with numbers along with an abbreviation of the variable. Similarly, in the label column question items were written in abbreviated format. The value section of the column was developed from “0” showing information not provided and then “1” for “Very Unlikely” to “7” “Very Likely” on a seven-point Likert scale and “0” showed information not provided and then “1” for “Strongly Disagree” to “5” “Strongly Agree” on a five-point Likert scale.

After entering data, coding was done for variables, which consisted of a series of grouped question items (Appendix 5). These variables are representing as independent and dependent variables used in the analysis

Finally data was cleaned by descriptive statistics tests to know the responses to each question according to column section entry to confirm the proper figure was entered.

### **7.3 Data Screening Prior to Analysis**

Accuracy of data is necessary for analysing the responses of participants. Many issues are concerned with the accuracy with which data are entered into the data file. Issues like missing data, outliers, linearity, normality and Homoscedasticity have an impact on the relationships of variables or for the outcome of variables. Indeed, the objective of data screening is as much to reveal what is not apparent as it is to portray the actual data, for the “hidden” effects are easily overlooked (Hair *et al.*, 2006, p-37). Thus, for honest analysis of main data, these issues must be a prior consideration and resolved (Tabachnick and Fidell, 2007).

### 7.3.1 Missing Data

Missing data is one of the most pervasive problems in data analysis. It is a fairly common occurrence in certain areas of research which can affect the results of research objectives. Missing data occurs for a variety of reasons but the most common reasons in social science research are long questionnaires and/or participants who accidentally miss out questions. According to Tabachnick and Fidell (2007, p-62), missing data seriousness depend on the pattern of missing data, how much is missing, and why it is missing. However, the pattern is more important than the number missing. In social science research, there are various suggestions like using the mean of the scores on the variance (Stevens, 1992) or removing sample(s) who do not responding to a question (Norusis, 1995). According to Tabachnick and Fidell (2007, p-63), if only few data points, say, 5% or less, are missing in a random pattern from a large data set, the problem are less serious and almost any procedure for handling missing values yields similar results. To find the missing data, this study applied SPSS package of missing value and found all question data less than 5% of the total data (Appendix 6). Thus, the removal of all missing data such that 25 samples out of 556 samples is 4.49% which does not cause problems with the outcome of the analysis.

### 7.3.2 Outliers

An outlier is a score with a distinct characteristic from the rest of the data. It occurs with an extreme value on one variable or a combination of scores on two or more variables to deviate the statistics (Tabachnick and Fidell, 2007). According to Hair *et al.* (2006, p-73) an outlier is judged to be an unusually high or low value on a variable, or a unique combination of values across several variables that make the observation stand out from the others. Hair *et al.* (2006, p-73) have classified outliers into one of four classes based on the source of their uniqueness.

- a. It can arise from a procedural error, such as a data entry error or mistake in coding.
- b. It is an observation that occurs as the result of an extraordinary event, which accounts for the uniqueness of the observation.

- c. It comprises extraordinary observations for which the researcher has no explanation.
- d. It contains observations that fall within the ordinary range of values on each of the variables.

There are three methods to detect outliers (Tabachnick and Fidell, 2007; Hair *et al.*, 2006, p-73 and Field, 2006). Such as:

- a. Univariate detection
- b. Bivariate detection
- c. Multivariate detection

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

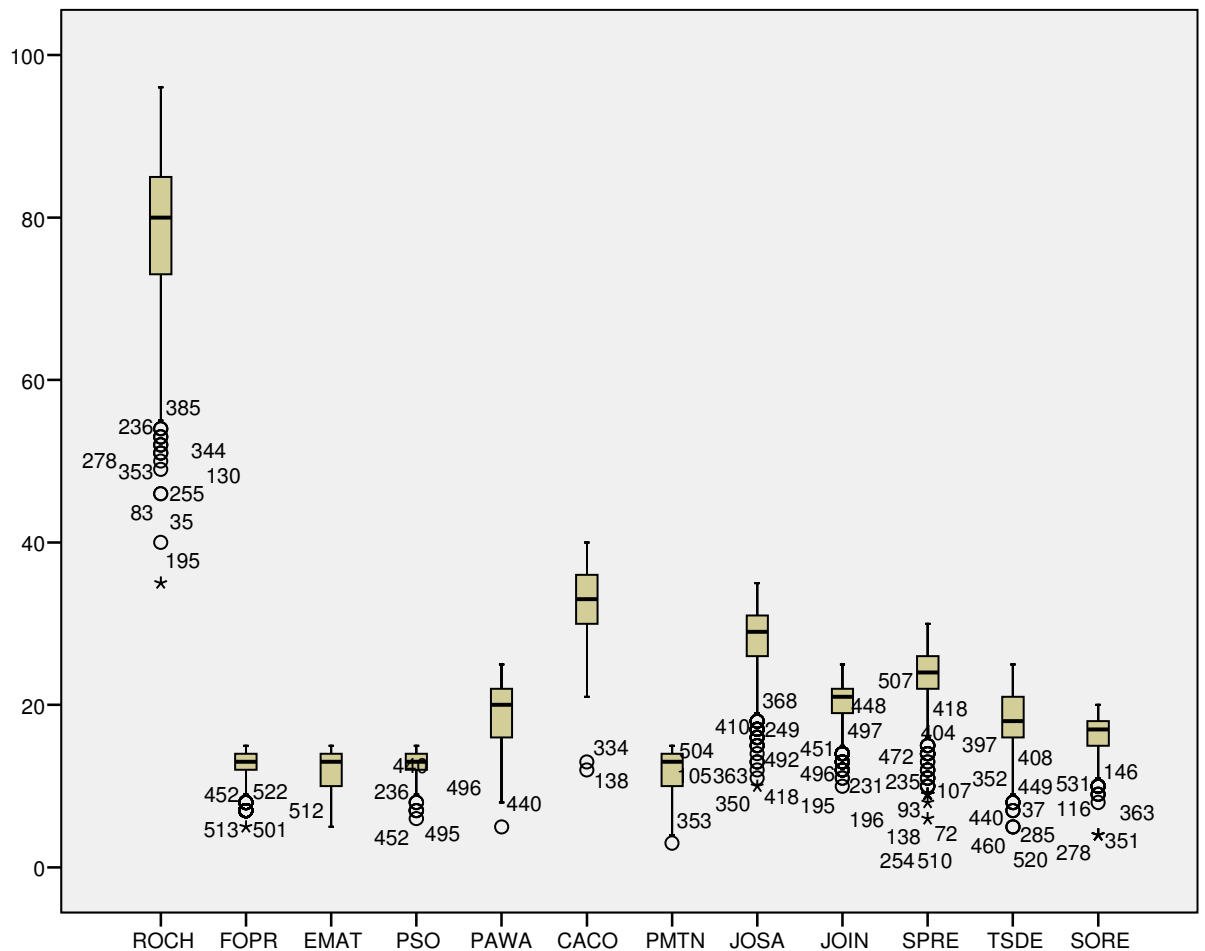
Bivariate outliers can be identified by applying a pair of variables jointly in a scatter plot in which if case(s) fall markedly outside the range of the other observations will be seen as isolated points (Hair *et al.*, 2006).

Multivariate outliers are a combination of scores on two or more variables. It is a better solution than bivariate because of a large number of graphs and limited numbers of variables observations. Thus for multidimensional position of variables, the multivariate detection method of dealing with outliers is more useful. According to Hair *at el.* (2006) and Field (2006) multivariate outliers can be identified by Mahalanobis  $D^2$  measure in which assessment of each observation can be done across a set of variables. In this test if  $D^2/df$  (degree of freedom) value exceeds 2.5 in small samples and 3 or 4 in large samples it can be designated as a possible outlier (Hair, *at el.*, 2006, p-75). After

detecting multivariate outliers, these can be examined by univariate or bivariate methods for fully understanding the nature of its uniqueness.

Outliers cannot be categorically characterised as either beneficial or problematic (Hair, *et al.* 2006) but they can bias the mean and inflate the standard deviations (Field and Hole, 2003). Thus, the researcher should be aware of such values because they bias the model research fit to the data (Field, 2006). This research study applied a graphical method for detecting the univariate outliers and Mahalanobis's distance case was applied for finding multivariate outliers to confirm their effect on the objectives of the study. In box plot (Graph 7.1), 11 univariate outliers were found which marked with an asterisk and also compared with the multivariate outlier tests by Mahalanobis's distance test which confirmed the samples (Table 7.1).

**Graph 7.1    Inbox Plot**



**Table 7.1 Univariate and Multivariate Outliers Results**

Univariate Outliers		Multivariate Outliers		
Case with standard values exceeding + 2.5		Case with a value of $D^2/df$ Greater than 2.5 (df = 13) <sup>a</sup>		
		Case	$D^2$	$D^2/df$
ROCH	195	138	43.78	3.38
FOPR	452	195	35.02	2.69
EMAT	No cases	334	35.68	2.74
PSO	No cases	440	42.57	3.27
PAWA	No cases			
CACO	No cases			
PMTN	No cases			
JOSA	350			
JOIN	No cases			
SPRE	72, 128, 138, 195, 254, 510			
TSDE	No cases			
SORE	363, 278			

a. Mahalanobis  $D^2$  value based on the 13 variable perceptions.

Note: ROCH = readiness for change; EMAT = emotional attachment, FOPR = feeling of pride, PSO = personal sense of obligation, PAWA = pay/wages/rewards, CACO = career commitment, PMTN = promotion, JOSA = job satisfaction, JOIN = job involvement, SPRE = supervisor and peer relations, TSDE = training and skills development, SORE, social relationships in the workplace

### 7.3.3 Normality, Linearity and Homoscedasticity

Before going on to infer results from the data, it should be ensured that data is normally distributed and also to confirm the relationship between variables. In multivariate analysis, a fundamental assumption is shaping the data to show the variation. According to Tabachnick and Fidell (2007), variables related with each other must be normally distributed. This research study is going to confirm the data by screening the normality, linearity and homoscedasticity before inferring results from the data.

#### 7.3.2.1 Normality

In statistics, normality refers to the data distribution which is a fundamental assumption in measuring the variation of variables. For analysing the data, it is not always required but is found better if the variables are normally distributed (Tabachnick and Fidell, 2007). According to Hair *et al.* (2006, p-79), if the variation from the data normal



distribution is sufficiently large, all resulting statistical tests are invalid, because normality is required to use the F and t statistics.

Normality of data can be assessed by statistical methods (Tabachnick and Fidell, 2007 and Hair *et al.*, 2006). In statistical method, normality of data distribution can be measured by Kurtosis and Skewness test and Kolmogorov and Shapiro method (Field, 2006; Tabachnick and Fidell, 2007; Hair *et al.*, 2006). For that, initially descriptive statistics were applied in SPSS 15.0 for Windows to know the skewness and kurtosis (Table 7.2). All variables were found normally distributed; however, values for skewness were found negative and for kurtosis values were mixed such that negative and positive. In addition, Kolmogorov and Shapiro test (Field, 2006) was applied to find the data normality. Results of this test (Table 7.3) were found significant for all variables, which might be due to large sample size (e.g. n=518 in this study) because this test is very sensitive to large sample size and minor deviation from normality show this test as significant, hence, significant K-S test does not reveal departure from normality of data (Field, 2006, p. 93).

**Table 7.2 Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Std. Error	Kurtosis	Std. Error
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
ROCH	518	40.00	96.00	77.5290	10.28896	-.925	.107	.317	.214
FOPR	518	7.00	15.00	12.3707	2.63250	-1.161	.107	-.091	.214
EMAT	518	5.00	15.00	11.6525	3.09597	-1.030	.107	-.460	.214
PSO	518	6.00	15.00	12.9170	1.59146	-.872	.107	1.287	.214
PAWA	518	5.00	25.00	18.8571	3.59008	-.588	.107	-.108	.214
CACO	518	12.00	40.00	32.5753	4.29037	-.454	.107	.412	.214
PMTN	518	3.00	15.00	11.5405	3.02621	-1.041	.107	-.271	.214
JOSA	518	10.00	35.00	27.8803	5.05876	-1.078	.107	.576	.214
JOIN	518	10.00	25.00	20.2432	3.36018	-.899	.107	.110	.214
SPRE	518	8.00	30.00	23.4981	4.63556	-1.196	.107	1.264	.214
TSDE	518	5.00	25.00	17.7143	3.94687	-.543	.107	.203	.214
SORE	518	6.00	20.00	15.9131	2.79924	-.895	.107	.237	.214

Valid N 518 (list wise)

Note: ROCH = readiness for change; EMAT = emotional attachment, FOPR = feeling of pride, PSO = personal sense of obligation, PAWA = pay/wages/rewards, CACO = career commitment, PMTN = promotion, JOSA = job satisfaction, JOIN = job involvement, SPRE = supervisor and peer relations, TSDE = training and skills development, SORE, social relationships in the workplace

**Table 7.3 Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
ROCH	.126	518	.000	.929	518	.000
FOPR	.295	518	.000	.770	518	.000
EMAT	.286	518	.000	.790	518	.000
PSO	.162	518	.000	.912	518	.000
PAWA	.127	518	.000	.960	518	.000
CACO	.088	518	.000	.975	518	.000
PMTN	.263	518	.000	.820	518	.000
JOSA	.174	518	.000	.900	518	.000
JOIN	.201	518	.000	.901	518	.000
SPRE	.182	518	.000	.897	518	.000
TSDE	.098	518	.000	.971	518	.000
SORE	.202	518	.000	.908	518	.000

a Lilliefors Significance Correction

Note: df = degree of freedom, Sig. = Significance

Note: ROCH = readiness for change; EMAT = emotional attachment, FOPR = feeling of pride, PSO = personal sense of obligation, PAWA = pay/wages/rewards, CACO = career commitment, PMTN = promotion, JOSA = job satisfaction, JOIN = job involvement, SPRE = supervisor and peer relations, TSDE = training and skills development, SORE, social relationships in the workplace.

### 7.3.2.2 Linearity

Linearity means the correlation between variables which is represented by a straight line. In data analysis, it is important to know the level of relationship of variables. An implicit assumption of all multivariate techniques based on co-relational measures of association, including multiple regression, logistic regression, factor analysis, and structural equation modelling, is linearity (Hair *et al.*, 2006, p-85). Thus, examining the relationships of variables is important to identify any departures that may affect the correlation. In statistics, linearity can be measured by Pearson's correlations or a scatter plot (Field, 2006; Tabachnick and Fidell, 2007; Hair *et al.*, 2006). This study applied Pearson's correlations and found all independent variables significantly positively correlated to the dependent variable (Table 7.4). Results of this test showed that all variables are linear with each other.

**Table 7.4 Pearson's Correlations**

	ROCH	FOPR	EMAT	PSO	PAWA	CACO	PMTN	JOSA	JOIN	SPRE	TSDE	SORE
ROCH	1											
FOPR	.239**	1										
EMAT	.146**	-.087*	1									
PSO	.292**	.248**	.035	1								
PAWA	.345**	.171**	.114**	.114**	1							
CACO	.138**	.137**	-.064	.243**	.155**	1						
PMTN	.229**	.068	-.049	.041	.228**	.084	1					
JOSA	.467**	.155**	.114**	.163**	.360**	.229**	.146**	1				
JOIN	.209**	.047	.055	.133**	.167**	.246**	.052	.256**	1			
SPRE	.238**	.077	.010	.123**	.203**	.164**	.117**	.168**	.217**	1		
TSDE	.190**	.079	.020	.146**	.317**	.129**	.100*	.169**	.110*	.455**	1	
SORE	.215**	-.008	-.002	.040	.211**	.191**	.059	.290**	.070	.125**	.150**	1

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

Note: ROCH = readiness for change; EMAT = emotional attachment, FOPR = feeling of pride, PSO = personal sense of obligation, PAWA = pay/wages/rewards, CACO = career commitment, PMTN = promotion, JOSA = job satisfaction, JOIN = job involvement, SPRE = supervisor and peer relations, TSDE = training and skills development, SORE, social relationships in the workplace.

### 7.3.2.3 Homoscedasticity

Homoscedasticity estimates the variance of dependent variables with independent variables. In multiple regression analysis, the assumption of variation of variables should be constant (Field, 2006). According to Hair *et al.* (2006, p-83) homoscedasticity is the assumption that dependent variable(s) exhibit equal levels of variance across the range of predictor variable(s). Thus, it refers to the assumption of normality because when the assumption of multivariate normality is met, the relationships between variables are homoscedasticity (Field, 2006; Tabachnick and Fidell, 2007). Homoscedasticity can be measured by graphical and statistical methods (Hair *et al.*, 2006; Field, 2006). In research, when data are grouped, homoscedasticity is known as homogeneity which can be measured by Levene's test of homogeneity of variances (Tabachnick and Fidell, 2007). Thus, this study applied Levene's test of homogeneity of variance to confirm the results of variability of dependent variables with independent variables (Table 7.5).

**Table 7.5 Test of Homogeneity of Variances**

		Levene Statistic	df1	df2	Sig.
ROCH	Based on Mean	.099	1	516	.753
	Based on Median	.020	1	516	.886
	Based on Median and with adjusted df	.020	1	511.747	.886
	Based on trimmed mean	.054	1	516	.816
FOPR	Based on Mean	1.609	1	516	.205
	Based on Median	.560	1	516	.454
	Based on Median and with adjusted df	.560	1	514.542	.454
	Based on trimmed mean	1.578	1	516	.210
EMAT	Based on Mean	.011	1	516	.918
	Based on Median	.022	1	516	.883
	Based on Median and with adjusted df	.022	1	515.668	.883
	Based on trimmed mean	.006	1	516	.939
PSO	Based on Mean	7.035	1	516	.008
	Based on Median	5.079	1	516	.025
	Based on Median and with adjusted df	5.079	1	508.893	.025
	Based on trimmed mean	4.477	1	516	.035
PAWA	Based on Mean	3.746	1	516	.053
	Based on Median	2.686	1	516	.102

	Based on Median and with adjusted df	2.686	1	513.107	.102
	Based on trimmed mean	3.684	1	516	.055
CACO	Based on Mean	.210	1	516	.647
	Based on Median	.099	1	516	.753
	Based on Median and with adjusted df	.099	1	500.926	.753
	Based on trimmed mean	.140	1	516	.709
PMTN	Based on Mean	.052	1	516	.820
	Based on Median	.015	1	516	.903
	Based on Median and with adjusted df	.015	1	513.836	.903
	Based on trimmed mean	.009	1	516	.924
JOSA	Based on Mean	.571	1	516	.450
	Based on Median	.636	1	516	.425
	Based on Median and with adjusted df	.636	1	513.593	.425
	Based on trimmed mean	.501	1	516	.479
JOIN	Based on Mean	2.737	1	516	.099
	Based on Median	1.291	1	516	.256
	Based on Median and with adjusted df	1.291	1	515.991	.256
	Based on trimmed mean	2.449	1	516	.118
SPRE	Based on Mean	3.680	1	516	.056
	Based on Median	2.670	1	516	.103
	Based on Median and with adjusted df	2.670	1	515.866	.103
	Based on trimmed mean	3.358	1	516	.067
TSDE	Based on Mean	9.720	1	516	.002
	Based on Median	9.360	1	516	.002
	Based on Median and with adjusted df	9.360	1	507.424	.002
	Based on trimmed mean	9.765	1	516	.002
SORE	Based on Mean	2.545	1	516	.111
	Based on Median	.704	1	516	.402
	Based on Median and with adjusted df	.704	1	515.534	.402
	Based on trimmed mean	2.664	1	516	.103

Note: df = degree of freedom, Sig. = Significance

Note: ROCH = readiness for change; EMAT = emotional attachment, FOPR = feeling of pride, PSO = personal sense of obligation, PAWA = pay/wages/rewards, CACO = career commitment, PMTN = promotion, JOSA = job satisfaction, JOIN = job involvement, SPRE = supervisor and peer relations, TSDE = training and skills development, SORE, social relationships in the workplace.

The results in the above table show that many variables ensured that the assumption of homogeneity has not been violated. However, PSO and TSDE are significant which mean a lack of homogeneity in these two variables. Nevertheless, it can be noted that like K-S Test, the Levene's test is also sensitive to sample size, hence, it can be significant when the sample size is large (such as n=518 in the present study), which

does not mean that there is substantial departure from normality of data (Field, 2006, p.98).

#### **7.4 Demographic Characteristics and Relationships**

The main study was completed within five months which shows the interest of participants in the issue being studied. As mentioned in previous chapter, the data for the main study was collected from Pakistan. Of the 1000 questionnaires distributed among faculty members from 33 different public sector universities in all four provinces of the country, 556 were returned, which shows a response rate of 55.6%. This response rate could be due to the fact that the questionnaire was mostly handed over face-to-face and followed a procedure in which at least three reminders were sent out after two weeks. Data was recorded with coding and cleaned before inferring findings. However, a few missing data were found which were excluded as discussed in an earlier section (section 7.3.1). The researcher also found a few outliers from the data, which were also excluded from the study (section 7.3.2).

The characteristics of the respondents such as age, gender, marital status, present employment status, higher education level, number of dependents, years in present job, and years with present employer were asked in the questionnaire. Demographic details of the participants (Table 7.6) show that 61.8% (n=315) of participants were male and 35.9 % (n=186) were between 31 to 40 years of age. A majority (60.2%, n=312) of the participants were married and most of them (30.1%, n=154) had 3 to 4 dependents. The majority of respondents comprised lecturers (40.7%, n=211) and assistant professors (31.5%, n=163). About 42 percent (n=217) had a Master's degree as the highest educational qualification. The majority of respondents (36.5%, n=189) had remained in their present job for 1 to 5 years and most of them (26.8%, n=139) were working with their present employer for the same period.

**Table 7.6 Demographic Characteristics of Participants**

Demographic	Category	Frequencies
Gender	Male	315
	Female	203
Age	<21	02
	21-30	154
	31-40	186
	41-50	90
	51-60	77
	>60	09
Marital Status	Single	177
	Married	312
	Divorced or Widowed	29
Present Employment Status	Lecturer	211
	Assistant Professor	163
	Associate Professor	78
	Professor	66
Highest Educational Level	B.E/MBBS/Masters Degree	217
	MS/M. Phil Degree	152
	Ph.D Degree	149
Number of Dependents	1-2	117
	3-4	154
	5-6	87
	7 +	42
	None	118
Years in present job	< 1 year	77
	1-5 years	189
	6-10 years	109
	11-15 years	50
	16-20 years	45
	21 and more	48
Years with present employer	< 1 year	70
	1-5 years	139
	6-10 years	81
	11-15 years	72
	16-20 years	71
	21 and more	85



A multi analysis of variance (MANOVA) was used to analyse the relationships between demographic variables such that gender, age, marital status, highest education level, number of dependents and years with present employer and study variables such that readiness for change, emotional attachment, feeling of pride, pay/wages/rewards, promotion, job satisfaction, job involvement, supervisor and peer relations, training and skills development, and social relationships in the workplace. Result of MANOVA (Table 7.7) shows significant relationships between number of dependents and readiness to change ( $p = .009$ ), gender and feeling of pride ( $p = .019$ ), gender and training and skills development ( $p = .005$ ), age and feeling of pride ( $p = .002$ ), marital status and job satisfaction ( $p = .015$ ), marital status and supervisor and peer relations ( $p = .036$ ), higher education level and training and skills development ( $p = .015$ ), years with present employer and emotional attachment ( $p = .027$ ), years with present employer and feeling of pride ( $p = .004$ ), years with present employer and job involvement ( $p = .045$ ).

