

University of Southampton Research Repository ePrints Soton

Copyright © and Moral Rights for this thesis are retained by the author and/or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder/s. The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given e.g.

AUTHOR (year of submission) "Full thesis title", University of Southampton, name of the University School or Department, PhD Thesis, pagination

UNIVERSITY OF SOUTHAMPTON

FACULTY OF LAW AND MANAGEMENT

School of Management

**Moral Hazard in a Moderated-Mediation Framework of Incentives and
Perceptions – A Case Study of the Higher Education Faculty in
Pakistan**

by

Shandana Shoaib

Thesis for the degree of Doctor of Philosophy

April 2015

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF LAW AND MANAGEMENT

School of Management

Doctor of Philosophy

MORAL HAZARD IN A MODERATED-MEDIATION FRAMEWORK OF
INCENTIVES AND PERCEPTIONS – A CASE STUDY OF THE HIGHER
EDUCATION FACULTY IN PAKISTAN

by **Shandana Shoaib**

One of the by-products of the establishment of the Higher Education Commission in Pakistan is the introduction of an incentive regime for the faculty. The existence of explicit incentives is a usual feature of the corporate sector, as it sits well with the commercial enterprise model. Simply pulling out features of the commercial enterprise model and trying to fit it into the formal education system, without any sound bedding and preparatory grounds, could not be accepted by sanity to get suitable outcomes. The purpose of the study is to introduce the concept of moral hazard in a moderated-mediation framework of incentives, organizational justice perception, and reward expectancy to answer the research questions. To achieve the intended purpose, qualitative data were collected through semi-structured, face-to-face interviews from 19 top level management personnel of the chosen higher education institutions; using purposive sampling. NVivo 9 was used for analysis of the qualitative data. A detailed set of descriptive and inferential codes were generated, which were later braided into sub-themes and themes. Using the analytic strategies of pattern matching and cross-case analysis, a wide range of perceived moral hazards present in the faculty were revealed, along with the main determinants of this problem. The qualitative analysis also helped in the proper positioning of the constructs in the theoretical framework, as well as the operationalisation of the latent constructs used in the survey. Quantitative data collection followed the qualitative phase – using a survey. The proposed relationships in the theoretical framework were tested with a sample of 311 academics; using simple random sampling, via causal models and Structural Equation Modelling, and found that incentives might boost the apparent performance, but not necessarily the intended performance.

The effect of incentives on the moral hazard tendency of employees has been confirmed by the results of both qualitative and quantitative data. The incentive problem surfaced up as one of the sub-themes in the perceived determinants of moral hazard. Moreover, the quantitative results confirm that disposition towards incentives has a direct, an indirect, and a conditional indirect effect on the employee tendency towards moral hazard. Examining the conditional indirect effect of incentives on moral hazard tendency

serves the purpose of “critical realism”, which looks beyond the occurrence of events by analysing the underlying causal mechanism of the problem of moral hazard in multitasking professionals. The results have important implications for managers, academicians, and policy makers for mitigating adverse behaviour in the employees, through proper use of incentives.

Contents

Declaration of Authorship	xvii
Acknowledgements	xix
Nomenclature	xxi
1 Introduction to the Study	1
1.1 Introduction	1
1.2 Background of the Study	1
1.3 Gap in the Literature	6
1.4 Problem Statement	8
1.5 Aim of the Study	9
1.6 Objectives of the Study	9
1.7 Research Questions	9
1.8 Theoretical Framework	10
1.8.1 Disposition Towards Incentives	11
1.8.2 Organizational Justice Perception	13
1.8.3 Reward Expectancy	14
1.8.4 Moral Hazard Tendency	15
1.9 Scheme of the Study	17
1.10 Conclusion	18
2 Literature Review	19
2.1 Introduction	19
2.2 Importance of Human Capital in Modern Firms	20
2.3 Agency Theory in Organizational Context	23
2.3.1 Criticism Against Agency Theory	27
2.3.2 Significance of Contract in Agency Relationships	27
2.3.3 Problems of Contracting	29
2.4 Contemporary Pay for Professionals	32
2.5 The Nature of Incentive Contracts – Do these Act as Motivation Tools?	35
2.6 Challenges for Designing Incentive Contracts	36
2.7 Do Incentives Matter in the Education Sector?	41
2.8 Equity Theory and its Role in Employee Perception	42
2.9 Expectancy Theory and Employee Perception	46
2.10 What is Organizational Justice?	49
2.11 The Problem of Performance Measurement in the Educators	51
2.12 Moral Hazard in the Context of Education	55
2.13 Pay System in the Higher Education Sector	61

2.14	Setting the Stage for Hypotheses	64
2.14.1	Relationship between Employee Disposition towards Incentives and Moral Hazard Tendency	64
2.14.2	The Effect of Incentives on Reward Expectancy	65
2.14.3	The Mediating Role of Reward Expectancy	66
2.14.4	The Rationale for Organizational Justice Perception as a Moderator	67
2.14.5	Conditional Indirect Effect of Disposition towards Incentives on Moral Hazard Tendency	67
2.15	Conclusion	70
3	The Research Design	71
3.1	Introduction	71
3.2	The Choice of Research Philosophy	71
3.2.1	What are the Underlying Traits of Critical Realism?	73
3.2.2	Looking at the Problem from the Lens of Critical Realist	74
3.2.3	The Relation of Critical Realism and Triangulation	76
3.3	Triangulation as the Research Method	76
3.4	Case Study as the Research Strategy	80
3.4.1	Case Study Design	80
3.4.2	Type of the Study	81
3.4.3	Why and How Exploratory and Explanatory?	83
3.4.4	Logic for Using Multiple-Case Study	84
3.4.5	Case and Unit of Analysis	85
3.5	Generalisation	85
3.6	Conclusion	86
4	Research Methodology	87
4.1	Introduction	87
4.2	Research Questions and Objectives	87
4.3	Case Selection for the Study	91
4.4	Reasons for Excluding Private Sector Universities	91
4.5	Case Vignettes	92
4.5.0.1	Case Study A: University of Peshawar	93
4.5.0.2	Case Study B: Agriculture University, Peshawar	93
4.5.0.3	Case Study C: University of Engineering and Technology, Peshawar	93
4.5.0.4	Case Study D: Islamia College University, Peshawar	94
4.5.0.5	Case Study E: Khyber Medical University	94
4.5.0.6	Case Study F: Institute of Management Sciences, Peshawar	94
4.6	Operational Measures	95
4.6.1	Organizational Justice Perception	95
4.6.2	Moral Hazard Tendency	96
4.6.3	Disposition Towards Incentives	97
4.6.4	Reward Expectancy	97
4.6.5	Control Variables	98
4.7	Data Collection from Primary Sources	100
4.7.1	Interviews	100
4.7.1.1	Structure of the Interviews	100
4.7.1.2	Sampling for the Interviews	101

4.7.1.3	Conducting the Interviews	101
4.7.1.4	Respondent Questions	102
4.7.2	Survey	105
4.7.2.1	Design of the Survey	105
4.7.2.2	Sampling for the Survey	105
4.7.2.3	Data Collection through Survey	106
4.7.3	Participant Observation	106
4.7.4	Pilot Study-Three Rounds of Pilot Testing	107
4.7.5	Data Collection from Secondary Sources	109
4.8	Issues and Challenges during Data Collection	109
4.9	Analysing the Evidence	110
4.10	Intertwining Qualitative and Quantitative Data	112
4.11	Addressing Quality Issues in the Case Study	112
4.11.1	Reliability	112
4.11.2	Construct Validity	113
4.11.3	Internal Validity	113
4.11.4	External Validity	114
4.12	Gaining Access to Cases	114
4.13	Ethical Issues	114
4.14	Conclusion	115
5	Qualitative Data Analysis Process	117
5.1	Introduction	117
5.2	The Power of Qualitative Analysis	117
5.3	Developing Causal Models for the Study	118
5.4	Qualitative Data Analysis	120
5.4.1	Data Sorting	120
5.4.2	Three Levels of Codes	120
5.4.3	Memos	125
5.4.4	Cross-Case Findings and Cross-Case Analysis	125
5.5	Conclusion	127
6	Depiction of the Problem of Moral Hazard in Educators	129
6.1	Introduction	129
6.2	Perceived Moral Hazards in the Faculty	129
6.2.1	Perceived Moral Hazards Related to Teaching	132
6.2.1.1	Lack of Punctuality	132
6.2.1.2	Outdated Knowledge and Inappropriate Methodology	136
6.2.1.3	Deception in Course Management	141
6.2.1.4	Indifference Towards Student Counselling	144
6.2.1.5	Cheating the Examination System	145
6.2.2	Perceived Moral Hazards in Research and Publication	150
6.2.2.1	Lack of Research Initiative	150
6.2.2.2	Inflating the Publication Count	154
6.2.2.3	Free-Riding	156
6.2.2.4	The Problem of Plagiarism	158
6.2.2.5	Indifference Towards Research Students	159
6.2.3	Perceived Other Academic Hazards	162
6.3	Summary and Critical Reflection on Cross-Case Analysis	164

6.4	Perceived Determinants of Moral Hazard	170
6.4.1	The Faculty is Asymmetrically Informed	172
6.4.2	Job Security and Pay Security	173
6.4.3	Lack of Clear and Explicit Job Description for Faculty	177
6.4.4	The Incentive Problem	179
6.4.5	Lack of Accountability	183
6.4.6	Missing Link between Pay and Performance	186
6.5	The Contingency Table	189
6.6	Managerial Implications of the Contingency Table	191
6.7	Summary and Critical Reflection on Cross-Case Analysis	191
6.8	Concluding the Problem of Moral Hazard in Educators	194
6.8.1	Conclusion	195
7	Quantitative Data Analysis Process	197
7.1	Introduction	197
7.2	Data Screening	197
7.3	Checking the Reliability	198
7.4	Sample Size Adequacy	198
7.5	Controlling for Common Method Bias Test	199
7.6	Conducting Factor Analysis	199
7.7	Multiple Regression Analysis	200
7.8	Testing the Data for Normality	201
7.8.1	The Box Plots	201
7.8.2	Testing Data for Skeweness and Kurtosis	202
7.9	Checking for Multicollinearity	202
7.10	R^2 and Adjusted R^2	202
7.11	Interpreting Regression Coefficients (B_i and β_i)	203
7.12	Statistical Modelling for Regression Analysis	203
7.12.1	Mediation Analysis	203
7.12.1.1	Conceptual and Statistical Modelling of Mediation	203
7.12.1.2	Steps for Testing Mediation as Suggested by Baron and Kenny (1986)	205
7.12.1.3	Interpreting the Regression Output for Mediation Model – (Baron and Kenny, 1986)	205
7.12.1.4	Estimation of the Mediation Effect in PROCESS	206
7.12.1.5	Customised PROCESS Command Structure	206
7.12.1.6	Interpreting the Regression Output for Mediation Model – (Hayes, 2013)	207
7.12.1.7	Sobel Testing for Indirect Effect	207
7.12.2	Moderation Analysis	207
7.12.2.1	Conceptual and Statistical Modelling of Moderation	208
7.12.2.2	Steps in Testing Moderation	210
7.12.2.3	Interpreting the Regression Output for Moderation Model	210
7.12.2.4	Estimation of the Moderation Model Using PROCESS	210
7.12.2.5	Customised PROCESS command structure	211
7.12.2.6	Interpreting the Regression Output for Moderation Model – (Hayes, 2013)	211
7.12.3	Structural Equation Modelling	212
7.12.4	Moderated-Mediation Analysis or Conditional Process Analysis	212

7.12.4.1	Conceptual and Statistical Modelling for Moderated-Mediation	213
7.12.4.2	Estimation of the Moderated-Mediation Model Using PROCESS	215
7.13	Conclusion	215
8	Results of Quantitative Data Analysis	217
8.1	Introduction	217
8.2	Data Screening	217
8.3	Sample Size for the Study	217
8.4	Characteristics of the Sample	218
8.5	Controlling and Testing for Common Method Bias	218
8.6	Exploratory Factor Analysis	220
8.7	Confirmatory Factor Analysis	224
8.8	Addressing Quality Issues in the Survey Measures	225
8.8.1	Content Validity	225
8.8.2	Face Validity	226
8.8.3	Construct Validity	226
8.8.4	Checking the Reliability	226
8.9	Results for Descriptive Statistics	227
8.9.1	Sample Size Adequacy	227
8.9.2	The Box Plots	228
8.9.3	Testing Data for Skeweness and Kurtosis	228
8.9.4	Checking for Multicollinearity	228
8.10	Mediation Analysis	230
8.10.1	Reporting the Results for Mediation	232
8.10.2	Results of Sobel Test	233
8.10.3	Assessing the Indirect Path in the Mediation Model	234
8.10.4	Estimating the Total Effect in the Mediation Model	234
8.10.5	Argument as to Whether Reward Expectancy Mediates or Not	234
8.10.6	Control Variables	235
8.11	Moderation Analysis	235
8.11.1	Reporting the Results for Moderation	237
8.11.2	Change in the R^2 and Adjusted R^2	238
8.11.3	Visualising the Interactions	238
8.11.4	Control Variables	240
8.12	Results for Structural Equation Modelling	240
8.12.1	Goodness of Fit Index (GFI)	241
8.12.2	Normed Fit Index (NFI) and Comparative Fit Index (CFI)	241
8.12.3	Root Mean Square Error of Approximation (RMSEA)	241
8.12.4	p of Close Fit (PCLOSE)	242
8.12.5	Standardised Root Mean Square Residual (SRMR)	242
8.13	Moderated-Mediation Analysis	244
8.13.1	Regression Output for Moderated-Mediation Analysis or Conditional Process Analysis – Hayes (2013)	244
8.13.2	The Conditional Indirect Effect of X on Y	244
8.13.3	The Direct Effect	245
8.13.4	Control Variables	246
8.14	Summary of the Hypotheses	246
8.15	Conclusion	248

