

**ORGANISATIONAL CLIMATE, WORKPLACE  
BULLYING AND EMPLOYEE HEALTH IN SELECTED  
SERVICE SECTORS OF PAKISTAN**

**MEHWISH IFTIKHAR**

**FACULTY OF ECONOMICS AND ADMINISTRATION  
UNIVERSITY OF MALAYA  
KUALA LUMPUR**

**2019**

**ORGANISATIONAL CLIMATE, WORKPLACE  
BULLYING AND EMPLOYEE HEALTH IN SELECTED  
SERVICE SECTORS OF PAKISTAN**

**MEHWISH IFTIKHAR**

**THESIS SUBMITTED IN FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF PHILOSOPHY**

**FACULTY OF ECONOMICS AND ADMINISTRATION  
UNIVERSITY OF MALAYA  
KUALA LUMPUR**

**2019**

**UNIVERSITY OF MALAYA**  
**ORIGINAL LITERARY WORK DECLARATION**

Name of Candidate: Mehwish Iftikhar

Matric No: EHA160012

Name of Degree: Doctor of Philosophy

Title of Project Paper/Research Report/Dissertation/Thesis ("this Work"):  
"Organizational Climate, Workplace Bullying and Employee Health in Selected Service Sectors of Pakistan"

Field of Study: Human Resource Management

I do solemnly and sincerely declare that:

- (1) I am the sole author/writer of this Work;
- (2) This Work is original;
- (3) Any use of any work in which copyright exists was done by way of fair dealing and for permitted purposes and any excerpt or extract from, or reference to or reproduction of any copyright work has been disclosed expressly and sufficiently and the title of the Work and its authorship have been acknowledged in this Work;
- (4) I do not have any actual knowledge nor do I ought reasonably to know that the making of this work constitutes an infringement of any copyright work;
- (5) I hereby assign all and every rights in the copyright to this Work to the University of Malaya ("UM"), who henceforth shall be owner of the copyright in this Work and that any reproduction or use in any form or by any means whatsoever is prohibited without the written consent of UM having been first had and obtained;
- (6) I am fully aware that if in the course of making this Work I have infringed any copyright whether intentionally or otherwise, I may be subject to legal action or any other action as may be determined by UM.

Candidate's Signature

Date:

Subscribed and solemnly declared before,

Witness's Signature

Date:

Name:

Designation:

## ABSTRACT

Workplace bullying is a devastating problem which needs to be addressed given its adverse effects and implications. This study identified several gaps in the literature when expanded specifically to service sector of Pakistan where the problem of bullying is rife (Bashir & Malik, 2011; Naseer & Khan, 2015; Ahmad *et al.*, 2017). There is a scarcity of academic research on the understanding of workplace bullying (traditional and cyberbullying). As an emerging field of research area, detailed understanding about the predictors of cyberbullying have not been fully established. Very few studies have been conducted on studying the bundled impacts of workplace bullying (traditional bullying and cyberbullying) at workplace of organizations. This study is endeavored to fill up the gaps by focusing on organizational climate as a cause of workplace bullying (on the basis of frustration aggression theory and social interaction approach), technology (social networking and ICT) in relation to cyberbullying, and bundled effects of both the traditional and cyber bullying on employee health by considering General Strain Theory. Emotional Intelligence as a coping strategy has also been proposed and tested in this study in order to reduce the negative health impacts of bullying. In this quantitative cross sectional research, data is gathered from 382 employees in 4 service sectors (banking, telecom, hoteling and education) of Pakistan, with a response rate of 78%. Analysis has been done through Structural Equation Modeling (SEM) by using smartPLS version 3.2. Using NAQ-21 and NAQ-R on the basis of the cut-off criteria for measuring bullying and cyberbullying prevalence, the results highlighted that 59%, 53%, 48% and 37% of the respondents were categorized as bullied traditionally and 49%, 41%, 40% and 18% were cyberbullied in banking, telecom and hoteling and education service sectors respectively. Overall, the traditional bullying experienced a 49% whilst the cyberbullying was at 47%. Multiple dimensions of organizational climate are found to be the predictors of workplace

bullying, while technology (social networking and ICT's) is significantly related to the prevalence of cyberbullying at workplace of service sector organizations. Workplace bullying (traditional and cyber) depicted negative consequences on employee's health in the form of psychological, physiological and emotional health. Organizational climate also significantly effects employee health directly. Results also highlighted the mediating effect of workplace bullying between the relationship of organizational climate and employee health (burnout and ill-health). Furthermore, Emotional Intelligence with its dimensions (self-awareness, self-regulation, motivation, empathy and social skills) moderates the relationship between workplace bullying and employee health (burnout and ill-health). This research gives new insights about various types of bullying (traditional and cyber) and its adverse effects and also contributes to the emergent dialogue of identifying the debilitating outcomes of both types of bullying. Organizations may use Emotional Intelligence as a coping strategy in order to reduce the negative effects of bullying by embedding it in the HR policy of the organization.

## ABSTRAK

Buli di Tempat Kerja merupakan suatu masalah mudarat yang perlu ditangani memandangkan kesan dan implikasinya. Kajian ini mengenalpasti beberapa jurang dalam literatur berkait rapat khususnya dengan sektor perkhidmatan di Pakistan di mana masalah buli semakin meningkat (Bashir & Malik, 2011; Nasser & Khan, 2015; Ahmad *et al.*, 2017). Kajian akademik dalam memahami buli di tempat kerja (buli tradisional dan buli siber) masih kurang. Memandangkan ia merupakan satu bidang kajian yang masih baru, pemahaman yang lebih lanjut mengenai prediktor buli siber masih belum diketahui sepenuhnya. Sehingga kini masih kurang kajian dijalankan terhadap impak kedua-dua buli tradisional dan buli siber di tempat kerja. Kajian ini bertujuan mengisi jurang dalam kajian dengan memfokus kepada iklim organisasi sebagai penyebab masalah Buli di Tempat Kerja (berdasarkan *frustration aggression theory* dan pendekatan interaksi sosial), teknologi (rangkaian sosial dan ICT) berhubung dengan buli siber dan kesan kedua-dua bentuk buli tradisional dan buli siber ke atas kesihatan pekerja dengan menggunakan *General Strain Theory*. Strategi bagi mengatasi masalah buli dalam bentuk *Emotional Intelligence* telah dicadangkan dan diuji bagi mengurangkan kesan kesihatan akibat daripada buli. Dalam kajian kuantitatif *cross sectional* ini, data dikumpulkan daripada 382 pekerja dari 4 sektor perkhidmatan (perbankan, telekomunikasi, perhotelan, dan pendidikan) di Pakistan dengan kadar responden sebanyak 78%. Analisis dijalankan melalui *Structural Equation Modeling (SEM)* dengan aplikasi *smartPls* versi 3.2. Berasaskan kriteria *cut-off* dalam NAQ-21 dan NAQ-R, kelaziman buli tradisional adalah 59%, 53%, 48%, dan 37% dan buli siber adalah 49%, 41%, 40%, dan 18% dalam sektor perbankan, telekomunikasi, perhotelan dan pendidikan masing-masing. Secara keseluruhan, buli tradisional adalah 49% manakala buli siber adalah 47%. Pelbagai dimensi dalam iklim organisasi didapati adalah prediktor kepada Buli di Tempat Kerja manakala teknologi (rangkaian sosial dan ICT) mempunyai hubungan signifikan kepada

kejadian buli di tempat kerja di organisasi sektor perkhidmatan. Buli di Tempat Kerja (tradisional dan siber) memberi kesan negatif ke atas kesihatan pekerja dalam bentuk psikologi, fisiologi, dan kesihatan emosi. Iklim organisasi juga memberi kesan langsung ke atas kesihatan pekerja. Hasil kajian juga menunjukkan hubungan kesan pengantara Buli di Tempat Kerja dengan kesihatan pekerja (*burnout* dan *ill-health*). Tambahan pula, *Emotional Intelligence* dalam dimensi (*self-awareness, self-regulation, motivation, empathy, and social skills*) mengimbangi hubungan antara Buli di Tempat Kerja dengan faktor kesihatan pekerja (*burnout* dan *ill-health*). Kajian ini menghasilkan pendedahan baru mengenai jenis Buli di Tempat Kerja (tradisional dan siber) dan kesan negatif serta dialog yang semakin membimbangkan dalam identifikasi kesan buli. Organisasi boleh menggunakan strategi *Emotional Intelligence* dalam mengurangkan kesan negatif daripada Buli di Tempat Kerja dengan melaksanakannya dalam dasar sumber manusia organisasi.

## **ACKNOWLEDGEMENTS**

First and foremost, I want to thank Allah, the most beneficent and the most merciful, who gave me the strength, courage, knowledge and patience to conduct this research work. I would like to express my sincere gratitude to my supervisor Prof. Dr. Beh Loo See for her full support, encouragement, expert guidance, patience, motivation and understanding throughout my study and research. Her vast knowledge, professional attitude and positive criticism motivated me to yearn for more continuous learning. It has been an honour for me to be her student.

I would also like to acknowledge Business School of National University of Science and Technology (NUST) Pakistan for their sponsorship and financial support.

Most importantly, I would like to thank my family for all their prayers and encouragement, as none of this would have been possible without their support and love. I would like to express my heartfelt gratitude to my mother especially as she played a very vital role in getting me to this level of success. My parents, brothers and sisters have been a constant source of care, concern and motivation. I am also indebted to my husband Sheraz Khan Yousafzai who has been an overwhelming encouragement for me. Lastly I want to thank all my friends and relatives who have been supportive and remembered me in prayers throughout this endeavor.

## TABLE OF CONTENTS

Abstract .....	iii
Abstrak .....	v
Acknowledgements .....	vii
Table of Contents .....	viii
List of Figures .....	xiv
List of Tables .....	xv
List of Symbols and Abbreviations .....	xvii
List of Appendices .....	xix
<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
1.1 Introduction .....	1
1.2 Background of the Study.....	5
1.3 Classification of Service Sector.....	11
1.4 The Prevalence of Bullying in Service Sector.....	14
1.4.1 Bullying in Banking, Hoteling, Education and Telecommunication Sectors.....	14
1.5 Problem Statement.....	18
1.6 Research Questions and Research Objectives.....	21
1.7 Scope of the Study .....	24
1.8 Operational Definitions .....	25
1.9 Significance of the Study .....	26
1.10 Organization of the Chapters.....	28
1.11 Summary of Chapter 1 .....	30

<b>CHAPTER 2: LITERATURE REVIEW .....</b>	<b>31</b>
2.1 Introduction .....	31
2.2 The Concept of Workplace Bullying .....	32
2.3 Defining Bullying and Cyberbullying .....	33
2.4 Difference between Cyberbullying and Traditional Bullying .....	34
2.5 Prevalence of Cyberbullying .....	35
2.6 Forms of Cyberbullying .....	36
2.7 Review of Related Theories .....	37
2.8 Novak's Theory of Learning and Prevalence of Workplace Bullying .....	38
2.8.1 Key Elements of Novak's (1998) Theory of Learning .....	38
2.8.2 Application of Novak's (1998) Theory of Learning to Workplace bullying.....	39
2.9 Prevalence of Workplace Bullying in Service Sector of Pakistan .....	40
2.10 Demographic Factors and Workplace Bullying .....	42
2.11 Antecedents of Traditional Bullying and Cyberbullying .....	44
2.11.1 Frustration-Aggression Theory and Social Interaction Approach in Relation to Workplace Bullying .....	44
2.11.2 Organizational Climate as an Antecedent of Workplace Bullying ...	45
2.11.3 Concept of Organizational Climate .....	45
2.11.4 Components of Organizational Climate .....	47
2.11.4.1 Psychological and Physical Climate.....	47
2.11.5 The Formation of Organizational Climate .....	48
2.11.6 The Importance of Organizational Climate .....	50
2.11.7 Challenges for New Work Environment .....	51
2.11.8 Construct Developed for Organizational Climate .....	52
2.11.8.1 Cyberbullying as a Dark Side of Technology .....	54

2.11.8.2 Social networking and cyberbullying .....	56
2.12 Reverse Application of General Strain Theory and Health Outcomes .....	58
2.13 Employee Health Outcomes of Workplace Bullying .....	59
2.13.1 Burnout as a Health Outcome of Workplace Bullying .....	59
2.13.2 Psychological and Physiological Health Outcomes of Workplace Bullying .....	60
2.14 Organizational Climate and Health Outcomes of Workplace Bullying .....	62
2.15 Mediating Effects of Workplace Bullying .....	63
2.16 Coping Strategies.....	63
2.16.1 Emotional Intelligence .....	64
2.16.2 Conceptualization of Emotional Intelligence .....	65
2.16.3 Model of Emotional Intelligence: Intelligence Rectifies Behavior. .	66
2.16.4 Goleman’s Mixed Model of Emotional Intelligence (1998).....	67
2.16.5 Previous Empirical Studies used Emotional Intelligence as a Moderator.....	70
2.16.6 Emotional Intelligence as a Coping Strategy to Reduce Burnout and Ill- Health.....	70
2.17 Recent Research Work Related to Workplace Bullying.....	73
2.18 Conceptual Framework .....	75
2.19 Summary of Chapter 2 .....	77
 <b>CHAPTER 3: METHODOLOGY .....</b>	<b>78</b>
3.1 Introduction .....	78
3.2 Nature of Research .....	78
3.3 Rationale for Choosing Quantitative Method .....	80
3.4 Population and Sampling Frame .....	83
3.5 Sampling Strategy.....	83

3.5.1	Key Respondents .....	86
3.5.2	Sample Size .....	86
3.6	Data Collection .....	87
3.7	Instrumentation .....	89
3.7.1	Organizational Climate .....	90
3.7.2	Workplace Bullying .....	92
3.7.3	Employee Health .....	96
3.7.4	Emotional Intelligence .....	99
3.8	Questionnaire Design .....	101
3.9	Pilot Testing and Results .....	102
3.10	Data Analysis .....	103
3.11	Structural Equation Modeling .....	104
3.11.1	Second-Generation Statistical Analysis Techniques .....	105
3.11.2	Usefulness of Partial Least Square for the Estimation of Structural Equation Modeling .....	105
3.11.3	PLS-SEM Evaluation .....	106
3.11.4	Reflective and Formative Constructs .....	108
3.11.5	Test of Moderation Effects .....	115
3.12	Summary of Chapter 3 .....	115
<b>CHAPTER 4: RESULTS AND ANALYSIS .....</b>		<b>116</b>
4.1	Introduction .....	116
Figure 4.1: Organization and structure of chapter 4 ‘Results and Analysis’ .....		117
4.2	Data Screening .....	118
4.3	Demographic Data of Respondents .....	118
4.4	Analysis of Common Method Bias (CMB) .....	120
4.5	Prevalence of Traditional and Cyberbullying .....	121

4.6	Relationship between Demographic Variables and Workplace Bullying.....	122
4.7	Evaluation of Research Model .....	124
4.7.1	Evaluation of Measurement Model .....	124
4.7.1.1	Internal Consistency .....	125
4.7.1.2	Indicator Reliability.....	125
	Figure 4.2: Factor Loadings (After Elimination of Items).....	126
	Figure 4.3: Factor Loadings of Moderator Emotional Intelligence after the Elimination of Items.....	127
4.7.1.3	Construct and Composite Reliability.....	127
4.7.1.4	Convergent Validity .....	128
4.7.1.5	Discriminant Validity .....	129
4.7.1.6	Burnout a Reflective-Formative Construct.....	130
4.7.2	Evaluation of Structural Model .....	132
4.7.2.1	Multicollinearity.....	133
4.7.2.2	Path Coefficients .....	133
	Figure 4.4: Path Coefficient Analysis.....	135
4.7.2.3	Hypothesis Testing (Direct effects).....	135
4.7.2.4	Coefficient of Determination ( $R^2$ ) .....	138
4.7.2.5	Effect Size ( $f^2$ ).....	139
4.7.2.6	Predictive Relevance ( $Q^2$ ).....	140
4.7.3	Evaluation of Mediator (Indirect Effects).....	141
4.7.3.1	Mediating Analysis OC WPB BO .....	144
4.7.3.2	Mediating Analysis OC WPB I-H.....	145
4.7.4	Moderating Effects .....	150
4.7.4.1	Emotional Intelligence as a Moderator between Workplace Bullying and Burnout .....	151

4.7.4.2 Emotional Intelligence as a Moderator between Workplace Bullying and Ill-Health .....	152
4.8 Hypotheses Results of Indirect Effects .....	154
4.9 Summary of Chapter 4 .....	155
<b>CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>156</b>
5.1 Introduction .....	156
5.2 Research Highlights .....	156
5.3 Discussion on Research Objectives and Findings .....	162
5.4 Implications of the Current Study .....	177
5.5 Limitations and Recommendations .....	184
5.6 Summary of Chapter 5 .....	185
References .....	186
List of Publications and Papers Presented .....	209
List of Appendices .....	210

## LIST OF FIGURES

Figure 2.1: Model of OC (Organizational Climate), Gerber (2003).....	52
Figure 2.2: Goleman's (1988) Mixed Model of Emotional Intelligence .....	68
Figure 2.3: Conceptual Framework .....	76
Figure 3.1: PLS-SEM Evaluation Stages (Sarstedt <i>et al.</i> , 2014).....	107
Figure 4.1: Organization and structure of chapter 4 'Results and Analysis' .....	117
Figure 4.2: Factor Loadings (After Elimination of Items).....	126
Figure 4.3: Factor Loadings of Moderator Emotional Intelligence after the Elimination of Items.....	127
Figure 4.4: Path Coefficient Analysis .....	135
Figure 4.5: Coefficient of Determination R square (Diagrammatic Representation) ...	139
Figure 4.6: Effect Size F Square (Diagrammatic Representation) .....	140
Figure 4.7: Direct Paths without Mediator.....	142
Figure 4.8: Indirect Paths with Mediator .....	143
Figure 4.9: Types of Mediation (Zhao <i>et al.</i> , 2010) .....	148
Figure 4.10: Moderation between Workplace Bullying and Burnout .....	151
Figure 4.11: Moderation between Workplace Bullying and Ill-Health .....	153

## LIST OF TABLES

Table 1.1: Market Based Classification of Service Sector.....	12
Table 1.2: Classification of Service Sector of Pakistan.....	13
Table 1.3: Percentage (%) of Bullying in Service Sectors of Different Countries.....	15
Table 2.1: Relevant Theories in the Study .....	38
Table 2.2: Dimensions of Organizational Climate in Relation to Bullying.....	53
Table 2.3: Components of Emotional Intelligence (Daniel Goleman, 1998).....	69
Table 2.4: Recent Past Researches on Workplace Bullying .....	74
Table 3.1: Research Methodology used in Recent Past Studies on Workplace Bullying .....	81
Table 3.2: Service Sectors and Total Number of Companies .....	84
Table 3.3: Selected Companies .....	85
Table 3.4: Scale to Measure Organizational Climate .....	91
Table 3.5: Scale to Measure Workplace Traditional Bullying.....	93
Table 3.6: Scale to Measure Workplace Cyberbullying .....	95
Table 3.7: Scale to Measure Burnout.....	97
Table 3.8: Scale to Measure Psychological Health .....	98
Table 3.9: Scale to Measure Physical Health .....	99
Table 3.10: Scale to Measure Emotional Intelligence .....	100
Table 3.11: Results of Pilot Study .....	103
Table 3.12: Summarized Criteria to Select Formative or Reflective Constructs (Jarvis <i>et al.</i> , 2003) .....	108
Table 4.1: Demographic Characteristics of Respondents .....	119
Table 4.2: VIF Values Calculated through Full Collinearity Assessment Approach...	121

Table 4.3: Workplace Traditional and Cyberbullying Prevalence in 4 Selected Service Sectors.....	122
Table 4.4: Correlation Analysis.....	123
Table 4.5: Hypotheses Results for Demographic Variables and Bullying .....	124
Table 4.6: Construct Reliability and Composite Reliability and Convergent Validity	128
Table 4.7: Discriminant Validity (Fornell-Larcker Criterion) .....	130
Table 4.8: Discriminant Validity of the Moderator: Emotional Intelligence (Fornell-Larcker Criterion) .....	130
Table 4.9: Collinearity (Reflective-Formative Construct Burnout) .....	131
Table 4.10: Significance of Formative Indicators .....	131
Table 4.11: Multicollinearity among Research Variables .....	133
Table 4.12: Path Coefficients .....	134
Table 4.13: Hypotheses Results (Direct Effects).....	137
Table 4.14: Coefficient of Determination ( $R^2$ ).....	138
Table 4.15: Effect Size ( $f^2$ ).....	139
Table 4.16: Predictive Relevance ( $Q^2$ ).....	141
Table 4.17a: Direct and Indirect Paths OC      WPB      BO.....	143
Table 4.18: Direct Effects and Significance.....	147
Table 4.19: Specific Indirect Effects and Significance.....	147
Table 4.20: Significance of Moderating Effect of Emotional Intelligence over Workplace Bullying and Burnout.....	152
Table 4.21: Significance of Moderating Effect of Emotional Intelligence over Workplace Bullying and Ill-Health .....	153
Table 4.22: Significance and Hypotheses Results of Indirect Effects .....	154
Table 5.1: Summary of all the Hypotheses Results .....	161
Table 5.2: Summary of Overall Thesis .....	173

## LIST OF SYMBOLS AND ABBREVIATIONS

ICT	:	Information and Communication Technology
CB	:	Cyberbullying
WB	:	Workplace bullying
WPB	:	Workplace bullying
TB	:	Traditional bullying
GST	:	General Strain Theory
OC	:	Organizational climate
OCL	:	Organizational climate leadership
OCJD	:	Organizational climate job description
OCWC	:	Organizational climate working condition
OCNN	:	Organizational climate time pressure
OCT	:	Organizational climate technology
WPTB	:	Workplace traditional bullying
WPCB	:	Workplace cyber bullying
BOEE	:	Burnout emotional exhaustion
BOD	:	Burnout depersonalization
BOR	:	Burnout reduced personal accomplishment
PSY	:	Psychological health
PHY	:	Physiological health
EI	:	Emotional Intelligence
I-H	:	Ill-health
T	:	Technology
Em	:	Empathy
Mo	:	Motivation

S-A	:	Self-Awareness
S-R	:	Self-Regulation
S-S	:	Social Skills
NAQ	:	Negative Act Questionnaire
NAQ-R	:	Negative Act Questionnaire Revised
SEM	:	Structure Equation Modelling
PLS-SEM	:	Partial least square Structural equation modelling
AVE	:	Average Variance Extracted
VIF	:	Variance Inflation Factor
CR	:	Composite Reliability
LV's	:	Latent Variables
B	:	Path Coefficients
R <sup>2</sup>	:	Coefficient of Determination
$f^2$	:	Effect Size
Q <sup>2</sup>	:	Predictive Relevance
O	:	Original Sample
M	:	Sample Mean
STDEV	:	Standard Deviation

## **LIST OF APPENDICES**

Appendix A: Lists of Companies in Each Selected Service Sector	210
Appendix B: Outer Loadings of Indicators	223
Appendix C: Cross Loading Values to Assess Discriminant Validity	229
Appendix D: Questionnaire Used for the Current Study	231

University of Malaya

## CHAPTER 1: INTRODUCTION

### 1.1 Introduction

In today's workplaces of organizations, workplace bullying is a reality and truth. As depicted by Giorgi (2010), one out of every five workers have experienced bullying or being the victim of bullying by others. Workplace bullying is prevalent widely and is increasing just like an epidemic. Previously employees were smoothly working in organizations without having experienced serious issues of bullying and such incidents were quite rare. These days, every individual at work is at risk of being bullied (e.g. Hannabus (1998)). Furthermore, bullying is becoming a prevalent issue, which may occur anywhere either in schools or at workplace (Notar, Padgett, & Roden, 2013) and a global problem (Nielsen *et al.*, 2009).

Zapf and Einarsen (2005) identified that bullying becomes a predominant problem at work in many countries. Workplace bullying is found to be an interpersonal stressor as different researchers have studied it comprehensively for example in various countries like USA (e.g. Lutgen-Sandvik, Tracy, & Alberts, 2007), UK (e.g. Liefhoghe & Mac Davey, 2001), Norway (e.g. Einarsen, Raknes, & Matthiesen, 1994), Canada (e.g. Leck & Galperin, 2006), Italy (e.g. Giorgi, 2012), and Japan (e.g. Meek, 2004). These studies concluded that bullying is increasing at an alarming rate globally. For example, the occurrence and tenacity of workplace bullying events occur at wide range from 5% to 10% in European countries. Further, practitioners examined the prevalence rate and nature of bullying in USA and found that 47% of workers were exposed to bullying and humiliating behaviour over a 2 year period (Lutgen-Sandvik *et al.*, 2007). Additionally some other studies have reported that 97% of employees at work have experienced various kinds of mistreatment and psychological maltreatment in the form of bullying during the last 5 years (Fox & Stallworth, 2005). Thus, bullying becomes a global issue

of discussion and research and should be addressed attentively by researchers and practitioners.

Besides, over the last decades with the Information and Communication Technology (ICT) revolution, modern technologies are growing rapidly and the increasing number of people promptly interacting by using modern technologies like Internet and mobile phones at workplace. Electronic media and technology usage both within and outside the workplace is rapidly increasing. Keith and Martin (2005) revealed that the extensive usage of individuals in modern devices of communication has delivered an alternative medium for bullies to target their victims in the form of new type of bullying i.e. cyberbullying. Some of the features of cyberbullying are common with workplace traditional bullying. A survey had shown that there was a total of one billion internet users worldwide and double of this were mobile phone users (Norris, 2001). This increasing ratio of users of digital communication devices also increases the danger of widespread cyberbullying. The term “Cyberbullying” was first coined in the start of the century by a Canadian scholar Bill Belsey (Campbell, 2005). He defined cyberbullying as “the use of information and communication technologies to support deliberate, repeated, and hostile behavior by an individual or group that is intended to harm others”. Cyberbullying includes the use of ICT’s in order to threaten, intimidate, harass, victimize, or bully the other person or a group of persons. Different terminologies have been used to define and describe this new act such as electronic bullying, SMS bullying, e-bullying, mobile bullying, digital bullying, online bullying, internet bullying and cyberbullying (Hinduja & Patchin, 2007). In the beginning, researchers working in this new field of study were focusing only on adolescents and children especially in schools, thus, the prevalence of cyberbullying at workplaces of organizations is not as detailed.

The current study is focusing on predictors of workplace bullying (cyber and face to face) and its consequences in the form of health (emotional, physical and psychological) outcomes. There can be multiple reasons that may cause bullying and cyberbullying at workplace. Some psychosocial hazards for violence at workplace, mostly bullying and harassment, are related to poor organizational and environmental structures at the workplace, the deficits in organization and negative behavior of leaders might also be considered as hazardous for organizational workplace (Milczarek, Vartia, & Pahkin, 2010). There are many dimensions of organizational climate but only those dimensions that are directly related to workplace bullying as depicted by the literature, are used in this research while making the construct of organizational climate. The study proposes that organizational climate with its dimensions like technology usage (social networking and ICT's), cultural norms, changing leadership styles, working conditions, diversity, time pressures and teamwork may widen the experience of workplace face to face bullying and cyberbullying as well.

Previous research studies exploring bullying and cyberbullying occurrences and effects, have also investigated about its consequences and researches have been conducted in multiple industry situations, such as school teachers in China (McCormack, Casimir, Djurkovic, & Yang, 2006), nurses in the UK (Quine, 1999), call center agents in India (D'cruz & Noronha, 2013), Norway restaurant staff (Matthiesen & Einarsen, 2004) and Italy academia (Giorgi, 2010). Though the negative/destructive outcomes of workplace bullying have already been explored in a variety of occupational settings and wide range of countries worldwide, but there is a dire need that researchers and practitioners should examine the negative ramifications of targeted victims of bullying at workplace in the form of its psychological, physical and emotional health impacts. Extensive evidences have commended that bullying is found to be a most destructive, disturbing and crippling problem (Andrea & Crawford, 1992) which increases the

possibility of damaging victim's cognitive functioning, self-esteem, physical health, and emotional health as well (Brotsky, 1976; Einarsen & Mikkelsen, 2003; Keashly & Harvey, 2005). Previous research work done on bullying suggested a strong relationship between workplace bullying exposure and psychosomatic, mental and psychiatric health issues among bullying victims. Van Heugten (2013) also revealed in his research that, targeted victim of bullying might experience depression, stress, anxiety, physical, emotional and mental health distractions and these negative effects may increase with the passage of time. Other than this, social isolation, social maladjustment, low self-esteem, concentration problems, sleep disturbance, anxiety, fatigue and burnout are found to be common symptoms among victims (Hogh, Mikkelsen, & Hansen, 2011). "Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslachi, Jackson, & Leiter, 1996).

Researchers argued that victims of cyberbullying are being more humiliated as compared to face to face bullying victims because in most types of cyberbullying, victims can be exposed to a wider audience, but lesser in face to face bullying (Shariff, 2005). On the basis of this ontology, researchers argued that cyberbullying is strongly related to more negative psychological impacts as compared to face to face bullying (Dooley, Pyzalski, & Cross, 2009). Thus, it is quite significant to study the dual impact of face to face and cyberbullying on employee health.

Naseer and Khan (2015) proposed that it is quite significant to conduct a research on deleterious consequences of bullying at workplace on employee's emotional, physical and psychological health and it would be more valuable in a third world country like Pakistan, where the problem is rife, bullying incidences are common and yet such cases are under-reported and under-researched which might be associated with deteriorating employees

health and well-being. According to Yoo and Lee (2018), workplace bullying entails grim consequences on employee's life but at the same time, very few studies have been conducted on bullying at workplace especially in Asian context.

As the technology usage at workplaces is also increasing in developing countries such as Pakistan and its negative affects should also be studied comprehensively. Thus the current study attempts to address this contention by studying the antecedents and negative health (psychological, physical and emotional) outcomes of workplace face to face bullying and cyberbullying among employees in the service sector of Pakistan particularly the banking, telecom, hotel and education sectors which are the main contributing sectors of the economy. In order to overcome the negative health impacts of bullying the variable Emotional Intelligence is proposed. Initially, Salovey and Mayer (1990) proposed the Emotional Intelligence as a psychological theory, defined it as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions"(p.189). The variable Emotional Intelligence with its 5 dimensions (self-awareness, self-regulation, motivation, empathy and social skill) is added as a moderator to cope with the devastating issue of bullying and its negative impacts.

## **1.2 Background of the Study**

According to World Health Organization, half of the world's population spends approximately one third of their total time at work as they are active economically. A healthy workplace is the prerequisite of work, thus decent work environment is an essential social determinant of healthy workplace to produce a healthy workforce. Therefore, a healthy workforce is the precondition of productivity and economic development (World Health Organization, 2007). Providing healthy work environment should be the top priority of each organization. Every work environment is considered to

be healthy, if there is an absence of harmful working conditions and presence of health-promoting activities and actions. Maintenance of occupational health is costly (to promote and maintain the highest degree of physical, mental, and emotional well-being of workers) and the burden of that cost is increasing day by day. Factsheet (2014) by WHO shows that, most of the countries have exposed an economic loss of 4 to 6 percent of GDP because of work-related health issues.

Organizations must be aware about those organizational risk factors that might have negative association with employee's health. There exists a very blur and thin line between what is and what is not psychological workplace violence, and this brings to the aim of this research on the type of psychological violence literally called workplace bullying that may occur at the workplace of organizations. Along with this, the use of electronic media both within and outside of the workplace is rapidly growing. With the revolution of Information and Communication Technology (ICT) from the last decade, medium of communication on internet, mobile phones and other electronic devices are common at workplace of organizations. Keith and Martin (2005) researched and concluded that this extensive use of latest communication devices and easy access to them has provided another (alternate) medium to bullies to target their victims in the form of cyberbullying. So traditional bullying and cyberbullying both are becoming global issues (Nielsen *et al.*, 2009) and may cause negative health outcomes in organizations.

Workplace bullying started to get attention among Asian countries, almost a decade ago. Unluckily, sexual harassment cases in the organizations of Asian countries are not well documented but at workplace of many Asian countries, harassment and violation is being practiced which can be figured out through the steps taken by Asian countries to initialize ways of dealing with the issue (Sadrudin, 2013). It is evident that workplace bullying is prevalent in South Asian countries such as India, Bangladesh and Pakistan.

D'Cruz and Rayner (2013) conducted a survey among the employees of information-technology enabled service-business process outsourcing (ITES-BPO) sector in India to identify the prevalence of workplace bullying. A total of 42.3 per cent respondents reported to have been exposed to at least one bullying act 'very often' in past six months, which is equivalent to weekly experiences of bullying. A recent research by Rai and Agarwal (2017) on 205 managers in an Indian corporation suggested that just like managers in the west, Indians also experience high incidences of bullying. It is also depicted that the downward bullying is more common as most of the acts of bullying were directed from bosses/superiors.

Likewise, a cross-sectional study on 824 employees of Dhaka, Bangladesh examined relationships of work practices to how employees manage their shame and pride at work, and the connection of such management strategies to workplace victimization and bullying (Ahmed and Braithwaite, 2008). Results revealed that bullying incidences are common and employees involved in bullying had lower scores on shame acknowledgment such as feeling shame or guilt, taking responsibility, making amends etc. and humble pride (self-respect and respecting others). Another research conducted in Bangladesh, found that workplace bullying is prevailing in the banking sector and generating a strong counterproductive workplace behavior among the employees especially females. This problem leads organizational employees toward suffering from physical and mental health disorders.

Various studies have been conducted in Pakistan which shows the prevalence of bullying at workplace of Pakistani organizations e.g. research conducted by Razzaghian and Ghani (2014) depicted the occurrence of bullying at workplace of private sector universities of Khyber Pakhtunkhwa; Sadruddin (2013) reported harassment cases at workplace of public and private institutions of Karachi, Pakistan and revealed that

harassment is regularly practiced at workplace of Pakistan which genuinely affects the performance of working women and has greater impact on their work efficiency and effectiveness. Harassment is more common in private sector and mostly takes place in the form of mental torture, treats and verbal abuse. Another research in banking sector of Lahore, Pakistan shows the presence of work related and personal bullying in relation to turnover intentions (Hussain and Aslam, 2015).

From the above literature it is determined that workplace bullying is a growing problem of South Asian countries including Pakistan, which needs to be addressed. Nevertheless, some Asian countries took steps forward to address harassment, violation and bullying acts by way of legislation. Thailand amended its Labor Code in 1998 and included punishment in the form of penalties for sexual harassment and violations at workplace (ILO NATLEX, 2012). Philippines enacted an Anti-Sexual Harassment Act to promote in 1995 zero tolerance for sexual harassment at workplace (International Labor Organization, 2012). The Malaysian government likewise, also amended the Employment Act 1955 in 2012 by introducing an additional part on sexual harassment for protecting employees at workplace (Hassan *et al.*, 2015). A report of the Commission on Inquiry for Women in Pakistan documented that workplace sexual harassment does take place in Pakistan (Pradhan-Malla, 2012). According to Parveen (2010), during 2008 to 2010 a total of 24119 cases of violence against women have been reported in Pakistan out of which only 520 cases of workplace harassment were filed. Also the electronic media and newspapers portray very few of the cases of workplace sexual harassment, which clearly indicates that the women are not safe at workplace of Pakistan. As cited in Maria and Ayesha (2016)'s study, the Human Rights Commission of Pakistan (HRCP) reported that nearly 91% of female workers faced harassment in the domestic work sector. These statistics demonstrates that the physical and verbal harassment of female workers is a common phenomenon at workplace of Pakistani organizations. This discourages

Pakistani women from continuing job and often leads them to long lasting psychological health issues.

After reviewing the recent and past incidences of harassment, government of Pakistan in 2010 has passed The Protection against Harassment of Women at Workplace Bill to provide safe and sound environment to the working women. It is important to appreciate The Protection against Harassment of Women at the Workplace Act 2010 as it is the first of its kind to talk about harassment as a noteworthy legal issue, and to address the violation of woman's right at workplace of Pakistan. Later on, the bill turned into a law that was a great step but unfortunately the law served as a piece of paper. It was expected that a male offender would think thousand times before harassing any female, but all fail because of lack of practical implementation of rights are missing. However besides the Government, organizations of Pakistan also need to take several measures to ensure the effective implementation of the Act in organizations or instead organizations should make effective policies to alleviate workplace bullying and harassment problems which are not only common to women but the male workers also became the victim of bullying at workplace e.g. findings of Ahmer *et al.* (2008) shows that male workers ratio of being bullied is greater than female workers, also the males respondents reported that their medical college does not have a policy on controlling bullying or harassment acts and the adequate support is not available for individuals who had been bullied or harassed by others.

In a joint program of ILO/ICN/WHO/PSI, integral work has been done and guidelines were provided on workplace violence (workplace bullying) in the health sector from 2000 to 2002 (Steinman, 2013). They stated that organizational employees should be provided with violence-free workplace and it is the responsibility of employers to promote and provide healthy work environment to their workers. They should recognize the overall

responsibility and to ensure the health and safety and wellbeing of employees. According to national legislation and practice (Steinman, 2013), employers must ensure the elimination of the predictable risks of workplace hazards and violence. Their main emphasis was on the following points:

- To create a climate in organizations in which rejection of violence should be promoted.
- Assessment of incidences of workplace violence on a daily basis and to investigate what factors support or create workplace violence in their organizations.
- Giving responsibilities to managers to implement policies and procedures in order to eliminate workplace violence
- To provide suitable information, guidance and training to workers regarding workplace violence.

On the basis of the above, this research proposes that organizational climate can be the predictor of workplace violence in the form of traditional bullying and cyberbullying which may have negative effects on psychological, physiological and emotional health (burnout) of workers. So, traditional bullying and cyberbullying at workplace can be the major factors of deteriorating worker's health, thus the purpose of this study. The number of targeted victims who have experienced workplace bullying or continue to experience bullying (Houshmand, O'Reilly, Robinson, & Wolff, 2012) are on the increase. Workplace bullying is emotionally, physically, and economically costly. Organizations are continually losing billions of dollars (Murrey, 2009) in high absenteeism and turnover rates, loss of productivity, associated litigations and increasing health care premiums. Past decade research have led greater awareness of the phenomenon and occurrence of bullying but in theoretical perspective there has been little research conducted in order to cope with the negative outcomes of bullying and cyberbullying, specifically related to

psychological, physiological and emotional health of workers. On the basis of past research findings violence may account for roughly 0.5 to 3.5 percent of GDP per year (Hoel & Cooper, 2000). The cost incurred by organizations because of bullying at workplace can be as high as 4 billion dollars per year (Murray, 2009). This evidence clearly indicates that workplace bullying is far too high and this issue is urgently needed to be resolved.

For this purpose it is vital to study what are the predictors of workplace traditional and cyberbullying? And what types of bullying may occur at workplace of organizations and to what extent that may harm the health (psychological and emotional) of these workers? Such some of the elements of organizational climate might act as causes of workplace bullying. The use of ICT and social networking at workplace can be important contributors in cyber type of bullying in service sector of Pakistan. Significantly more important, it is vital to understand how human resource managers can help to create a safe working environment, free from any bullying behavior thus giving employees a chance to have a relaxed working environment without much psychological, physical and emotional stress so that employees remain healthy physically, emotionally and psychologically. Manager in organizations need to take appropriate actions to monitor, evaluate and reduce the negative outcomes of this severe bullying. In addition, Emotional Intelligence along with its dimensions is proposed as a coping strategy to overcome the negative health effects of workplace bullying in the service sector of Pakistan.

### **1.3 Classification of Service Sector**

In the overall world economy service sector is the largest and fastest growing sector, holding the largest share in total employment and output in most of the developed countries being a highly diversified sector. Different service classification systems have been developed but Browning and Singelmann (1978) provide a market based

classification system that contains both public and private provisions. Elfring (1988), has regrouped the service activities from the (International Standard Industrial Classification) ISIC, based on Browning and Singelemann's system, and has developed four sub-sectors as shown in Table 1.1.

**Table 1.1: Market Based Classification of Service Sector**

<b>Market-based Classification Systems-Browning-Singelmann's (1978) and Elfering's (1988) Suggestions</b>				
<b>Sub-Sectors</b>	<b>Browning and Singelmann's Sub-groups</b>	<b>Sub-</b>	<b>Elfring's groups</b>	<b>Sub-</b>
Producer Services	Banking, Credit and other Financial Services Insurance Real Estate Engineering and Agricultural Services Accounting and Booking-Keeping Miscellaneous Business Services Legal Services		Business and Professional Services Financial Services Insurance Services Real Estate Services	
Distributive Services	Transportation and Storage Communication Wholesale Trade Retail Trade (Except Eating and Drinking Places)		Retail Trade Whole Trade Transport Services Communications	
Personal Services	Domestic Services Hotels and Lodging Places Eating and Drinking Places Repair Services Laundry and Dry Cleaning Barber and Beauty Shops Entertainment and Recreational Services Miscellaneous Personal Services		Hotels, Bars and Restaurants Recreation, Amusements and Cultural Services Domestic Services Other Personal Services	
Social Services	Medical and Health Services Hospitals Education Welfare and Religious Services Non-profit Organizations Postal Services Government Miscellaneous Professional and Social Services		Government Proper (Civil or Military) Health Services Education Service Miscellaneous Social Services	

Based on the Annual Report of State Bank of Pakistan services sector consists of four major sectors in Pakistan mainly; distributive services, producer services, personal services and social services. These sectors are further distributed in different subsectors. The distributive sector provides the consumers with utility, household as well as profits for the traders. Producer services comprises financial sector which not only provides facilities to the consumers but also grants the capital to business and industrial community. The personal services sector provides the citizens with public goods and shelters. Finally, the social services sector is further distributed into 2 subsectors (i) public administration and defense and (ii) health and education facility.

**Table 1.2: Classification of Service Sector of Pakistan**

<b>Classification of Service Sector in Pakistan based on Annual Report of State Bank of Pakistan, 2003-2004</b>	
Distributive Services	Railways
• Transportation, Storage and Communications	Water transport
	Air transport
	Pipeline transport
	Road transport
	Mechanized
	Non Mechanized
	Communication
	Storage
	Water transport
• Wholesale, Retail Trade and Hotels and Restaurants	Wholesale and Retail Trade including Imports
	Purchasing and Sale Agents and Brokers
	Auctioning
Producer Services	State Bank of Pakistan
• Financial Institution	Commercial Bank
	Other Financial Intermediaries
	Insurance Corporations and Pension Funds
Personal Services	Domestic Services
• Entertainment and Recreation Services	Hotels and Lodging Places
	Eating and Drinking Places
• Ownership and Dwelling	Repair Services
Social Services	Education
• Public Administration and Defense	Medical and Health Services
	Other Household and Community Services
• Social Community and Private Services	

For this study, four subsectors of service sector (one from each sector) has been targeted mainly banking, telecommunication, hotel industry and education in order to investigate about causes and health effects of workplace traditional and cyberbullying.

#### **1.4 The Prevalence of Bullying in Service Sector**

Stress and violence at work are commonly present in service sectors as compared to other economic sectors, increasing with the interface between workers and consumers/customers. Stress and violence in service sector may have a direct relationship or might exist in indirect relationship with employees and customers, or may be present among workers in an unexpected situation or work environment which becomes difficult to control and it may also provoke workers toward inappropriate actions and reactions. Researchers have studied occurrences of bullying at workplace of multiple service sectors. The current study discussed about bullying prevalence and percentages in four service sectors (banking, hoteling, education and telecommunication) as these are selected as targeted population of the current study, calculated by researchers in various countries. Explanation along with the percentages is given in the following section.

##### **1.4.1 Bullying in Banking, Hoteling, Education and Telecommunication Sectors**

With the introduction of ICT's in banking sector, complexity of products and services supply is increasing especially in the multinational organizational structures. Because of this, banks require workers with increasing skills and competencies and are also promoting the recruitment of a more skilled and sophisticated human resources and are coming up with new contractual arrangements. Therefore, the concept of flexibility at work is emerging (short term contracts, increased competencies, temporary work, part time work and flexible pay policies). It is reported that, temporary workers are more susceptible to bullying and harassment which enhances unwanted sexual advances (Estrada, Nilsson, Jerre, & Wikman, 2010; Quine, 1999; Tsuno *et al.*, 2015). Other studies

from Japan also specified that temporary employees are more at risk of being bullied (Tsuno *et al.*, 2015) and become victims of verbal abuse more as compared to permanent workers or workers holding open-ended contracts. Likewise, a large survey conducted in Quebec reported that both temporary, and part-time workers were at larger risk of being harassed and being the victims of occupational violence in comparison to full-time permanent employees (Vezina *et al.*, 2011). These sort of conditional jobs are mainly associated with increased job insecurity (OECD, 1999). These factors might be the cause of workplace bullying by influencing cost-benefit considerations (Bjorkqvist, Osterman, & Hiet-Bdck, 1994). Previous studies conducted on banking sector in various countries depicting the prevalence of bullying at workplace of banks with the bullying percentage as summarized in the Table 1.3 shows the existence of bullying acts.