**Table: 7.7 Demographic Multi Analysis of Variances (MANOVA)**

Demographics	ROCH <sup>a</sup>		EMAT <sup>b</sup>		FOPR <sup>c</sup>		PAWA <sup>d</sup>		PMTN <sup>e</sup>		JOSA <sup>f</sup>		JOIN <sup>g</sup>		SPRE <sup>h</sup>		TSDE <sup>i</sup>		SORE <sup>j</sup>	
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P
Gender	.105	.746	.299	.585	2.446	.019*	.297	.586	.314	.576	.046	.830	.384	.536	1.168	.280	4.487	.005**	.184	.669
Age	1.510	.187	1.553	.174	3.998	.002**	.935	.459	.549	.739	1.011	.412	.439	.821	.830	.529	.507	.771	.613	.690
M.S	1.784	.151	.618	.604	.738	.530	828	.479	1.574	.196	3.534	.015*	.426	.735	2.883	.036*	.073	.974	2.293	.078
H.E.L.	1.492	.227	.564	.569	.344	.709	1.783	.170	.319	.727	.224	.800	.314	.730	.481	.619	4.248	.015*	1.079	.342
N.D	3.451	.009**	.642	.633	1.086	.364	1.031	.392	1.525	.195	1.227	.300	1.124	.346	2.086	.083	1.052	.381	.357	.839
Y.P.E.	1.208	.306	2.572	.027*	3.526	.004**	1.947	.087	1.615	.156	1.264	.280	2.301	.045*	1.783	.117	.065	.997	.799	.551

<sup>a</sup>R<sup>2</sup> = .509, Δ R<sup>2</sup> = .024; <sup>b</sup>R<sup>2</sup> = .508, Δ R<sup>2</sup> = .022; <sup>c</sup>R<sup>2</sup> = .534, Δ R<sup>2</sup> = .073; <sup>d</sup>R<sup>2</sup> = .553, Δ R<sup>2</sup> = .073; <sup>e</sup>R<sup>2</sup> = .499, Δ R<sup>2</sup> = .003; <sup>f</sup>R<sup>2</sup> = .528, Δ R<sup>2</sup> = .060; <sup>g</sup>R<sup>2</sup> = .526, Δ R<sup>2</sup> = .057; <sup>h</sup>R<sup>2</sup> = .512, Δ R<sup>2</sup> = .029; <sup>i</sup>R<sup>2</sup> = .540, Δ R<sup>2</sup> = .085; <sup>j</sup>R<sup>2</sup> = .475, Δ R<sup>2</sup> = -.044

\**p* < .05; \*\**p* < .01

Note: ROCH = readiness for change; EMAT = emotional attachment, FOPR = feeling of pride, PAWA = pay/wages/rewards, PMTN = promotion, JOSA = job satisfaction, JOIN = job involvement, SPRE = supervisor and peer relations, TSDE = training and skills development, SORE, social relationships in the workplace, M.S = marital status, H.E.L. = higher educational level, N.D = number of dependent, Y.P.E. = years with present employer

## 7.5 Factor Loading and Data Analysis

Factor analysis techniques were used for data reduction which identifies groups or clusters of variables. The factor which produces group variables shows the relationship of variables to the factor. Field (2006, p-619) defines three main uses of factor analysis.

1. To understand the structure of a set of variables
2. To construct a questionnaire to measure any underlying variables
3. To reduce a data set to a more manageable size while retaining as much of the original information as possible.

Factor analysis includes underlying dimensions at which variables seems in group together in a meaningful way. This can be achieved by looking for variables that correlate highly with a group of other variables, but do not correlate with variables outside that group (Field, 2006, p-621). In fact, factor analysis provides the tools for analysing the structure of the interrelationships (correlations) among a large number of variables by defining sets of variables that are highly interrelated, known as factors (Hair *et al.*, 2006, p-104). Different techniques such that exploratory or confirmatory factor analysis can be used to achieve this purpose. Both are using for structuring groups of variables or data reduction. However, the exploratory factor analysis technique is used for “take what the data give you”, but confirmatory factor analysis techniques involves grouping variables together on a factor or the precise number of factors for testing hypotheses (Hair *et al.*, 2006, p-104). Initially, this study applied exploratory factor analysis to take data in a group for a factor and then applying confirmatory factor analysis techniques to confirm the group of measurement variables related to a factor for examining the hypotheses. The existence of clusters of large correlation coefficients between subsets of variables suggests that those variables could be measuring aspects of the same underlying dimension (Field, 2006, p-620). For exploratory factor analysis SPSS version 15.0 for Windows was applied.

### 7.5.1 Exploratory Factor Analysis

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

Several ways are available to assess the adequacy of extraction and the number of factors but the most common are Eigenvalues and Scree plot. Before, going on to extract factors, it is important to calculate the variability in scores (the variance) for any given measures (or variables) (Field, 2006). According to Hair *et al.* (2007, p-102) communality is the total amount of variance an original variable shares with all other variables included in the analysis. A variable that has no specific variance (or random variance) would have a communality of 1; a variable that shares nothing with other variables would have a communality of 0 (Field, 2006, p-630). Communality can be calculated from factor loading in which model containing multiple constructs with communalities of less than .5 are required and for larger sample size, less than .7 are required (Hair *et al.*, 2007). This research applied variables with a communality value above .5 (Table 7.8). Results showed that all variables retained in the factor loading have communality values above .5. Results confirmed the high variation from .671 to .828 which showed high variance among the variables.

**Table 7.8 Communalities**

Variables	Initial	Extraction	Variables	Initial	Extraction
ROCH2	1.000	.765	JOSA3	1.000	.715
ROCH3	1.000	.737	JOSA6	1.000	.824
ROCH4	1.000	.784	JOSA7	1.000	.730
ROCH6	1.000	.778	JOSA4	1.000	.686
ROCH7	1.000	.709	JOSA5	1.000	.675
ROCH10	1.000	.758	JOIN2	1.000	.824
ROCH12	1.000	.703	JOIN3	1.000	.710
EMAT1	1.000	.802	JOIN4	1.000	.747
EMAT2	1.000	.773	JOIN5	1.000	.786
EMAT3	1.000	.798	SPRE1	1.000	.737
FOPR1	1.000	.820	SPRE3	1.000	.746
FOPR2	1.000	.772	SPRE4	1.000	.755
FOPR3	1.000	.806	SPRE5	1.000	.680
PAWA1	1.000	.671	TSDE2	1.000	.749
PAWA2	1.000	.740	TSDE3	1.000	.780
PAWA3	1.000	.706	TSDE4	1.000	.828
PAWA4	1.000	.679	SORE1	1.000	.788
PMTN1	1.000	.805	SORE3	1.000	.774
PMTN2	1.000	.808	SORE4	1.000	.827
PMTN3	1.000	.821			

Extraction Method: Principal Component Analysis.

Note: ROCH = readiness for change; EMAT = emotional attachment, FOPR = feeling of pride, PAWA = pay/wages/rewards, PMTN = promotion, JOSA = job satisfaction, JOIN = job involvement, SPRE = supervisor and peer relations, TSDE = training and skills development, SORE, social relationships in the workplace.

#### 7.5.1.1 Eigenvalue

In principal component extraction method eigenvalues are associated with a variance which indicates the substantive importance of that factor. A quick estimate of the number of factors is obtained from the size of the eigenvalues reported as part of an initial run with principal component extraction (Tabachnick and Fidell, 2007, p-644). With component analysis variance of each variable contributing 1, a component with an eigenvalue less than 1 is not important (Tabachnick and Fidell, 2007; Field, 2006; Hair *et al.*, 2006). Thus, only the factors having eigenvalues greater than 1 are significant; all factors with latent roots less than 1 are considered insignificant and are disregarded (Hair *et al.*, 2006, p-120). For extracting factors from the data this study found ten factors having an eigenvalue greater than 1 (Table 7.10). The first factor was a high value and then successively smaller eigenvalues were found.

**Table 7.9 Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	Variance	Cumulative (%)	Total	Variance (%)	Cumulative (%)	Total	Variance (%)	Cumulative (%)
1	9.009	23.100	23.100	9.009	23.100	23.100	5.367	13.761	13.761
2	3.679	9.434	32.535	3.679	9.434	32.535	3.570	9.154	22.915
3	2.986	7.655	40.190	2.986	7.655	40.190	3.059	7.844	30.759
4	2.759	7.075	47.265	2.759	7.075	47.265	2.980	7.642	38.401
5	2.365	6.065	53.329	2.365	6.065	53.329	2.746	7.041	45.442
6	2.210	5.667	58.997	2.210	5.667	58.997	2.448	6.277	51.719
7	1.879	4.818	63.815	1.879	4.818	63.815	2.389	6.125	57.844
8	1.843	4.726	68.541	1.843	4.726	68.541	2.360	6.052	63.896
9	1.468	3.764	72.305	1.468	3.764	72.305	2.358	6.045	69.941
10	1.398	3.583	75.888	1.398	3.583	75.888	2.319	5.947	75.888
11	.582	1.492	77.380						
12	.509	1.306	78.686						
13	.491	1.259	79.944						
14	.455	1.167	81.112						
15	.441	1.132	82.243						
16	.423	1.084	83.327						
17	.413	1.058	84.386						
18	.404	1.036	85.422						
19	.381	.976	86.398						
20	.366	.937	87.335						
21	.347	.889	88.224						
22	.339	.868	89.092						
23	.329	.844	89.936						
24	.319	.819	90.755						
25	.312	.800	91.555						
26	.299	.766	92.321						
27	.291	.746	93.068						
28	.284	.727	93.795						
29	.263	.675	94.470						
30	.254	.651	95.121						
31	.251	.644	95.765						
32	.242	.619	96.385						
33	.235	.603	96.987						
34	.225	.577	97.564						
35	.220	.565	98.129						
36	.213	.546	98.675						
37	.197	.505	99.180						
38	.163	.419	99.599						
39	.156	.401	100.000						

Extraction Method: Principal Component Analysis

**Table 7.10 Factor Loading**

Variables	1	2	3	4	5	6	7	8	9	10
ROCH4	.850									
ROCH6	.823									
ROCH2	.822									
ROCH10	.821									
ROCH3	.807									
ROCH12	.794									
ROCH7	.779									
JOSA6		.847								
JOSA4		.782								
JOSA7		.778								
JOSA5		.769								
JOSA3		.754								
JOIN2			.882							
JOIN5			.876							
JOIN4			.849							
JOIN3			.829							
SPRE4				.850						
SPRE1				.844						
SPRE3				.844						
SPRE5				.805						
PAWA2					.808					
PAWA3					.793					
PAWA4					.777					
PAWA1					.720					
PMTN3						.886				
PMTN1						.882				
PMTN2						.869				
SORE4							.890			
SORE3							.860			
SORE1							.834			
EMAT3								.883		
EMAT1								.870		
EMAT2								.862		
FOPR1									.891	
FOPR3									.884	
FOPR2									.827	
TSDE4										.884
TSDE3										.847
TSDE2										.812

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

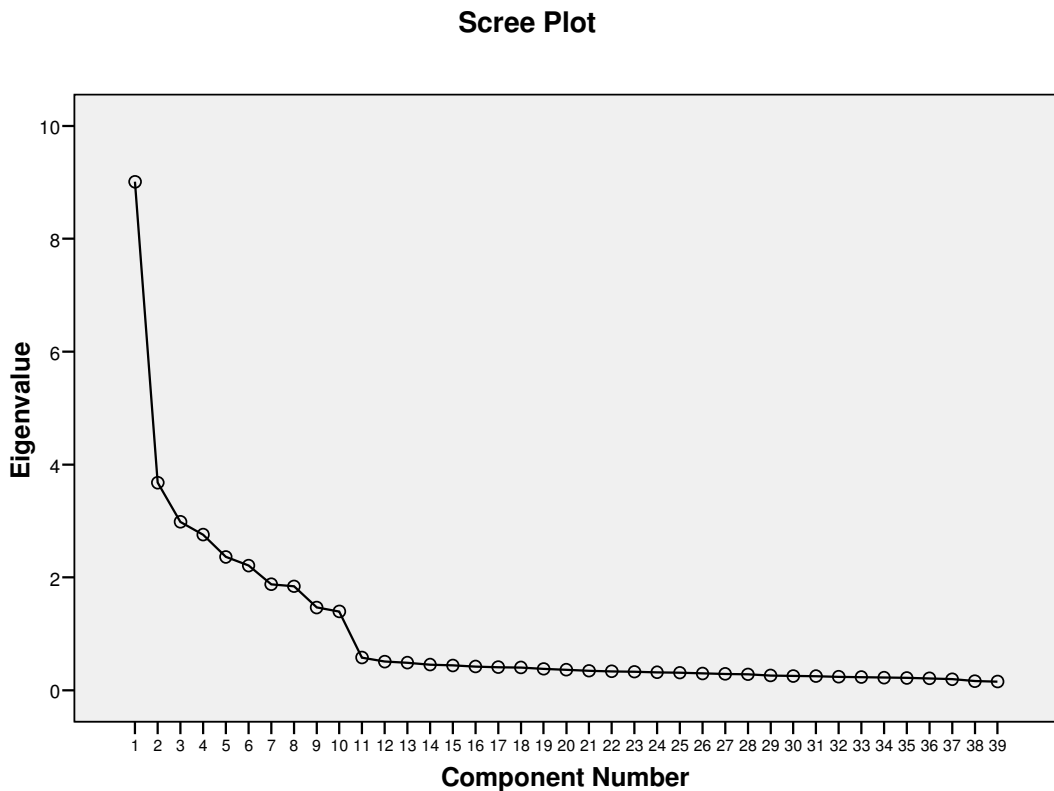
a Rotation converged in 6 iterations.

Note: ROCH = readiness for change; EMAT = emotional attachment, FOPR = feeling of pride, PAWA = pay/wages/rewards, PMTN = promotion, JOSA = job satisfaction, JOIN = job involvement, SPRE = supervisor and peer relations, TSDE = training and skills development, SORE, social relationships in the workplace.

### 7.5.1.2 Scree Plot

In identifying the extraction factors by eigenvalues, a scree plot is commonly used to confirm the maximum number of factors. Logically, factors should be extracted with high eigenvalues but this decision can be made by plotting a scree graph. The scree test is derived by plotting the latent roots against the number of factors in their order of extraction, and the shape of the resulting curve is used to evaluate the cut off point (Hair *et al.*, 2006, p-120). Usually the scree plot negatively decreases, the eigenvalue is highest for the first factor and moderate but decreasing for the next few factors before reaching small values for the last several factors (Tabachnick and Fidell, 2007, p-644). By applying a scree plot test on data to confirm the extracted factors through eigenvalues, the researcher confirmed the same number of factors (Graph 7.2).

**Graph 7.2 Scree Plot**





Once factors have been extracted, it is necessary to know to what degree variables load onto these factors. Rotation is important for improving the interpretability and scientific utility of the solution. It is used to maximise high correlations between factors and variables and minimise low ones. Different techniques can be used to develop factors from variables but the rotation technique is very helpful (Field, 2006). There are two types of rotation method such that orthogonal and oblique rotation (Field, 2006; Tabachnick and Fidell, 2007; Hair *et al.*, 2006). Orthogonal rotation method is useful when variables are independent means factor rotated when variables are non co-relational while oblique rotation is useful for co-relational variables. Orthogonal solutions offer ease of interpreting, describing, and reporting results, yet they strain reality unless the researcher is convinced that the underlying process is almost independent while oblique is vice versa (Tabachnick and Fidell, 2007, p-638-639). However, as different methods of extraction give similar results with a good data set, so also different methods of rotation tend to give similar results if the pattern of correlations in the data is fairly clear (Tabachnick and Fidell, 2007, p-637). This study applied Varimax orthogonal techniques which are most commonly used in rotation. It is used for maximising variance. According to Tabachnick and Fidell (2007, p-620) the goal of Varimax rotation is to maximise the variance of factor loading by making high loadings higher and low ones lower for each factor.

The Kaiser-Meyer-Olkin value was .880, exceeding the recommended value of 0.6 and the Bartlett Test of Sphericity reached a statistical significance, thus supporting the forcibility of correlation matrix. Table 7.9 reveals the rotated component matrix of the scale. Principal Component Analysis showed the presence of ten components with eigenvalues exceeding 1, explaining 23.10%, 9.43%, 7.65%, 7.06%, 6.07%, 5.67%, 4.82%, 4.73%, 3.76%, and 3.58% of the variance respectively (Table 7.9). The scree plot revealed a clear cut off of these components. To aid in the interpretation of the ten components a Varimax Rotation was performed. The rotated solution revealed the presence of a simple structure showing a number of strong loading, with all variables loading on components.

After developing the factors internal consistency, each loaded factor was assessed by Cronbach's alpha measure. The following clusters of the items were specified for the most relevant dimensions of the elements.

Factor 1 – Readiness for Organisational Change (ROCH): This factor covers the information regarding employees’ response to the organisational change (Miller *et al.*, 2006; Madsen *et al.*, 2005). Fourteen items were applied based on Hanpachern’s original scale for readiness to organisational change (with slight alterations), which was based in part on McNabb and Sepic (1995) for the construct. Applying factor loading and deleted seven items which loaded less than .5 (Field, 2006) were excluded (Table 7.11).

**Table 7.11 Factor Loading and Cronbach’s Alpha of Employee Readiness for Organisational Change Scale**

Factors and Related Items	Factor Loading	Cronbach’s Alpha
Readiness for Change		
My willingness or Openness to solve university problems is	.824	
My willingness or Openness to be a part of the new project is	.808	
My willingness or Openness to create new ideas is	.802	
My willingness or Openness to do things in a new or creative way is		.942
My willingness or Openness to change the way I work because of the change is	.779	
My willingness or Openness to learn new things is	.774	
My willingness or Openness to support change is	.745	
	.730	

Factor 2 – Emotional Attachment (EMAT): This factor encompasses the employees’ psychological expression to organisational change (Miller *et al.*, 2006; Madsen *et al.*, 2005). A three item scale was applied which was developed by Cook and Wall (1980) and factor analysis conducted by Mathews and Shepherd (2002). Applying factor loading at .5 (Field, 2006) all three items were included (Table 7.12).

Factor 3 – Feeling of Pride (FOPR): This factor covers employees’ psychological attachment to organisational change (Miller *et al.*, 2006; Madsen *et al.*, 2005). A three item scale was applied developed by Cook and Wall (1980) and factor analysis conducted by Mathews and Shepherd (2002) in factor loading. Applying factor loading at .5 (Field, 2006) no item was excluded (Table 7.12).

Personal Sense of Obligation (PSO): This factor covers employees’ psychological attachment to organisational change (Miller *et al.*, 2006; Madsen *et al.*, 2005). A three item scale developed by Cook and Wall (1980) and factor analysis conducted by

Mathews and Shepherd (2002) was applied. Applying factor loading at .5 (Field, 2006) no manifest variable loaded to any factor. Thus, this factor was excluded from the study.

Factor 4 – Pay/Wages/Rewards (PAWA): This factor covers employees’ instrumental commitment to the organisation (Penley and Gould, 1988). A five item scale applied by Price and Muller (1986) and modified by Yoon and Thye (2002) was applied and provided information about employees’ attachment in order to establish financial aspects about the organisational change. Applying factor loading at .5, only one item was excluded and the factor was loaded with four factors (Field, 2006) (Table 7.12).

**Table 7.12 Factor Loading and Cronbach’s Alpha of Employee Commitment to the Organisation Scale**

Factors and Related Items	Factor Loading	Cronbach’s Alpha
Emotion Attachment (EMAT)		
I am quite proud to be able to tell people who it is I work for	.777	.861
I feel myself to be part of the university	.816	
I would not recommend a close friend to join our staff	.803	
Feeling of Pride (FOPR)		
I sometimes feel like leaving the employment for good	.767	.866
Even if the university were not doing too well financially, I would be reluctant to change to another employer	.745	
The offer of a bit more money with another employer would not seriously make me think of changing my job	.797	
Pays and Wages (PAWA)		
Compared to other employees, my work reward is proper in view of my training and education	.703	.851
Compared to other employees, my work reward is proper in view of my effort that I input.	.791	
Compared to other employees, my work reward is proper in view of my work experience	.771	
Compared to other employees, my work reward is proper in view of my work responsibilities	.782	

Factor 5 – Promotion (PMTN): This factor covers employees’ situational commitment to the organisation (Goulet and Singh, 2002). A three-item scale developed by Gaertner and Nollen (1989) and Chang (1999) was applied measuring the employees’ perception regarding promotion. All items were included applying factor loading at .5 (Field, 2006) (Table 7.13).

Factor 6 – Job Satisfaction (JOSA): This factor encompasses employees' individual commitment to the organisation (Agho *et al.*, 1992). A seven-item scale developed by Brayfield and Rothe (1951) was applied measuring the employees' satisfaction with the job during organisational change. Five items were included applying factor loading at .5 (Field, 2006) (Table 7.13).

Factor 7 – Job Involvement (JOIN): This factor encompasses employees' individual attachment to the organisation (Blau, 1999; McGinnis and Morrow, 1990). A five-item scale developed by Kanungo (1982) was applied to measure job involvement. One item was excluded applying factor loading at .5 (Field, 2006) (Table 7.13).

Career Commitment (CACO): This factor covers employees' psychological attachment to their career (Blau, 1999; McGinnis and Morrow, 1990). Eight items with a five-point Likert Scale (Strongly Disagree, Strongly Agree) from Blau (1985) were used to measure employee career commitment. Applying factor loading at .5 (Field, 2006) no manifest variable loaded to any factor. Thus, this factor was excluded from the study.

Factor 8 – Supervisor and Peer Relation (SPRE): This factor encompasses employee individual attachment to the organisation (Morrow, 1993). Five well-known items concerning employee perception of supervisor support and advice on employee career development or progression measured by Chang (1999) based Gaertner and Nollen (1989) was applied. Two items were excluded applying factor loading at .5 (Field, 2006) (Table 7.13).

Factor 9 – Training and Skills Development (TSDE): This factor covers employees' psychological attachment to the organisation (Gaertner and Nollen, 1989). A three-item scale applied by Chang (1999) based on Mobley *et al.* (1978) and one item developed by the researcher was applied to examine employees' attitudes and behaviours. Three items were included applying factor loading at .5 (Field, 2006) (Table 7.13).

**Table 7.13 Factor Loading and Cronbach's Alpha of Employee Commitment to Career Scale**

Factors and Related Items	Factor Loading	Cronbach's Alpha
<b>Promotions (PMTN)</b>		
This university prefers to promote from within rather than hire outsider for high level positions	.754	.883
Over all, this university does a good job placing competent people in position	.769	
This university does good job in moving people to new jobs when university require it	.805	
<b>Job Satisfaction (JOSA)</b>		
I feel fairly well satisfied with my present job	.701	.902
I feel that my job is no more interesting than others I could get	.716	
Each day of work seems like it will never end	.792	
I find really enjoyment in my work	.796	
I am disappointed that I ever took this job	.692	
<b>Job Involvement (JOIN)</b>		
To me my Job is only a small part of whom I am	.835	.894
I am very much involved personally in my job	.741	
I live, eat and breathe my job	.684	
I have very strong ties to job	.689	
<b>Supervisors and Peers Relations (SPRE)</b>		
I can communicate well with my boss	.739	.871
I respect my boss's judgment on my issue	.820	
My boss lets me know what is expected of me	.825	
My boss encourages me to give my best efforts	.834	
<b>Training and Skills Development (TSDE)</b>		
This university has a well defined training and skills development programmes for the employees	.812	.857
I am given a real opportunity to improve my skills in this University	.825	
I have been well trained by this university for my current job	.874	

Factor 10 – Social Relationships in the Workplace (SORE): This factor covers employee social relationships in the workplace to measure the attachment to the organisation (Hanpachern *et al.*, 1997 and Madsen *et al.*, 2005). A four-item scale was adapted from the five item relationships subscales of Hanpachern's Revised Margin in Life scale (1998), which itself had been modified from the original published survey by Stevenson in 1982. Three items were included applying factor loading at .5 (Field, 2006) (Table 7.14).

**Table 7.14 Factor Loading and Cronbach's Alpha of Social Relationships in the Workplace Scale**

Factor and Related Items	Factor Loading	Cronbach's Alpha
Social Relationships in the Workplace (SORE)		
My interpersonal relationships with my co workers are excellent	.708	
My relationship to the leaders in my university is very positive	.743	.867
The people I have met at my job are great	.817	

Factors structured above (Table 7.12, 7.13, 7.14) were conducted to establish employees' readiness for organisational change predictor variables. The factors which had Eigenvalues greater than 1 were preserved. The measure of sampling adequacy (MSA = .880) (Kaiser, 1974) and Bartlett Test of Sphericity (BTS = 12575.554, P = 0.000) demonstrated that exploratory factor analysis was applied correctly. The amount of variance explained by these factors was 75.89% (Hair *et al.*, 2006). Cronbach's alpha for each factor confirmed that the items in each factor were internally consistent (Nunnally, 1978). This result indicated that these factors can be considered as the basis for the confirmatory factor analysis (CFA) application. According to Anderson and Gerbing (1988), casual relations between the underlying constructs and their related indicators should be specified properly by confirmatory factor analysis before imposing any casual relations among the constructs. In the next stage confirmatory factor analysis was performed to assess the convergent and construct validity of scales.

### 7.5.2 Confirmatory Factor Analysis and Measurement Models

Confirmatory factor analysis (CFA) is a technique usually employed to confirm *a priori* hypothesis about the relationship between a set of measurement items and their respective factors (Netemeyer *et al.*, 2003, p-148). Anderson and Gerbing (1988, p-422) recommend a two-step approach in structural equation modelling which allows testing of the significance of all pattern coefficients and provides a particularly useful framework for formal comparisons of the substantive model of interest with the next likely theoretical alternatives. Applying the measurement model assessment approach, first the validity of the construct is tested by confirmatory factor analysis (Hair *et al.*, 2006). Following this approach, the relationships between the constructs were examined by structural equation modelling.