9 Findings, Contributions, and Recommendations	249
9.1 Introduction	249
9.2 Moral Hazard and its Relationship with the Incentives: Evidence from the Literature	249
9.2.1 Empirical Findings: The Effect of Incentives on Faculty's Deviant Behaviour	252
9.3 Moral Hazard and its Relationship with Cognitions: Evidence from the Literature	253
9.3.1 Empirical Findings: Organization Justice Perception and Reward Expectancy	255
9.4 Discussion	256
9.5 Contributions of the Study	260
9.5.1 Theoretical Contributions	260
9.5.2 Practical Implications	263
9.5.2.1 Lessons for the Management	263
9.5.2.2 Lessons for the Academe	265
9.5.2.3 Global Utility	266
9.6 Methodological Contributions	266
9.7 Caveats and Limitations	267
9.7.1 Personal Reflections	268
9.7.2 Study Limitations	268
9.7.2.1 Metaphysical Ontology of Moral Hazard	268
9.7.2.2 Cross-Sectional Data	269
9.7.2.3 Narrow Focus of the Study	269
9.7.2.4 Scant Literature	269
9.7.2.5 Non-Availability of the Data	270
9.7.2.6 Limited Focus on Incentives	271
9.7.2.7 Limited Generalisation	271
9.7.2.8 Regional Conditions	272
9.8 Delimitations of the Study	272
9.9 Future Direction-Unlocking Avenues	272
9.9.1 Inclusion of Other Variables	272
9.9.2 Testing with New Assumptions	273
9.9.3 Using Longitudinal Study and Experimental Design	273
9.9.4 Comparative Analysis	273
9.9.5 Methodological Refinements	273
9.9.6 Cross-Cultural Research	274
9.9.7 Testing the Model(s) Using Other Theories	274
9.10 Conclusion	274
References	275
Appendix	315
Appendix 1 A	317
Appendix 1 B	319
Appendix 2 A	321
Appendix 2 B	323

Appendix 3 A	325
Appendix 3 B	327
Appendix 3 C	329
Appendix 4	331
Appendix 5	333
Appendix 6	335
Appendix 7	337
Appendix 8 A	339
Appendix 8 B	341
Appendix 9 A	343
Appendix 9 B	345
Appendix 10	347
Appendix 11	349
Supplement Material-Incentive System for the Faculty and Performance	
Appraisal of the Faculty	351
1.1 Incentives as a Motivation Tool for the Faculty	351
1.1.1 Incentives for Teaching	352
1.1.2 Incentives for Research	359
1.1.3 Incentives for Consultancy Work	365
1.1.4 Incentives for Supervising Research Students	365
1.1.5 Promotion as an Incentive for the Faculty	367
1.2 Summary and Critical Reflection on Cross-Case Analysis	369
1.3 Conclusion on the Incentive System	370
Performance Appraisal System for the Higher Education Faculty	373
2.1 An Overview of the Performance Appraisal System	373
2.2 The Sources for Faculty Performance Appraisal	374
2.2.1 Appraisal by the Students	374
2.2.2 Appraisal by the Supervisors	377
2.2.3 Annual Confidential Report- ACR	378
2.3 Challenges in the Performance Appraisal System	380
2.3.1 Subjectivity in the Performance Appraisal System	380
2.3.2 Problems in the Performance Appraisal Sources	383
2.3.2.1 Inappropriate Appraisal of the Faculty by the Students	383
2.3.2.2 Biased Appraisal by the Supervisors	386
2.3.2.3 Perils in the Annual Confidential Report	388
2.3.2.4 Absent Peer Review and Self-Assessment Report	388
2.4 Summary and Critical Reflection on Cross-Case Analysis	389

2.5 Conclusion 391

List of Figures

2.1	Agency Theory	26
2.2	Equity Theory	45
2.3	Expectancy Theory	48
2.4	Hypotheses for the Study	69
3.1	Triangulation for the Research	79
4.1	Research Methodology	90
5.1	Model Prior to Qualitative Data Collection and Analysis	119
6.1	Perceived Moral Hazards in the Faculty	131
6.2	Effective Teaching	149
6.3	Research	161
6.4	Other Academic Hazards	163
6.5	Perceived Determinants of Moral Hazard	171
6.6	Contingency Table	190
7.1	Conceptual and Statistical Model for Mediation	204
7.2	Conceptual and Statistical Model for Moderation	209
7.3	Conceptual and Statistical Model for Moderated-Mediation	214
8.1	Regression Coefficients for the Paths	232
8.2	Conditional Effect of Simple Slopes	239
8.3	Path Estimation in AMOS	243
1	Growth of Universities in Public/Private Sector	318
2	Agency Theory	322
3	Items for the Survey	326
4	Items for the Survey	328
5	Items for the Survey	330
6	Map of Pakistan and KPK	332
7	Ratio of BPS Faculty to TTS Faculty	334
8	Population of Faculty in KPK Province	336
9	Interview Consent	338

10	Box Plot for Moral Hazard and Incentive	340
11	Box Plot for Reward Expectancy and Organizational Justice	342
12	Residual Plots for Incentive and Reward Expectancy	344
13	Residual Plots for Moral Hazard and Organizational Justice	346
14	Incentive Regime for Faculty	353
15	Inflation Rate in Pakistan (2011-2013)	356
16	The Trend of Publications in Pakistan	360
17	Performance Appraisal System	375

List of Tables

3.1	Research Paradigms	72
3.2	Components of Critical Realism and its Interpretation	75
3.3	Objectivity and Subjectivity in the Phenomena	77
3.4	Taxonomy of Triangulation	78
3.5	Overview of the Study	82
4.1	Linking Research Objectives, Questions, and Approaches	88
4.2	Criteria for Case Selection	92
4.3	Semi-Structured In-Depth Interviews	103
4.4	Three Staged Pilot Testing	109
4.5	List of Interviewees	111
5.1	Cases and Interviewees	121
5.2	Provisional Start List of Codes	123
5.3	Sample Memo	126
6.1	Linking Research Objectives to Research Questions	130
6.2	Teaching Effectiveness	133
6.3	GRE Averages by Country (2011-12)	137
6.4	Citations of Publications from Pakistan (2006-2010)	153
8.1	Demographic Characteristics with Frequencies and Percentages	219
8.2	The Pattern Matrix	222
8.3	Goodness of Fit Indices	224
8.4	Cronbach Alpha for the Variables	227
8.5	Skewness and Kurtosis	228
8.6	Inter Variable Correlation and Summary Statistics	229
8.7	Regression Output for the Mediation Model	230
8.8	Regression Coefficients for the Mediation Model Using PROCESS	231
8.9	Calculation for Sobel Test Using Estimations and Standard Errors	233
8.10	Calculation for Sobel Test Using T Statistic	233
8.11	Hierarchical Regression	236
8.12	Regression Output for the Moderation Model Using PROCESS	237
8.13	Conditional Effect of X on Y at Values of M	237
8.14	Goodness of Fit for Models	241
8.15	Regression Output for the Conditional Process Model Using PROCESS	244
8.16	The Conditional Indirect Effect of X on Y at the Values of W	245
8.17	Hypotheses Summary	247
1	Demographics of Education in Pakistan with a Special Emphasis on KPK	317
2	The Tenure Track System in Higher Education Sector	324

3	Ranking of Universities	352
4	Research Activities in Pakistan from 2011-13	362

Declaration of Authorship

I, **Shandana Shoaib**, declare that the thesis entitled *Moral Hazard in a Moderated-Mediation Framework of Incentives and Perceptions – A Case Study of the Higher Education Faculty in Pakistan* and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published work of others, this is always clearly attributed;
- where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
- I have acknowledged all main sources of help;
- where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
- none of this work has been published before submission

Signed:.....

Date:.....

Acknowledgements

Not a single day goes by without expressing my gratitude to Allah for enabling me to execute a task, which was a far lived dream just a few years ago. Turning a distant dream into reality, would have never been possible, had it not been accompanied by the tireless effort and persistent attitude of my respected supervisors Professor Yehuda Baruch and Dr. Tahir Nisar; turning me from a layman into an independent researcher, by infusing their research skills into my blockhead. Looking back, the journey was not less than a challenge, but the determination and dedication of my supervisors made me overcome this challenge. Thank you, Professor Yehuda Baruch for being my inspiration and motivation.

Talking about incentives and justice throughout the research, it will be a moral hazard on my part, if I fail to admit the genuine support from my family, friends, and fellows, who had never let me down at times of despair. They were my strength and motivation through the expedition in achieving a colossal task. I am especially indebted to some of them who stand out of the crowd and travelled an extra mile with me.

Thanks to my parents, who prayed all these years for me and my success, and a result of their prayers Allah has bestowed upon me the shortest title, yet the highest prestige, for which I was never a deserving candidate.

Thank you Allah for everything you gave me and for listening when I thought no one was there. Protecting me from the things, which were harmful and helping me with problems big and small. Thank you for all your blessings, which I did not even realise were blessings, and I can surely never even come close to thanking you enough. Praise be to Allah, who is omnipresent; guiding us towards the right path and protecting us from going astray.

Nomenclature

ACR–Annual Confidential Report
AMOS–Analysis of Moment Structures
BP– Basic Pay
BPS– Basic Pay Scale
BCI–Bootstrap Confidence Interval
CEO–Chief Executive Officer
CFA–Common Bias Method
CI–Confidence Interval
CMB–Common Method Bias
DAI–Degree Awarding Institution
DTI–Disposition Towards Incentives
EFA–Education For All
FCM–Fielder’s Contingency Model
FTI–Fast Track Initiative
GFI–Goodness of Fit Index
GLM–General Linear Model
GRE–Graduate Record Examination
HEC–Higher Education Commission
HEI–Higher Education Institution
HOD–Head of Department
HR–Human Resource
HRM–Human Resource Management
IEE–International Institute for Education
ILM–Internal Labour Market
KPK–Khyber Pukhtoon Khwa
MHT–Moral Hazard Tendency
NEMIS–National Education Management and Information System
NFI–Normed Fit Index
OCB–Organizational Citizenship Behaviour
OJP–Organizational Justice Perception
OLS–Ordinary Least Square
OIC–Organization of the Islamic Conference

ORIC–Office of Research, Innovation & Commercialization
PEC–Pakistan Education Council
PRP–Performance Related Pay
RAE–Research Assessment Exercise
RE–Reward Expectancy
RMSEA–Root Mean Square Error of Approximation
RPA–Research Productivity Award
Rs–Rupees
SAT–Scholastic Assessment Test
SEM–Structural Equation Modelling
S.D–Standard Deviation
SPSS–Statistical Package for the Social Sciences
TTS–Tenure Track System
TOR–Terms of Reference
TOFEL–Test Of English as a Foreign Language
TQA–Teaching Quality Assessment
TQM–Total Quality Management
ULCI–Upper Level Confidence Interval
LLCI–Lower Level Confidence Interval
NNFI–Non-Normed Fit Index
QEC–Quality Enhancement Cell
UNDP–United Nations Development Programme
UNESCO–United Nation Education, Scientific, and Cultural Organization
VC–Vice Chancellor
VIE–Valance, Instrumentality, and Expectancy
VIF–Variance Inflation Factor

Chapter 1

Introduction to the Study

1.1 Introduction

This chapter provides a concise overview of the study. First, the background of the study has been discussed. Followed by the gap identified from the literature review, outlining the problem statement, aims, objectives and research questions developed, after an extensive review of the literature. Moreover, the chapter also presents a detailed theoretical framework; introducing different constructs used in the framework and how these have been positioned. Finally, the scheme of the study has been provided; enlisting all the chapters.

1.2 Background of the Study

Education plays a vital role in the development of human capital and provides a solid base for the socio-economic development of a society. It raises the productivity and efficiency of the individuals, thus producing skilled manpower, which is capable of leading the economy towards the path of sustainable economic development (Memon, 2007). Conceição et al. (2006) and Hayward (2008) emphasise the emerging role of knowledge as a major driver for the economic development of a region. Higher education has constantly been a priority on the social agenda of the government, but its importance has increased manifold with the emerging “knowledge economy” (WorldBank, 2000). Many developing countries need to work harder, just to survive and defend their stance; let alone to catch up with the developed nations (UNESCO, 2008). The critical nature of the higher education for the development of the third world countries is also highlighted in the report by the WorldBank (2000). Referable to the crucial role of higher education, any problem in this sector can either delay or impede the economic development process of a country (Hayward, 2008). The author further stresses the importance of higher education in the creation, dissemination, and application

of knowledge, and for developing technical and professional capacity of the pupils. Universities must respond to the global challenges for the well-established pedagogical and epistemological traditions, to gain and preserve their reputation (Conceição et al., 2006). The authors show concern about the rapid pace of exogenous socio-economic change, and the increasingly non-sustainability of the world that puts pressure on the efficacy of the discipline-based model for learning, research, and teaching. Moreover, the authors confer the responsibility of diffusing the concept of sustainability to the higher education institutions.

Like most developing countries, the state of affairs of the higher education sector in Pakistan is not very encouraging, and the quality of education exhibits a declining trend. The major issues and challenges of the education system include: low literacy rate, high dropout rate, widespread teacher absenteeism, weak management and supervision structure, shortage of trained and qualified teachers, lack of teachers' dedication, motivation and interest in their profession, and lack of physical facilities. Moreover, the curriculum is mostly outdated, irrelevant, and does not satisfy the demands of the present day (UNESCO, 2008).

The higher education system in Pakistan has been slowly transformed over the years. Private sector practices have been embraced by the public sector higher education institutions. There has been a paradigm shift in the universities from a traditional model towards a business model, due to the dynamic environment and market demands. Van Ameijde et al. (2009) claim that the higher education institutions are no longer protected entities, whose legitimacy is taken for granted. Referring to the changing role of the higher education, the authors further claim that these institutions are expected to deal with the complexity of market forces; trying to strike a balance between catering for the need to teach an increased number of students while at the same time striving to maintain traditional academic principles of quality. According to Irs and Türk (2012), one can find examples of educational institutions taking over the management methods of the private sector, to increase the performance of schools and pupils. Higher education institutions have unique cultural characteristics; creating a challenge for the public-sector institutions to mimic the management principles derived from the private-sector (Van Ameijde et al., 2009).

Since the establishment of the Higher Education Commission (HEC) in 2002, new educational policies have been introduced, which are aimed at steering the higher education in Pakistan towards attaining international standards (Manzoor et al., 2009). The hard work and continuous struggle of this Commission – in just over a decade – improved the plight of higher education in this region, from almost non-existent state to one which has been internationally recognised; albeit, still far behind the education system of the developed countries. The HEC has initiated drastic measures in uplifting the quality of education; however, these measures have failed to make a substantial impact on the quality of higher education in the country. The HEC has given special

attention to research and publication; a concept which was unfamiliar to many, before the establishment of this esteemed body. Research gives rise to curiosity and a desire to search for better solutions to the community's problems (Memon, 2007).