**Table 1.3: Percentage (%) of Bullying in Service Sectors of Different Countries**

Sector	Researchers	Countries	Percentage (%) of Bullying	Duration
Banking	Yilmaz and Uzuncarsili-Soydas (2006)	Turkey	15.9%	Last 6 months
Banking	Anon (2004)	New Zealand	43%	Last 6 months
Banking	Almeida (2003)	Iran	56.3%	Previous working life
Banking	Verdasca (2011)	Portuguese	25% frequently 50% occasionally	Last 12 months
Hotel and catering industry	Safety and Work (2000)	EU and EFTA countries	12%	Last six months
Hotels	Bentley <i>et al.</i> (2012)	New Zealand	15%	Last six months
Hotels	Stale Einarsen and Skogstad (1996)	Norwegian	14.1%	Last six months
Hotels	Hoel (2002)	United Kingdom	7.5%	Last six months
			(46.3%)	Last 5 years

**Table 1.3: Continue**

<b>Sector</b>	<b>Researchers</b>	<b>Countries</b>	<b>Percentage (%) of Bullying</b>	<b>Duration</b>
Hotels	Pinuel and Cantero (2002)	Spain	16%	Last six months
Higher Education	(Statistics, 2013)	United States	27.6% 9% (cyber)	Last 6 months
Higher Education	Zabrodska and Kveton (2013)	Czech Republic	13.6%	Last 6 months
Higher Education	Bjorkqvist <i>et al.</i> (1994)	Finland	20.5%	Last 6 months
Higher Education	Fox and Stallworth (2009)	USA	36.6%	Previous working life
Higher Education	Giorgi (2012)	Italy	19%	Last 6 months
Higher Education	Gul, Ince, and Ozcan (2011)	Turkey	70%	Previous working life
Higher Education	McKay, Arnold, Fratzl, and Thomas (2008)	Canada	52%	Previous working life
Higher Education	Raskauskas (2006)	New Zealand	65.3%	Previous working life
Higher Education	Simpson and Cohen (2004)	UK	25%	Last 12 months
Telecom	West <i>et al.</i> (2014)	Canada	16.2%	Last 6 months
Telecom	Bashir and Hanif (2011)	Pakistan	52%	Previous working life

Just like other service sectors, the hotel industry, catering and tourism sector is categorized as a sector having interface with the public or customers. It is accounted as a fact that a large number of people are provided with jobs by hotels and catering enterprises, even those who are less trained, vulnerable groups of the population such as youth, migrants, members of ethnic minorities and women with family responsibilities as well. These employees are certainly in need of support to avoid and to cope with potential situations of experiencing violence and stress. Very few number of studies in hotels, catering or tourism services have been conducted (Faulkner & Patiar, 1997; Hannerz *et*

*al.*, 2002; Patah *et al.*, 2010; Vettori & Nicolaides, 2016), specifically focusing on stress and violence. Various indications have suggested that physical violence is also a problem in this service sector. European Agency for Safety and Health reported that, the hotel and catering industry is a sector which is more at risk of physical violence in the EU and the European Free Trade Area (EFTA) countries (European Agency for Safety and Health at Work, 2000). The Table 1.3 also shows the percentage of bullying in hotel industry of various countries. Studies in multiple countries depicted that bullying is a severe problem of hotel industry as percentages show that, during last six months large number of employees have been the victims of psychological violence or workplace bullying. Likewise, in higher education sector workplace bullying is a longstanding problem but having a very short history of research. Workplace environment of higher education institutions is unusual. It usually provides the practice of tenure and loose organizational structure of academic units (Bolman & Deal, 1997) which makes it different from other work environments. One of the researchers revealed that, these type of organizations are particularly exposed to promote a prevalence of bullying (Westhues, 2002). He further argued that poorly organized work environment and ineffective management, such conditions are common in educational institutions which may generate workplace bullying. Bullying percentages in higher education are also given in the Table 1.3 which demonstrates a prevalence of bullying at workplace of education sector.

In private telecommunication sector most of the jobs are subcontracted and temporary which increases job insecurity, so that it might induce unwanted negative behaviors among workers like bullying (Lamontagne, Kennedy, & Beaulé, 2009). Hoel and Cooper (2000) conducted a first nation-wide survey about workplace bullying in which they targeted various occupations and industrial sectors in Britain including banking sector and telecom, and have been reported that bullying is the occupational and industrial hazard of considerable magnitude. One out of ten were being the victim of bullying at

workplace within the last six months, this figure increased to one in four when calculated in the last five years. West *et al.* (2014) conducted a research on different businesses including industrial sectors of Canada-banking, retail, education, professional services, telecommunications and the non-profit sectors demonstrated in their interview-based qualitative research that respondents have shared narrations with examples regarding their experiences of bullying and cyberbullying at workplace, and have depicted the frequent occurrences of workplace bullying. It is also illustrated that among all the industrial sectors the percentage of workplace bullying is maximum in telecom sector. Past researches have depicted the prevalence of workplace bullying in service sectors of Pakistan as well, including banking (Naseer & Khan, 2015), telecommunication (Bashir & Malik, 2011) and education sector (Sadrudin, 2013). Thus it can be concluded that workplace traditional and cyberbullying is the most common and urgent problem faced in the service sector of Pakistan. Thus the section on problem statement is developed.

### **1.5 Problem Statement**

In today's professional work environment, bullying is a prevalent issue (Notar, Padgett, & Roden, 2013) and workers are becoming the victims of bullying with the ratio of 1:5, indicated by Giorgi (2010). Braun (2004) reported that at some point in their professional life, about 30% of participants surveyed had experienced bullying at workplace, 27% of employees reported having bullying victimization with them, over the last 6 months and 30% (Visagie, Havenga, Linde, & Botha, 2012) traditional bullying victimization occurred among adulthood at workplace (Kowalski, Toth, & Morgan, 2018). Therefore, the risk of being bullied is increasing, as it is wide spread at workplace of organizations. Given the revolutionary change in technological sector, Information and Communication Technology (ICT) period has been witnessed modern technologies as the medium of communication such as internet, mobile phones, computers etc. at workplace of organizations. This wide spread usage of modern communication system has provided

bullies with another (alternative) medium to target their victims in the form of latest type of bullying, called cyberbullying (Keith & Martin, 2005). Antoniadou and Kokkinos (2015) indicated that cyber-bullying is a recently emerging form of violence, and is significantly gaining much more media and research attention. This means that, modern technology not only created a borderless world but also upgraded traditional bullying into cyberbullying (Zhao *et al.*, 2016). There are empirical gaps in the understanding of both workplace face to face bullying and cyberbullying and their bundled effects at workplace has not been widely studied, even the prevalence of cyberbullying at workplace of organizations is relatively unknown (Gardner *et al.*, 2016). There is a scarcity of academic literature which may specifically focus on cyberbullying among employees at workplace (West *et al.*, 2014). Initially, this comparatively new field of research has focused only on adolescents and school children (Card & Hodges, 2008; Katzer, Fetchenhauer, & Belschak, 2009). However, only a handful of researches have been conducted on cyberbullying at workplace (Gardner *et al.*, 2016). Nature wise, workplace cyberbullying is different from youth cyberbullying but, it has not been analyzed in detail until yet and currently the effects are less known (Bjorkqvist *et al.*, 1994; West *et al.*, 2014). Due to increased capabilities of technology at workplace, bullying and specifically cyberbullying is emerging and is becoming a more serious problem. Further technological capabilities are moving quicker than codes of conduct, thus it becomes quite challenging for government as well as organizations to develop frameworks in order to manage this disturbing behavior effectively. Various studies in the past have shown that different dimensions of organizational climate may create bullying at workplace e.g. leadership as the dimension of organizational climate has been studied by Felson (1992) in relationship to workplace bullying, job description is also explored as a predictor of workplace bullying by various researchers (Leymann, 1996; Hauge, Stogstad, & Einarsen, 2009). Likewise, cultural norms (Moreno-Jimenez *et al.*, 2008), working conditions (Carnero,

Martinez, & Sanchez-Mangas, 2010) and time pressures (Zapf & Einarsen, 2003) were also studied as different dimensions of organizational climate in relationship to workplace bullying. As an emerging field of research area, understanding of the causes of cyberbullying has not been fully developed yet. Literature shows that one of the important dimensions of organizational climate i.e. technology and social networking have not been widely studied as the cause of new form of bullying i.e. cyberbullying. A recent research highlighted that modern technology not only created a borderless world but also promoted bullying into cyberbullying (Zhao, Zhou, & Mao, 2016). In Gerber (2003)'s model of organizational climate, technology is represented as one of the important elements that contributes in organizational climate. The structural approach of organizational climate proposed by Payne and Pugh (1976) also portrayed that, along with other factors technological advancement is also an objective aspect of work environment which shows a major contribution in cyberbullying. Very few studies have been conducted on predictors of workplace cyberbullying thus, further research is needed to understand the factors which motivate cyberbullying. In order to eliminate this gap, this study proposed the use of technology as social networking and ICT's for communication among employees in organizations as one of the dimensions of organizational climate, which may have relationship with workplace cyberbullying. Extensive evidences have shown that workplace bullying is a crippling and disturbing issue (Adams, 1992) with greater possibility of damaging victim's cognitive functioning, self-esteem, physical health, and emotional health as well (Brodsky, 1976; Stale Einarsen & Mikkelsen, 2003; Keashly & Harvey, 2005). It is considered to be a very common problem of service sector as compared to the economic sector. Among all service sectors, telecommunication industry is speedily flourishing in Pakistan, and most of the multinational telecom companies are having greater diversity with employees from different origins, cultural and ethnic backgrounds. Therefore, workers face various devastating problems where bullying is rife

(Bashir & Malik, 2011). There is little research on banking sector of Pakistan regarding bullying issues despite the high level of prevalence of bullying. Naseer and Khan (2015) depicted that, research on workplace bullying has been conducted on very small scale. Thus, further research is significantly needed. In academic sector, bullying is common as illustrated by Ahmad *et al.* (2017), nearly half of the employees working in Education sector of Pakistan have experienced bullying at workplace. In hotel and tourism industry of Pakistan, it is more evident as researched by various practitioners in various countries (Einarsen & Skogstad, 1996; Hoel, 2002; Hoel & Cooper, 2000) but unfortunately not in Pakistan. Thus, it would be quite significant to study bullying occurrence/prevalence, its types, level, frequency, extent and its antecedents and precedents (effects) in four selected service sectors of Pakistan. Besides, to cope with the issue it is significantly more important for managers and organizations to take appropriate actions to monitor, evaluate and reduce the negative outcomes of this severe workplace bullying issue. Over the past decade, researchers have led to the greater awareness of the phenomenon; though, few researches have been conducted on the negative outcomes of traditional bullying and cyberbullying specifically related to employee emotional, psychological and physical health and on the coping strategies regarding workplace bullying negative health impacts.

## **1.6 Research Questions and Research Objectives**

Generally this research aims to find out the antecedents of workplace traditional bullying and cyberbullying and their direct and indirect (by way of mediation) effects on emotional (burnout), psychological and physiological health of employees and to investigate the moderating effects of Emotional Intelligence on the relationships of workplace bullying (traditional and cyber) and employee health (burnout, psychological and physiological).

**Table 1.4: Research Questions and Objectives**

<b>Sr. No</b>	<b>Research Questions</b>	<b>Research Objectives</b>
1	What types of bullying exist in workplace of organizations and to what extent?	To explore the nature, level and frequency of bullying at workplace of service sector of Pakistan.
2	Does the incidence of workplace (traditional and cyber) bullying vary by companies, gender, age, profession and years of experience in the current organization?	To find out the relationship of demographic variables with workplace (traditional and cyber) bullying.
3	What sort of relationship exists between organizational climate and workplace (traditional and cyber) bullying?	To identify the antecedents of traditional bullying and cyberbullying at workplace.  a) The relationship of organizational climate with workplace (traditional and cyber) bullying. b) The relationship of technology (ICT's and Social networking) with cyberbullying.
4	Does the workplace (traditional and cyber) bullying effect burnout (emotional health) and ill-health (psychological & physiological).	To explore the relationship of workplace bullying (traditional and cyber) with health outcomes: burnout (emotional health) and ill-health (psychological & physiological).
5	What is the relationship of organizational climate with burnout (emotional) and ill-health (psychological & physiological)?	To assess the relationship of organizational climate with health outcomes: burnout (emotional health) and ill-health (psychological & physiological).  a) To determine the direct impact of organizational climate on burnout and ill-health (employee health). b) To evaluate the mediating effects of workplace (traditional and cyber) bullying between organizational climate and employee health outcomes, burnout and ill-health.
6	Does the Emotional Intelligence moderate the relationships of workplace (traditional and cyber) bullying with burnout and ill-health (employee health outcomes)?	To investigate the moderating effect of Emotional Intelligence on the relationships of workplace (traditional and cyber) bullying with burnout and ill-health (employee health outcomes).

After reviewing literature, past researches, the current scenario and the general objective of the study, research questions are developed for this study and these research questions lead to the specific research objectives to conduct this research. Research questions and specific research objectives are presented in the following Table 1.4.

Some of the past researches have depicted that victims of bullying may suffer increased possibility of psychological and physical health issues, for example anxiety, depression, increased alcohol usage, high level of blood pressure, insomnia, headache etc. (Gorenak & Popovic, 2014). Corney (2008), suggested that workplace bullying victims might become suicidal in extreme cases. Therefore, the present study is initiated with an objective to study organizational climate with its multiple dimensions, and technology use (social networking and ICT's) as root causes of traditional bullying and cyberbullying behaviours and to explore its relationship with psychological health, physical health and burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment). The coping strategy, Emotional Intelligence as a moderating variable is proposed to overcome the negative effects of workplace bullying on workers psychological and physical health, and to reduce the positive effect of bullying on burnout. The model proposed in this research comprises of multiple relationships showing direct, indirect (mediating) and moderating effects of variables, which have not been studied in this form previously.

So, there are four aims for this research. The first is to address some of the signs indicating workplace and cyberbullying. The second types of bullying that may occur at workplace of service sector of Pakistan. The third is to investigate the consequences of workplace bullying and lastly to suggest a possible solution to the problem by adding a moderating variable Emotional Intelligence as a coping strategy to reduce the negative effects of bullying and cyberbullying.

## **1.7 Scope of the Study**

Bullying signifies an occupational hazard of extensive magnitude especially at workplace of service sector (Hoel, Cooper, & Faragher, 2001). This is becoming a global issue and may deleterious effects on emotional, psychological and physical health of employees. The scope of the current study is focused on the prevalence rate, level and frequency of both the traditional and cyberbullying, highlighting the causes of workplace bullying (traditional and cyber), its relationship with emotional, psychological and physiological health of workers and coping strategies to overcome the negative health affects in service sector of Pakistan. The present study is to investigate the direct and indirect (mediating) effects of variables, organizational climate, and workplace bullying and employee health outcomes. In addition the study examined the moderating effect of emotional intelligence between workplace bullying and health outcomes (burnout, psychological and physiological health) of employees of service sector of Pakistan. The targeted population of the study is the selected organizations of banking, telecom, hotel and education industries of Pakistan. All the registered private and public banks, 4 and 5 star hotels, telecommunication companies and HEC recognized universities are taken as sample frame. Data is collected from 5 banks, 5 hotels, 5 telecommunication companies and 5 higher educational institutes. The key respondents of the current study are the officials working in all these 20 service sector organizations.

## 1.8 Operational Definitions

**Table 1.5: Definitions of Key Concepts of the Study**

Variables	Definitions	Authors/years
Organizational Climate	“A set of measurable properties of the work environment, directly or indirectly perceived by the people who live and work in a particular environment and is assumed to influence their motivation and behavior”.	Litwin and Stringer (1968)
Workplace (traditional) bullying	Workplace bullying is defined as “a situation in which one or more individuals are subjected to a series of systematic, repeated and frequent negative actions which are unwanted, which range over duration (i.e. about six months), in which there is a power imbalance between the bully and bullied and in which the victim ends up in an inferior position where he/she is unable to defend himself/herself”. <b>Personal bullying</b> is “exposure to negative personal behaviours like gossips, insulting remarks, taunting, teasing and frequent criticism” and <b>work-related bullying</b> is “the exposure to negative acts like unmanageable workloads, unreasonable deadlines, needless monitoring, hiding of information etc.”	Einarsen & Mikkelsen (2003) Nielsen <i>et al.</i> , (2009).
Workplace Cyberbullying	“Using electronic media (e.g., e-mail, SMS, social media, virtual communities) to inflict intentional and repeated harm to a target similar to conventional bullying” or “Any use of information and communications technology to support deliberate and hostile attempts to hurt, upset or embarrass another person”.	Piotrowski (2012)  Llewellyn (2009)
Burnout	“Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment which can occur among individuals who work with people in some capacity”	Maslachi <i>et al.</i> (1996)
Emotional Intelligence	“Emotional Intelligence is the ability to perceive, express and understand emotions and to be able to regulate them in ourselves and in others”	Cabello and Fernández-Berrocal (2015)

## 1.9 Significance of the Study

According to Yoo and Lee (2018), very few studies have been conducted on workplace bullying issues especially in Asian context. Naseer and Khan (2015) pointed out in a third world country such as Pakistan, it is pertinent to study the harmful consequences of workplace bullying on employee's health. In Pakistan, incidences of bullying are extensive at the workplace, yet at the same time, are under-reported and under-researched and become obvious in the form of diminishing employee health and well-being. Additionally, much less is known about the outcomes of cyberbullying at workplace. Previous study showed that bullying via email is related to turnover intentions, low level of job satisfaction and anxiety (Baruch, 2005). However apart from this study limited research has documented the impact of cyberbullying on employees (West *et al.*, 2014). Researchers depicted that cyberbullying has more severe effects in comparison to traditional bullying. As Smith (2018) revealed that so far empirical evidence shows that being a cyber victim has effects so severe and usually more than traditional bullying; whereas those who are the victims of both traditional and cyber bullying simultaneously are the worst affected, but little evidence is present in the past researches to address this issue (Gardner *et al.*, 2016). Therefore, the present study significantly contributes in not only finding out the antecedents of workplace bullying while also analyzing the bundled effects of both types of bullying (traditional and cyber) on employee health outcomes (burnout, physiological and psychological health).

In order to overcome negative health impacts, a variable Emotional Intelligence is added as a moderator. Though proven by past researches that Emotional Intelligence significantly contributes in improving individual and organizational productivity as well as wellbeing (Cavallo & Brienza, 2004), and few previous studies have also proposed that workplace bullying might contribute in the development of Emotional Intelligence. Although, a link between Emotional Intelligence and workplace bullying has been

established e.g. Branch, Murray, and Ramsay (2012) who demonstrated that there is a negative relationship between workplace bullying and Emotional Intelligence. Ashraf and Khan (2014) conducted a research in Pakistani hospitals and depicted that Emotional Intelligence moderates the relationship of workplace bullying and job performance and the study mainly focused on the need to reduce negative impact of workplace bullying on the performance of doctors and nurses. Emotional Intelligence has also been proposed to mitigate the adverse effects of stressful situations such as workplace bullying in the fast-moving consumer goods industry, Sri Lanka (Gunawardena & Galahitiyawa, 2016). The study concluded that Emotional Intelligence moderates the relationship of workplace bullying with job performance. Sheehan (1999) suggested that in order to prevent workplace bullying, the developing of employee's Emotional Intelligence might be useful. Another research was conducted by Hutchinson and Hurley (2013) to explore the moderating effect of Emotional Intelligence on the relationship of leadership capabilities and workplace bullying within nursing workplace environment. The research concluded that leadership and Emotional Intelligence capabilities offer real potential to mitigate bullying behavior at workplace.

Above analysis demonstrates that, the moderating effects of Emotional Intelligence on the relationship of workplace bullying and employee (emotional, psychological and physiological) health outcomes, has less been evaluated (also see Table 2.4). This study is modeled after the examination of the studies having link between workplace bullying and Emotional Intelligence, and the conceptual framework is developed for the current study which proposed the link between workplace bullying, Emotional Intelligence and employee health outcomes i.e., the development of self-awareness, self-regulation, motivation, empathy and social skills abilities of Emotional Intelligence may act as a moderator between workplace bullying and employee emotional, psychological and physiological health. If so, this research will significantly contribute to the emergent

dialogue of identifying the debilitating outcomes of workplace traditional and cyberbullying, as well as in proposing ideas and making positive suggestions to overcome the problem of bullying at workplace. This study is targeting the four sub sectors (banking, telecom, hotel and education) of service sector of Pakistan, to investigate the traditional and cyberbullying prevalence, antecedents and bundled health effects of both types of bullying, which is limited in previous studies (see Tables 2.4 and 3.1) hence the important empirical contribution of the study. This study extensively highlights the practical gaps regarding laws to control workplace harassment and bullying and providing an alternative strategy to cope up with the issue of workplace bullying negative effects instead of waiting for legislation. There is an evidence that, until now, organizations remained ineffective in dealing with the implications of both the workplace traditional bullying and cyberbullying (D'cruz & Noronha, 2013). Gardner *et al.* (2016) specified in his research clearly that organizational practices are required to be improved to manage this costly workplace problem effectively. So after analyzing the causes, types and impacts of bullying and cyberbullying, the present study also suggests the possible solution (factors of Emotional Intelligence as a coping strategy) to overcome the negative health impacts of both the traditional bullying and cyberbullying, which might be an important contribution at practical side.

### **1.10 Organization of the Chapters**

The current thesis is organized and structured into five chapters.

Chapter one comprises detailed introduction to the topic of the study, background of the study, and emphasizes on the problem statement with empirical and practical gaps, research objectives and research questions. It also provides the purpose and scope of the study in detail. The chapter ends with the brief definitions of all the research variables.

Chapter two starts with the definitions of bullying and cyberbullying and provides the detailed review on prevalence of workplace traditional and cyberbullying in service sectors of Pakistan. It also highlights the causes/antecedents of workplace bullying and its impact on employee health outcomes, on the basis of different theories. Concept, approaches and construct of organizational climate are explained in detail. Model of Emotional Intelligence as a coping strategy is also introduced. This chapter provides the foundation for the development of theoretical framework as well as the hypotheses development for the study.

Chapter three of the study provides the description about research design and methodology. The research design (i.e. population and sampling frame, key respondent, sampling strategy, sample size and instrumentation) is explained first. The next section provides details of the data analysis including measurement model and structural model, as well as the discussion of the underlying structure, followed by the methods used for measurement and structural validation by using PLS-SEM, are explained in detail.

Chapter four aims to examine the research hypotheses. The data gathered for the research was processed by using SPSS (statistical package for the Social Sciences) version 21 for Windows and smartPLS version 3.2 for Structural Equation modelling. This chapter includes testing of measurement and structural model. During the measurement model convergent and discriminant validity were tested. Structural models were used to test the hypothesized relationships of the current study.

Chapter five provides discussion on the findings of the study. The chapter starts with the highlights of the research process adopted for the current study. It is then followed by the discussion on each objective of the study and findings of the study. Furthermore, theoretical, and managerial implications of the study are provided in the next section, followed by limitations and future recommendations.

Appendix A consists of list of all the public and private HEC recognized universities, list of public and private telecommunication companies of Pakistan, complete list of public, private and Islamic banks and list of all the 4 and 5 star hotels of Pakistan. Appendix B consists of the cover letter of questionnaire includes researcher's name, the name of academic institution and an expression of the appreciation, with the signature of Deputy Dean of Faculty of Economics and Administration-University Malaya. Appendix C, comprises of outer loading values of each indicator which shows indicators reliability. Appendix D, consists of cross loading values to assess the discriminant validity of indicators and constructs. Appendix E, presents the questionnaire used in this study.

### **1.11 Summary of Chapter 1**

Chapter 1 starts with the introduction and background of the study and gives the complete overview of the problem that workplace bullying is a wide spread problem of today's service sector organizations. It also includes the classification of service sector. Further, the chapter includes the problem statement based on empirical and practical gaps identified in the literature. Purpose of the study has been documented in this chapter that follows the scope of the study. Operational definitions of research variables are also given to enhance reader's understanding followed by the organization of the respective chapters.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents the review of literature following with the hypotheses development on the basis of theoretical support. The concept of workplace bullying, definitions, types and the prevalence is explained. A new iteration of bullying called cyberbullying and the difference between cyber and traditional bullying on the basis of features is also discussed. More importantly, in the next section relevant theories are highlighted to understand the concept or to support and explain the relationships between variables of the study. For instance, Novak's (1988) theory of learning is to understand the concept of bullying, frustration-aggression theory (Felson, 1992) and the social interaction approach are used (Berkowitz, 1988) in relation to organizational climate and workplace bullying and the General Strain Theory (GST) is to meet the objective regarding to the relationship of workplace bullying and psychological and physiological health outcomes. Novak's (1988) theory of learning is used to understand the concept of workplace bullying and its prevalence in organizational settings. This theory emphasizes that an individual person came to know about bullying behavior or act on the basis of prior knowledge and experience that certain act is bullied act or not thus, he/she can better understand and respond about bullying happenings and prevalence while answering to the questions about workplace bullying. The theory is followed by the prevalence of workplace bullying in service sector of Pakistan and hypotheses regarding to the prevalence in each of four service sectors such as banking, telecom, hotels and education. In the next section Frustration-aggression theory and the social interaction approach is explained to understand the relationship between variables organizational climate and workplace bullying. As frustrated climate of the organization induces aggression among workers which leads them toward aggressive behaviors like bullying at workplace. The next section comprises of concept of organizational climate, its components, formation

and developing the construct of organizational climate. The dimensions of organizational climate are discussed in relation to workplace bullying on the basis of literature support and the technology (social networking and ICT) as a predictor of cyberbullying is explained, followed by the relevant hypotheses. Further section provides the detail of health outcomes of workplace bullying: burnout (emotional health) and ill-health (psychological and physiological health). Mediating effects of workplace bullying in the relationship of organizational climate with burnout and ill-health are also explained. Following section is about the reverse application of General Strain Theory (GST), as reverse application is helpful in understanding the emotional and psychological consequences of criminogenic activities such as traditional bullying and cyberbullying in the form of frustration, aggression and depression. Next, Emotional Intelligence as a coping strategy is introduced to reduce the negative health outcomes of workplace bullying and the Goleman's model of Emotional Intelligence (1988) is adopted to measure the dimensions of it. Recent past studies conducted on workplace bullying is presented in the next section to portray how this study is different from past researches? In the next section of this chapter, conceptual framework of the study is developed on the basis of literature review and theoretical background. Summary of the chapter 2 is given in the last section.

## **2.2 The Concept of Workplace Bullying**

German and Scandinavian researchers started to explore about bullying in the workplace in the beginning of 1990's. Definitional elements of bullying remained debatable and until yet researchers agree that bullying behaviors must be considered as repeated over a certain period of time (Leymann, 1996) and there should be a power discrepancy among the victim and the perpetrator, so that it becomes difficult for the victim to defend him/herself (Staale Einarsen, Hoel, & Notelaers, 2009). Thus, workplace

bullying has been defined by Salin (2003) as “repeated and persistent negative acts towards one or more individual(s), which involve a perceived power imbalance and create a hostile work environment”. On the basis of country, industrial sector and methods of measurement, rates of prevalence of workplace bullying were considerably varying (Grainger & Fitzner, 2007; Hoel & Cooper, 2000) with bullied rates of 8.6 percent (Ståle Einarsen & Skogstad, 1996), 13.6 percent (Zabrodska & Kveton, 2013) and 28 percent (Lutgen-Sandvik *et al.*, 2007) have been reported. Workplace bullying is just like a systematic power abuse which may adopt various distinctions like predatory, work-related and person-related, direct versus indirect bullying, dispute-related bullying along with the latest iteration of bullying i.e. cyberbullying (Ståle Einarsen *et al.*, 2009; Slonje & Smith, 2008). It is repeated exposure over a minimum time period of 6 months to the acts of maltreatment, abusive actions and aggressive behavior by peers, supervisors, or direct reports (Ståle Einarsen *et al.*, 2009; Houshmand *et al.*, 2012). Workplace bullying is related to harassment, mobbing, and incivility and it has different meanings among researchers (Ståle Einarsen *et al.*, 2009).

### **2.3 Defining Bullying and Cyberbullying**

Bullying, mobbing, harassment, e-harassment, cyber aggression and cyber deviancy are the terms used to describe intimidating behaviors and humiliating acts which may occur in the workplace of organizations. Einarsen and his colleagues explained that in English-speaking countries the term bullying is used for such kind of acts, and in French-speaking countries the term “harassment” is commonly used and in European countries “mobbing” is the term that is generally used. Cyber aggression and e-harassment are parts of a broader collection of cyber deviant behaviors at workplace which involves cyber loafing, online gambling and hacking. Einarsen and his colleagues’ have divided the bullying behavior into 3 distinct categories such as work-related bullying, person-related

bullying and physically intimidating bullying. In work-related bullying information is being withheld, opinions of workers are usually ignored, unmanageable workloads are given, unreasonable deadlines are being imposed, excessive monitoring of work and heavy time pressures are included. In person-related bullying workers are being ridiculed/humiliated at work, areas of responsibility are being removed, gossips about person and the rumors are being spread, workers are being ignored, passing of insulting remarks, allegations were being made, worker is being ignored/excluded, or induced to quit the job and being the subject of practical jokes or the target of extreme testing. Lastly physically-intimidating bullying consists of being the target of impulsive anger or being shouted at, or pointing of figure or blocking shoving or threats of actual physical violence and being abused. Many of these bullying behaviors may occur face-to-face (traditionally) or in cyberspace. Cyberbullying is defined by Piotrowski (2012) as “using electronic media (e.g., e-mail, SMS, social media, virtual communities) to inflict intentional and repeated harm to a target and is just similar to conventional bullying”.

#### **2.4 Difference between Cyberbullying and Traditional Bullying**

Cyberbullying is different from traditional bullying in some of the ways. Smith (2012) has been described 7 features: (1) cyberbullying is dependent upon some technological expertise (2) it is mainly indirect instead of doing face-to-face, so the perpetrator identity remains anonymous (3) the perpetrator of cyberbullying can't see the reaction of victim in the short run at least (4) in traditional bullying perpetrator may have an objective of gaining status by showing power (abusive) over others, but this can't be in case of cyberbullying (5) in case of cyberbullying witness role can be quite complex as compare to traditional bullying. The witness can be with the perpetrator at the time of action (sending or posting) or might be with the victim when he received the post (6) there is no safe haven in case of cyberbullying i.e. no way to escape, as the message may be sent to

the victim to his/her mobile or computer or may receive nasty comments on website, wherever he/she is (7) cyberbullying particularly reaches to larger audience groups in seconds while audience is usually small in traditional sort of bullying.

## **2.5 Prevalence of Cyberbullying**

Power *et al.* (2013) pointed out that, it is quite harder to get consistent results regarding to the overall prevalence of cyberbullying in the workplace because in organizations, there are cultural differences that constitutes bullying or cyberbullying and the method of measuring this behavior is also different like it can be subjective or objective (Ståle Einarsen, Hoel, Zapf, & Cooper, 2011), and also depends on the type of industry in which the research is going to be conducted (Privitera & Campbell, 2009). In 2009 a survey has been conducted among internet users of age under 18 and has reported that, about seven percent respondents were cyber-bullied and Perreault (2011) also stated that seventy three percent respondents were bullied by e-mail. Another research conducted by Privitera and Campbell (2009) on Australian Manufacturing Workers Union and the respondents were the male workers reported that, 89.3% workers were experiencing at least one negative act face-to-face or online (e-mail, SMS or telephone) on the basis of “now and then” over the past 6 months. Further, among these respondents 83.5% reported more than one instance with the average rate of negative acts of 8.9%. According to Ståle Einarsen *et al.* (2011), the types of activities which can be reported over e-mail may include: spreading gossips, being the subject of allegations against them, withholding information, and being exposed to heavy workloads that are unmanageable etc. Leymann (1996) conducted a research and revealed that 18.7% of respondents were being the victims of workplace bullying as reported by others and 37.5% were self-reported victims of bullying. And most of them were being bullied by e-mail or telephone or both. Interestingly, researchers found that cyberbullying is usually accompanied by face-to-face bullying. Privitera and

Campbell (2009) concluded that, cyberbullying is a new type of bullying so in order to handle this issue most of the organizations are not well-equipped with good policies, codes of conduct, strategies or procedures for the protection of health of workers their safety and wellbeing. Thus, there is a dire need to study the prevalence and health outcomes of bullying and cyberbullying

## **2.6 Forms of Cyberbullying**

The emergent concept of cyberbullying shows that, offenders are using the alternative means and have diverted their attentions toward technology (like mobile telephones and the internet) to use it as a powerful mean of controlling others and exercising power. Cyberbullies may reach to their targets at any time whether it's a day or a night. According to Schenk and Fremouw (2012) cyberbullying has various forms including:

- Harassment: repeatedly sending threatening or insulting messages to others.
- Flaming: electronic/digital transmission of rude/angry messages.
- Denigration: spreading cruel rumors, put-downs.
- Masquerading: to pretend as someone else and information sharing to damage other's reputation.
- Cyber stalking: threats of intimidation or harm.
- Outing: To reveal personal information about someone which was shared in confidence.
- Exclusion: meanly leaving a person out of online group like a game or a chat line or ganging up on one person.

As exposed by Hoff and Mitchell (2009), cyberbullying may occurs in terms of difficulties in relationships like romance and friendship breakups, feeling envious with the coworker's success or on the basis of gender, ethnicity,

disability or sexual orientation if there is prejudiced intolerance about a particular group. This research is specifically focusing on cyberbullying at workplace of organizations. Different forms of bullying as mentioned above may exist at different workplaces.

## **2.7 Review of Related Theories**

In this research, Novak's (1998) theory of learning, frustration-aggression theory (Berkowitz, 1989), social interaction approach (Felson, 1992) and General Strain Theory (GST) are used to meet the relevant objectives. Novak's (1988) theory of learning is used to understand the concept of workplace bullying and its prevalence in organizational settings. An individual person came to know about bullying behavior or act on the basis of prior knowledge and experience, that certain act is bullied act or not. Thus, he/she can better understand and respond about bullying happenings and prevalence while answering to the questions about workplace bullying. Frustration-aggression theory and the social interaction approach is to understand the relationship between variables organizational climate and workplace bullying. As frustrated climate of the organization induces aggression among workers which may lead them toward aggressive behaviors like bullying at workplace. General Strain Theory (GST) is applied in a reverse way as reverse application is helpful in understanding the emotional and psychological consequences of criminogenic activities such as traditional bullying and cyberbullying in the form of frustration, aggression and depression. In this research, Emotional Intelligence as a coping strategy is introduced to reduce the negative health outcomes of workplace bullying. To make the construct of Emotional Intelligence the Goleman's model of Emotional Intelligence (1988) is adopted and the social and personal competences recommended by Goleman's model were used as dimensions of Emotional Intelligence. Explanation of the theories used to meet the relevant objectives of the current study is given in Table 2.1.

**Table 2.1: Relevant Theories in the Study**

<b>Relevant Theories</b>	<b>Theory Description</b>	<b>Used for the Objectives</b>
<b>Novak's (1998) Theory of Learning</b>	Meaning comes from prior knowledge, which comes from the experiences. And this meaning influences our choice of action and behaviour.	To understand the concept of bullying and its prevalence in organisations.
<b>Frustration-aggression theory and social interaction approach</b>	The role of external circumstances in causing aggression and negative effects.	To identify the organisational climate as an antecedent of workplace bullying.
<b>General Strain Theory (GST)</b>	Strain/stressor leads to negative emotions such as frustration, depression, and anxiety, may increases one's inclination towards delinquent and criminal behaviour.	Applied in a reverse way to find out the health outcomes of workplace bullying.
<b>Goleman (2005) mixed models theory Of Emotional Intelligence</b>	Grouped into personal competencies (self-awareness, self-regulation and motivation) and social competencies such as empathy and social skills used in the workplace situations.	Used these competencies as dimensions of Emotional Intelligence to overcome the negative health impacts of workplace bullying.

## **2.8 Novak's Theory of Learning and Prevalence of Workplace Bullying**

### **2.8.1 Key Elements of Novak's (1998) Theory of Learning**

Novak's has presented his view in Novak (1998) theory of learning that construction of meaning by an individual about different aspects of the world depends upon experiences. Novak's theory focuses on from where meaning comes and revealed that meaning originates from pre-existing knowledge which comes from our prior experience. A person construct meaning of an event or object on the basis of prior knowledge he/she has. And this meaning affects our actions and behaviors regarding to that phenomena and these acts in turn adds to our experiences.

### **2.8.2 Application of Novak's (1998) Theory of Learning to Workplace bullying**

If the above concepts of Novak's (1998) theory of learning is to be related to the concept of workplace bullying, it will be easy to understand the phenomenon of workplace bullying that an individual person may know about bullying behavior depends on pre-existing knowledge about bullying which may originates from prior experiences. On the basis of this meaning about workplace bullying, individuals choose their actions that in turn adds to their personal experiences about bullying at workplace. Such new experiences enhance person's knowledge and inform his meaning. As an example to understand this concept, if the colleague is being bullied by his/her supervisor by being publically reticulated in a workplace meeting, so that's the first experience of other employees to observe bullying happening with the co-worker. So this is the learning experience and it makes the perception that these acts and behaviors are negative and comes under the category of bullying. Thus, bullying at work is a concept which gives meaning to employees that it's a real and significant problem of workplace. The employee got to know that workplace bullying might be a situation arise in public or in meetings at workplace that may cause huge distress for the colleague who is the victim, and also discomfort others during meetings. In the result, choices of actions of employees will be different like, they may support that colleague to the best possible degree or may avoid working with that colleague's supervisor who is the perpetrator of the bullying. This formulation shows that, understanding of workplace bullying is different for different people and every individual conceptualize it differently. Meaningful learning about workplace bullying is required which may result in a new conceptualization of this phenomenon and new action choices in relation to workplace bullying. Thus, Novak's (1998) theory of learning might be useful in understanding workers behaviors at workplace in relation to workplace bullying. The core concept of the view is that, the

varying meaning of this phenomenon may lead workers toward different perceptions, actions and choices.

It is suggested that application of Novak's (1998) theoretical view of learning to workplace bullying may change an individual's conceptual meaning of workplace bullying and leads an individual to perform different action in response to workplace bullying. Individuals who considers workplace bullying a harmful activity and thinks to have delinquent consequences of it are, less likely to indulge in workplace bullying behaviors and are more likely to respond understandingly if such action is being reported. It is suggested by Novak's theory that, workers should be provided with a training related to workplace bullying which keenly focuses on meaningful learning regarding workplace bullying concept. The meaningful learning might change the learners' conceptualities of workplace bullying phenomenon. Most significantly, those trainings that focuses on meaningful learning based on prior knowledge may eliminate misconceptions about workplace bullying and may lead workers toward positive actions at workplace (Brodsky, 1976). Eventually, these positive action choices might reduce the occurrence of problematic workplace phenomenon like bullying.

In the current study, Novak's theory of learning can be applicable in understanding the concept of bullying on the basis of prior knowledge and experience that, what behaviors and acts are considered to be bullied acts. On the basis of which respondents can better respond regarding bullying questions, thus prevalence rate of bullying extent and frequency can be measured appropriately to meet the first objective of the study.

## **2.9 Prevalence of Workplace Bullying in Service Sector of Pakistan**

Statistics show that in Pakistan the mobile market is flourishing (Hallingby, 2016), and it is stunning that there were about more than 300 million users. As of August 31, 2004 there was a continued growth in number of users and have increased the figure to double

digit, as cited by Yasser (2012) that the telecommunication industry is blossoming speedily in Pakistan and various national and multinational telecom companies are working. They are having origins from different countries with different organizational culture, policies and practices as compare to Pakistani work environment, so the employees of these companies have to face different problems where bullying is at the most (Bashir & Malik, 2011). Another research by Naseer and Khan (2015) conducted on employees working in the service sector i.e. banking and telecom sector of Pakistan. Four banks and two telecommunication organizations have been targeted and resulted that, there is a prevalence of bullying at workplace of banking and telecommunication sectors. But these results cannot be generalized as the number of banks and telecom companies targeted for this research are only 2 and 4 respectively that shows a very small scale of study and needs to be extended. In spite of applying a strict measure relatively, prior study by Ahmad *et al.* (2017) has revealed that workplace bullying is also a significant issue among academics (education sector) in Pakistan. It is indicated in his study that around half of academics i.e. 47.9% were experiencing workplace bullying on regular basis. The rates of perceptions of workplace bullying prevalence were higher in education sector than the perception rates reported in former western studies comparatively (Table 1.3). Additionally, it is also found that among academic workers downward bullying is more dominant because of hierarchical structuring in organizational levels and is commonly found in Pakistani educational institutes (Sadrudin, 2013). The hotel industry of Pakistan covers a large proportion of the country's revenue and mainly contributes in the Pakistan's economy (Ali, 2010). Very few studies have been conducted in the past on hotels and restaurants which only shows the financial condition of hotel industry of Pakistan (Imtiaz *et al.*, 2016), terrorist threats and harassment in hotels of Pakistan (Konar, Kumar & Hussain, 2014) and sustainability at hotel industry of Pakistan (Sajjad, Jillani & Raziq, 2018) but the past researches have

not focused much on workplace bullying issues in hotel industry of Pakistan. Thus, there is a need to study bullying prevalence, level and extent at the workplace of hotel sector of Pakistan and its relationship with health outcomes.

On the basis of above discussion, following hypotheses are formulated:

*H1: There is a prevalence of workplace bullying (traditional and cyber) in service sector of Pakistan.*

*H1a: There is a prevalence of workplace bullying (traditional and cyber) in banking sector of Pakistan.*

*H1b: There is a prevalence of workplace bullying (traditional and cyber) in telecom sector of Pakistan.*

*H1c: There is a prevalence of workplace bullying (traditional and cyber) in hotel sector of Pakistan.*

*H1d: There is a prevalence of workplace bullying (traditional and cyber) in education sector of Pakistan.*

Analysis above shows that bullying is a type of problem that occurs widely in service sector, hence it is vital to study its relationship with demographic variables, its precedents and effects and to provide some solutions to cope up with negative outcomes.

## **2.10 Demographic Factors and Workplace Bullying**

Gender seems to be studied at wider level among all the demographic variables though, the results of empirical studies regarding to the relationship of gender and bullying are not consistent (Moreno-Jiménez, Rodríguez-Muñoz, Salin, & Morante, 2008). Prior studies on this relationship depicted an insignificant relationship between two (Grunau,

2007; Vartia, 1996). Conversely, study of Trijueque and Gomez (2010) found that bullying is most common in women as compare to men. Moreover Moreno-Jiménez *et al.* (2008) testified that, differences among bullying percentages on gender basis also vary from industry to industry as higher level of bullying is reported by women in male dominated industry while in female dominated child care industry men are being more bullied (Lindroth & Leymann, 1993). The other variable “Age” is also significantly related to bullying, as depicted by prior study that there is a higher percentage of bullying among union member workers who are having the age between 31 and 50 (Trijueque & Gomez, 2010). Hoel and Cooper (2000) have proved that bullying is more experienced by younger people as compare to old workers. Research by Rayner and Hoel (1997) testified that bullying victims are typically having age of less than 25 years. Conversely, Ståle Einarsen and Skogstad (1996) reported that older employees experiences more cases of bullying. Various other studies conducted in Scandinavian countries indicated that older workers experience more hostile acts (Einarsen *et al.*, 1994; Vartia, 1996). Position/Job title is also related to bullying at workplace. Some researches indicated same level of bullying among employees, supervisors and managers (Hoel, 2002). Moreno-Jimenez *et al.* (2008) cited the author Salin (2003) and have reported that, there is a significant relationship between bullying and hierarchical status i.e. lower hierarchical level employees reported more bullying in comparison to employees at higher level. In order to assess the relationship between workplace bullying and demographic variables the study hypothesized that:

*H2a: Workplace bullying has significant relationship with gender*

*H2b: Workplace bullying is significantly related to age*

*H2c: Workplace bullying is significantly related to the profession.*

*H2d: Workplace bullying is significantly related to experience in the current organization.*

## **2.11 Antecedents of Traditional Bullying and Cyberbullying**

### **2.11.1 Frustration-Aggression Theory and Social Interaction Approach in Relation to Workplace Bullying**

Ideally, two of the frameworks might clarify the role of environmental factors as bullying antecedents' i.e. the frustration-aggression theory by Berkowitz (1989) and the social-interaction approach (Felson, 1992). Frustration-aggression theory highlights the role of external factors in causing negative effects and aggression and the social-interaction approach explains that stressful environments and events may indirectly induces aggression among workers by having severe effect on the victim's behavior . Stressful environments or events might induce workers to behave in such ways which persuade others to attack them. In a bullying situation, a worker distressed by stressful or unsatisfactory situation at work and may irritate others, and due to this reason he/she may aggravate a hostile or aggressive behavior.

In the current study frustration-aggression theory and social interaction approach are quite applicable in understanding the antecedents of workplace bullying by analyzing the relationship of organizational climate with workplace traditional and cyberbullying. Objective 2 of the current study is to identify the organizational climate as an antecedent of workplace (traditional and cyber) bullying. If the objective 2 is to be aligned with the concept of frustration aggression theory and social interaction approach it can be suggested that, external factors or stressful environment (negative organizational climate in this study) play a vital role in producing aggressive behaviors (workplace bullying in this research). As the negative climate of the organization may leads workers toward aggressive behaviors at workplace such as bullying.

### **2.11.2 Organizational Climate as an Antecedent of Workplace Bullying**

There can be multiple reasons which may provide basis for bullying and cyberbullying at workplace. Bullying and harassment are psychosocial hazards for workplace violence and are associated to poor environment and weak organizational structures at workplace and also linked to leaders negative behavior and deficiencies in work organization (Milczarek *et al.*, 2010). Bullying may also originates from work design problems such as role conflicts, incompetent leadership of management, a socially exposed position of a person subject to violence, a hostile and negative social climate or culture which rewards harassment (Milczarek *et al.*, 2010). “Insufficient staff i.e. inadequate relational care and lack of decision-making autonomy” are also the organizational risk factors (Banerjee *et al.*, 2012). Researches in Norway and Finland have proved that, there is a significant relationship of low satisfaction with leadership, role conflict, poor flow of information and bullying prevalence (Ståle Einarsen *et al.*, 1994; Vartia, 1996). So this explanation exposes that, the reason of occurrence of bullying might include the personality characteristics of victims/ perpetrators, the human interaction nature at workplace and the organizational climate (Hoel & Salin, 2003). There are lots of dimensions of organizational climate but only those dimensions that are directly related to workplace bullying based on literature (Table 2.2), are used in this research while making the construct of organizational climate. Primarily, it is important to understand the entire concept of organizational climate, its aspects and the formation.

### **2.11.3 Concept of Organizational Climate**

There is a controversy while researchers were conceptualizing organizational climate. There is a little consensus on a definition of organizational climate, how it should be measured and on the formation of it. Various researchers have been used organizational climate in different contexts and formulated various definitions of this term.