The validity of a construct is an essential condition for further theory testing and development (Carmines and Zeller, 1979; Steenkamp and Trijp, 1991). Thus, confirmatory factor analysis is used as a stricter assessment of construct validity to ensure that the theoretical meaning of a construct is empirically captured by its indicators (Bagozzi *et al.*, 1991; Steenkamp and Trijp, 1991). Applying this approach, the researcher assessed how well all the manifest variables of the same construct relate to each other (Fornell and Larcker, 1981; Bagozzi *et al.*, 1991; Anderson and Gerbing, 1988, Hair *et al.*, 2006). Furthermore, measurement model assessment by confirmatory factor analysis confirms the overall validity of the model such that nomological validity. For that, goodness of fit indices of measurement models are used (Steenkamp and Trijp, 1991; Lages, 2000).

Assessing measurement model by confirmatory factor approach, maximum likelihood (ML) estimation method was employed (Hair *et al.*, 2006; Tabachnick and Fidell, 2007). This approach is applicable when the sample size does not meet the criterion of having at least five observations for each variable (Bentler and Chou, 1987; Anderson and Gerbing, 1988; Hair *et al.*, 2006). The model fit indicators were utilised in model validation in order to solve the likely problem of an unreliable  $\chi^2$  (Chi-square) static and standard errors due to ML application (Bentler and Chou, 1987). The researcher applied separate measurement model estimation by confirmatory factor analysis for each scale of the study.

Applying maximum likelihood estimation method for confirmatory factor analysis in measurement model, first run the employees' commitment to the organisation scale elements. The model fit measures indicated a valid three factor solution. All of the items for all three factors were retained. Table 7.15 shows the results of measurement model structure results. Fit indices of model such that Chi-square ( $\chi^2$ ) demonstrated a good fit, root mean square error of approximation (RMSEA = .042), and goodness of fit measure (GFI = .977) showed a good model fit (Fornell and Larcker, 1981; Bagozzi *et al.*, 1991; Hair *et al.*, 2006). Further, incremental fit indices such that normated fit index (NFI = .972), non normated fit index (NNFI = .983), normated comparative fit index (CFI = .986) and adjusted goodness of fit index (AGFI = .963) also showed a good model fit (Doll *et al.*, 1994; Garver and Mentzer, 1999; Hair *et al.*, 2006). It was concluded that

the measurement model of these three factors was nomologically valid (Steenkamp and Trijp, 1991; Lages, 2000).

**Table 7.15 Measurement Model of Employee Commitment to the Organisation Variables**

Model Fit Indicators*	$\chi^2$	Df	RMSEA	GFI	NFI	NNFI	CFI	AGFI
	66.750	35	.042	.977	.972	.983	.986	.963

\* $\chi^2$  – Chi square; df – degree of freedom; RMSEA – Root mean square error of approximation; GFI – Goodness of fit index; NFI – Normated fit index; NNFI – Non normated fit index; CFI – Comparative fit index; AGFI – Adjusted goodness of fit index

Assessing convergent validity of employees' commitment to the organisation scale measurement model, t value applied which showed as a critical ratio in the measurement model (Table 7.16) (Bagozzi *et al.*, 1991; Chau, 1997). All the t values of the items were significantly greater than the critical value of 1.96 at the 0.99 confidence level and all indicators showed higher individual squared multiple correlations (Reliabilities) than 0.50.

**Table 7.16 Convergent Validity of Employee Commitment to the Organisation Variables**

Variables	SMC*	t-value
<b>Emotional Attachment (EMAT)</b>		
I am quite proud to be able to tell people who it is I work for	.717	19.521
I feel myself to be part of the university	.616	18.661
I would not recommend a close friend to join our staff	.694	
<b>Feeling of Pride (FOPR)</b>		
I sometimes feel like leaving the employment for good	.723	20.057
Even if the university were not doing too well financially, I would be reluctant to change to another employer	.621	19.097
The offer of a bit more money with another employer would not seriously make me think of changing my job	.707	
<b>Pay/Wages/Rewards (PAWA)</b>		
Compared to other employees, my work reward is proper in view of my training and education	.572	15.860
Compared to other employees, my work reward is proper in view of my effort that I input.	.655	16.739
Compared to other employees, my work reward is proper in view of my work experience	.579	15.954
Compared to other employees, my work reward is proper in view of my work responsibilities	.547	



\*SMC – Squared multiple correlation

Furthermore, all three constructs had high composite reliabilities ( $\rho > 0.70$ ) (Table 7.17). The Cronbach's alpha was above the criterion value ( $\alpha_{EMAT} = 0.861 > .70$ ,  $\alpha_{FOPR} = 0.866 > .70$ ,  $\alpha_{PAWA} = 0.851 > .70$ ) (Nunnally, 1978) and the average variance extracted for each construct was above 0.50 (Fornell and Larcker, 1981).

**Table 7.17 Internal Consistency of Employee Commitment to the Organisation Variables**

Variables	Composite Reliability ( $\rho$ )	Cronbach's alpha ( $\alpha$ )	Average Variance Extracted (AVE)
Emotional Attachment	.862	.861	.676
Feeling of Pride	.866	.866	.684
Pay/Wages/Rewards	.851	.851	.588

Next, employee career commitment scale elements were tested for measuring the uni-dimensionality of factors by confirmative factor analysis. Overall, assessment of measurement model showed that all five factors which extracted via exploratory factor analysis were fit for the scale. For confirming the nomological validity of scale, element fits tests were assessed and found fit (Table 7.18) (Steenkamp and Trijp, 1991; Lages, 2000). Fit indices of model (RMSEA = .046; GFI = .939) showed a good model fit (Fornell and Larcker, 1981; Mueller, 1996; Bagozzi *et al.*, 1991; Hair *et al.*, 2006). Further, incremental fit indices (NFI = .945; NNFI = .966; CFI = .970 and AGFI = .923) also showed a good model fit (Doll *et al.*, 1994; Garver and Mentzer, 1999; Hair *et al.*, 2006).

**Table 7.18 Measurement Model of Employee Commitment to the Career Variables**

Model Fit Indicators*	$\chi^2$	Df	RMSEA	GFI	NFI	NNFI	CFI	AGFI
	319.676	151	.046	.939	.945	.966	.970	.923

\* $\chi^2$  – Chi square; df – degree of freedom; RMSEA – Root mean square error of approximation; GFI – Goodness of fit index; NFI – Normated fit index; NNFI – Non normated fit index; CFI – Comparative fit index; AGFI – Adjusted goodness of fit index

Convergent validity of employees' career commitment scale measurement model was assessed by t value (Bagozzi *et al.*, 1991; Chau, 1997). In this model t value was shown

in critical ratio (Table 7.19). However, t values of all items were significantly greater than the critical value of 1.96 at the 0.95 confidence level and all indicators showed higher individual squared multiple correlations (reliabilities) than 0.50.

**Table 7.19 Convergent Validity of Employee Career Commitment Variables**

Variables	SMC*	t-value
<b>Promotion (PMTN)</b>		
This university prefers to promote from within rather than hire outsider for high level positions	.593	21.569
Over all, this university does a good job placing competent people in position	.634	21.889
This university does good job in moving people to new jobs when university require it	.788	
<b>Job Satisfaction (JOSA)</b>		
I feel fairly well satisfied with my present job	.652	16.427
I feel that my job is no more interesting than others I could get	.707	23.531
Each day of work seems like it will never end	.709	16.413
I find really enjoyment in my work	.604	15.570
I am disappointed that I ever took this job	.479	
<b>Job Involvement (JOIN)</b>		
To me my job is only a small part of whom I am	.807	26.059
I am very much involved personally in my job	.567	19.739
I live, eat and breathe my job	.611	26.056
I have very strong ties to job	.737	
<b>Supervisor and Peer Relations (SPRE)</b>		
I can communicate well with my boss	.634	17.151
I respect my boss's judgment on my issue	.664	17.969
My boss lets me know what is expected of me	.678	18.056
My boss encourages me to give my best efforts	.560	
<b>Training and Skills Development (TSDE)</b>		
This university has a well defined training and skills development programmes for the employees	.593	18.520
I am given a real opportunity to improve my skills in this University	.634	19.036
I have been well trained by this university for my current job	.788	

\*SMC – Squared multiple correlation

Furthermore, all five constructs had high composite reliabilities ( $\rho > 0.70$ ) (Table 7.20). The Cronbach's alphas were above the criterion value ( $\alpha_{\text{PMTN}} = 0.883 > .70$ ,  $\alpha_{\text{JOSA}} = 0.902 > .70$ ,  $\alpha_{\text{JOIN}} = 0.894 > .70$ ,  $\alpha_{\text{SPRE}} = 0.871 > .70$ ,  $\alpha_{\text{TSDE}} = 0.857 > .70$ , (Nunnally, 1978) and the average variance extracted for each construct was above 0.50 (Fornell and Larcker, 1981).

**Table 7.20 Internal Consistency of Employees' Career Commitment Variables**

Variables	Composite Reliability ( $\rho$ )	Cronbach's alpha ( $\alpha$ )	Average Variance Extracted (AVE)
Promotions	.880	.883	.672
Job Satisfaction	.907	.902	.630
Job Involvement	.894	.894	.680
Supervisor and Peer Relations	.873	.871	.634
Training and Skills Development	.859	.857	.671

The next scale was employee social relationships in the workplace which consisted of a single factor with three latent variables. Measurement of the uni-dimensionality of the factor by confirmative factor analysis test was conducted. Confirming the nomological validity of scale element fits tests was assessed and found fit (Table 7.21) (Steenkamp and Trijp, 1991; Lages, 2000). Fit indices of model (RMSEA = .0698; GFI = 1.00, NFI = 1.00 and CFI = 1.00) showed a perfect model fit (Fornell and Larcker, 1981; Mueller, 1996; Bagozzi *et al.*, 1991; Hair *et al.*, 2006; Doll *et al.*, 1994; Garver and Mentzer, 1999).

**Table 7.21 Measurement Model of Social Relationships in the Workplace Variable**

Model Fit Indicators*	$\chi^2$	Df	RMSEA	GFI	NFI	NNFI	CFI	AGFI
	.000	0	.069	1.000	1.000	---	1.000	---

\* $\chi^2$  – Chi square; df – degree of freedom; RMSEA – Root mean square error of approximation; GFI – Goodness of fit index; NFI – Normated fit index; NNFI – Non normated fit index; CFI – Comparative fit index; AGFI – Adjusted goodness of fit index

Convergent validity of social relationships in the workplace scale measurement model was assessed by t value (Bagozzi *et al.*, 1991; Chau, 1997). In this model t value was shown in critical ratio (Table 7.22). However, t values of all items were significantly greater than the critical value of 1.96 at the 0.95 confidence level and all indicators showed higher individual reliabilities (Squared Multiple Correlations) than 0.50.

**Table 7.22 Convergent Validity of Social Relationships in the Workplace Variable**

Variables and Related items	SMC*	t-value
Social Relationships in the Workplace (SORE)		
My interpersonal relationships with my co workers are excellent	.659	20.037
My relationship to the leaders in my university is very positive	.630	19.667
The people I have met at my job are great	.773	

\*SMC – Squared multiple correlation

Furthermore, the construct had high composite reliability ( $\rho > 0.70$ ) (Table 7.23). The Cronbach's alphas were above the criterion value ( $\alpha_{\text{SORE}} = 0.867 > .70$ ) (Nunnally, 1978) and the average variance extracted for each construct was above 0.50 (Fornell and Larcker, 1981).

**Table 7.23 Internal Consistency of Social Relationships in the Workplace Variable**

Variable	Composite Reliability ( $\rho$ )	Cronbach's alpha ( $\alpha$ )	Average Variance Extracted (AVE)
Social Relationships in the workplace	.868	.867	.687

Finally, the dependent variable such that readiness for organisational change (ROCH) was assessed by confirmatory factor analysis. The goodness of fit indices evidenced that the measurement model was valid, thereby confirming nomological validity (Table 7.24) (Steenkamp and Trijp, 1991; Lages, 2000). The RMSEA measure was .051, which is within the acceptable range of 0.05 and 0.08 (Garver and Mentzer, 1999), and NFI, NNFI, CFI were above the 0.95 threshold value and GFI and AGFI were above critical value (Fornell and Larcker, 1981; Mueller, 1996; Bagozzi *et al.*, 1991; Hair *et al.*, 2006; Doll *et al.*, 1994; Garver and Mentzer, 1999) (Table 7.24). All of the items for the readiness for organisational change (ROCH) were retained.

**Table 7.24 Measurement Model of Readiness for Organisational Change Variable**

Model Fit Indicators*	$\chi^2$	Df	RMSEA	GFI	NFI	NNFI	CFI	AGFI
	32.676	14	.051	.982	.989	.990	.994	.965

\* $\chi^2$  – Chi square; df – degree of freedom; RMSEA – Root mean square error of approximation; GFI – Goodness of fit index; NFI – Normated fit index; NNFI – Non normated fit index; CFI – Comparative fit index; AGFI – Adjusted goodness of fit index

The results of the confirmatory factor analysis application of this scale showed that the convergent validity was satisfied. All t values of the manifest variables were higher than the critical value of 1.96 at the 0.95 confidence level (Bagozzi *et al.*, 1991; Chau, 1997) (Table 7.25). Almost all indicators' square multiple correlation such that individual reliability were above the threshold value of 0.50.

**Table 7.25 Convergent Validity of Readiness for Organisational Change Variable**

Items	SMC*	t-value
My willingness or Openness to solve university problems is	.725	22.638
My willingness or Openness to be a part of the new project is	.682	21.679
My willingness or Openness to create new ideas is	.735	22.859
My willingness or Openness to do things in a new or creative way is	.742	23.017
My willingness or Openness to change the way I work because of the change is	.647	20.881
My willingness or Openness to learn new things is	.714	22.379
My willingness or Openness to support change is	.643	

\*SMC – Squared multiple correlation

The readiness for organisational change construct showed high composite reliability ( $\rho > 0.70$ ) and the average variance extracted for the factor was above 0.50 (Fornell and Larcker, 1981). Additionally, Cronbach alpha was above the criterion value ( $\alpha_{ROCH} = 0.942 > .70$ ), thereby exceeding the threshold value of .70 (Nunnally, 1978) (Table 7.26).

**Table 7.26 Internal Consistency of Readiness for Organisational Change Variable**

Variable	Composite Reliability ( $\rho$ )	Cronbach's alpha ( $\alpha$ )	Average Variance Extracted (AVE)
Readiness to organisational change	.941	.942	.698

#### 7.5.2.1 Discriminant Validity

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

Results of average variance extracted should be greater than the squared correlation estimates (Fornell and Larcker, 1981; Hair *et al.*, 2006, p-778). Using this approach, the researcher found discriminant validity in all latent constructs (Table 7.27). The results showed that values of all average variance extracted are greater than relevant squared correlation estimates, thereby confirming discriminant validity.

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

**Table 7.27 Discriminant Validity**

Variables	1	2	3	4	5	6	7	8	9	10
1.SORE	<b>.697</b>									
2.TSDE	.147	<b>.669</b>								
3.SPRE	.080	.427	<b>.632</b>							
4.JOIN	-.002	.082	.124	<b>.677</b>						
5.JOSA	.349	.162	.093	.237	<b>.646</b>					
6.PMTN	.003	.138	.136	.037	.216	<b>.716</b>				
7.PAWA	.274	.283	.133	.159	.450	.287	<b>.587</b>			
8.FOPR	-.051	.093	.060	.036	.189	.098	.177	<b>.682</b>		
9.EMAT	.007	-.013	.020	.093	.171	-.052	.129	-.116	<b>.675</b>	
10.ROCH	.258	.114	.072	.240	.555	.278	.500	.289	.222	<b>.697</b>

Note: Average variance was extracted from the squared multiple correlation estimates as a formula given by (Fornell and Larcker, 1981).

Note: ROCH = readiness for change; EMAT = emotional attachment, FOPR = feeling of pride, PAWA = pay/wages/rewards, PMTN = promotion, JOSA = job satisfaction, JOIN = job involvement, SPRE = supervisor and peer relations, TSDE = training and skills development, SORE, social relationships in the workplace.

### 7.5.3 Assessment of Model Fit

A two step approach was adopted to proceed with the study as mentioned in section 7.5.2. Following the measurement model estimation, a structural equation modelling technique was applied that allows a set of relationships between independent and dependent variables. According to Hair *et al.* (2006, p-22) structural equation modelling provides the appropriate and most efficient estimation technique for a series of separate multiple regression equations estimated simultaneously.

Overall fit of the structural model confirm consistency of the theoretical model and the estimated model which is based on the observed values (Diamantopoulos and Siguaw, 2000; Hair *et al.*, 2006). So many methods are available to test the overall model fit, however none of them alone can provide an absolute assurance of model fit. Kline (1998, p-130) recommended at least four tests such that chi-square; GFI, NFI, or CFI; NNFI; and SRMR. However, most common fit indices are chi-square ( $\chi^2$ ), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), and Root Mean Square Error Approximation (RMSEA). During analysis no constraints were imposed to any parameter relating to manifest and latent variables.

Overall fit of the model to the observed data was examined in order to assess whether the model was valid. Table 7.28 shows the results for the goodness of fit indices. Absolute and incremental fit indices were demonstrated and found that the model was an adequate representation of the independent and dependent proposed constructs. Applying root mean square error approximation to find model fit, the result was 0.039, which is below the cut-off value of 0.05 (Hair *et al.*, 2006; Garver and Mentzer, 1999). The NFI, NNFI, and CFI measures were applied to measure the model goodness of fit. The figures for these indices were .950, .953, and .956 respectively which were above the 0.95 criterion value (Diamantopoulos and Siguaw, 2000; Doll *et al.*, 1994; Hair *et al.*, 2006; Mueller, 1996). The GFI and AGFI were 0.89 and 0.87, respectively. There appears to be some difference regarding the recommended threshold value of 0.90 (Hair *et al.*, 2006). However, Doll *et al.* (1994) and Durande-Moreau and Usunier (1999) suggest that a criterion of 0.80 is considered acceptable. Since the values for GFI and AGFI were within the acceptable range from 0.80 to 0.90, the model fit was considered acceptable. Thus, the absolute fit measures indicate that the structural equation model represents a satisfactory fit for the sample data collected. The  $\chi^2$  statistic divided by the degree of freedom also indicates a reasonable fit at 1.77. It can be concluded that the proposed model maintains a good fit from the observed data.

**Table 7.28 Model Fit Indicators**

Model Fit Indicators*	$\chi^2$	Df	RMSEA	GFI	NFI	NNFI	CFI	AGFI
	1225.903	692	.039	.888	.950	.953	.956	.874

\* $\chi^2$  – Chi square; df – degree of freedom; RMSEA – Root mean square error of approximation; GFI – Goodness of fit index; NFI – Normated fit index; NNFI – Non normated fit index; CFI – Comparative fit index; AGFI – Adjusted goodness of fit index

## 7.6 Hypotheses Testing

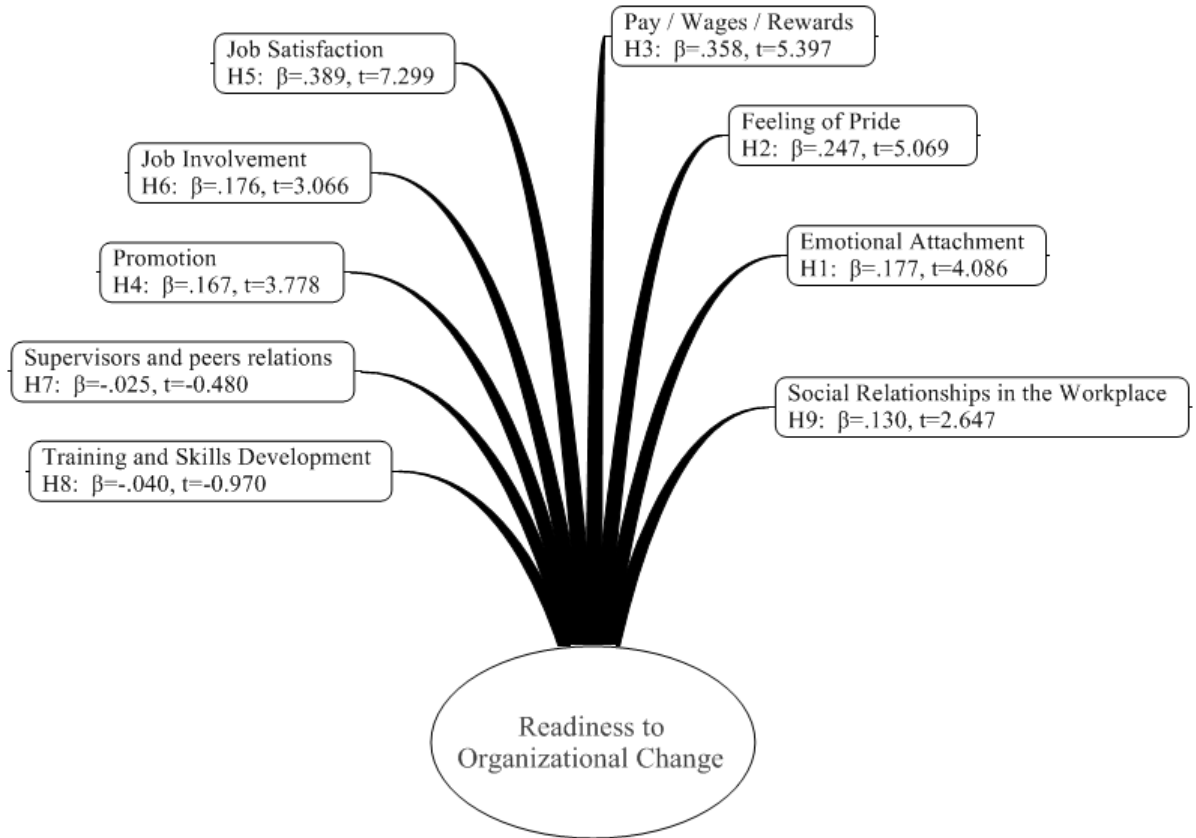
An operational model is shown in Figure 4.1 in the theoretical framework chapter. The base of analysis of the model is organisations (universities) as the variables to be analysed at the organisation level. Based on the structural model, the research hypotheses were tested from the standardised estimate and t value (critical ratio). For data analysis, the researcher employed AMOS 16.0 for Windows software to run the model for examining the hypotheses. Results are summarised in the following Table



7.29 and shown in the operational model (Figure 7.1). Using path estimates and t values (critical ratio) nine hypotheses were examined in this study. Seven of the t values were above the 1.96 critical values at the 0.01 significant levels. The remaining two construct in relation to dependent variables, t values were not found significant ( $t_{\text{critical}} = -.480$ ,  $p = .631$  and  $t_{\text{critical}} = -.971$ ,  $p = .331$ ).

The aim of this thesis is to predict the causal relationships between a dependent variable such that readiness for organisational change (ROCH) and independent variables such that emotional attachment (EMAT), feeling of pride (FOPR), pay/wages/rewards (PAWA), promotion (PMTN), job satisfaction (JOSA), job involvement (JOIN), supervisor and peer relations (SPRE), training and skills development (TSDE), and social relationships in the workplace (SORE). In this study independent variables were selected from three different scales such that employees commitment to the organisation, employees career commitment and social relationships in the workplace. The first three factors such that EMAT, FOPR, and PAWA are related to employee commitment to the organisation. The remaining five elements such that PMTN, JOSA, JOIN, SPRE, and TSDE are concerned with employee commitment to the career scales. Only one predictor such that SORE is related to social relationships in the workplace scale.