Reid (2008) has given a pattern of the growth rate of higher education in Pakistan, which amounts to about 5% per annum (averaged over the past 8 years). The rapid growth has resulted in compromising the quality of higher education. Hayward (2008) considers quality maintenance and enhancement in the higher education sector, as a challenge for the HEC. The author stresses achieving high quality education in Pakistan, which should be compatible with the benchmark set by the international market. Furthermore, the author highlights the importance of higher education for the developing countries that until and unless the higher education system works smoothly and efficiently, these countries cannot capitalise on the creation and use of knowledge.

Reid (2008) argues that the aspect of quality in higher education has been confined only to what is measurable; ignoring sometimes more important aspects, which are not readily measurable, yet might be equally important. Using standardised criteria for all colleges or universities is not possible because each holds its own core general-education programs and course requirements (Crech and Board, 2000). The authors stress that the educators must pay careful attention to what is being measured and not to the amount of the information gathered, as usually what is being measured is not always important and what is important is not always measured.

The faculty is no doubt the backbone of the provision of quality education to the students and is responsible for changing the social outlook of the society through knowledge dissemination and knowledge creation (Thomas and Li, 2009). The calibre of teachers – is a central element in any education system – is poor in Pakistan (Memon, 2007). The author further points out that the education sector in Pakistan suffers from the insufficient financial input, low levels of efficiency for implementation of programs, and poor quality of management, monitoring, supervision, and teaching. Some causative factors responsible for the present condition have been pointed out by (SPDC, 2002), which among others include: poor quality of teachers and cheating in the examinations. Hoodbhoy (2003) calls the education system in Pakistan, as breeding grounds for the mass production of “lumpen graduates”, and consider the examinations as memory tests. Ignorant and incurious, with poor reading and writing skills, incapable of coherently articulating an argument, such students show few qualities that one can associate with a university. In addition, teacher appointments in the educational institutions, is subject to political interference. Stilwell (2003, p. 59) states:

The increased use of commercial criteria and economic incentives in higher education is the product of political choices, both by national governments and within the upper echelons of university management.

According to Memon (2007), it has opened the system to graft and rent seeking behaviours; leading to high levels of teacher absenteeism – aggravated by the absence of an effective supervision system. The author further stresses that the quality of education depends on motivation, qualification, experience, training, aptitude, and a host of other factors – not the least of these being the environment and management structures within which they perform their role. The issue of teachers’ remuneration has been highlighted by the reports of WorldBank (2000) and TaskForce (2000). Moreover, the absence of research and misalignment of outputs from the higher education with societal needs, has also been highlighted by these reports. Due to the issue of faculty reward, the higher education institutes are unable to attract and retain talent in sufficient numbers (TaskForce, 2000). The report further points out that internal and external incentives for research are missing. Many factors are involved in the decay of education in Pakistan, but all of them converge at corruption (Tribune, 2011).

Reid (2008) points towards the inception of higher education in Pakistan on the seams of the traditional British system of the 19th century; with its primary focus on preparation for public services, as its main problem; whereas, the current demands have dramatically changed. Pakistan’s higher education sector needs to realise this fact, and switch over to a system, which is more receptive to, and driven by the market needs. Manzoor et al. (2009) embraces the fact that to make the educational system successful, it needs to be simplified and structured to meet the needs of the students and employees in the educational institutions. Reid (2008) cautions that change should not be introduced in a manner that mimics the foreign systems and models, without adapting them to the local context. This is an acknowledged fact that universities in the developing countries like Pakistan, blindly follow the quality assurance scheme, which is dwelling in the developed nations; not realising that there is a vast conflict between the economic and financial positions of these countries. This does not mean that the management practices are wrong or ineffective, but these might just lack acclimatisation according to the region’s cultural context (Shuaib, 2012). The author has apprehensions that many of the management practices are adopted from the west, without its proper adaptation to the eastern culture; resulting in discouraging results. It is, therefore, utmost necessary that the systems and strategies adopted for the improvisation of the higher education system in Pakistan must be indigenous and home grown, which are tailor-made to the prevailing conditions of the country.

Amongst other recommendations, different studies have suggested revisiting of the current reward system for the faculty, to acquire best talent from within Pakistan. Successful companies have various types of organizational reward programs that recognise and reinforce good employee performance (Mujtaba and Shuaib, 2010). Schacter and Thum (2004) stress upon the institutional reforms for uplifting the higher education in the country by instituting accountability, performance-based evaluations, and incentive systems, which are fair and transparent. For a successful implementation

of the incentive system, employees should perceive it as a representation of a fair degree of organizational justice (Schaubroeck et al., 2008). The HEC is working hard to make higher education institutes competitive at the global level, by revisiting the compensation programs for teachers, providing trainings, and enhancing their qualifications. The government is providing substantial funds to the public-sector universities to improve the quality of higher education. For this purpose the Commission introduced an incentive scheme that rewards the faculty for different activities in its job; to motivate it for future better performances. It is now the responsibility of the universities to bring forth the desired results.

In an increasingly complex work structure, organizations are heavily relying upon the use of incentive systems of performance related payment (PRP) (Kang and Yanadori, 2011; Kessler and Purcell, 1992). However, the current trend of its use is declining (Gittleman and Pierce, 2013). There is a growing challenge for the management; using the right type of incentive, which will relate to the desired dimensions of a job. Knowledge workers are the cutting edge of contemporary industry (Shuaib, 2008); confining them to a traditional payment system might hinder their creativity, and result in a decline in the performance (Chib et al., 2012), as well as frequent turnovers (Belfield and Heywood, 2008; Schaubroeck et al., 2008). PRP is a system that purports to motivate employees to exert efforts in the direction, which will ensure fulfilment of the organizational goal.

The extant literature tends to focus on the bright, as well as dull sides of incentives (Thomas et al., 2013; Aguinis et al., 2012b, 2013). More specifically, PRP is an explicit use of incentive system (Holmstrom and Milgrom, 1991, 1994; Baker, 1992; Baron and Kreps, 1999), which can serve as an energiser for the knowledge workers and can boost their performance (Milkovich et al., 2005; Aguinis et al., 2013). Taken from the agency perspective, the appropriate incentivising system is concerned with cost-benefit analysis (Eisenhardt, 1989a; Lavy, 2007). Traditional control and command mechanisms do not suit well for such environments; therefore, an all-embracing motivational strategy should be looked for (Eldridge and Nisar, 2006). While significant attention has been paid to such financial analyses, the question of moral hazard has not been considered in the literature. This can be a critical element, particularly in the public sector. Referable to the pressures related to performance and incentives or ineffective implementation procedures – in some cases – these programs can encourage unethical behaviour (Mujtaba and Shuaib, 2010). The education sector may fit well for testing the relevance and effectiveness of incentive systems that would contribute to our understanding of the way incentives can be utilised to enhance related practices (Wyatt, 2013).

The current acumen is to motivate professionals and reduce the potential hazards associated with incentives (Beer et al., 2004). Organizations need to nurture a performance based environment that conforms to the principles of equity. Despite the ostensible benefits of incentives, empirical investigation of the use of high-power incentives in multitasking jobs is scarce. Most previous studies on incentives have

been mainly focused on schemes for the top level management (Hall and Murphy, 2000; Allcock and Filatotchev, 2010; Elayan et al., 2003) and workers in the production sector. The present study specifically targets the career employees in the public sector academe and examines whether the incentives can become either a source of behavioural improvement or cause moral hazard in the faculty, and if so, then how it affects its behaviour.

1.3 Gap in the Literature

Organizations develop their reward systems to maintain employees' motivation and uphold justice (Heneman et al., 2002a; Chien et al., 2010). To reach these aims, organizations need to make sure that the employees are aware of how reward processes work and how they will be influenced by these processes (Case, 2001; Penttila, 2009). The area of reward and compensation gained more interest among scholars due to the challenge of motivating and retaining knowledge workers (Giauque et al., 2010); who are mobile repositories of knowledge (Drucker, 1998).

Assuming that human nature is selfish, the agents and principals will tend to have differences in interests and attitudes; leading to divergent decision-making preferences (Eisenhardt, 1989a; Shapiro, 2005). Agency theory is concerned with the potential conflict between the principal and the agent, due to their divergent interests as well as with the principal's approach for controlling and monitoring the activities of the agent. Monitoring the work of professional agents is difficult; therefore, the use of incentives has been suggested as an alternative path of control in lieu of direct monitoring (Kuvaas, 2006). Moreover, when outputs are measured with different precision, then the use of high-powered incentives can be sub-optimal for the principal; leading to unfair distribution of effort by the employee across different tasks in the job that will in turn affect the quality of work (Thiele, 2007; Wikina, 2008; Hansen, 2010). This might also increase the tendency of deviant behaviour in the employees, who will be tempted to manipulate the outcomes to gain benefit from the principal, by maximising their rewards rather than the performance. Different tasks will impose different costs on the agent (Thiele, 2010); therefore, an employee will opt for less costly and more lucrative activities.

If agents are able to manipulate the performance measures to maximise their rewards (Burgess et al., 2012), by rearranging their effort cost – might cause the problem of moral hazard (Thiele, 2007; Wikina, 2008; Hansen, 2010). It is unclear whether or not this happens, and if so, to what extent and what may be done to mitigate it. The problem of incentive remains the biggest challenge faced by contemporary organizations (Hansen, 2010; Grant, 2013). To curb the problem of moral hazard in professional agents, which has a deep connection with the reward system and the organizational

justice system of a firm. These systems must be managed in an overall harmonised way (Wright et al., 2001). This means that the employee performance must be properly evaluated, and rewards must be distributed in a manner that is proportionate to an employee's effort, and acknowledge the resultant performance. This means that the employee performance must be properly evaluated, and rewards must be distributed in a manner that is proportionate to an employee's effort and acknowledge the resultant performance. An individual's performance and pay have to be in accord (Lawson, 2000) to motivate people to improve their performance and work quality (Türk, 2008).

The majority the of studies on incentives focus on the private sector, and only a few have explored such processes and their impact on the public sector (Van Ameijde et al., 2009). Granovetter (1985) suggests that the social context within which transactions are enforced has a great impact on the behaviour of agents. Despite this staunch belief, Kidder and Buchholtz (2003) have apprehensions that agency theory and the highly specified contracts that derive from the agency framework – ignore the social context in which contracts are embedded. Granovetter (1985) describes social networks and interpersonal relationships between the parties as mechanisms for attenuating opportunism in situations where opportunism is likely. The public sector – in particular higher education – may offer a strong ground to test the effect of incentives on scholars' behaviour, which might be of relevance to educational reformers (Wyatt, 2013). The use of incentives in the education sector is confronted with the same dilemma; as incentives have shown little effect on the performance of scholars (Springer et al., 2010). It is difficult to reward the teachers based on the evaluation of their performance (Ballou, 2001). Despite the growing awareness of the potential benefits of quality education, the empirical testament to how to tap quality, associated with the proper use of incentives is sparse (Lavy, 2004; Steers et al., 2004). The opinion of the scholars, on the use of incentives in the education sector is, therefore, inconclusive. Brickley and Zimmerman (2001) suggest that schools can modify their incentive schemes to improve the quality of teaching.

This study provides a framework for examining the problem of moral hazard in a contextual setting, which is underpinned by the processes and their outcomes that are pertinent to professional agents. More specifically, the analysis focuses on the problem of moral hazard caused by the use of incentives; particularly looking at the behavioural patterns of the faculty members. There is also little methodological evidence of using the perspective of critical realism in the studies conducted on moral hazard and incentives. Critical realism combines the qualitative and quantitative research approaches, and can yield an all-inclusive picture of the interest phenomena. Many researchers avoid using critical realism, as it requires a switchover from one approach to another, which is complex and exhausting.

To summarise, the following gaps have been identified from the literature:

1. Scarcity of research on the subject of moral hazard and its determinants, especially in multitasking professionals;
2. Limited empirical studies conducted in the area of moral hazard and incentives, especially using a case study strategy;
3. Lack of evidence of triangulation in the area of moral hazard and incentives;
4. Lack of empirical investigation of the problem of moral hazard and high-powered incentives from the perspective of critical realism;
5. Scarcity of empirical work on the problem of moral hazard and incentive systems in the Pakistani higher education system.

1.4 Problem Statement

The quality of higher education (HE) in Pakistan is declining day by day, especially in the Province of Khyber Pukhtoon Khwa. The prime indicator is the low GRE score earned by the pupils from this region; the consequence is that they are barred from seeking admission in reputable foreign universities. The knowledge and skills of these students are therefore deemed questionable. There are several other indicators for assessing the quality of education, such as negligible patents secured by the scholars, as well as the low number of publications in the impact factor journals from this part of the world. One reason for poor performance may be the increasing rate of moral hazard in the faculty, which consequently affects the work quality of the academics. The current business school critique revolves around the paradox “self-interest” versus “altruism” (Birnik and Billsberry, 2008). Despite the many undesirable outcomes of employee misconduct, scholars have an inadequate understanding of the causes and mechanisms that contribute to this problem (Harris and Bromiley, 2007).

Moral hazard includes all types of “fiddling with the rules” and “opportunistic” behaviour; leading to consequences that are unintended from the original policy or practice. The problem has been especially reported in the public sector universities – as the interest of the principal and the agent is misaligned. Individual trust has become a great challenge for the public sector organizations (Park and Blenkinsopp, 2011). The authors stress that mitigating the problem of corruption and improving citizen satisfaction are on the top priority of the government’s agenda; yet, there is a missing link between the aims of these two policies. Van Ameijde et al. (2009) assert that in the UK, the government’s concern to enhance the quality of higher education has become evident, through the mechanisms of the Research Assessment Exercise (RAE) and Teaching Quality Assessment (TQA). The authors blame increased competition between the universities for student enrolment and funding support have led to commoditisation of knowledge. Seeking guidance from the literature, the current

study looks into the employee disposition towards incentives and organizational justice perception in a higher education setting; to examine the problem of moral hazard in professionals and overcome the gaps identified in the literature.