As revealed by Ahmed (1998), organizational theorists-Kurt Lewin and Douglas McGregor traditionally originated the term “climate”. They used the term first to refer the social and organizational climate correspondingly. They further explained that the organizational climate is dependent upon its employees’ and their feelings and perceptions, organizational practices, procedures and reward system of organization. Organizational climate is defined in a variety of ways. One definition that is most widely accepted is of Litwin and Stringer (1968), who define organizational climate as “a set of measurable properties of the work environment, directly or indirectly perceived by the people who live and work in a particular environment and is assumed to influence their motivation and behavior”. Forehand and Von Haller (1964) definition of organizational climate is most widely accepted and most earlier definition on the basis of citations (James & Jones, 1974; Johannesson, 1973; Moran & Volkwein, 1992), who defined organizational climate as “a set of characteristics that describes an organization, distinguishes it from other organizations, is relatively enduring over time and can influence the behavior of people in it”. Tagiuri, Litwin, and Barnes (1968) highlighted the importance of perceptions while defining organizational climate. They explained that the climate of organization is usually interpreted by organizational members and it effects their motivational level and attitudes. They explained the concept further as: “Organizational climate is a comparatively enduring quality of the internal environment of an organization which (1) influences the behavior of organizational members, (2) is experienced by its members, and (3) can be described in terms of the values of a particular set of characteristics/attributes of the organization.” Organizational climate is the quite durable characteristic of an organization which makes it different from other organizations and (1) exemplifies its members shared perceptions about their organizations on the basis of various factors such as trust, autonomy, cohesiveness, innovation, support, recognition and fairness; (2) provides basis for situation

interpretation; (3) is formed by interaction of members; (5) shapes behaviors by acting as a source of influence; (4) and reflects the prevalent values, norms and attitudes of the culture of organization.

#### **2.11.4 Components of Organizational Climate**

The components of the construct of organizational climate are measurable and controllable (Litwin & Stringer, 1968) and are having characteristics to define an organization and distinguish it from other organizations (Steers, 1977). This discussion rectifies that, organizational climate's definitions and approaches are diversified. Literature shows that, same is the case with the dimensions and measures of organizational climate so that various dimensions are used by various researchers in order to measure organizational climate (Davidson & De Jong, 2000).

##### **2.11.4.1 Psychological and Physical Climate**

Larger attention has been paid to differentiate between objective and perceptual climate (Glick, 1985; James, Joyce, & Slocum, 1988) and to distinguish psychological and organizational nature of climate e.g. Jones and James (1979), and also to explain methodological matters related to the aggregation perceptions of individual climate in order to represent organizational climate (Chan, 1998; Klein *et al.*, 2000). The disagreements related to these issues have been resolved fundamentally (Schneider, 2000) but, small deal of attention has been paid to explain how best the climate been captured as a system-wide variable in the organization. It has been mainly accepted that multiple climates may exist within an organization e.g. Schneider (2000). Parker and Aggleton (2003) conducted a meta-analytic review of the literature of psychological climate and mentioned that, there are multiple dimensions of climate based on research on psychological climate. Dimensions of psychological climate covers most of the aspects of the individual's work environment includes leadership style, characteristics of their

job, the physical work environment, job pressure, co-workers and supervisors relationship.

#### **2.11.5 The Formation of Organizational Climate**

Climate research has been first done by Lewin, Lippitt and White in the late 1930s in the industrial context (Lewin, Lippitt, & White, 1939) and has an extensive history in industrial and organizational psychology fields (Ashkanasy, Wilderom, & Peterson, 2000; Schneider & Reichers, 1983). Climate characterizes a comparatively similar set of perceptions and beliefs toward the organization whereas, climate theory basically focused on the process in which such type of homogeneity exist (Moran & Volkwein, 1992; Schneider & Reichers, 1983). Though, there is no undisputed agreement about the dimensions forming the organizational climate construct (Ashforth, 1985; Boada-Grau, Diego-Vallejo, Llanos-Serra, & Vigil-Colet, 2011; Campbell, Dunnette, Lawler, & Weick, 1970; Kopelman, Brief, & Guzzo, 1990). Koys and DeCotiis (1991) have identified 8 key dimensions: cohesion, autonomy, trust, support, pressure, impartiality, innovation and recognition. Over the last 25 years, climate theory has progressed substantially based on structural approach where organizational dimensions such as hierarchy and size were considered to be the leading contributors towards climate (Moran & Volkwein, 1992). After that, organizational climate focus were shifted to the perpetual approach in which the individuals were supposed to be an essential factor in the formation of climate. The two approaches were criticized largely as is explained in the following section. This criticism has delivered the push for the development of the interactive cultural approaches toward the formation of climate (Moran & Volkwein, 1992; Zohar, 1980). There is a lack of understanding regarding emergence and the formation of climate in an organization. Schneider and Reichers (1983) have presented 4 types of approaches for climate formation.

1. The structural approach,
2. The perceptual approach,
3. The interactive approach,
4. The cultural approach.

Payne and Pugh (1976) initially proposed **structural approach**. According to this approach, organizational climate is considered to be an organizational characteristic or an attribute. Organizations usually own these attributes depend upon the perceptions of members of an organization (Moran & Volkwein, 1992). Organizational climate is the combination of the objective facets of the work environment such as size of the organization, a centralized or decentralized structures, hierarchical levels, technology advancements and the degree to which organizational policies or rules affect the behavior of members.

In Gerber (2003)'s model of organizational climate, it is also portrayed that technology is one of the important elements which may contribute in the formation of organizational climate.

In the **perpetual approach** of organizational climate, an individual creates a psychological representation of the organizational climate on the basis of perceptions about the organizational conditions. Organizational processes like leadership, communication, influence and decision-making patterns are included in it (Moran & Volkwein, 1992).

Moran and Volkwein (1992) indicated that, in an **interactive approach** the formation of organizational climate depends upon the interaction of individuals in organizational situation's response which results in the common agreement or teamwork of organizational members. Communication is a basic contributor of organizational climate.

Empirical researches done by Coetsee and Pottas (cited in Gerber, 2003) proved that, communication is the key element which contributes in the formation of organizational climate. Climate is defined in the interactive approach as “the aggregated effect of the interaction between the characteristics of the person and the organization”. Climate is formed by the interaction of organizational members and the information exchange by way of communication (Moran & Volkwein, 1992).

**Cultural approach** is proposed by Moran and Volkwein (1992) explained that, organizational climate is created by individuals in a group who share and interact and are having the same abstract frame of reference and organizational culture as they know how to deal with the demands of organizations. This approach emphasizes that, the individual's interaction is the key source of climate. So, in the development of organizational climate organizational culture plays a very vital role.

#### **2.11.6 The Importance of Organizational Climate**

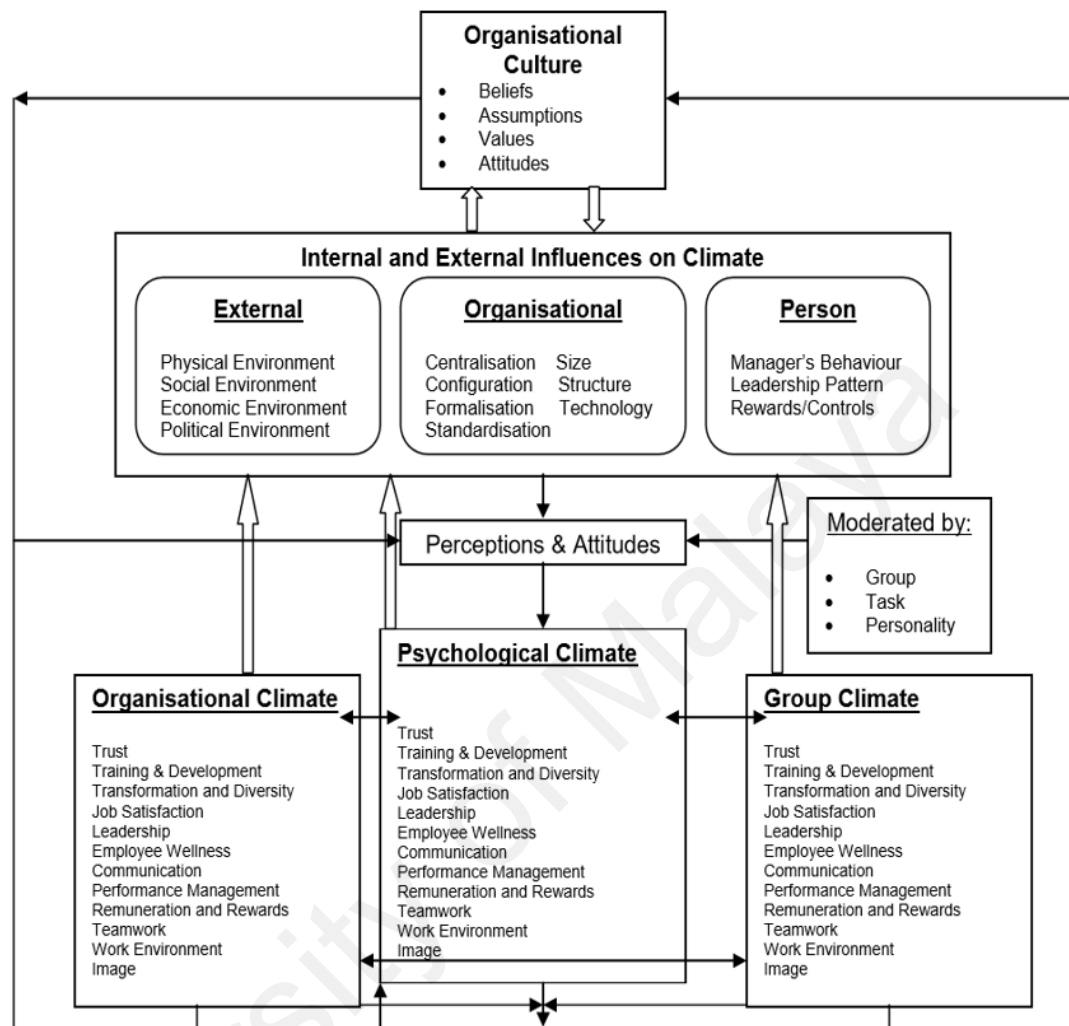
Organizations are facing much more challenges in the 21<sup>st</sup> century than ever before. The challenges are not distinctive to any specific industry or organization but having strong effects on organizations, irrespective of their size and structures. In a specific organization an organizational climate is used to be challenged by the increasing number of changes and having impact on today's organizations (Nair, 2006). Such changes are related to restructuring, merging and acquiring, trends of technology, politics and internationalization, local and international economy as well as increased competition. If the organizations do not manage these changes appropriately this would be resulted in a change in the behavior or perception of each individual employee, which may decrease the motivation and satisfaction level of workers and may increase the turnover intentions and absenteeism, which ultimately leads toward low organizational performance (Gray, 2007). Organizations endeavor to improve performance constantly for their survival and

to compete their competitors. The importance of organizational climate is increasing day by day as organizations have to make sure that the workers who have added value to their bottom line are intended to remain a part of this organization and they are willing to work for the organizational interest and ready to put their efforts to benefit the organization (Brown & Leigh, 1996).

#### **2.11.7 Challenges for New Work Environment**

There is a huge difference between modern work environment and the work environment three decades before. The main difference is irresistible new challenges that organizations are facing. Modern challenges consist of organizational structural changes, changes in the nature of organization, increased competition, high degrees of technological innovation, and the other challenges that workers are facing in the organization, like flexible hours of working, maintenance of work life balance, redefinition of employment contract, new business patterns and procedures (Kangis, Gordon, & Williams, 2000; Nair, 2006).

Organizations have to struggle hard in order to remain competitive in a global diverse market. Martins and Von der Ohe (2003) analyzed that, these changes strongly effects organizational climate and motivation level of workers which ultimately influences the profitability of the organization. Managers in organizations are facing lots of challenges in which the most common is managing workers teams in rapidly changing work environment and to create a climate in which workers can show their talent, skills and expertise and can perform efficiently (Suliman & Abdulla, 2005). Apart from this, technology is also becoming a well-known challenge. Henceforth, it is quite challenging for organizations and is critically important to develop and maintain such conditions that are favorable for the creation of a high-performing organizational climate.



**Figure 2.1: Model of OC (Organizational Climate), Gerber (2003)**

This model rectifies that, technology plays a vital role in forming the construct of organizational climate. Hence, the present study added technology as one of the dimensions of organizational climate and studied it as an antecedent of workplace cyberbullying.

#### 2.11.8 Construct Developed for Organizational Climate

On the basis of above discussion, construct of organizational climate for this study is developed by combining several elements extracted from above mentioned researches.

This construct comprises of leadership, job descriptions, time pressures, cultural norms, working conditions and technology. Technology is specifically related to the prevalence of cyberbullying at place of work (Llewellyn, 2009). Those elements of organizational climate are chosen for this study which are directly related to traditional bullying and cyberbullying. According to different researches characteristics of organization and the psychosocial work environment are considered to be the common antecedents of workplace bullying (Agervold & Mikkelsen, 2004; Ståle Einarsen, 2000; Hoel & Salin, 2003). Multiple dimensions of organizational climate are directly related to workplace traditional and cyberbullying behaviors as are shown in the following Table 2.2.

**Table 2.2: Dimensions of Organizational Climate in Relation to Bullying**

<b>Climate Dimensions</b>	<b>Relationship with Workplace Bullying</b>	<b>Literature Support</b>
<b>Leadership</b>	Leadership practices can be the major cause of bullying. Autocratic leadership might induce frustration and aggression among subordinates which may increase the prospect of peer aggression among group members, and in this way it acts as a precursor of bullying at workplace.	Felson (1992)  O'Moore, Seigne, McGuire, and Smith (1998)  Vartia (1996)
<b>Job Descriptions</b>	Unclear job description and role ambiguity are associated to workplace bullying. Poorly organized work structures with unclear roles and descriptions are also associated to workplace bullying.	Ståle Einarsen <i>et al.</i> (1994) Leymann, 1996.  Hauge, Skogstad, and Einarsen (2009)
<b>Cultural Norms</b>	According to social interactions theory, those people who are not adjusted to cultural norms and expectations of organization are more probable at the risk of being the victim of aggressive behavior i.e. bullying.	Felson (1992), Tedeschi and Felson (1994)  Moreno-Jiménez <i>et al.</i> (2008)

**Table 2.2: Continue**

<b>Climate Dimensions</b>	<b>Relationship with Workplace Bullying</b>	<b>Literature Support</b>
<b>Working Conditions</b>	There is a significant relationship between the rate of bullying occurrences and working conditions of an organization.	Stale Einarsen <i>et al.</i> (1994), Vartia (1996)  Carnero, Martínez, and Sánchez-Mangas (2010)
<b>Time Pressures</b>	Time pressure influences the degree of workplace bullying. It has been documented as an antecedent of bullying at workplace of organizations.	Zapf and Einarsen (2011), Hoel and Salin (2003)
<b>Technology (Social networking and ICT)</b>	In addition to the difficulties of managing use of social media, a further management challenge arising from the spread of ICT and social networking is cyber-bullying	Llewellyn (2009)

On the basis of the above construct and literature support it can be hypothesize that

*H3: Organizational climate has significant negative relationship with workplace bullying.*

#### **2.11.8.1 Cyberbullying as a Dark Side of Technology**

It is quite difficult to manage the use of services of social media. In addition to other difficulties, a management challenge is rising from the use of ICT and social networking media which is called cyber-bullying, defined by Llewellyn (2009) as “any use of information and communication technology to support deliberate and hostile attempts to hurt, upset or embarrass another person”. Cyberbullying consists of ICT for intimidating,

harassing, victimizing or bullying others. It has also been defined as “the use of information and communication technologies to support deliberate, repeated, and hostile behavior by an individual or a group who are intended to harm others” (Belsey, 2007). Positing or sending a harmful material on internet is also a kind of cyberbullying and it also includes the use of digital technology in order to impose social cruelty on targets or victims (Willard, 2006). Digital communication means used as tools for bullying are: instant messaging, social networking sites, email, chat rooms, blogs, web sites, pictures, text messages or video clips etc. Cyberbullying may also include posting or sending hazardous messages or images via internet or any other devices of digital communication. Strom and Strom (2005) argued that, the intentions of cyberbullying perpetrator can be to harm, humiliate or threaten an individual and to provoke fear, endanger and helplessness in the victim. Campbell (2005) exposed cyberbullying as a dark side of technology and revealed that bullying via negative use of technology is harmful and should be controlled. Following actions might be included in cyberbullying.

- Email threats
- Offensive e-mails
- Propagating defamatory gossips about employees on social networking sites and blogs
- Posting blogs and leaving comments on social networking sites
- Threats or offensive comments sent to a person’s mobile phone via SMS text-messages
- Harassment by email

Privitera and Campbell (2009) conducted a small scale study and a survey showed that Australian workers have experienced some kinds of cyberbullying victimization at large scale. The survey was at limited scale and the study find that, victims of cyber bullying

have also experienced bullying via conventional channels. But there is a need of more comprehensive research on this new emerging issue and is vital to study technology as an antecedent of cyberbullying.

Cyberbullying is relatively a new area of research and understanding of its antecedents has not been fully developed yet. Previous researches depicted that, victims of traditional (face to face) bullying might be indulged in cyberbullying by harassing their perpetrators online as a revenge (Ybarra & Mitchell, 2004). Little research has been done by few researchers on workplace cyberbullying and more research is required to explain occurrence and effects. Previous theories in this field highlighted the weakness of communication media that it lacks the appropriate cues which may provide awareness about the situation of communication partner such as his mood and the work environment (Sprouill & Kielser, 1986). In such kind of situation workers are not that much worried about their evaluation. They become less polite, little focused on relationship orientation and more focused on task orientation while working virtually. This increases the likelihood of negative acts like sending of negatively worded messages without having any fear of how they would be interpreted (Kiesler, Siegel, & McGuire, 1984). Technological communication media with its characteristics might indorse conflicts. For example, Friedman and Currall (2003) explains that two of the elements of email communication i.e. too long messages and weak interpersonal bonds might increases the possibility of conflicts and disputes. This research proposed that misuse of technology at workplace, as technology is one of the important component of organizational climate, might be the antecedent of workplace cyberbullying.

#### **2.11.8.2 Social networking and cyberbullying**

According to Broughton *et al.* (2010), the wide spread of social networking and its use generates challenges to manage risk related to individual and organizational reputation.

It is unknown that how the use of social network shapes an individual behavior at place of work, and how the performance assessment of managers at workplace is affected by the perception of employee use of social networks and how it works as a mean of exchanging information about individual concerns. The electronic media usage is increasing within and outside of the organizations as people are more interested in technological adoption. The rapid use of technology is increasing the danger of being involved in the alternative way of bullying that is cyberbullying, which is mediated by technology. Cyberbullying is defined by Piotrowski (2012) as “inappropriate, unwanted social exchange behaviors initiated by a perpetrator via online or wireless communication technology and devices”. According to Grigg (2010) forms of cyberbullying include “fraudulent, aggressive, anonymous, hacking into email accounts, unwanted messages, threats, spreading rumors, harassment, unwanted phone calls, attacks, malicious and abusive messages”. Most of the elements of both the traditional and cyberbullying are common. Lawrence (2015) has described that both are repeated and hurtful, both might be intense, both involves power imbalance and might create feeling of powerlessness. There are also some differences between both, as the basic difference between them is the technology use. Cyberbullying occurs through the use of any technology. Lawrence (2015) also argued that CB (cyberbullying) is distinct from WB (workplace bullying), and is found to be more harmful because of three features that is WB doesn't share: potential for anonymity, access and publicness. Snyman and Loh (2015) have depicted that cyber-bullies can possibly reach to their targets in any location, at any time, through different means like phone, email, by use of social networking sites, text messaging and others and put targets in trouble so that they can't avoid bullies and stop using technology which is quite difficult to manage as technology use is essential for work and family communication. Technology is growing and evolving speedily. Workers recognize that technological tools are essential for their business, but are still grappling with how

organizations can effectively integrate them into business activities and stop contributing them in the blurring of personal and workplace boundaries? According to Card and Hodges (2008) if anyone wants to do bullying with others specially at workplace, it's very easy to do so by several electronic means now a days because there is an accessibility of cell phone to everyone—every person has Facebook on his/her mobile, LinkedIn on cell phone and also have text messages option in hands. Hence social networking through ICT's in organizations can be the cause of cyberbullying at place of work among workers. So for this purpose, the current study proposed the following hypothesis:

*H3a: Positive technology use is negatively related to cyberbullying.*

## **2.12 Reverse Application of General Strain Theory and Health Outcomes**

General Strain Theory (GST) claims that stressors or strains increases the possibility of negative emotions like frustration, anger and depression and as a response, these type of emotions may create pressure for corrective actions and crimes (Agnew & White, 1992). This theory explains how negative emotions, stress or strain leads an individual towards criminological or deviant sort of behaviors.

Agnew (2001) elaborated and extended the General Strain Theory (GST) and proposed that peer abuse/ bullying victimization is also a criminological and delinquent behavior. This theory further explains the reason of increasing likelihood of various types of crimes on the basis of negative life event happenings (Agnew, 2001).

Criminogenic activities include many forms of bullying like aggressive, relational, verbal, indirect and cyber. Hinduja and Patchin (2007) predicted that General Strain Theory might be helpful for researchers or practitioners in understanding the complex behavioral, emotional and psychological consequences of traditional and cyberbullying.

For this instance, the current study applied the General Strain Theory (GST) theory in a reverse way in order to find out the health outcomes of criminogenic behavior i.e. bullying at workplace in the form of aggression, frustration, anxiety etc. This reverse application of theory will be helpful in understanding the concept of criminal and deviant behavior such as bullying victimization at workplace that it can be a persuasive cause of emotional, psychological and physiological health distraction by frequently producing the feelings of anger, frustration and depression among workers.

### **2.13 Employee Health Outcomes of Workplace Bullying**

It is quite significant for organizations to counteract against bullying at workplace so that to reduce its negative effects. There are negative effects of bullying on psychological and physical wellbeing as well as social health of workers (Hogh *et al.*, 2011). Top management team has the responsibility to solve this problem in every organization at each workplace. If the top managers are not going to take any action, this issue may increase substantially with more severe impacts. This research study proposed that, there may be negative employee health impacts of workplace bullying and these can be burnout and ill health (psychological and physiological) issues.

#### **2.13.1 Burnout as a Health Outcome of Workplace Bullying**

The definition of burnout varies with the variation in context and intensions of researchers. Burnout most commonly defined as “It is a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment which can occur among individuals who work with people in some capacity” (Maslachi *et al.*, 1996). Schaufeli *et al.* (2001) revealed that to diagnose burnout, the neurasthenic symptoms should additionally be work-related and professional treatment must be provided to an individual. Besides, those professionals who are having psychological background, use to see burnout as a continues phenomenon and also consider it as a chronic distress

resulted from frustrated and stressed work environment however, medical background professionals use to see burnout as dichotomously and they consider it as a medical condition. So they both refer burnout differently in their own ways.

Various research studies have investigated about incidence of bullying and its possible consequences by particularly focusing on the relationship between workplace bullying and burnout symptoms. Ståle Einarsen (2000) and Savicki, Cooley, and Gjesvold (2003) have conducted the studies show that bullying is having strong association with psychosomatic complaints and psychological distress, it also includes the experience of burnout. A Finnish study has been conducted on around five thousand staff members of hospitals resulted that, victims of bullying had 26% more certified absences with the reason of having psychological issues including burnout as compare to those who had not suffered with this sort of phenomenon. Another research also conducted in hospitals and some other organizations by Kivimäki, Elovainio, and Vahtera (2000) has shown that workplace bullying is related to self-reported burnout and also associated to the intentions to leave the job. A study conducted by Ståle Einarsen (2000) on 745 Norwegian nurses concluded that bullied nurses obtained a higher level of burnout as compared to non-bullied nurse colleagues. Another Norwegian research (Mathisen, inarsen, & Mykletun, 2008) explored about the prevalence and consequences of bullying and harassment in the restaurants. Result of the study showed a positive link between exposure to bullying behavior and burnout. So following hypothesis can be postulated.

*H4a: Workplace bullying has significant positive relationship with Burnout.*

### **2.13.2 Psychological and Physiological Health Outcomes of Workplace Bullying**

Bullying at workplace is known as a risk factor in clinical depression (Niedhammer, David, & Degioanni, 2006), it is also recognized as a risk factor in case of suicide attempts

(O'Moore *et al.*, 1998), clinical levels of anxiety (Quine, 1999), post-traumatic stress disorders (Matthiesen & Einarsen, 2004; Mikkelsen & Einarsen, 2002; Tehrani, 2004), turnover intention, higher levels of job induced stress, absenteeism, lower levels of job satisfaction as well as sick leaves (De Wet, 2010; Kivimäki *et al.*, 2000; Quine, 1999). Previous researches established the fact that workplace bullying is found to be a huge stressor that severely affects the health and well-being of the targeted victims and also leaves adverse effects in the workplace of organization where it occurs (Hogh *et al.*, 2011). Parkins, Fishbein, and Ritchey (2006) identified that for the victims, bullying may have severe consequences with negative effects on psychological and physical health. Psychological and physiological symptoms consist of depression, restless feelings and inability to think clearly, anxiety, irritability feelings, headache, digestion issues, high blood pressure, post-traumatic stress disorder, sleep disturbance etc.

Limited researches have been documented the outcomes of cyberbullying at workplace. A study by Baruch (2005) depicted that bullying via email is allied with turnover intentions in organizations, lower level of job satisfaction and also related to anxiety. Other than this, small work has been done related to the impact of cyberbullying on employees. Implementation and usage of digital communication devices in organizations are increasing, supporting the global nature of work so that, further research is needed to investigate about the impacts of cyberbullying in the workplace. A researcher's team of Nottingham University and the University of Sheffield have been conducted a research in order to investigate about cyberbullying incidents on the sample of staff working in the universities of UK. Results revealed that more the people become victim of cyberbullying greater will be the mental strain issues and will have less job satisfaction. It is also found that online bullying has more severe and stronger affects than offline bullying. Okoiye, Anayochi, and Onah (2015) has depicted in his study that cyberbullying consist of harassment/mistreatment by offender against physically distant

victim. However, offender and victim are not having personal contacts in case of cyberbullying though it is emotionally and psychologically destructive for youth. This sort of destructions and damages produce strain, which provoke victim towards negative behavioral choices and induce feelings of frustration, anger, and depression. It is a stressful experience when someone is being cyberbullied and has varied impacts depending upon the level, frequency and severity of issue. Few studies have identified its psychological effects such as lower self-esteem by Katzer *et al.* (2009), depression (Didden *et al.*, 2009) and social anxiety (Juvonen & Gross, 2008). This discussion leads to the following hypothesis:

*H4b: Workplace bullying has significant positive relationship with ill-health (psychological and physiological).*

## **2.14 Organizational Climate and Health Outcomes of Workplace Bullying**

Researchers and practitioners came up with various mechanisms which link organizational climate with mental and physical health issues. Various models have also been used to elaborate this relationship in which two sets of models are commonly employed. In one set of models, organizational climate is described as a job stressor that influences mental health of workers directly. In this model of a healthy workplace, Kelloway and Day (2005) showed (as an example) that organizational factors such as involvement of workers, interpersonal relationships of employees, and a culture of support at work, as well as fairness and respect have greater influence on mental health of workers. In the current model, both the job demands and characteristics of organization such as organizational climate might act as a factor of occupational stress, which may have severe impacts on both the mental and physical health. The other set of models explain, how organizational climate affects employee mental as well as physical health indirectly. Like in the model of the healthy work organization, Wilson *et al.* (2004)

revealed that organizational climate relates to mental and physical health and influences job design, job conditions and psychological work adjustment. MacDavitt, Chou, and Stone (2007) have reviewed the researches related to the impact of organizational climate on employee outcomes. This review of research pointed out that burnout is a mental health outcome of poor organizational climate. On the basis of this literature, the current study may propose that:

*H5a: Organizational climate has negative relationship with burnout.*

*H5b: Organizational climate is negatively associated with ill-health (psychological and physiological).*

## **2.15 Mediating Effects of Workplace Bullying**

As is depicted from the above literature, organizational climate may contribute in inducing negative behaviors in workers which may lead them towards workplace bullying, and bullying at workplace might be the major cause of negative health outcomes such as burnout and ill (psychological and physiological) health. The mediation is also supported by the researcher Brotheridge, Lee, and Power (2012). So, the study may hypothesize the mediation of workplace bullying in a relationship between organizational climate and health outcomes, as is given following:

*H6a: Workplace bullying acts as a mediator between organizational climate and burnout.*

*H6b: Workplace bullying acts as a mediator between organizational climate and ill-health (psychological and physiological).*

## **2.16 Coping Strategies**

Coping is defined by Lazarus (1991) as “cognitive and behavioral efforts to manage specific external or internal demands (and conflicts between them) that are appraised as

taxing or exceeding the resources of a person”. Two general categories of coping have been defined by Lazarus and Folkman (1984) that are: problem-focused coping and emotion-focused coping. Later Carver, Scheier, and Weintraub (1989) projected a third category i.e. avoidance coping. Researchers have paid much more attention towards understanding the styles of coping and their effective utilization in order to influence satisfaction level and wellbeing of workers and to maintain work life balance e.g. (Evans, Bryant, Owens, & Koukos, 2004; Torkelson & Muhonen, 2004). These styles of coping have also been studied by researchers to measure the potential of workers to alleviate the destructive impact of stressors (Carver *et al.*, 1989), negative events of life (Begley & Hutchinson, 1998) as well as burnout (Evans *et al.*, 2004; Jenaro, Flores, & Arias, 2007). Past researches revealed that problem-focused coping may have positive outcomes or it may have zero effect (no affect) (Endler, Parker, & Summerfeldt, 1998). Emotion-focused coping increases psychological distress (Ireland, Boustead, & Ireland, 2005) and on contrary to this, avoidance coping has positive effects and reduces stress level in the short term at least (Gullone, Jones, & Cummins, 2000). The present study is also endeavoring to contribute in the theory by suggesting a variable Emotional Intelligence as a coping strategy to overcome the negative (emotional and psychological and physiological) effects of bullying victimization. If an individual (worker) is emotionally intelligent he/she will come up with the effects of bullying victimization (a criminological or delinquent behaviors) in a positive way instead of letting bullying to destroy health.

#### **2.16.1 Emotional Intelligence**

“Emotional intelligence is the ability to perceive, express and understand emotions and to be able to regulate them in ourselves and in others” (Cabello & Fernández-Berrocal, 2015; David R. Caruso, Mayer, & Salovey, 2002). Various models have been proposed by researchers and endeavored to explain the concept of Emotional Intelligence and to

develop the construct (Cherniss, Extein, Goleman, & Weissberg, 2006). Some researchers studied it as a relatively stable construct. Just like K. V. Petrides, Pita, and Kokkinaki (2007), who studied the trait Emotional Intelligence and verified that it is a distinct and complex construct and present in a compound (partially determined by multiple personality dimensions) form and in the hierarchy of personality it lies at lower level. Researchers additionally emphasized, it consist of various skills and competencies that can be developed throughout the life (Daniel Goleman, 1998). According to Daniel Goleman and Cherniss (2001), leaders and employees with high Emotional Intelligence may contribute in the effectiveness of organization, improving service quality and recruitment process, retention of employees, inducing commitment among workers, increasing morale and improving health of workers.

#### **2.16.2 Conceptualization of Emotional Intelligence**

Emotional Intelligence was first coined by two psychologists in the late 1980's, named Peter Salovey and John (Jack) Mayer. In literature it was the most focused topic and has gained larger attention (e.g. Goleman, 1995), and in an academic research its importance has quite increased e.g. Mayer, Roberts, and Barsade (2008) and after his 1990's scientific publication (David R Caruso & Salovey, 2004).

Salovey and Mayer (1990) have initially defined Emotional Intelligence and have developed it as a psychological theory. According to them, Emotional Intelligence is “the ability to monitor one's own and others' feelings and emotions to discriminate among them and to use this information to guide one's thinking and actions”. Stys and Brown (2004) emphasizes that Emotional Intelligence has three main existing models presented by: (1) Peter Salovey and John Mayer, modelled it as a cognitive ability or a form of pure intelligence; (2) Reuven Bar-On, perceived Emotional Intelligence as a mix of both the personality and cognitive ability aspects and gave greater emphasis on the impact of

cognitive and personality factors on well-being; (3) Daniel Goleman, also studied Emotional Intelligence as a mixed intelligence. According to him, it's a mix of cognitive ability and personality aspects that determines success at workplace (which is a distinguished idea from Reuven Bar-On). Several years later, Salovey and Mayer (1990) had introduced Emotional Intelligence in different context with different and restricted mind setup. They explained that, Emotional Intelligence is adopting the way in which an individual processes information about emotions as well as emotional responses. Lastly, Goleman (1995) initially considered Emotional Intelligence as a notion, which arose from a large set of findings of different researches, conducted on the importance of the emotions in human life. In these findings, Empathy, Learned Optimism, and Self-Control have been pointed out as important outcomes not in the family but also at workplace as well as in other areas of life.

#### **2.16.3 Model of Emotional Intelligence: Intelligence Rectifies Behavior.**

In an academic research, the most defensible and accepted model of Emotional Intelligence is the four-branch model of Salovey and Mayer (1990), as revealed by the researcher Jordan (2004). They conceptualized it as a complex process of management of emotions and the ability to link emotion and cognition. Goleman (1995) defines it as “incorporate social and emotional competencies including some personality traits and attitudes”. Emotional Intelligence is constructed on the basis of three approaches: ability, trait, and mixed. Ability approach rectifies that in order to navigate the environment, emotions are considered to be a useful source (Salovey & Mayer, 1990). In a trait approach, people usually focus on self-perceptions of their own emotional abilities (Petrides *et al.*, 2007). The mixed approach is the combination of the ability and the trait approach (Daniel Goleman, 1998). Salovey and Mayer's model of Emotional Intelligence can logically better explain how cognition rectifies personality or how intelligence

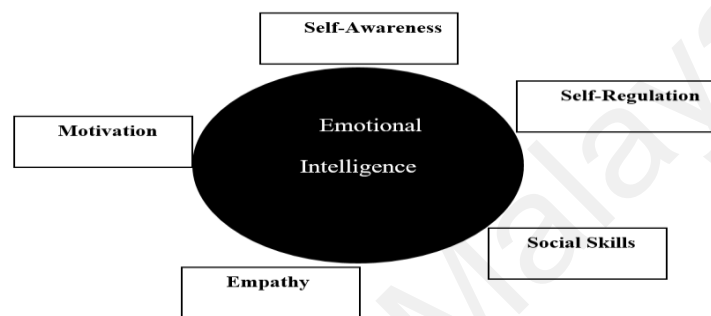
rectifies behavior? Four-branch classic model of Emotional Intelligence includes (1) emotion awareness i.e. correct perception and expression of emotions, (2) thought facilitation (valid use of emotions to improve the process of cognition), (3) emotion understanding i.e. understanding the developments of emotions according to the situation and time, and (4) emotion management, for example effective regulation of emotions in self and others (Mayer, Caruso, & Salovey, 1999). Another research conducted by Ashraf and Khan (2014) depicted that to cure the destructive behavior of managers and supervisors like workplace violence or bullying, multi-dimensional construct of Emotional Intelligence may play a vital role. But in the current study, it is proposed that Emotional Intelligence may act as a moderating variable in order to weaken the positive relationship of workplace bullying and ill-health outcomes. Emotional Intelligence can be used as a coping strategy to overcome the negative effects of workplace bullying. Construct used for measuring Emotional Intelligence in this study depends on the five components of Emotional Intelligence mixed model of Goleman (1998) as explained in the following section.

#### **2.16.4 Goleman's Mixed Model of Emotional Intelligence (1998)**

Goleman's model (1998) is known as the emotional competence framework. According to Goleman, this model is an adaptation of Mayer and Salovey's model (1997) that demonstrates how talent and actions might be used within workplace situations? Goleman's model is a mixture of five basic personal and social competencies such as:

- **Self-Awareness:** To know what we are feeling and using this knowledge in a realistic assessment of our own abilities and in decision making.
- **Self-Regulation:** Handling of our own emotions so that they do not hinder the task at hand but facilitate it.

- **Motivation:** To use preference's to guide and move us towards our set goals and objectives. Helping us to take initiative to struggle and to improve ourselves.
- **Empathy:** Recognizing the feelings of other people and taking their perspective into our thoughts and doing actions accordingly.
- **Social Skills:** Handling emotions in a good way within the relationships, understanding the social situations accurately and negotiating well in a team working situations.



**Figure 2.2: Goleman's (1988) Mixed Model of Emotional Intelligence**

Goleman (1998) explains, throughout this model each person will have his/her own particular strengths and limitations, so some people will act better than others at certain aspects of the model. To be average across all sections is much better than to try in any one (Goleman, 1998). Many researchers have been criticized this model and stated that it is too broad and comprehensive and it includes most of unrelated psychological traits (Brackett, Mayer, & Warner, 2004). Because of this reason, this model is called mixed model of Emotional Intelligence as it covers broad areas.

Components and Hallmarks of the Daniel Goleman Mixed model of Emotional Intelligence are given in the following Table 2.3.

**Table 2.3: Components of Emotional Intelligence (Daniel Goleman, 1998)**

Components	Definitions	Hallmarks
Self-Awareness	The ability to recognize and understand your moods, emotions and drives, as well as their effects on others.	Self-confidence Realistic self-assessment Self-deprecating sense of humor
Self-Regulation	The ability to control or redirect impulses or moods The property to suspend judgement and think before acting	Trustworthiness and integrity Comfort with ambiguity Openness to change
Motivation	A passion to work for the reason that go beyond money or status The propensity to pursue goals with energy and persistence	Strong drive to achieve optimism, even in the face of failure Organizational commitment
Empathy	The ability to understand the emotional makeup of other people Skill in treating people according to their emotional reactions	Expertise in building and retaining talent Cross-cultural sensitivity Service to clients and customers
Social Skills	Proficiency in managing relationships and building networks  An ability to find common ground and build rapport	Effectiveness in leading change  Persuasiveness  Expertise in building and leading teams

### **2.16.5 Previous Empirical Studies used Emotional Intelligence as a Moderator**

To the best of my knowledge, very few empirical studies have been conducted which have used the Emotional Intelligence as a moderator in the relationship of workplace bullying and employee health outcomes. The moderating effects have been explored on the relationship of workplace bullying with different variables such as job performance (Ashraf & Khan, 2014) in hospitals of Pakistan and leadership capabilities (Hutchinson & Hurley, 2013) within nursing workplace environment. An empirical study has also been conducted to investigate the inter-relationships between work stress, Emotional Intelligence and burnout in a sample of South African nurses and determined that Emotional Intelligence moderates the relationship of work stress and burnout (Gorgens-Ekermans, 2012). Analysis of the above studies also depicted that previous studies which have studied Emotional Intelligence as a moderator were mostly conducted in hospitals or within nursing workplace environment.

### **2.16.6 Emotional Intelligence as a Coping Strategy to Reduce Burnout and Ill-Health.**

Emotional Intelligence and positive use of emotions “Feeling bad can be good, and feeling good can be bad”, all depends on the situation, the people involved, and the goals” (David & Salovey, 2004). Sheehan (1999) demonstrated that to prevent workplace bullying, the developing of employee’s Emotional Intelligence is quite useful. Branch, Murray, and Ramsay (2012) have established a negative relationship between workplace bullying and Emotional Intelligence. Emotional Intelligence competences, if used in a positive way might be helpful to avoid the bad effects of feeling good or bad. A successful manager is one who is emotionally intelligent, and plays a vital role in avoiding bad consequences and constructing a peaceful work environment. Though, being good or bad is limited to the intensions and perceptions of a leader and a follower. Tugade and

Fredrickson (2004) documented that “Emotional Intelligence is the ability to recognize and use positive emotions to manage negative circumstances and can have beneficial effects on one’s well-being.” Hence, emotional coping (Emotional Intelligence) can be used to reduce negative health outcomes of workplace bullying such as burnout and ill-health.

Burnout is not only a concern of health organizations but also a syndrome that might be induced in the workers of every kind of organization, and there are several factors that may better contribute in reducing or preventing the level of burnout among employees. Tsaousis and Nikolaou (2005) underlines that, organizations must endeavor to prevent burnout among employees in organizations and Emotional Intelligence seems to reduce the possibility for burnout. Burnout is somehow similar to depression (Shirom, 2005), and one of the factors of Emotional Intelligence i.e. emotion management may contribute in reducing the level of burnout. Increased levels of burnout is also related to the decreased levels of empathy (Brazeau, Schroeder, Rovi, & Boyd, 2010). Emotional Intelligence is a skill which can depreciate (Doherty, Cronin, & Offiah, 2013) and can affect/change the level of empathy on the basis of work environment.

Emotional Intelligence must be indorsed in workers of organizations in order to maintain employee empathy (Doherty *et al.*, 2013). Individuals usually experience burnout who typically lack adaptability, achievement drive and initiative, and these are particularities of the behavior (Maslachi *et al.*, 1996) and are components of the self-management ability of Emotional Intelligence. The self-management ability is termed as “an ability to manage one’s internal impulses and resources, keeping disruptive emotions and impulses in check, maintaining standards of honesty and integrity, taking responsibility for personal performance, flexibility in handling change, and being comfortable with novel ideas, approaches, and new information” (Daniel Goleman,

1998). Goleman initially described the self-management as a combination of two clusters i.e. self-regulation and motivation. The self-regulation cluster is conceptualized as managing and controlling one's own impulses, while other cluster of motivation consists of driving and energizing individual's behavior (Jacobs, Flanigen, Jansen, & van Bakkum, 2001). Additionally, Yadav *et al.* (2014) emphasizes that an individual who is having good self- management ability may also handle relationships in a good way and can effectively achieve personal and professional goals, which may lead him/her towards success.

Tsaousis and Nikolaou (2005) proposed that increased Emotional Intelligence may improves physical and psychological health, which is related to the participation of stress-reducing behaviors. Moreover, Oginska-Bulik (2005) proposed that emotional coping can be helpful in reducing occupational stress. Emotionally intelligent person may have control on his/her emotions that induces behavior which may help in stress reduction (Fernandez, 2007), conflict-handling and ethical concerns (Görgens-Ekermans & Brand, 2012). Furthermore, individuals can identify their emotions on the basis of Emotional Intelligence and can considerably reflect on the effect of these emotions (Doherty *et al.*, 2013; Krasner *et al.*, 2009; Schaufeli *et al.*, 2001; Shanafelt *et al.*, 2005). Development of Emotional Intelligence skills may help an individual in better regulation of his/her emotions (Petrides & Furnham, 2006). Past research conducted on nurses depicted that, Emotional Intelligence has greater impact on the level of job stress (Akerjordet & Severinsson, 2004). In another research findings, it is concluded that, Emotional Intelligence alleviates workplace and organizational stress (Arora, 2010). Emotional Intelligence may enhances the skills in an individual that helps in dealing with difficult situations, which can be damaging emotionally (Svyantek & Afzalur Rahim, 2002).

Emotional Intelligence also helps an individual to gain better understanding of emotions and the consequent reactions that are associated with the stressful stimulus, which ultimately lessen stress and burnout.

After analyzing Emotional Intelligence, workplace bullying and health literature this study formulated the following hypotheses:

*H7a: Emotional Intelligence moderates the relationship of workplace bullying and burnout.*

*H7b: Emotional Intelligence moderates the relationship of workplace bullying and ill-health (psychological and physiological).*

## **2.17 Recent Research Work Related to Workplace Bullying**

Table 2.4 is the representation of previous research work and is presented here to analyze the links between variables: workplace bullying, organizational climate, psychological health and Emotional Intelligence, developed and studied by past researchers. Analysis of these past researches show that researchers in the past have not conceptualized the frameworks in a way the current study is going to represent and analyze on the basis of which the conceptual framework for the current study is developed in the following section (Figure 2.3).

**Table 2.4: Recent Past Researches on Workplace Bullying**

Authors	Title	Related Conceptual frameworks	Findings
Gunawardena (2016)	The role of Emotional Intelligence (EI) on Workplace bullying and Individual's work Performance.		The negative relationship between workplace bullying and work performance is weaker for those with high EI and stronger for those with low EI.
Naseer and Khan (2015).	The Deleterious Effects of Workplace Bullying on Employee's Job Strains in Pakistan.		The results indicated, the presence of such interpersonal hostile behaviors at the workplace of service sector of Pakistan (banking and telecom) and its positive relationship with job strain.
Giorgi <i>et al.</i> (2016)	Detrimental Effects of Workplace Bullying: Impediment of Self-Management Competence via Psychological Distress.		Exposure to workplace bullying leads toward psychological distress, and Self-management ability mediates the relationship of workplace bullying and psychological distress

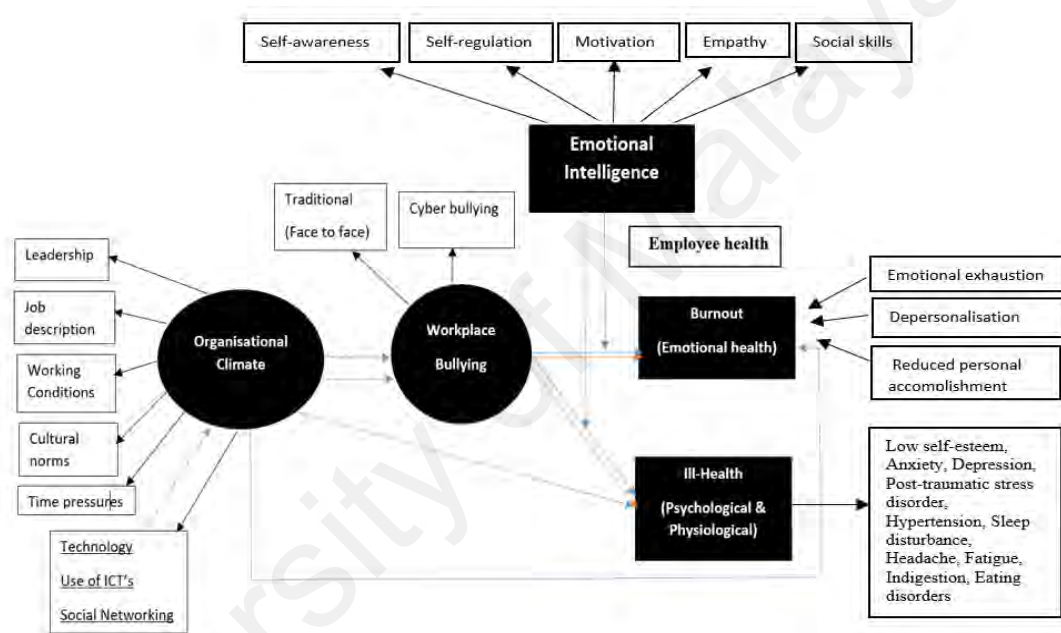
Table 2.4: Continue

Authors	Title	Related Conceptual frameworks	Findings
Wright (2015)	Cyber victimization and adjustment difficulties: The mediation of Chinese and American adolescents' digital technology usage.		Cyber victimization is positively related to depression, anxiety and loneliness.
R. Law, Dollard, Tuckey, and Dormann (2011)	Psychosocial safety climate (PSC) as a lead indicator of workplace bullying and harassment, job resources, psychological health and employee engagement.		PSC is a lead indicator of bullying, psychosocial hazards, psychological health problems and work engagement.
Yoo and Lee (2018)	It Doesn't End There: Workplace Bullying, Work-to-Family Conflict, and Employee Well-Being in Korea.		Work-to-family conflict mediates the relationship of workplace bullying with lower levels of quality of life and occupational health.