**Figure 7.1 Model**



**Table 7.29 Regression Weights**

Variables	Estimate	S.E.	C.R.	P
Readiness for Organisational Change <--- Emotional Attachment	.177	.043	4.086	***
Readiness for Organisational Change <--- Feeling of Pride	.247	.049	5.069	***
Readiness for Organisational Change <--- Pay/wages/rewards	.358	.066	5.397	***
Readiness for Organisational Change <--- Promotion	.167	.044	3.778	***
Readiness for Organisational Change <--- Job Satisfaction	.389	.053	7.299	***
Readiness for Organisational Change <--- Job Involvement	.176	.057	3.066	.002
Readiness for Organisational Change <--- Supervisor and Peer Relations	-.025	.053	-.480	.631
Readiness for Organisational Change <--- Training and Skills Development	-.040	.042	-.971	.331
Readiness for Organisational Change <--- Social Relationship in the Workplace	.130	.049	2.647	.008

Note: S.E = standard error, C.R = critical ratio, P = significance value

In the hypothesised model figure, the paths between independent variables and dependent variables were found to be significant except two such that supervisor and peer relations and training and skills development. It was found that emotional attachment (EMAT), feeling of pride (FOPR), pay/wages/rewards (PAWA), promotion (PMTN), job satisfaction (JOSA), job involvement (JOIN), and social relationships in the workplace (SORE) had a statistically significant impact on readiness for organisational change (ROCH). The first independent predictor variable of employee commitment to the organisation scale elements such that emotional attachment was found to be positively and significantly related to the dependent variable such that readiness for organisational change ( $\beta = .177$ ,  $p < 0.01$ ,  $t_{\text{EMAT}} = 4.086$ ) (H1 accepted). The influence of the second independent predictor on the same scale such that feeling of pride was confirmed to be positively and significantly related to readiness for organisational change ( $\beta = .247$ ,  $p < 0.01$ ,  $t_{\text{FOPR}} = 5.069$ ) (H2 accepted). Among the employee commitment to the organisation scale elements, the pay/wages/rewards construct had the highest impact on employees' readiness for organisational change construct ( $\beta = .358$ ,  $p < 0.01$ ,  $t_{\text{PAWA}} = 5.397$ ) (H3 accepted). The above results indicated that all organisational commitment constructs applied in this study had positive and significant relationships to readiness for organisational change. That means, when the employees have a commitment to the organisation, they are more likely to openness or readiness for organisational change.

As a result of this assessment the following hypotheses were accepted (Table 7.30). There is a positive significant relationship between emotional attachment (EMAT) and employee readiness for organisational change (ROCH) (H1), there is a positive significant relationship between feeling of pride (FOPR) and employee readiness for organisational change (ROCH) (H2), there is positive significant relationship between pay and wages (PAWA) and employee readiness for organisational change (ROCH) (H3).

The evaluation of the structural equation modelling regarding the relationships between the construct of employee career commitment as an independent predictor and employee readiness for organisational change as a dependent variable showed that first three independent variables are determinants for the dependent variable. The standardised estimates and t values (Table 7.29) showed that the paths of first three

independent factors to the dependent factor were positively and statistically significant. The first independent predictor of this scale such that promotion was found to be positively and significantly related to the dependent variable such that readiness for organisational change ( $\beta = .167$ ,  $p < 0.01$ ,  $t_{\text{PMTN}} = 3.778$ ) (H4 accepted). Among the employee career commitment scale elements, the job satisfaction construct had the highest impact on employee readiness for organisational change construct ( $\beta = .389$ ,  $p < 0.01$ ,  $t_{\text{JOSA}} = 7.299$ ) (H5 accepted). The influence of the third independent predictor on same scale such that job involvement (JOIN) to readiness for organisational change (ROCH) was also found to be positively and significantly related ( $\beta = .176$ ,  $p < 0.01$ ,  $t_{\text{JOIN}} = 3.066$ ) (H6 accepted). The examination of corresponding path estimates and t values for the links between supervisor and peer relationships (SPRE) and readiness for organisational change (ROCH) were not found to be positively and significantly related ( $\beta = -.025$ ,  $p > 0.05$ ,  $t_{\text{SPRE}} = -.480$ ) (H7 rejected). The influence of the last independent predictor on same scale such that training and skills development was not confirmed to be positively and significantly related to readiness for organisational change ( $\beta = -.040$ ,  $p > 0.05$ ,  $t_{\text{TSDE}} = -.971$ ) (H8 rejected).

The above results indicate that three predictors out of five of employee commitment to their career scale had positive and significant relationships to readiness for organisational change. Two predictors such that supervisor and peer relations (SPRE) and training and skills development (TSDE) were not confirmed to be positive and significant relationships to readiness for organisational change. That means, employees who are committed to their career by promotion, job satisfaction and job involvement are more likely to be open to accept organisational change. As a result of this assessment the following hypotheses in the scale of employee career commitment was accepted (Table 7.30). There is a significant relationship between promotion (PMTN) and employee readiness for organisational change (ROCH) (H4), there is a significant relationship between job satisfaction (JOSA) and employee readiness for organisational change (ROCH) (H5), there is significant relationship between job involvement (JOIN) and employee readiness for organisational change (ROCH) (H6). In this scale, two constructs such that SPRE and TSDE were not confirmed to the dependent variable thus the two hypotheses such that there is a significant relationship between supervisor and peer relationship and employee readiness for organisational change (SORE) (H7), and

there is significant relationship between training and skills development and employee readiness for organisational change (TSDE) (H8) were rejected.

In last scale, only one element (social relationships in the workplace) was hypothesised as an independent variable in the model (Figure 4.1). The influence of this predictor had the lowest impact on employee readiness for organisational change construct in this study. However, the standardised estimates and t values (Table 7.29) showed that the path between independent variable and dependent variable such that readiness for organisational change was found to be positive and significant ( $\beta = .130$ ,  $p < 0.01$ ,  $t_{\text{SORE}} = 2.647$ ) (H9 accepted). That means, employee who have positive social relationships in the workplace are more likely to open or accept organisational change. As a result of this assessment the hypothesis in this scale such that there is a significant relationship between social relationships in the workplace (SORE) and employee readiness for organisational change (ROCH) (H9) was accepted.

The explanatory power of the structural equation model was assessed on the basis of the squared multiple correlations (SMC) for structural equations which indicate the amount of variance in the dependent (endogenous) variable accounted for by the independent (exogenous) variable. Overall variance in the dependent variable such that readiness for organisational change (ROCH) construct was 67% by the independent variables such that emotional attachment (EMAT), feeling of pride (FOPR), pay/wages/rewards (PAWA), promotion (PMTN), job satisfaction (JOSA), job involvement (JOIN), and social relationships in the workplace (SORE). All these predictors have positive and statistically significant relationships to ROCH. The squared multiples correlations value for the structural equation demonstrates the relationships between the predictor variables. The relationship between EMAT, FOPR, PAWA, PMTN, JOSA, JOIN, and SORE to ROCH construct was .20, .27, .45, .25, .52, .21, .47, .098, .24, respectively. These values showed as 20%, 27%, 45%, 25%, 52%, 21%, 47%, 9.8%, and 24% variance, respectively to the readiness for change construct. The overall model accounted for 43% of the variance in readiness for organisational change scores.

Standardised beta scores for the model showed that job satisfaction and pay/wages/rewards were the best predictors of readiness for organisational change successively. To control multi-collinearity in the factors, the researcher followed Aiken

and West (1991) deviation score procedure. Inspection of variance inflation factor scores (VIFs) indicated that there were no instances of problematic multi-collinearity among any of the factors. Each VIF was less than 1.884, which is far less than the 10.0 threshold suggested by Neter *et al.* (1996). However, standardised beta score of social relationships in the workplace was confirmed as a lesser predictor of readiness for organisational change in the model. The summary of hypotheses testing is presented in the following table.

**Table 7.30 Summary of Results of Hypotheses Testing**

Hypotheses	Results
<b>H1:</b> There is a significant positive relationship between feeling of pride and employee readiness for organisational change.	Accepted
<b>H2:</b> There is a significant positive relationship between emotional attachment and employee readiness for organisational change.	Accepted
<b>H3:</b> There is a significant positive relationship between pay/wages/rewards and employee readiness for organisational change.	Accepted
<b>H4:</b> There is a significant positive relationship between promotion and employee readiness for organisational change.	Accepted
<b>H5:</b> There is a significant positive relationship between job satisfaction and employee readiness for organisational change.	Accepted
<b>H6:</b> There is a significant positive relationship between job involvement and employee readiness for organisational change.	Accepted
<b>H7:</b> There is a significant positive relationship between supervisors and peers relationship and employee readiness for organisational change.	Rejected
<b>H8:</b> There is a significant positive relationship between training and skills development and employee readiness for organisational change.	Rejected
<b>H9:</b> There is a significant positive relationship between social relationships in the workplace and employee readiness for organisational change.	Accepted

## 7.7 Conclusion

In conclusion, this chapter presents the findings from final purified scales and hypotheses testing. Initially, data was screened through pointing out missing data and

data outliers in order to prepare for further analysis. Accuracy of data was assessed through linearity, normality and homoscedasticity tests to infer accurate results that data portray. This section was followed by the explanation of factor loading to identify the groups or clusters of variables. An exploratory factor analysis technique was used to show the relationship of variables to factors. In this section factors were extracted with the help of eigenvalues and scree plot. Applying Varimax of orthogonal technique in principal component, factors were rotated which showed maximum variance of factor loading. The finding showed significant results in which ten factors were extracted out of twelve. The measurement scale for this research was subjected to confirmatory factor analysis (CFA) after the exploratory factor analysis. The measurement model and structural model was assessed in AMOS 16.0 version software on the basis of 518 cases. Before inferring results, reliability and construct validity tests were also conducted in which all measurement scales were found satisfactory. As for hypotheses testing, standardised estimates and t values were applied from the structural model. The findings showed statistically significant positive relationships between independent variables and the dependent variable. All independent variables related to employees' commitment to the organisation scale such that emotional attachment, feeling of pride, pay/wages/rewards were found positively and significantly correlated to the independent variable such that readiness for organisational change. Further, in the career commitment scale, three constructs such that promotion, job satisfaction and job involvement was found positively and significantly related to readiness for organisational change. But two factors such that supervisor and peer relations and training and skills development was not found positively and significantly to readiness for organisational change. In the third scale, only one factor such that social relationships in the workplace was used and found positively and significantly related to readiness for organisational change. Furthermore, results confirmed through squared multiple correlations in which all factors possessed predictive power except supervisor and peer relations and training and scale development which was found to be a negatively predicted factor. The results of significant relationships between constructs were as theoretically expected. However, more detailed discussion of the findings will be provided in the next chapter.



## **Chapter Eight Discussion**

### **8.1 Introduction**

The objectives of this study was to examine the relationships and predictive influence of independent variables such that emotional attachment, feeling of pride, pay/wages/rewards, promotion, job satisfaction, job involvement, supervisor and peer relations, training and skills development and social relationships in the workplace to a dependent variable such that employee readiness for organisational change. These independent elements were explored from the employee commitment perspectives to the attitudes and behaviours. This was a cross sectional study in which data was received from public sector universities of Pakistan.

In this study hypotheses were developed on the basis of relationships between independent and dependent variables. The general findings in this study are that supervisor and peer relations and training and skills development elements are not considered to be a predictive factor to employee readiness for organisational change. Whereas a direct relationship between emotional attachment, feeling of pride, pay/wages/rewards, promotion, job satisfaction, job involvement and social relationships in the workplace to readiness for organisational change was found. An explanation about these unexpected results will be provided later on in this chapter.

The structure of this chapter is as follows. First, the population and sample issues are presented and second part is concerned to the results of scale purification. Third, the findings of all hypotheses tested are reviewed and compared with past research. Finally, the results of social relationships in the workplace to readiness for organisational change will be discussed.

### **8.2 Population and Sample Issue**

This study was conducted in public sector higher educational institutions in Pakistan. The total population of faculty members of public sector higher education institutions is 10,471 in all sixty eight universities (HEC, no date a). For data collection, a random sampling was done (Tabachnick and Fidell, 2007; Hair *et al.*, 2006) from full time

faculty members in all categories such that professors, associate professors, assistant professors, and lecturers. Of the 1000 questionnaires distributed among the faculty members from thirty three different public sector universities including medical, engineering, agricultural as well as general in all four provinces of Pakistan, 556 were returned, which shows a response rate of 55.6%. A large enough sample was applied to represent the population and underlying structure because of examining the reliable correlations and prediction power of factors (Tabachnick and Fidell, 2007; Hair *et al.*, 2006). According to Comery and Lee (1992), a sample size of 50 - 100 is treated as poor, 200 as fair, 300 as good and 500 as very good and 1000 is treated as excellent. Thus, this study covered a large sample and provided a substantive representation of the total population of public sector universities. However, the respondent rate was not so good because they were asked to participate on a voluntary basis (Methodology Chapter).

From the sample data, dealing with missing data is an important issue. In social science research, there are various suggestions like using the mean of the scores on the variance (Stevens, 1992) or removing the sample(s) who do not respond to any question (Norusis, 1995). To find the missing data, this study found 25 samples of missing data out of 556 samples which is 4.49% and does not make any difference to the outcome of analysis. Thus, 25 samples were deleted from the data and then tested for finding outliers. Outliers cannot be categorically characterised as either beneficial or problematic (Hair *et al.*, 2006) but they can bias the mean and inflate the standard deviations (Field and Hole, 2003). Thus, the researcher should be aware of such values because they bias the model research fit to the data (Field, 2006). The researcher applied a graphical method for detecting the univariate outliers and Mahalanobis distance case was applied for finding multivariate outliers to confirm their effect. In box plot, 11 univariate outliers which attached with asterisk (Table 7.1) were detached and also compared with the multivariate outliers test by Mahalanobis's distance test which confirmed only four samples. After finding outliers this study was confined to 518 samples for the final study.

### **8.3 Measurement Scale Purification**

The scale for the study such that employee readiness for organisational change, employee commitment to the organisation, employee career commitment and social relationships in the workplace was developed primarily on the basis of conceptual articles. Thus, the first issue to be discussed is the operationalisation and validation of the concepts in this study. The item pool for the scale was subjected to quantitative refinement. Content and face validity was assessed in a pilot study in which participants were asked to give their opinions about the items. In addition, the survey instrument was assessed through expert field researchers in the university (Hardesty and Bearden, 2004) at the initial stage of research. Experts were asked to comment on the lists of scale items. Moreover, the developed scales were subjected to two rounds of data reduction such that exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) and several statistical tests like convergent validity (CV), discriminant validity (DV), composite reliability ( $\rho$ ), Cronbach's alpha reliability ( $\alpha$ ) and average variance extracted (AVE). As a result, theoretically and operationally valid and reliable scales were developed and hypotheses testing were performed with the scale. However, some inferences were made on the scale development and refinement issues which are discussed as followed.

Overall, the finalised scales were found to possess satisfactory validity and reliability and were consequently employed in the hypotheses testing. Besides, in the pilot study, a few suggestions were received from the participants to strengthen and make clearer the survey questionnaire. First, the word 'university' was inserted instead of 'organisation', which have made it clearer to participants to provide response about his or her university. Second, in the demography scale, the option for gender and marital status should be open. This suggestion could reduce gender bias. Third, in the item on highest educational level, Bachelor of Engineering (BE) and Bachelor in Medicine and Bachelor in Surgery (MBBS) were included because this study was to be conducted in all types of university in Pakistan including professional and general universities. Thus, for medical and engineering universities the basic appointment requirement is a bachelor's degree which meant that this option should be included in the relevant question. Finally, in the readiness for organisational change scale the phrase 'my willingness or openness' was applied once for all items in the scale at the beginning.

Participants suggested putting this phrase with all questions items which might be more easily understood.

The dimensionality of almost all constructs is consistent with those reported in the literature. However, a few factors were not loaded into any factor or group of predictors in the exploratory factor analysis technique. Thus, the researcher extracted “take what the data give you” for testing hypotheses (Hair *et al.*, 2006, p-104). Two factors, one from each of the employee commitment to the organisation and career scales were not loaded into a group in this test. The first factor such that personal sense of obligation (PSO) was not grouped when the three item scale developed by Cook and Wall (1980) and factor analysis conducted by Mathews and Shepherd (2002) were applied. This predictor was used as an attitudinal attachment of employee for organisation (Mathews and Shepherd, 2002; Madsen *et al.*, 2005). In addition, it should be noted that two other factors such that emotional attachment and feeling of pride used in this scale were loaded to their respective predictor to show the employee psychological attachment for organisational change (Miller *et al.*, 2006; Madsen *et al.*, 2005). This issue especially concerns the concept of affective commitment in which all three factors were assessed in past literature. The literature suggested that in less affluent societies, employees are influenced by psychological and role related factors with commitment (Alvi and Ahmed, 1987; Chang, 1999).

The second factor was career commitment from employee commitment to the career scale. Eight items from Blau (1985) were used to measure the employee career commitment. This was used because employee personal variables can affect the individual’s loyalty and identification. In exploratory factor analysis no one group of manifest variables formed. Thus, this factor was excluded from the study. All remaining factors from independent predictor variables such that pay/wages/rewards, promotion, job satisfaction, job involvement, supervisor and peer relations, training and skills development, and social relationships in the workplace and the dependent variable such that readiness for organisational change were grouped in their respective group. However, a few latent variables were excluded from these predictors due to less or cross loading (Previous Chapter).

In summary, the findings from the scale purification reflect two main ideas. First, when the scale is adapted and applied to another culture and region, it is necessary to assess the relevance of the context of the scale to achieve the validity of inferences (Singh, 1995). The first and most fundamental question may be whether the same context exists in another country. Moreover, if it exists, it may not have the same form or it may have different elements in other countries (Craig and Douglas, 2000, p-256). Second, to ensure the applicability of adapted scales, it is crucial to assess external validity in addition to internal criteria such that reliability and validity (Craig and Douglas, 2000). However, researcher assessed construct validity which is an essential condition for further theory testing and development (Carmines and Zeller, 1979; Steenkamp and Trijp, 1991; Bagozzi *et al.*, 1991).

#### **8.4 Determinants of Readiness for Organisational Change: Effects of Employee Commitment to the Organisation**

This study is concerned with examining employee attitudes, beliefs, and behaviours to readiness for organisational change. Overall, employee commitment to the organisation predictors has a statistically significant and positive relationship with readiness for organisational change. The relationship between each element of employee commitment to the organisation is also found to be statistically significant. This suggest that, other things being equal, the more commitment to the organisation that is perceived, the more open and ready for the organisational change.

In the literature, commitment has been conceptualised as an attitudinal and behavioural aspect of employees towards an organisation or work in the domain of organisational behaviour and social relations (Oliver, 1990; Meyer *et al.*, 1989). An attitudinal approach seeks the nature and quality of relationships, while a behavioural approach is based on an individual's sense of attachment not to an organisation but to their action (Oliver, 1990). Researchers have directly or indirectly focused on commitment as attitudinal and behavioural approaches to employee readiness for organisational change (Madsen *et al.*, 2005; Eby *et al.*, 2000; Weber and Weber, 2001).

A central theme emerges from the conceptual framework (refer chapter five) that employee develop positive attitudes and behaviours on the basis of expectations and

benefits provided by organisation. Alvi and Ahmed (1987); Chang (1999) supported the view that in organisation, employee can be satisfied by fulfilling their psychological and financial needs. Thus, this study applied employee psychological predictor variables such that emotional attachment (loyalty), personal sense of obligation (involvement) and feeling of pride (identification) (Cook and Wall, 1980; Buchanan, 1974; Mathews and Shepherd, 2002; Madsen *et al.*, 2005) and a financial predictor such that pay/wages/rewards to examine employee attitudes and behaviours to readiness for organisational change. Allen and Meyer (1990); Gautam *et al.* (2001); Penley and Gould (1988) empirically supported the concept by analysing the psychological and financial perspective of employees to understand their attitudes and behaviours towards the organisation. In the literature, affective, moral, alienative and normative elements were used as psychological factors and instrumental or continuance components were used as financial predictors (Allen and Meyer, 1990; Gautam *et al.*, 2001; Penley and Gould, 1988).

This researcher applied the predictors reported above as independent variables to examine employees' attitudes and behaviours towards change in higher educational institutions in Pakistan. Applying exploratory factor analysis using SPSS 15.0 version for Windows, three factors (emotional attachment, feeling of pride and pay/wages/rewards) were loaded. In this study, the sense of obligation (involvement) factor was not loaded independently or with any other factor. This suggested reassessing the dimensionality of the instrument using confirmatory factor analysis (Mathews and Shepherd, 2002). Applying confirmatory factor analysis in AMOS 16.0 version software, the result confirmed same three factors for organisational commitment. This appeared to confirm that employees of higher educational institutions are concerned to help their organisation for personal gain and psychological attachment.

The results were assessed for the relative influence of the three predictor variables such that emotional attachment, feeling of pride and pay/wages/rewards to readiness for organisational change by their standard coefficients ( $\beta$  coefficient) (Table 7.22). The results indicated a positive prediction to the dependent variable such that readiness for organisational change. A Beta coefficient of emotional attachment ( $\beta = .177$ ,  $p < 0.01$ ,  $t_{EMAT} = 4.086$ ) indicated a positive contribution to readiness for organisational change. This seemed reasonable, at least in higher educational institutions, where employee

develop their attitudes and behaviours on the basis of emotional attachment. Indeed, employee intends to stay or show a sense of attachment (Cook and Wall, 1980) to their institutions. In previous research, emotional attachment has been assessed to understand the attitudes and behaviours of employees (Madsen *et al.*, 2005; Mathews and Shepherd, 2002; Cook and wall, 1988) and found positive results. In this research, the results supported H1 (There is a significant positive relationship between emotional attachment and employees' readiness for organisational change) and provided evidence of employee affection for their organisation as has been claimed. Moreover, this finding also confirms and expands existing knowledge for organisations in Pakistan (Alvi and Ahmed, 1987; Chang, 1999).

The results of the second predictive variable such that a feeling of pride in the organisational commitment scales predicted more than emotional attachment. A beta coefficient of feeling of pride (identification) ( $\beta = .247$ ,  $p < 0.01$ ,  $t_{FOPR} = 5.069$ ) indicated a positive contribution to readiness for organisational change. The results showed that employees of higher educational institutions contribute more towards change because of a feeling of pride. Again, this seemed reasonable, at least in higher educational institutions, where employees tend to understand the organisation's goals and values (Cook and Wall, 1980). In previous research, a feeling of pride was assessed to understand employee attitudes and behaviours (Madsen *et al.*, 2005; Mathews and Shepherd, 2002; Cook and Wall, 1988) and found positive results. In this research, the results supported H2 (There is a significant positive relationship between a feeling of pride and employees' readiness for organisational change) and provided evidence of employee commitment to the goals and values of the organisation. Moreover, this finding also confirms and expands existing knowledge for organisations in Pakistan (Alvi and Ahmed, 1987; Chang, 1999).

In the scale of employee commitment to the organisation, the pay/wages/rewards construct had the highest impact on employee readiness for organisational change construct ( $\beta = .358$ ,  $p < 0.01$ ,  $t_{PAWA} = 5.397$ ) (H3 accepted). The results supported H3 (There is a significant positive relationship between pay/wages/rewards and employee readiness for organisational change) and provided evidence of the employee satisfaction with the organisation. A beta coefficient indicated a positive contribution to the endogenous factor. The results showed that employees of higher educational institutions

contribute more to this factor than to others in the same scale for change readiness. It can be claimed that on the basis of financial rewards, employee entrenchment increased and they become more loyal and involved in the organisation. It may also be concluded that employees are more open and ready as a result of intrinsic rewards than extrinsic. Mottaz (1988) advocated that tangible rewards are the most useful way to facilitate and motivate employees to perform tasks and remain with an organisation. This also confirms the finding that employees are more satisfied by intrinsic job rewards revealed by Yoon and Thye (2002). This suggests that employee who receive encouragement and rewards for change are more likely to act voluntarily in support of organisational change goals and contribute to overall organisational effectiveness (Organ, 1988; Van yperen *et al.*, 1999). This finding is also confirmed from a policy document of Higher Education Commission of Pakistan, which suggests that financial rewards for faculty members can improve their performance (HEC, 2005, no date b).

In summary, providing an environment that encourages emotional attachment, a feeling of pride and good pay/wages/rewards can help organisations to effectively influence employee attitudes and behaviours. The above results indicate that all organisational commitment constructs applied in this study had positive and significant relationships with the readiness for change construct. That means, in public sector higher educational institution of Pakistan, when employees are committed to the organisation, they are more likely to be open or readiness for organisational change. This conceptualisation suggests that committed employees have a strong belief in and acceptance of the organisation's goals and values, show a willingness to exert considerable efforts on behalf of the organisation and have a strong desire to maintain membership of the organisation (Mathews and Shepherd, 2002, p-369). One predictor factor such that sense of obligation was not loaded in the group and another factor such that pay/wages/rewards predicted more to readiness for organisational change along with the rest of organisational commitment factors are noteworthy for future research in other contexts of organisations.