1.5 Aim of the Study

The overall aim of this study is to generate an in-depth understanding of the problem of moral hazard in the higher education faculty by exploring and examining the incentive system of public sector universities in Pakistan. The study particularly examines the adverse effect of the incentive system on the employees' work behaviours that might lead to potential moral hazard, either due to an erroneous design of the system or referable to its weak implementation. Moreover, the role of employee perception of the organizational justice system and reward expectancy have also been examined to see how these interact with the incentive system in causing behavioural problems in the faculty. The case study has been chosen as the research strategy, which is complemented by mixed-methods – different causal models are developed and tested – to achieve the aim of this study. Since this research only explains the phenomena under investigation, the findings can serve as a starting point for a comprehensive discussion by the policy makers in academia.

1.6 Objectives of the Study

The following objectives were set to achieve the aim of the study:

1. To understand the existing phenomenon of moral hazard in the faculty of the public higher education sector in Pakistan;
2. To understand the role of the incentive system in the context of moral hazard;
3. To determine the underlying causal mechanism for the problem of moral hazard.

A refined version of these objectives is provided in Chapter 4, Table 4.1, and also in Chapter 6, Table 6.1.

1.7 Research Questions

Each research question is linked with a set of objectives and gaps identified from the literature, as provided in Chapter 4 (Section 4.2) and Chapter 6, Table 6.1. However, a set of broad research questions for the study is as follows:

1. How and why the problem of moral hazard is manifested in the faculty of the public higher education sector, in Pakistan?

2. What is the role of incentives in the problem of moral hazard?
3. What is the underlying causal mechanism in the problem of moral hazard?

1.8 Theoretical Framework

A theoretical framework for the study has been developed upon the basic premise and assumptions of “Agency Theory”, which primarily relates to the field of economics. Moreover, the motivation theories of Equity and Expectancy from the field of organizational sciences have likewise been applied. The framework depicts that the higher an employee inclination towards incentives/rewards, the more he/she will strive hard to get those rewards. This might include short-cuts in performance, as employees would prefer to opt for those tasks that have incentives attached to them; thus, resulting in partial fulfilment of the job – a generic problem – in multitasking individuals. The resultant performance might be deficient as an employee will only be focused on those tasks that will fetch him/her higher rewards. However, the fair or unfair organizational justice perception of an employee will moderate the effect of employee disposition towards incentives on reward expectancy. Furthermore, it is believed that the fair perception of the system will enhance this effect.

To summarise, the theoretical framework depicts a direct relationship between an employee’s disposition towards incentives and his/her moral hazard tendency. The framework also includes an indirect relationship between the two constructs using reward expectancy as a mediator. Moreover, the role of organizational justice perception as a moderator completes the framework. Both the mediator and the moderator provide an in-depth causal analysis of the interest phenomena. However, a more complete analysis should attempt to model the mechanism at work by linking employee disposition towards incentives with moral hazard tendency; while simultaneously allowing those effects to be contingent on context, circumstances, or individual differences. The indirect effect of disposition towards incentives on moral hazard tendency through reward expectancy will be moderated by the different values of organizational justice perception. This implies that the indirect effect will be higher when organizational justice perception is fairer and vice versa. Thus, organizational justice perception should enhance the indirect effect between an employee disposition towards incentives and his/her moral hazard tendency.

The problem of incentives has been specifically highlighted in the literature of multitasking by [Holmstrom \(1982\)](#), and has been later worked upon by [Holmstrom and Milgrom \(1991\)](#), [Baron and Kreps \(1999\)](#), [Wright et al. \(2001\)](#), and [Bohnet and Eaton \(2003\)](#), among others. It has been referred to as the cost of doing business in agency relationships ([Davis et al., 1997](#); [Williamson and Ouchi, 1980](#); [Oviatt, 1988](#); [Prendergast, 1999](#); [Wright et al., 2001](#); [Susarla et al., 2002](#); [Hardt, 2009](#)), which needs

to be managed properly (Eisenhardt, 1989a; Stroh et al., 1996). Agency costs should be considered as an investment by the principal, which will yield worthwhile results in the distant future (Roberts and Greenwood, 1997; Wiseman and Gomez-Mejia, 1998; Bloom and Milkovich, 1998). There is no commonly accepted theory of incentives. The systems are tailor-made to organizational needs and culture, as PRP plans are effective under certain conditions (Milkovich et al., 1991). This study has chosen performance-based incentives generally to denote any reward that links pay and performance. The study endeavours to find out the reasons for behavioural problems in professional employees, also known as the “incentive problem”.

PRP or incentive system has a deep connection with the performance measurement system of an organization, which has been acknowledged by Jensen and Meckling (1976), Hölmstrom (1979), Holmstrom and Milgrom (1987), Gibbons (1998, 2005), Holmstrom and Milgrom (1991), Baker (1992), Parks and Conlon (1995), Prendergast (1999), Lavy (2007) and Aguinis et al. (2012b) because it shapes an employee’s perception of fairness by involving the dynamics of “what”, “how”, and “how much” needs to be measured. Milkovich (2013) notes that, “you get what you pay for and what cannot be measured cannot be paid for.”

The research on moral hazard has focused on all aspects of economic incentives in multitasking scenarios through a restricted tunnel vision that mostly relates to the economic perspective (Griesinger, 1990). The current study has chosen to liberate this vision, by including the cognitive phenomena, which emanate from the employee interaction with the environment to produce outcomes. Incentives provide signals to the employees, in the form of valuable codes for their performance (Chib et al., 2012); however, the way in which the employees decode these signals to generate a meaningful message out of it, requires cognition (Granovetter, 1985; Fudge and Schlacter, 1999). These expectations may be communicated implicitly as well as explicitly (Fudge and Schlacter, 1999). Thus, the psychological perceptions of the organizational justice system refer to more than the provision of incentives to regulate an employee’s behaviour (Davis et al., 1997). Constructing upon this notion, the present study examines how cognitive dissonance of employees – in the form of perception – affects the relationship between incentives and moral hazard. Perception is an important modifier of the cognitive process, by which people interpret the stimuli they face in the environment (Pour Ezzat and Somee, 2009), due to the fact that the interests, cognitive frames, and incentives co-evolve (Kaplan and Henderson, 2005).

1.8.1 Disposition Towards Incentives

Monetary incentives are at the heart of employees motivation issues, due to its high utility function. Incentives will provide an input to an employee’s behavioural response by conveying the organizational preferences and value system (Fudge and Schlacter,

1999). In the current study “disposition towards incentives” is defined as an employee’s desire for explicit incentives that is expected to drive his/her workplace behaviour. This study focuses on how a faculty member’s high or low tendency towards explicit incentives will determine his/her job performance in teaching and research.

The model given by [Datar et al. \(2001\)](#) clearly explains the phenomena of effort allocation in multitasking individuals. The authors admit that the two actions (intensity) and allocation have the same cost to the agent; however, it has different benefits to the principal; therefore, the concern is both about the “intensity” and “allocation” of effort. A performance measure that coordinates an agent’s effort choices with the principal’s objective is referred to as being perfectly congruent. The authors argue that sometimes a single measure is not sufficient, or it might entail noise, which urges the use of multiple measures that should be carefully chosen for proper distribution of effort in a given job.

The proposed model is apposite for multitasking faculty. A faculty member has to divide his/her effort cost, not only between different tasks, but also between multiple dimensions of a single task. For instance, the faculty members are required to teach and conduct research simultaneously (multiple task); while, maintaining a balance between the quality and quantity of the task (multiple dimensions). Again, for some tasks or dimension of a task, the available performance measures are clear; whereas, for others this might not always be the case. Teaching effectiveness or quality cannot be measured directly, or through a single performance measure. The principal has to depend upon multiple proxy measures to determine how a faculty member is performing in an assigned job. Thus, multiple performance measures are useful to the extent that they decrease the cost of motivating high levels of effort on a single task ([Guymon et al., 2008](#)).

The concept of merit pay is also in vogue in America and elsewhere, especially in the education sector. According to the World Bank report, several countries are providing incentives in a variety of ways to improve the students’ outcome ([Vegas and Umansky, 2005](#)). How the faculty member allocates effort towards different tasks, will be a function of how effort is induced. According to [Datar et al. \(2001\)](#), if two tasks are equally important in terms of achieving the company’s objective, but one task is measured with less precision than the other, then the imprecise performance measure should have a larger incentive weight as compared to the precise performance measure to induce the agent to allocate an equal amount of effort to each task. The risk averse nature of the agent will push him/her towards keeping the cost low, which might lead to potential inefficient behaviour at work place. PRP focuses on simple jobs, for which the measures of performance are easily available, where such incentives have a positive impact on the employees’ productivity ([Gibbons, 2005](#); [Dixit, 2002](#); [Prendergast, 1999](#)). A detailed investigation of piece rates on performance; carried out by [Lazear \(1996\)](#) and [Lazear and Oyer \(2007\)](#) discovered that productivity rose from 20% to 36% after a change in the incentive schemes, with wages going up by almost 12%.

In essence, the current study offers two insights that are particularly applicable to how we ought to design incentives, keeping in mind multiple performance measures. First, the research demonstrates that the employees' actions are misaligned with the principal's goal(s), when extrinsic incentives are linked to the wrong performance measures, or when they focus on a single performance measure, in a task that has multiple measures. Second, the effect of extrinsic incentives – combined with the agency's assumption of information asymmetry and risk averseness of agents – lead to “shirking” and “opportunistic” behaviour.

1.8.2 Organizational Justice Perception

Employees reaction towards the way they are treated at work, cannot be understood adequately without taking into account perceived fairness of the outcome and the procedure used to reach that outcome (Folger and Konovsky, 1989; Greenberg, 1986). Greenberg (1986) introduced the concept of organizational justice with respect to how an employee judges the treatment of the organization, and how an employee's attitude are shaped by this discourse that results in his workplace conduct. The organizational justice literature has been broadly divided into two main categories: the procedural justice and the distributive justice. Procedural justice refers to the fairness of the processes used to make decisions that lead to outcomes (Leventhal, 1980), whereas distributive justice is conceived as the fairness of decision outcomes, and distribution of rewards and resources (Adams, 1965). The concept of procedural justice originated in the organizational literature, and is concerned with the perceived fairness of procedures employed in making decisions, whereas distributive justice aims at the fairness of rewards according to the employee's cost function Duffy et al. (2003). Influenced by the views of Adams (1965) and Leventhal (1980), in this study “organizational justice perception” is defined as an individual's perception of fairness that is based upon procedural justice and distributive justice, such as how pay and promotion decisions are made in the organization, and are how employees get affected by the outcomes of these decisions; especially in reference to their performance, such as how their performance is appraised and acknowledged by the management.

The literature has a detailed discussion regarding which kind of justice takes precedence over the other, in terms of its importance to the employee perception of organizational justice. According to Konovsky (2000), the different dimensions of justice produce unique effects in shaping up perception. However, the importance of neither can be negated while studying the problems of motivation and human behaviour, as the combined effect of dissimilar types of justices is better than the individual effect of any one type. Organizational justice perception is necessary for determining the performance efficiency and the personnel satisfaction in organizations (Pour Ezzat and Somee, 2009).

Employees' perceptions of organizational justice can result in a myriad of positive and negative outcomes. The reward system of any organization needs to be backed up by a sound organizational justice system, which implies having the right type of performance assessment tools that incorporate clear and accurately aligned performance measures with an employee's actual performance. The reason for alignment is crucial for increasing the intended performance of employees and not just their measured performance (Van der Stede, 2009). Hölmstrom (1979) cautions about the proper use of performance measures while using high-powered incentives for the employees. If the marginal product of an agent's action on the performance measure is highly correlated with the marginal product of these actions on the principal's objective, then the performance measure is good; resulting in efficient performance (Baker, 1992). Substantial literature exists that supports the evidence that employee's perception of organizational justice has a significant impact on his/her job behaviour (Adams, 1965; Vroom, 1964; Pour Ezzat and Somee, 2009). According to these authors, perceiving an injustice will result in the employee dissatisfaction; leading to a negative impact on his/her performance, due to lowered commitment, less willingness to work more hours than what has been agreed upon, and theft; among others.

Holding negative perception is a sign of ill-health of an organizational justice system (Cropanzano et al., 2001). It disturbs the entire ecosystem of an organization and specifically hits the performance level of an individual. To restore justice, employees will resort to different self-sufficing strategies that are expressed in the form of job behaviour, which is deterministic of their productivity level. It is further assumed that the cumulative productivity of the employees will affect the organizational level productivity. Managers should realise the fragile nature of these processes, and improve the performance appraisal system and reward system for enhanced productivity.

1.8.3 Reward Expectancy

Vroom (1964) defines motivation as a process of choosing among alternative choices of action – a process controlled by the individual – based on estimates of how well the expected outcomes of a given behaviour will eventually lead to the desired results. In the current study “reward expectancy” has been defined as an employee effort distribution choices between different tasks and activities included in his/her job that will help in the achievement of the desired rewards. Essentially, how multitasking individuals make their effort distribution choices will be a function of the incentive choices available to them in the organization. Fischer (2004) discovered a relationship between the distributive justice and personal satisfaction, which implies that the perception of expectancy also has an impingement on personnel behaviour. If employees do not have incentives which are linked to their performance, it will break the link between expectancy, instrumentality, and valance, which is the crux of Expectancy Theory.

Performance evaluation plays an important function in determining an employee's pay and promotion, or even both. Thus, employee expectancy can be closely associated with the concept of distributive justice. Evidence suggests that organizational justice primarily influences one's satisfaction with the outcome in question or the results of some decision (Brockner and Wiesenfeld, 1996). For example, the belief that one's pay is not suitable compensation for one's achievement, results in perceptions of inequity that can contribute to low pay satisfaction (Sweeney et al., 1990; Summers and Hendrix, 1991; Harder, 1992; Sweeney and McFarlin, 1993).

Rewards should match the employee's perception of being fair and equitable; however, the traditional high pay for seniority seems to ignore this issue (Mujtaba and Shuaib, 2010). The seniority-based remuneration is in vogue in all public sector institutions – including public sector educational institutions. Pay can only be equitable if it varies with the employee's performance and effort. People prefer individual-based performance pay, as opposed to seniority-based pay because it is believed to be more equitable, and especially those who are high achievers (Kuhn, 2009). When a reward system of an organization is insensitive towards the employee performance, the employees tend to resort to altering their performance substantially; without having any effect on tangible rewards. Consequently, it adversely affects their performance (Eisenberger and Cameron, 1996). Baron and Kreps (1999) argue that payment to individuals should be made according to their contribution.