## 2.18 Conceptual Framework

Conceptual framework is developed (Figure 2.3) to investigate the relationship between organizational climate, workplace traditional and cyberbullying, employee health outcomes (burnout and ill-health) and Emotional Intelligence (as a coping strategy). Technology (use of ICT's and social networking) is also taken as one of the

important dimension of organizational climate along with other five dimensions. It is proposed that organizational climate may create workplace bullying and negative use of technology may create cyber type of bullying at workplace as ICT's and social networking is considered to be a common medium/platform for communication at workplace of most of the organizations, specifically this research is targeting the banking, telecom, hotel and education sectors of Pakistan.



**Figure 2.3: Conceptual Framework**

Workplace bullying is proposed as a mediator in relationship between organizational climate and employee health (burnout and ill-health). Impact of workplace traditional bullying and cyberbullying on health outcomes like burnout and ill-health (psychological and physiological) is also represented in conceptual framework. Emotional Intelligence is added in the framework as a moderator on the relationship of workplace bullying and employee health (burnout and ill-health) outcomes. On the basis of these relationships (see figure 2.3) hypotheses were developed (see table 5.2). In the current study Emotional Intelligence is added as a moderator and not the mediator because the analysis of the

previous studies conducted in hospitals have depicted that Emotional Intelligence moderates the relationship between work stress and burnout (Gorgens-Ekermans, 2012), likewise it may act as a moderator between workplace bullying and job performance (Ashraf and Khan), hence the variable Emotional Intelligence has the potential to strengthen or weaken the relationship between variables, so the current study proposed it as a moderator between workplace bullying and employee health. Secondly in this study Emotional Intelligence is proposed as a coping strategy to reduce the negative effects of workplace bullying on employee health, and the coping strategy acts like a moderator as it strengthens or weakens the relationship in a positive or negative direction. Similarly, increase in the Emotional Intelligence of workers i.e. self-awareness, self-regulation, motivation, empathy and social skills may weakens the positive relationship between workplace bullying and employee health (burnout and ill-health) outcomes. As the relationship is developed on the basis of the literature (see section 2.16.6) but this is the new way of representing the idea as previous studies have not directly analyzed the Emotional Intelligence as a moderator in the relationship of workplace bullying and employee health (see table 2.4). Hence it will be the contribution of the current study.

## **2.19 Summary of Chapter 2**

Chapter 2 gives the literature, based on insights about workplace traditional bullying and cyberbullying and its prevalence in service sector in the light of multiple theories. It consists of conceptual development of organizational climate by using different approaches. It also gives relational understanding about variables of the study. This includes relationships among organizational climate, workplace bullying, burnout, ill-health and Emotional Intelligence. Challenges for modern workplace and new iteration of bullying i.e. cyberbullying is also explained. Hypotheses development on the basis of extensive literature review is also done in this chapter. At the end of the chapter, conceptual framework of the study is presented along with the detail of variables.

## **CHAPTER 3: METHODOLOGY**

### **3.1 Introduction**

Methodology section of the present study authenticates the planned research methodology and the justification behind it to test the projected hypotheses along with the details regarding the nature of research, research design adopted for the study, sample description, population and sampling frame, sampling techniques, instrumentation, data collection, and detail of included variables, data analysis and selected procedures. The study aimed to develop and investigate the structural model based on 7 constructs/variables (organizational climate, workplace traditional bullying, cyberbullying, burnout, psychological and physiological health and Emotional Intelligence) with multiple relationships and paths. The construct of organizational climate comprises of 6 dimensions: leadership, job description, working condition, cultural norms, time pressure and technology, illustrated in the section 3.7.1. Burnout is measured on the basis of 3 dimensions i.e. emotional exhaustion, depersonalization and reduced personal accomplishment, while the construct of Emotional Intelligence included dimensions: self-awareness, self-regulation, motivation, empathy and social skills. Pilot testing and results are also given. Explanation of data analysis, structural equation modelling and the description of formative and reflective constructs is also provided in this chapter.

### **3.2 Nature of Research**

On the basis of data, Alan Bryman (2012) has recommended two main types of researches that are quantitative and qualitative. It is quite significant to select the appropriate type of research that suits the data, so for this, it's important to identify the nature of research first whether the research is qualitative or quantitative because this selection affects the significance and results of a research project (Kumar & Phrommathed, 2005; Saunders, 2011). Bryman and Bell (2011) are also aligned with the

same opinion and significance of the identification of suitable type of research and its nature because it may affects the questions, methods and statistical analysis adopted for the research, the inferences made by the researcher and the objectives of the research as well.

As stated by Creswell (2009), quantitative research is an approach which is objective and deductive and formally used for solving the problems. Quantitative research is based on positivist philosophy and its methods focuses on more objective measurements like statistical analysis and mathematical/numerical calculations of the data. Questionnaires and survey techniques are usually adopted to collect the quantitative data, or computational techniques might be opted by manipulating the pre-existing statistical data (Babbie, 2010). Quantitative research focuses on numerical data collection and generalizability across different groups or may emphasize on a particular phenomenon (Muijs, 2010). According to Saunders (2011), quantitative methods deliver a high level of exactness in measurement and statistical power analysis.

In contrast, qualitative research is based upon interpretivist philosophy and is subjective in nature. It is considered to be an informal inductive approach to problem solving. Generally the qualitative ways of inquiring a problem consisted of human or social sort of problems including several perspectives. Alan Bryman (2012) highlighted that qualitative research is performed in a natural type of setting where the researcher observes and develop a complex and inclusive view of a phenomenon. In qualitative research, researcher try to either explore the application of a theory or model in different contexts or expecting for a theory or model to emerge from the data (Sekaran & Bougie, 2003; Creswell, 2009). Qualitative researchers endeavor to explain, decode and interpret the phenomena correctly and precisely which happens in normal social settings. Qualitative researches are usually conducted in natural settings (Denzin, 2008).

Typically quantitative research is used for testing the hypotheses, application of statistical procedures in order to acquire results having least human influence and minimum method bias to get more scientific results, which are rigorous and generalizable. In contrast, qualitative research is more explanatory in nature and attempts to explore facts and figures but with least generalizability.

### **3.3 Rationale for Choosing Quantitative Method**

If we consider the objectives and factors of the study, quantitative research design is justified and appropriate in order to conduct the current research. The research objectives and questions formulated in this study compels the data collection via survey instrument. Moreover, inferential statistical analysis to test the hypothesized relationships is also related to the quantitative analysis.

Analysis of recent past studies on relevant topics (see Table 3.1) also depicted that most of the researchers have adopted the quantitative methods for data collection and analysis and is a commonly used procedure, which signifies the importance of quantitative techniques for the current study.

**Table 3.1: Research Methodology used in Recent Past Studies on Workplace Bullying**

Research Methodology				
Author (Year)	Title/Theme	Methods (Qualitative or Quantitative)	Sample Size	Data Analysis
1 Gardner <i>et al.</i> (2016)	Predictors of Workplace Bullying and Cyber-Bullying in New Zealand	Quantitative  Online Survey	2412 male and female New Zealand resident workers	Regression and Correlation
2 Antoniadou and Kokkinos (2015)	A review of research on cyber-bullying in Greece	Qualitative: Systematic Bibliographic Research		Reviewed Published Articles and Unpublished Dissertations
3 Okoiye <i>et al.</i> (2015)	Moderating Effect of Cyberbullying on the Psychological Well-Being of In-School Adolescents in Benin Edo State Nigeria	Quantitative Research	300 adolescents of 15 schools	Pearson Product Moment Correlation and Multiple Regression
4 Naseer and Khan (2015)	The Deleterious Effects of Workplace Bullying on Employee's Job Strains in Pakistan	Quantitative Research	280 employees working in banking and telecom Pakistan	SEM (Structural Equation Modelling)
5 Verkuil, Atasayi, and Molendijk (2015)	Workplace bullying And Mental health: A Meta-Analysis on Cross Sectional and Longitudinal Data	Qualitative Research	42 articles reviewed	Systematic Review and Meta-Analysis
6 Privitera and Campbell (2009)	Cyberbullying: The new face of workplace bullying?	Quantitative Research	145 Australian Manufacturing Workers Union (AMWU) Queensland	Descriptive Statistics

Research Methodology					
7	West <i>et al.</i> (2014)	Cyberbullying at Work: In Search of Effective Guidance	Qualitative Research	9 HR professionals of business industry	semi-structured Interviews
8	Ojedokun and Idemudia (2013)	The Moderating Role of Emotional Intelligence between PEN Personality Factors and Cyberbullying in a Student Population	Cross-sectional quantitative survey research.	397 male and female Nigerian undergraduates	Pearson multiple correlation and moderated hierarchical multiple regression
9	Ilongo (2016)	Workplace bullying as 'anti-positive psychology' in institutions of higher learning	Qualitative Research	Twenty academic staff members of the National University of Lesotho	Iterative and inductive methods of the Interpretive Phenomenological Analysis (IPA). Semi structured Interviews
10	Bano and Malik (2013)	Impact of Workplace Bullying on Organizational Outcome	Quantitative Research	200 male and female doctors from public and private hospitals of Lahore, Pakistan	Linear Regression Analysis
11	Al-Bawaliz, Arbeyat, and Hamadneh (2015)	Emotional Intelligence and its Relationship with Burnout among Special Education Teachers in Jordan : An Analytical Descriptive Study on the Southern Territory	Qualitative Research	200 Teachers working in Education center of Jordan	Pearson Product Moment Correlation and T Test

### 3.4 Population and Sampling Frame

Target population is the group on which results of the research can be generalized (Bhattacharjee, 2012; Zikmund, Babin, Carr, & Griffin, 2012). Target population of the current study is employees of service sector of Pakistan specifically targeting the four subsectors banking, telecommunication, hotel industry and education. Multistage sampling technique is applied for the selection of subsectors and their respective organizations. All the registered private and public banks, telecommunication companies, 4 and 5 star hotels and Higher Education Commission (HEC) recognized universities are taken as sample frame (see Appendix A). Sampling frame facilitates researchers in the selection of the appropriate sample from the list of target population that represents all the characteristic of population (Ritchie, Lewis, Nicholls, & Ormston, 2013).

### 3.5 Sampling Strategy

Researchers have identified that to select the sample from the target population there are two main strategies i.e., probability and non-probability (Robson, 2002). In probability sampling, every unit of the population has an equal chance of getting selected (i.e., non-zero probability) whereas, non-probability is a sampling technique in which some of the units of the population have zero chance of being selected or the probability of selection cannot be determined accurately (Bhattacharjee, 2012). Furthermore, a multistage sampling procedure can have both types of sampling at different stages of the sampling plan (Sekaran & Bougie, 2003). In the current study, for the selection of suitable sample of respondents that might be the representative of the whole population **multistage sampling** was adopted, consisted of both the probability and non-probability sampling strategies and the reason of using both types of sampling is that at the first and second stages of sampling there were lists available (Appendix A) that shows the total number of companies with names from which some of companies were selected and there was an equal chance of each company being selected. So the probability sampling

(random and disproportionate) is applied at these two stages to select the companies. In the third stage of sampling, employees need to be selected for data collection but it was not possible to get the list of all the employees in all 20 selected companies, so it was better to apply non-probability sampling (purposive) at this stage. The sampling strategy consisted of three stages: At first stage **random sampling technique** is applied for the selection of each subsector. Service sector of Pakistan is consisted of 4 natural sectors (distributive, producer, personal and social services) with different number of subsectors in each, as is shown in Table 1.2 (chapter 1). One subsector from each sector has been selected on random basis as shown in the following Table 3.2.

<b>S. No</b>	<b>Service Sectors</b>	<b>Selected Subsectors</b>	<b>Total Companies</b>	<b>Selected Companies</b>
1	Distributive services	Telecommunication	6	5
2	Producer services	Banking	33	5
3	Personal services	Hotels	29	5
4	Social services	Education	176	5

In the Second stage of multistage sampling, **disproportionate stratified sampling** is used. Disproportionate stratified sampling is a type of probability sampling in which the population of sampling units are divided into sub-groups or strata to select the sample from each strata on random basis. The chance (probability) of each unit in the stratum being selected is not proportional to the number of unit in each strata, or the sampling fraction within all the strata is not the same. For example in the case of this study, in order to make strata, lists of total companies of each sector are generated attached in Appendix A, which gives the appropriate figure of total number of companies in each subsector also showing in the above Table 3.2. There are total 6 telecommunication companies, 33 public, private and Islamic banks, 29 (4 and 5 star) hotels, and 179 public and private

universities located in different regions of Pakistan. Each subsector/subgroup is non-overlapping with different number of companies hence formed 4 strata. In this stage of sampling 5 companies are to be selected from each stratum on the basis of disproportionate sampling (specifically selected those 5 which are having their headquarters/main branches/main campuses in the capital cities of Pakistan (Lahore, Karachi, Islamabad and Peshawar). Larger cities are the good representatives of the country in terms of cultures, norms and behaviors. The sampling fraction to be applied in the telecommunication sector would be 1 in 1 approximately, the sampling fraction would be applied in the banking stratum would be 1 in 7 approximately, the sampling fraction to be applied in hotels and education would be 1 in 6 and 1 in 35 (approximately) respectively. Disproportionate type of sampling is preferred to be used when there are strata or a stratum in the population of interest that are quite small (in the current study like telecommunication) but quite important, and which may not be sufficiently represented in a survey if any other sampling approach is used. This approach is used to have a more balanced representation of different groups of service sectors. Hence, on the basis of disproportionate stratified random sampling, 5 telecommunication companies, 5 banks, 5 hotels and 5 universities (higher educational institutes) were selected.

**Table 3.3: Selected Companies**

<b>S. No</b>	<b>Telecommunication</b>	<b>Banks</b>	<b>Hotels</b>	<b>Universities</b>
1	Warid (Karachi)	MCB Bank Limited (Lahore)	Awari (Karachi)	Quid e Azam University (Islamabad)
2	Ufone (Islamabad)	Bank Alfalah (Karachi)	Marriot (Islamabad)	NUST (Karachi)
3	Telenor (Islamabad)	HBL (Karachi)	Pearl Continental (Lahore)	COMSATS (Islamabad)
4	Zong (Islamabad)	Askari Bank (Islamabad)	Sareena (Islamabad)	Islamic University (Islamabad)
5	Ptcl (Islamabad)	United Bank Limited (Karachi)	Sheraton (Karachi)	University of Peshawar (Peshawar)

At **third stage** workers are selected who are working in headquarters/main branches/main campuses of each selected company, on the basis of **purposive sampling**. Here it is important to mention, the term headquarter is used for telecom companies; main branch is used for banks and hotels and the term main campus is used for educational institutes or Universities. Hence, these terminologies headquarters/main branches/main campuses have similar characteristics for the sampling frame.

Questionnaires were distributed among respondents who have been working in that organization for more than six months in main branches. This is because, workplace bullying is measured on the basis of bullying occurrences during last six months or more. Furthermore, most of the headquarters/main branches/main campuses are located in capital cities of Pakistan like Karachi, Lahore and Islamabad and are the good representatives of the population.

### **3.5.1 Key Respondents**

For this study, survey respondents included official level employees of each company. In this survey, a total of 500 questionnaires were distributed (25 questionnaires to each selected company) without any discrimination/bias in 20 above selected companies. Any official working at top, middle or lower level could be a part of this survey.

### **3.5.2 Sample Size**

According to Hair, Ringle, and Sarstedt (2011) sample size should be carefully determined and has to be adequate because it validates that the statistical tests performed in the current study detect an effect on the sample size when, in fact, a true effect exists in the population.

To determine the sample size, two broader criteria are available. First criterion depends upon the statistical technique and statistical power to be used and required in the

current study (Hair *et al.*, 2011; Lomax & Schumacker, 2012; Mitchell, 1993). Second criterion to calculate the sample size depends on the total population (Sekaran & Bougie, 2003). This study adopted the first criteria and avoided the second because it is unrealistic to find out the total population of employees working in all selected service sector organizations.

Considering the first criterion, literature review depicted that there is no consensus of researchers on sample size required to apply the SEM technique (Lomax & Schumacker, 2012; Mitchell, 1993). The criteria that literature exposed for the selection of sample size is given below,

- 1) Minimum 200 of sample, for Structural Equation Modeling (as a rule of thumb).
- 2) Second criteria depends upon the total number of observed variables, total number of parameters to be estimated, and adequate desired statistical power.

There were 7 constructs used in this study (organizational climate, workplace traditional bullying, cyberbullying, burnout, psychological and physiological health and Emotional Intelligence) to test the hypothesized relationships. Lomax and Schumacker (2012) has recommended 20 observations for each construct as minimum sample size. So the minimum sample size of 140 was recommended for the current study to make sure the detection of true effect within the population. Though, a higher sample size is recommended by Hair *et al.* (2011) for capturing the true variation within population.

### **3.6 Data Collection**

This study was commenced with the aim to investigate the relationship between organizational climate, workplace bullying (traditional and cyber) and employee health (burnout, psychological and physiological) with moderating effects of Emotional Intelligence. The nature of the study determines that survey instrument was a good choice

to be used. Standardized questionnaires were adopted and adapted in order to measure variables and for the variable technology, self-developed questions were asked after making sure the validity and reliability of the measure. Data was collected by two means of communication i.e., online and offline (face to face). Previous literature shows that researchers have used the terms offline (Knapp & Kirk, 2003) and paper pencil survey (Booth-Kewley, Edwards, & Rosenfeld, 1992) for face to face surveys.

For online collection of data, questionnaire was developed by a specific application of Google doc and was distributed among the respondents via email or WhatsApp the google form. In recent times, researchers recommend the use of cloud technology for data collection as it is proved to be more convenient and effective way of data collection (Denton, 2012; Lewis, 2015). Lewis (2015) suggested that it is better to use online means of data collection by using technology such as smart devices or internet. It is simpler and convenient way of interaction as the respondents of the study were officials working in different service sector organizations located in multiple cities. Thus, the use of Google form was more convenient because of time constraints. But the response rate was too slow while collecting the data online, so it was also needed to visit organizations personally and to get the required number of questionnaires. Therefore, the online method of data collection is followed by offline method in the current study as both methods can be used in single research because both gives almost the similar responses. In some of the studies, computer surveys (online) generated similar results as paper and pencil surveys (offline), e.g., on attitude questionnaires (Booth-Kewley, Edwards, & Rosenfeld, 1992). Findings demonstrated that there is no systematic difference between computer and paper-and-pencil methods as computer and paper-and-pencil methods of administration yield similar responses on questionnaires regarding attitude. Likewise in another research, for personally sensitive questions (Knapp & Kirk, 2003), results also showed the similarities in responses collected by both the online and offline ways. Moreover, the choice for

particular methodologies depend on the research topics and objectives, the availability of resources in terms of budget and time as well as on the specific methodological advantages/disadvantages. Schillewaert and Meulemeester (2005) described that for more general topics such as consumer goods and lifestyle issues, living habits, attitudes, opinions and interests, offline and online samples seem to generate results that are not significantly different from one another. Hence, it was not problematic to use both the online and offline methods of data collection in the current research as research questions are related to attitudes and perceptions of employees working in service sector. The process of data collection took almost four months.

### **3.7 Instrumentation**

After determining the research design and sampling methods, the upcoming stage is to theoretically and practically decide about the measurement of the key variables in the research design. Questions for key variables organizational climate, workplace traditional bullying, cyberbullying, burnout, psychological and physiological health and Emotional Intelligence were formulated by consulting other previous researches, which have been measured the same variables before. The more the instrument is well-established the better it will lead to data collection and ultimately will lead to accurate conclusions. Thus, it is imperative to develop, adopt or adapt a valid instrument for successful research study.

For the current study researcher used self-administered questionnaire. For this purpose, the researcher adopted and adapted the scales from previous studies and developed some items as well (for technology use).

Research instrument is explained in detail in the following section. The instrument for data collection were based on 5-point Likert scale. Promoters of Likert scale were working over the years and are still endeavoring to find out the best possible number of options on the scale. Though, researchers recommended that each number of options has

its own pros and cons (Matell & Jacoby, 1971). Latest studies using the Likert scale revealed that the most optimum option for Likert scale is 5-points. In contrast to 7 scales, comprises of variety of options, but seems quite difficult to respond as differentiation between lots of option is not easy. On the other hand 3-point Likert scale do not provide enough choices which can give appropriate freedom to respondents (Boone & Boone, 2012; Stashevsky & Lampert, 2014). Dawes (2008) conducted an experiment with the purpose to compare 5 point, 7 point and 10 point Likert scales. Results of the experiment indicated that 5 point Likert scale provides more appropriate results as compare to 7 and 10 point Likert scale. After analyzing the recommendations of recent researchers, the present study finally decided to adopt 5 point Likert scale for the collection of data. Measures are adopted and adapted from previous studies (standardized questionnaires) and were amended according to the requirement of the study.

### **3.7.1 Organizational Climate**

“Organizational climate is a set of measurable properties of the work environment, directly or indirectly perceived by the people who live and work in a particular environment and is assumed to influence their motivation and behavior ” (Litwin & Stringer Jr, 1968). The present study operationalized the variable “organizational climate” as first order reflective construct based on 6 dimensions such as leadership, job description, working condition, time pressures, cultural norm and technology. First five dimensions of organizational climate were assessed by a reduced version (17 items) of the MDOQ10 (D'Amato & Majer, 2005). Questionnaire was available in an Italian version and has been translated into English language. Some questions were deleted and some were further added as dimension of organizational climate (technology) was also added in the study. Last dimension of organizational climate i.e. technology was measured on the basis of self-developed questions. Overall organizational climate was measured by 17 items. Details are given in the following Table 3.4.

**Table 3.4: Scale to Measure Organizational Climate**

	Items/Questions	Item Codes	No of Items	Measurement Scale	Instrument & Authors
Leadership					D'Amato Majer (2005).
1	I am given supportive feedback by my head of department on the work I do.	OCL1	3	1 = Strongly disagree, 5=Strongly Agree	
2	I can talk to my head of department about something that has upset or annoyed me about work.	OCL2			
3	My head of department encourages me at work.	OCL3			
Job description					
4	There is lack of informational resources to carryout responsibilities assigned to me.	OCJD1	2	1 = Strongly disagree, 5=Strongly Agree	
5	I am not clear on the scope and responsibilities of my role (job).	OCJD2			
Working condition					
6	Working conditions are tough at my job.	OCWC1	3	1 = Strongly disagree, 5=Strongly Agree	
7	I feel fatigue when I have to get up early in the morning to face another day on the job.	OCWC2			
8	My role/job at office does not allow me enough time for my family.	OCWC3			
Cultural Norm					
9	My organization has some cultural norms that are against my norms.	OCCN1	2	1 = Strongly disagree, 5=Strongly Agree	
10	I have various other interests (social, religious etc.) which remain neglected because of nature of my job.	OCCN2			
Time pressure					
11	My workload is too excessive.	OCTP1	2	1 = Strongly disagree,	

**Table 3.4: Continue**

	<b>Items/Questions</b>	<b>Item Codes</b>	<b>No of Items</b>	<b>Measurement Scale</b>	<b>Instrument &amp; Authors</b>
12	I feel overburdened in my role at my organization.	OCTP2		5=Strongly Agree	
<b>Technology</b>					
13	I use internet as a part of my work on regular basis.	OCT1	4	1 = Strongly disagree, 5=Strongly Agree	Self-developed
14	Workers communicate with each other through the use of ICT's (Telephones, computers, audio-visual systems).	OCT2			
15	My company makes use of ICT's and social networking sites for work purposes.	OCT3			
16	My organization has a policy relating to the use of social networking sites.	OCT4			
17	There are general restrictions on employees accessing the internet/ specific websites in working time.	OCT5			

### 3.7.2 Workplace Bullying

Workplace bullying is defined as “a situation in which one or more individuals are subjected to a series of systematic, repeated and frequent negative actions which are unwanted, which range over duration (i.e. about six months), in which there is a power imbalance between the bully and bullied and in which the victim ends up in an inferior position where he/she is unable to defend himself/herself” (Stale Einarsen & Mikkelsen, 2003). However, the current study operationalized the construct ‘workplace bullying’ as 2nd order reflective construct on the basis of traditional bullying and cyberbullying.

***(a) Workplace Face to Face (Traditional) Bullying***

In this study Negative Acts Questionnaire (NAQ), a 21-items scale developed by Ståle Einarsen (2001) was adopted to gather the data related to workplace traditional bullying. It is considered to be a most valid measure as validated by various researchers in multiple countries (Giorgi, Arenas, & Leon-Perez, 2011). In this measure the term bullying is not directly used, so it reduces the possible response biasness. For the identification of victims of workplace bullying Leymann (1996) developed a criterion. If the respondents had experienced at least two of the negative behaviors weekly or more often over the past 6 months, they will be categorized as “bullied or bullying victims”.

**Table 3.5: Scale to Measure Workplace Traditional Bullying**

	<b>Items/Questions</b>	<b>Item Codes</b>	<b>No of Items</b>	<b>Measurement Scale</b>	<b>Instrument &amp; Authors</b>
18	Someone withholding information which affects my performance	WPTB1			
19	I am being humiliated or ridiculed in connection with my work	WPTB2			
20	I am being ordered to do work below my level of competence	WPTB3			
21	I am having key areas of responsibility removed or replaced with more trivial or unpleasant tasks	WPTB4			
22	There is spreading of gossip and rumors about me	WPTB5			
23	I am being ignored or excluded by people at work	WPTB6			
24	Having insulting or offensive remarks made about my person (i.e. habits and background), my attitudes or my private life	WPTB7			
25	I am being shouted at or being the target of spontaneous anger	WPTB8			

**Table 3.5: Continue**

	<b>Items/Questions</b>	<b>Item Codes</b>	<b>No of Items</b>	<b>Measurement Scale</b>	<b>Instrument &amp; Authors</b>
26	Intimidating behavior such as finger pointing, shoving, blocking/barring the way	<b>WPTB9</b>	21	1 Never 2 Now and then 3 Monthly 4 Weekly 5 Daily	Adopted from Negative Acts Questionnaire Revised (NAQ-R)  Einarsen (2001)
27	I get hints or signals from others that I should quit my job	WPTB10			
28	I get repeated reminders of my errors or mistakes	WPTB11			
29	I am being ignored or facing a hostile reaction when I approach	WPTB12			
30	Persistent criticism of your work and effort	WPTB13			
31	My opinions and views are being ignored	WPTB14			
32	Practical jokes carried out by people I don't get on with	WPTB15			
33	I am being given tasks with unreasonable or impossible targets or deadlines	WPTB16			
34	Having allegations made against you	WPTB17			
35	Excessive monitoring of my work	WPTB18			
36	Pressure not to claim something which by right I am entitled to (e.g. sick leave, holiday entitlement, travel expenses)	WPTB19			
37	I am being the subject of excessive teasing and sarcasm	WPTB20			
38	I am being exposed to an unmanageable workload	WPTB21			

**(b) Cyberbullying**

Cyberbullying is defined by Piotrowski (2012) as “Using electronic media (e.g., e-mail, SMS, social media, virtual communities) to inflict intentional and repeated harm to a target similar to conventional bullying”.

Instruments for measuring cyberbullying at workplace are quite few and are considered to be well validated measures. Mostly are based on NAQ-R (Privitera & Campbell, 2009). In this study cyberbullying is measured on the basis of 10 items scale developed on the basis of NAQ-R. e.g., “I have received rude, insulting or offensive online communications by people at work”. Respondents were asked, how often they had experienced cyberbullying behaviors through eight forms of technology (1. Phone calls 2. Pictures or video clips, 3. Text messages 4. chat rooms 5. Emails 6. Instant messaging 7 social networking websites 8. Websites). The same criterion of, “have experienced at least two behaviors weekly or more for the last 6 months”, was applied.

**Table 3.6: Scale to Measure Workplace Cyberbullying**

	<b>Items/Questions</b>	<b>Item Codes</b>	<b>No of Items</b>	<b>Measurement Scale</b>	<b>Instrument Authors</b>
39	You are being exposed to an unmanageable workload by emails.	WPCB1	12	1 Never 2 Now and then 3 Monthly 4 Weekly 5 Daily	Adapted from Negative Acts Questionnaire Revised (NAQ-R)
40	You have received rude, insulting or offensive online communications by people at work.	WPCB2			
41	Excessive online monitoring of your work.	WPCB3			
42	Spreading of gossip and rumors about you on social networking sites, chat rooms or other online medium.	WPCB4			
43	You are given tasks with unreasonable targets / deadlines by email or telephone.	WPCB5			

**Table 3.6: Continue**

	<b>Items/Questions</b>	<b>Item Codes</b>	<b>No of Items</b>	<b>Measurement Scale</b>	<b>Instrument Authors</b>
44	Persistent criticism of your work and effort through personal/group online communication.	WPCB6			Einarsen (2001)
45	Repeated reminders of your errors or mistakes by online mean.	WPCB7			
46	Hints / signals from others to quit your job by email, SMS or telephone.	WPCB8			
47	People excluding you from online communication groups.	WPCB9			
48	Practical jokes (audio, video, written or oral) from people you don't get on with through online mean.	WPCB10			
49	You are being ignored / facing a hostile reaction when you approach somebody in organization online.	WPCB11			
50	Online threats of violence or physical abuse.	WPCB12			

### 3.7.3 Employee Health

#### (a) *Burnout*

“Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity” (Maslach & Jackson, 1984). Maslach and Jackson (1984) burnout questionnaire was adapted to measure employee burnout in four kinds of organizational settings.

**Table 3.7: Scale to Measure Burnout**

<b>Scale Adapted to Measure Burnout</b>					
	Items/Questions	Item Codes	No of Items	Measurement Scale	Instrument Authors
51	I feel emotionally drained from my work	BOEE1	13	1 = Strongly disagree, 5=Strongly Agree	Adapted from Maslach Burnout Inventory Scale  Maslach and Jackson (1984)
52	I feel used up at the end of the workday.	BOEE2			
53	I feel fatigued when I get up in the morning and have to face another day on the job.	BOEE3			
54	Working with people all day is really a strain (tension) for me.	BOEE4			
55	I feel burned out from my work.	BOEE5			
56	I feel I am positively influencing other people's lives through my work.	BOD6			
57	I worry that this job is hardening me emotionally.	BOD7			
58	I feel very energetic.	BOD8			
59	I feel frustrated by my job.	BOD9			
60	I feel I am working too hard on my job.	BOR10			
61	Working with people directly puts too much stress on me.	BOR11			
62	I have accomplished many worthwhile things in my job.	BOR12			
63	In my work, I deal with emotional problems very calmly.	BOR13			

***(b) Psychological (Mental) Health***

The General Health Questionnaire (GHQ) is a well-known measure of current mental health since it has been developed by Goldberg in the 1970s and it's been used in a variety of organizational settings in various cultures extensively (cited in Montazeri *et al.* (2003)). Initially the questionnaire was developed as a 60-item instrument but currently, a range of shortened versions of the questionnaire are

available like the GHQ-30, the GHQ-28, the GHQ-20, and the GHQ. In this study, researcher adapted some of the items from shortest version GHQ-12 items scale.

**Table 3.8: Scale to Measure Psychological Health**

<b>Scale Adapted to Measure Psychological (Mental) Health</b>					
	Items/Questions	Item Codes	No of Items	Measurement Scale	Instrument Authors
64	I am able to concentrate on my work.	PSY1	12	1 = Strongly disagree, 5=Strongly Agree	Adapted from General Health Questionnaire Goldberg (1992)
65	I Lost much sleep.	PSY2			
66	Playing useful part.	PSY3			
67	Capable of making decisions.	PSY4			
68	I am under stress.	PSY5			
69	Could not overcome difficulties.	PSY6			
70	I enjoy normal activities.	PSY7			
71	Face up to problems.	PSY8			
72	Feeling unhappy and depressed.	PSY9			
73	Losing confidence.	PSY10			
74	Thinking of self as worthless.	PSY11			
75	Feeling reasonably happy.	PSY12			

***(c) Physical Health***

Physical Health Questionnaire (PHQ) a self-report scale was adapted (some items according to the study) in order to measure physiological health in the current study.

Physical Health Questionnaire (PHQ) is a somewhat brief measure of somatic health.

**Table 3.9: Scale to Measure Physical Health**

<b>Scale Adapted to Measure Physical Health</b>					
	Items/Questions	Item Codes	No of Items	Measurement Scale	Instrument Authors
76	I often had difficulty getting to sleep at night.	PHY1	7	1 = Strongly disagree, 5=Strongly Agree	Adapted from Physical Health Questionnaire (PHQ)  Schat, Kelloway, and Desmarais (2005)
77	I often had nightmares or disturbing dreams.	PHY2			
78	I often had a headache when there was a lot of pressure on me to get things done.	PHY3			
79	I usually suffered from an upset stomach (indigestion).	PHY4			
80	I often feel nauseated ("sick to your stomach").	PHY5			
81	I often got constipated or suffer from diarrhea.	PHY6			
82	I often had minor colds (that made me feel uncomfortable but didn't keep me sick in bed or make me miss work).	PHY7			

#### 3.7.4 Emotional Intelligence

Cabello and Fernández-Berrocal (2015) has defined Emotional Intelligence as, "The ability to perceive, express and understand emotions and to be able to regulate them in ourselves and in others"

Emotional Intelligence was assessed through a scale developed by Schutte *et al.* (1998). There were 26 items adapted from 33-item Emotional Intelligence scale, which were more suitable for the current study.

**Table 3.10: Scale to Measure Emotional Intelligence**

	Items/Questions	Item Codes	No of Items	Measurement Scale	Instrument Authors
83	I know when to speak about my personal problems to others.	EI1	26	1 = Strongly disagree, 5=Strongly Agree	Adapted from  The Emotional Intelligence Scale  Schutte <i>et al.</i> (1998)
84	I know how to speak about my personal problems to others.	EI2			
85	I find it hard to understand the non-verbal messages of other people.	EI3			
86	When my mood changes, I see new possibilities.	EI4			
87	Emotions are one of the things that make my life worth living.	EI5			
88	I am aware of my emotions as I experience them.	EI6			
89	I expect good things to happen.	EI7			
90	I like to share my emotions with others.	EI8			
91	When I experience a positive emotion, I know how to make it last.	EI9			
92	I arrange events others enjoy.	EI10			
93	I seek out activities that make me happy.	EI11			
94	I am aware of the non-verbal messages I send to others.	EI12			
95	I present myself in a way that makes a good impression on others.	EI13			
96	When I am in a positive mood, solving problems is easy for me.	EI14			
97	By looking at their facial expressions, I recognize the emotions people are experiencing.	EI15			
98	I know why my emotions change.	EI16			

**Table 3.10: Continue**

	<b>Items/Questions</b>	<b>Item Codes</b>	<b>No of Items</b>	<b>Measurement Scale</b>	<b>Instrument Authors</b>
99	I have control over my emotions.	EI17			
100	I motivate myself by imagining a good outcome to tasks I take on.	EI18			
101	I compliment others when they have done something well.	EI19			
102	I am aware of the non-verbal messages other people send.	EI20			
103	When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself.	EI21			
104	When I am faced with a challenge, I give up because I believe I will fail.	EI22			
105	I know what other people are feeling just by looking at them.	EI23			
106	I help other people feel better when they are down.	EI24			
107	I use good moods to help myself keep trying in the face of obstacles.	EI25			
108	I can tell how people are feeling by listening to the tone of their voice.	EI26			

### 3.8 Questionnaire Design

The method of Dillman (1978) was adopted in order to design the questionnaire which comprises of a cover letter, an instruction sheet and the survey instrument. The cover letter of the questionnaire encompasses researcher's name, the name of academic

institution and an expression of the appreciation along with the signature of Deputy Dean to enhance the response rate. The cover letter and the questionnaire were presented to the top management authorities of each selected company and got signatures from them so that they must be aware about the purpose of the research going to be conducted about their organization. Instruction is given at the top of questionnaire before starting questions to help respondents so that they can easily understand the purpose and significance of the study and may respond to the questions effectively. The self-administered questionnaire consisted of two main sections. First part of the questionnaire consisted of demographic profiles of the respondents including gender, age, profession, job title, and experience in the current organization. The second part of the questionnaire obtained the perceptions of the respondents regarding the main variables of the study namely organizational climate, workplace traditional bullying, cyberbullying, employee health (burnout, psychological and physiological health) and Emotional Intelligence. Questionnaire for the current study is attached in Appendix D.

### **3.9 Pilot Testing and Results**

Most of the studies on workplace bullying have been conducted in western countries (see Table 1.3 in chapter 1). Thus, it is important to do pilot testing of the questionnaire developed for this study before starting the final data collection to remove the ambiguousness of the questionnaire if any, and to get confirmation that whether the respondents are able to understand all the questions or not? Moreover pilot study assures that the respondents can understand the wording and language of the questionnaire.

For pilot study 30 officials working in 4 service sectors of Pakistan were chosen randomly and were asked to read the questionnaire with full concentration and highlight if they feel any confusion in understanding the questionnaire in terms of wording, language, construct, concept or terminologies etc. Their comments and opinions were

highly appreciated and considered in order to make the questionnaire more clarified. After that, the reliability of the questionnaire was tested as shown in the Table 3.11. Results depicted the enough reliability of all the constructs and dimensions of each construct as of alpha values are above the cut-off criteria of 0.70 except a variable technology, which is 0.696 but is considered to be in the acceptable range.

**Table 3.11: Results of Pilot Study**

<b>Construct</b>	<b>Dimensions</b>	<b>Total Items</b>	<b>Reliability</b>
<b>Organizational Climate</b>	Leadership	3	0.762
	Job description	2	0.811
	Working condition	3	0.921
	Time pressure	2	0.771
	Cultural norms	2	0.710
	Technology	5	0.696
	<b>Overall</b>	17	0.891
<b>Workplace bullying</b>	Traditional bullying	21	0.964
	Cyberbullying	12	0.956
	<b>Overall</b>	33	0.978
<b>Burnout</b>	Emotional Exhaustion	5	0.888
	Depersonalization	4	0.717
	Reduced personal accomplishment	4	0.919
	<b>Overall</b>	13	0.887
<b>Ill-health</b>	Psychological health	12	0.947
	Physiological health	7	0.738
	<b>Overall</b>	19	0.922
<b>Emotional Intelligence</b>	Self-awareness	6	0.941
	Self-regulation	8	0.876
	Motivation	4	0.881
	Empathy	6	0.743
	Social skills	2	0.910
	<b>Overall</b>	26	0.942

### 3.10 Data Analysis

The aim of the data analysis is to get answers of the research questions and to meet research objectives. Statistical tests and analysis have been done in this section to

investigate the relationships between variables and to test and analyze the developed hypotheses. Specified period of time is taken while collecting the data as it is a cross sectional kind of research. Cross sectional study seems to be suitable here since in the present study, the researcher explored causal relations (Sekaran, 2011). After analyzing comprehensive literature of workplace bullying regarding methodology (detail is given in Table 3.1) researchers adopted the quantitative methods and techniques in this study to test the hypotheses. One of the salient quantitative techniques, Structural Equation Modeling (SEM) is adopted for the reason, this study is investigating the relationships (direct, indirect, mediating, moderating) between number of variables and having so many constructs thus, SEM allows researchers to observe various interrelated dependence relationships simultaneously between various constructs represented by variety of measures/scales while calculating measurement error (Rigdon, 1998). Statistical analysis has been done on the basis of SPSS 21 and Smart-PLS version 3.2.

### **3.11 Structural Equation Modeling**

Structural equation modeling (SEM) qualifies the more rigorous analysis on the basis of combination of both the structural and measurement model analysis. The structural model explores causality among sets of constructs of dependent and independent variables, while the measurement model calculates loadings and makes a link between observed variables and their latent variables. The standardized coefficient beta indicates the relative strength of the statistical relationship. Moreover, model also integrates and analyses the observed variables in detail (Geffen & Rothenberg, 2000).

SEM simultaneously explains the relationships among latent variables, shows the strength of the measurement items in loading and also avoid multicollinearity issues (Koh, Laplante, & Tong, 2007). SEM is actually the combination of factor analysis and multiple

regression. SEM's major contribution is to test the relationships simultaneously that are unified into an integrated model.

Partial Least Square SEM (PLS-SEM) technique, an alternative to covariance-based SEM (CB-SEM) is adopted in this study for the evaluation of theoretically developed cause-effect relational model. PLS-SEM has the ability to estimate the complex models very reliably on the basis of few observations without imposing data distributional assumptions. As this is an exploratory research and PLS-SEM is statistically very useful for exploratory research settings which are "simultaneously data-rich and theory-primitive" (Wold, 1985).

### **3.11.1 Second-Generation Statistical Analysis Techniques**

SEM as second-generation technique, comprises of statistical methods for simultaneously modelling causal networks of effects instead of doing in a piecemeal manner. Second-generation technique (i.e., SEM) provides more scalable, extensive and flexible causal-modelling capabilities as compare to first-generation techniques (regression, correlation, ANNOVA). First-generation techniques are having limited modelling capabilities specifically in terms of causal or complex modelling (Lowry & Gaskin, 2014). Particularly, first-generation techniques cannot deal with modelling latent variables, mediation effects, and multiple group moderation of multiple effects. SEM is capable of including latent (unobserved) variables in model, as it is the prime advantage of SEM. So that, the researcher may model abstract construct consist of various indicators, each of which is a dimension of the latent construct.

### **3.11.2 Usefulness of Partial Least Square for the Estimation of Structural Equation Modeling**

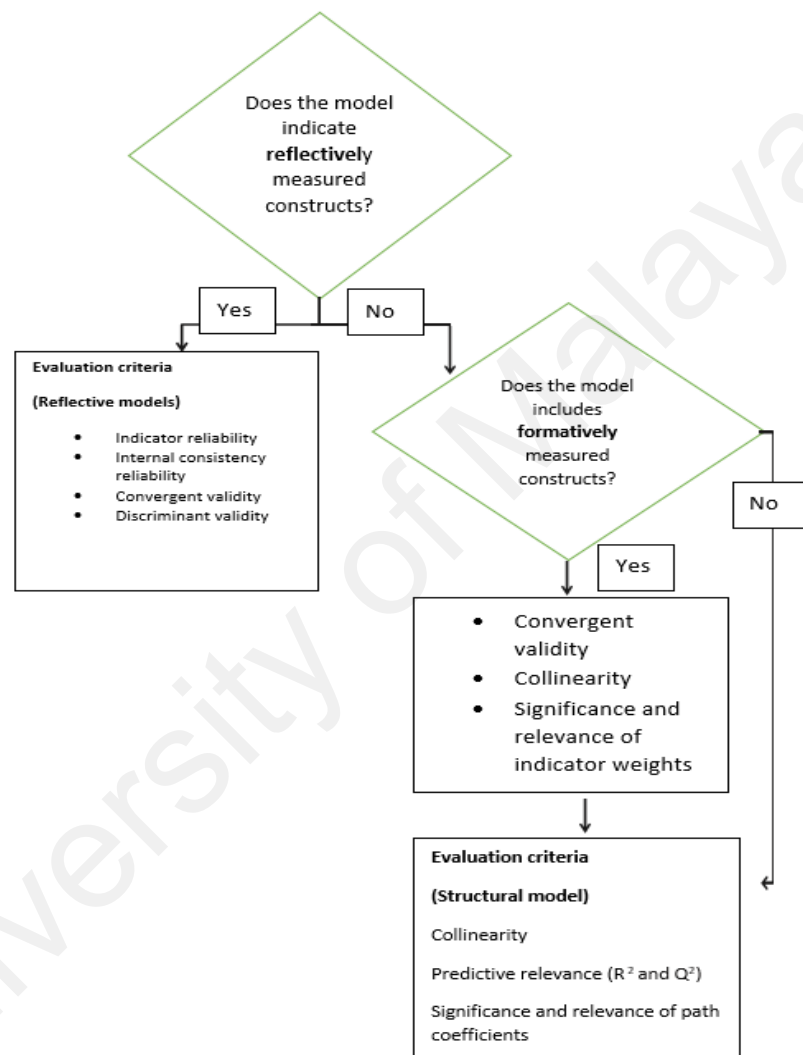
Use of PLS-SEM is increasing in resolving social sciences routine problems because of its methodological strength that it can handle modeling issues effectively e.g. (Hair,

Ringle, & Sarstedt, 2013; Sarstedt, Ringle, Smith, Reams, & Hair, 2014) are some of the examples of management research. While estimating path models consist of so many constructs usually above five or multiple path relationships or having various indicators (usually above six) in one construct, PLS-SEM works quite effectively and efficiently. Likewise, this study is also comprises of multiple constructs with various indicators and investigating path relationships between multiple variables. In comparison to CB-SEM, PLS-SEM usually got much more statistical power and reaches to higher level of convergence (Henseler & Chin, 2010; Reinartz, Haenlein, & Henseler, 2009). Additionally, PLS-SEM flexibly handles advanced level model elements like moderators, nonlinear models or hierarchical relation models (e.g., (Becker, Klein, & Wetzels, 2012; Henseler & Chin, 2010). PLS is considered to be a multipurpose approach to SEM (e.g., (Hair, Ringle, & Sarstedt, 2012; Henseler & Chin, 2010)), and is able to handle data and modeling issues arises in business organizations regularly. Thus PLS-SEM seems a good choice for the analysis of current research with 7 constructs, organizational climate, workplace traditional bullying, cyberbullying, burnout, psychological health, physiological health, and Emotional Intelligence along with various indicators. Research is going to investigate direct and indirect (mediating and moderating) relationships between constructed variables.