### **8.5 Determinants of Readiness for Organisational Change: Effects of Employee Career Commitment**

Career commitment of employee has been conceptualised to develop positive attitudes



and behaviours to work (Blau, 1985; Chang, 1999; Poon, 2004). This concept was characterised by the development of personal career goals and the individual's attachment to, identification with and involvement in those goals (Collarelli and Bishop, 1990). As discussed in chapter four, employee of organisation can develop attitudes and behaviours on the basis of career commitment which is reflected by individual and situational factors (London, 1983; Blau, 1985; McGinnis and Morrow, 1990; Goulet and Singh, 2002).

In this study, individual and situational factors have been applied to examine employee attitudes and behaviours in higher educational institutions of Pakistan during organisational change programmes. In the individual scale, career commitment, job satisfaction, job involvement, supervisor and peer relations, and training and skills development were applied and for situational only one factor such that promotion was applied. Job satisfaction, job involvement and promotion predictor variables had statistically significant and positive relationships to readiness for change. However, the supervisor and peer relations and training and skills development variables were not found to have a statistically significant relationship to readiness for change. This suggests that, all things being equal, the more career commitment that is perceived, the more openness and readiness for organisational change will be noted in the public sector higher educational institutions of Pakistan.

Applying exploratory factor analysis using SPSS 15.0 version for Windows, all factors except one (career commitment) were not loaded. This suggested reassessing the dimensionality of the instrument using confirmatory factor analysis (Mathews and Shepherd, 2002). Applying confirmatory factor analysis in AMOS 16.0 version Software, the results did not confirm the same factors for employee career commitment.

In organisations, employee has no lifelong contract with their employer and this may create uncertainty among employees. This feeling grows among employees during periods of economic turbulence, which result in downsizing and restructuring (Morrow, 1993; Hall and Associates, 1986). Many elements of the work environment like job contract, fear of job loss, job fit and organisational uncertainty are likely to be important to develop career motivation. In situational factors, researchers (Goulet and Singh, 2002) have used variables like organisational uncertainty, fear of job loss and job fit

factors to know the employee's cognition level towards their career commitment. In this research study, the researcher examined one situational factor such that promotion to measure employee attitudes and behaviours to career commitment. This may lead to employee readiness for organisational change programmes.

Situational factors are related to the relationship between employee and organisation on the basis of an agreement to provide services. Thus, this can affect an individual's attitudes and behaviours for organisational change. In the theoretical framework of this study, promotion was conceptualised as an independent predictor variable to readiness for organisational change. Because, employee believes that an organisation pursues promotion as internal policy, they are more committed (Gaertner and Nollen, 1989). In this study, three items used by Chang (1999) based on Gaertner and Nollen (1989) study was adapted to examine the employee's perception about promotion. A beta coefficient of promotion ( $\beta = .167$ ,  $p < 0.01$ ,  $t_{PMTN} = 3.778$ ) indicated a positive contribution to change readiness. This statistical finding shows that internal promotion policy can influence employee attitudes and behaviours towards organisational change. Hence, the results support H4: There is a significant positive relationship between promotion and employee readiness for organisational change, which is also evidence of employee satisfaction with their career.

In the current situation where economic, financial, developmental, competitive and environmental dimensions are fragile, particularly in Pakistan, it may be claimed that on the basis of promotion, employee sense of security can increase and they become more loyal and involved with the organisation. In literature, the predictor has been applied and found positively significant to employee commitment for career (Gaertner and Nollen, 1989; Chang, 1999). This suggests that employee who receive encouragement in the form of promotion according to policy are more likely to act voluntarily in support of organisational change goals and contribute to overall organisational effectiveness (Organ, 1988; Van yperen *et al.*, 1999). This finding discovered that internal promotion policy can encourage individuals to be more open and ready for organisational change in Pakistan especially for higher education sector. This finding is evident from the review of official document of the Higher Education Commission of Pakistan (HEC) that the retention of productive faculty members in higher education system is necessary and important; therefore, the HEC has announced a tenure track

system of faculty appointment on an attractive salary package comparable to that offered by the private sector (HEC, 2009).

According to Table (7.29), the effect of the individual job satisfaction factor was found to be strong as was expected. Results were assessed by their standard coefficients ( $\beta$  coefficient). A beta coefficient of job satisfaction ( $\beta = .389$ ,  $p < 0.01$ ,  $t_{\text{JOSA}} = 7.299$ ) indicated a positive contribution to readiness for organisational change. This statistical finding showed that job satisfaction can influence employee attitudes and behaviours towards organisational change. Among the individual factors of employee commitment to the career scale elements, the job satisfaction construct had the highest impact on the employee readiness for organisational change construct (H5 accepted). As noted in the results, there was support for a positive relationship between readiness for organisational change and job satisfaction. Thus, H5: there is a significant positive relationship between job satisfaction (JOSA) and employee readiness for organisational change was accepted.

Job satisfaction has been defined as the degree to which employee likes their work (Agho *et al.*, 1992). It is related with employee personal factors (Goulet and Singh, 2002) for active feelings towards his or her job. These feelings can be generated when an organisation provides all the facilities and benefits to promote employee development and progression. The results indicated that employees of public sector educational institutions like the jobs and the organisation and this supported previous results in which employees are satisfied by his or her job. A satisfied employee is expected to like his or her job and the organisation and will probably be committed to his or her career (Goulet and Singh, 2002, p-78). Many researchers have applied this factor to examine the attitudes and behaviours of employee and found this variable to be positively related at a significant level (McGinnis and Morrows, 1990; Cherniss, 1991; Blau's, 1999; Goulet and Singh, 2002). This study also supports previous studies and the researcher has extended the research by examining the job satisfaction predictor variable to examine employees' attitudes and behaviours for organisational change in educational institutions of Pakistan.

Employee develops their beliefs, behaviours and attitudes on the basis of benefits and prior expectations. According to Chang (1999), individuals bring sets of expectations to

their employment situation, and attitudes and behaviours are outcomes of a process in which individuals compare their level of expectations with their reality. The job involvement factor is defined as an employee's attachment to a job (London, 1993), in which employee can be identified by his or her job which shows the importance of the job relative to the individual's life. This factor is involved with the individual's psychological behaviour which can show individual's attitudes and behaviours. Based on a beta coefficient in structural equation modelling results, it is evident that job involvement is a predictor of employee readiness for organisational change. The influence of job involvement in developing attitudes and behaviours was found to be positively and significantly related ( $\beta = .176$ ,  $p < 0.01$ ,  $t_{\text{JOIN}} = 3.066$ ). Hence hypothesis H6: there is a significant positive relationship between job involvement and employee readiness for organisational change was accepted. This finding supports results found in previous research in which job involvement was connected to attitudes and behaviours towards careers (Goulet and Singh, 2002; Blau, 1999; McGinnis and Morrow, 1990). In this study, the researcher extended job involvement to examine employee attitudes and behaviours for organisational change in the public sector universities. Findings of above variables are confirmed from the latest policy announced by the Higher Education Commission of Pakistan that numerous schemes such that scholarships for higher education, funds for attending conferences abroad, funds for running research project(s) and so many other incentives and facilities are going to be provided to faculty members to encourage them to enhance their performance (HEC, 2005; no date b). Thus, this predictor can be used as source of employee readiness for organisational change in general, and in public higher educational institutions in Pakistan in particular.

Individuals enter into an organisation with their own plans and expectations for satisfying their needs. Organisation can attract more employees by satisfying psychological demands. Supervisor and peer relationships were found to be one of the important psychological predictors in the commitment domain to manage employees (Greenhaus *et al.*, 1990; Kim, 1995). It is commonly regarded as one's belief in the importance of hard work and frugality (Morrow, 1993). This relationship was developed by Morrow (1993) to understand employee intentions when he or she remapped the relationships in the work environment. By applying five well known items used by Gaertner and Nollen (1989); Chang (1999), the results of this study were confirmed through a beta coefficient ( $\beta = -.025$ ,  $p > 0.05$ ,  $t_{\text{SPRE}} = -.480$ ) as non significant. The

examination of corresponding path estimates and t values for the links between supervisor and peer relationships (SPRE) and readiness for organisational change (ROCH) were not found to be positively and significantly related. Thus, hypothesis H7: there is a significant positive relationship between supervisor and peer relationships and employee readiness for organisational change was rejected.

In the literature, the supervisor and peer relations predictor was used as developing attitudes and behaviour to share information and advice on career opportunities (Chang, 1999; Gaertner and Nollen, 1989; Mottaz, 1988). However, in this research findings discovered that subordinates and supervisors did not share or advise individuals to enhance their career in public sector higher educational institutions of Pakistan. Generally, the results suggest that a thorough understanding of supervisor and peer relations requires that attention be given to developing individual attitudes and behaviours to readiness for organisational change in public sector higher educational institutions of Pakistan.

Individuals with a strong degree of career commitment may show higher levels of expectations and requirements from the organisation with which they may forge relationships. It also implies that highly career committed individuals may be more motivated when their expectations are satisfied than those who are less committed. Training is known to be an important factor in developing individual skills (Gaertner and Nollen, 1989). Four items were applied, in which three items were adapted from Chang (1999) based on Mobley *et al.* (1978) and one item was developed by researcher with five-point Likert scale (from strongly agree to strongly disagree) to examine the employee attitudes and behaviours for organisational change. Results were assessed by their standard coefficients ( $\beta$  coefficient). The influence of training and skills development as an independent predictor was not confirmed to be positively and significantly related to readiness for organisational change ( $\beta = -.040$ ,  $p > 0.05$ ,  $t_{TSDE} = -.971$ ). This statistical finding indicates that a training and skills development factor may not influence employee attitudes and behaviours for organisational change, particularly in academic institutions of Pakistan. Among the individual factors of employee commitment to the career scale elements, the training and skills development construct had no impact on the employee readiness for organisational change construct. Hence H8: there is a significant positive relationship between training and skills development

and employee readiness for organisational change was rejected.

In fact, training and skills of employee follow competence and development in an organisation. This factor has been widely applied by numerous researchers and found positive results (Chang, 1999; Gaertner and Nollen, 1989). In this study, results suggest that attention must be given to training and skills development and vast training programmes should be launched in public sector higher educational institutions of Pakistan. This finding is confirmed from the higher education commission of Pakistan's document that suggests that poor standard of faculty is due to a lack of training (HEC, 2005). Thus, training and professional development programmes for faculty members are essential, which have also been officially recommended (HEC, 2005).

In conclusions, the findings from the hypotheses testing suggest that employees of higher educational institutions of Pakistan can develop their attitudes and behaviours as a result of institutional and individual predictors. Higher educational institutions can actively use internal promotion policy, job satisfaction and job involvement to influence the individual's mind for organisational change. Additionally, respondents made some observations on two factors such that supervisor and peer relationship and training and skills development, which were not discovered to be positively and significantly related to readiness for organisational change.

#### **8.6 Social Relationships in the Workplace: A Determinant of Readiness for Organisational Change**

The literature suggests that social relationships in the workplace can lead to developing employee attitudes and behaviours for organisational change. In organisation, employee interacts with their colleagues such that subordinate, peer or supervisor but these feelings, attitudes and perceptions may be positive or negative. This study applied social relationships in the workplace as a predictive variable for examining employee attitudes and behaviours for organisational change. Standardised estimates and t values (Table 7.29) showed that the path between social relationships in the workplace predictor variable and readiness for organisational change was found to be positive and significant ( $\beta = .130$ ,  $p < 0.01$ ,  $t_{\text{SORE}} = 2.647$ ). From the respondent point of view, positive social relationships in the workplace factor mean they are more likely to be

open or ready for organisational change. Thus, H9: there is a significant positive relationship between social relationships in the workplace and readiness for organisational change was accepted.

In the social sciences domain, social relationships in the workplace factor is used to ascertain employee likes, dislikes and enjoyment related to talking, interacting and working with their subordinate, supervisor and peer. In previous studies, researchers directly or indirectly used it for examining employee attitudes and behaviours for organisational change (Hanpachern *et al.*, 1997; Eby *et al.*, 2000; Weber and Weber, 2001; Cunningham *et al.*, 2002; Madsen *et al.*, 2005). Generally, the results suggest that a thorough understanding of social relationships in the workplace require that attention be given to developing individual attitudes and behaviours to readiness for organisational change in the public sector universities of Pakistan.

## **8.7 Conclusion**

In conclusion, this chapter has provided discussion on the results of the scale and population, measurement scales purification and hypotheses testing. All hypotheses developed in the framework were discussed with previous literature and found inferences for the future. The flow of factors used in this study might be enriched by considering individual attitudes and behaviours towards organisational change. Two out of nine independent predictor variables were not positively and significantly related to readiness for organisational change. Supervisor and peer relations and training and skills development was not suggested to develop individual attitudes and behaviours in higher educational institutions of Pakistan. Moreover, pay/wages/rewards and job satisfaction predictor variables were found more related to readiness for organisational change.

In the next chapter, policy implications will be presented. Research limitations will also be noted and other potential research directions will be discussed in more detail.

## **Chapter Nine      Conclusions**

### **9.1      Introduction**

Research on the determinants of employee readiness for organisational change was stimulated by new interest evinces due to recent change reforms in the public sector higher educational institutions of Pakistan. Increased attention on competition, advanced technology, mergers, expansion, product quality maintenance, enhancing employee efficiency rapid growth, new business ventures, exciting opportunities, innovations, and new leadership and management approaches led to number of countries knowing employee attitudes and behaviours of organisation change.

The scope of this study was to examine employee readiness predictors for organisational change. Based on different review of extant literature and different theoretical perspectives, an integrative theoretical framework was developed which is composed of employee commitment to the organisation, career and social relationships in the workplace factors. Alongside the theoretical framework, a set of hypotheses have been developed.

The study applied a positivist approach methodology in which a survey questionnaire was used to obtain quantitative data to test hypotheses. The data for this study was obtained from public sector higher educational institutions of Pakistan. The sample consists of one thousand faculty members from thirty three public sector universities from all over the country. Structural equation modelling techniques including analysis of moment structure (AMOS) software applied to test the hypothesised relationships. In this chapter, first the theoretical contribution of the thesis in terms of gaps in the field is discussed. Second, the practical or managerial implications of the study's findings are described. This is followed by a discussion of the methodological and theoretical limitations of the research. Finally, some future research avenues are suggested.



## **9.2 Research Implications**

### **9.2.1 Theoretical Implications**

After reviewing extant literature in the domain of change management, a conceptual framework was developed on the basis of employee attitudes, beliefs, and behaviours. This study was conducted in Pakistan where it was proposed that employees of organisations can develop their attitudes and behaviours on the basis of psychological and financial needs. In the framework, the direct influence of employee commitment to the organisation and career and social relationships in the workplace factors on employee readiness for organisational change was investigated. This understanding was conceptualised on the basis of prior studies (Penley and Gould, 1988; Gaertner and Nollen, 1989; Chang, 1999; Goulet and Singh, 2002; Madsen *et al.*, 2005). With the employee commitment to the organisation and career this study examined the relationships between emotional attachment, feeling of pride, pay/wages/rewards, promotion, job satisfaction, job involvement, supervisor and peer relations, training and skills development and social relationships in the workplace and employee readiness for organisational change.

Statistical results showed that all hypotheses except two were accepted. Overall, employee commitment to the organisation factors were found to be significantly and positively correlated to readiness for organisational change. The relative power of employee career factors was found to be positive and significant to readiness for change. However, two factors such that supervisor and peer relations and training and skills development were not found to be significant and positive to readiness for change. Furthermore, employee social relationships in the workplace were also found to be positively and significantly correlated to readiness for organisational change. This finding also supports the development of employee attitudes and beliefs, particularly in Pakistan.

The novelty of this research is based on the development of comprehensive theoretical framework that examines the factors that influence the employee attitudes and behaviours in public sector higher educational institutions of Pakistan. Previous studies that have been conducted in the area of change management did not focus on the

employee psychological and financial factors to examine the employee response for organisational change. Thus it can be claimed that this is the first time that this theoretical framework tested empirically and theoretically. Several theoretical contributions emerge from this research.

First, to the knowledge of researcher this research is the first empirical work that synthesised concepts from two main theories such that Maslow's need theory and Armenakis's five key message readiness component theory to assess individual attitudes and behaviours in a more holistic manner, and in a Pakistan context. In the present study, an integrative model was developed that combines factors associated with the employee commitment and social relationships factors. However, a comprehensive approach, which takes development of the cognition of employee through needs and expectations into consideration, has not been tested. Although a few studies about employee readiness for organisational change have been conducted (Eby *et al.*, 2000; Cunningham *et al.*, 2002; Madsen *et al.*, 2005; Rafferty and Simons, 2006; Cinite, *et al.*, 2009), they tend to focus on only specific factors such that psychological, workplace, environmental, cultural and social factors but ignored employee commitment factors. This study suggests an integrative model that combines employee commitment to the organisation and career factors along with social relationships in the workplace factor in response of employee psychological and financial needs.

Second, another contribution to knowledge is that, it is the first study of its kind collecting valuable data from Pakistan. In addition, the study contributed to the limited knowledge on how employees of Pakistan organisations become open and ready for organisational change. In this regard, the researcher has addressed the questions which are those factors that influence the employee attitudes and behaviours to support organisational change. The researcher has combined a set of key factors such that emotional attachment, feeling of pride, pay/wages/rewards, promotion, job satisfaction, job involvement, supervisor and peer relations, training and skills development and social relationships in the workplace and employee readiness.

Third, this research was conducted in educational sector which is another contribution to knowledge that, it is the first study to report that has valuable data from public sector higher educational institution. In addition, the study contributed to knowledge on how

employee of public sector universities of Pakistan develops their attitudes and behaviours for organisational change. Although studies have been found in sales, health, engineering, local governments, profit and non profit oriented organisations (Eby *et al.*, 2000; Cunningham *et al.*, 2002; Burnes, 2003; Peach *et al.*, 2005; Madsen *et al.*, 2005), the setting of this study was educational institutions, which is significant for a wider validity of findings.

Finally, a key combination relates to the fact that it brings empirical evidence from a relatively new cultural context, taking into account that most of the prior studies have taken place in the Australia, Canada, UK and USA. This is the first study reported on employee readiness for organisational change in public sector higher educational institutions of Pakistan. This is significant in permitting a test of a wider validity of findings derived from research conducted in South Asia context.

### **9.2.2 Practical Implications**

The examination of factors that influence employee to readiness for organisational change is an important endeavour. Eventually, change affects individual attitudes and behaviours because of moving form a known to unknown situation. The findings of this study have several practical implications however, few important implication for managers and academics are followed.

First, this study highlighted the importance of employee psychological factors for employee openness and readiness for organisational change. The results showed that employees of public sector higher educational institutions of Pakistan develop their positive attitudes and behaviours on the basis of psychological factor such that emotional attachment, feeling of pride, job satisfaction and job involvement. When they perceive that organisation fulfil employee psychological needs, they are more likely to act positively and significantly. Results assessed the relative influence of emotional attachment, feeling of pride, job satisfaction and job involvement to readiness for organisational change. Findings indicated a positive influence to the dependent variable such that readiness for organisational change. Moreover, these findings confirm and expand existing knowledge for organisations in Pakistan. That means, when employees have a psychological commitment to the organisation and career, they are more likely to

demonstrate readiness for organisational change. This conceptualisation suggests that committed employees have a strong belief in and acceptance of the organisation's goals and values, show a willingness to exert considerable efforts on behalf of the organisation and have a strong desire to maintain membership of the organisation.

Second, this study found that employees who have high financial attachment to their organisation and career are more willing to accept new situations. This suggests that, other things being equal, the more financial commitment to the organisation and career that is perceived, so more openness and readiness for organisational change will be noted. Currently, the economic, financial, developmental, competitive, and environmental situation is fragile, particularly in Pakistan. Results assessed that on the basis of intrinsic rewards such that pay/wages/rewards and promotion, employee can be more open and ready for organisational change. It is considered positive that employees in higher educational institutions of Pakistan are satisfied by intrinsic job rewards. This suggests that employee who receives financial rewards and encouragement for promotion are more likely to act voluntarily in support of organisational change goals and can contribute to overall organisational effectiveness.

Third, Social relationships in the workplace can lead to developing employee attitudes and behaviours for organisational change. From the respondent point of view, positive social relationships in the workplace factor lead to openness or readiness for organisational change. In public sector universities of Pakistan, this factor was found to be proactive and pursue employee likes, dislikes and enjoyment related to talking, interacting and working with their subordinates, supervisors and peers. Generally, the results suggest that social relationships in the workplace may support to be more open and ready for organisational change in public sector higher educational institutions of Pakistan.

Fourth, the results of this study suggest that employee relationship with supervisor and peer is critical. This finding discovered that subordinate and supervisor do not share or advise individuals about career enhancement. Generally, the results advocate that a thorough understanding of supervisor and peer relations requires that attention be given to developing individual attitudes and behaviours to readiness for organisational change. Indeed, employee needs valuable suggestions for developing their future career from

their colleagues. Results found that, in higher educational institutions of Pakistan, supervisor and peer did not share information with others for enhancing career development or promotion. Thus, this study suggests that supervisor and peer who have prior experience, knowledge, or information should share it with others so as to enhance confidence and the belief among employees towards the organisation in any unknown situation. They should be honest in their dealings with peers and those under their supervision.

Finally, regarding training and skills development, there is less evidence that employees are open and ready for organisational change. It may be that in public sector higher educational institutions of Pakistan, few if any training and skills development programmes are in operation which is why the majority of employees did not develop consent on the factor. In fact, training and skills of employee follows competence and development in an organisation. The results of this study suggest that attention must be given to training and skills development programmes in public sector higher educational institutions to build up employee confidence when faced with any unidentified situation.

The major inference of the present research is that employees from public sector higher education institution of Pakistan may develop positive attitudes and behaviours on the basis of psychological and financial factors. This issue was raised some time ago (Alvi and Ahmed, 1987; Chang, 1999), but since then there seems to be a lack of empirical evidence supporting it.

### **9.2.3 Methodological Implications**

The contribution of this study in terms of methodology is that this research is one of the few studies that test employee readiness predictor variables outside the western cultural set up, particularly in Pakistan. Readiness researchers such that Eby *et al.* (2000); Cunningham *et al.* (2002); Madsen *et al.* (2005); Rafferty and Simons (2006); Cinite, *et al.* (2009) highlighted employee readiness predictor variables in developed or western cultural work settings. This research has filled gaps in global investigations by testing predictor variables in cross-cultural work settings which may be useful for generalising

these predictors. Examining the predictor variables in Pakistan, could provide additional insights into extant literature because Pakistani people and their cultural backgrounds are substantially different from those of western countries (Fatima, 2002; Alvi and Ahmed, 1987). The findings of the study suggest that employee attitudes and behaviours are important and can develop in a similar way not only to western but also to non-western cultures. Employees in Pakistan shows their similar beliefs about the overall concept to those reported in the literature but placed more weight on future needs and expectations. In addition, the conceptual framework explains the individual determinants and consequences of employee readiness for organisational change, indicating that the individual concept may be effectively used in management research in other countries as well.

Additionally, this study verifies existing measurement scales in a country which is culturally different from other work settings. For example employee relationship with management, job knowledge and skills and job demands were tested in four profit-oriented companies from north Utah (Miller *et al.*, 2006). Rafferty and Simons (2006) examined antecedents of employee readiness for fine-tuning and corporate transformation change in an Australian organisation.

According to the findings, all scales generally appear valid in their general content but the number of items in purified scales is not the same as those of original scales. For instance, after testing the readiness scale that consisted of fourteen items was purified with only seven items and found high reliability and constructs validity. Similarly in employee commitment for the organisation and career scale one variable from each such that personal sense of obligation and career commitment were completely not loaded. However, a few scales such that emotional attachment, feeling of pride and promotion were purified on their basic items whereas a few items were deleted from pay/wages/rewards, job satisfaction, job involvement, supervisor and peer relations and training and skills development scales and loaded with extracted items and found high reliability and construct validity. Future cross-national research could benefit from further investigation about the essential conditions in which comparability of scales across countries is affected.

### **9.3 Research Limitations**

#### **9.3.1 Theoretical Limitations**

Despite the promising results, some limitations of the study should be noted that could be addressed in future research. Examining employees' attitudes and behaviours only in higher educational institutions may limit generalisability. It is possible that people who seek employment in non educational organisations react differently. Thus, these predictor variables of the theoretical framework should be tested in other organisations in the same culture which may present confounding effect in those institutions. Thus, more tests are necessary to strengthen its generalisability.

The second limitation of this research is that the present research did not consider the phases of organisational change. In future research, researcher could examine the differences in employee attitudes and behaviours depending on how long the change process had taken.