In short, performance incentives provide an impetus for a behavioural pattern of the employees (Gardner et al., 2004). Whenever, the employees are able to establish the cognitive link between their efforts, performance, and rewards – they will be actuated to perform better. Positive perception of the organizational justice is assumed to push the employees towards the expected behaviours; whereas, negative perception of organizational justice will produce the opposite results, and will be manifested as behavioural problems in the employees. The role of Expectancy Theory fits well into the concept of multitasking, as different activities compete for an individual's time, effort, and attention. Those activities, which hold a greater valence for an individual in terms of reward, will steal his/her effort and attention.

1.8.4 Moral Hazard Tendency

Moral hazard refers to the tendency of a party to take risks with the belief that they will not have to bear the consequences of their actions (IADI, 2013). One of the basic assumptions of the principal-agent relationship is that the agent is opportunistic because of goal incongruence with the principal. The agent will try to pursue personal goals at the cost of the principal's goal. This problem has been termed as "moral hazard" by Hölmstrom (1979), which has subsequently been accepted as the prime tension area in agency relationships (Harrell-Cook and Ferris, 1997; Eisenhardt, 1989a; Stroh

et al., 1996; Wiseman and Gomez-Mejia, 1998; Prendergast, 1999; Wright et al., 2001; Kidder and Buchholtz, 2003). “Moral hazard tendency” for the purpose of this study is defined as any intention of the employee to act opportunistically that will have an adverse effect on his/her workplace performance. The problem refers to a wide range of negative behaviours that can adversely affect the work efficiency of an employee and the organization, which includes “shirking” behaviour, besides other kinds.

The definition and measurement of job performance have been a central theme in the psychological and organizational research. Milkovich et al. (1991) agree that there are different definitions of performance – some have focused on the outcome of the job, others on job behaviour, and some on personal traits of the employee. The focus of this study will be on the behavioural component. Behaviour on the job can be categorised into either positive or negative. The former is the expected behaviour of an employee and is presumed to be efficient and effective; whereas, the latter is the perverted behaviour, which is presumed to be ineffective and inefficient. The negative behaviour of an employee is usually due to “shirking”; translating into the problem of moral hazard. Multitasking jobs are notorious for such troubles. Moral hazard can be defined as a form of behavioural corruption that violates the work ethics (Park and Blenkinsopp, 2011). The problem refers to “opportunism” or “shirking” behaviour that adversely affects the performance efficiency of employees (Milgrom and Roberts, 1992). Barker and Carter (1994) define corruption as an act that contains the ignoring and violating of rules and regulations, wrongful exercise of an employee position, and opting for the acceptance of some actual or expected material reward or gain (Park and Blenkinsopp, 2011). Agreeing to these authors, corruption in whatever form undermines the performance of public services. Moral hazard is believed to be caused by information asymmetry, that favours the professional agent (Lazear and Shaw, 2007; Parks and Conlon, 1995), and the misaligned interests between the principal and the agent (Milgrom and Roberts, 1992; Denisi and Pritchard, 2006). Shirking tends to reduce an agent’s effort cost (Gomez-Mejia, 1992), and results in extracting higher rents than the agent would otherwise obtain from the principal.

Ghoshal and Moran (1996) consider opportunism to be a more substantial pattern of self-interest assumption of motivation, which is common in economics and other social science fields. The degree and style of opportunism vary in individuals. According to Williamson (1979), opportunism is seeking self-interest in diverse ways. The author admits that even less opportunism has its price, which debits the principal’s account, and further assumes the human nature to be its main cause. Wright et al. (2001) believe that providing an agent with authority triggers this problem – as power is transferred from the principal to the agent – and the principal is at the clemency of the agent.

The motivation theories of equity and expectancy suggest that when people hold negative perceptions about their organizational justice system, they will resort to less efficient or deviant behaviours. This will pacify their perception incongruence and restore

equilibrium. Perceived injustice can be at least partially considered as the consequence of moral transgression (Folger, 1998).

1.9 Scheme of the Study

The study is comprised of 9 chapters, which are organised in a typical manner; starting with the introduction, followed by the literature review, research philosophy and paradigm, methodology, data analyses, and finally presenting the findings, contributions and recommendations.

Chapter 1 provides a background of the study. Moreover, the problem statement is discussed at length along with the study aim, objectives, and research questions, followed by the theoretical framework and its constituent components. The last part of the chapter presents the scheme of the study with a brief overview of each chapter included in the study.

Chapter 2 comprises of the literature review of the theories and main constructs used in the study. This chapter extensively covers the work done in the areas of moral hazard, incentives, and organizational justice perception. Chapter 2 also includes a set of hypotheses developed in the light of the extant literature.

Chapter 3 presents the study design, with elaborate discussions on the research philosophy and research paradigm within the context of “Critical Realism”.

Chapter 4 elaborates the research methodology. The beginning part of this chapter also includes a case protocol.

Chapter 5 presents the process of qualitative data analysis. This chapter provides details of how qualitative data were collected and analysed. This includes generation of different level of codes, memos, and the techniques applied for cross-case analysis.

Chapter 6 comprises of the cross-case analysis, with respect to the problem of moral hazard in the faculty.

Chapter 7 presents the analysis process of the empirical data collected through surveys. This chapter demonstrates the significance and rationale of each statistical test used in the quantitative data analysis.

Chapter 8 shows the results of the quantitative data analysis. This chapter provides the results of all the statistical tests that have been discussed in Chapter 7, which includes descriptive and inferential analysis of the quantitative data.

Chapter 9 discusses the research findings and presents the main theoretical and practical contributions of the study, along with the recommendations made in the light of these findings. This chapter basically triangulates the findings from the qualitative and

quantitative approaches, and provides a combined conclusion of the mixed-methods. Moreover, at the end of the chapter the study limitations and future research prospects are elaborated.

1.10 Conclusion

This chapter has provided a brief overview of the study with respect to its aim, objectives, and research questions. Moreover, it has also furnished an introduction to the main components of the theoretical framework; followed by the structure of the thesis, which comprises of nine chapters – arranged in a logical manner. The ensuing chapter presents an in-depth literature review of the theories underpinning this research and main concepts of the study.

Chapter 2

Literature Review

2.1 Introduction

This chapter reviews the literature to build ample understanding of the role of incentives, organizational justice perception, and reward expectancy in the manifestation of the problem of moral hazard in multitasking employees. The study is supported by underpinning of the theoretical account of selected economic and motivation theories, such as Agency Theory, Equity Theory, and Expectancy Theory. Agency theory has its roots deeply embedded in economic exchanges. The theory turns out to be quite dependable and flexible whenever tested by the researchers' for numerable economic issues. It enhances the understanding of a complex principal-agent relationship in an organizational setting. The same holds true for the equity and expectancy theories, which are held in high esteem by the behavioural and organizational researchers. The current study blends the two sets of theories, providing new insights into the problem of moral hazard. This chapter also contains a set of hypotheses developed from the literature review.

The majority of the previous research on incentives has been conducted in the context of developed countries, where people reacted differently to incentives than people do in the developing countries. "Sound-bite" conclusions are rarely valid, and are context and culture dependent (Gerhart et al., 2009). The abstract constructs of the theoretical framework in this study were operationalised in the context of higher education; in the region of KPK. The previous studies, which are mostly conducted in the West have utilised these concepts in their respective cultures, and in accordance with their specific needs, which could not be directly applied in the cultural context of KPK. For example, in the western culture, where most of the research is conducted in this area, the higher education system has a different setting, and teachers' performance, efficiency, and quality are judged by the "student's test score"; especially on the subjects of math or other hard sciences. Most of the measures of a teacher performance quality cannot be

applied in public sector universities in Pakistan, which are marked by characteristics of collectivist culture. Furthermore, originally the concepts of moral hazard and incentives were introduced in the western countries, which are far ahead of the developing countries like Pakistan – caution must be exercised – while reproducing similar concepts and models in a non-western culture, as any lapse might lead to erroneous conclusions. Gneezy et al. (2011) note that the effect of incentives depends upon the design, form, and its interaction with the intrinsic and social motivations of the employees; therefore, the outcome can never be certain. Hence, different types of incentives, provided in different environments are bound to produce varied outcomes.

2.2 Importance of Human Capital in Modern Firms

Knowledge workers are a source of value addition to the modern, flexible firms (Lee et al., 2006). The authors stress that knowledge workers possess tacit knowledge, which is a prominent characteristic of innovation in modern systems. Chambers et al. (1998, p. 2) state that:

A more complex economy demands more sophisticated talent with global acumen, multi-cultural fluency, technological literacy, entrepreneurial skills, and the ability to manage increasingly delayed and disaggregated organizations.

The authors claim that a firm's superior talent will be its future's prime source of competitive advantage. The human resource of a firm needs to be managed in the same strategic manner like any other organizational asset (Lee et al., 2006; Collins and Smith, 2006). Lee et al. (2006) and Milkovich (2013) reinforce the importance of human asset as nonpareil, which provides a sustainable competitive advantage to the governing body. Nahapiet and Ghoshal (1998) consider that a firm's *human resource deployments* have the potential to provide it with an advantage in terms of its human, social, and intellectual capital to attain a competitive edge. Previous organizations used to compete in the market, and favourably positioned themselves against their competitors, by capitalizing more on traditional resources. However, the traditional resources are believed to be short-lived, and can be easily replicated; therefore, the organizations would lose their competitive edge in the market. Firms are always busy finding new ways for a sustained competitive edge (Beer et al., 2004).

The traditional employees are currently being replaced by “knowledge workers”, who are becoming the most highly prized commodity in the advanced economy (Giauque et al., 2010). The insight and competence possessed by these workers are idiosyncratic, and is a rare commodity in the market (Aguinis et al., 2012b). Chambers et al. (1998) and Aguinis et al. (2012b) call it as a “talent war”. The significance of intellectual capital has been acknowledged as a major advantage in the context of the economic

rivalry by providing the core competencies (Giauque et al., 2010; Combs et al., 2006). This is imputable to the fact that employment is becoming more dynamic, uncertain, and complex, requiring more of cognitive ability, and is scattered in time and place (Pravettoni et al., 2007). It, therefore, increases the workers responsibilities.

In traditional organizations, employee control and monitoring were a requirement because of the limited employee ownership or obligation for goods created, and for achieving top-down defined targets (Eldridge and Nisar, 2006). In such traditional organizations, job satisfaction was low because people had little job significance. The transition of focus from traditional resources of a firm to its increased focus on human resource has, in turn, affected the human resource policies and practices. Rousseau (1997) calls it the shift from management prerogatives to an employee self-management, which requires lesser formal control. Organizations have realised this secret and diverted their attention towards investing time, efforts, and resources in controlling and motivating its human resource. Firms have two fundamental HR needs: the need to prudently utilise its resources to achieve its goals and objectives, and the need to assess the productivity of human resources achievement, to repay them in a rational manner (Nordhaug, 2004). Substantial uncertainty is involved because companies obtain “crude labour” not work performance. Hence, it is not productivity, rather the potential performance of the agent that is brought into the firm. Put differently, the agent’s work time is obtained instead of his/her work results, especially in case of professional employees (Nordhaug, 2004). The productivity of knowledge workers cannot be specified ex-ante (Tirole, 1999; Currall et al., 2005). Moreover, the effect of their efforts sometimes is not manifested immediately, and usually requires a certain time period for the fruits of their exertions to appear. The conversion of human time and competence in work performance, nevertheless, remains an unsolved equation. The term “incomplete labour contract” characterise this way of reasoning, which highlights the difficulty of purchasing potential labour and not real labour (Tirole, 1999, 2009). The author argues that initially the parties to a contract lend themselves to the available standard design contract of the industry, and this perhaps, is the best contract under existing knowledge, by considering a contingency as foreseeable, but not foreseen. Furthermore, the author has given two implications of this approach, which is in contrast to the traditional approach: there are transaction costs of negotiating deals, and complete contracts may become wasteful contracts. Contracts can be modified or renegotiated after implementation, whenever the need arises, ex-post. Stroh et al. (1996) admit that the management has to choose between the fixed pay and the variable pay, which depends upon the extent to which a job allows monitoring. The appropriate contracts in this situation would be long term and incomplete; incorporating the factor of contingency, or more simply incentive based contracts.

The management can not exactly pin down the way the employees are required to behave, and specify their work methods; therefore, it faces a governance problem

(Nordhaug, 2004). However, the measure for their efficient utilisation is the degree to which their creativity brings innovation to the organization (Magrassi, 2002). Pink (2001) calls knowledge workers as archetypal “free-agents”. These agents pursue boundary-less careers outside the bureaucratic organizations, yet many are still employed in bureaucratic systems. Gomez-Mejia et al. (2005) consider that by losing such a worker, an organization will not only incur financial losses, but also depart with the valuable knowledge. The interplay between knowledge workers and contemporary bureaucratic organizations presents a serious challenge to the management because they are involved in a different type of employment relationship (Lee et al., 2006). Due to increased autonomy at the workplace, these actors have to be handled tactfully. The benefits that these organizations can reap by having such employees and the loss incurred by losing them sharpens their demand (Allen et al., 2010). They are in a spot to negotiate their organizational commitment based on their knowledge, and scarcity of supply (Giauque et al., 2010). An interesting characteristic of these actors is that they are highly committed towards their work, rather than to any specific organization, and their demand is ever increasing (Aguinis et al., 2012a).

Organizations’ reliance on self-managed employees to utilise their autonomy and tacit knowledge has increased, due to the changing nature of work (Currall et al., 2005; Thomas et al., 2013). Drucker (1998) considers the knowledge workers to be mobile repositories of knowledge. The itinerant nature of these employees increases their chances of job mobility. It is, therefore, critical to understand how to motivate such professional agents due to their unique skills (Chien et al., 2010). Kwon et al. (2010) consider the knowledge workers as the pinnacle of modern organizations. Aguinis et al. (2012a) highlight the fact that organizations benefit by retaining top talent, by empirically proving that top talent produces a disproportionately large amount of output. One way to supervise these workers, is to offer them compensation packages that are market competitive, and to motivate them for the right task by offering incentives. Türk and Roolaht (2007) argue that the employees are rewarded for expending their efforts, through pecuniary and non-pecuniary benefits, according to the value of their work in the establishment. These authors affirm that the value of a job is no longer confined to local labour market, but instead, it is determined by the international market. Pay is viewed as one of the most significant activities of the HR management, and a key to the relationship between employers and employees in the employment exchange or transaction process (Dulebohn and Werling, 2007). These authors consider compensation as a crucial employee management and controlling tool in most organizations.