### **3.11.3 PLS-SEM Evaluation**

PLS-SEM results evaluation depends upon two stages, illustrated in the Figure 3.1. First stage is called measurement model analysis. In this analysis researcher examines whether the measures included in the model are reflective or formative or both. After analyzing the measures, if the researcher gets the satisfactory results then he/she will move on to second stage of evaluation which is called structural model analysis (Hair, Henseler, Dijkstra, & Sarstedt, 2014). First stage is related to measurement theory while second is to examine structural theory, which determines the significance and

meaningfulness of structural relationships and is related to hypotheses testing. Two-stage procedure of SEM evaluation (measurement model and structural model) is also recommended by Anderson and Gerbing (1988) and Kline (2005).



**Figure 3.1: PLS-SEM Evaluation Stages (Sarstedt *et al.*, 2014)**

Before the evaluation of measurement model, researchers have to decide first whether the constructs or indicators of the model are reflective or formative?

### 3.11.4 Reflective and Formative Constructs

Researchers have to differentiate between formative and reflective constructs. It is quite important to specify the criteria as it's a practical way for researchers to decide on the suitable measurement model to use in their research.

**Table 3.12: Summarized Criteria to Select Formative or Reflective Constructs (Jarvis *et al.*, 2003)**

Decision Rule	Formative Model	Reflective Model
1. Direction of causality from construct to measure implied by the conceptual definition. Are the indicators (items) defining (a) characteristics or (b) manifestations of the construct? Would changes in the items cause changes in the construct or not? Would changes in the construct cause changes in the indicators?	Direction of causality is from items to construct  Indicators are defining the characteristics of the construct  Changes in the indicators should cause changes in the construct  Changes in the construct do not cause changes in the indicators	Direction of causality is from construct to items  Indicators are the manifestations of the construct  Change in the indicator should cause changes in the construct and vice versa
2. Interchangeability of the items or indicators. Should the indicators have the same or similar construct? Do the indicators share a common theme? Would dropping of the indicators alter the conceptual domain of construct?	Indicators need not be interchangeable  Indicators need not share a common theme  Dropping an indicator may alter the conceptual domain of the construct	Indicators should be interchangeable  Indicators should share a common theme  Dropping an indicator should not alter the conceptual domain of the construct
3. Covariation among the indicators  Should a change in one indicator be associated with changes in other indicators?	Not necessary for indicators to co-vary with each other	Indicators are expected to co-vary with each other

Though, researchers conceptually discussed on the differences between formative and reflective measurement models (Bollen & Lennox, 1991; Diamantopoulos & Winklhofer, 2001; Edwards & Bagozzi, 2000) but no comprehensive list of criteria is developed yet to help or guide researchers who are working on this issue. The summarized criteria is given in the Table 3.12 including various questions that researchers may ask themselves to determine whether the specific construct is reflective or formative.

On the basis of criteria mentioned in Table 3.12, it is determined that the constructs; organizational climate; workplace traditional bullying; cyberbullying; psychological and physiological health; and Emotional Intelligence are reflective in nature. While the construct burnout is a reflective-formative construct.

Construct can also be multidimensional. Multidimensional constructs are constructs with more than one dimension, and each dimension can be measured using either reflective or formative indicators. These multiple dimensions “are grouped under the same multidimensional construct because each dimension represents some portion of the overall latent construct” (K. S. Law & Wong, 1999).

In the current research study, all of the constructs are reflective while only the construct burnout is multidimensional construct, which is comprised of sub constructs with reflective items and relationships between the sub constructs and the construct under study are formative. Hence, it is a reflective-formative multidimensional construct.

### ***Stage 1: Evaluation of Measurement Model***

Basic objective of measurement model evaluation is to determine the consistency and validity of items, indicators or manifest variables. PLS-SEM allows researchers to identify the relationships between items and constructs more flexibly, after analyzing the measurement that it is reflective or formative (Hair *et al.*, 2014). Assessment of reflective

measurement model and formative measurement model including different steps are as follow:

*(a) Reflective Measurement Model Assessment*

If the measure is reflective, the first step is to find out the **indicator's reliability** by calculating the loadings. Loadings above 0.50 shows that the construct explains over 50% of the variance in indicator. The second step is to access the **internal consistency reliability**. While doing analysis with PLS-SEM, internal consistency reliability is usually estimated on the basis of composite reliability (Joreskog, 1969). In exploratory researches like current study, values between 0.50 and 0.70 are reflected “acceptable, while values between 0.70 and 0.95 are considered “satisfactory to good” (Hair *et al.*, 2014). Values above 0.95 are problematic as they show the items redundancy, which may lead items toward the issue of undesirable response patterns like straight line and overstated correlations among error terms of indicators (Drolet & Morrison, 2001).

**Convergent Validity**

Next step is to examine the convergent validity of the construct which is to be measured reflectively. Convergent validity explains the items variance and on the basis of which it measures the extent to which a construct converges in its indicators. It also calculates the extent of correlation among the measures of the similar concept (Cooper & Schindler, 2011; Hair *et al.*, 2011). Convergent validity consisted of calculations of construct loadings, AVE (average variance extracted) and construct reliabilities. AVE is the sum of squares of a standardized factor loading in order to represent the variation in each item, which is explained by the latent variable. In a construct, the AVE is actually the average percentage of variance explained by the measurement items of that construct. As 0.50 or above is the standardized value of AVE. While analyzing the convergent validity it is substantial to explore the significance of items loading in each construct.

## **Discriminant Validity**

The last step is to examine the discriminant validity. Discriminant validity analysis in a path model determines the degree to which one construct is empirically distinct from other constructs i.e. how distinctly its indicators represent only this particular construct, as well as the extent to which this construct correlates with the other constructs.

In such sort of validity analysis, responses are measured without cross loadings in terms of latent constructs (Arbuckle, 2011; Hair *et al.*, 2011; Rasli, 2006). If correlation between exogenous construct is above 0.85, it violates discriminant validity (Cooper & Schindler, 2011; Rasli, 2006). In discriminant validity the average variance extraction values must be higher than inter-construct correlation values.

### ***(b) Formative Measurement Model Assessment***

Evaluation of formatively measured constructs are different from reflectively measured constructs. The analysis of formatively measured constructs includes the assessment of (i) convergent validity (ii) collinearity (iii) statistical significance and (iv) relevance of the indicators weight (Hair *et al.*, 2014).

**Convergent validity** of formatively measured constructs is examined on the basis of the degree of correlation among formatively measured construct and the reflectively measured (or single-item) construct which means, the extent they both correlates. Hair *et al.* (2013) recommend that at least 65% of variation in reflectively measured item or items should be explained by the formatively measured construct with a path coefficient of 0.80 approximately. Path coefficient of 0.70 (that explains about 50% of variance) is also considered to be acceptable in most of the cases.

After verifying about convergent validity, the next step is to examine the **collinearity** among the formative indicators. For this instance, the researcher has to calculate variance

inflation factor (VIF) of each item. Multiple regression analysis should be done between indicators/manifest/items of formatively measured construct and all other measurement items of the same construct. Higher the value of VIF greater will be the collinearity level. VIF value above 5 depicts the collinearity among indicators (rule of thumb). The next step involved in the assessment of formatively measured construct is to examine **the significance and relevance of the indicators**.

Unlike multiple regression, PLS-SEM does not make any distributional assumptions related to the indicators or error terms which helps in immediate testing of the significance level of weights on the basis of normal distribution. As an alternative in PLS-SEM, the researcher uses bootstrapping routine, a resampling technique, which draws wide number of subsamples from original data usually 5000 while using replacement technique and re-estimates the model for every subsample. Researcher calculates bootstrap standard errors on the basis of these subsamples, which contribute in the computation of t-values and p-values for each indicator weight. On the basis of t-values, researcher determines the significance level of the weights and takes the decision whether to retain the indicator or should be removed from the construct.

The indicator should be retained if it has a significant weight. If the indicator has a non-significant weight but the loading is 0.50 or higher, it should be still retained after getting expert judgement and opinion.

If the indicator has a non-significant weight with loading less than 0.50, it is significant to delete that indicator from the measurement model.

### ***Stage 2: Evaluation of Structural Model***

If the assessment of measurement model shows the quality of measurement model is satisfactory then the researcher moves toward structural model assessment, this is the second stage of evaluation of PLS-SEM as shown in the Figure 3.1.

Structural model assessment consists of analysis of endogenous constructs that verifies the model's quality as well. The assessment consist of following 4 steps: Collinearity test between the predictor constructs; coefficient of determination ( $R^2$ ), cross-validated redundancy ( $Q^2$ ) and the path coefficient analysis.

While doing path coefficient computations, series of regression analysis have to be done between constructs. So in the beginning, **collinearity** test is important to determine and remove the biasness in regression results because of collinearity issues. This step is related to the model assessment of formative measures as the scores of the exogenous latent variables serve as input for the assessment of VIF.

Next step is to calculate the **R value** of each endogenous construct. R represents the measure of the predictive accuracy of the model in terms of in-sample prediction as well as measures the variance explained in each of the endogenous constructs. The value of R ranges from 0 to 1, higher level represents the greater level of predictive accuracy. According to the rule of thumb, R values of 0.25, 0.50 and 0.75 might be considered weak, moderate and substantial, respectively (Hair *et al.*, 2011; Henseler & Chin, 2010).

Calculating  $Q^2$  is another way to evaluate the model's predictive relevance also called blindfolding.  $Q^2$  can be calculated on the basis of two approaches, one is cross-validated redundancy and the other is cross-validated communality. Researchers suggested to use cross-validated redundancy approach as it is considered to be the best approach (Hair *et al.*, 2014).

The  $Q^2$  is based on blindfolding procedure that omits some part of the data matrix, estimates the parameters of the model and predicts the omitted part on the basis of previously computed estimates. If the difference between predicted and original values is smaller than greater will be the  $Q^2$ , and will show the greater predictive accuracy of the model.  $Q^2$  is also considered to be the measure of out of sample prediction (Rigdon, 2014; Sarstedt, Ringle, Henseler, & Hair, 2014). For a particular (endogenous) construct,  $Q^2$  values above zero depicts the acceptable predictive accuracy of the model.

### **Effect Size ( $f^2$ )**

The fitness of the current study's proposed model will also be calculated through  $f^2$  value which shows the effect size. The value of  $f^2$  is measured by increase in  $R^2$  in relevance to the proportion of variance of the endogenous variable which remains unexplained (Cohen, 1988b). The  $f^2$  values in between the range of 0.02 and 0.14 reflects the weak effect, values between 0.15 and 0.34 shows moderate effect, and values above 0.35 determines the strong effect.

In the next step, the structural path analysis is done on hypothesized relationships by calculating the **strength and significance of the path coefficients**. Just like the weight assessment of formative indicators, the assessment of significance is done by bootstrapping standard errors which serves as a basis for t-value calculations for the path coefficients. The standardized range of path coefficient values is between -1 and +1. Coefficient value closer to -1 represents strong negative relationship while coefficient more towards +1 shows strong positive relationship. The interpretation of the determination of size of coefficient depends upon the context of the research.

In the final step of structural model analysis, **structural model relationships** analysis has to be done. This analysis is not only limited to the calculation of direct effects but

also considers total effects (if applicable), which is calculated by adding direct effects and indirect effects between exogenous and endogenous constructs in the structural model. Total effect provides the richer picture of relationships and allows the consideration of an exogenous construct's influence on a target construct through all mediating constructs in the structural model.

#### **3.11.5 Test of Moderation Effects**

This study proposed that the relationship between workplace bullying and employee ill-health i.e. burnout, psychological and physiological health is inversely moderated by Emotional Intelligence. In other words, the more the Emotional Intelligence is, the lower will be the positive effect of workplace bullying on workers ill-health. Emotional Intelligence would weaken the positive effect of workplace bullying on employees ill-health. Statistically in smart PLS, moderation effects will be tested by checking the interaction effects between independent variables.

#### **3.12 Summary of Chapter 3**

Chapter 3 gives the description of research methodology of the current study. The chapter comprises of sampling techniques used in this research and data collection procedures. The chapter includes the details about the nature of research, sampling strategy, data collection, instrumentation and questionnaire design. It gives complete insights about data analysis procedures and also elaborates about data analysis techniques and testing of hypotheses. Structural Equation Modeling (SEM) is used for data analysis by using smartPLS. SEM is comprised of two models, measurement model and the structural model. The chapter discusses about the step wise processes of both models. Discussion on reflective and formative constructs is also present.

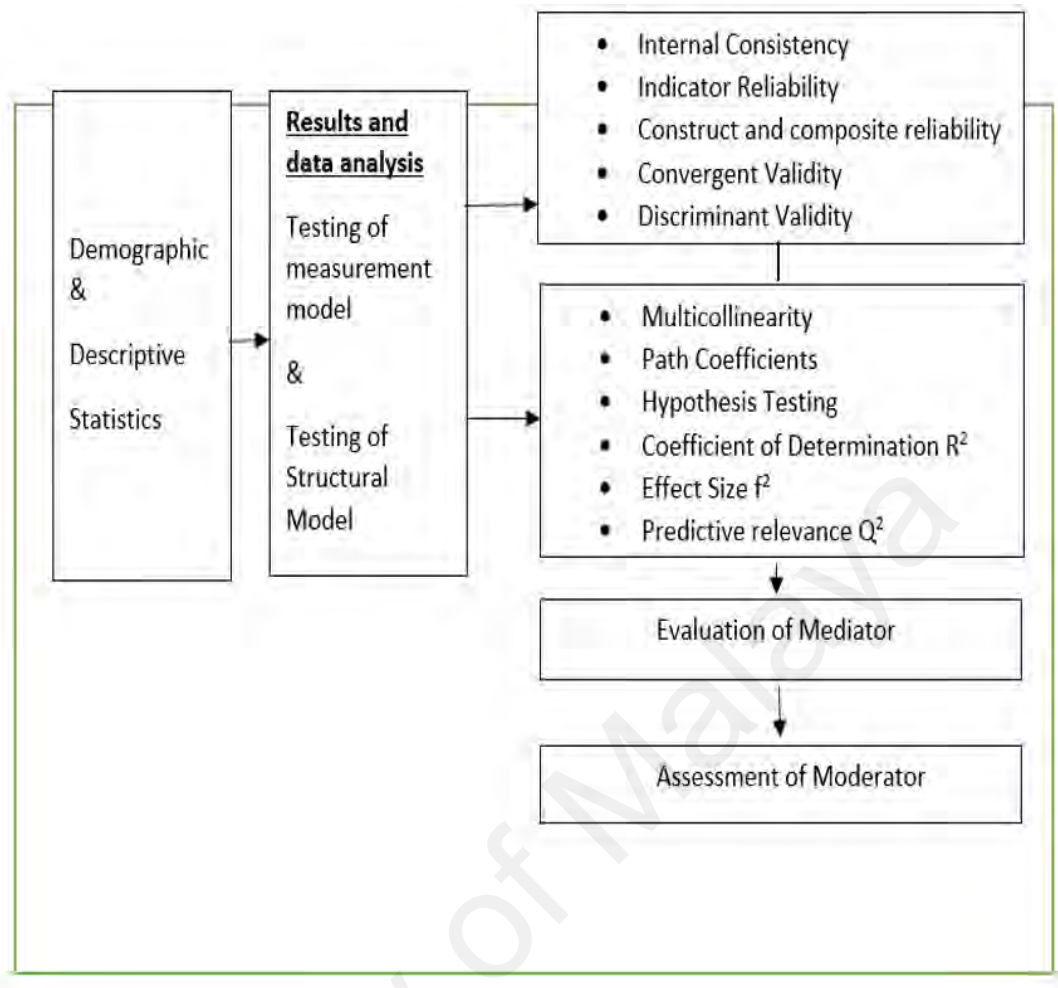
## CHAPTER 4: RESULTS AND ANALYSIS

### 4.1 Introduction

Chapter 4 provides the description of the data analysis techniques used for hypotheses testing and the results and findings of the current study. Demographic analysis is done and the descriptive statistics is also calculated and presented for the sample and variable description.

For empirical analysis, SmartPLS software version, 3.2.4 has been used. The analysis is based on the Structural Equation Modelling (SEM) as statistical methods and techniques. In the field of social sciences the use of SEM-PLS technique has recently become more popular and common (Chin, 1998; J. F. Hair Jr & Lukas, 2014).

As demonstrated in Figure 4.1, the results are interpreted on the basis of two SEM models i.e. measurement model and structural model. During measurement model analysis the convergent, composite and discriminant validity of the variables and constructs were tested. The analysis of the results for the measurement model are presented in this chapter along with measurements of internal consistency, reliability and validity analysis. Structural model analysis was used to test the hypothesized relationships of the current study on the basis of path coefficient analysis. Coefficient of determination, effect size and predictive relevance were also calculated. Mediating and moderating effects have also been testified and results are presented in this chapter of the study.



**Figure 4.1: Organization and structure of chapter 4 ‘Results and Analysis’**

## 4.2 Data Screening

For data collection of the current study, 500 questionnaires were distributed online and off-line among the workers working in main branches of selected organizations under 4 service sectors of Pakistan i.e. banking, telecom, hoteling and education, located in different cities. After few months total of 390 questionnaires were received with a response rate of 78%. However, 8 questionnaires were found to be incomplete and had missing values above 10, so that these questionnaires were excluded from the analysis. Remaining 382 questionnaires were found to be valid and appropriate for further analysis.

## 4.3 Demographic Data of Respondents

This section provides the complete detail regarding to respondents gender, age, profession and the experience in the current organization. Demographic characteristics of respondents are presented in the Table 4.1 on the basis of frequency distribution and percentages. First the detail of **gender** distribution is given, which shows that male response rate is more than female. There were about 71 percent of male respondents, while remaining 29 percent were females. One reason can be the general proportion in Pakistan for female workers is less as comparison to male members. Secondly it was also difficult to approach female faculty members because of their home commitments and schedules. The second demographic variable selected for the current study is the **age** of respondents. The study focuses officials working in service sector organizations and the major portion of the above graph is covered by the respondents ranging between the ages of 31 to 40. Percentage demographic shows that the percentage of the respondents between categories 20-30 is 40%. Respondents who are between 31-40 are having the percentage of 49%. Respondents between 41 and 50 were 7%. And few of the workers were between the age of 51 and 60 showing the percentage of 4% approximately.

**Table 4.1: Demographic Characteristics of Respondents**

<b>Demographic Variables</b>	<b>Frequencies</b>	<b>Percentages</b>
<b>Gender</b>		
Male	271	71%
Female	111	29%
<b>Age</b>		
20-30	153	40%
31-40	187	49%
41-50	27	7%
51-60	15	4%
<b>Profession</b>		
Education	130	43%
Telecom	92	24%
Hoteling	80	21%
Banking	80	21%
<b>Experience in current organization</b>		
6 months-3 years	183	48%
3 years-6 years	103	27%
6 years-9 years	45	12%
9years to 12 years	27	7%
Above	24	6%

For the current study workers were approached who belong to different **professions** like baking, telecom, hoteling and education.

Proportion of respondents who belong to education is greater than others which is 34%. Respondents working in telecom sector are about 24%. Remaining 21% belongs to hoteling profession and 21% of the employees were selected as respondents of the current study who are in banking profession.

Experience of the respondents in the current organization is also considered as a demographic variable. Five categories of experience were formed as 6 months to 3 years, 3 to 6 years, 6 to 9 year, 9 to 12 years and above.

As the above Table 4.1 shows that out of the five categories of experience, mainly the category of 3 to 6 years of employment covers more area with the percentage of 27%. Percentages show that 48 percent of the respondents belong to the category of 6 months to 3 years. 12 percent belongs to the category 6 to 9 years. 7 percent lie between 9 to 12 years and 6 percent of the respondents were having the total professional experience of above 12 years in the current organization.

#### **4.4 Analysis of Common Method Bias (CMB)**

The validity of the study was analyzed by testing for common method bias (CMB). When there is a variance in responses due to measurement method or instrument used, instead of constructs that the measures are representing then the common method bias (CMB) occurs in data. In other words, instrument introduces the bias which causes variation.

In PLS-SEM, common method bias (CMB) is calculated through full collinearity assessment approach introduced by Kock (2015). VIF values must be less than the threshold value of 3.3 (Hair Jr, Sarstedt, Ringle, & Gudergan, 2017; Kock, 2015). This

indicates that the model is free from common method bias. If any of the values is above 3.3, it will be indicative of model affected by common method bias (CMB).

**Table 4.2: VIF Values Calculated through Full Collinearity Assessment Approach**

	<b>Burnout</b>	<b>Ill- Health</b>	<b>Organisational Climate</b>	<b>Workplace Bullying</b>
<b>Burnout</b>		2.065	3.268	3.201
<b>Ill-Health</b>	2.309		3.262	2.496
<b>Organisational Climate</b>	2.52	2.642		3.227
<b>Workplace Bullying</b>	3.262	2.551	3.164	
	<b>Burnout</b>	<b>Ill-Health</b>	<b>Organisational Climate</b>	<b>Workplace Bullying</b>
<b>Burnout</b>		2.065	3.268	3.204
<b>Ill-Health</b>	2.309		3.262	2.496
<b>Organisational Climate</b>	2.52	2.642		3.227
<b>Workplace Bullying</b>	3.262	2.551	3.164	

Table 4.2 represents that all the VIF values calculated through full collinearity that corresponds to a latest variables of the study are lower than the 3.3 threshold. This is indicative that the research model is free from common method bias (CMB) and there are no collinearity issues among latent variables.

#### **4.5 Prevalence of Traditional and Cyberbullying**

In the current study bullying experience is classified into 4 different service sectors and leymman's criteria (two or more negative acts at least weekly or monthly in a last six months period ) has been applied in order to measure the percentage of victims of workplace traditional and cyberbullying separately in each sector. Table 4.3 depicts the prevalence percentages in 4 sectors. Results show that there exist a very high prevalence of both the traditional bullying and cyberbullying at workplace of service sector of Pakistan, which supports H1 and its sub hypotheses. Hence, H1, H1a, H1b, H1c and H1d

are accepted. Results also depicted that there is a maximum prevalence of both the traditional and cyberbullying in hoteling sector. A total of 49% workers are the victims of workplace traditional bullying and 37% are cyberbullying victims, and the total victims who are being traditionally and cyber bullied at a time are also 36% in overall service sector of Pakistan.

**Table 4.3: Workplace Traditional and Cyberbullying Prevalence in 4 Selected Service Sectors**

<b>Sector</b>	<b>Traditional bullying</b>	<b>cyberbullying</b>	<b>Both</b>	<b>Hypothesis</b>	<b>Results</b>
Banking	59%	49%	47%	H1a	<b>Accepted</b>
Telecom	53%	41%	40%	H1b	<b>Accepted</b>
Hotel	48%	40%	38%	H1c	<b>Accepted</b>
Education	37%	18%	18%	H1d	<b>Accepted</b>
<b>Total</b>	<b>49%</b>	<b>37%</b>	<b>36%</b>	<b>H1</b>	<b>Accepted</b>

The bullied percentages in all four service sectors are quite high. It can be compared to the bullying prevalence percentages in service sectors of various western countries (see table 1.3) which are quite smaller than the current findings, and the maximum prevalence of workplace traditional bullying and cyberbullying is present in banking sector as compared to other sectors.

#### **4.6 Relationship between Demographic Variables and Workplace Bullying**

Demographic data also provides some useful information regarding workplace bullying based on the demographic characteristics of respondents. It was also noticed that some of the demographic variables were significantly related to workplace bullying in positive and negative directions. To further validate these observations, correlation analysis of the demographic variables with bullying was also performed. The detail of this analysis is given in the Table 4.4.

**Table 4.4: Correlation Analysis**

	Gender	Profession	Age	Experience in current organization	Traditional bullying	Cyber bullying
Gender	1	.418**	-.006	.033	.236**	.134**
Profession	.418**	1	.055	.245**	-.095**	.038**
Age	-.006	.055	1	.611**	.118	.033
Experience in current organization	.033	.245**	.611**	1	-.032	-.004

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 \* . Correlation is significant at the 0.05 level (2-tailed).

Results in the Table 4.4 depicted that there is a significant relationship between gender and both types of bullying i.e. traditional bullying and cyberbullying at 0.01 level. But, the strength of relationships is weak as 0.236 with traditional bullying and 0.134 with cyberbullying. It is determined that with the change of gender, bullying victimization also changes. As previous studies also revealed that females are more being the victims of workplace bullying as compare to male (Cortina *et al.*, 2002; Wimmer, 2009). Hence, H2a is accepted. Demographic variable age is insignificantly associated with workplace bullying (traditional and cyber), as p value is above 0.05 level. Hence, H2b is not accepted.

When the demographic variable profession is compared with the research variables workplace traditional bullying and cyberbullying, the relationships are found to be significant as p values are less than 0.05 in both cases. This shows that with the change of profession bullying victimization level also changes. Thus H2c is accepted. Similarly, demographic variable “experience in the current organization” is found to be insignificant in relation to workplace traditional and cyberbullying with P values above 0.05 hence,

H2d is not accepted. Table 4.5 shows the results of hypotheses testing for demographic variables and bullying.

**Table 4.5: Hypotheses Results for Demographic Variables and Bullying**

<b>Hypotheses</b>	<b>p-value</b>	<b>Result</b>
H2a: Gender -Workplace bullying (Traditional and Cyber)	Significant	<b>Accepted</b>
H2b: Age - Workplace bullying (Traditional and Cyber)	Insignificant	<b>Not Accepted</b>
H2c: Profession - Workplace bullying (Traditional and Cyber)	Significant	<b>Accepted</b>
H2d: Experience - Workplace bullying (Traditional and Cyber)	insignificant	<b>Not Accepted</b>

#### **4.7 Evaluation of Research Model**

Structural equation modelling (SEM) technique is used to test the research model of the current study on the basis of partial least square (PLS) method. Measurement model and structural model analysis was done while conducting the data analysis. The software smartPLS version 3.2 has been used for SEM analysis.

##### **4.7.1 Evaluation of Measurement Model**

Measurement model analysis deals with the evaluation of reliability and validity of both the manifest variables and the whole construct. Analysis includes measurement of indicator loadings, internal consistency, discriminant, and convergent validity values (explanation is given in chapter 3). In order to determine the convergent validity, composite reliability (CR) and average variance extracted (AVE) values were used. For discriminant validity, Fornell-Larcker criterion and cross loading values were calculated. Explanation is given in the following sections.

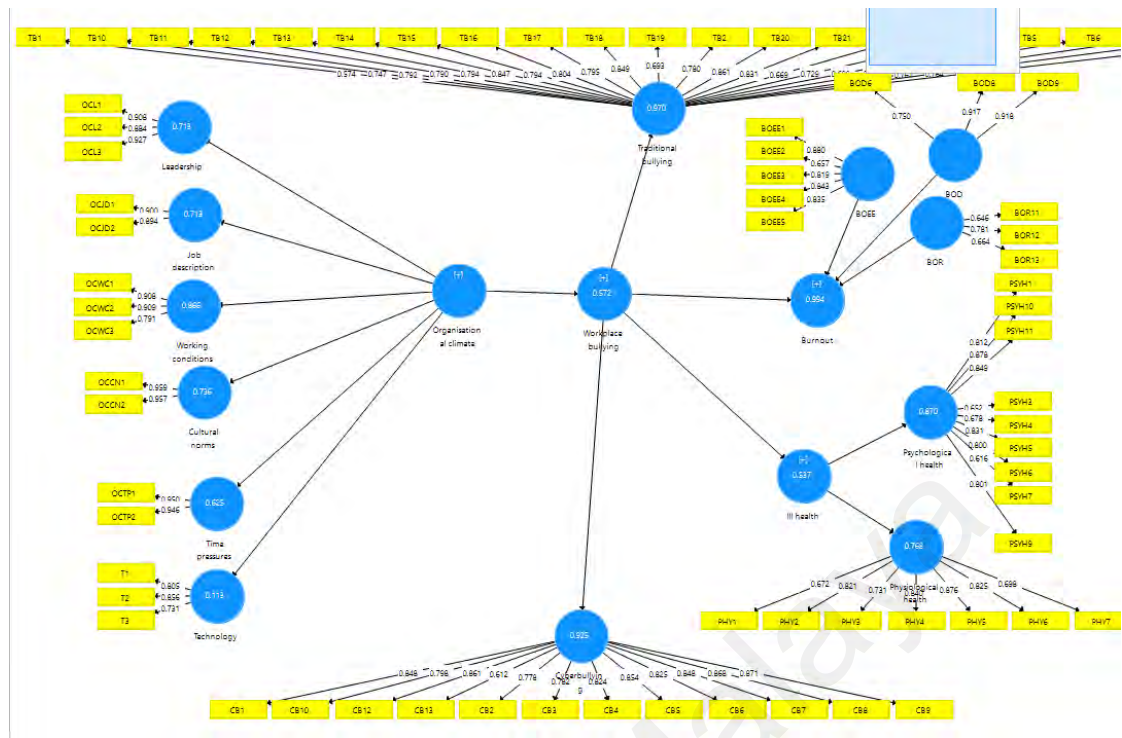
#### 4.7.1.1 Internal Consistency

Consistency evaluation is consisted of reliability tests. Reliability of manifest variable describes the variance of each manifest related to its latent variable on the basis of calculations of outer loadings (Götz, Liehr-Gobbers, & Krafft, 2010), which shows **indicator reliability**. The cut-off value for outer loading used in this study is 0.5. Consistency analysis also consisted of **construct reliability** evaluation on the basis of Cronbach's alpha and **Composite Reliability** (CR). Cronbach's alpha value must be greater than 0.7, and Composite Reliability equal to 0.7 is considered as "Modest reliability" (Hair *et al.*, 2011).

#### 4.7.1.2 Indicator Reliability

Indicator reliability is evaluated on the basis of factor loading or outer loading values of each item. Indicators having value of 0.70 and above are considered acceptable. According to J. F. Hair Jr and Lukas (2014), if the indicator's loading is below 0.40, it must be considered for elimination. Whereas, if indicator's loading value is between 0.40 and 0.70, it must be considered for elimination only if it increases the composite reliability (CR) and average variance extracted (AVE) values.

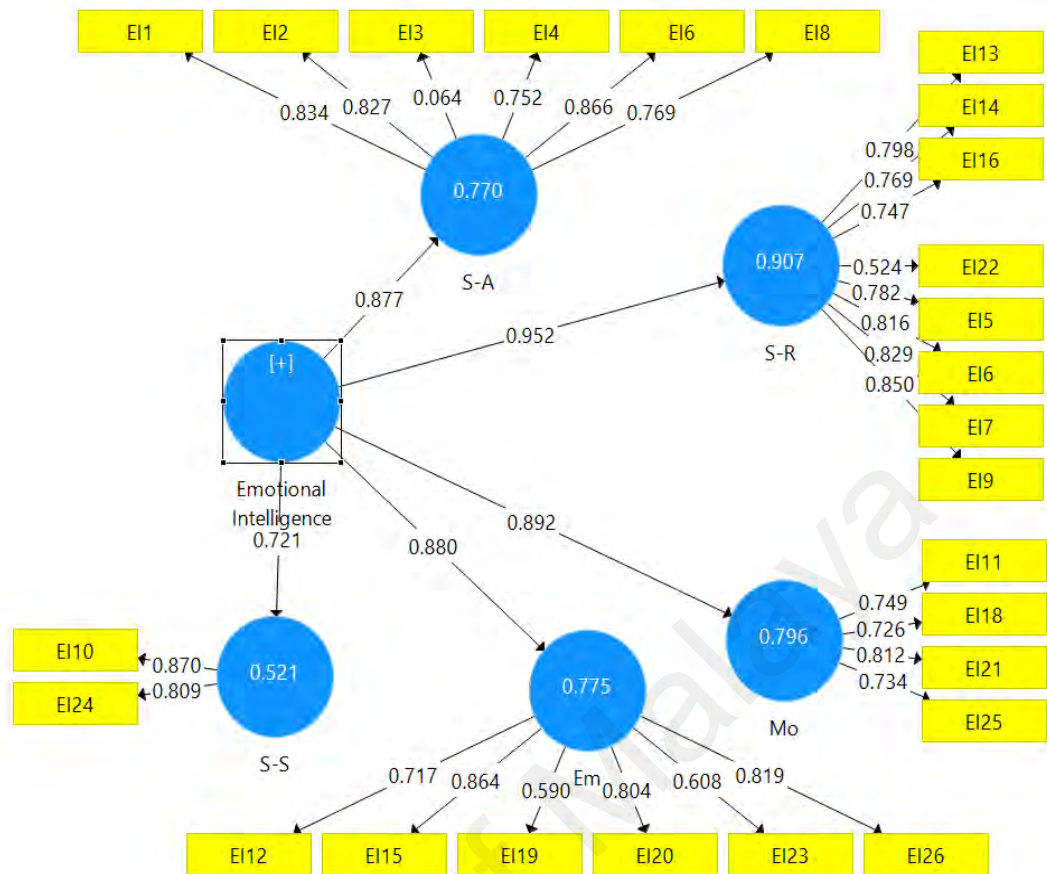
While eliminating the indicators, researchers must be careful enough as elimination should only be considered if it enhances the CR and AVE to the minimum threshold value, otherwise it is better to retain that indicator (J. F. Hair Jr & Lukas, 2014; Henseler & Fassott, 2010). Table in Appendix C shows the outer loadings of each manifest variable after eliminating the items BOR10, BOD7, CB11, PSY2, PSY8 and PSY12. Items were eliminated on the basis of outer loadings less than 0.50, which increased the CR and AVE values up to the standard point as shown in the Table 4.6.



**Figure 4.2: Factor Loadings (After Elimination of Items)**

Figure 4.2 represents that Factor loadings (outer loadings) of each manifest variable is above the cut-off criteria of 0.5, shows the enough contribution of each element in the construct.

Appendix B also represents the outer loadings of each indicator of the moderating variable Emotional Intelligence. The results are also highlighted in the Figure 4.3.



**Figure 4.3: Factor Loadings of Moderator Emotional Intelligence after the Elimination of Items**

Item E17 was showing outer loading less than 0.4 so was better to delete, as according to (F. Hair Jr, Sarstedt, Hopkins, & G. Kuppelwieser, 2014), if an indicator's value is less than 0.40 it must be eliminated. Items having outer loadings between 0.4 and 0.7 are not increasing the CR and AVE values from minimum threshold value, so better to retain them. All other items are showing outer loadings above the cut-off criteria of 0.5.

#### 4.7.1.3 Construct and Composite Reliability

After examining the outer loadings of the indicators, construct reliability and composite reliability of each construct is determined. Table 4.6 depicts that Cronbach's alpha values are well above 0.7 indicating enough reliability of the constructs. Composite reliability of each construct also seems high. Higher the composite reliability (CR) value high will be the items consistency. Thus, the resultant values indicated a good level of

construct reliability and consequently revealed that the items used in the present research instrument, to represent constructs, contains high level of internal consistency.

**Table 4.6: Construct Reliability and Composite Reliability and Convergent Validity**

	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>Average Extracted (AVE)</b>	<b>Variance</b>
BOD	0.828	0.898	0.748	
BOEE	0.867	0.905	0.657	
BOR	0.778	0.74	0.589	
Burnout		FORMATIVE		
Cultural Norms	0.91	0.957	0.917	
Cyberbullying	0.954	0.96	0.668	
Ill-Health	0.932	0.94	0.498	
Job Description	0.757	0.891	0.804	
Leadership	0.892	0.933	0.822	
Organizational Climate	0.919	0.932	0.504	
Physiological Health	0.893	0.917	0.614	
Psychological Health	0.914	0.93	0.599	
Technology	0.732	0.84	0.638	
Time Pressures	0.887	0.947	0.899	
Traditional Bullying	0.965	0.968	0.591	
Working Conditions	0.839	0.904	0.759	
Workplace Bullying	0.978	0.979	0.589	
Em	0.831	0.878	0.549	
Mo	0.749	0.842	0.571	
S-A	0.793	0.862	0.548	
S-R	0.889	0.912	0.544	
S-S	0.586	0.828	0.706	
Emotional Intelligence	0.945	0.951	0.748	

*BOD=Burnout depersonalization, BOEE=Burnout emotional exhaustion, BOR=Burnout reduced personal accomplishment, Em=Empathy, Mo=Motivation, S-A=Self-awareness, S-R= Self-regulation, S-S=Social skills*

#### 4.7.1.4 Convergent Validity

According to F. Hair Jr *et al.* (2014), convergent validity determines the degree to which a measure correlates with an alternative measure of same the construct. So that, convergent validity confirms that an item measures its projected construct. In the current study, the convergent validity is measured on the basis of AVE (average value extracted) as recommended by Waddock and Graves (1997). An AVE value of 0.50 and greater

indicates the acceptable range of convergent validity. Table 4.6 represents the values of AVE for the convergent validity of the constructs used in the current study. Meanwhile, all the values fulfilled the minimum threshold criteria of AVE that is 0.50, so it depicts the acceptable convergent validity for measurement model of the present study.

#### **4.7.1.5 Discriminant Validity**

Discriminant validity analysis in table 4.9 indicates, how much the manifest variable is relevant to the latent variable in a specific construct, and its cross loading values will also be higher for its LV as compare to other constructs (Chin, 1998).

According to Urbach and Ahlemann (2010), discriminant validity is used to describe how the constructs are different from each other? Fornell and Larcker (1981) criterion and cross-loadings of the items of the construct are the methods usually used to measure discriminant validity. In Fornell and Larcker (1981) criterion method, the value is acquired when the square root of AVE of a construct is found to be higher than its correlation with other constructs. In Cross-Loading method, the value directs that the loadings of items are greater than their respective construct and in comparison to other constructs. The values predict the discriminant validity of a measurement model. Discriminant validity is measured by running algorithm function in Smart PLS software.

The results given in the Tables 4.7 and 4.8 (for the moderator Emotional Intelligence) showed the values assessed through Fornell Larcker criterion in order to measure the discriminant validity. Result shows that all the manifest variables are having cross loading values higher for their related LV's (latent variables), then other constructs. This testifies the discriminant validity of the measurement model that, each construct is having manifest variables a good representative of its assigned LV (latent variable).

**Table 4.7: Discriminant Validity (Fornell-Larcker Criterion)**

	BOD	BOEE	BOR	BO	CN	CB	I-H	JD	L	OC	PHY	PSY	T	TP	TB	WC	WPB
	0.865																
BOEE	0.792	0.81															
BOR	0.74	0.591	0.7														
BO	0.927	0.897	0.855	Formative													
CN	-0.578	-0.598	-0.55	-0.645	0.958												
CB	0.645	0.67	0.622	0.746	-0.583	0.817											
I-H	0.791	0.692	0.741	0.834	-0.641	0.683	0.706										
JD	-0.458	-0.581	-0.51	-0.6	0.655	-0.616	-0.602	0.897									
L	-0.552	-0.531	-0.61	-0.652	0.58	-0.713	-0.637	0.716	0.907								
OC	-0.661	-0.685	-0.66	-0.76	0.858	-0.732	-0.731	0.844	0.845	0.71							
PHY	0.607	0.54	0.549	0.637	-0.479	0.504	0.876	-0.5	-0.432	-0.545	0.784						
PSY	0.803	0.691	0.765	0.846	-0.661	0.705	0.932	-0.58	-0.686	-0.752	0.643	0.774					
T	-0.312	-0.029	-0.38	-0.245	0.258	-0.145	-0.348	0.1	0.26	0.336	-0.251	-0.369	0.799				
TP	-0.563	-0.627	-0.44	-0.611	0.682	-0.507	-0.505	0.573	0.509	0.791	-0.382	-0.515	0.284	0.948			
TB	0.62	0.696	0.598	0.746	-0.588	0.9	0.732	-0.646	-0.712	-0.74	0.62	0.695	-0.128	-0.573	0.769		
WC	-0.624	-0.671	-0.61	-0.723	0.795	-0.7	-0.678	0.765	0.724	0.93	-0.512	-0.693	0.218	0.692	-0.664	0.871	
WPB	0.647	0.704	0.624	0.766	-0.602	0.962	0.733	-0.651	-0.73	-0.756	0.591	0.717	-0.139	-0.562	0.985	-0.696	0.768

**Table 4.8: Discriminant Validity of the Moderator: Emotional Intelligence (Fornell-Larcker Criterion)**

	Em	Emotional Intelligence	Mo	S-A	S-R	S-S
Em	0.741					
Emotional Intelligence	0.871	0.666				
Mo	0.761	0.89	0.756			
S-A	0.636	0.879	0.707	0.74		
S-R	0.788	0.967	0.808	0.867	0.738	
S-S	0.538	0.728	0.673	0.571	0.669	0.84

*Em=Empathy, Mo=Motivation, S-A=Self-awareness, S-R= Self-regulation, S-S=Social skills*

The second measure to assess discriminant validity is cross-loadings, which are obtained through algorithm generated in Smart PLS software. The values of cross loadings between indicators and constructs are presented in Appendix C, which shows enough discriminant validity of each item against its construct.

#### 4.7.1.6 Burnout a Reflective-Formative Construct

Formative constructs are measured differently, as is explained in chapter 3 of this study. Other than measuring convergent validity, the study also measures the collinearity among formative dimensions as well as statistical significance and the relevance of indicators weight. It is noteworthy that burnout is a reflective-formative construct as it has formative dimensions/factors with reflective indicators/items.

Following Table 4.9 shows the collinearity among dimensions of formative construct burnout on the basis of VIF ((variance inflation factor) values.

**Table 4.9: Collinearity (Reflective-Formative Construct Burnout)**

	<b>BOD</b>	<b>BOEE</b>	<b>BOR</b>	<b>Burnout</b>
BOD				3.115
BOEE				2.755
BOR				2.019
Burnout				

*BOD=Burnout depersonalization, BOEE=Burnout emotional exhaustion, BOR=Burnout reduced personal accomplishment.*

In order to determine the collinearity among formative dimensions, VIF values have been calculated. The greater the VIF values, higher will be the level of collinearity. On the basis of rule of thumb, it is analyzed that, all the VIF values below 5 and above 3.33 indicates the low level of collinearity and the VIF below the threshold 3.33 indicates no collinearity issues (Kock, 2015). So, there are no collinearity issues among formative indicators of the same construct (burnout). Significance and relevance of the formative indicators have also been accessed by running bootstrapping routine (a resampling technique), which computes bootstrap standard errors as well as t-values and p-values for each indicator's weight.

**Table 4.10: Significance of Formative Indicators**

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>t Statistics ( O/STDEV )</b>	<b>p Values</b>
BOD -> Burnout	0.158	0.158	0.01	15.877	0
BOEE -> Burnout	0.705	0.705	0.014	50.241	0
BOR -> Burnout	0.227	0.226	0.013	16.955	0

Table 4.10 indicates that all 3 dimensions of burnout are contributing significantly with significant t-values and p- values. So all of its indicators should be retained for further analysis of structural model.

If the reliability and validity measures are summarized, it can be concluded on the basis of tests conducted to analyze the data that the measurement model of the current research study is fit. Factor loadings are appropriate, CR and AVE values are suitable enough, and discriminant validity is present and there found no collinearity issues among the indicators of formative construct as well. Hence, the measurement model is quite valid and the quality is satisfactory for further assessment of structural model.

#### **4.7.2 Evaluation of Structural Model**

Structural model evaluation represents the relationship between exogenous and endogenous latent variables on the basis of coefficient of determination ( $R^2$ ), path coefficient ( $\beta$ ), T-value and p-value (Chin, 1998). It is also used to test the proposed relational hypotheses.

Final step in accessing structural model is predicting the significance and relevance of variables in a model, on the basis of bootstrapping process (taking 5000 samples). Usually criteria's used in order to determine the significance and relevance of relationships (proposed) among variables i.e. calculating multicollinearity, path coefficients (B), coefficient of determination ( $R^2$ ), effect size ( $f^2$ ) and effect size ( $Q^2$ ), were explained in chapter 3 of the current study.

In the coming section, results and description is provided, which explains the significance and relevance of relationships among study variables on the basis of above mentioned criteria's.

#### 4.7.2.1 Multicollinearity

If there is a high multicollinearity between two or more independent variables of research model, the problem occurs. The VIF (variance inflation factors) values were tested to find out the potential multicollinearity among independent variables. This study uses J. F. Hair Jr and Lukas (2014) tolerance level criteria for VIF values i.e. 0.20 or higher and 5 or lower.

**Table 4.11: Multicollinearity among Research Variables**

	<b>Workplace Bullying</b>	<b>Burnout</b>	<b>Ill-Health</b>
Workplace bullying		2.302	2.319
Organizational Climate	1.000	3.112	2.441

Hence, with respect to the independent variables, all the values of VIF used in the present study are within the acceptable range of 0.20 to 5.00 (Table 4.11). Thus, it can be stated confidently that there is no multicollinearity issue among the variables of present study.

#### 4.7.2.2 Path Coefficients

Evaluation of structural model also includes determination of path coefficients on the basis of boot strapping technique, which evaluate the relationships (paths) between dependent and independent variables. Furthermore, t-values and p-values are measured to determine the significance of all the paths exist between these variables. Empirical results regarding to t-values, p-values and path coefficient values between variables in the present study are presented in the following Table 4.12.

**Table 4.12: Path Coefficients**

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>t Statistics (O/STDEV)</b>	<b>p Values</b>
Organizational climate -> Burnout	-0.439	-0.44	0.041	10.843	0
Organizational climate -> Cultural norms	0.856	0.857	0.013	67.548	0
Organizational climate -> Ill health	-0.449	-0.454	0.046	9.751	0
Organizational climate -> Job description	0.842	0.84	0.016	51.349	0
Organizational climate -> Leadership	0.851	0.852	0.017	50.483	0
Organizational climate -> Technology	0.539	0.538	0.039	13.83	0
Organizational climate -> Time pressures	0.779	0.776	0.022	35.277	0
Organizational climate -> Working conditions	0.931	0.931	0.007	125.666	0
Organizational climate -> Workplace bullying	-0.762	-0.765	0.02	38.576	0
Technology -> Cyberbullying	-0.463	-0.464	0.017	3.787	0
Workplace bullying - > Burnout	0.477	0.48	0.046	10.474	0
Workplace bullying - > Cyberbullying	0.938	0.937	0.009	110.047	0
Workplace bullying - > Ill health	0.399	0.392	0.048	8.309	0
Workplace bullying - > Traditional bullying	0.985	0.985	0.001	766.033	0



Results revealed that the path coefficient value between organizational climate and workplace bullying is -0.762, which shows the negative relationship between variables and the t-value is 38.5, which is greater than the critical value of 1.96. p-value is also less than the threshold value of 0.05 (J. Hair Jr, 2006) that shows the significance of relation. On the basis of these empirical results, it is proved that hypothesis H3 is accepted and it is determined that organizational climate has significant negative relationship with workplace bullying.