The third limitation is the use of single source data. However, Crampton and Wagner (1994) suggest the seriousness of this issue depends on the research question and nature of variables under consideration. According to Eby *et al.* (2000) perceived readiness for change is perceptual of individuals and assessing individual perception self reported data can be used. In fact, previous research on employees' readiness has relied almost exclusively on self reported data to infer employees' attitudes and behaviours for readiness to organisational change (Eby *et al.*, 2000; Cunningham *et al.*, 2002; Madsen *et al.*, 2005; Rafferty and Simons, 2006).

The fourth limitation is that, since this study is one of the few studies which simultaneously examine employees' attitudes, beliefs and behaviours by employees' commitment to the organisation and career along with social relationships in the workplace factors, a large sample with diverse professions would strengthen and support the research findings. With increasing mergers, downsizing, and layoffs, individuals are now unable to depend on a single organisation for their entire careers, and commitment to one's own career, accordingly, becomes an important source of occupational meaning (Chang, 1999, p-1275). Thus, factors related to individual careers

and future development is implicated as of importance in organisational change. Therefore, more studies are required to better understand employees' attitudes, beliefs and behaviour for organisational change.

### **9.3.2 Methodological Limitations**

The research design used in this study is not without certain methodological limitations. It did not allow examining employees attitudes and behaviours for change readiness over time that needs to be considered when interpreting the results. Several limitations of the study should be noted. First, the fact that the data is reliant on using a single, self-reported questionnaire at a single point in time is problematic. When self-reports are used, concerns regarding common method bias being responsible for the observed relationships often arise (Cole *et al.*, 2006). A self-reported single data at a single point in time may be highly affected. Such data may reflect the influence of employees' commitment to the organisation and career and social relationships in the workplace, thereby resulting in spuriously high relationships.

A second limitation is the cross-sectional design of the study. Because data was collected at a single point in time, one is unable to establish cause-and-effect relationships among the variables of interest. Future research that looks to develop a longitudinal design in order to collect predictor and criterion variables before and after the change would be much stronger. In the management domain, chaos and complexity theory are widely applied which suggest that all systems are in a constant state of change and are easily frightened into disequilibrium for any number of reasons. This suggests that longitudinal studies may be particularly useful to understand employees' attitudes and behaviours to readiness for organisational change. In organisational change, individual's perceptions may be equally dynamic if the system is constantly redefining itself (Waldrop, 1992).

Third, the research analyses were based on public sector higher educational institutions of Pakistan, therefore limiting the generalisability of the research findings (Cole *et al.*, 2006). Furthermore, this research was conducted in Pakistan, thus there is also a limitation of the research findings for generalisation particularly for organisations in developed or western countries.



The fourth limitation of this study is the contextual effect in the responses because this study was undertaken on a voluntary participation basis and respondents were given a choice of completing the questionnaire anywhere such that at work or outside work. In this questionnaire, it was not required to state where the questionnaire had been completed. Thus, it is possible that respondents could have been affected by the environment or other factors when they completed the survey.

The fifth limitation may be that this study was based on the use of the questionnaire method, which implies that common method bias might have occurred as in other research using the same method (Blau, 1985). Data obtaining from a single source may be problematic for causal prediction based on the survey since the measures are taken on one occasion only. Thus multiple methods may be helpful to further clarify the plan of this research. This limitation proposes that in-depth interviews with employees along with quantitative data would be more useful.

Finally, there might be reliability and validity issues with the information obtained from the questionnaires used in this study because they were self-reported by the respondents. According to (Park and Kim, 2009, p-34) self-survey data may produce high correlations among measures, in part, because the data shared common method variance and thus errors in measurement are correlated with each other.

#### **9.4 Future Research Avenue**

The study findings contribute to the literature on human resource management (HRM), organisational behaviour (OB), organisational development (OD) and change management (CM). By providing an in-depth account of individual attitudes and behaviours this study examined employees' commitment to the organisation and career and social relationships in the workplace predictors which are helpful the organisation to get support and openness for successful and meaningful organisational change.

There are so many avenues for future research. This study examined direct relationships between independent variables such that emotional attachment, feeling of pride, pay/wages/rewards, promotion, job satisfaction, job involvement, supervisor and peer

relations, training and skills development and social relationships in the workplace to the dependent variable such that employee readiness for organisational change. One of the key issues for future researchers to address concerns the examination of more sophisticated relationships between antecedent measures and readiness. In this regard, future research could also further develop a theoretical model concerning change readiness for different types of predictors' relationships. This study investigated direct relationships between change readiness and a variety of antecedent factors. However, it is reasonable to suggest that a variety of more complicated relationships may exist.

Future research could also further develop a theoretical model concerning change readiness for different types of change. In addition, while authors generally propose that change attitudes, such as readiness, mediate the relationship between change implementation and outcomes, this has not been the subject of extensive research. Given the theoretical importance that attitudes such as change readiness play in theoretical accounts of the change process, it is essential that more theoretical and empirical work is conducted on this construct. In addition, the conceptual framework developed for the study should be investigated in organisations other than higher educational institutions which may support its generalisability. It is possible that people who seek employment in non-educational organisations react differently. Thus, these predictor variables should be tested in other organisations in same culture may present confounding effects. Thus, more tests are necessary to strengthen its generalisability.

Future research beckons, since many questions are still unanswered. Longitudinal studies may help determine if the relationships studied here differ depending upon the stage of the organisational change process under evaluation since employee's perceptions concerning change intervention may themselves change over time (Rousseau and Tijoriwala, 1999). In future research, researcher(s) could examine the differences in employee attitudes and behaviours depending on how long the change process had taken.

For future research, this study also suggests using in-depth interviews alongside survey questionnaires which may infer more about individuals' attitudes and behaviours for readiness to organisational change.

This study suggests applying different individual and organisational factors along employees' commitment to the organisation and career aspects which may provide in-depth findings for the future. And finally, a large sample including diverse professions may provide more strength and support future findings. Therefore, more studies are required to better understand employees' attitudes, beliefs and behaviour for organisational change.

## References

- Abrahamson, E. 2000, "Change without Pain", *Harvard business review*, vol. 78, no. 4, pp. 75-79.
- Agho, A.O., Price, J.L. & Mueller, C.W. 1992, "Discriminant Validity of Measures of Job Satisfaction, Positive Affectivity and Negative Affectivity", *Journal of Occupational and Organizational Psychology*, vol. 65, pp. 185.
- Aiken, L.S. & West, S.G. 1991, *Multiple Regressions: Testing and Interpreting Interactions*, Sage, London.
- Alas, R. 2009, "The Impact of Work-Related Values on the Readiness to Change in Estonian Organizations", *Journal of Business Ethics*, vol. 86, no. 2, pp. 113-124.
- Alderfer, C. P. 1969, "An empirical test of a new theory of human needs", *Organisational Behaviours and Human Performance*, vol. 4, pp. 143-175.
- Allen, N.J. & Meyer, J.P. 1990, "The measurement and antecedents of affective, continuance and normative commitment to the organization", *Journal of Occupational Psychology*, vol. 63, no. 1, pp. 1-18.
- Alvi, S.A. & Ahmed, S.W. 1987, "Assessing Organizational Commitment in a Developing Country: Pakistan, A Case Study", *Human Relations*, vol. 40, no. 5, pp. 267-280.
- Amaratunga, D., Baldry, D., Sarchar, M. & Newton, R. 2002, "Quantitative and qualitative research in the built environment: application of mixed research approach", *Work Study*, vol. 51, no. 1, pp. 17-31.
- Anderson, J. & Gerbing, D. 1988, "Structural Equation Modelling in Practice: A review and Recommended Two-step Approach", *Psychological bulletin*, vol. 103, no. 3, pp. 411-423.
- Anderson, J. & Gerbing, D. 1982, "Some Methods for Specifying Measurement Models to Obtain Uni-dimensional Construct Measurement", *Journal of Marketing Research*, vol. 19, no. 4, pp. 453-460.

- Anonymous, 2003, "Emotional connections to work", *The Work life Report*, vol. 14, no. 4, pp. 6.
- Anonymous, 2010, "Higher Education in Pakistan: Towards a Reform Agenda, available from [www.tfhe.net/resources/pakistan.htm](http://www.tfhe.net/resources/pakistan.htm), retrieved on 23-09-2009
- Armenakis, A.A. & Bedeian, A.G. 1999, "Organizational Change: A Review of Theory and Research in the 1990s", *Journal of Management*, vol. 25, no. 3, pp. 293-315.
- Armenakis, A.A. & Fredenberger, W.B. 1997, "Organizational Change Readiness Practices of Business Turnaround Change Agents", *Knowledge and Process Management*, vol. 4, no. 3, pp. 143-152.
- Armenakis, A.A. & Harris, S.G. 2002, "Crafting a change message to create transformational readiness", *Journal of Organizational Change Management*, vol. 15, no. 2, pp. 169.
- Armenakis, A. A., Harris, S. G., & Feild, H. S. 1999, " Making change permanent: A model for institutionalizing change interventions" . *Research in Organizational Change and Development*, vol. 12, pp. 97-128
- Armenakis, A.A., Harris, S.G. & Mossholder, K.W. 1993, "Creating readiness for organizational change", *Human Relations*, vol. 46, no. 6, pp. 681.
- Arnold, J., Cooper, C., & Robertson, I. 1995. *Work Psychology: Understanding Human Behaviour in the Workplace*, Pitaman Publishing, London.
- Aryee, S. & Tan, K. 1992, "Antecedents and outcomes of career commitment", *Journal of Vocational Behavior*, vol. 40, no. 3, pp. 288-305.
- Ashford, S.J. 1988, "Individual Strategies for Coping with Stress during Organizational Transitions", *Journal of Applied Behavioural Science*, vol. 24, no. 1, pp. 19-36.
- Au, N., Ngai, E. W. T., Cheng, T.C.E. 2002, "A critical review of end user information system satisfaction research and a new research framework", *Omega*, vol. 30, pp. 451-478.

- Babin, B., Boles, J. & Robin, D. 2000, "Representing the Perceived Ethical Work Climate among Marketing Employees", *Journal of Academy of Marketing Sciences*, vol. 31, no. 5/6, pp. 366-382.
- Bagozzi, R. & Philips, L. 1982, "Representing and Testing Organizational Theories: A Holistic Construal", *Administrative Science Quarterly*, vol. 27, pp. 459-489.
- Bagozzi, R., Yi, Y., & Philips, L. 1991, "Assessing Construct Validity in Organizational Research", *Administrative Science Quarterly*, vol. 36, no. 3, pp. 421-458.
- Baker, M. 2002, "Sampling", *The Market Review*, vol. 3, no. 1, pp. 103-120.
- Baltes, B. B., Zhdanova, L. S., & Parker, C. C. 2009, "Psychological climate: A comparison of organizational and individual level referents", *Human Relations*, vol. 62, no. 5, pp. 669-700.
- Bareil, C., Savoie, A. & Meunier, S. 2007, "Patterns of Discomfort with Organizational Change", *Journal of Change Management*, vol. 7, no. 1, pp. 13-24.
- Barnet, R. 1990, *The idea of higher education*. Philadelphia, USA: The Society for Research into Higher Education.
- Barnett, W.P. & Carroll, G.R. 1995, "Modelling Internal Organizational Change", *Annual Review of Sociology*, vol. 21, no. 1, pp. 217.
- Bartol, K.M. 1979, "Professionalism as a Predictor of Organizational Commitment, Role Stress, and Turnover: a Multidimensional Approach", *Academy of Management Journal*, vol. 22, no. 4, pp. 815-821.
- Baruch, Y. & Holtom, B. C. 2008, "Survey response rate levels and trends in organizational research", *Human Relations*, vol. 61, no. 8, pp. 1139-1160.
- Bechtel, R.L. & Squires, J.K. 2001, "Tools and techniques to facilitate change", *Industrial & Commercial Training*, vol. 33, no. 7, pp. 249-254.
- Beer, M. & Walton, E. 1990, "Developing the competitive organization: Interventions and strategies", *American Psychologist*, vol. 45, no. 2, pp. 154-161.

- Belson, W.A. 1986, *Validity in survey research: with special reference to the techniques of intensive interviewing and progressive modification for testing and constructing difficult or sensitive measures for use in survey research: a report*, Aldershop, Gover.
- Bennett J. L. 2001, "Change Hygiene", *HR Magazine*, vol. 46, no. 8, pp. 149.
- Bentler, P. M., & Bonnett, D. G. 1980, "Significance tests and goodness of fit in the analysis of covariance structures", *Psychological bulletin*, vol. 88, pp. 588-606.
- Bentler, P. & Chou, C. 1987, "Practical Issues in Structural Modeling", *Sociological Methods and Research*, vol. 16, no. 1, pp. 78-117.
- Bernerth, J. 2004, "Expanding Our Understanding of the Change Message", *Human Resource Development Review*, vol. 3, no. 1, pp. 36-52.
- Blau, G.J 1999, "Early-Career Job Factors Influencing the Professional Commitment of Medical Technologists", *Academy of Management Journal*, vol. 42, no. 6, pp. 687-695.
- Blau, G.J. 1985, "The measurement and prediction of career commitment", *Journal of Occupational Psychology*, vol. 58, no. 4, pp. 277-288.
- Blau, G.J. & Boal, K.B. 1987, "Conceptualizing How Job Involvement and Organizational Commitment Affect Turnover and Absenteeism", *Academy of Management Review*, vol. 12, no. 2, pp. 288-300.
- Bovey, W.H. & Hede, A. 2001, "Resistance to organisational change: The role of defence mechanisms", *Journal of Managerial Psychology*, vol. 16, no. 7/8, pp. 534.
- Brayfield, A.H. & Rothe, H.F. 1951, "An index of job satisfaction", *Journal of Applied Psychology*, vol. 35, no. 5, pp. 307-311.
- Bridges, W. 1986, "Managing Organizational Transitions", *Organizational dynamics*, vol. 15, no. 1, pp. 24-33.

- Buchanan, B. 1974, "Building Organizational Commitment - the Socialization of Managers in Work Organizations", *Administrative Science Quarterly*, vol. 19, no. 4, pp. 533.
- Buller, P.F. 1988, "For Successful Strategic Change: Blend OD Practices With Strategic Management", *Organizational dynamics*, vol. 16, no. 3, pp. 42-55.
- Burnes, B. 2003, "Managing change and changing managers from ABC to XYZ", *The Journal of Management Development*, vol. 22, no. 7/8, pp. 627.
- Burrell, G. & Morgan, G. 1979, *Sociological Paradigm and Organizational Analysis: Elements of the Sociology of Corporate Life*, Heinemann, London.
- Carmines, E. & Zeller, R. 1979, *Reliability and Validity Assessment*, Sage Publications, London.
- Caroli, E. & Reenen, J.V. 2001, "Skill-Biased Organizational Change? Evidence from a Panel of British and French Establishments", *The Quarterly Journal of Economics*, vol. 116, no. 4, pp. 1449-1492.
- Carson, K.D. & Bedeian, A.G. 1994, "Career Commitment: Construction of a Measure and Examination of Its Psychometric Properties", *Journal of Vocational Behavior*, vol. 44, no. 3, pp. 237-262.
- Carson, K.D., Carson, P.P., Roe, C.W., Birkenmeier, B.J. & Phillips, J.S. 1999, "Four Commitment Profiles and their Relationships to Empowerment, Service Recovery, and Work Attitudes", *Public Personnel Management*, vol. 28, no. 1, pp. 1.
- Cavana, R., Delahye, B.L. & Sekaran, U. 2001, *Applied Business Research: Qualitative and Quantitative methods*, Wiley, Milton, Australia.
- Chang, C. S. & Chang, H. H. 2007, "Effects of internal marketing on nurse job satisfaction and organizational commitment: example of medical centres in Southern Taiwan", *Journal of Nursing Research*, vol. 15, no. 4, pp. 265-274.



- Chang, E. 1999, "Career Commitment as a Complex Moderator of Organizational Commitment and Turnover Intention", *Human Relations*, vol. 52, no. 10, pp. 1257-1278.
- Chau, P. 1997, "Re-examining a Model for Evaluating Information Centre Success Using Structural Equation Modelling Approach", *Decision Science*, vol. 28, no. 2, pp. 309-334.
- Chawla, A. & Kelloway, E.K. 2004, "Predicting openness and commitment to change", *Leadership & Organization Development Journal*, vol. 25, no. 5/6, pp. 485.
- Chen, I. C. L. 2005, The Societal Culture dimension within the Human Relation Practice of Taiwanese management in the UK, Unpublished Thesis, Department of Management and Organization, University of Sterling, UK. (Online Accessed on 14-03-2008)
- Cherniss, C. 1991, "Career commitment in human service professional: A biographical study", *Human Relations*, vol. 44, no. 5, pp. 419-437.
- Childs, A. & Klimoski, R.J. 1986, "Successfully predicting career success: An application of the biographical inventory", *Journal of Applied Psychology*, vol. 71, no. 1, pp. 3-8.
- Chonko, L.B. 2004, "Organizational readiness for change, individual fear of change, and sales manager performance: an empirical investigation", *Journal of Personal Selling and Sales Management*, vol. 24, no. 1, pp. 7-17.
- Chreim, S. 2006, "Postscript to change: survivors' retrospective views of organizational changes", *Personnel Review*, vol. 35, no. 3, pp. 315.
- Chreim, S. 2002, "Influencing organizational identification during major change: A communication-based perspective", *Human Relations*, vol. 55, no. 9, pp. 1117-1137.
- Christians, C 2000, Ethics and Politics in Qualitative Research. In Denzin, NK & Lincoln,YS (eds.) *Handbook of Qualitative Research*. Sage. London. pp. 133-155.

- Churchill, J.G.A. 1979, "A paradigm for developing better measures of marketing construct", *Journal of Marketing*, vol. 16, pp. 64-73.
- Cinite, I., Duxbury, L. E. & Higgins, C. 2009, "Measurement of Perceived Organizational Readiness for Change in the Public Sector", *British Journal of Management*, vol. 20, pp. 265-277.
- Clark, G. (2005), Reform in Higher Education in Pakistan, In Hathaway, R. M. (Eds.) Education Reform in Pakistan: Building for the Future'. (55-68). Woodrow Wilson International Centre for Scholars, Washington D.C.
- Clark, L.A. & Watson, D. 1995, "Constructing Validity: Basic Issues in Objective Scale Development", *Psychological Assessment*, vol. 7, no. 3, pp. 309-319.
- Coch, L. & French, Jr. J.R.P. 1948, "Overcoming Resistance to Change", *Human Relations*, vol. 1, no. 4, pp. 512-532.
- Cohen, A. 1999, "Relationships among five forms of commitment: An empirical assessment", *Journal of Organizational Behavior*, vol. 20, no. 3, pp. 285.
- Cohen, A. 1996, "On The Discriminant Validity of the Meyer and Allen Measure of Organizational Commitment: How Does it Fit with the Work Commitment Construct?", *Educational and Psychological Measurement*, vol. 56, no. 3, pp. 494-503.
- Cohen, L., Manion, L. & Morrison, K. 2000, *Research Methods in Education*, 5th edn, Routeledge Falmer, London.
- Colarelli, S.M. & Bishop, R.C. 1990, "Career Commitment Functions, Correlates, and Management, *Group & Organization Studies*, vol. 15, no. 2, pp. 158-176.
- Cole, M.S., Harris, S.G. & Bernerth, J.B. 2006, "Exploring the implications of vision, appropriateness, and execution of organizational change", *Leadership & Organization Development Journal*, vol. 27, no. 5, pp. 352.

- Coleman, D. F., Irving, G. P., & Cooper, C. L. 1999, "Another look at the locus of control-organizational commitment relationship: It depends on the form of commitment", *Journal of Organizational Behavior*, vol. 20, pp. 995-1001.
- Collis, J. & Hussey, R. 2003, *Business Research: A Practical Guide for Undergraduate and Postgraduate Student*, 2nd edn, PALGRAVE MACMILLAN, New York.
- Comery, A. L & Lee, H. B. 1992, *A first course in factor analysis*, 2nd edn, L. Erlbaum Associates, Hillsdale, NJ.
- Cook, J. & Wall, T. 1980, "New work attitude measures of trust, organizational commitment and personal need non-fulfilment", *Journal of Occupational Psychology*, vol. 53, no. 1, pp. 39-52.
- Cortina, J. 1993, "Interaction, Nonlinearity, and Multicollinearity: Implications for Multiple Regression", *Journal of Management*, vol. 19, no. 4, pp. 915-922.
- Craige, C. & Dougla, C. 2000, *International Marketing Research*, 2nd edn, John Wiley & Sons, Chichester.
- Crampton, S.M. & Wagner, J.A. 1994, "Percept-Percept Inflation in Micro-organizational Research: An Investigation of Prevalence and Effect", *Journal of Applied Psychology*, vol. 79, no. 1, pp. 54-66.
- Cresswell, J.W. 2003, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 2nd edn, SAGE, London.
- Cronbach, L. J. 1951, "Coefficient alpha and the internal structure of tests", *Psychometrika*, vol. 16, pp. 297-334.
- Cummings, T. G., & Worley, C. G. 2005, *Organisation development and Change*, 8th edn, Cincinnati, OH: South-Western College Publishing.
- Cummings, T.G. & Worley, C.G. 2001, *Organization development and change*, South-Western College Publishing, Cincinnati, OH.

- Cunningham, C.E., Woodward, C.A., Shannon, H.S. & MacIntosh, J. 2002, "Readiness for organizational change: A longitudinal study of workplace, psychological and behavioural correlates", *Journal of Occupational and Organizational Psychology*, vol. 75, pp. 377.
- Davis, R. 1979, "Interactive transfer of expertise: Acquisition of new interference rules", *Artificial Intelligence*, vol. 12, pp. 121-157.
- De Vaus, D.A. 2002, *Surveys in social research*, 4th edn, Routledge, London.
- De Vellis, R. 2003, *Scale Development*, Sage Publication, London.
- Denscombe, M. 2003, *The Good Research Guide: For Small-scale Social Research*, 2nd edn, Open University Press, Buckingham.
- Denscombe, M. 2002, *Ground Rules for Good Research*, Open University Press, Bukingham.
- Dent, E.B. & Goldberg, S.G. 1999, "Challenging "Resistance to Change"", *Journal of Applied Behavioral Science*, vol. 35, no. 1, pp. 25-41.
- Desplaces, D. 2005, "A Multilevel Approach to Individual Readiness to Change", *Journal of Behavioral and Applied Management*, vol. 7, no. 1, pp. 25.
- Diamantopoulos, A. & Siguaw, J. 2000, *Introducing LISERL*, Sage Publication, London.
- Dirks K., Cummings L. & Piece J. 1996, "Psychological ownership in organizations: Conditions under which individual promote and resist change", *Research in Organizational Change and Development*, vol. 9, pp. 1-23.
- Doll, W., Xia, W., & Torkzadeh, G. 1994, "A confirmatory Factor Analysis of the End-User Computing Satisfaction Instrument", *MIS Quarterly*, vol. 18, no. 4, pp. 453-461.

- Dreher, G.F. & Bretz, R.D. 1991, "Cognitive ability and career attainment: Moderating effects of early career success", *Journal of Applied Psychology*, vol. 76, no. 3, pp. 392-397.
- Dunham, R.B., Grube, J.A. & Castañeda, M.B. 1994, "Organizational commitment: The utility of an integrative definition", *Journal of Applied Psychology*, vol. 79, no. 3, pp. 370-380.
- Durande-Moreau, A. & Usunier, J. 1999, "Time Styles and the Waiting Experience: An Exploratory Study", *Journal of Service Research*, vol. 2, no. 2, pp. 173-186.
- Easterby-Smith, M., Thorpe, R. & Lowe, A. 1991, *Management Research: An Introduction*, 2nd edn, Sage, London.
- Eby, L.T., Adams, D.M., Russell, J.E.A. & Gaby, S.H. 2000, "Perceptions of organizational readiness for change: Factors related to employees' reactions to the implementation of team-based selling", *Human Relations*, vol. 53, no. 3, pp. 419-442.
- Elias, S.M. 2009, "Employee Commitment in Times of Change: Assessing the Importance of Attitudes toward Organizational Change", *Journal of Management*, vol. 35, no. 1, pp. 37-55.
- Erturk, A. (2008). 'A trust based approach to promote employees' openness to organisational change in Turkey', *International Journal of Manpower*, 29, pp. 462-483.
- Etzioni, A. 1961, *A comparative analysis of complex organizations*, Free Press, Glencoe, NY.
- Ezzamel, M., Lilley, S. & Willmott, H. 1996, "The View from the Top: Senior Executives' Perceptions of Change Management Practices in UK Companies", *British Journal of Management*, vol. 7, no. 2.
- Fatima, M. 2002, "Management of Quantum Change in Pakistan Organizations", *The Journal*, vol. 7, no. 3, pp. 1-17.