2.3 Agency Theory in Organizational Context

Agency theory has for a long time governed the economic relationship between the principal and the agent, whether it has existed in the external or internal market. The theory was conceptualised some 90 years ago, and ever since it has been generously used by the scholars from almost all disciplines, such as [Davis et al. \(1997\)](#), [Harrell-Cook and Ferris \(1997\)](#), [Dharwadkar et al. \(2000\)](#), [Wright et al. \(2001\)](#), [Eisenhardt \(1989a\)](#), [Hölmstrom \(1979\)](#), and [Wiseman and Gomez-Mejia \(1998\)](#), among others. Agency theory deals with the contracts between the principals and the agents – for the latter to perform some services in return for rewards from the former ([Jensen and Meckling, 1976](#); [Eisenhardt, 1989a](#)). The contract specifies what the principal expects from the agent, and what the agent will receive in return ([Parks and Conlon, 1995](#)). [Jensen and Meckling \(1976\)](#) indicate that if both the parties are utility maximisers, then, there is a possibility that the agent will not always work in the best interest of the principal. ([Eisenberger et al., 1999](#), p. 687) state that, “People understand that reward’s use in everyday is utilitarian, involving the reward giver’s lack of control over the potential reward recipient”.

The main problem highlighted by the agency theory is the maintenance of proper demeanour of the agents, which arises due to diverging interests, especially when the procurement of information about the agent is costly, uncertain, incomplete, and is held asymmetrically ([Oviatt, 1988](#); [Prendergast, 1999](#); [Dalton et al., 2007](#)). Such relationships are more difficult to handle, as the professional agent is more knowledgeable than the principal, due to the information edge over the counterpart ([Sharma, 1997](#)). [Young et al. \(2012\)](#) argue that even a principal’s ability to monitor an agent’s input will not allow him/her to exactly specify the activities of the agent due to information asymmetry, especially in professionals.

[Davis et al. \(1997\)](#) stress that in modern firms the principals and agents are motivated by opportunities of perusing their personal gains; therefore, principals invest their wealth in the company and design governance systems to maximise their utility, by curbing an agent’s unfavourable acts. The agent, on the other hand, accepts the responsibility of managing the principal’s wealth, as he/she considers it to be an opportunity of gaining more utility, rather than by accepting other opportunities. The principal can thus limit divergences from his interest by establishing appropriate incentives for the agent, and by incurring monitoring costs designed to limit the aberrant activities of the agent. In addition, a principal might even pay the agent to expend resources (bonding costs), to guarantee that the agent will not take certain actions, which would harm him/her, and to further ensure that the principal will be compensated if the agent takes adverse actions ([Jensen and Meckling, 1976](#)).

Previously, the role of agency theory was confined mostly to understanding the relationship between the managers and the shareholders. [Balkin and Gomez-Mejia](#)

(1990) and Gerhart and Milkovich (1990) focus on the compensation issues of the executives and top level managers. Jensen and Meckling (1976) and Williamson (1985) indicate that finance and economics scholars have a particular contribution towards the agency and transaction cost theories to explain the relationship between the top managers and shareholders, by referring and explaining some of its confusing aspects (Oviatt, 1988). Davis et al. (1997) stress that modern corporations cannot be handled by single owners, and as a result, these entities have multiple owners; each trying to maximise his/her benefits in the firm. These authors pointed towards the multi-layered agency relationships. Later, scholars turned their attention away from the compensation of the top executive, and were more interested in studying the relationship of middle level managers due to scarcity of research in this area (Stroh et al., 1996). The author contributes towards the application of agency concepts to variable pay, and took the liberty of taking agency relationships a step further by studying the professional agents. Sharma (1997) discusses the principal-professional relationship in the context of hiring firms and outside professional service providers, thus studying the inter-firms principal relationship; with one firm having an information edge over the other. Moreover, the author argues that the professional-principal agency relationship can be used as a base-line for inter-firm professional-principal agency relationship.

Eisenhardt (1989a) splits the literature of agency theory into two different streams: the positivist stream and the principal-agent stream. For both the streams, the unit of analysis (contract) and assumptions (people, organization, and information) are the same; they only differ in mathematical rigour, dependent variable, and style. The principal-agent stream has more testable implications in optimal contracts; while reinforcing the agency links with the mainstream organizational perspective. Eisenhardt (1989a) suggests that it is crucial to use agency theory to examine a firm's compensation scheme with an objective of cost cutting. As compensation is one of the major costs of doing business, managers have to choose between fixed pay and variable pay, conditioned on how comfortable it is to monitor the job performance of the employees. The principal can motivate agents by controlling their incentives (Davis et al., 1997). Rousseau (1998) stresses that traditional micro-organizational behaviour research focus more on incentives to motivate employee workplace behaviour. The principal-agent relationship should be liberated from altruistic inclinations by devising mechanisms that engender trust, rather than exclusively relying on information-gathering devices (Sharma, 1997).

Gomez-Mejia and Balkin (1992) argue that when work behaviours are inherently non-programmable, an organization is forced to monitor behaviour by assessing outcomes (e.g., number of publications). As a principal is contracting on an agent's behaviour, therefore, it is more efficient that the agent should be paid for those behaviours, which can actually be observed and evaluated (Stroh et al., 1996). The authors further conclude that when a long term employment relationship is expected between the principal and the agent, the principal's reliance on behaviour-based

compensation escalates, as more information is available to the principal about the agent's behaviour. Eisenhardt (1989a) and Stroh et al. (1996) confirm that monitoring is directly connected to task programmability. Task programmability is positively related to the use of behaviour-based compensation contracts (fixed salary), but negatively linked to the use of outcome-based contracts (variable pay) because it allows the principal to specify the job behaviours of the agent ex-ante. Stroh et al. (1996) opine that when a long term employment relationship is expected between the principal and the agent, the principal's reliance on behaviour-based compensation escalates, as more information is available to the principal about the agent's behaviour. Wright et al. (2001) advocate the need of studying agency relationship from a behavioural perspective, and not strictly in the economic sense. The authors stress for opening up the tunnel vision, and consider "deviations" to be central to behavioural research, which will also be beneficial to the principal. Robinson and Rousseau (1994) consider employment as a psychological contract in which the agent meets the expectations of the principal with a reciprocal reward from the latter. In this relationship, both the parties are required to contribute and in return receive the things which are of value to them. Agency Theory needs to be tested with more empirical evidence, especially in an organizational context to give it flexibility by incorporating the psychological element. Kidder and Buchholtz (2003) discuss the agency relationship from the psychological contract perspective. Agency theory has been applied to issues ranging from micro-level settings to macro-level settings (Eisenhardt, 1989a). Davis et al. (1997) propose that agency theory addresses the issues of divergent interest between the principal and the agent, yet there should be another theory that explains interest alignment in more detail. It will, therefore, not be an exaggeration to label the agency theory as the "mother of theories". The authors have put forward the concept of "Stewardship Theory" as a way of defining relationship based on other behavioural premises beyond an economic perspective.

To sum up, agency theory has a high potential which can be applied as a launching pad for many other economic and non-economic theories to deal with complex employment relationship issues. Linking multiple discipline theories have always led to the breakthrough of new connections, novel model building, and modern theories, thus further adding valuable knowledge to the already existing sources. Figure 2.1 shows the basic framework of the agency relationship.

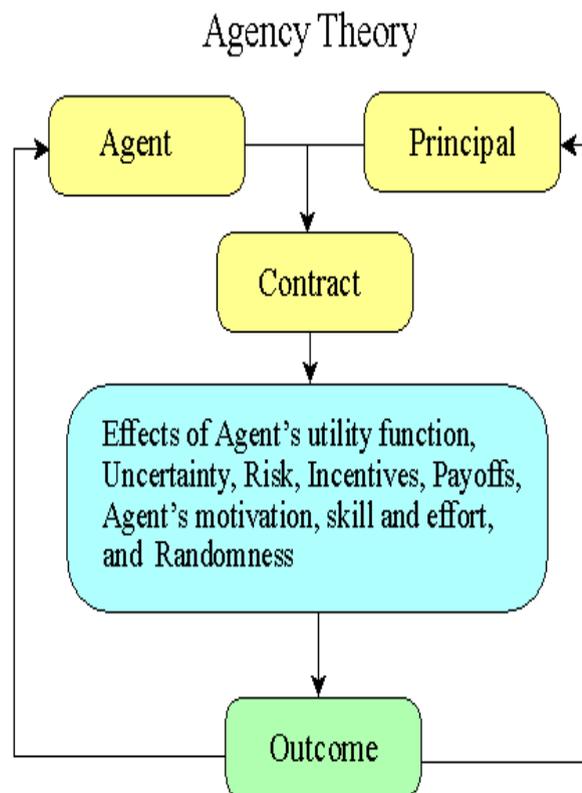


Figure 2.1: Agency Theory
Source: [Tiessen and Waterhouse \(1983\)](#)

2.3.1 Criticism Against Agency Theory

Agency theory is concerned with resolving problems related to the agency relationship, such as goal conflict between the principal and the agent, and the difficulty to verify the agent's appropriate behaviour (Eisenhardt, 1989a). The second problem pertains to different risk sharing attitudes between the two main parties to the contract (Gomez-Mejia and Welbourne, 1988). These authors consider the "risk differential" as the root cause for creating the problem of moral hazard in the principal-agent relationship. Wright et al. (2001) stress that the risk averse behaviour of the agent tends to persuade him/her to keep the cost at the minimum level. The authors have criticised the narrow perspective of agency theory, as it simply looks at economic exchanges between two individuals, such as the principal and the agent, and ignores the larger context, such as not examining it from the perspective of groups and organizations. The authors further criticise this theory to be limiting; as the agents are always assumed to be risk averse, which in reality might not always be true – neither all individuals are the same, nor all the situations should be considered as identical. Agency theory, thus, looks at the people through a single lens. Chiles and McMackin (1996) and Bloom and Milkovich (1998) argue that the element of risk has not been paid much attention in the past and remains scant in empirical testing. Chiles and McMackin (1996) have empirically tested a range of risk preferences, such as risk aversion, risk neutrality, and risk seeking; claiming that the three types of preferences have different implications. It can be beneficial to traverse the gaps related to the outcomes of risk, which were not analysed in the previous studies. Gomez-Mejia and Welbourne (1988) also hold a similar view by criticising the agency theorists for ignoring a wider range of risk preferences, such as risk seeking or risk loving behaviour of the agents. Hence, the authors want to promote the risk horizons to improve agency models. Keeping in view the loopholes and deficiencies in the agency theory, the authors further suggest that despite the links between governance structure and risk preference choices of the agent, the nature of precise relationship is far from clear.

In short, agency theory and the highly specified contracts that are grounded in the agency doctrine have been knocked down by the behavioural researchers, for ignoring the social context influence, such as the nature and interpretation of contracts by the agents.

2.3.2 Significance of Contract in Agency Relationships

Oviatt (1988) refers to the agency relationship as an intricate nexus of exchanges between the people at different levels. Jensen and Meckling (1976) assert that organizations are simply legal fictions which serve as a nexus of contracting relationships among individuals. Agency theory, therefore governs the relationship of the two parties in a hierarchical setting of a firm (Parks and Conlon, 1995). The relationship is regulated

by a “contract”. Contracts thus lie at the heart of agency relationships by incorporating the “how” and “why” of transaction cost. The contract demonstrates the intention of principal’s expectations from the agent; upon the agent’s acceptance of the contract the two parties are bound in an employment relationship. [Kidder and Buchholtz \(2003\)](#) consider a contract as a pursuit to mitigate the problems arising out of agency assumptions. Contracts are usually legal documents; specifying the criteria used in awarding compensation, and the foreseeable conditions for linking compensation to established criteria over some finite time period.

[Fama and Jensen \(1983\)](#) describe contracts as something which specify the rights of an agent along with the criterion for performance evaluation and the rewards they receive, taking into consideration the available production technologies and external legal restraints that might influence the cost function of a firm. [Prendergast \(1999\)](#) states that the previous economic relationship was examined in the context of the outside environment; however, it was only after the establishment of organizations that such contracts have been brought inside the firm and studied.

[Butnaru \(2009\)](#) views the contract like a game between the two main parties, and for every game there are certain rules to be followed by the parties involved. The actors have two alternatives, either to abide by the regulations by trusting each other, or default and expropriate the composite quasi rent. Contracts are always made under uncertainty. Violation according to the author can be harmful for the parties involved in the contract. The contract binds the parties from going astray in discharging their responsibilities while upholding their mutual benefit. Without a contract this relationship would have been very vague, resulting in pandemonium. Nonetheless, contracts are written by and applied to human beings, it is therefore hard to cover everything in the deed that pertains to the demeanour of the agent, as human behaviour is unpredictable and people behave differently even in the same situations. Therefore, contracts will always have a provision for contingency clause. This has been alluded to as “incomplete contracting” by [Tirole \(1999, 2009\)](#) and is usually the source of tension in agency relationships. Contracting is incomplete because there is no point in writing a contract, which specifies particular behaviours when the desired action cannot be observed and consequently the contract cannot be effectively enforced ([Levin, 2003](#)). The author admits that the real world contracts are informal. Both the principal and agent understand these types of contracts without it being written in detail. Firms care about their reputation and will try to follow the contract, however, they expect flexibility from the agents to go beyond the contractual requirements. The give and take situation that arises during the course of employment allows the contracts to be adjusted as per the demands of the situation. The following paragraphs will highlight the difficulties in contracting.

2.3.3 Problems of Contracting

Contracting is never an easy job and involves several pitfalls. Nordhaug (2004) asserts that a contractual relationship is not merely difficult, but close to impossible to recount in detail that what the employee is supposed to do and how he/she shall perform, posing governance challenges to the management, and efficient use of human competence. Tirole (2009) considers it as a state of awareness of the unawareness of the parties involved.