*H3a: Positive technology use is negatively related to cyberbullying.*

Sub hypothesis of H3 is related to technology use and cyberbullying. Results depicted that path coefficient value between technology use and cyberbullying is -0.463 and t-value is 3.787 (less than 1.96) and the p-values is 0.000, which is significant at 0.05 level. Findings revealed the negative and significant relationship. Hence, it is proved that positive technology use is negatively related to cyberbullying, so that H3a is accepted.

*H4a: Workplace bullying has significant positive relationship with burnout.*

According to result findings, the path coefficient between workplace bullying and burnout is 0.477 with significant t-value of 10.4 (greater than the threshold value of 1.96) and p-value of 0.000 (less than 0.05). These empirical evidences are quite sufficient to accept the hypothesis H4a that workplace bullying has significant positive relationship with burnout. Hence, H4a is accepted.

*H4b: Workplace bullying has significant positive relationship with ill-health (psychological and physiological).*

Workplace bullying and ill-health has path coefficient value of 0.399, shows the positive relationship. The resultant t-value is 8.3 and p-value is significant at 0.05 level.

Thus, empirical statistics is quite enough to support hypothesis that workplace bullying has significant positive relationship with ill-health (psychological and physiological). So, H4b is also accepted in the current study.

*H5a: Organizational climate has significant negative relationship with burnout.*

Results determined that path coefficient value between organizational climate and burnout is -0.43. To test the significance of the path coefficient, t-value is measured as 10.8, which is greater than critical value of 1.96 and the p-value is also found to be significant as 0.000. So that, the current study concluded a significant negative relationship between organizational climate and burnout, hence H5a is accepted.

*H5b: Organizational climate is negatively associated with ill-health (psychological and physiological).*

The path coefficient value between organizational climate and ill-health is -0.449, t-value is 9.75 and p-value is 0.000. Results revealed that coefficient value shows the negative relationship and the t-value and p-value are significant enough as meeting the threshold criteria. Hence, there are empirical evidences that organizational climate is negatively associated with ill-health (psychological and physiological). So, H5b is also accepted on the basis of these evidences.

**Table 4.13: Hypotheses Results (Direct Effects)**

<b>Hypothesis</b>	<b>Path Coefficient</b>	<b>T-value (P value)</b>	<b>Significant</b>	<b>Result</b>
H3	-0.762	38.5 (0.00)	Yes	<b>Accepted</b>
H3a	-0.463	3.787 (0.00)	Yes	<b>Accepted</b>
H4a	0.477	10.4 (0.00)	Yes	<b>Accepted</b>
H4b	0.399	8.3 (0.00)	Yes	<b>Accepted</b>
H5a	-0.43	10.8 (0.00)	Yes	<b>Accepted</b>
H5b	-0.449	9.75 (0.00)	Yes	<b>Accepted</b>

Table 4.13 shows hypotheses results for direct effects. All the relationships are significant and hypotheses are accepted.

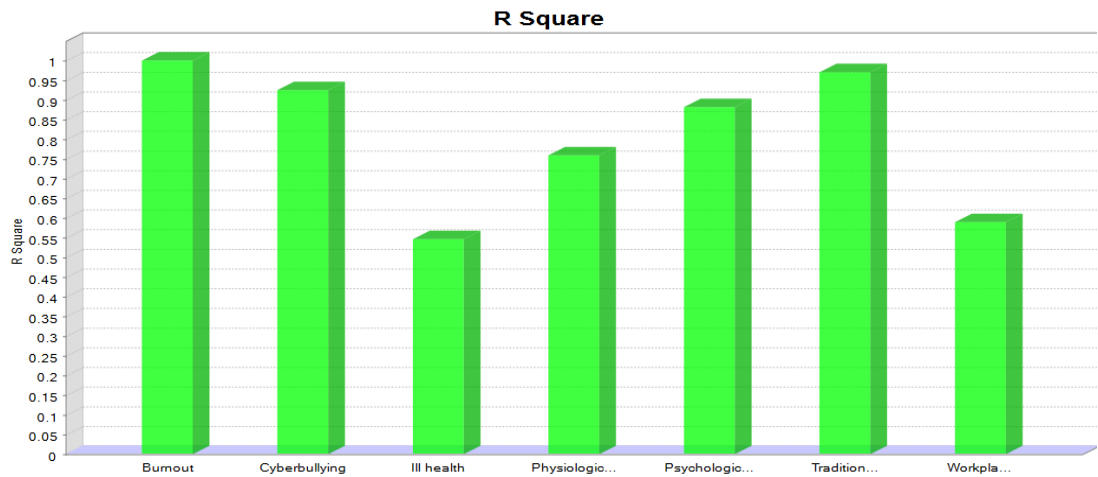
#### 4.7.2.4 Coefficient of Determination ( $R^2$ )

Coefficient of determination ( $R^2$ ) explains how much variation in dependent variable is caused by the independent variables. The greater  $R^2$  values specifies the predictive ability of the structural model. Though,  $R^2$  strength is dependent upon the research model complexity and type of discipline (J. F. Hair Jr & Lukas, 2014).  $R^2$  values of 0.25, 0.50, and 0.75 are considered weak, moderate and substantial respectively.

**Table 4.14: Coefficient of Determination ( $R^2$ )**

Variables	R Square	Results
Burnout	0.94	Substantial
Cyberbullying	0.925	Substantial
Ill health	0.546	Moderate
Physiological health	0.759	Substantial
Psychological health	0.882	Substantial
Traditional bullying	0.97	Substantial
Workplace bullying	0.59	Moderate

Table 4.14 represents the values of Coefficient of Determination ( $R^2$ ) for the variables of the current study. Burnout shows the  $R^2$  value of 0.94, which counted a substantial amount of variance in burnout is caused by workplace bullying. Similarly,  $R^2$  value of cyberbullying is measured as 0.92 that also shows a substantial amount of variance in cyberbullying is caused by the variable technology. Ill-health is showing moderate variance of 0.54 by workplace bullying, likewise  $R^2$  value of workplace bullying is 0.59 that also shows the moderate variation caused by organizational climate. Following bar chart representation also shows the significant amount of variation caused by independent variables in dependent variables.



**Figure 4.5: Coefficient of Determination R square (Diagrammatic Representation)**

On the bases of these findings, it can be concluded that structural model of the current study has a significant predictive ability as all the dependent variables (workplace bullying, cyberbullying, burnout, ill-health) are significantly affected by independent variables (organizational climate and workplace bullying). As all the  $R^2$  values are showing significant determination and variations caused by independent variables.

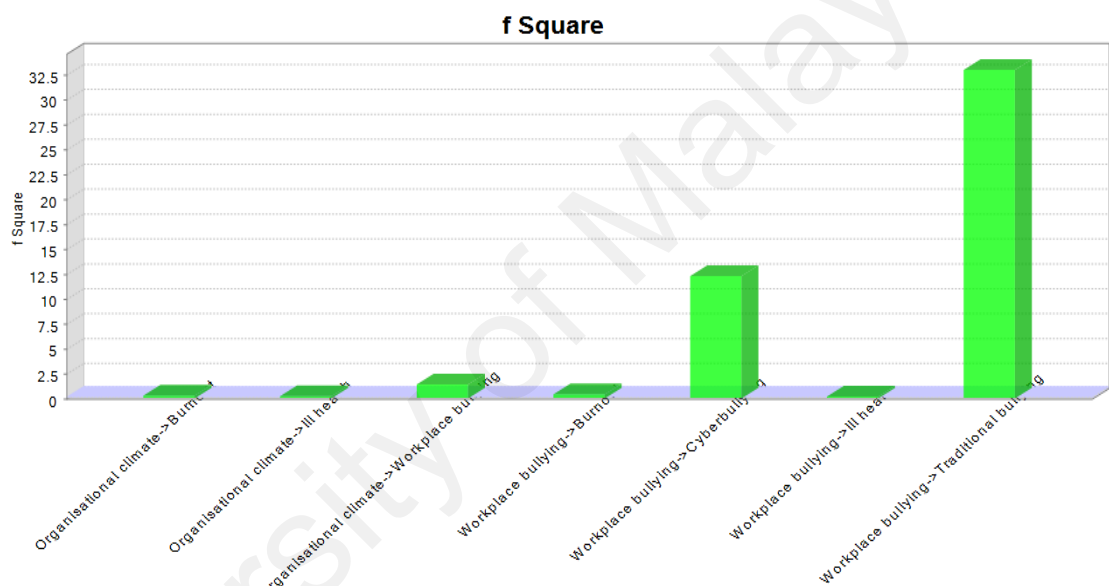
#### 4.7.2.5 Effect Size ( $f^2$ )

The fitness of the model proposed in the current study is estimated on the basis of the value of  $f^2$ , which describes the effect size. Values of  $f^2$  is considered to be weak if it is in range of 0.02-0.14, if 0.15-0.34 then is considered to be moderate, and 0.35 and above depicts the strong effect (Cohen, 1988a). For the current study, model fitness is measured and  $f^2$  values are obtained for each path and is presented in Table 4.15.

**Table 4.15: Effect Size ( $f^2$ )**

Paths	Effect Size ( $f^2$ )	Results
OC → WPB	1.408	Strong
WPB → BO	0.414	Strong
WPB → ill-health	0.194	Moderate
OC → BO	0.281	Moderate
OC → ill-health	0.223	Moderate

These findings of  $f^2$  revealed the fitness of structural model and proved that organizational climate has a strong effect over workplace bullying and workplace bullying also has a strong effect over burnout. However, moderate effects of workplace bullying and organizational commitment are determined over ill-health and burnout respectively. Likewise,  $f^2$  value of organizational climate also shows a moderate effect over ill-health



**Figure 4.6: Effect Size F Square (Diagrammatic Representation)**

#### 4.7.2.6 Predictive Relevance ( $Q^2$ )

The value of  $Q^2$  is attained by applying blindfolding procedure in PLS-SEM that determines a specific omission distance (D). Details are provided in chapter 3 of the current study. In structural model,  $Q^2$  values above zero for an endogenous latent construct represents the path model's predictive relevance for that particular construct.  $Q^2$  value of 0.35, 0.15, and 0.02 are considered as large, moderate, and weak predictive relevance respectively (J. F. Hair Jr & Lukas, 2014).

In the Table 4.16 values of predictive relevance measures ( $Q^2$ ) are presented that are calculated through “blindfolding” procedure. The values of  $Q^2$  indicated the predictive relevance of exogenous variable organizational climate for endogenous variables burnout and ill-health has moderate effect size i.e. 0.267 and 0.262 respectively. While the predictive relevance of organizational climate (exogenous variable) for workplace bullying (endogenous variable) shows large effect size.

**Table 4.16: Predictive Relevance ( $Q^2$ )**

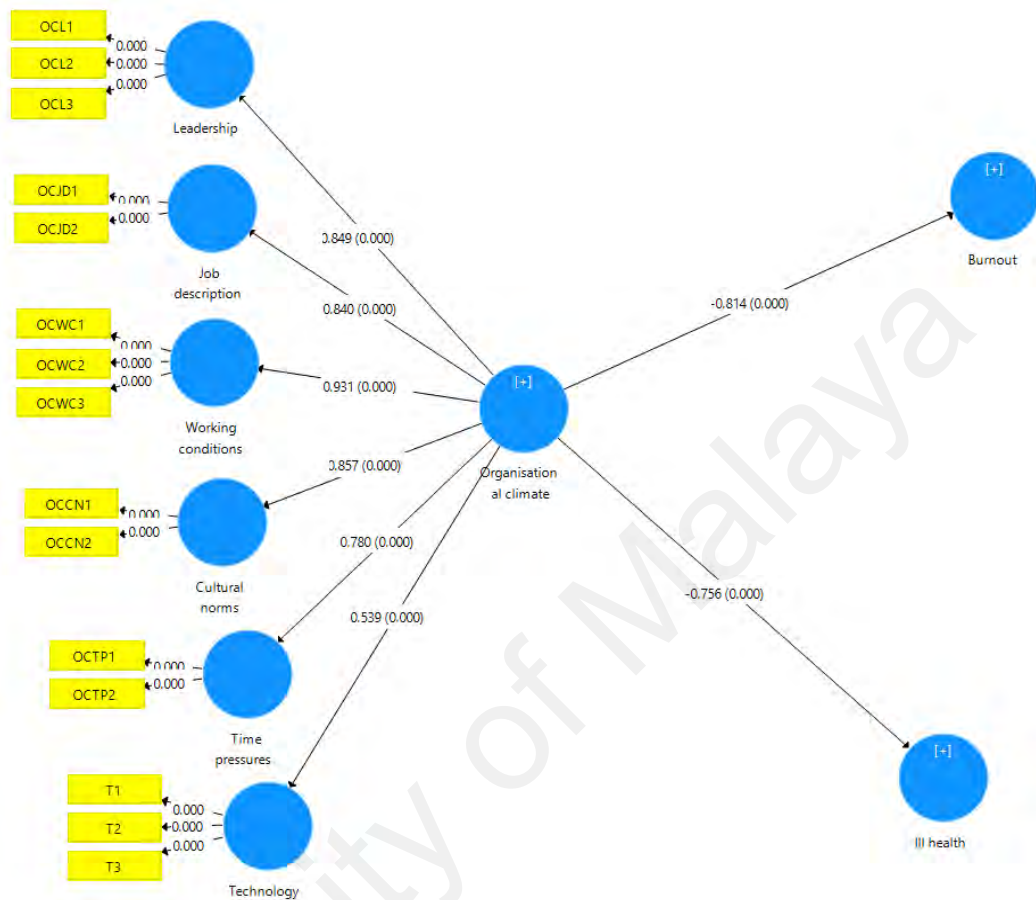
<b>Constructs</b>	<b>SSO</b>	<b>SSE</b>	<b><math>Q^2 (=1 - SSE/SSO)</math></b>	<b>Effect size</b>
Burnout	4,966.00	3,640.97	0.267	moderate
Ill health	7,258.00	5,359.56	0.262	moderate
Workplace bullying	12,606.00	8,592.54	0.318	large

Thus exogenous variable, organizational climate has a predictive relevance for endogenous variables burnout, ill-health and workplace bullying.

#### **4.7.3 Evaluation of Mediator (Indirect Effects)**

Research hypotheses H6a and H6b deals with the study of mediating effects of workplace bullying on the relationships of organizational climate and burnout as well as organizational climate and ill-health (psychological and physiological). So, the mediating effects are tested through indirect effects between independent and dependent variables via mediating variable on the bases of empirical investigation by SmartPLS in two steps. First is to find out the significance of direct and indirect effects by estimating beta values (path coefficients), p-values and t-values and second step is related to the calculations of VAF (variance accounted for) value, which determines the strength of mediation which can be partial, full or no mediation. VAF value can be obtained by dividing the indirect effect over total effect. The study analyzed about mediating effects by applying

bootstrapping technique in PLS-SEM. Figure 4.7 shows the coefficient values calculated between independent and dependent variables without mediator.



**Figure 4.7: Direct Paths without Mediator**

After adding mediator workplace bullying, bootstrapping analysis was done again and coefficient values were calculate, shown in the following Figure 4.8.

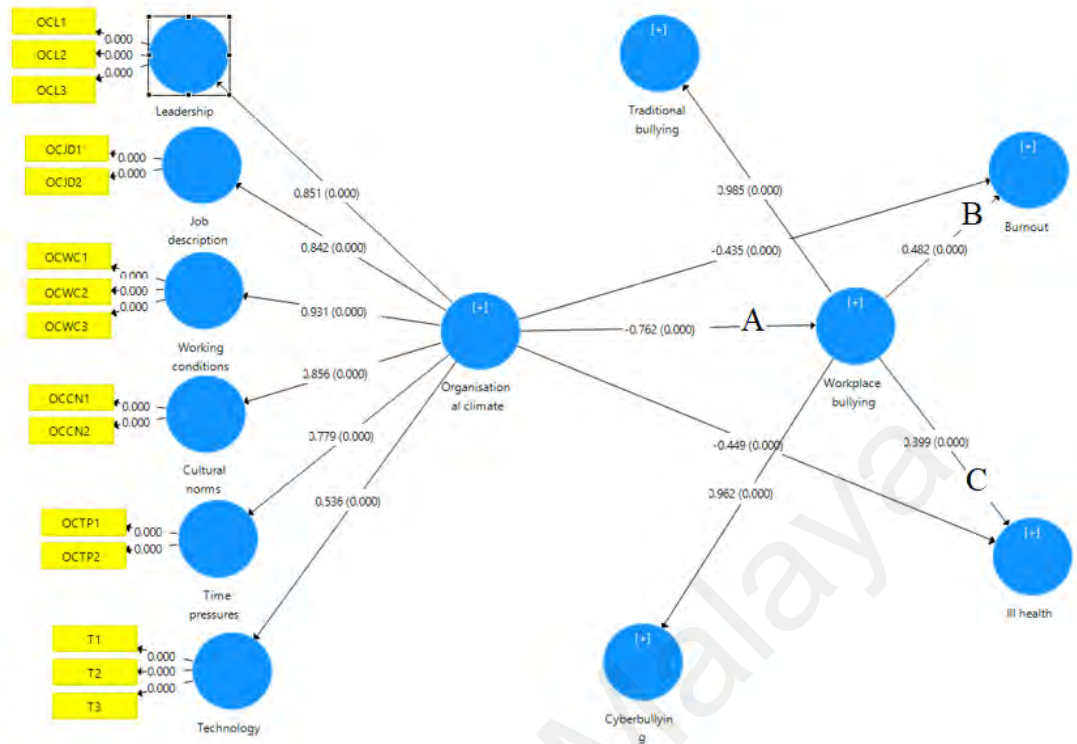


Figure 4.8: Indirect Paths with Mediator

Table 4.17a: Direct and Indirect Paths OC ➡ WPB ➡ BO

Paths	Path Coefficient	Standard Error (SE)	t Statistics
Organizational climate -> Burnout	-0.435	0.05	8.626
Organizational climate -> Workplace bullying	-0.762 (A)	0.052 (SE <sub>A</sub> )	36.23
Workplace bullying -> Burnout	0.482 (B)	0.017 (SE <sub>B</sub> )	8.583

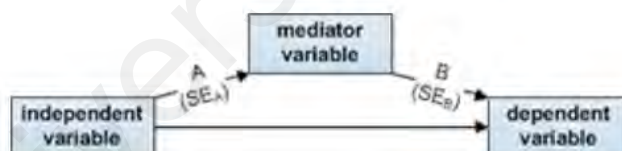
Table 4.17b: Direct and Indirect Paths OC ➡ WPB ➡ I-H

Paths	Path Coefficient	Standard Error (SE)	t Statistics
Organizational climate -> Ill-Health	-0.449	0.013	8.557
Organizational climate -> Workplace bullying	-0.762 (A)	0.052 (SE <sub>A</sub> )	36.23
Workplace bullying -> Ill-Health	0.399 (C)	0.016 (SE <sub>C</sub> )	7.289

#### 4.7.3.1 Mediating Analysis OC $\Rightarrow$ WPB $\Rightarrow$ BO

Figure 4.10 revealed that path coefficient value between organizational climate (independent variable) and burnout (dependent variable) is -0.814. Table 4.17a shows path coefficient value of the direct path decreases to -0.435 (by adding mediator) and the t-value and p-value are significant as  $t=8.626$  and  $p=0.000$ .

So the direct path **OC  $\Rightarrow$  BO** is significant. In order to find out the significance or insignificance of indirect path **OC  $\Rightarrow$  WPB  $\Rightarrow$  BO**, Sobel test analysis is conducted (values are taken from Table 4.17a). According to J. F. Hair Jr, Hult, Ringle, and Sarstedt (2016), prior testing of the significance of mediating effects were relied mostly on the Sobel (1982) test. The Sobel test compares the direct relationship between the dependent variable and the independent variable with the indirect relationship between the dependent variable and the independent variable, which includes the mediation construct (Helm *et al.*, 2010). Results of sobel test are following.



A:	-0.762	?
B:	0.482	?
SE <sub>A</sub> :	0.052	?
SE <sub>B</sub> :	0.017	?

#### Sobel Test Result

Sobel test statistic: -13.01795272

One-tailed probability: 0.0

Two-tailed probability: 0.0

Above calculations show that, indirect path **OC → WPB → BO** is also significant with t-value of -13.01 and p-value of 0.00. VAF is also calculated by putting values in the formula

$$\text{VAF} = \frac{\text{indirect effect} \times 100}{\text{Total effect}}$$

Indirect effect = a\*b, Total effect = direct + indirect effect

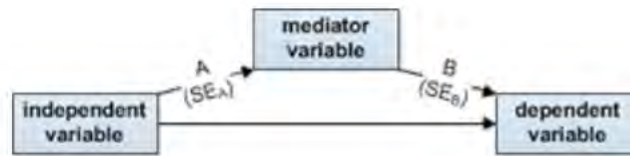
VAF calculated is 45% that shows enough variance.

By applying F. Hair Jr *et al.* (2014) criteria, if the direct effect (adding mediator) is significant and indirect effect is also significant and  $\text{VAF} > 20\%$ , but  $< 80\%$  then there founds a partial mediation. So, it is analyzed that workplace bullying partially mediates the relationship between organizational climate and burnout, hence H6a is accepted.

#### 4.7.3.2 Mediating Analysis **OC → WPB → I-H**

And the path coefficient value between independent variable organizational climate and dependent variable ill-health is -0.756 (as shown in Figure 4.10). Path coefficient value of the direct path decreases to -0.449 (by adding mediator) and the t-value is 8.557 while p-value is 0.00 (Table 4.17b) which shows the significance of the direct path **OC → I-H**.

Significance of indirect path **OC → WPB → I-H** is also calculated on the bases of Sobel test (values are taken from Table 4.17b), as given below.



A:	-0.762	?
B:	0.399	?
SE <sub>A</sub> :	0.052	?
SE <sub>B</sub> :	0.016	?

### Sobel Test Result

Sobel test statistic: -12.63403127

One-tailed probability: 0.0

Two-tailed probability: 0.0

Sobel test results show that indirect path **OC**  $\Rightarrow$  **WPB**  $\Rightarrow$  **I-H** has the t-value of -12.63 and p-value is 0.00, so that the indirect path from organizational climate to workplace bullying and workplace bullying to ill-health is significant. VAF calculated is 40%. Again applying the criteria of F. Hair Jr *et al.* (2014), it is concluded that the relationship of organizational climate and ill-health is partially mediated by workplace bullying. Thus, H6b is accepted.

#### 4.8.3.2 Limitations of Sobel Test

Because of some limitations of Sobel (1982) test, research has dismissed the Sobel test for the evaluation of mediation, especially in PLS-SEM analysis (Sattler, Volckner, Riediger, & Ringle, 2010). The Sobel test assumes a normal distribution which is not consistent with the nonparametric PLS-SEM method. Furthermore, the Sobel test parametric assumptions typically do not hold for the indirect effect as if multiply two normally distributed coefficients results in a no normal distribution of their product. Also, the Sobel test uses unstandardized path coefficients as input for the test statistic and has less statistical power, particularly when it is applied to small sample sizes.

Hence, it is recommended that researchers should use bootstrapping procedure for sampling distribution of the indirect effect instead of Sobel test. This approach has also been brought forward in a regression context (Preacher & Hayes, 2004, 2008). Bootstrap makes no assumptions about the sampling distribution of the statistics and researchers may apply it to small sample sizes with great confidence. Therefore, this approach is quite suitable for the PLS-SEM method and implemented in the SmartPLS 3 software. Moreover, as compare to Sobel test, bootstrapping the indirect effect gives more statistical power and is better to use to measure the significance or insignificance of indirect effects as well. Thus, the current research also used bootstrapping technique to analyze the significance and non-significance of indirect effects other than Sobel test and calculated the mediating effects again. The analysis and description is given in the following section.

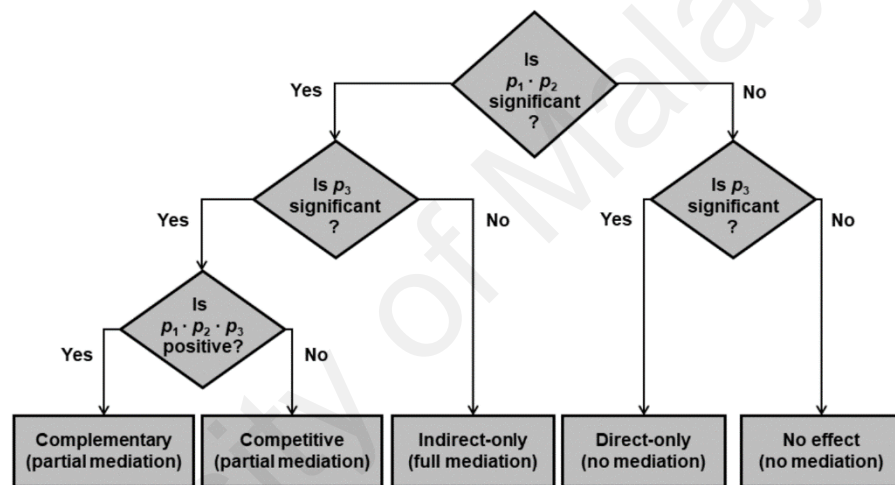
Table 4.18: Direct Effects and Significance

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>t Statistics ( O/STDEV )</b>	<b>p Values</b>
Organizational climate -> Burnout	-0.214	-0.197	0.079	2.692	0.007
Organizational climate -> Ill health	-0.474	-0.475	0.061	7.828	0

Table 4.19: Specific Indirect Effects and Significance

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>t Statistics ( O/STDEV )</b>	<b>p Values</b>
Organizational climate -> Workplace bullying -> Burnout	-0.208	-0.199	0.089	2.354	0.00
Organizational climate -> Workplace bullying -> Ill health	-0.609	-0.609	0.025	24.117	0

The recent research e.g., Hayes (2013) though pointed out some conceptual and methodological problems with Baron and Kenny (1986) approach. In contrast to this background, current research analysis builds on Zhao, Lynch Jr, and Chen (2010) description, who provided fusion of prior research on mediation analysis and consistent guidelines for future research. However in order to analyze mediating effects, the current research also used Zhao *et al.* (2010) suggested model (shown in the Figure 4.9) to further validate the mediating effects, which J. F. Hair Jr *et al.* (2016) also propose to use for PLS-SEM.



**Figure 4.9: Types of Mediation (Zhao *et al.*, 2010)**

The author describes two types of non-mediation:

**Direct-only non-mediation:** The direct effect is significant but indirect effect is not significant.

**No-effect non-mediation:** both the direct and indirect effect are insignificant.

Moreover, they classify three types of mediation:

**Complementary mediation:** The direct effect and the indirect effect both are significant and point in the same direction.

**Competitive mediation:** The direct effect and the indirect effect both are significant and point in opposite directions.

**Indirect-only mediation:** The direct effect is insignificant but the indirect effect is significant.

In that sense, Zhao *et al.* (2010) procedure of mediation closely relates to Baron and Kenny's (1986) concept of partial mediation and full mediation.

If both the direct and indirect effects are significant then the researcher has to distinguish between complementary and competitive mediation. Complementary mediation is the one in which both the direct effect and the indirect effect  $p1 \cdot p2$  points in the same direction, means the product of the direct effect and the indirect effect (i.e.,  $p1 \cdot p2 \cdot p3$ ) is positive (Figure 4.12). While, in competitive mediation—the direct effect  $p3$  and also the indirect effect  $p1$  or  $p2$  have opposite signs and the product of the direct effect and the indirect effect  $p1 \cdot p2 \cdot p3$  is negative (Figure 4.9).

On the basis of new calculation (in Tables 4.18 and 4.18) and the above discussion, it is therefore concluded that workplace bullying partially mediates the relationship of organizational climate and burnout, since both the direct effect (OC-BO) and the indirect effect (OC-WPB-BO) are significant (see Tables 4.18 and 4.19) with significant *t* and *p* values. To further validate the type of partial mediation, research further compute the product/multiplication of the direct effect and the indirect effect. Since the direct and indirect effects are both negative (same direction) and the sign of their product is positive (i.e.  $-0.214 \cdot -0.208 = 0.0445$ ). It is concluded that workplace bullying represents complementary mediation of the relationship from organizational climate to burnout.

Therefore, H6a is accepted.

It is also depicted from the Tables 4.18 and 4.19 that workplace bullying partially mediated the relationship of organizational climate and ill-health as the direct effect (OC-Ill) and indirect effect (OC-WPB-Ill-H) are significant. Hence, H6b is accepted.

As, the product of the direct and indirect effect is positive ( $-0.474-0.609=0.2886$ ), so there is a complementary kind of partial mediation.

#### 4.7.4 Moderating Effects

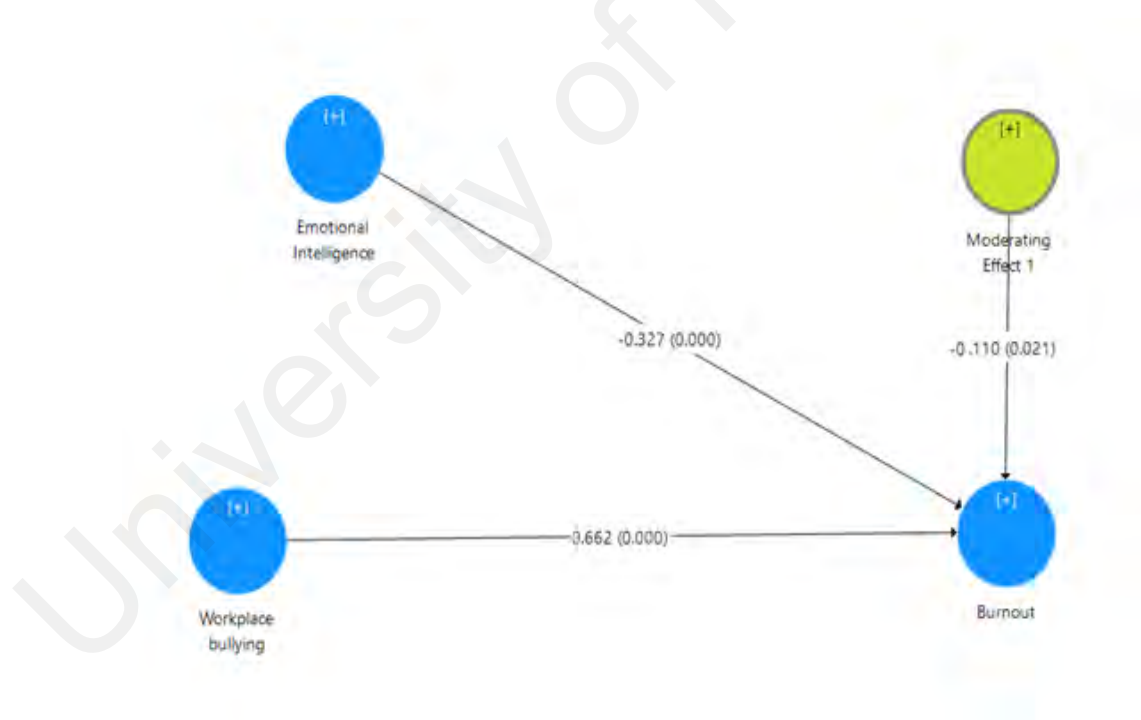
Hypotheses H7a and H7b of the present study were to investigate, whether Emotional Intelligence moderates the relationship between workplace bullying and employee health outcomes (burnout and ill-health)? In the current study, moderating effects were measured through two-stage approach, recommended by Hair *et al.* (2013).

In smart PLS SEM, two-stage approach is used to calculate the continuous moderating effects. Continuous moderator may affect both the strength and direction of relationship between variables and it can be a general form of multigroup analysis (F. Hair Jr *et al.*, 2014). The present study also carried Two-Stage approach used in PLS-SEM for the moderator Emotional Intelligence. In this approach, latent variable scores of the latent predictor (workplace bullying) and latent moderator variable (Emotional Intelligence) from the main effects model (excluding the interaction term) were used. Latent variable scores were kept saved and were used in the second step of analysis in order to calculate the product indicator which contains the interaction term in addition to the predictor and moderator variable.

It was hypothesized that Emotional Intelligence moderates the relationship between workplace bullying and burnout as well as workplace bullying and ill-health of employees.

#### 4.7.4.1 Emotional Intelligence as a Moderator between Workplace Bullying and Burnout

Figure 4.10 shows the moderating model by calculating dependent, independent and moderating effects through two-stage approach by using SmartPLS. Moderating effect has been tested by calculating the value of moderation, which shows the effect of moderating variable Emotional Intelligence on the relationship between workplace bullying and burnout. Negative value of moderation (-0.110) suggested that Emotional Intelligence weakened the relationship between workplace bullying and burnout of employees. The result illustrates an increase of one unit standard deviation in Emotional Intelligence will weaken the positive relationship of workplace bullying and burnout by 11%.



**Figure 4.10: Moderation between Workplace Bullying and Burnout**

Significance of moderation has also been testified by using bootstrapping method of smartPLS. Table 4.20 represents that moderating effect of Emotional Intelligence on the

relation relationship of workplace bullying and burnout is significant at 0.05 level of confidence ( $t=2.351$  and  $p=0.02$ ). Hence, H7a of the present study is accepted.

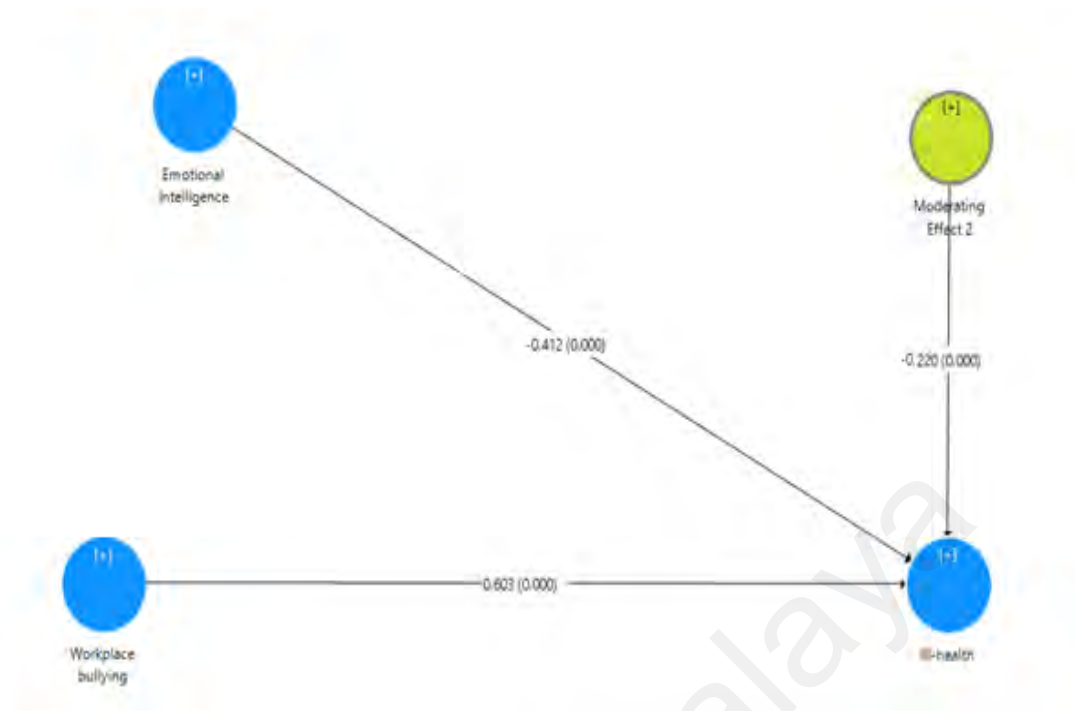
**Table 4.20: Significance of Moderating Effect of Emotional Intelligence over Workplace Bullying and Burnout**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t Statistics ( O/STDEV )	p Values
Emotional Intelligence -> Burnout	-0.327	-0.317	0.073	4.475	0
Moderating Effect 1 -> Burnout	-0.11	-0.116	0.047	2.351	0.02
Workplace bullying -> Burnout	0.662	0.68	0.092	7.166	0

Note: Each time bootstrapping function is run in SmartPLS, it produces a random t-value (Hair *et al.*, 2014).

#### 4.7.4.2 Emotional Intelligence as a Moderator between Workplace Bullying and Ill-Health

Figure 4.11 represents the moderated model estimated on the basis of two-stage approach by using SmartPLS. Model represents the moderating effect of Emotional Intelligence on workplace bullying and ill-health relationship. Negative value of moderating effect (-0.22) suggested that Emotional Intelligence weakened the relationship between workplace bullying and ill-health. The value depicts one unit increase of standard deviation in Emotional Intelligence is likely to weaken the relationship of workplace bullying and ill-health by 0.22 or 22%



**Figure 4.11: Moderation between Workplace Bullying and Ill-Health**

However, moderating effect has also been tested for its significance by using bootstrapping procedure in SmartPLS. Table 4.21 shows that moderating effect of Emotional Intelligence on the relationship of workplace bullying and ill-health is significant at 0.05 level as  $t=0.041$  and  $p=0.00$ . These values have proved the significance of moderator's effect.

**Table 4.21: Significance of Moderating Effect of Emotional Intelligence over Workplace Bullying and Ill-Health**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t Statistics ( O/STDEV )	p-values
Emotional Intelligence -> Ill-health	-0.412	-0.413	0.094	4.363	0
Moderating Effect 2 -> Ill-health	-0.22	-0.222	0.054	4.041	0
Workplace bullying -> Ill-health	0.603	0.607	0.116	5.186	0

Note: Each time bootstrapping function is run in SmartPLS, it produces a random t-value

(F. Hair Jr *et al.*, 2014).

Hence, H7b is accepted that Emotional Intelligence moderates the relationship of workplace bullying and ill-health of workers.

#### 4.8 Hypotheses Results of Indirect Effects

**Table 4.22: Significance and Hypotheses Results of Indirect Effects**

Hypothesis	Path Coefficient	t-value (p-value)	Significant	Result
<b>H6a</b>	Direct path OC-BO =-0.214 (table 4.19) Indirect path OC-WPB-BO= -0.208 (table 4.20)	2.69 (0.007)  2.354 (0.009)	Yes  Yes	<b>Partial mediation (Complementary)</b>
<b>H6b</b>	Direct path OC-I-H =-0.474 (table 4.19) Indirect path OC-WPB-I-H= -0.609 (table 4.20)	7.82 (0.00)  24.11 (0.00)	Yes  Yes	<b>Partial mediation (Complementary)</b>
<b>H7a</b>	Emotional intelligence-burnout=-0.110 (moderating effect)	2.351(0.021)	Yes	<b>Moderation</b>
<b>H7b</b>	Emotional intelligence-ill-health=-0.22 (moderating effect)	4.041(0.00)	Yes	<b>Moderation</b>

Table 4.22 represents the overall summary of hypotheses results of indirect (moderating and mediating) effects.

#### **4.9 Summary of Chapter 4**

Chapter 4, discussed the results and analysis of data. Initially demographic statistics such as gender, age, profession and experience in the current organization are presented then descriptive statistics such as mean and standard deviation are provided. By using Structural Equation Modelling, data is analyzed based on measurement and structural models. Measurement model is analyzed through internal consistency, indicators reliability, construct and composite reliability and discriminant and convergent validity. Details of formative and reflective indicators/construct is given. Simultaneously, specification of structural model is discussed and the study also examines the results of hypotheses testing on the basis of path coefficient analysis. Furthermore, coefficient of determination and effect size is calculated to check the structural model fitness. Evaluation of mediator and moderator is also included in this chapter.

## **CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

In the final chapter of the study, interpretation of results (derived logically) will be provided along with findings. Moreover, probable justifications for the significant findings between organizational climate, workplace bullying (either traditional or cyber) and employee health will be explained. Besides, comprehensive discussion will also be provided regarding implications, limitations and future recommendations.

Essentially, this chapter is organized into three parts on the basis of findings, interpretation, implications, limitations and recommendations for future.

First part starts with the highlights of the study followed by main results and findings of the research. The next part comprises discussion on each objective of the study related to findings of the research. Furthermore, in the next section, theoretical and practical implications of the study are provided in detail along with limitations and future recommendations.

### **5.2 Research Highlights**

A healthy workplace is a prerequisite of work, thus decent work environment and just employment are essential social determinants of healthy workplace, which produces healthy workforce. Therefore, a healthy workforce is the precondition of productivity and economic development (World Health Organization, 2007). Providing a healthy work environment should be the leading priority of each organization. Survey done in one third of countries depicted that in most of the countries health ministries had no staff specifically dedicated to deal with workers' health issues. That's why, execution of workplace health regulations was found insufficient in most of the countries, and unfortunately Pakistan is one of them. So it's very important for organizations and managers to make such valuable strategies that can promote their employees' health or at

least that can alleviate health problems of workers. For this instance, organizations must be aware about those organizational risk factors that might have negative association with employee's health.

Workplace bullying, both traditional and cyber, is the most serious and devastating issue of today's organizations and should be resolved on urgent bases as it has deleterious effects on emotional, psychological and physical health of employees. It is prevalent widely in organizations and is increasing just like an epidemic. Naseer and Khan (2015) tinted in the research that, it is enormously valuable in a third world country like Pakistan to study the harmful consequences of workplace bullying on employee's health. In Pakistan, incidences of bullying are extensive at workplace yet, at the same time, are under-reported and under-researched, which becomes obvious in the form of diminishing employee health and well-being. And much less is known about the outcomes of cyberbullying in the workplace. Antoniadou and Kokkinos (2015) indicated that cyberbullying is a recently emerging form of violence, and is significantly gaining much more media and research attention but there is a scarcity of academic literature that specifically focuses on cyberbullying among employees at workplace (West *et al.*, 2014). It has been recommended that cyberbullying has more severe effects in comparison to traditional bullying, but there are little evidences to address this issue (Gardner *et al.*, 2016). Initially, this comparatively new field of research has focused only on adolescents and school children (Card & Hodges, 2008; Katzer *et al.*, 2009) that's why, little evidence is currently present that may prove the harmful effects of cyberbullying at workplace. This research study endeavored to fill-up the currently discussed gaps on the basis of multiple theories like Novak's theory of learning, General Strain Theory (GST), frustration aggression theory, and social interaction approach and so on.

This research highlighted that the phenomenon of bullying is a serious and complicated problem especially at workplace of service sector of Pakistan and should be addressed urgently. Previous studies conducted in Pakistan highlighted the prevalence of workplace bullying in various service sectors (e.g., telecommunication industry), where employees have to face different problems, in which bullying is the most serious issue (Bashir & Malik, 2011). Bullying issues are also faced by banking sector employees (Naseer & Khan), and the academic sector too (Ahmad *et al.*, 2017). The levels of perception of workplace bullying prevalence were higher than those reported in studies, has been conducted in the West. In addition, bullying is prevalent among low-level academic workers because of the hierarchical structuring, often present in Pakistani educational institutes. Only a few studies have been conducted on bullying in the hotel service sector. Thus, current study aimed to conduct the research in detail to find out the prevalence, root causes, and adverse health impacts of both the workplace, traditional and cyber types of bullying in 4 selected service sectors of Pakistan that are banking, telecom, hotel and education.

Most importantly the current research also recommended Emotional Intelligence as a coping strategy in order to overcome the negative health impacts of workplace face to face and cyberbullying.

For this instance, research highlighted 7 research questions and nineteen (19) hypotheses and sub hypotheses. The present cross-sectional study adopted quantitative research design to achieve the set forth objectives.

Targeted population of the current study was officials working in service sector of Pakistan, specifically targeted the four subsectors: banking, telecommunication, hotel industry and education. Multistage sampling technique is applied for the selection of subsectors, their respective organizations and officials working in those organizations.

All the registered private and public banks, telecommunication companies, 4 and 5-star hotels and HEC (Higher Education Commission) recognized universities were taken as a sample frame. The sampling strategy consisted of three stages: At first stage random sampling technique was applied for the selection of each subsector. One sub sector from each of 4 natural strata has been selected. On the basis of random sampling 5 telecommunication companies, 5 banks, 5 hotels and 5 higher educational institutes were selected from each respective subsector. At third stage 500 officials were purposively selected, working in headquarters or main branches of each selected company, with the purpose-who have been working there for last six months.

The researcher used 5 point Likert scale for the adapted questionnaire, to gather data from the respondents. Before conducting final survey, the questionnaire was pilot tested to test the validity and reliability of the instrument. Data was collected by two means of communication that is, online and offline. Final survey showed a response rate of 78% with 390 responses. However 8 questionnaires were found to be incomplete and had missing values above 10, so that, these questionnaires were excluded from the analysis. Remaining 382 questionnaires were found to be valid and appropriate for further analysis.

Descriptive analysis about respondent's characteristics show little deviation in data in terms of gender, age, profession and experience in the current organization. Structural equation modelling (SEM) technique is used to test the measurement and structural model of the current study on the basis of partial least square (PLS), version 3.2. Internal consistency, convergent and discriminant validity of all the constructs under study (organizational climate, workplace bullying, burnout, psychological and physiological health and Emotional Intelligence) were analyzed and tested in measurement model. On the basis of results it is determined that there were no convergent and discriminant validity issues among the constructs. In structural model, hypotheses testing has been done.

Overall findings of the study concluded that demographic variables, gender and profession are significantly related to workplace bullying (traditional and cyber) while, age and experience in the current organization have insignificant relations with workplace bullying. There is a prevalence of workplace face to face and cyberbullying in all four selected service sectors of Pakistan, with overall rate of 49% of traditional bullying and 37% of cyberbullying, which is quite high ratio. Organizational climate along with its dimensions (Leadership, job description, working condition, cultural norm, time pressures and technology) is significantly related to workplace bullying. Negative use of technology (ICT, s and social networking) can also be a significant reason of creating cyberbullying at workplace of organizations. Workplace bullying (either traditional bullying or cyberbullying) severely effects employee health in an adverse manner and produces burnout, psychological and physiological health-illness among workers. Organizational climate also effects employee health directly with significant effects. Results also highlighted the mediating effect of workplace bullying between the relationship of organizational climate and employee health (burnout and ill-health). Furthermore, Emotional Intelligence with its dimensions (self-awareness, self-regulation, motivation, empathy and social skills) moderates the relationship between workplace bullying and both employee health factors, burnout and ill-health (psychological and physiological). Table 5.1 highlights the results of the current study. Further section provides brief discussion on the findings of the current study.