- Field, A. 2006, *Discovering Statistics Using SPSS*, Second Edition edn, SAGE Publications, London.
- Field, A. & Hole, G. 2003, *How to Design and Report Experiments*, SAGE, London.
- Flick, U. 2002, *An introduction to qualitative research*. 2nd ed., London, Sage.
- Floyd, F.J. & Widaman, K.F. 1995, "Factor analysis in the development and refinement of clinical assessment instruments", *Psychological Assessment*, vol. 7, pp. 286-299.
- Fornell, C. & Larcker, D.F. 1981, "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error", *Journal of Marketing Research (JMR)*, vol. 18, no. 1, pp. 39-50.
- Gaertner, K.N. & Nollen, S.D. 1989, "Career Experiences, Perceptions of Employment Practices, and Psychological Commitment to the Organization", *Human Relations*, vol. 42, no. 11, pp. 975-991.
- Galais, N. & Moser, K. 2009, "Organizational commitment and the well-being of temporary agency workers: A longitudinal study", *Human Relations*, vol. 62, no. 4, pp. 589-620.
- Garver, M.S. & Mentzer, J.T. 1999, "Logistic research methods: Employing structural equation modeling to test for construct validity", *Journal of Business Logistic*, vol. 20, no. 1, pp. 33-57.
- Gattiker, U.E. & Larwood, L. 1988, "Predictors for Managers' Career Mobility, Success, and Satisfaction", *Human Relations*, vol. 41, no. 8, pp. 569-591.
- Gautam, T., van Dick, R. & Wagner, U. 2001, "Organizational Commitment in Nepalese Settings", *Asian Journal of Social Psychology*, vol. 4, no. 3, pp. 239.
- Gellatly, I.R. 1995, "Individual and group determinants of employee absenteeism: Test of a casual model", *Journal of Organizational Behavior*, vol. 16, pp. 469-485.
- Gilbert, N. 2001, *Researching Social Life*, 2nd edn, Sage, London.
- Gleick, J. 1987, *Chaos: Making a New Science*, Sphere Book Ltd, London.

- Goldstein, J. 1988, "A Far-from-Equilibrium Systems Approach to Resistance to Change", *Organizational dynamics*, vol. 17, no. 2, pp. 16-26.
- Good, L.K., Page, T.J., Jr. & Young, C.E. 1996, "Assessing Hierarchical Differences in Job-Related Attitudes and Turnover among Retail Managers", *Journal of the Academy of Marketing Science*, vol. 24, no. 2, pp. 148-156.
- Goulet, L.R. & Singh, P. 2002, "Career Commitment: A Re-examination and an Extension", *Journal of Vocational Behavior*, vol. 61, no. 1, pp. 73-91.
- Government of Pakistan, 2002, '*The Taskforce on Improving of Higher Education in Pakistan: Challenges and Opportunities*', Ministry of Education, Islamabad.
- Greenhaus, J., Parasurman, S., & Wormley, W. 1990, "Effects of race on organizational experiences, job performance evaluation, and career outcomes", *Academy of Management Journal*, vol. 33, no. 1, pp. 64-86.
- Greenhaus, J.H. & Beutell, N.J. 1985, "Sources of Conflict between Work and Family Roles", *Academy of Management Review*, vol. 10, no. 1, pp. 76-88.
- Gregory, D. M., Way, C. Y. LeFort, S., Barrett, B. J., & Parfrey, P. S. 2007, "predictors of registered nurses' organizational commitment and intent to stay", *Health Care Management Review*, vol. 32, no. 2, pp. 119-127.
- Haider, S. Z. 2008, "Challenges in Higher Education: Special reference to Pakistan and South Asian Developing Countries", *NONPARTISAN EDUCATION REVIEW*, vol. 4, no. 2, pp.1-12.
- Hair, J. F. , Black, Jr. W.C., Babin, B.J., Anderson, R.E. & Tatham, R.L. 2006, *Multivariate Data Analysis*, 6<sup>th</sup> , PEARSON Prentice Hall, USA.
- Hall, D. T., & Associates 1986, *Career development in organizations*, Jossey-Boss, San Francisco.
- Hall, D.T. (1976), *Careers in Organizations*, Goodyear, Santa Monica, CA.

- Hall, T.D. 1971, "A theoretical model of career subidentity in organizational settings", *Organizational Behavior and Human Performance*, vol. 6, pp. 50-76.
- Hampel P. S & Maris G. Martinsons 2009, "Developing international organizational change theory using cases from China", *Human Relations*, vol. 62, no. 4, pp. 459-499.
- Hanpachern, C., Morgan, G.A. & Griego, O.V. 1998, "An extension of the theory of margin: A framework for assessing readiness for change", *Human Resource Development Quarterly*, vol. 9, no. 4, pp. 339.
- Hardesty, D.M. & Bearden, W.O. 2004, "The use of expert judges in the scale development: Implications for improving face validity of measures of unobservable constructs", *Journal of Business Research*, vol. 57, no. 2, pp. 98-107.
- Hart, C. 1998, *Doing a Literature Review: Realising the Social Science Research Imagination*. London: Sage.
- Hattie, J. 1985, "Methodology Review: Assessing unidimensionality of tests and items", *Applied Psychological Measurement*, vol. 9, no. 2, pp. 139-164.
- Hayes, I. D. 1990, *The crises of education in Pakistan*. Lahore, Pakistan: Vanguard Books.
- Healy, M. & Perry, C. 2000, "Comprehensive Criteria to Judge Validity and Reliability of Qualitative Research within the Realism Paradigm", *Qualitative Market Research: An International Journal*, vol. 3, no. 3, pp. 118-126.
- Heracleous, L. & Langham, B. 1996, "Strategic change and organizational culture at hay management consultants", *Long Range Planning*, vol. 29, no. 4, pp. 485-494.
- Herscovitch, L. & J. P. Meyer, (2002). 'Commitment to organizational change: extension of a three-component model', *Journal of Applied Psychology*, 87, pp. 474-487.
- HEC, 2005, Medium Term Development Framework 2005-2010, Higher Education Commission of Pakistan (HEC), Islamabad, Pakistan.



- HEC, 2009, Model Tenure Track Process Statues, Document Version 1.8, Higher Education Commission of Pakistan (HEC), Islamabad, Pakistan.
- HEC, no date a, Statistical Booklet on Higher Education Pakistan (2001-02 to 2003-04). Higher Education Commission of Pakistan (HEC), Islamabad, Pakistan.
- HEC, no date b, Higher Education in Pakistan: Towards a Reform Agend, Higher Education Commission of Pakistan (HEC), Islamabad, Pakistan.
- Holloway, P.J. & Mooney, J.A. 2004, "What's a research protocol?", *Health Education Journal*, vol. 63, no. 4, pp. 374-384.
- Holt, D.T., Armenakis, A.A., Feild, H.S. & Harris, S.G. 2007, "Readiness for Organizational Change: The Systematic Development of a Scale", *Journal of Applied Behavioral Science*, vol. 43, no. 2, pp. 232-255.
- Hom, P.W., Katerberg, R. & Hulin, C.L. 1979, "Comparative examination of three approaches to the prediction of turnover", *Journal of Applied Psychology*, vol. 64, no. 3, pp. 280-290.
- Huselid, M.A. 1995, "The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance", *Academy of Management Journal*, vol. 38, no. 3, pp. 635-672.
- Huselid, M.A. & Day, N.E. 1991, "Organizational commitment, job involvement, and turnover: A substantive and methodological analysis", *Journal of Applied Psychology*, vol. 76, no. 3, pp. 380-391.
- Hussey, J. & Hussey, R. 1997, *Business Research, A practical guide for undergraduate and postgraduate students*, Palgrave, New York.
- Ilggen, D.R., & Pulakos, E.D. 1999. 'Employee performance in today's organizations. In D. R. Ilggen, and E.D.Pulakos (Eds.) *The changing nature of performance: Implications for staffing, motivation, and development*'. (1-8). San Francisco: Jossey-Boss.

- Jansen, K.J. 2000, "The emerging dynamics of change: resistance, readiness, and momentum", *Human Relations*, vol. 23, pp. 53-55.
- Jick, T.D. 1979, "Mixing Qualitative and Quantitative Methods: Triangulation in Action", *Administrative Science Quarterly*, vol. 24, no. 4, pp. 602-611.
- Jimmieson N. L., Peach, M. & White, K. M. 2008, "Utilizing the theory of planned behavior to inform change management: An investigation of employee intentions to support organizational change", *The Journal of Applied Behavioral Science*, vol. 44, no. 2, pp. 237-262.
- Jimmieson, N.L., Peach, M. & White, K.M. 2008, "Utilizing the Theory of Planned Behavior to Inform Change Management: An Investigation of Employee Intentions to Support Organizational Change", *Journal of Applied Behavioral Science*, vol. 44, no. 2, pp. 237-262.
- Jokisaari, M. & Nurmi, J. 2009, "Changes in newcomers' supervisors support and socialization outcomes after organizational entry", *Academy of Management Journal*, vol. 52, no. 3, pp. 527-544.
- Jones, R.A., Jimmieson, N.L. & Griffiths, A. 2005, "The Impact of Organizational Culture and Reshaping Capabilities on Change Implementation Success: The Mediating Role of Readiness for Change", *Journal of Management Studies*, vol. 42, no. 2, pp. 361-386.
- Joreskog, K. & Sorbom, D. 1996, *LISREL 8: User's Reference Guide*, Scientific Software International Inc. Chicago, USA.
- Judge, T.A. & Bretz, R.D., JR 1994, "Political Influence Behavior and Career Success", *Journal of Management*, vol. 20, no. 1, pp. 43-65.
- Judge, T.A., Cable, D.M., Boudreau, J.W. & Bretz Jr., R.D. 1995, "An Empirical Investigation of the Predictors of Executive Career Success", *Personnel Psychology*, vol. 48, no. 3, pp. 485-519.

- Judge, T.A., Thoresen, C.J., Pucik, V. & Welbourne, T.M. 1999, "Managerial coping with organizational change: A dispositional perspective", *Journal of Applied Psychology*, vol. 84, no. 1, pp. 107-122.
- Kaarst-Brown, M.L. 1999, "Five symbolic roles of the external consultant", *Journal of Organizational Change Management*, vol. 12, no. 6, pp. 540-561.
- Kaiser, H.F. 1974, "An Index of Factorial Simplicity", *Psychometrika*, vol. 39, pp. 31-36.
- Kangas, S., Kee, C.C. & McKee-Waddle, R. 1999, "Organizational factors, nurses' job satisfaction, and patient satisfaction with nursing care", *Journal of Nursing Administration*, vol. 29, no. 1, pp. 32-42.
- Kanungo, R.N. 1982, *Work Alienation: An Integrative Approach*, Praeger, New York.
- Kiesler, R.M. 1971, *The Psychology of Commitment*, Academic Press, New York.
- Kim, H. 1995, "An exploratory study on career development systems in Korean business", *The Korean Personnel Administration Journal*, vol. 19, pp. 233-258.
- Kim, W.C. & Mauborgne, R. 1998, "Procedural Justice, Strategic Decision Making, and the Knowledge Economy", *Strategic Management Journal (1986-1998)*, vol. 19, no. 4, pp. 323.
- Kline, R.B. 1998, *Principles and practice of structural equation modeling*, Guilford, New York.
- Konovsky, M.A. & Cropanzano, R. 1991, "Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance", *Journal of Applied Psychology*, vol. 76, no. 5, pp. 698-707.
- Kopelman, R.E. 1985, "Job Redesign and Productivity: A review of the Evidence", *National Productivity Review*, vol. 4, no. 3, pp. 237-255.
- Kotter, J.P. 1996, *Leading Change*, Harvard Business School Press, Boston.

- Kotter, J.P. 1995, "Leading Change: Why Transformation Efforts Fail. (cover story)", *Harvard business review*, vol. 73, no. 2, pp. 59-67.
- Kotter, J.P. & Schlesinger, L.A. 1979, "Choosing strategies for change", *Harvard business review*, vol. 57, no. 2, pp. 106-114.
- Kriel, P. J. 2006, The Relationship of Morality, Ethics and Justice to Quality of Worklife, Unpublished PhD Thesis, Southern Cross University, NSW, Australia. (Online accessed on 12-03-2008)
- Lages, L. 2000, *The Marketing Strategy-Performance Relationship: A Structural Model Examination of Portuguese Export Market Ventures*, Warwick Business School.
- Lehman, W.E.K., Greener, J.M. & Simpson, D.D. 2002, "Assessing organizational readiness for change", *Journal of Substance Abuse Treatment*, vol. 22, no. 4, pp. 197-209.
- Lewin, K. 1951, *Field Theory in Social Sciences*, Harper and Row, New York.
- Lewis-Beck, M. 1993, "Multiple Regression" in *International Handbooks of Qualitative Applications for the Social Sciences*, 2nd edn, Sage, London, pp. 39-68.
- Lincoln, Y.S. & Guba, E.G. 1985, *Naturalistic inquiry*, Sage Publication, Beverly Hills, CA.
- Line, R. 2005, "The structure and function of attitudes towards organizational change", *Human Resource Development Review*, vol. 4, pp. 8-32.
- Liou, K. & Nyhan, R.C. 1994, "Dimensions of Organizational Commitment in the Public Sector: an Empirical Assessment", *Public Administration Quarterly*, vol. 18, no. 1, pp. 99-118.
- Litwin, M.S. 1995, *How to measure survey reliability and validity*. Sage Publication Inc. London.
- London, M. 1983, "Toward a Theory of Career Motivation", *Academy of Management Review*, vol. 8, no. 4, pp. 620-630.

- Madsen, S.R. 2003, "Wellness in the workplace: Preparing employees for change", *Organization Development Journal*, vol. 21, no. 1, pp. 46.
- Madsen, S.R., Miller, D. & John, C.R. 2005, "Readiness for organizational change: Do organizational commitment and social relationships in the workplace make a difference?", *Human Resource Development Quarterly*, vol. 16, no. 2, pp. 213.
- Martin, A.J., Jones, E.S. & Callan, V.J. 2006, "Status differences in employee adjustment during organizational change", *Journal of Managerial Psychology*, vol. 21, no. 1/2, pp. 145.
- Martin, A.J., Jones, E.S. & Callan, V.J. 2005, "The role of psychological climate in facilitating employee adjustment during organizational change", *European Journal of Work & Organizational Psychology*, vol. 14, no. 3, pp. 263-289.
- Martin, M.M. 1998, "Trust Leadership", *Journal of Leadership and Organizational Studies*, vol. 5, no. 3, pp. 41-49.
- Maslow, A. 1954, *Motivation and Personality*, Harper & Row, New York.
- Mathews, B.P. & Shepherd, J.L. 2002, "Dimensionality of Cook and Wall's (1980) British Organizational commitment Scale revisited", *Journal of Occupational and Organizational Psychology*, vol. 75, pp. 369.
- Mathieu, J.E. & Zajac, D.M. 1990, "A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment", *Psychological bulletin*, vol. 108, no. 2, pp. 171-194.
- Maylor, H. & Blackmon, K. 2005, *Researching Business and Management*. London: Palgrave, Macmillan.
- McClelland, D. C. 1965, "Toward a theory of motive acquisition", *American Psychologist*, vol. 20, pp.321-333.
- McGinnis, S.K. & Morrow, P.C. 1990, "Job attitudes among full- and part-time employees", *Journal of Vocational Behavior*, vol. 36, no. 1, pp. 82-96.

McNabb, D.E. & Sepic, T.F. 1995, "Culture, Climate, and Total Quality Management: Measuring Readiness for Change", *Public Productivity and Management Review*, vol. 18, no. 4, pp. 369-385.

McNeese-Smith, D.K. 1997, "The influence of manager behavior on nurses' job satisfaction, productivity, and commitment", *Journal of Nursing Administration*, vol. 27, no. 9, pp. 47-55.

Medium Term Development Framework (MTDF) 2005-10, 2005, Higher Education Commission, Islamabad. Web page

[http:// www.hec.gov.pk/html/about\\_hec/HEC\\_med\\_dev.pdf](http://www.hec.gov.pk/html/about_hec/HEC_med_dev.pdf)

Memon, G. R. 2007, "Education in Pakistan: The Key Issues, Problems and The New Challenges," *Journal of Management and Social Sciences*, vol. 3, no. 1, pp. 47-55.

Merriam-Webster. (1999). *Merriam-Webster's Collegiate Dictionary*. 10th edition. Springfield, MA:

Meyer, J.P. & Allen, N.J. 1984, "Testing the 'side-bet theory' of organizational commitment: Some methodological considerations", *Journal of Applied Psychology*, vol. 69, no. 3, pp. 372-378.

Meyer, J.P., Allen, N.J. & Smith, C.A. 1993, "Commitment to organizations and occupations: Extension and test of a three-component conceptualization", *Journal of Applied Psychology*, vol. 78, no. 4, pp. 538-551.

Meyer, J.P., Allen, N.J. & Smith, C.A. 1993, "Commitment to organizations and occupations: Extension and test of a three-component conceptualization", *Journal of Applied Psychology*, vol. 78, no. 4, pp. 538-551.

Meyer, J.P. & Herscovitch, L. 2001, "Commitment in the workplace: Toward a general model", *Human Resource Management Review*, vol. 11, no. 3, pp. 299.

Mileti, D.S., Gillespie, D.F. & Haas, J.E. 1977, "Size and Structure in Complex Organizations", *Social Forces*, vol. 56, no. 1, pp. 208-217.

- Miller and Brewer 2003, *The A-Z of social research*, Sage, London.
- Miller, D., Madsen, S.R. & John, C.R. 2006, "Readiness for Change: Implications on Employees' Relationship with Management, Job Knowledge and Skills, and Job Demands", *Journal of Applied Management and Entrepreneurship*, vol. 11, no. 1, pp. 3.
- Moblen, W., Horner, O., & Hollingsworth, A. 1978. 'An evaluation of precursors of hospital employee turnover'. *Journal of Applied Psychology*, 63(4): 408-414.
- Mohanthy, J. 2000, *Current trends in higher education*. New Delhi, India: Deep & Deep.
- Montgomery, D., Peck, E., & Vining G. 2001, *Introduction to Linear Regression Analysis*, 3<sup>rd</sup>, Wiley: Chichester.
- Morgan, N., Kaleka, A., & Katsikeas, C. 2004, "Antecedents of Export Venture Performance: A Theoretical Model and Empirical Assessment", *Journal of Marketing*, vol. 68, no. 1, pp. 90-108.
- Morrow P. C. 1993, *The theory and measurement of commitment*, Greenwich, CT, JAL.
- Morrow, P.C. 1983, "Concept Redundancy in Organizational Research: The Case of Work Commitment", *Academy of Management Review*, vol. 8, no. 3, pp. 486-500.
- Mottaz, C.J. 1988, "Determinants of Organizational Commitment", *Human Relations*, vol. 41, no. 6, pp. 467-482.
- Mowday, R. T., Porter, I. W., & Dubin, R. 1974, "Unit performance, situational factors and employee attitudes in spatially separated work units", *Organizational Behaviour and Human Performance*, vol. 12, pp. 231-248.
- Mowday, R.T., Steers, R.M. & Porter, L.W. 1979, "The measurement of organizational commitment", *Journal of Vocational Behavior*, vol. 14, no. 2, pp. 224-247.
- Mueller, R. 1996, *Basic Principles of Structural Equation Modelling*, Springer, London.

- Mughal, N. A. & Manzoor. 1999, *Issues in higher education: Problems and prospects of the Pakistani university*. Jamshoro, Pakistan: University of Sindh.
- Nadvi, K. & Robinson, M. 2004, *Pakistan drivers of change: Synthesis and policy implications*. Institute of Development Studies, University of Sussex, Falmer, UK.  
Available at: [www.gsdrc.org/docs/open/DOC35.pdf](http://www.gsdrc.org/docs/open/DOC35.pdf) (accessed on 25/06/2009)
- Narayan, A., Steele-Johnson, D., Delgado, K.M. & Cole, P.A. 2007, "Differential Effects of Pertaining Influences on Readiness to Change", *Journal of Psychology*, vol. 141, no. 1, pp. 47-60.
- National Education Policy, 2009, Government of Pakistan, Ministry of Education, Islamabad.
- Netemeyer, R., Bearden, W., & Sharma, S. 2003, *Scaling Procedure: Issues and Applications*, Sage, London.
- Neuberg, S., Judice, T., & West, S. 1997, "What the Need for Closure Scale Measures and What It Does Not: Toward Differentiating among Related Epistemic Motives", *Journal of Personality and Social Psychology*, vol. 72, no. 6, pp. 1396-1412.
- Neuman, J.H. & Baron, R.A. 1998, "Workplace Violence and Workplace Aggression: Evidence Concerning Specific Forms, Potential Causes, and Preferred Targets", *Journal of Management*, vol. 24, no. 3, pp. 391-419.
- Norušis, M. J. 1995. *SPSS 6.1 Guide to Data Analysis*. Englewood Cliffs: Prentice Hall.
- Nunnally, J. 1978, *Psychometric Methods*, 2<sup>nd</sup>, McGraw-Hill, New York, NY.
- Nutt, P.C. & Backoff, R.W. 1993, "Transforming Public Organizations with Strategic Management and Strategic Leadership", *Journal of Management*, vol. 19, no. 2, pp. 299-347.
- Obaid, Z. 2006, "Reforming Political Universities: An Organizational Analysis of University of Peshawar", Unpublished Thesis, Department of Administration and Organization, University of Bergen, Norway.



- Oliver, N. 1990, "Rewards, investments, alternatives and organizational commitment: Empirical evidence and theoretical development", *Journal of Occupational Psychology*, vol. 63, no. 1, pp. 19-31.
- Oppenheim, A.N. 1992, *Questionnaire design, interviewing and attitude measurement*, Continuum, London.
- O'Reilly, C.A. & Chatman, J. 1986, "Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on pro-social behaviour", *Journal of Applied Psychology*, vol. 71, no. 3, pp. 492-499.
- Organ, D.W. 1988, *Organizational Citizenship Behavior: The Good Soldier Syndrome*, Lexington Books, Lexington.
- Osama, A., Anjam, A., Lakha, S. K., Gilani, S. Z., & King, C., 2009, "Pakistan's reform experiment", *Nature*, vol. 461, no. 13. Pp-38-39.
- Oxfam, 2006, *Girls' Education in South Asia*, Education and Gender Equality Series, Programme Insights, Oxford: Oxfam GB.
- Palmer, I. & Dunford, R. 2008, "Organizational Change and the Importance of Embedded Assumptions", *British Journal of Management*, vol. 19, pp. S20-S32.
- Park, J. S. & Kim, T. H. 2009, "Do types of organizational culture matter in nurse job satisfaction and turnover intention?", *Leadership in Health Services*, vol. 22, no. 1, pp. 20-38.
- Peach, M., Jimmieson, N.L. & White, K.M. 2005, "BELIEFS UNDERLYING EMPLOYEE READINESS TO SUPPORT A BUILDING RELOCATION: A Theory of Planned Behavior perspective", *Organization Development Journal*, vol. 23, no. 3, pp. 9.
- Penley, L.E. & Gould, S. 1988, "Etzioni's model of organizational involvement: A perspective for understanding commitment to organizations", *Journal of Organizational Behavior (1986-1998)*, vol. 9, no. 1, pp. 43.

- Peter, P. 1981, "Construct Validity: A Review of Basic Issues and Marketing Practices", *Journal of Marketing Research*, vol. 18, no. 2, pp. 133-145.
- Peter, P. 1979, "Reliability: A review of Psychometric Basics and Recent Marketing Practices", *Journal of Marketing Research*, vol. 16, no. 1, pp. 6-17.
- Peter, J.P. & Churchill Jr., G.A. 1986, "Relationships among Research Design Choices and Psychometric Properties of Rating Scales: A Meta-Analysis", *Journal of Marketing Research (JMR)*, vol. 23, no. 1, pp. 1-10.
- Pinder, C. C. 1998, *Work motivation in organizational behaviour*, New York: Prentice-Hall.
- Poon, J.M.L. 2004, "Career commitment and career success: moderating role of emotion perception", *Career Development International*, vol. 9, no. 4, pp. 374-390.
- Powpaka, S. 1998, "Factor Affecting the Adoption of Marketing Orientation: The Case of Thailand", *Journal of International Marketing*, vol. 6, no. 1, pp. 33-55.
- Price, J. L., & Mueller, C.W. 1986, *Absenteeism and turnover of hospital employees*. Greenwich,CT: JAI.
- Price, J.L. & Mueller, C.W. 1981, "A Causal Model of Turnover for Nurses", *Academy of Management Journal*, vol. 24, no. 3, pp. 543-565.
- Rafferty, A.E. & Simons, R.H. 2006, "An Examination of the Antecedents of Readiness for Fine-Tuning and Corporate Transformation Changes", *Journal of Business and Psychology*, vol. 20, no. 3, pp. 325.
- Reige, A.M. 2003, "Validity and Reliability Tests in Case Study Research: A Literature Review with "Hand-on" Application for Each Research Phase", *Qualitative Market Research: An International Journal*, vol. 6, no. 2, pp. 75-86.
- Reilly, N.P. & Orsak, C.L. 1991, "A career stage analysis of career and organizational commitment in nursing", *Journal of Vocational Behavior*, vol. 39, no. 3, pp. 311-330.