Milgrom and Roberts (1992) discuss some of the chief problems of actual contracting which include: adverse selection, bounded rationality, imperfect commitment, secret data, moral hazard, and incentives. Agency theory according to Eisenhardt (1989a), strives to obtain a more efficient contract; given the agency assumptions about the individual and the organization. The principal hires an agent to act for him/her; while unaware of the exact abilities, expertise, honesty, etc., possessed by the recruit. The principal's act of hiring less talented individuals due to inadequate or lack of information is termed as "adverse selection" (Milgrom and Roberts, 1992). Adverse selection is considered to be merely a portion of the principal-agent bigger problem, as even after selecting employees the principal might not be fully cognisant of the agent's activities, and the agent might resort to "shirking". Arrow (1984) refers to the former as "hidden information" and the latter as "hidden actions".

Nagar (2002) discusses the incentive compensation in the wake of two problems faced by the top managers: how to delegate authority to the agents, and how to design an incentive system to ensure that the agents will not misuse the given authority. Many social scientists stress that the incentives should be tied to the agent's responsibilities. The author further establishes a point that the organizations which are innovative, volatile, and growing, can delegate more authority to the agents, thus increasing the range of incentives for its employees. In an unstable environment top managers cannot cope with the information generation effectively; therefore, the authority has to be delegated to the lower level employees. The author is of the opinion that in a dynamic environment the performance measures also fluctuate, putting the employee incentives at risk for which the firm must compensate. To deal with dynamism, Kidder and Buchholtz (2003) recommend that agents must be given incentives to accept risks. The principal pays a premium as an incentive which is related to the management trades-off against the benefits of delegation (Nagar, 2002). The work is, however, missing an important element of the incentive scheme, such as performance measures, which is the essence of incentive contracts.

Contingency is a big challenge in writing optimal contracts, which to some extent can be reduced by incorporating both the internal and external elements while designing contracts (Tirole, 1999, 2009). Although, it is very difficult to absolutely eliminate these costs, it can be significantly reduced through "efficient contracting" (Wright et al., 2001). Fundamentally, the focus of compensation is on a few internal factors. It has

to be linked with both ILM (internal labour market) and external environment to keep pace with the rapid changes in the environment due to globalization (Dulebohn and Werling, 2007).

Planning an efficient contract does not need to be fully insured or have full incentives, and it also does not need to be completely uninsured or without incentives (Gibbons, 2005). The author posits that an efficient contract should be one which rests between these two extremes. Moreover, the author criticises that if this rule is applied in spirit, the agent may resort to manipulations in work outcomes, by supporting his argument with the help of practical examples from different companies. The author thus concludes that incentive contracts are not the sole source of motivation; for example, a promise of promotion may involve a contract, but not an incentive contract.

Eisenhardt (1989a) discusses the issue of trade-off between the cost of measuring behaviour, the cost of measuring outcomes, and transferring the risk to the agent. Bonner and Sprinkle (2002) believe that a complex task requires a greater degree of attention and cognitive processing as compared to simple tasks. The literature is fairly consistent in claiming that as task complexity increases, employees seem to be less responsive to financial incentives (Bonner et al., 2000; Mohd-Sanusi and Mohd-Iskandar, 2006). The reason being that as task complexity increases, successful performance requires a high degree of both skill and effort, which in turn may discourage individuals from chasing high-powered incentives (Bonner and Sprinkle, 2002). Usually tasks which are amorphous or non-programmable, do not have specific behavioural measures, and it is difficult to frame an ex-ante contract.

Compensation system serves a dual purpose in the principal-agent relationship, such as allocating risks and rewarding productive work (Holmstrom and Milgrom, 1991). If the agent is made to bear the full cost or benefits of his/her actions, he/she would take efficient choices. Roberts (2004) suggests that agents should not bear all the costs or benefits of his/her actions because benefits might be uncertain while the agent is risk averse; therefore, uncertain payments are less attractive to the agent than fixed payments. Such types of organizations are inefficient because the agent will shoulder all the risk; arising out of uncertain benefits while the principal's risk absorbing capacity will be wasted, as the agents cannot be full residual claimants (Baker et al., 1988; Wright et al., 2001). Bloom and Milkovich (1998) consider a payment system to be optimal when it is balances between an agent's effort and risk.

The strength of the incentives offered will determine the amount of effort an agent is willing to put into his/her work (Roberts, 2004). This claim of the author is in accord with the expectancy theory of motivation. Making the incentive more intense will increase the expected return to the agent from exerting more effort (Holmstrom and Milgrom, 1991). Furthermore, the agent must expect to receive adequate total compensation to willingly work for the principal, else would leave the firm. Theoretically,

an ideal incentive design involves a trade-off. The exact nature of the trade-off depends on the ground that the agent does not bear all the marginal costs and benefits. [Roberts \(2004\)](#) offers a very simple model with useful predictions about the design of incentives. Stronger incentives should be extended when the agent is less risk averse, and performance measures will be done more accurately to depict the agent's actions. Moreover, when inducing higher level of efforts is more valuable to the principal and the agent can more easily respond to the strengthened incentives.

[Baron and Kreps \(1999\)](#) state that in economics, labour is referred to as a commodity for which the principal pays a price to procure his/her services at the given market price. The problem is how the principal determines the units of labour, which he/she has purchased, and how he/she will fix a price value for that labour.

[Frey et al. \(2013\)](#) emphasise that the input control is the most appropriate control system when tasks are ambiguous, complex, and interdependent. In unstructured tasks, the output control could lead to dysfunctional reactions, such as gaming. According to these authors, paying an employee by time or output is a complex phenomenon, and the problem of units becomes more complicated when linked to incentives. [Harrell-Cook and Ferris \(1997\)](#) argue that there is plentiful evidence that an agent presses the principal for short-term incentives. The short-term orientation strategy can result in grave implications for investing in HR when the benefits of such investments have the potential to accrue over a longer period of time. The actions adopted by the organization in conforming to pressures for short term financial performance are termed "tactics" and not "strategies". According to [Fudge and Schlacter \(1999\)](#), when the employees engage in unethical behaviour, they accrue short-term benefits to the organization, which may expedite accomplishment of the immediate goal(s) of the organization. The incentive system, according to [Stroh et al. \(1996\)](#), has to be aligned with the type of industry as well as the type of work an agent is required to perform, under a given contract. [Jiang et al. \(2012\)](#) found that the motivation-enhancing practices have a direct effect on the employee performance, as well as indirect positive effects on financial performance and operational outcomes. According to ([Fudge and Schlacter, 1999](#)), organizations should identify those rewards which have the greatest motivational incentive for the employees, especially those employees who are involved in innovation and research ([Chien et al., 2010](#)). The business processes of an organization need to allow some experimentation and risk taking; without this it will not be possible to discover effective ways of operations and to develop new products that will lead to transformational changes ([Lawler III and Finegold, 2000](#)). Innovation requires individuals to access resources, especially financial resources. The authors argue that in terms of financial resources, organizations can create pots of money that can be awarded to individuals, who have ideas about new products or processes that can change the organization.

2.4 Contemporary Pay for Professionals

A great deal of the research has moved into contracting, but very few empirical implications have surfaced up, which provides little direction in understanding the actual compensation arrangement in organizations (Werner and Ward, 2004; Dulebohn and Werling, 2007; Kuhn, 2009). Labour cost is essentially the highest cost that is incurred by the firms, yet little attention has been paid linking the reward system with the organizational aims and strategies (Balkin and Gomez-Mejia, 1987). Since the inception of the organization, rewards have been viewed as a primary enticement for the employees and a major expense for the employer; still many important features of organizational incentive systems have not been examined in detail (Werner and Ward, 2004). Dulebohn and Werling (2007) assert that a number of intrinsic factors play a complementary role in the employment relationship, yet, compensation remains the key motive. The authors acknowledge that the compensation decisions of a firm can provide it a competitive edge. The important role of compensation in managing organizations is the key precept of modern management. Balkin and Gomez-Mejia (1987) stress pay to be an integral part of the corporate strategy and one of the key areas of HRM.

Economists have become more interested in the theory of the firm in recent years. They are focusing on several regions of HRM, but one such important area, which causes a larger influence on organizational behaviour is the incentive system (Baker et al., 1988). This includes HRM in general and compensation policies in particular – to be given more attention. Brown et al. (2003) investigate the relationship between organizational-level pay decisions and organizational functioning, thus dividing pay structures into egalitarian and hierarchical categories. The former refers to the compressed pay distribution, whereas, the latter to a dispersed pay. The authors suggest that an overly egalitarian as well as an overly hierarchical structure is both detrimental to the equity perception of employees. Pay level interprets the average compensation level of a firm in relation to its rivals (Gerhart et al., 1992); it is frequently labelled as leading, meeting, or lagging (Milkovich, 2002). Characteristics of a particular pay structure according to Gerhart et al. (1992) include the number of levels in a pay structure, the differential between pay levels, and the rate at which each employee can progress through each level in the structure. Bloom and Milkovich (1998) assert that agency theory is concerned with the choices of the principal about the structure and form of the compensation system and how these will affect the principal's outcomes.

Heneman et al. (2002a) confirm that a new strategic pay perspective has emerged in the 1990's where a transformation has taken place in the field of pay, shifting the focus away from the individual as a unit of analysis; to organization as the cardinal focus of pay. The increasing marketisation of economies has caused an impingement on the labour marketplace, and the organizational reward systems alike. The changing workforce requires updating and flexible reward practices (Dulebohn and Werling,

2007). The new pay should differentiate between floors of functioning by eliminating the “one size suits all” scheme (Mujtaba and Shuaib, 2010). Horwitz et al. (2006) acknowledge that a generic HR strategy may not work for all types of employees in an organization. The authors suggest that a package of strategies which should provide personalised and specialised treatment to different groups, and sub-groups in firms, which include: flexible job design, growth opportunities, contemporary remuneration systems, i.e., achievement-linked financial rewards, etc. The authors further stress that the motivational strategies of traditional employees and knowledge workers must also be distinguished. de Silva (1998) expresses his views on the importance of contemporary pay systems that it should not only recognise skill differentials of employees, but also provide incentives to employees to acquire multi-skills through years of investment in education and training, which is crucial for multitasking jobs.

According to Kuhn (2009), compensation delivers a hefty impact on employee performance by deciphering the signals into job behaviours. The author looks at the pay system from the perspective of the organization culture. Pay system affects the employees’ motivation, satisfaction, and behaviour, as it indicates the organizational values to the employees. Moreover, the pay system can either attract or repel the right kind of people because it mirrors an organization’s philosophy, values, and practices. Arrowsmith et al. (2010) declare pay management as an important portion of the employment relationship. The organizational citizenship behaviour is related to individual ratings and rewards, such as individual level outcomes (Podsakoff et al., 2009; Organ et al., 2011).

Research has shown that perceived inequity leads to undesirable behaviour. Heneman III (2002) hold some reservations that the new pay programs might fetch equity issues among employees. Moreover, the author has concerns regarding how employee competencies are to be measured, the nature of competency assessments, the reliability and validity of appraisals and the pricing of competency levels, such as skill blocks. The author has further apprehensions as to out whether the presumed strategic benefits of person-based pay systems outweigh the negative attitudinal and behavioural reactions which it fosters among the employees.

Jensen and Murphy (1990) consider the form of compensation more critical than the amount, in attracting and motivating talented people. Parks and Conlon (1995) studied the conditions under which employers should offer and employees should accept contingent pay, and harmonise with the success of new payment systems, but have reservations about why and how these new pay systems work, and under what conditions they will be successfully implemented. According to Heneman et al. (2002a), pay systems are focusing less on the administrative aspect and more on the strategic aspect. The authors argue that a system will be considered rigid where remuneration is not provided for the characteristics (SKA) of the incumbent, but rather for the obligations of the occupation. Moreover, the authors propose that pay should be provided for output and

not the time spent on the job. [Heneman \(2000\)](#) stresses on providing external equity rather than internal equity and suggests a participative approach.

[Lawler \(2000\)](#) points out that the strategic success of a firm depends upon its reward structure which supports its strategic intent. The author further asserted that a firm should build up its compensation strategy in such a way so as to retain “excellent” employees; excellence is defined in the terms of performance pursuing strategic objectives of the firm. The firms must shift from control strategies to employee motivation strategies, where incentives should be linked to an employee’s contribution towards value-creation, which refers to an effective organisation of human resource. The author stresses the provision of valued rewards to the employees, who can develop themselves in strategically important ways, and considers PRP systems critical to an organizational success in a dynamic knowledge-based economy. [Wiseman \(2001\)](#) agrees that successful strategy implementation should start with the rearrangement of an organization’s reward system.

[Gomez-Mejia \(1992\)](#) proposes diversified compensation strategies for a firm that has different compensation systems; further stressing that there cannot be a one best fit for all. Based on previous studies, the author has divided strategic compensation choices into two major types: “algorithmic” and “experiential”. The former is based on structured work; whereas, the latter on unstructured work. The two compensation choices lie on extreme ends of a continuum; however, most organizations fall in-between the two extremes. A firm should adjust its position along the continuum based on its diversification strategy. Experiential compensation strategy with greater reliance on variable pay, may attract and retain talent. In other words, the greater the asset specificity, the more probable it is that organizations will follow the experiential compensation strategy. The author labels the modern systems as, “ambidextrous” organizations for which experiential compensation strategy can be more worthy. Homogeneous pay structure for a heterogeneous workforce will demoralise creativity; whereas, experiential compensation patterns foster an entrepreneurial culture.

[Balkin and Gomez-Mejia \(1987\)](#) demonstrate that the success of a firm adopts a mix and match of compensation strategies, organization, and overall environment. Linking of the compensation system to ILM (Internal Labour Market) and external environment can help combat the challenges of globalisation ([Dulebohn and Werling, 2007](#)). [Parks and Conlon \(1995\)](#) predict that in the future, the form of compensation will be more significant than the quantity. Compensation strategies need to be aligned with the organizational characteristics and the characteristics of its employees ([Stroh et al., 1996](#)).