**Table 5.1: Summary of all the Hypotheses Results**

<b>Research Hypothesis</b>	<b>Result</b>
<i>H1: There is a prevalence of workplace bullying (traditional and cyber) in service sector of Pakistan.</i>	<b>Accepted</b>
<i>H1a: There is a prevalence of workplace bullying (traditional and cyber) in banking sector of Pakistan.</i>	<b>Accepted</b>
<i>H1b: There is a prevalence of workplace bullying (traditional and cyber) in telecom sector of Pakistan.</i>	<b>Accepted</b>
<i>H1c: There is a prevalence of workplace bullying (traditional and cyber) in hotel sector of Pakistan.</i>	<b>Accepted</b>
<i>H1d: There is a prevalence of workplace bullying (traditional and cyber) in education sector of Pakistan.</i>	<b>Accepted</b>
<i>H2a: Workplace bullying has significant relationship with gender</i>	<b>Accepted</b>
<i>H2b: Workplace bullying is significantly related to age</i>	<b>Not Accepted</b>
<i>H2c: Workplace bullying is significantly related to the profession.</i>	<b>Accepted</b>
<i>H2d: Workplace bullying is significantly related to experience in the current organization.</i>	<b>Not Accepted</b>
<i>H3: Organizational climate has significant negative relationship with workplace bullying.</i>	<b>Accepted</b>
<i>H3a: Positive technology use is negatively related to cyberbullying.</i>	<b>Accepted</b>
<i>H4a: Workplace bullying has significant positive relationship with burnout.</i>	<b>Accepted</b>

**Table 5.1: Continue**

<b>Research Hypothesis</b>	<b>Result</b>
<i>H4b: Workplace bullying has significant positive relationship with ill-health (psychological and physiological).</i>	<b>Accepted</b>
<i>H5a: Organizational climate has significant negative relationship with Burnout.</i>	<b>Accepted</b>
<i>H5b: Organizational climate is negatively associated with ill-health (psychological and physiological).</i>	<b>Accepted</b>
<i>H6a: Workplace bullying acts as a mediator between organizational climate and burnout.</i>	<b>Accepted</b>
<i>H6b: Workplace bullying acts as a mediator between organizational climate and ill-health (psychological and physiological).</i>	<b>Accepted</b>
<i>H7a: Emotional Intelligence moderates the relationship of Workplace bullying and burnout.</i>	<b>Accepted</b>
<i>H7b: Emotional Intelligence moderates the relationship of Workplace bullying and ill-health (psychological and physiological).</i>	<b>Accepted</b>

### **5.3 Discussion on Research Objectives and Findings**

The current study investigated the relationship of organizational climate, workplace bullying and employee health along with moderating effects of Emotional Intelligence. Thus, study proposed total of 19 hypotheses and sub hypotheses out of which 17 hypotheses are accepted and 2 are not accepted. Following section comprises of brief discussion regarding objectives and findings of the current study.

### **Objective 1: Nature, level and frequency of bullying at workplace of service sector of Pakistan.**

First, objective of the study was to find the nature, level and frequency of workplace bullying at workplace of service sector of Pakistan. To achieve this objective, researcher divided service industry into four subsectors: banking, hotel, telecom and education (selected on the basis of random sampling technique). It is hypothesized that *H1: There is a prevalence of workplace bullying in service sector of Pakistan*. Results depicted that, there is a prevalence of two types (nature) of bullying in overall service sector of Pakistan, traditional (face to face bullying) and cyberbullying. Prevalence rate of workplace bullying (traditional and cyber) has been analyzed and reported. A total of 49% workers are the victims of workplace traditional bullying, and 37% are cyberbullying victims, and the total victims who are being traditionally and cyber bullied at the same time are 36% in overall service sector of Pakistan. Bullying percentage is measured on the basis of frequency criteria set by laymen (1996). If the respondents had experienced at least two negative acts, weekly or more often over the past 6 months they were categorized as “bullied or bullying victims”.

To find out the prevalence rate (level) in each subsector, H1 is sub hypothesized into 4 hypotheses H1a, H1b, H1c and H1d. Results indicated that prevalence rate of workplace traditional bullying in banking is 59% and cyberbullying is 49%. Workplace traditional bullying prevalence percentage in telecom is 53% and 41% of cyberbullying. Likewise, bullying prevalence in hotel sector is 48% (traditional) and 40% (cyber). And in education sector the percentage is 37% and 18% of traditional bullying and cyberbullying respectively. Thus, hypotheses H1 with all with all of its sub hypotheses were accepted.

Findings of the present study verifies the presence of workplace bullying in overall service sector of Pakistan. Employees are being the victims of face to face and traditional

types of bullying. Very few studies were conducted in Pakistan to find out the prevalence percentages, especially in service sector. Naseer and Khan (2015) highlighted in his study that incidences of bullying are extensive at workplace and are under-reported and under-researched. Bashir and Malik (2011) have researched about the occurrence of bullying in telecommunication sector and concluded that bullying problem is present at the most but, the study lacks the percentage measurement. Furthermore, findings are consistent to Ahmad *et al.* (2017) that there is a prevalence of workplace bullying in education sector of Pakistan but the current study measured the separate percentages of the traditional and cyberbullying along with the overall percentage. Current study's findings regarding to prevalence of bullying in banking sector are consistent with the findings of Naseer and Khan (2015) that banking sector employees are also facing bullying issues at workplace.

If the percentages of bullying prevalence are compared with the prevalence ratios of bullying in service sectors of various countries, provided in chapter 1 of the study in Table 1.3, it is concluded that prevalence ratios are very high in service sector of Pakistan as compare to other countries. Thus, workplace bullying is proved to be a significant and severe issue of service sector of Pakistan, which needs to be addressed on urgent and priority bases.

#### **Objective 2: The relationship of demographic variables with workplace bullying.**

Second objective of the study was to find out the relationship of all the demographic variables (gender, age, profession and experience in the current organization) with workplace bullying (traditional and cyberbullying). To achieve this objective study proposed the hypotheses H2a, H2b, H2c and H2d, illustrate that workplace bullying has significant relationship with gender, age, profession and experience in the current organization respectively. Results indicated a weak significant relationship between

gender and workplace bullying (both the traditional and cyber) with  $r=0.236$  and  $r=0.134$  respectively. Thus, H2a is accepted.

Various researches have been conducted in the past (Moreno-Jimenez *et al.*, 2008) to investigate the relationship of demographic variable gender with workplace bullying but the results were inconsistent. The result of the current study related to gender and bullying relation strengthened the findings of previous researches, just like Trijueque and Gómez (2010), which has been proved the significant relationship between two. The relationship signifies that with gender variation like male and female, bullying victimization also changes (H1a is accepted). The rate of bullying victimization is different in male and female respondents.

Results of the present study regarding demographic variable age and workplace bullying concluded an insignificant relationship between two, as  $p$  values is above 0.05 level. Hence, H2b is not accepted. Results are contrary to the previous findings on the same variables, conducted at different workplace settings. Various researches depicted the significant relationship (Trijueque & Gómez, 2010) also the researches by Hoel and Cooper (2000) and Rayner and Hoel (1997), between these two variables. Other studies conducted in Scandinavian countries also indicated that older workers experience more hostile acts than younger employees (Einarsen *et al.*, 1994; Vartia, 1996). Thus, further research is needed to explore the relationship between age and bullying in order to confirm the significance or insignificance. Results also highlighted the significance among the relationship of demographic variable profession with workplace bullying. Bullying victimization is significantly related to the profession. As in this study bullying among multiple professions like education, banking, hoteling and telecommunication has been testified. Results depicted the prevalence rate of bullying among all professionals working in selected sectors is different. Maximum prevalence of both types of bullying

i.e. traditional and cyber is present in banking sector (59% and 49% respectively) and the second highest percentage is in telecom (53% and 41%). Traditional bullying prevalence is 37% and cyberbullying prevalence is 18% in education sector while 48% and 40% respectively in hotel industry. This shows that with the change of profession bullying percentage also changes, so both are related significantly. Hence H2c is accepted. Last demographic variable of the current study “experience in the current organization” has also been tested for the significance with the main variable of the study i.e. workplace bullying. Results depicted the insignificance of the relationship between these two variables (p-value is greater than 0.05). Hence, H2d is not accepted. It is concluded that experience in the current organization has no effect on bullying victimization.

**Objective 3: Antecedents of bullying and cyberbullying at workplace.**

- a) The relationship of organizational climate with workplace bullying (face to face and cyber)**
- b) The relationship of technology (ICT's and Social networking) with cyberbullying.**

To achieve the above mentioned objective and its parts, this research endeavored to construct the organizational climate first, which has been further tested as an antecedent of workplace bullying by hypothesizing that H3: Organizational climate has significant negative relationship with workplace bullying.

While making the construct of organizational climate for this study, those dimensions have been considered which have been identified by previous researchers that these can be directly related to workplace bullying. Leadership practices have been identified by researchers (O'Moore *et al.*, 1998; Vartia, 1996) that it can be a predecessor of workplace bullying. Specifically, autocratic leadership might induce frustration and aggression

among workers, which may leads them toward bullying at workplace. Poorly organized work practices (unclear job description) were also directly related to bullying (Staale Einarsen *et al.*, 2009). As identified by Moreno-Jiménez *et al.* (2008), if workers are not adjusted to cultural norms of organization, this may provoke them towards bullying victimization. Carnero *et al.* (2010) also highlighted that working conditions in organizations may also be the reason of creating bullying. Likewise, according to Zapf and Einarsen (2011), time pressure in work may influences the degree of workplace bullying. Llewellyn (2009) highlighted in his research that with the use of ICT's and social networking at workplace, management challenges are arising, and workplace bullying (cyberbullying) is one of them.

After making and testing the construct, researcher has investigated the relationship between organizational climate and workplace bullying. Results indicated ( $b=-0.762$ ,  $t=38.5$  and  $p<0.05$ ), organizational climate with its dimensions (Leadership, job description, cultural norm, working condition, time pressure and technology) has negative association with workplace bullying. If organizational climate is poor at workplace of service sector organization, weak leadership is there, job descriptions are ambiguous, cultural norms are unacceptable, working conditions are tough, huge time pressures are there which are unmanageable, and there is a negative use of technology, these may be the antecedents of bullying at workplace. Research also proved that negative use of technology (ICT's and social networking) is directly related to cyber type of bullying ( $b=-0.463$ ,  $t=3.787$ ,  $p<0.05$ ). The rapid use of technology is increasing the danger of being involved in the alternative way of bullying i.e. cyber bullying. Research also revealed that cyber bullying might happens at workplace of organization by using 8 eight mediums of technology (1. Phone calls 2. Pictures or video clips, 3. Text messages 4.Chat rooms 5. Emails 6. Instant messaging 7 Social networking websites 8. Websites). So, management should recognize that technological tools are essential for doing business, but is equally

important to deal effectively in order to integrate them into business activities and stop contributing them in the blurring of personal and workplace boundaries.

**Objective 4: The relationship of workplace bullying (face to face and cyber) with health outcomes: burnout (emotional health) and ill-health (psychological & physiological).**

To investigate about the outcomes of both types (face to face and cyber) of bullying, research questions were asked regarding bullying effects on employee health outcomes.

Similar results were also identified by a Norwegian research conducted in the past (Mathisen *et al.*, 2008). Severe consequences of bullying were also been identified in the form of psychological and physical health problems (Parkins *et al.*, 2006). So that, this study also tested the impact of workplace bullying on ill-health (psychological and physiological) of employees. Psychological and physiological symptoms comprises of depression, restless feelings and inability to think clearly, anxiety, irritability feelings, headache, digestion issues, high blood pressure, post-traumatic stress disorder, sleep disturbance etc. Results indicated ( $b=0.399$ ,  $t=8.3$  and  $p<0.05$ ) the significant positive impact of workplace bullying on psychological and physiological health of workers. Keeping in view, studies in the past have examined the outcomes of only one type of bullying at a time and mostly examined the effects of traditional bullying only, while for the current study, the focus was probably broader and analyzed the impact of both types of bullying (face to face and cyber) at a time, on health outcomes. So, not only the traditional (face to face) bullying cause's emotional and psychological distractions but cyberbullying also have the same negative ramifications and induces feelings of frustration, anger, and depression and causes burnout and psychological and physiological disruptions.

This study strengthened the findings of previous research of Katzer *et al.* (2009), indicated psychological effects of cyberbullying like lower self-esteem and another study (Didden *et al.*, 2009) concluded depression as employee health consequence of cyberbullying. Finally, it is concluded that workplace bullying outcomes are disturbing and severe in nature which affect workers health badly, thus needed to cope with the issue.

**Objective 5: The relationship of organizational climate with health outcomes: burnout (emotional health) and ill-health (psychological & physiological).**

**a) To determine the direct impact of organizational climate on burnout and ill-health (employee health).**

**b) To evaluate the mediating effect of workplace bullying between organizational climate and employee health outcomes.**

Fifth objective of the study is comprises of two parts and deals with the direct and indirect (mediating) effects of organizational climate on health outcomes (burnout and ill-health) respectively. Results indicated that organizational climate has significant negative relationship with burnout ( $b=-0.43$ ,  $t=10.8$  and  $p=0.00$ ) and is negatively associated to ill-health (psychological and physiological). Results of the current study are in line with the findings of the previous researchers (e.g. Wilson *et al.* (2004), MacDavitt *et al.* (2007), Kelloway and Day (2005)). So, it is concluded that the construct of organizational climate (leadership, job description, working condition, cultural norm, time pressure and technology) effects both the mental and physical health of employees directly, so is a significant determinant of damaging employee health in organizations.

Second part of this objective was intended to assess the indirect relationship of organizational climate and employee health outcomes (burnout and ill-health) by

evaluating the mediating effects of workplace bullying (traditional and cyber). Results indicated that workplace bullying act as a mediator between organizational climate and burnout, and the mediation is partial, as direct path without mediator is significant (path coefficient= -0.814 and  $p=0.00$ ) and the indirect path with mediator is also significant ( $p$  value is 0.00). It is also concluded that workplace bullying represents complementary kind of partial mediation between the relationship of organizational climate and burnout.

It is also determined that workplace bullying mediates (partially) the relationship of organizational climate and ill-health of workers. The direct relationship (without mediator) is significant, as path coefficient=-0.756 and  $p=0.00$ . And the indirect path (with mediator) is also significant, as  $p$  value is 0.00. And the product of the direct and indirect effect is positive ( $-0.474 \cdot -0.609 = 0.2886$ ), so there is a complementary kind of partial mediation.

Study concluded that workplace bullying originates from hostile and negative organizational climate such as incompetent leadership of management, unclear job descriptions, role conflicts, high time pressures etc., consistent to the findings of Milczarek *et al.* (2010), and bullying victimization lead workers toward emotional, psychological and physiological distractions, supported by Parkins *et al.* (2006) and (Quine, 1999). This is how the mediation occurs, which is also supported by Brotheridge *et al.* (2012).

**Objective 6: The moderating effect of Emotional Intelligence on the relationships of workplace bullying with burnout and ill-health (employee health outcomes).**

Last objective of the current study was to investigate, Emotional Intelligence moderates the relationships of workplace bullying with burnout and ill-health (employee health outcomes). Results of the current study indicated that Emotional Intelligence with

its five dimensions (self-awareness, self-regulation, motivation, empathy and social skills) moderates the relationship of workplace bullying with burnout (an employee health outcome) and the moderation was significant at 0.05 level of confidence ( $t=2.351$  and  $p=0.02$ ). Negative value of moderating effect ( $-0.110$ ) suggested that Emotional Intelligence weakens the positive relationship of workplace bullying and burnout. Positive relation between workplace bullying and burnout ( $0.662$ ) showed that with the increase of bullying victimization, employee health damages in the form of increased level of burnout (emotional exhaustion, reduced personal accomplishment and depersonalization). However, if the employees are emotionally intelligent, they are self-aware about their emotions, having enough level of self-regulation, if they are self-motivated and high level of empathy is present and are having sufficient social skills, it will reduce the positive impact of workplace bullying on burnout or weakens the relationship between both. Conclusively, bullying victimization will not affect employee's health if the worker is emotionally intelligent.

Likewise, Emotional Intelligence also moderates the relationship of workplace bullying with ill-health (psychological and physiological), which is another employee health outcome. Moderation effect of Emotional Intelligence is significant as  $t=0.041$  and  $p=0.00$ . The value of moderation was negative ( $-0.22$ ), depicted that Emotional Intelligence weakens the positive relationship ( $0.603$ ) of workplace bullying with ill-health. If the worker is emotionally intelligent, bullying victimization at workplace will not affect his/her psychological and physiological health in an adverse way, conversely, worker will deal with the problem quite intelligently. This verifies the importance of Emotional Intelligence among employees working in organizations.

Although it has been suggested by previous researchers that Emotional Intelligence may enhances the skills in an individual, which helps in dealing with difficult situations

that might be damaging emotionally (Svyantek & Afzalur Rahim, 2002). Likewise, Tsaousis and Nikolaou (2005) have also been emphasized that organizations must endeavor to prevent burnout among employees in organizations and Emotional Intelligence seems to reduce the possibility for burnout.

Oginska-Bulik (2005) also proposed that emotional coping might be helpful in reducing occupational stress and also been found to alleviate workplace and organizational stress (Arora, 2010). Some of the past researches have also suggested that emotionally Intelligent person may have control on his/her emotions, which induces behavior that may help in stress reduction (Fernandez, 2007), conflict-handling, and ethical concerns (Gorgens-Ekermans & Brand, 2012). Nonetheless, researchers have not studied Emotional Intelligence as a coping strategy in detail to reduce the negative health effects of workplace bullying. The present study concludes that Emotional Intelligence acts as a coping strategy in order to reduce the negative health outcomes of workplace bullying by way of its moderating effects.

**Table 5.2: Summary of Overall Thesis**

Research Objectives	Research Hypotheses	Literature Support	Results / Findings
To explore the nature, level and frequency of bullying at workplace of service sector of Pakistan.	<p>H1: There is a prevalence of workplace bullying (traditional and cyber) in service sector of Pakistan.</p> <p>H1a: There is a prevalence of workplace bullying (traditional and cyber) in banking sector of Pakistan.</p> <p>H1b: There is a prevalence of workplace bullying (traditional and cyber) in telecom sector of Pakistan.</p> <p>H1c: There is a prevalence of workplace bullying (traditional and cyber) in hotel sector of Pakistan.</p> <p>H1d: There is a prevalence of workplace bullying (traditional and cyber) in education sector of Pakistan.</p> <p>H2a: Workplace</p>	<p>Bashir and Hanif (2011)</p> <p>Naseer and Bashir (2015)</p>	<p>There is a prevalence of workplace traditional (face to face) bullying and cyberbullying in overall service sector of Pakistan.</p> <p><b>Banking</b> (59% traditional bullying and 49% cyberbullying)</p> <p><b>Telecom</b> (53% traditional bullying and 41% cyberbullying)</p> <p><b>Hoteling</b> (48% traditional bullying and 40% cyberbullying)</p> <p><b>Education</b> (37% traditional bullying and 18% cyberbullying)</p> <p><b>Overall</b> (49% traditional bullying and 37% cyberbullying)</p>

Research Objectives	Research Hypotheses	Literature Support	Results / Findings
To find out the relationship of demographic variables with workplace bullying.	bullying has significant relationship with gender  H2b: Workplace bullying is significantly related to age  H2c: Workplace bullying is significantly related to the profession.  H2d: Workplace bullying is significantly related to experience in the current organization.	Marino-Jimenez, <i>et al.</i> , 2009  (inconsistent results)  (Grunau, 2007; Vartia, 1996)  (not significant)  Einarsen <i>et al.</i> , 1994  Hoel, Cooper & Faragher (2001)	Workplace bullying (face to face and cyber) is significantly related to gender and profession while insignificantly related to age and experience in current organization.
To identify the antecedents of bullying and cyberbullying at workplace.  a) The relationship of organizational climate with workplace bullying (face to face and cyber) b) The relationship of technology (ICT's and Social networking) with cyberbullying.	H3: Organizational climate has significant negative relationship with workplace bullying.  H3a: Positive technology use is negatively related to cyberbullying.	Hoel & Salin (2003)  Noel Card (2008)	Organizational climate acts as an antecedent of workplace bullying (face to face and cyber).  a) Organizational climate has significant and direct impact on workplace bullying (face to face and cyber).  b) Technology (ICT's and social networking) has significant and direct impact on workplace cyberbullying.

Research Objectives	Research Hypotheses	Literature Support	Results / Findings
<p>To explore the relationship of workplace bullying (face to face and cyber) with employee health outcomes: burnout (emotional health) and ill health (psychological &amp; physiological).</p>	<p>H4a: Workplace bullying has significant positive relationship with burnout.</p> <p>H4b: Workplace bullying has significant positive relationship with ill-health (psychological and physiological).</p>	<p>Einarsen S <i>et al.</i>, (2000)</p> <p>Mathisen GE <i>et al.</i>, (2008)</p>	<p>Workplace bullying (face to face and cyber) has significant and direct relationship with burnout.</p> <p>Workplace bullying (face to face and cyber) has significant and direct impact on ill-health (psychological and physiological).</p>
<p>To access the relationship of organizational climate with health outcomes: burnout (emotional health) and ill health (psychological &amp; physiological).</p> <p>a) To determine the direct impact of organizational climate on burnout and ill-health (employee health outcomes).</p> <p>b) To evaluate the mediating effect of workplace bullying between organizational climate and employee health outcomes.</p>	<p>H5a: Organizational climate has significant negative relationship with burnout.</p> <p>H5b: Organizational climate is negatively associated with ill-health (psychological and physiological).</p> <p>H6a: Workplace bullying act as a mediator between organizational climate and burnout.</p>	<p>MacDavitt <i>et al.</i> (2007)</p> <p>Wilson <i>et al.</i> (2004)</p> <p>Kelloway and Day (2005)</p> <p>Brotheridge <i>et al.</i>, (2012)</p>	<p>a) Organizational climate is significantly and directly associated to burnout.</p> <p>Organizational climate has significant and direct association with ill-health (psychological and physiological).</p> <p>b) Workplace bullying (face to face and cyber) acts as a mediator between organizational climate and burnout.</p>

Research Objectives	Research Hypotheses	Literature Support	Results / Findings
To investigate the moderating effects of coping strategy Emotional Intelligence on the relationship of workplace bullying with burnout and ill- health (employee health outcomes).	H6b: Workplace bullying act as a mediator between organizational climate and ill health (psychological and physiological).	Iftikhar and Qureshi (2014)	Workplace bullying (face to face and cyber) acts as a mediator between organizational climate and ill-health (psychological and physiological).
	H7a: Emotional Intelligence moderates the relationship of Workplace bullying and burnout.	Syvantek & Rahim, 2002	Emotional intelligence moderates the relationship between workplace bullying (face to face and cyber) and burnout.
	H7b: Emotional Intelligence moderates the relationship of workplace bullying and ill-health (psychological and physiological).	Tsaousis & Nikolaou (2005)	Emotional intelligence acts as a moderator between workplace bullying (face to face and cyber) and ill-health (psychological and physiological).

#### 5.4 Implications of the Current Study

This study is making several noteworthy contributions in the literature about workplace bullying and employee health in service sector organizations.

Findings of the current study eliminates the gap in the literature that limited research has documented the impact of cyberbullying on employees (West *et al.*, 2014). This research documented the negative health impacts of both the traditional and cyberbullying, that it causes burnout and ill-health (psychological and physiological) among workers.

The most important contribution of this study is that in order to overcome negative health impacts of workplace (traditional and cyber) bullying, a variable Emotional Intelligence was proposed as a moderator. A link between Emotional Intelligence and workplace bullying has been established e.g. Branch *et al.* (2012) demonstrated a negative relationship between bullying and Emotional Intelligence. It was also depicted that Emotional Intelligence helps in improving wellbeing and productivity of workers (Cavallo & Brienza, 2004). Sheehan (1999) also conducted a research to prove that employee's Emotional Intelligence may prevent workplace bullying. Ashraf and Khan (2014) have tested the moderating effects of Emotional Intelligence on the relationship of workplace bullying and job performance. But, the present research came up with an insight and proved that Emotional Intelligence with its five dimensions ( self-awareness, self-regulation, motivation, empathy and social skills) acts as a coping strategy to overcome the negative health impacts of workplace (traditional and cyber) bullying by way of moderation.

Hence, this research study is contributing to the emergent dialogue of identifying the antecedents and outcomes of both types of bullying i.e. traditional and cyberbullying in service sector of Pakistan, as well as suggesting a positive solution to cope with a

disturbing workplace issue. On the bases of these implications, conceptual framework of the study was developed (see Figure 2.3 in chapter 2).

Conceptual framework of the study (Figure 2.3) highlights the significant relationships between research variables. It is the diagrammatic representation of the concept that organizational climate along with its six dimensions (leadership, job description, working condition, cultural norms, time pressure and technology) is the antecedent of workplace bullying, and technology use (ICT's and social networking) is directly related to cyber type of bullying. Employee health i.e. burnout (depersonalization, emotional exhaustion and reduced personal accomplishment) and ill-health (psychological and physiological) are outcomes of both types of workplace bullying (traditional and cyber). Workplace bullying mediates the relationship of organizational climate and employee health outcomes (burnout and ill-health) as well. Organizational climate also affects employee health directly. Emotional Intelligence acts as a moderator and a coping strategy in order to reduce the negative health outcomes of bullying. The explanation regarding why Emotional Intelligence is proposed as a moderator and not the mediator in this research, is also provided in the section 2.18 along with the conceptual framework. Thus, the framework provides antecedents and outcomes of workplace traditional and cyberbullying as well as presented Emotional Intelligence as a coping strategy to overcome the negative health effects of workplace bullying

This research uses Novak (1998) theory of learning to understand the concept of bullying and its prevalence in organizations. Application of (Novak, 1998) theoretical view of learning to workplace bullying may change an individual's conceptual meaning of bullying and leads an individual to perform different actions in response to bullying victimization. Novak's theory-meaning originates from pre-existing knowledge, which comes from past experiences, is significantly important to understand bullying concept

as employees should know whether the specific act of his/her peer, colleague, supervisor or boss comes under the category of bullying or not, so that worker will respond accordingly. In the current study, bullying acts were pre-determined on the basis of pre-existing knowledge shared by past researchers, and respondents were then asked to respond about bullying occurrences based on these acts, during their past 6 month's experience. Novak's theory of learning is applied to determine the prevalence rate of bullying at workplace. On the basis of these research findings, future researchers may apply Novak's theory of learning to understand the concept of bullying and to study its prevalence rate.

Previous studies conducted on bullying prevalence were mostly conducted in western countries (see Table 1.3), in which researcher's targeted different occupations and very limited researchers have been endeavored to find out the bullying prevalence and its effects in service sector of Pakistan, as bullying is a devastating issue of different service subsectors (Ahmad *et al.*, 2017; Naseer & Khan). This research theoretically contributed in the enhancement of knowledge regarding to bullying prevalence (nature, frequency, level and effects) in service sector of Pakistan. For this instance, organizations must be aware about those organizational risk factors that might have negative association with employee's health. This study has a significant managerial implication, as it not only highlights the major devastating risk factors/ of today's organizations which has been neglected, but also investigated about the root causes or antecedents of bullying. Thus, managers should focus on these dimensions in order to improve the climate of organization, so that to avoid bullying victimisation which is a big risk factor to damage employees health in organizations.

The current study applied frustration aggression theory by Berkowitz (1989) and the social-interaction approach (Felson, 1992) to identify the antecedents of workplace

bullying. Frustration-aggression theory highlights the role of external factors in causing negative effects and aggression, and the social-interaction approach explains that stressful environment and event may indirectly induces aggression among workers, which may lead them towards negative behavior. On the basis of above theories, it has been identified that poor/bad organizational climate induces aggression among workers, so it produces negative behaviors like bullying at workplace. Hence, the findings of the current study that organizational climate is negatively related to workplace bullying, are in line with the frustration-aggression theory and social interaction approach and provided a significant theoretical contribution by strengthening these theories.

Most of the work has been done on workplace traditional type of bullying, but there was a scarcity of academic literature that specifically focuses on cyberbullying among employees at workplace (West *et al.*, 2014), as it is an emerging field of research area, understanding of the antecedents of cyberbullying were not fully developed. This research not only studied both types of bullying (traditional and cyber) in parallel, while also explored the antecedents and outcomes of cyberbullying along with traditional bullying.

Construct of organizational climate has also been developed in this research on the basis of those dimensions which were related to workplace bullying, derived from literature and previous findings (see Table 2.2). On the basis of Gerber (2003) model of organizational climate and the findings of Payne and Pugh (1976), it is determined that technology is also a part of construct of organizational climate. So, this research has included technology in the construct of organizational climate as one of the dimensions and tested and proved technology as an antecedent of new type of bullying i.e. cyberbullying. Future researchers may add technology in the construct of organizational climate and can relate it to cyberbullying.

Agnew (1992) presented a General Strain Theory which explains how negative emotions, stress or strain leads an individual towards criminological or deviant sort of behaviors. Different types of bullying like aggressive, verbal, relational, direct, and indirect and cyber are considered to be a criminogenic and deviant behaviors. Bullying is considered one of the deviant behaviors on which GST theory can be applied. Here in this study, the General Strain Theory (GST) theory is applied in a reverse way as corrective action and deviant behavior of others at work like workplace bullying may foster strain or negative emotions such as anger, frustration, and depression, and might affect psychological and physiological health of workers. This research proved that workplace bullying is directly related to ill-health (psychological and physiological) of workers in service sector organizations. Therefore, the research academically contributed in the literature that, General Strain Theory (GST) theory can be applied in a reverse way.

This study is academically useful for knowledge enhancement in the field of human resource management, organizational behavior, training and development, strategic management and total quality management.

Employee health plays a very vital role in an efficiency of every organization. But, it is a shocking fact that in sub-index of health of GCI, Pakistan ranked as 127 in 2015 which clearly shows that employee health is a serious issue in Pakistani organizations. Globally, Pakistan is at 130 in ranking out of 142 countries in Global Competitiveness index (GCI), having large number of ill-health workers. So, it's very important for organizations and managers to make such valuable strategies that can promote their employees' health or at least that can alleviate their health problems. It is practically more important to consider workplace bullying a genuine issue therefore, managers pay serious attention towards this crippling problem by making special laws and policies for workplace. As in developing countries, cyber-crime laws are still at infancy stage (Kundi,

Nawaz, & Akhtar, 2014). The legislation on cyber type crimes in Pakistan is quite weak (Mohammed, 2016). However, General Pervez Musharraf introduced the Prevention of Electronic Crime Ordinance (PECO) in 2007, and was originated for the prevention of terrorist/banned groups from the negative use of internet, like using propaganda against the military forces and also to protect the Parliament members especially females, from being harassed by insulting/abusive messages and phone calls. There is no such provision in Prevention of Electronic Crime Ordinance (PECO) that tackles the work related bullying issues of employees at any workplace. Also the Prevention of Electronic Crimes Act (PECA) was enacted in 2016, which was to only deal with the electronic crimes such as cyber stalking, unauthorized access to information system or data, cyber terrorism, electronic forgery, unauthorized use of electronic information, electronic fraud and so on (Daudpota, 2016), but the cyberbullying issue is missing in this act. Review of legislative law indicated that, presently Pakistan has no such law to comprehensively deal with the growing threats of cybercrime (Mohammed, 2016). Legal Framework is inadequate and ill equipped to address the online threats of the 21st Century cyber age. In the age of digital world new types of cybercrimes cannot be dealt with the existing legislative laws like cyberbullying at workplace.

Besides cyberbullying, face to face (traditional) bullying is also a severe type of mental stressor that must be considered as one of the human rights violation. There are very few laws and policies available, related to workplace social crimes like workplace bullying, though it is common. Recently, government action has strictly discouraged bullying and more serious forms of violence in schools, but no such legislation has been passed to prevent bosses, supervisors and co-workers from bullying. Very few laws are in place that are against psychological violence at the place of work (Kamal, 2017). So long as the targeted victim is not physically or psychologically disabled, or he/she is not of another socioeconomic class, and is not whistle blowing, no legislation exists for the protection

of the victim. The available law regarding workplace is mostly related to female harassment only like, Women Harassment Act of Pakistan, 2010, passed by the government to provide women a safe and sound working environment. But unfortunately, the law just served as a piece of paper and the practical implementation of the law is missing (Sadrudin, 2013). Even until 2016, some sensitive provinces of Pakistan which are less gender sensitive, have not formally enforced and passed the Woman Harassment Act (Yousaf & Schmiede, 2016) in organizations.

Because of lack of specific legislation existence, the problem is increasing day by day in organizations. As specified by Patten (2017), the laws regarding workplace bullying are quite unsatisfactory and fragmented. Thus, organizations or companies must look elsewhere for guidance in order to develop policies and strategies to deal with the issue. Companies must step forward on their own to identify issues and to make the right policies on the basis of cultural and behavioral norms of organizations. The foremost issue is that, organizations are incapable of identifying bullying and cyberbullying thus are unable to take appropriate steps to cope with such issues. According to Piotrowski (2012), this requires effective policy making, which defines bullying (face to face or online), and provides clarification of standards about acceptable and unacceptable norms and behaviors, that might be communicated, implemented and supported and must offers a support to the affected workers and give consideration to privacy issues at workplace regarding to the confidentiality and the allegations of ongoing technological changes.

Dr. Carlo Caponecchia, a workplace bullying expert says: “Some people do not think [bullying] is a workplace issue, and others do not think it is an issue [at all]; they think it is someone's external psychological problem” (Caponecchia & Wyatt, 2011). The current study not only explains the seriousness and urgency of the workplace bullying issue but also provides the solution in order to cope up with the problem. Instead of waiting for

legislation to make special laws to control bullying type of activities, organisations must step forward on their own to identify issues and to make the right policies at organisational level on the basis of cultural and behavioural norms of the organisation. On the basis of current research findings it is suggested to overcome the negative health impacts of workplace bullying, employees should be provided with the trainings of improving Emotional Intelligence. It should be embedded in HR (human resource) policy of the organization that workers must be provided with the trainings of how to improve their Emotional Intelligence. Emotional Intelligence workshops should be conducted as Dolev and Leshem (2016) indicates that training program improves Emotional Intelligence competencies and related behaviors of workers, and that these shifts have positive impact upon their practice.

## **5.5 Limitations and Recommendations**

This is a cross sectional survey based study, in which relational and mediation based hypotheses have been tested, but according to Maxwell, Cole and Mitchell (2011) mediation results can be biased if the longitudinal design for research is not adopted. Although hypotheses were proposed on the basis of previous empirical results and strong theoretical foundation, biasness may exist in mediation results because of lack of longitudinal research design. The other limitation is with the measurement scale for cyberbullying, as the scale and criteria is still developing. NAQ-R is used in the current study to measure cyberbullying, which has been developed to measure traditional type of bullying, and the criteria applied is the same as for traditional bullying (developed by layman). There is a dire need to develop a new scale and criteria, specifically to measure cyberbullying. Though the larger sample of officials was taken for the current study, but due to time constraints the research is limited to the headquarters/main branches of 20

service sector organizations in different cities. Further researches may include the rest of service sector organizations, as well as the manufacturing sector.

## **5.6 Summary of Chapter 5**

Chapter 5 of the study discusses the findings based upon results. This chapter starts with the research highlights including overall findings of the study followed by the comprehensive discussion on each research objective along with the result findings. Summary of the overall thesis is given in tabulated form for readers to have a better and quick insight. In the next section, implications of study (academic and practical) are provided. Limitations of the study, methodological deficiencies and scope limitations are also discussed in this chapter.

## REFERENCES

- Adams, A., & Crawford. (1992). *Bullying at Work: How to Confront and Overcome it*. London: Virago Press.
- Agervold, M., & Mikkelsen, E. G. (2004). Relationships between bullying, psychosocial work environment and individual stress reactions. *Work & Stress*, 18(4), 336-351.
- Agnew, R. (1992). Foundation for a General Strain Theory of crime and delinquency. *Criminology*, 30(1), 47-88.
- Agnew, R. (2001). Building on the Foundation of General Strain Theory: Specifying the Types of Strain Most Likely to Lead to Crime and Delinquency. *Journal of Research in Crime and Delinquency*, 38(4), 319-361. doi:10.1177/0022427801038004001
- Agnew, R., & White, H. R. (1992). An empirical test of General Strain Theory. *Criminology*, 30(4), 475-500.
- Ahmad, S., Ahmad, S., Kalim, R., Kalim, R., Kaleem, A., & Kaleem, A. (2017). Academics' perceptions of bullying at work: insights from Pakistan. *International journal of educational management*, 31(2), 204-220.
- Ahmer, S., Yousafzai, A. W., Bhutto, N., Alam, S., Sarangzai, A. K., & Iqbal, A. (2008). Bullying of medical students in Pakistan: a cross-sectional questionnaire survey. *PLoS one*, 3(12), e3889.
- Ahmed, P. K. (1998). Culture and climate for innovation. *European journal of innovation management*, 1(1), 30-43.
- Akerjordet, K., & Severinsson, E. (2004). Emotional intelligence in mental health nurses talking about practice. *International Journal of Mental Health Nursing*, 13(3), 164-170.
- Al-Bawaliz, M. A., Arbeyat, A., & Hamadne, B. M. (2015). Emotional Intelligence and Its Relationship with Burnout among Special Education Teachers in Jordan: An Analytical Descriptive Study on the Southern Territory. *Journal of Education and Practice*, 6(34), 88-95.
- Ali, A. (2010). Socio Economic cost of terrorism: A case study of Pakistan. *Strategic Studies*, 57(1), 1-14.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Andrea, A., & Crawford, N. (1992). *Bullying at Work: How to Confront and Overcome It*. London: Virago Press.
- Antoniadou, N., & Kokkinos, C. M. (2015). A review of research on cyber-bullying in Greece. *International Journal of Adolescence and Youth*, 20(2), 185-201.

- Arbuckle, J. L. IBM SPSS Amos 20 user's guide. 2011. *Crawfordville: Amos Development Corporation, SPSS Inc Google Scholar*.
- Arora, R. C. (2010). Comfort-physiological principles, iaq and design conditions. *Refrigeration and Air Conditioning*, 819-871.
- Ashforth, B. E. (1985). Climate formation: Issues and extensions. *Academy of management review*, 10(4), 837-847.
- Ashkanasy, N. M., Wilderom, C. P., & Peterson, M. F. (2000). *Handbook of organizational culture and climate*: 1–18. Thousand Oaks, CA: Sage Publications.
- Ashraf, F., & Khan, M. A. (2014). Does emotional intelligence moderate the relationship between workplace bullying and job performance? *Asian Business & Management*, 13(2), 171-190.
- Babbie, E. (2010). *The Practice of Social Research* Wadsworth Cengage Learning. *International Edition*.
- Banerjee, A., Daly, T., Armstrong, P., Szebehely, M., Armstrong, H., & Lafrance, S. (2012). Structural violence in long-term, residential care for older people: Comparing Canada and Scandinavia. *Social Science & Medicine*, 74(3), 390-398.
- Bano, S., & Malik, S. (2013). Impact of Workplace Bullying on Organizational Outcome. *Pakistan Journal of Commerce & Social Sciences*, 7(3), 618-627.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Baruch, Y. (2005). Bullying on the net: Adverse behavior on e-mail and its impact. *Information & management*, 42(2), 361-371.
- Bashir, A., & Malik, N. I. (2011). Interdisciplinary Journal of Contemporary Research in Business. *IJCRB*, 3(1), 634- 647.
- Becker, J. M., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM: guidelines for using reflective-formative type models. *Long Range Planning*, 45(5), 359-394.
- Begley, M. R., & Hutchinson, J. W. (1998). The mechanics of size-dependent indentation. *Journal of the Mechanics and Physics of Solids*, 46(10), 2049-2068. doi:[https://doi.org/10.1016/S0022-5096\(98\)00018-0](https://doi.org/10.1016/S0022-5096(98)00018-0)
- Belsey, B. (2007). Cyberbullying: A real and growing threat. *ATA Magazine*, , , 88(1), 14–21.
- Bentley, T. A., Catley, B., Cooper-Thomas, H., Gardner, D., O'Driscoll, M. P., Dale, A., & Trenberth, L. (2012). Perceptions of workplace bullying in the New Zealand travel industry: Prevalence and management strategies. *Tourism Management*, 33(2), 351-360.
- Berkowitz, L. (1989). Frustration-aggression hypothesis: examination and reformulation. *Psychological bulletin*, 106(1), 59-73.

- Bhattacharjee, A. (2012). Social science research: Principles, methods, and practices. 2<sup>nd</sup> ed. Open Access Textbooks; 2012.
- Bjorkqvist, K., Osterman, K., & Hielt-Bdck, M. (1994). Aggression among university employees. *Aggressive behavior*, 20(3), 173-184.
- Boada-Grau, J., de Diego-Vallejo, R., de Llanos-Serra, E., & Vigil-Colet, A. (2011). Versión breve en español del Team Climate Inventory (TCI-14): desarrollo y propiedades psicométricas. *Psicothema*, 23(2), 308-313.
- Bollen, K., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychological bulletin*, 110(2), 305.
- Bolman, L. G., & Deal, T. E. (1997). *Nya perspektiv på organisation och ledarskap: kreativitet, val och ledarskap*: Studentlitteratur.
- Boone, H. N., & Boone, D. A. (2012). Analyzing likert data. *Journal of extension*, 50(2), 1-5.
- Booth-Kewley, S., Edwards, J. E., & Rosenfeld, P. (1992). Impression management, social desirability, and computer administration of attitude questionnaires: Does the computer make a difference? *Journal of Applied Psychology*, 77(4), 562-566.
- Brackett, M. A., Mayer, J. D., & Warner, R. M. (2004). Emotional intelligence and its relation to everyday behaviour. *Personality and Individual differences*, 36(6), 1387-1402.
- Braithwaite, V., Ahmed, E., & Braithwaite, J. (2008). Workplace bullying and victimization: The influence of organizational context, shame and pride. *International Journal of Organizational Behavior*, 13(2), 71-94.
- Branch, S., Murray, J., & Ramsay, S. (2012). Workplace bullying. *The Encyclopedia of Human Resource Management: Thematic Essays*, 181-196.
- Braun, J. (2004). Bullying prevalent in many workplaces. *Arizona Business Gazette*, 2.
- Brazeau, C. M., Schroeder, R., Rovi, S., & Boyd, L. (2010). Relationships between medical student burnout, empathy, and professionalism climate. *Academic Medicine*, 85(10), S33-S36.
- Brodsky, C. M. (1976). *The harassed worker*: DC Heath & Co. Health Lexington Mass.
- Brotheridge, C. M., Lee, R. T., & Power, J. L. (2012). Am I my own worst enemy? The experiences of bullying targets who are also aggressors. *Career Development International*, 17(4), 358-374.
- Broughton, A., Higgins, T., Hicks, B., & Cox, A. (2010). Workplaces and Social Networking. *The implications for employment relations*. Brighton: Institute for Employment Studies.
- Brown, S. P., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81(4), 358.

- Browning, H. L., & Singelmann, J. (1978). The transformation of the US labor force: the interaction of industry and occupation. *Politics & Society*, 8(3-4), 481-509.
- Bryman, A. (2012). *Social research methods*. Oxford university press.
- Bryman, A., & Bell, E. (2011). Ethics in business research. *Business Research Methods*.
- Cabello, R., & Fernández-Berrocal, P. (2015). Implicit theories and ability emotional intelligence. *Frontiers in psychology*, 6-700.
- Campbell, J. J., Dunnette, M. D., Lawler, E. E., & Weick, K. E. (1970). Managerial behavior, performance, and effectiveness.
- Campbell, M. A. (2005). Cyber bullying: An old problem in a new guise? *Journal of Psychologists and Counsellors in Schools*, 15(1), 68-76.
- Caponecchia, C., & Wyatt, A. (2011). *Preventing workplace bullying: An evidence-based guide for managers and employees*: Routledge New York, NY.
- Card, N. A., & Hodges, E. V. (2008). Peer victimization among schoolchildren: Correlations, causes, consequences, and considerations in assessment and intervention. *School psychology quarterly*, 23(4), 451-461.
- Carnero, M. A., Martínez, B., & Sánchez-Mangas, R. (2010). Mobbing and its determinants: the case of Spain. *Applied Economics*, 42(29), 3777-3787.
- Caruso, D. R., Mayer, J. D., & Salovey, P. (2002). Relation of an Ability Measure of Emotional Intelligence to Personality. *Journal of Personality Assessment*, 79(2), 306-320. doi:10.1207/S15327752JPA7902\_12
- Caruso, D. R., & Salovey, P. (2004). *The emotionally intelligent manager: How to develop and use the four key emotional skills of leadership*: John Wiley & Sons.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of personality and social psychology*, 56(2), 267-283.
- Cavallo, K., & Brienza, D. (2006). Emotional competence and leadership excellence at Johnson & Johnson: The emotional intelligence and leadership study. *Europe's Journal of Psychology*, 2(1). Consortium for Research on Emotional Intelligence in Organizations.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, 83(2), 234-246.
- Chapell, M. S., Hasselman, S. L., Kitchin, T., & Lomon, S. N. (2006). Bullying in elementary school, high school, and college. *Adolescence*, 41(164), 633-648.
- Cherniss, C., Extein, M., Goleman, D., & Weissberg, R. P. (2006). Emotional intelligence: what does the research really indicate? *Educational Psychologist*, 41(4), 239-245.

- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Cohen, J. (1988a). Statistical power analysis for the behavioral sciences 2nd edn: Erlbaum Associates, Hillsdale.
- Cohen, J. (1988b). Statistical power analysis for the behavioral sciences. 2nd: Hillsdale, NJ: erlbaum.
- Cooper, D., & Schindler, P. (2011). Business research methods, 11th (international) edition. Shanghai: Singapore: McGraw Hill.
- Corney, B. (2008). Aggression in the workplace: A study of horizontal violence utilising Heideggerian hermeneutic phenomenology. *Journal of health organization and management*, 22(2), 164-177.
- Cortina, L. M., Lonsway, K. A., Magley, V. J., Freeman, L. V., Collinsworth, L. L., Hunter, M., & Fitzgerald, L. F. (2002). What's gender got to do with it? Incivility in the federal courts. *Law & Social Inquiry*, 27(2), 235-270.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance-financial performance link. *Strategic management journal*, 303-319.
- D'Amato, A., & Majer, V. (2005). *M-DOQ10: Majer-D'Amato Organizational Questionnaire 10: manuale*: Organizzazioni Speciali.
- Daudpota, F. (2016). An Examination of Pakistan's Cybercrime Law. Available at SSRN: <https://ssrn.com/abstract=2860954> or <http://dx.doi.org/10.2139/ssrn.2860954>
- D'cruz, P., & Noronha, E. (2013). Navigating the extended reach: Target experiences of cyberbullying at work. *Information and Organization*, 23(4), 324-343.
- D'Cruz, P., & Rayner, C. (2013). Bullying in the Indian workplace: A study of the ITES-BPO sector. *Economic and Industrial Democracy*, 34(4), 597-619.
- Davidson, J., & De Jong, R. M. (2000). The functional central limit theorem and weak convergence to stochastic integrals II: fractionally integrated processes. *Econometric Theory*, 16(5), 643-666.
- Dawes, J. (2008). Do data characteristics change according to the number of scale points used. *International journal of market research*, 50(1), 61-77.
- De Wet, C. (2010). The reasons for and the impact of principal-on-teacher bullying on the victims' private and professional lives. *Teaching and Teacher Education*, 26(7), 1450-1459.
- Denton, D. W. (2012). Enhancing instruction through constructivism, cooperative learning, and cloud computing. *TechTrends*, 56(4), 34-41.
- Denzin, N. K. (2008). *Collecting and interpreting qualitative materials* (Vol. 3): Sage Publications.

- Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of marketing research*, 38(2), 269-277.
- Didden, R., Scholte, R. H., Korzilius, H., de Moor, J. M., Vermeulen, A., O'Reilly, M., . . . Lancioni, G. E. (2009). Cyberbullying among students with intellectual and developmental disability in special education settings. *Developmental neurorehabilitation*, 12(3), 146-151.
- Dillman, D. A. (1978). *Mail and telephone surveys: The total design method* (Vol. 19): Wiley New York.
- Doherty, E. M., Cronin, P. A., & Offiah, G. (2013). Emotional intelligence assessment in a graduate entry medical school curriculum. *BMC medical education*, 13(1), 13-38.
- Dolev, N., & Leshem, S. (2016). Teachers' Emotional Intelligence: The Impact of Training. *International Journal of Emotional Education*, 8(1), 75-94.
- Dooley, J. J., Pyżalski, J., & Cross, D. (2009). Cyberbullying versus face-to-face bullying: A theoretical and conceptual review. *Zeitschrift für Psychologie/Journal of Psychology*, 217(4), 182-188.
- Drolet, A. L., & Morrison, D. G. (2001). Do we really need multiple-item measures in service research? *Journal of service research*, 3(3), 196-204.
- Edwards, J. R., & Bagozzi, R. P. (2000). On the nature and direction of relationships between constructs and measures. *Psychological methods*, 5(2), 155-174.
- Einarsen, S. (2000). Harassment and bullying at work: A review of the Scandinavian approach. *Aggression and violent behavior*, 5(4), 379-401.
- Einarsen, S. (2001). The Negative Acts Questionnaire: Development, validation and revision of a measure of bullying at work. In *Proceedings of the 10th European Congress on Work and Organisational Psychology, Prague, May 2001*.
- Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the Negative Acts Questionnaire-Revised. *Work & Stress*, 23(1), 24-44.
- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. L. (2011). The concept of bullying and harassment at work: The European tradition. *Bullying and harassment in the workplace: Developments in theory, research, and practice*, 2(1), 3-40.
- Einarsen, S., & Mikkelsen, E. G. (2003). Individual effects of exposure to bullying at work. *Bullying and emotional abuse in the workplace: International perspectives in research and practice*, 6(1), 145-162.
- Einarsen, S., Raknes, B. r. I., & Matthiesen, S. B. (1994). Bullying and harassment at work and their relationships to work environment quality: An exploratory study. *European journal of work and organizational psychology*, 4(4), 381-401.

- Einarsen, S., & Skogstad, A. (1996). Bullying at work: Epidemiological findings in public and private organizations. *European journal of work and organizational psychology*, 5(2), 185-201.
- Elfring, T. (1988). Service employment in advanced economies; a comparative analysis of its implication for economic growth.
- Endler, N. S., Parker, J. D., & Summerfeldt, L. J. (1998). Coping with health problems: Developing a reliable and valid multidimensional measure. *Psychological assessment*, 10(3), 195-205.
- Estrada, F., Nilsson, A., Jerre, K., & Wikman, S. (2010). Violence at work—The emergence of a social problem. *Journal of Scandinavian Studies in Criminology and Crime Prevention*, 11(1), 46-65.
- European Agency for Safety and Health at Work (2000): Monitoring the State of Occupational safety and Health in the European Union- Pilot study summary report. Bilbao: European Agency for Safety and Health at Work, 1(1), 5-64
- Evans, G. D., Bryant, N. E., Owens, J. S., & Koukos, K. (2004, October). Ethnic differences in burnout, coping, and intervention acceptability among childcare professionals. In *Child and Youth Care Forum*, 3(5), 349-371). Kluwer Academic Publishers-Plenum Publishers.
- Factsheet, W. H. O. (2014). Lead poisoning and health, 2013. Available at: <http://www.who.int/news-room/fact-sheets/detail/lead-poisoning-and-health>
- Faulkner, B., & Patiar, A. (1997). Workplace induced stress among operational staff in the hotel industry. *International Journal of Hospitality Management*, 16(1), 99-117.
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Felson, R. B. (1992). "Kick'em when they're down": Explanations of the relationship between stress and interpersonal aggression and violence. *Sociological Quarterly*, 33(1), 1-16.
- Fernandez, C. S. (2007). Emotional intelligence in the workplace. *Journal of Public Health Management and Practice*, 13(1), 80-82.
- Forehand, G. A., & Von Haller, G. (1964). Environmental variation in studies of organizational behavior. *Psychological bulletin*, 62(6), 361-382.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research*, 18(3), 382-388.
- Fox, S., & Stallworth, L. E. (2005). Racial/ethnic bullying: Exploring links between bullying and racism in the US workplace. *Journal of Vocational Behavior*, 66(3), 438-456.

- Fox, S., & Stallworth, L. E. (2009). Building a framework for two internal organizational approaches to resolving and preventing workplace bullying: Alternative dispute resolution and training. *Consulting Psychology Journal: Practice and Research*, 61(3), 220-241.
- Friedman, R. A., & Currall, S. C. (2003). Conflict escalation: Dispute exacerbating elements of e-mail communication. *Human relations*, 56(11), 1325-1347.
- Gardner, D., O'Driscoll, M., Cooper-Thomas, H. D., Roche, M., Bentley, T., Catley, B., . . . Trenberth, L. (2016). Predictors of workplace bullying and cyber-bullying in New Zealand. *International journal of environmental research and public health*, 13(5), 448-462.
- Geffen, C. A., & Rothenberg, S. (2000). Suppliers and environmental innovation: the automotive paint process. *International Journal of Operations & Production Management*, 20(2), 166-186.
- Gerber, F. (2003). Die invloed van organisasieklimaat op werksmotivering [The influence of organisational climate on work motivation]. *Unpublished MComm dissertation. Pretoria: University of South Africa*.
- Giorgi, G. (2010). Workplace bullying partially mediates the climate-health relationship. *Journal of Managerial Psychology*, 25(7), 727-740.
- Giorgi, G. (2012). Workplace bullying in academia creates a negative work environment. An Italian study. *Employee Responsibilities and Rights Journal*, 24(4), 261-275.
- Giorgi, G., Arenas, A., & Leon-Perez, J. M. (2011). An operative measure of workplace bullying: the negative acts questionnaire across Italian companies. *Industrial health*, 49(6), 686-695.
- Giorgi, G., Perminienè, M., Montani, F., Fiz-Perez, J., Mucci, N., & Arcangeli, G. (2016). Detrimental effects of workplace bullying: impediment of self-management competence via psychological distress. *Frontiers in psychology*, 7-60.
- Glick, W. H. (1985). Conceptualizing and measuring organizational and psychological climate: Pitfalls in multilevel research. *Academy of management review*, 10(3), 601-616.
- Goldberg, D. (1992). General health questionnaire (GHQ-12). *Windsor, UK: Nfer-Nelson*.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ* New York: Bantam Dell: Random House.
- Goleman, D. (1998). *Working with emotional intelligence*: Bantam.
- Goleman, D., & Cherniss, C. (2001). *The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations*: Jossey-Bass.
- Gorenak, M., & Popovic, A. (2014). *Quality of Work-Life Balance and Workplace Violence*. Paper presented at the Human Capital without Borders: Knowledge and

- Görgens-Ekermans, G., & Brand, T. (2012). Emotional intelligence as a moderator in the stress–burnout relationship: a questionnaire study on nurses. *Journal of clinical nursing*, 21(15-16), 2275-2285.
- Götz, O., Liehr-Gobbers, K., & Krafft, M. (2010). Evaluation of structural equation models using the partial least squares (PLS) approach. In *Handbook of partial least squares* (pp. 691-711). Springer, Berlin, Heidelberg. Grainger, H., & Fitzner, G. (2007). *The First Fair Treatment at Work Survey: Executive Summary: Updated*: Department of Trade and Industry.
- Gray, R. (2007). A climate of success: Creating the right organization climate for high performance. Amsterdam: Elsevier/Butterworth-Heinemann
- Grigg, D. W. (2010). Cyber-aggression: Definition and concept of cyberbullying. *Journal of Psychologists and Counsellors in Schools*, 20(2), 143-156.
- Grunau, G. (2007). *Mobbing and Burnout: Are they linked?* , Walden University.
- Gül, H., İnce, M., & Özcan, N. (2011). The relationship between workplace mobbing and burnout among academics at a Turkish university. *Research Journal of International Studies*, 18(1), 118-134.
- Gullone, E., Jones, T., & Cummins, R. (2000). Coping styles and prison experience as predictors of psychological well-being in male prisoners. *Psychiatry, psychology and law*, 7(2), 170-181.
- Gunawardena, W. A. M. S. U., & Galahitiyawa, N. W. (2016). The Role of Emotional Intelligence on Workplace Bullying and Individuals' Work Performance. *Sri Lankan Journal of Management*, 21 (1), 01-38.
- Hair, J. F., Henseler, J., Dijkstra, T. K., & Sarstedt, M. (2014). Common beliefs and reality about partial least squares: Comments on Rönkkö and Evermann.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2012). Partial least squares: the better approach to structural equation modeling? *Long Range Planning*, 45(6), 32-319.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance, *Long Range Planning*, 46(1), 1-12.
- Hair Jr, J. (2006). Black, WC, Babin, BJ Anderson, RE & Tatham, RL (2006). *Multivariate data analysis*, 6th Edition, Prentice Hall, New Jersey.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*: Sage Publications.
- Hair Jr, J. F., & Lukas, B. (2014). *Marketing research* (Vol. 2): McGraw-Hill Education Australia.

- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*: SAGE Publications.
- Hallingby, H. K. (2016). "The status of the mobile phone number as general purpose identifier—elaboration on cases from Norway and Pakistan". 27th European Regional Conference of the International Telecommunications Society (ITS), Cambridge, United Kingdom, 7th - 9th September 2016
- Hannabuss, S. (1998). Bullying at work. *Library Management*, 19(5), 304-310.
- Hannerz, H., Tüchsen, F., & Kristensen, T. S. (2002). Hospitalizations among employees in the Danish hotel and restaurant industry. *The European Journal of Public Health*, 12(3), 192-197.
- Hassan, K. H., & Lee, Y. Z. (2015). Sexual Harassment in the Workplace: Selected Court Cases and New Legal Provisions in Malaysia. *Asian Social Science*, 11(16), 9-14.
- Hauge, L. J., Skogstad, A., & Einarsen, S. (2009). Individual and situational predictors of workplace bullying: Why do perpetrators engage in the bullying of others? *Work & Stress*, 23(4), 349-358.
- Hayes, A. F. (2013). *Methodology in the social sciences: Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY, US: Guilford Press.
- Henseler, J., & Chin, W. W. (2010). A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modeling. *Structural Equation Modeling*, 17(1), 82-109.
- Henseler, J., & Fassott, G. (2010). Testing moderating effects in PLS path models: An illustration of available procedures. In *Handbook of partial least squares* (pp. 713-735). Springer, Berlin, Heidelberg.
- Hinduja, S., & Patchin, J. W. (2007). Offline consequences of online victimization: School violence and delinquency. *Journal of school violence*, 6(3), 89-112.
- Hoel, H. (2002). *Bullying at work in Great Britain*. University of Manchester: UMIST.
- Hoel, H., & Cooper, C. L. (2000). *Destructive conflict and bullying at work*: Manchester School of Management, UMIST Manchester.
- Hoel, H., Cooper, C. L., & Faragher, B. (2001). The experience of bullying in Great Britain: The impact of organizational status. *European Journal of Work and Organizational Psychology*, 10(4), 443-465. doi:10.1080/13594320143000780
- Hoel, H., & Salin, D. (2003). 10 Organisational antecedents of workplace bullying. *Bullying and emotional abuse in the workplace*, 1(1), 221-236..
- Hoff, D. L., & Mitchell, S. N. (2009). Cyberbullying: Causes, effects, and remedies. *Journal of Educational Administration*, 47(5), 652-665.
- Hogh, A., Mikkelsen, E. G., & Hansen, A. M. (2011). Individual consequences of workplace bullying/mobbing. *Bullying and harassment in the workplace: Developments in theory, research, and practice*, 2(1), 107-128.

- Houshmand, M., O'Reilly, J., Robinson, S., & Wolff, A. (2012). Escaping bullying: The simultaneous impact of individual and unit-level bullying on turnover intentions. *Human Relations*, 65(7), 901-918.
- Hussain, H., & Aslam, Q. (2015). Workplace Bullying and Employee Performance among Bank Personnel in Pakistan. *The Lahore Journal of Business* (Springer), 3 (2), 59-78
- Hutchinson, M., & Hurley, J. (2013). Exploring leadership capability and emotional intelligence as moderators of workplace bullying. *Journal of Nursing Management*, 21(3), 553-562.
- ILO NATLEX. [http://www.ilo.org/dyn/natlex/natlex\\_browse.details?p\\_lang=en](http://www.ilo.org/dyn/natlex/natlex_browse.details?p_lang=en) [Accessed on 11 December, 2012]
- Ilongo, F. N. (2016). Workplace bullying as 'anti-positive psychology' in institutions of higher learning.
- Imtiaz, H., Sarfraz, H., Xie, Y. B., Muzammil, A., Muhammad, M. (2016). Empirical Analysis of Pakistan Hotel industry based on SWOT Model. *Journal of Tourism, Hospitality and Sports*, 19(1), 2312-5179
- International Labor Organization (2012). 'National Guidelines in the Philippines—Harassment in the Workplace'. <http://www.ilo.org/public/english/employment/gems/eeo/guide/p> [Accessed on 7 June, 2012]
- Ireland, J. L., Boustead, R., & Ireland, C. A. (2005). Coping style and psychological health among adolescent prisoners: a study of young and juvenile offenders. *Journal of Adolescence*, 28(3), 411-423.
- Jacobs, P., Flanigen, E., Jansen, J., & van Bakkum, H. (2001). *Introduction to zeolite science and practice* (Vol. 137): Elsevier.
- James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological bulletin*, 81(12), 1096-1112.
- James, L. R., Joyce, W. F., & Slocum, J. W. (1988). Comment: Organizations do not cognize. *Academy of management review*, 13(1), 129-132.
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of consumer research*, 30(2), 199-218.
- Jenaro, C., Flores, N., & Arias, B. (2007). Burnout and coping in human service practitioners. *Professional psychology: research and practice*, 38(1), 80-87.
- Johannesson, R. E. (1973). Some problems in the measurement of organizational climate. *Organizational behavior and human performance*, 10(1), 118-144.
- Jones, A. P., & James, L. R. (1979). Psychological climate: Dimensions and relationships of individual and aggregated work environment perceptions. *Organizational behavior and human performance*, 23(2), 201-250.

- Jordan, M. I. (2004). Graphical models. *Statistical Science*, 19(1), 140-155.
- Joreskog, K. G. (1969). Statistical analysis of sets of congeneric tests. *ETS Research Bulletin Series*, 1969(2), 1-41.
- Juvonen, J., & Gross, E. F. (2008). Extending the school grounds?—Bullying experiences in cyberspace. *Journal of School health*, 78(9), 496-505.
- Kangis, P., Gordon, D., & Williams, S. (2000). Organisational climate and corporate performance: an empirical investigation. *Management decision*, 38(8), 531-540.
- Katzer, C., Fetchenhauer, D., & Belschak, F. (2009). Cyberbullying: Who are the victims? A comparison of victimization in Internet chatrooms and victimization in school. *Journal of Media Psychology*, 21(1), 25-36.
- Keashly, L., & Harvey, S. (2005). Emotional Abuse in the Workplace. In S. Fox & P. E. Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 201-235). Washington, DC, US: American Psychological Association.
- Keith, S., & Martin, M. E. (2005). Cyber-bullying: Creating a culture of respect in a cyber world. *Reclaiming children and youth*, 13(4), 224-228.
- Kelloway, E. K., & Day, A. L. (2005). Building healthy workplaces: what we know so far. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 37(4), 223-235.
- Kiesler, S., Siegel, J., & McGuire, T. W. (1984). Social psychological aspects of computer-mediated communication. *American psychologist*, 39(10), 1123-1134.
- Kivimäki, M., Elovainio, M., & Vahtera, J. (2000). Workplace bullying and sickness absence in hospital staff. *Occupational and environmental medicine*, 57(10), 656-660.
- Klein, K. J., Bliese, P. D., Kozolowski, S. W., Dansereau, F., Gavin, M. B., Griffin, M. A., . . . Bligh, M. C. (2000). Multilevel analytical techniques: Commonalities, differences, and continuing questions.
- Kline, R. B. (2005). *Methodology in the social sciences: Principles and practice of structural equation modeling*. New York: Guilford Press.
- Knapp, H., & Kirk, S. A. (2003). Using pencil and paper, Internet and touch-tone phones for self-administered surveys: does methodology matter? *Computers in Human Behavior*, 19(1), 117-134.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (IJeC)*, 11(4), 1-10.
- Koh, P. S., Laplante, S. K., & Tong, Y. H. (2007). Accountability and value enhancement roles of corporate governance. *Accounting & Finance*, 47(2), 305-333.
- Konar, R., Kumar, J., & Hussain, K. (2014). Determinants of the Emerging Terrorist Threats to Luxury Hotels: A Case Study of Pakistan. *TEAM Journal of Hospitality and Tourism*, 11(1), 41-53.

- Kopelman, R. E., Brief, A., & Guzzo, R. (1990). The role of climate and culture in productivity. En B. Schneider (Ed.), *Organizational climate and culture*, 1(1), 282-318).
- Kowalski, R. M., Toth, A., & Morgan, M. (2018). Bullying and cyberbullying in adulthood and the workplace. *The Journal of social psychology*, 158(1), 64-81.
- Koys, D. J., & DeCotiis, T. A. (1991). Inductive measures of psychological climate. *Human relations*, 44(3), 265-285.
- Kraft, E., & Wang, J. (2010). An exploratory study of the cyberbullying and cyberstalking experiences and factors related to victimization of students at a public liberal arts college. *International Journal of Technoethics (IJT)*, 1(4), 74-91.
- Krasner, M. S., Epstein, R. M., Beckman, H., Suchman, A. L., Chapman, B., Mooney, C. J., & Quill, T. E. (2009). Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *Jama*, 302(12), 1284-1293.
- Kumar, S., & Phrommathed, P. (2005). Research methodology (pp. 43-50). US; Springer. Data retrieved from <http://link.springer.com/chapter/10.1007/0-387-23273-7>.
- Kundi, G. M., Nawaz, A., Akhtar, R., & MPhil Student, I. (2014). Digital revolution, cyber-crimes and cyber legislation: A challenge to governments in developing countries. *Journal of Information Engineering and Applications*, 4(4), 61-71.
- Lamontagne, M., Kennedy, M. J., & Beaulé, P. E. (2009). The effect of cam FAI on hip and pelvic motion during maximum squat. *Clinical orthopaedics and related research*, 467(3), 645-650.
- Law, K. S., & Wong, C.-S. (1999). Multidimensional constructs M structural equation analysis: An illustration using the job perception and job satisfaction constructs. *Journal of Management*, 25(2), 143-160.
- Law, R., Dollard, M. F., Tuckey, M. R., & Dormann, C. (2011). Psychosocial safety climate as a lead indicator of workplace bullying and harassment, job resources, psychological health and employee engagement. *Accident Analysis & Prevention*, 43(5), 1782-1793.
- Lawrence, F. J. (2015). *Prevalence and consequences of negative workplace cyber communications in the Australian public sector*. Queensland University of Technology.
- Lazarus, R. S. (1991). *Emotion and adaptation*: Oxford University Press on Demand.
- Leck, J. D., & Galperin, B. L. (2006). Worker responses to bully bosses. *Canadian Public Policy/Analyse de Politiques*, 32(1), 85-97.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of Aggressive Behavior in Experimentally Created "Social Climates". *The Journal of Social Psychology*, 10(2), 269-299.
- Lewis, S. (2015). Qualitative inquiry and research design: Choosing among five approaches. *Health promotion practice*, 16(4), 473-475.

- Leymann, H. (1996). The content and development of mobbing at work. *European journal of work and organizational psychology*, 5(2), 165-184.
- Liefooghe, A. P., & Mac Davey, K. (2001). Accounts of workplace bullying: The role of the organization. *European journal of work and organizational psychology*, 10(4), 375-392.
- Lindroth, S., & Leymann, H. (1993). Vuxenmobbing av män i barnomsorgen: Om mäns jämställdhet i ett kvinnodominerat yrke/Adult bullying of men in childcare (Rep. No. 6). *Stockholm: Arbeterskrydd-styrelsens böcker*.
- Litwin, G. H., & Stringer, R. A. (1968). *Motivation and Organizational Climate [By] George H. Litwin [And] Robert A. Stringer, Jr.*: Division of Research, Graduate School of Business Administration, Harvard University.
- Llewellyn, C. (2009). Legal Q&A: Cyber-bullying in the workplace. *Personnel Today* (September 15).
- Lomax, R. G., & Schumacker, R. E. (2012). *A beginner's guide to structural equation modeling*: Routledge Academic New York, NY.
- Lowry, P. B., & Gaskin, J. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. *IEEE transactions on professional communication*, 57(2), 123-146.
- Lutgen-Sandvik, P., Tracy, S. J., & Alberts, J. K. (2007). Burned by bullying in the American workplace: Prevalence, perception, degree and impact. *Journal of Management Studies*, 44(6), 837-862.
- MacDavitt, K., Chou, S.-S., & Stone, P. W. (2007). Organizational climate and health care outcomes. *The Joint Commission Journal on Quality and Patient Safety*, 33(11), 45-56.
- Maria, K., & Ayesha, A. (2016). The Protection against Harassment of Women at the Workplace Act 2010: A Legislative Review. *LUMS Law Journal* 2016: 3(1).
- Martins, N., & Von der Ohe, H. (2003). Organisational climate measurement-new and emerging dimensions during a period of transformation. *South African journal of labour relations*, 27(3\_4), 41-59.
- Maslach, C., & Jackson, S. E. (1984). Burnout in organizational settings. *Applied social psychology annual*.
- Maslachi, C., Jackson, S. E., & Leiter, M. P. (1996). *MBI Maslach Burnout Inventory*: CPP, Incorporated.
- Matell, M. S., & Jacoby, J. (1971). Is there an optimal number of alternatives for Likert scale items? Study I: Reliability and validity. *Educational and psychological measurement*, 31(3), 657-674.
- Mathisen, G. E., Einarsen, S., & Mykletun, R. (2008). The occurrences and correlates of bullying and harassment in the restaurant sector. *Scandinavian Journal of Psychology*, 49(1), 59-68.

- Matthiesen, S. B., & Einarsen, S. (2004). Psychiatric distress and symptoms of PTSD among victims of bullying at work. *British journal of guidance & counselling*, 32(3), 335-356.
- Maxwell, S. E., Cole, D. A., & Mitchell, M. A. (2011). Bias in cross-sectional analyses of longitudinal mediation: Partial and complete mediation under an autoregressive model. *Multivariate Behavioral Research*, 46(5), 816-841.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27(4), 267-298.
- Mayer, J. D., Roberts, R. D., & Barsade, S. G. (2008). Human abilities: Emotional intelligence. *Annu. Rev. Psychol.*, 59, 507-536.
- McCormack, D., Casimir, G., Djurkovic, N., & Yang, L. (2006). The concurrent effects of workplace bullying, satisfaction with supervisor, and satisfaction with co-workers on affective commitment among schoolteachers in China. *International Journal of Conflict Management*, 17(4), 316-331.
- McKay, R., Arnold, D. H., Fratzl, J., & Thomas, R. (2008). Workplace bullying in academia: A Canadian study. *Employee Responsibilities and Rights Journal*, 20(2), 77-100.
- Meek, C. B. (2004). The dark side of Japanese management in the 1990s: Karoshi and ijime in the Japanese workplace. *Journal of managerial psychology*, 19(3), 312-331.
- Mikkelsen, E. G. e., & Einarsen, S. (2002). Basic assumptions and symptoms of post-traumatic stress among victims of bullying at work. *European journal of work and organizational psychology*, 11(1), 87-111.
- Milczarek, M., Vartia, M., & Pakkin, K. (2010). European Agency for Safety and Health at Work, EU-OSHA. *Workplace Violence and Harassment: a European Picture. European Risk Observatory Report. Luxembourg: Publications Office of the European Union.*
- Mitchell, R. (1993). Path analysis: Pollination. Pages 211–231 in SM Scheiner & JG Gurevitch, editors. *Design and analysis of ecological experiments*: Chapman and Hall, New York.
- Mohammed, F. (2016). PECA 2015: A Critical Analysis of Pakistan's Proposed Cybercrime Bill. *UCLA J. Islamic & Near EL*, 15-71.
- Montazeri, A., Harirchi, A. M., Shariati, M., Garmaroudi, G., Ebadi, M., & Fateh, A. (2003). The 12-item General Health Questionnaire (GHQ-12): translation and validation study of the Iranian version. *Health and quality of life outcomes*, 1(1), 1-66.
- Moran, E. T., & Volkwein, J. F. (1992). The cultural approach to the formation of organizational climate. *Human relations*, 45(1), 19-47.
- Moreno-Jiménez, B., Rodríguez-Muñoz, A., Salin, D., & Morante, M. (2008). Workplace bullying in southern Europe: Prevalence, forms and risk groups in a Spanish sample. *International Journal of Organisational Behaviour*, 13(2), 95-109.

- Muijs, D. (2010). *Doing quantitative research in education with SPSS*: Sage Publications.
- Murray, J. S. (2009). Workplace bullying in nursing: A problem that can't be ignored. *Medsurg Nursing*, 18(5), 273-276.
- Nair, R. (2006). Climate studies and associated best practices to improve climate issues in the workplace. *Women in Engineering ProActive Network*.
- Naseer, S., & Khan, M. B. (2015). The Deleterious Effects of Workplace Bullying on Employee's Job Strains in Pakistan. *European Journal of Business and Management*, 7(4), 180-190.
- Niedhammer, I., David, S., & Degioanni, S. (2006). Association between workplace bullying and depressive symptoms in the French working population. *Journal of psychosomatic research*, 61(2), 251-259.
- Nielsen, M. B., Skogstad, A., Matthiesen, S. B., Glasø, L., Aasland, M. S., Notelaers, G., & Einarsen, S. (2009). Prevalence of workplace bullying in Norway: Comparisons across time and estimation methods. *European journal of work and organizational psychology*, 18(1), 81-101.
- Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide*. Cambridge University Press.
- Notar, C. E., Padgett, S., & Roden, J. (2013). Cyberbullying: A review of the literature. *Universal Journal of Educational Research*, 1(1), 1-9.
- Novak, J. D. (1998). *Learning, creating, and using knowledge*: Mahwah, NJ: Erlbaum.
- O'Moore, M., Seigne, E., McGuire, L., & Smith, M. (1998). Victims of bullying at work in Ireland. *Journal of Occupational Health and Safety Australia and New Zealand*, 14(1), 569-574.
- Organisation for Economic Co-operation and Development. (1999). *Implementing the OECD Jobs Strategy: Assessing performance and policy*. Organisation for Economic Co-operation and Development.
- Oginska-Bulik, N. (2005). Emotional intelligence in the workplace: Exploring its effects on occupational stress and health outcomes in human service workers. *International journal of occupational medicine and environmental health*, 18(2), 167-175.
- Ojedokun, O., & Idemudia, E. (2013). The moderating role of emotional intelligence between PEN personality factors and cyberbullying in a student population. *Life Science Journal*, 10(3), 1924-1930.
- Okoiye, O. E., Anayochi, N. N., & Onah, A. T. (2015). Moderating effect of cyber bullying on the psychological well-being of in-school adolescents in Benin Edo State Nigeria. *European Journal of Sustainable Development*, 4(1), 109-118.
- Parker, R., & Aggleton, P. (2003). HIV and AIDS-related stigma and discrimination: a conceptual framework and implications for action. *Social science & medicine*, 57(1), 13-24.

- Parkins, I. S., Fishbein, H. D., & Ritchey, P. N. (2006). The influence of personality on workplace bullying and discrimination. *Journal of Applied Social Psychology*, 36(10), 2554-2577.
- Parveen, R. (2010). Violence against Women in Pakistan. Islamabad: Aurat Foundation.
- Patah, M. O. R. A., Abdullah, R., Naba, M. M., Zahari, M. S. M., & Radzi, S. M. (2010). Workplace bullying experiences, emotional dissonance and subsequent intentions to pursue a career in the hospitality industry. *Journal of Global Business and Economics*, 1(1), 15-26.
- Patten, K. (2017). Law, Workplace Bullying and Moral Urgency. *Industrial Law Journal*, 47(2), 169–191.
- Payne, R. L. (1976). Organizational structure and climate. *Handbook of industrial and organizational psychology*, 1125-1173.
- Perreault, S. (2011). Self-reported Internet victimization in Canada, 2009. *Juristat: Canadian Centre for Justice Statistics*, 1G.
- Petrides, K., & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. *Journal of Applied Social Psychology*, 36(2), 552-569.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British journal of psychology*, 98(2), 273-289.
- Piñuel, I., & Cantero, A. O. (2002). La incidencia del mobbing o acoso psicológico en el trabajo en España: Resultados del barómetro CISNEROS II sobre violencia en el entorno laboral. *Lan harremanak: Revista de relaciones laborales*, 1(7), 35-62.
- Piotrowski, C. (2012). From workplace bullying to cyberbullying: The enigma of e-harassment in modern organizations. *Organization Development Journal*, 30(4), 1- 44.
- Power, J. L., Brotheridge, C. M., Blenkinsopp, J., Bowes-Sperry, L., Bozionelos, N., Buzády, Z., . . . Leighton, C. (2013). Acceptability of workplace bullying: A comparative study on six continents. *Journal of Business Research*, 66(3), 374-380.
- Pradhan-Malla, S. (2005). Sexual harassment in the workplace in Asia. In *Violence against women: Good practices in combating and eliminating violence against women. Expert Group Meeting. UN Division for the Advancement of Women in collaboration with: UN Office on Drugs and Crime Vienna, Austria* 17(1), 1-10.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers*, 36(4), 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891.

- Privitera, C., & Campbell, M. A. (2009). Cyberbullying: the new face of workplace bullying? *CyberPsychology & Behavior*, 12(4), 395-400.
- Quine, L. (1999). Workplace bullying in NHS community trust: staff questionnaire survey. *Bmj*, 318(7178), 228-232.
- Rai, A., & Agarwal, U. A. (2017). Workplace bullying among Indian managers: prevalence, sources and bystanders' reactions. *International Journal of Indian Culture and Business Management*, 15(1), 58-81.
- Raskauskas, J. (2006). *Bullying in Academia: An examination of workplace bullying in New Zealand universities*. Paper presented at the American Education Research Association conference.
- Rasli, A. (2006). *Data Analysis and Interpretation-A Handbook for Postgraduate Social Scientists*: Penerbit UTM.
- Rayner, C., & Hoel, H. (1997). A summary review of literature relating to workplace bullying. *Journal of community & applied social psychology*, 7(3), 181-191.
- Razzaghian, M., & Ghani, U. (2014). Effect of Workplace Bullying on Turnover Intention of Faculty Members: A Case of Private Sector Universities of Khyber Pakhtunkhwa, Pakistan. *Business & Economic Review*, 6(1), 40-51.
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of research in Marketing*, 26(4), 332-344.
- Rigdon, E. E., Schumacker, R. E., & Wothke, W. (1998). A comparative review of interaction and nonlinear modeling. *Interaction and nonlinear effects in structural equation modeling*, 1-16.
- Rigdon, E. E. (2014). Rethinking partial least squares path modeling: breaking chains and forging ahead. *Long Range Planning*, 47(3), 161-167.
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). *Qualitative research practice: A guide for social science students and researchers*: Sage Publications.
- Robson, C. (2002). Real world research. 2nd. Edition. *Blackwell Publishing*. Malden.
- Sadrudin, M. M. (2013). Sexual Harassment at Workplace in Pakistan-Issues and Remedies about the Global Issue at Managerial Sector. *Journal of Managerial Sciences*, 7(1), 113-125.
- Sajjad, A., Jillani, A., & Raziq, M. M. (2018). Sustainability in the Pakistani hotel industry: an empirical study. *Corporate Governance: The International Journal of Business in Society*, 18(4), 714-727.
- Salin, D. (2003). Ways of explaining workplace bullying: A review of enabling, motivating and precipitating structures and processes in the work environment. *Human relations*, 56(10), 1213-1232.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, 9(3), 185-211.

- Sarstedt, M., Ringle, C. M., Henseler, J., & Hair, J. F. (2014). On the emancipation of PLS-SEM: A commentary on Rigdon (2012). *Long range planning*, 47(3), 154-160.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), 105-115.
- Sattler, H., Völckner, F., Riediger, C., & Ringle, C. M. (2010). The impact of brand extension success drivers on brand extension price premiums. *International Journal of Research in Marketing*, 27(4), 319-328.
- Saunders, M. N. (2011). *Research methods for business students*, 5/e: Pearson Education India.
- Savicki, V., Cooley, E., & Gjesvold, J. (2003). Harassment as a predictor of job burnout in correctional officers. *Criminal justice and behavior*, 30(5), 602-619.
- Schat, A. C., Kelloway, E. K., & Desmarais, S. (2005). The Physical Health Questionnaire (PHQ): construct validation of a self-report scale of somatic symptoms. *Journal of occupational health psychology*, 10(4), 363-381.
- Schaufeli, W. B., Bakker, A. B., Hoogduin, K., Schaap, C., & Kladler, A. (2001). On the clinical validity of the Maslach Burnout Inventory and the Burnout Measure. *Psychology & health*, 16(5), 565-582.
- Schenk, A. M., & Fremouw, W. J. (2012). Prevalence, psychological impact, and coping of cyberbully victims among college students. *Journal of School Violence*, 11(1), 21-37.
- Schillewaert, N., & Meulemeester, P. (2005). Comparing Response Distributions of Offline and Online. *International Journal of Market Research*, 47(2), 163-178.
- Schneider, B. (2000). The psychological life of organizations. *Handbook of organizational culture and climate*, 1(1), 17-21.
- Schneider, B., & Reichers, A. E. (1983). On the etiology of climates. *Personnel psychology*, 36(1), 19-39.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and individual differences*, 25(2), 167-177.
- Sekaran, O. (2011). *Research methods in management*. Tehran: Governmental Management Training Center.
- Sekaran, U., & Bougie, R. (2003). *Research Methods for Business: A Skill-building Approach*. USA: John Willey & Sons.
- Shanafelt, T. D., West, C., Zhao, X., Novotny, P., Kolars, J., Habermann, T., & Sloan, J. (2005). Relationship between increased personal well-being and enhanced empathy among internal medicine residents. *Journal of General Internal Medicine*, 20(7), 559-564.

- Shariff, S. (2005). Cyber-dilemmas in the new millennium: School obligations to provide student safety in a virtual school environment. *McGill Journal of Education*, 40(3), 457-477.
- Sheehan, M. (1999). Workplace bullying: Responding with some emotional intelligence. *International journal of manpower*, 20(1/2), 57-69.
- Shirom, A. (2005). Reflections on the study of burnout The views expressed in Work & Stress commentaries are those of the author (s), and do not necessarily represent those of any other person or organization, or of the journal. *Work & Stress*, 19(3), 263-270.
- Simpson, R., & Cohen, C. (2004). Dangerous work: The gendered nature of bullying in the context of higher education. *Gender, Work & Organization*, 11(2), 163-186.
- Slonje, R., & Smith, P. K. (2008). Cyberbullying: Another main type of bullying? *Scandinavian journal of psychology*, 49(2), 147-154.
- Smith, P. K. (2012). Cyberbullying and cyber aggression. In *Handbook of school violence and school safety* (pp. 111-121). Routledge.
- Smith, P. K. (2018). Commentary: Types of bullying, types of intervention: reflections on Arseneault (2018). *Journal of child psychology and psychiatry*, 59(4), 422-423.
- Snyman, R., & Loh, J. M. (2015). Cyberbullying at work: The mediating role of optimism between cyberbullying and job outcomes. *Computers in Human Behavior*, 53, 161-168.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological methodology*, 13, 290-312.
- Sproull, L., & Kiesler, S. (1986). Reducing social context cues: Electronic mail in organizational communication. *Management science*, 32(11), 1492-1512.
- Stashevsky, S., & Lampert, S. (2014). Does the Likert scale fit the information age? *Values in Shock The role of contrasting management, economic, and religious paradigms in the workplace*, 1-467.
- Statistics, N. C. f. E. (2013). The nation's report card: A first look: 2013 mathematics and reading. *NCES 2014-451*.
- State Bank of Pakistan (2003-2004). Annual Report of State Bank. Karachi.
- Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. *Administrative science quarterly*, 46-56.
- Steinman, S. (2013). Workplace violence in the health sector. *Country Case Study: South Africa*. Geneva: International Labour Organisation/International Council of Nurses/WHO/Public Services International Joint Programme Working Paper, viewed, 9.
- Strom, P. S., & Strom, R. D. (2005). When teens turn cyberbullies. *The Education Digest*, 71(4), 35-41.

- Stys, Y., & Brown, S. L. (2004). A review of the emotional intelligence literature and implications for corrections. *Research branch correctional service of Canada*, 10.
- Suliman, A. M., & Abdulla, M. H. (2005). Towards a high-performance workplace: managing corporate climate and conflict. *Management decision*, 43(5), 720-733.
- Svyantek, D. J., & Afzalur Rahim, M. (2002). Links between emotional intelligence and behavior in organizations: Findings from empirical studies. *The international journal of organizational analysis*, 10(4), 299-301.
- Tagiuri, R., Litwin, G. H., & Barnes, L. B. (1968). *Organizational climate: Explorations of a concept*: Division of Research, Graduate School of Business Administration, Harvard University.
- Tangem, S (2017). The Effect of Workplace Bullying And Sexual Harrassment on Counterproductive Workplace Behaviour A Study on Bangladeshi Private Banks. *International Journal of Business, Economics and Law*, Vol. 14, Issue 5 (December.) ISSN 2289-1552
- Tedeschi, J. T., & Felson, R. B. (1994). *Violence, aggression, and coercive actions*: American Psychological Association.
- Tehrani, N. (2004). Bullying: a source of chronic post traumatic stress? *British Journal of Guidance & Counselling*, 32(3), 357-366.
- Torkelson, E., & Muhonen, T. (2004). The role of gender and job level in coping with occupational stress. *Work & Stress*, 18(3), 267-274.
- Trijueque, D. G., & Gómez, J. L. G. (2010). Profiles of social skills, coping strategies, and perceived social support in mobbed workers. *Psicopatología Clínica Legal y Forense*, 10(1), 7-22.
- Tsaousis, I., & Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health functioning. *Stress and health*, 21(2), 77-86.
- Tsuno, K., Kawakami, N., Tsutsumi, A., Shimazu, A., Inoue, A., Odagiri, Y., . . . Kawachi, I. (2015). Socioeconomic determinants of bullying in the workplace: a national representative sample in Japan. *PloS one*, 10(3), e0119435.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of personality and social psychology*, 86(2), 320-333.
- Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information technology theory and application*, 11(2), 5-40.
- Van Heugten, K. (2013). Resilience as an underexplored outcome of workplace bullying. *Qualitative health research*, 23(3), 291-301.
- Vartia, M. (1996). The sources of bullying—psychological work environment and organizational climate. *European journal of work and organizational psychology*, 5(2), 203-214.

- Verdasca, A. T. (2011). Workplace bullying, power and organizational politics: A study of the Portuguese banking sector. SCOPUS Working Papers. Lisbon.
- Verkuil, B., Atasayi, S., & Molendijk, M. L. (2015). Workplace bullying and mental health: a meta-analysis on cross-sectional and longitudinal data. *PloS one*, 10(8), e0135225.
- Vettori, S. & Nicolaides, A. (2016). "Sexual harassment at the workplace in the hospitality industry", *African Journal of Hospitality, Tourism and Leisure*, 5(2), 1-15.
- Vezina, M., Cloutier, E., Stock, S., Lippel, K., Fortin, É., Delisle, A., . . . Vézina, S. (2011). Enquête québécoise sur des conditions de travail, d'emploi, et de santé et de sécurité du travail (EQCOTESST). *Études et recherches/Rapport R-691*. Montréal: IRSST.
- Visagie, J. C., Havenga, W., Linde, H., & Botha, A. (2012). The prevalence of workplace bullying in a South African mining company. *South African Journal of Labour Relations*, 36(2), 62-75.
- West, B., Foster, M., Levin, A., Edmison, J., & Robibero, D. (2014). Cyberbullying at work: In search of effective guidance. *Laws*, 3(3), 598-617.
- Westhues, K. (2002). At the mercy of the MOB. *OH & S Canada*, 18(8), 30-30.
- Willard, N. (2006). Cyberbullying and cyberthreats. Eugene, OR: Center for Safe and Responsible Internet Use.
- Wilson, M. G., Dejoy, D. M., Vandenberg, R. J., Richardson, H. A., & McGrath, A. L. (2004). Work characteristics and employee health and well-being: Test of a model of healthy work organization. *Journal of occupational and organizational psychology*, 77(4), 565-588.
- Wimmer, S. (2009). Views on gender differences in bullying in relation to language and gender role socialisation. *Griffith Working Papers in Pragmatics and Intercultural Communication*, 2(1), 18-26.
- Wold, H. (1985). Partial least squares. *Encyclopedia of statistical sciences*.
- World Health Organization (2007). *Multiaxial presentation of the ICD-10 for use in adult psychiatry*. Cambridge University Press.
- Wright, M. F. (2015). Cyber victimization and adjustment difficulties: The mediation of Chinese and American adolescents' digital technology usage. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 9(1), article, 7.
- Yadav, M., Jhunjunwala, S., Phung, Q. T., Lupardus, P., Tanguay, J., Bumbaca, S., . . . Weinschenk, T. (2014). Predicting immunogenic tumour mutations by combining mass spectrometry and exome sequencing. *Nature*, 515(7528), 572-576.
- Yasser Khan, S. F. A., Zahid Mehmood, Muhammad Khalil Shahid, Muhammad Ibrahim. (2012). Analysis of Consumer Perception towards Telecommunication Services. *Journal of Social and Development Sciences*, Vol. 3, ((ISSN 2221-1152)), 88-98.

- Ybarra, M. L., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry*, 45(7), 1308-1316.
- Yılmaz, G., & Uzunçarşılı-Soydaş, A. (2006). Bullying Among Turkish Bank Employees and Its Relation with Sick Leave. Paper presented at the Proceedings of Asia Pacific Management Conference.
- Yoo, G., & Lee, S. (2018). It Doesn't End There: Workplace Bullying, Work-to-Family Conflict, and Employee Well-Being in Korea. *International journal of environmental research and public health*, 15(7), 1-13.
- Yousaf, R., & Schmiede, R. (2016). Harassment act implementation in higher education institutions. *Open Journal of Leadership*, 5(1), 8-19.
- Zabrodska, K., & Kveton, P. (2013). Prevalence and forms of workplace bullying among university employees. *Employee Responsibilities and Rights Journal*, 25(2), 89-108.
- Zapf, D., & Einarsen, S. (2005). Mobbing at Work: Escalated Conflicts in Organizations.
- Zapf, D., & Einarsen, S. (2011). Individual antecedents of bullying: Victims and perpetrators. *Bullying and harassment in the workplace: Developments in theory, research, and practice*, 1(1), 177-200.
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research*, 37(2), 197-206.
- Zhao, R., Zhou, A., & Mao, K. (2016). *Automatic detection of cyberbullying on social networks based on bullying features*. Paper presented at the Proceedings of the 17th international conference on distributed computing and networking.
- Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2012). Business research methods: Cengage Learning. *H4 B. Journal of Small Business Management*, 44(2), 268-284.
- Zohar, D. (1980). Safety climate in industrial organizations: theoretical and applied implications. *Journal of Applied Psychology*, 65(1), 96-102.

## **LIST OF PUBLICATIONS AND PAPERS PRESENTED**

### **CONFERENCES**

Mehwish Iftikhar & Loo-See Beh. “Prevalence Level and Predictors of Face to Face and Cyberbullying in Selected Service Sectors of Pakistan”, Asia International Multidisciplinary Conference May, 2018.

Mehwish Iftikhar & Loo-See Beh. “Workplace Traditional and Cyberbullying and Employee Health Outcomes: Emotional Intelligence a Coping Strategy”, Asia International Multidisciplinary Conference December, 2018.

### **PUBLICATIONS**

Mehwish Iftikhar & Loo-See Beh (2018). "Prevalence Level and Predictors of Face to Face and Cyberbullying in Selected Service Sectors of Pakistan". *International Journal of Engineering & Technology*, 7 (2.29), 1082-1088. (SCOPUS-Indexed)