- Remenyi, D., Williams, B., Money, A. & Swartz, E. 1998, *Doing Research in Business and Management: An Introduction to Process and Methods*, Sage, London.
- Robson, C. 1993, *Real World Research*, Blackwell, Oxford.
- Rosenblatt, Z. & Inbal, B. 1999, "Skill Flexibility among Schoolteachers: Operationalization and Organizational Implication", *Journal of Educational Administration*, vol. 37, no. 4, pp. 345-367.
- Rousseau, D. M., Tijoriwala, S. A. 1999, "What's a good reason to change? Motivated reasoning and social accounts in promoting organizational change", *Journal of Applied Psychology*, vol. 84, no. 4, pp. 514-528.
- Sagie, A. 1997, "A leader direction and employee participation in decision making: Contradictory or compatible", *Applied Psychology*, vol. 46, no. 4, pp. 387-416.
- Sagie, A. 1998, "Employee Absenteeism, Organizational Commitment, and Job Satisfaction: Another Look,", *Journal of Vocational Behavior*, vol. 52, no. 2, pp. 156-171.
- Salomon, G. 1993, *Distributed cognitions: Psychological and educational considerations*, Cambridge University Press, Cambridge.
- Sawahel, W. 2009, *Pakistan: Reform model for developed countries*, University World News, Issue: 0080.
- Schein, E.H. 1996, "Kurt Lewin's Change Theory in the Field and in the Classroom: Notes Toward a Model of Managed Learning<sup>1</sup>", *Systems Practice*, vol. 9, no. 1, pp. 27-47.
- Seibert, S.E., Crant, J.M. & Kraimer, M.L. 1999, "Proactive personality and career success", *Journal of Applied Psychology*, vol. 84, no. 3, pp. 416-427.
- Sekaran, U. 2006, *Research Methods for Business: A Skill Building Approach*, 4th edn, John Wiley and Sons, New Delhi.

- Shami, P.A. & Hussain, K.S. 2005, Development of Education in Pakistan, Academy of Educational Planning and Management (AEPAM), Ministry of Education, Islamabad, Research Study No. 183.
- Sharif, A. M. 2004, "Knowledge representation within information system in manufacturing environment", Unpublished Thesis, Department of Information Systems and Computing, Brunel University, UK.
- Sharif, M., Safdar, S., Mubeen, C., Hussain, S., & Rasheed S. 2007, "Factors Affecting Family Size and Sex Preference: A Study of Urban Tehsil Faisalabad (Pakistan)", *Journal of Agriculture & Social Sciences*, vol. 3, no. 1, pp. 21-24.
- Shirom, A. 1994, *The system perspective in labour relations: Towards a new model*, JAI Press, Greenwich, CN.
- Siddiqui, Z. S. 2006, Higher education reforms in Pakistan: Access and Equity, First International Conference on Assessing Quality in Higher Education
- Simpson, R. 1998, "Presenteeism, Power and Organizational Change: Long Hours as a Career Barrier and the Impact on the Working Lives of Women Managers", *British Journal of Management*, vol. 9, no. 3, pp. S37-S50.
- Singh, J. 1995, "Measurement Issues in Cross-National Research", *Journal of International Business Studies*, vol. 26, no. 3, pp. 597-619.
- Smith, I. 2006, "Continuing professional development and workplace learning - 15", *Library Management*, vol. 27, no. 4/5, pp. 300.
- Smith, I. 2005, "Achieving readiness for organisational change", *Library Management*, vol. 26, no. 6/7, pp. 408.
- Solomon, E.E., Bishop, R.C. & Dresser, R.K. 1986, "Organization moderators of gender differences in career development: A facet classification", *Journal of Vocational Behavior*, vol. 29, no. 1, pp. 27-41.
- Spector, P.E., 1997, *Job Satisfaction: Application, Assessment, Causes, and Consequences*. SAGE Publications, London.

- Steenkamp, J. E. M. and Trijp, H. C. M. 1991, "The use of LISERL in validating Marketing Constructs", *International Journal of Research in Marketing*, vol. 8, pp. 283-299.
- Steers, R.M. 1977, "Antecedents and Outcomes of Organizational Commitment", *Administrative Science Quarterly*, vol. 22, no. 1, pp. 46.
- Sullivan, E.I. & Decker, P.J. 1992, *Effective management in nursing*, 3rd edn, Addison Wesley, Redwood City, CA.
- Susanto, A.B. 2008, "Organizational readiness for change: A case study on change readiness in a manufacturing company in Indonesia", *International Journal of Management Perspectives*, vol. 2, no. 1, pp. 50-61.
- Tabachnick, B. G., & Fidell, L. S. 2007. *Using multivariate statistics* (5<sup>th</sup> ed.). Upper Saddle River, NJ.: Pearson International.
- Tannenbaum, R. & Hanna, R.W. 1994, "Holding on, letting go, and moving on: understanding a neglected perspective on change" in *Human Systems Development* Jossey-Bass, San Francisco, CA.
- Tetenbaum, T.J. 1998, "Shifting Paradigms: From Newton to Chaos", *Organizational dynamics*, vol. 26, no. 4, pp. 21-32.
- Ticehurst, G.W. & Veal, A.J. 2000, *Business research methods: a managerial approach*, Longman, French Forest, NSW.
- USAID, 2008, Evolution of USAID Higher Education Portfolio Task Order No. REE-1-07-05-00053-00.
- Vakola, M., & Nikolaou, I. 2005, "Attitudes towards organizational change: What is the role of employees' stress and commitment?", *Employees Relations*, vol. 27, pp. 160-174.
- Vakola, M., Tsaousis, I., & Nikolaou, I. 2003, "The role of emotional intelligence and personality variables on attitudes towards organizational change", *Journal of Managerial Psychology*, vol. 19, pp. 88-110.

- Vakola, M., Tsausis, I. & Nikolaou, I. 2004, "The role of emotional intelligence and personality variables on attitudes toward organisational change", *Journal of Managerial Psychology*, vol. 19, no. 1/2, pp. 88.
- VanYperen, N.W. & van den Berg, A.E. 1999, "Towards a better understanding of the link between participation in decision-making and organizational citizenship behaviour: A multilevel analysis", *Journal of Occupational & Organizational Psychology*, vol. 72, no. 3, pp. 377-392.
- Verschuren, P., Doorewaard, H. (1999), *Designing a Research Project*, LEMMA, Utrecht,
- Vogt, W.P. 2007, *Quantitative research methods for professionals*, Pearson, Boston.
- Waldrop, M.M. 1992, *Complexity: The Emerging Science at the Edge of Order and Chaos*, SIMON & SCHUSTER PAPERBACKS, New York.
- Wanberg, C.R. & Banas, J.T. 2000, "Predictors and outcomes of openness to changes in a reorganizing workplace", *Journal of Applied Psychology*, vol. 85, no. 1, pp. 132-142.
- Weber, P.S. & Weber, J.E. 2001, "Changes in employee perceptions during organizational change", *Leadership & Organization Development Journal*, vol. 22, no. 5/6, pp. 291.
- West, T.D. 1998, "Comparing change readiness, quality improvement, and cost management among veterans administration, for-profit, and non-profit hospitals", *Journal of health care finance*, vol. 25, no. 1, pp. 46.
- White, L. 2000, "Changing the "whole system" in the public sector", *Journal of Organizational Change Management*, vol. 13, no. 2, pp. 162.
- Wiener, Y. & Vardi, Y. 1980, "Relationships between job, organization, and career commitment and work outcomes: An integrative approach", *Organizational Behavior and Human Performance*, vol. 26, pp. 81-96.

- World Bank, 2006, Higher Education Policy Note: Pakistan: an Assessment of the Medium-Term Development Framework, Report No. 37247, Human Development Sector, South Asia Region.
- World Bank, 2009, World Development Indicator, Washington D. C.
- Wright, K.L. & Thompsen, J.A. 1997, "Building the people's capacity for change", *The TQM Magazine*, vol. 9, no. 1, pp. 36-41.
- Yin, R.K. 1994, *Case study research: design and methods*, Sage Publication, Thousands Oakes, California.
- Yoon, J. & Thye, S.R. 2002, "A Dual Process Model of Organizational Commitment: Job Satisfaction and Organizational Support", *Work and Occupations*, vol. 29, no. 1, pp. 97-124.
- Zangaro, G.A. 2001, "Organizational Commitment: A Concept Analysis", *Nursing forum*, vol. 36, no. 2, pp. 14.

## Appendix 1 Survey Questionnaire

### Section “A” Demography (please tick the relevant box)

1. Gender  Male  Female
2. Age  Less than 21  21-30  31-40  
 41-50  51 – 60  above 60
3. Present Marital Status  Single  Married  Divorced / Widow  
 Other
4. Present Employment Status  Lecturer  Assistant Professor  
 Associate Professor  Professor
5. Highest Education Level  B.E/M.B.B.S/ Masters Degree  MS/M.Phil Degree  
 Ph.D Degree
6. Number of Dependents  1-2  3-4  5-6  
 7+  None
7. Years on present job  < 1 year  1-5 years  6-10 years  
 11-15 years  16 -20 years  21 and more
8. Years with present employer  < 1 year  1-5 years  6-10 years  
 11-15 years  16 -20 years  21 and more

### Section “B” Readiness for Organisational Change

Please tick on the scale below to what extent you like with each of the following statement about the recent changes in the university: (1 = Very Unlikely, 2 = Unlikely, 3 = Somewhat Unlikely, 4 = Neutral, 5 = Somewhat Likely, 6 = Likely, 7 = Very Likely).

- |  | Very<br>Likely           | ←—————→                  |                          |                          |                          |                          | Very<br>Unlikely         |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|  | 1                        | 2                        | 3                        | 4                        | 5                        | 6                        | 7                        |
| 9. My willingness to work more because of the change is    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. My willingness to solve university problems is         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. My willingness to be a part of the new project is      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. My willingness to create new ideas is                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. My willingness to find ways to make the change fail is | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



		Very Likely	←—————→					Very Unlikely
		1	2	3	4	5	6	7
14.	My willingness to do things in a new or creative way is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	My willingness to change the way I work because of the change is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	My willingness to take responsibility for the change if it fails in my area is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	My willingness to be a part of the change programme is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	My willingness to learn new things is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	My willingness to change something even if it appears to be working	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	My willingness to support change is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	My willingness to improve what we are currently doing rather than implement a major change is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	My willingness to sell ideas about the change is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section “C” Employee Commitment for the Organisation**

Please tick on the scale below to what extent you agree with each of the following statement about the university: (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

		Strongly Agree	←—————→			Strongly Disagree
		1	2	3	4	5
23.	I am quite proud to be able to tell people who it is I work for	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	I sometimes feel like leaving the employment for good.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	I am not willing to put myself out just to help the university	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.	Even if the university were not doing too well financially, I would be reluctant to change to another employer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27. I feel myself to be part of the university
28. In my work I like to feel I am making some effort, not just for myself but for the university as well
29. The offer of a bit more money with another employer would not seriously make me think of changing my job
30. I would not recommend a close friend to join our staff
31. To know that my own work had made a contribution to the good of the university would please me
32. Compared to other employees, my work reward is proper in view of my training and education
33. Compared to other employees, my work reward is proper in view of my effort that I input.
34. Compared to other employees, my work reward is proper in view of my work experience
35. Compared to other employees, my work reward is proper in view of my work responsibilities
36. The procedures used to determine my pay raise are fair and consistent

**Section “D” Employee Commitment for the Career**

Please tick on the scale below to what extent you agree with each of the following statements (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

**Strongly Agree**  $\longleftrightarrow$  **Strongly Disagree**

37. If I could get another job different from this one and paying the same amount, I would probably take it
38. I definitely want a career for myself in my current area
39. If I could do it all over again, I would not choose to work in this profession
40. If I had all the money I need without working, I would probably still continue in this profession
41. I like this profession too well to give it up

42. This is the ideal profession for a work life
43. I am disappointed that I ever entered this profession
44. I spend a significant amount of time personal time reading profession related journals or books
45. This university prefers to promote from within rather than hire outsider for high level positions
46. Over all, this university does a good job placing competent people in position
47. This university does good job in moving people to new jobs when university require it
48. My job is like a hobby to me
49. It seems that my friends are more interested in their jobs
50. I feel fairly well satisfied with my present job
51. I feel that my job is no more interesting than others I could get
52. Each day of work seems like it will never end
53. I find really enjoyment in my work
54. I am disappointed that I ever took this job
55. The most important things that happen to me involve my job
56. To me my Job is only a small part of whom I am
57. I am very much involved personally in my job
58. I live, eat and breathe my job
59. I have very strong ties to job
60. My boss shows me how to improve my performance
61. I can communicate well with my boss
62. I respect my boss's judgment on my issue
63. My boss lets me know what is expected of me
64. My boss encourages me to give my best efforts

65. My work group has helped find solutions to problems
66. Training is regarded as a way to improve performance
67. This university has a well defined training and skills development programmes for the employees
68. I am given a real opportunity to improve my skills in this University
69. I have been well trained by this university for my current job
70. This university has not trained me well for potential future Jobs

**Section “E” Social Relationships in the Workplace**

Please tick on the scale below to what extent you agree with each of the following statements about the social relationships at the workplace: (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

- |  | <b>Strongly<br/>Agree</b> | ←————→                   | <b>Strongly<br/>Disagree</b> |
|--|---------------------------|--------------------------|------------------------------|
| 71. My interpersonal relationships with my co workers are excellent  | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>     |
| 72. Working with others is often difficult                           | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>     |
| 73. My relationship to the leaders in my university is very positive | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>     |
| 74. The people I have met at my job are great                        | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>     |

**(Thank you for taking the time to complete the questionnaire)**

## Appendix 2 Covering Letter



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Subject: Participation in a survey questionnaire about a study of determinants of employee readiness for organisational change.

Dear -----

I am writing to introduce my PhD study on “Determinants of Employee Readiness for Organisational Change”. This research study is sponsored by the Higher Education Commission of Pakistan and is being carried out at Brunel Business School, Brunel University, UK. It has approval from a Business School Research Ethics Committee, Brunel University.

This research involves completion of a questionnaire that comprises questions about demography, employee readiness for change, employee commitment for the organisation and career, and social relationships in the workplace. The participants of this study include different cadres of academics / faculty members at public sector higher education institutions in Pakistan.

In the hope that you are able to take part in this study and I am enclosing the consent form and the questionnaire. If you are happy to proceed please complete the attached form and return it to me within two weeks time of receiving it.

If you would like to discuss this with me in more detail please email/telephone me on the address/ telephone number given below. We hope to be complete the second phase of the study over the next four months and we look forward to your positive response.

Thank you for your help and time.

Yours sincerely,

**Naimatullah Shah**

*PhD Researcher*

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E-mail: [Naimatullah.Shah@brunel.ac.uk](mailto:Naimatullah.Shah@brunel.ac.uk)

### Appendix 3 Research Consent Form

Required for research involving human participants

**Title of Research:** Determinants of Employee Readiness for Organisational Change

**Researcher:** Naimatullah Shah, PhD Student, Brunel Business School, Brunel University

**Contact Information:** [Naimatullah.Shah@brunel.ac.uk](mailto:Naimatullah.Shah@brunel.ac.uk)

**Purpose of the Research:** To examine the employee attitudes and behaviours with the support of employee commitment for the organisation and career factors towards readiness for organisational change.

#### What is involved in participating?

I will ask you to complete the following survey questionnaire signed below serves to signify that you agree to participate in this study.

Your participation is voluntary and you can choose to decline to answer any question or even to withdraw at any point from the project. Anything you say will only be attributed to you with your permission: if not, the information will be reported in such a way as to make direct association with yourself impossible.

Confidentiality also means that the questionnaire will be coded and stored in such a way as to make it impossible to identify them directly with any individual (e.g. they will be organised by number rather than by name)

#### Consent:

I wish to be identified in the report YES  NO

I have read the above information and I agree to participate in this study (please tick)

Researcher's signature: \_\_\_\_\_

Date: \_\_\_\_\_

#### Appendix 4 Survey Questionnaire Coding and labelling

Q. No.	Question Code	Question Label
1	Gender	Gender
2	Age	Age
3	M-Status	Marital Status
4	Emp-Status	Employment Status
5	HE-Level	Higher Educational Level
6	N-Dependents	Number of Dependents
7	YP-Job	Years on Present Job
8	YP-Employer	Years with Present Employer
9	ROCH1	Work because of change
10	ROCH2	Solve organisation problems
11	ROCH3	Be a part of new project
12	ROCH4	Create new ideas
13	ROCH5	Ways to make change
14	ROCH6	Do things in a creative way
15	ROCH7	Change the ways
16	ROCH8	Take responsibility if it fails
17	ROCH9	Be a part of change programme
18	ROCH10	Learn new things
19	ROCH11	Change something even appears
20	ROCH12	Support change
21	ROCH13	Improve currently
22	ROCH14	Sell ideas
23	FOPR1	Proud to tell people
24	EMAT1	Sometimes feel like leaving
25	PSO1	Not willing to put just to help
26	EMAT2	Organisation not doing too well
27	FOPR2	I feel myself to be part
28	PSO2	I am making some efforts
29	EMAT3	Offer not make me think
30	FOPR3	Not recommend to friend
31	PSO3	Contribution to the organisation
32	PAWA1	Proper reward of training
33	PAWA2	Proper reward of efforts

34	PAWA3	Proper reward of experience
35	PAWA4	Proper reward of work
36	PAWA5	Pay raise procedure is fair
37	CACO1	I could get another job
38	CACO2	Want a career for myself
39	CACO3	Do it all over again
40	CACO4	I probably continue this profession
41	CACO5	I like this profession
42	CACO6	This is ideal profession
43	CACO7	Disappointed to enter
44	CACO8	Significant amount of time to read
45	PMTN1	Organisation prefers to promote
46	PMTN2	Organisation placing competent people
47	PMTN3	Organisation does good job
48	JOSA1	Job is like a hobby
49	JOSA2	My friends are more interested
50	JOSA3	I am fairly satisfied with my job
51	JOSA4	Job is no more interesting
52	JOSA5	Each day work never end
53	JOSA6	Really enjoy in my work
54	JOSA7	Disappointed taking this job
55	JOIN1	Important things to involve
56	JOIN2	Job is small part for me
57	JOIN3	I am much Involve personally in job
58	JOIN4	Live, eat and breathe my job
59	JOIN5	Strong ties to job
60	SPRE1	Improve performance
61	SPRE2	Communicate with supervisor
62	SPRE3	Respect supervisor's judgement
63	SPRE4	Supervisor lets me know
64	SPRE5	Supervisor encourage me
65	SPRE6	Work group help
66	TSDE1	Training improve performance
67	TSDE2	Organisation has training programmes
68	TSDE3	Opportunity to improve skills
69	TSDE4	Organisation well trained me
70	TSDE5	Organisation not trained me



71	SORE1	Interpersonal relations are excellent
72	SORE2	Working with others is difficult
73	SORE3	Relationship to the leaders are positive
74	SORE4	People are great

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## Appendix 5 Survey Questionnaire Coding and labelling

Q. No.	Variable Code	Variable Name	Question Numbers
1	Demography	Demography	1 – 8
1	ROCH	Readiness for Change	9 – 122
2	FOPR	Feeling of Pride	23, 27, 30
3	EMAT	Emotional Attachment	24, 26, 29
4	PSO	Personal Sense of Obligation	25, 28, 31
5	PAWA	Pays and Wages	32 – 36
7	CACO	Career Commitment	37 – 44
8	PMTN	Promotions	45 – 47
9	JOSA	Job Satisfaction	48 – 54
10	JOIN	Job Involvement	55 – 59
11	SPRE	Supervisor and Peer Relations	60 – 65
12	TSDE	Training and Skills Development	66 – 70
13	SORE	Social Relationships in the Workplace	71 – 74

## Appendix 6 Univariate Statistics

	N Count	Mean Percent	Std. Deviation Low	Missing High	Count
ROCH1	554	5.64	1.211	2	.4
ROCH2	555	5.86	1.271	1	.2
ROCH3	554	5.61	1.316	2	.4
ROCH4	556	5.81	1.248	0	.0
ROCH5	551	4.76	1.514	5	.9
ROCH6	554	5.79	1.267	2	.4
ROCH7	553	5.59	1.186	3	.5
ROCH8	551	5.14	1.447	5	.9
ROCH9	551	5.66	1.085	5	.9
ROCH10	549	5.95	1.239	7	1.3
ROCH11	548	5.33	1.357	8	1.4
ROCH12	549	5.74	1.241	7	1.3
ROCH13	553	5.16	1.522	3	.5
ROCH14	552	5.30	1.315	4	.7
FOPR1	554	4.10	1.006	2	.4
EMAT1	552	3.88	1.204	4	.7
PSO1	550	4.02	1.050	6	1.1
EMAT2	551	3.77	1.189	5	.9
FOPR2	553	4.07	1.012	3	.5
PSO2	553	4.37	.679	3	.5
EMAT3	553	3.92	1.120	3	.5
FOPR3	552	4.09	1.095	4	.7
PSO3	554	4.51	.640	2	.4
PAWA1	554	3.87	.960	2	.4
PAWA2	554	3.90	.974	2	.4
PAWA3	552	3.86	.942	4	.7
PAWA4	554	3.81	.950	2	.4
PAWA5	553	3.48	1.098	3	.5
CACO1	554	3.98	1.188	2	.4
CACO2	554	4.27	.849	2	.4
CACO3	553	3.96	1.149	3	.5
CACO4	554	3.91	1.124	2	.4
CACO5	552	3.84	1.091	4	.7
CACO6	554	4.26	.839	2	.4
CACO7	552	4.19	1.106	4	.7
CACO8	554	3.93	.872	2	.4
PMTN1	552	3.89	1.117	4	.7
PMTN2	554	3.82	1.125	2	.4
PMTN3	553	3.80	1.136	3	.5
JOSA1	553	4.03	1.038	3	.5
JOSA2	554	3.76	.966	2	.4
JOSA3	554	3.95	1.042	2	.4
JOSA4	553	3.85	1.125	3	.5
JOSA5	553	4.01	1.156	3	.5
JOSA6	554	4.10	1.029	2	.4
JOSA7	553	3.99	1.085	3	.5

JOIN1	552	3.86	.897	4	.7
JOIN2	552	4.01	.917	4	.7
JOIN3	554	4.08	.923	2	.4
JOIN4	552	4.07	.900	4	.7
JOIN5	551	4.15	.867	5	.9
SPRE1	554	4.01	1.157	2	.4
SPRE2	554	3.99	.956	2	.4
SPRE3	554	3.94	.999	2	.4
SPRE4	554	3.89	1.007	2	.4
SPRE5	554	3.92	1.083	2	.4
SPRE6	553	3.75	1.002	3	.5
TSDE1	554	4.22	.845	2	.4
TSDE2	554	3.15	1.225	2	.4
TSDE3	554	3.46	1.115	2	.4
TSDE4	554	3.33	1.155	2	.4
TSDE5	554	3.53	1.165	2	.4
SORE1	554	3.98	.986	2	.4
SORE2	554	3.79	1.094	2	.4
SORE3	554	3.99	.919	2	.4
SORE4	554	4.12	1.005	2	.4
Gender	556	1.39	.488	0	.0
Age	555	3.21	1.104	1	.2
M_Status	555	1.71	.580	1	.2
Emp_Status	556	2.00	1.045	0	.0
HE_Level	556	1.87	.838	0	.0
N.Dependents	555	2.79	1.461	1	.2
YP_Job	556	2.90	1.512	0	.0
YP_Employer	556	3.37	1.699	0	.0

a Number of cases outside the range (Q1 - 1.5\*IQR, Q3 + 1.5\*IQR).