[Baker et al. \(1988\)](#) suggest that compensation policy can be broken down into three independent dimensions for the purpose of analysis, such as the level of compensation, the functional form, and the composition. The level of compensation refers to the total expected cost or value of the compensation package to the principal or agent

respectively, which can be beneficial to a firm in attracting competent individuals. The functional configuration focuses on performance incentives. The authors admit that a simple increase in the level of compensation has no effect on the employee effort exertion for good performance. Finally, the composition refers to the components of a pay package, such as cash rewards, fringe benefits, the quality of the working environment, relationships with the co-workers, leisure, etc. All the three dimensions of compensation need to be managed in a harmonised way. Contracts are mostly structured around the functional form of the compensation (Baker et al., 1997).

The reward system is a potent indication of the company's values and philosophy. Paarlberg and Perry (2007, p. 397) state that:

Employees respond to organization values and the process of rewarding progress toward those values only to the extent that such goals and incentives fall within a zone of existing values.

Any system, which is spelled out incorrectly causes more damage than good to the organization. de Silva (1998) considers a reward system to be fair when linked to efforts; stressing that performance-based incentives should not be considered as an independent system from other HR practices of the organization. In reality, it is a part and parcel of the entire HR system and has to be aligned with the organizational culture, structure, and overall goals and objectives (Milkovich, 2013). Agency theory considers *incentive contract* as the building block of an employment relationship between an employee, the managers, and the administrative mechanisms of a firm (Milgrom and Roberts, 1992). Pay decisions are studied from the perspective of agency theory, which focuses more on the organizational interests, rather than the equity perception of the employees (Gomez-Mejia, 1992). Adam Jr and Foster Jr (2000) advocate the synchronization of the payment systems with the new business requirements, due to the fact that contextual variables affect quality performance and other financial variables.

2.5 The Nature of Incentive Contracts – Do these Act as Motivation Tools?

Money has always been a preferred motivator in organizations because of its outcome utility. Rynes et al. (2004) and Ryan and Weinstein (2009) believe that money has a symbolic or instrumental motivational value. Considering the symbolic context, money enhances the social status of an individual. On the other hand, the instrumental context acts as a motivator because it can fulfil a person's physiological and physiological needs. Werner and Ward (2004) stress that the evolution of management provides a new dimension for managing resources, which requires not only focusing on production, but the overall success of the organization. Taylor's (1988) contribution to the management can never be underestimated; especially his pig-iron experiment laid the foundation

for incentive based pay – in the form of piece rates (Wrege and Hodgetts, 2000). At that time, piece rate incentive worked very well because more emphasis was laid on the quantity of work, as the economy was dominated by production firms. Modern organizations are conscious of the quantity as well as the quality of the employees work. These firms still seek guidance from the pioneering work of Taylor (Wrege and Hodgetts, 2000). Fudge and Schlacter (1999) has apprehensions about the motivational tool designed to reward questionable behaviours which “made the numbers” at all cost. The most direct incentive is to pay the worker for measured performance (Holmstrom and Milgrom, 1994). According to Sprinkle (2000), prior research has shown that employees who receive incentives exert higher levels of effort than those receiving flat-wage contracts. The author affirms that incentive increases the pace of learning and improves the learning curve.

It was not long ago that organizations were not taking the incentive schemes so seriously. Agency theory re-establishes the importance of incentives and self-interest in organizational thinking (Eisenhardt, 1989a). Kaplan and Henderson (2005) agree that economic and management experts, as well as practitioners, were in favour of introducing formal and informal incentives into the compensation packages of their employees; yet, there is little evidence on the ground to support this notion. After considering the economic models of compensation, Behavioural scientists share the view that agents need to be motivated by proper incentives to advance the organizational goals (Balkin and Gomez-Mejia, 1987). Becker and Gerhart (1996), Lado and Wilson (1994) and Wright et al. (1994) suggest that when the employees have the right attitudes and direct their effort choices in the right direction, they can produce the right work place behaviours. Emphasising the behavioural management model in an effort to increase workers’ effectiveness, Stajkovic and Luthans (2001) proposed the introduction of incentive schemes in organizations. This model provided a five-step framework for identifying, measuring, analysing, contingently intervening in, and evaluating the employees’ task behaviour to improve productivity. The authors hold the view that the commonly used incentives have different natures; therefore, these produce different effects on the employee performance.

2.6 Challenges for Designing Incentive Contracts

Organizations have changed and are continuously changing in terms of technology, process information, and knowledge; however, the incentive systems have not kept pace with this quantum leap (Kaplan and Henderson, 2005). Modern organizations face continued stress on the frontiers of continuous improvement and to enhance productivity, and are ready to embrace the factors that motivate employees; while using the resources more diligently. This explains why the organizations are increasingly switching over to PRP plans (Sprinkle, 2000). Bloom and Milkovich (1998) agree that agency theory has

become the principal theory in guiding pay for performance (incentive) research in an organizational setting. According to [Courty and Marschke \(2003\)](#), the principal-agent incentive framework has made two contributions to the literature, such as on one hand, early models explain how the incentives were used by the organizations to motivate and reward higher performances of the employees; on the other hand, recent models aim at addressing occasions where performance measures communicate objectives that imperfectly correspond to the organization goal achievement. Incentive alignment is a control mechanism, by linking an agent's compensation to the performance targets specified in the contract ([Young et al., 2012](#)).

The paradox of incentives does not end here, but includes the threat of subjective evaluation. When firms enter into a contract with the agent, they need some formal contract as a starting point, but leaving space for more information to be incorporated. Information also plays a role in the relational contracting. The Relational contracts can incorporate a wide range of subjective information because a subjective assessment is considered to be a better gauge of the employee performance. The use of subjectivity is especially common in incentive contracts, as it reduces an employee's risk and helps in interest alignment between the principal and the agent ([Nisar, 2007](#)). However, it can create confusion and a feeling of distrust in the minds of the employees. [Prendergast \(1999\)](#) considers subjective evaluation as a possible threat to incentives. Granting to the author; everything cannot be quantified in dollar terms; therefore, it is left to subjective evaluation of the supervisors; however, subjective measures can be easily corrupted due to vested interests. [Roberson et al. \(2007\)](#) discusses the biases in the appraisal process that these might provide an opportunity of renegeing to the principal; in an attempt to save costs, due to non-execution of a priori efficient contract.

Contracts can be based on objective as well as subjective measures ([Baker et al., 1988](#)). Objective measures are used when the outcome is easily quantifiable, but subjective measures are used on the estimated value of the employee to the organization because the individual output is not readily quantifiable. In objective measurement, quality is sacrificed for short term earnings. Changing the performance standards, is likely to increase discontent among the agents. Subjective measurement has its own issues and is unpopular with both the agent and the supervisor. Under subjective monitoring, the meddling of judgemental criteria is likely to increase the agent's risk bearing spectrum; whereas, the preferred mode is lower risk ([Berrone et al., 2008](#)). [Tosi Jr and Gomez-Mejia \(1989\)](#) regard it as a challenge to the corporate establishment to set up supervisory mechanisms and incentive alignment mechanisms that can alter the risk orientation of the agent.

Monetary incentives represent a generalised claim on resources and are therefore preferred over an equal dollar payment in kind ([Baker et al., 1988](#)). Valuing either or both can be based upon two things, such as employee needs and employee valance of the rewards, which acts as an incentive for effort exertion by the agent. [Stajkovic](#)

and Luthans (2001) assert that the use of different incentives has different effects on the motivational level of the employee, which is task contingent. The fact has been upheld by Schwartz (2009) stressing that things are quite complex in real life, as extrinsic incentives will not alter the motivational structure of all people –especially people who have intrinsic motivation that is strongly internalised.

Some psychologists and behavioural scientists – while criticising monetary incentives – claim that monetary incentives are counterproductive because it reduces and overshadows the intrinsic rewards that an employee receives from his job. The argument raised against extrinsic rewards is that it erodes intrinsic motivation of the employees; encouraging them to focus narrowly on the assigned set of tasks, whereas, ignoring the organization's success, which comes with innovation. Extrinsic reward; therefore, dulls out intrinsic rewards (Chib et al., 2012), as the employees exert all their efforts in pursuit of getting the job done as quickly as possible; at the cost of getting satisfaction from the job (Baron and Kreps, 1999). Drucker (1998) confirms that money alone does not motivate employees to perform much more than it motivates volunteers. A compensation contract that is largely attached to performance reflects a lack of confidence on the part of the principal, who desires to protect himself/herself from agent's opportunism. Lack of confidence can cause contrary effects on the agents' morale. Cash rewards; although, have more utility for the employees, but its marginal utility decreases with the increase in each dollar in such rewards (Mujtaba and Shuaib, 2010). The authors stress that non-cash rewards are less costly to reinforce positive work behaviour. Furthermore, the authors claim that every 12 cents cash reward has been costing only 4 cents in recognition, with non-cash rewards. Rewards tend to be 15% cash and 47% non-cash for most large firms. Lepper et al. (1973), Frey and Jegen (2001), and Prendergast (1999) allege that intrinsic motivation can be crowded by extrinsic incentives. Prendergast (1999) raises concern that sometimes the crowding out effect is so severe that performance of employees begins to ebb. Stajkovic and Luthans (2001) discuss the incentive system in terms of cognitive perspective, by knitting together incentives in organizational economics and cognitive frame-work. Before introducing any new incentive scheme the employees need to be educated on what are the valued behaviours for the organization that needs to be rewarded. This persuasion of bringing about the change has been rightly supported by Kaplan and Henderson (2005). The authors focus on the details and dynamics of the incentive systems, which are difficult to change in the face of significant external shifts.

The importance of incentives varies with different cultures, industries, firms, the nature of employment, and type of employees. Extrinsic rewards can enhance intrinsic motivation under certain conditions (Eisenberger et al., 1999; Gagné and Deci, 2005). Reinforcing the negative effect of extrinsic motivation, Gagné and Deci (2005) argue that it can be deleterious to intrinsic motivation and can have negative consequences on the employee behaviour and performance (Schaubroeck et al., 2008). The difference

of opinions has led to a never ending discussion between the scholars and remains inconclusive, as to which type of incentive takes precedence; nonetheless, these disputes are important to bring out the different perspectives of incentive schemes.

Non-pecuniary incentives also need to be given attention while designing incentive systems. [Kidder and Buchholtz \(2003\)](#) stress on the importance of non-financial incentives in the agent's motivation; posing a challenge to the design of an incentive contract. These authors argue that money has limited impact on a professional agent because it is difficult for him/her to make the connection between pay and performance. [Stajkovic and Luthans \(2001\)](#) acknowledge the importance of both. The authors further assert that non-monetary rewards include social rewards, which can be translated into direct rewards at some later stage, for example, the agents holding responsible positions also draw prestige and power that are associated with their positions – are components of non-financial rewards. [Ederer and Manso \(2013\)](#) raise the inquiry of the structure of managerial compensation if the goal is to induce managers to pursue more innovative business strategies. In reality, most organizations employ a middle track to balance the effects of extrinsic against intrinsic incentives. The two types of incentives are helpful in overcoming social dilemma in firms that cannot be solved through hierarchical authority ([Osterloh et al., 2007](#)). [Sprinkle \(2000\)](#) highlights some of the key challenges faced by the firms in designing incentive contracts. For different types of jobs there are different types of incentives that serve the purpose of employee motivation ([Gerhart, 2005](#)). [Holmstrom and Milgrom \(1994\)](#) emphasise that for the effectiveness of incentives, it is important that the whole range of activities performed by an agent must be known.

Most past models of the organizational research focus exclusively on incentivising a single task. [Holmstrom and Milgrom \(1991\)](#) formally introduced the concept of multitasking; stressing on the need for new models to acknowledge the connections between instruments and activities, and analyse richer patterns of actual practice. The use of high-powered incentives according to the authors is logical in linear tasks, but in multitasking jobs no single measure reflects the agent's total contribution, due to the measurement problem. This makes an incentive system more intricate to be designed. Consequently, the authors suggest that the power of incentives should be kept low in such scenarios. [Hellmann and Thiele \(2011\)](#) assert that standard incentive compensation is inappropriate for environments where experimentation is important, and this is also the norm. Closely linked to multitasking, is the problem of measurement. The old dictum “if you can't measure it, you can't manage it” should be balanced by the more recent rejoinder “if you only manage the things you measure you miss a trick” ([Holbeche, 2005](#)). If measures, goals, and effort are misdirected, people will put effort into things that do not matter much; at the expense of those things that will make a positive difference to their performance ([Holbeche, 2005](#); [Wildman et al., 2011](#)).

The professionals need more autonomy at work place; creating a need of imposing external controls ([Young et al., 2012](#)). The authors are not sure about the effects of

performance-related financial incentives on the motivation level and performance of these professionals. Nonetheless, the authors believe that incentives should empower employees while at the same time render the organization what it requires. An incentive system needs to be considered as a barter system or as a transitional system, which clearly shows the give-and-take for the agent. If an employee gives the firm what it wants; the firm will compensate the employees what it promised to them. It functions precisely like a business, where a price is paid in return for what a company receives from its employees.

Incentives play a critical role in instigating the employee's lust for innovation. [Hölmstrom \(1979\)](#) was amongst the earliest scholars to explain the scarcity of the use of high-powered incentives because it imposes risks on the agent. The risk element increases with task complexity when the outcomes are not always construed. It becomes specifically a matter of concern when an agent's risk aversion gains momentum. [Prendergast \(1999\)](#) considers certain assumptions regarding the trade-off between risk and incentives, which signifies low-powered incentives for riskier environments. Additionally, it implies that in a dynamic environment, compensation should not entirely be hooked to an agent's outputs, as there are a number of factors which are outside the control of an agent. [Prendergast \(2002\)](#) has come up with a totally reverse argument to the traditional agency theory assumption, such as suggesting a negative correlation between incentives and risk. The author advocates that when the environment is uncertain, more responsibilities are delegated to the agents; therefore, pay should be based on performance outputs. Thus, PRP should be given in risky settings because in such cases monitoring is not only difficult, but also unfruitful. In multitasking roles the output measures are unreliable; therefore, the desirability of output based contracts decreases.

[Ederer and Manso \(2013\)](#) point to the work of economic researchers, who have proved the effectiveness of high-powered incentives in inducing higher levels of employee effort, which consequently increases productivity. However, the authors also put forward a contrary view of the behavioural researchers that high-powered incentives inhibit creativity and innovation. According to these authors, the trade-off between risk and incentives implies that compensation should not depend upon the measures, which are outside the control of the agent. Incentives may produce a dysfunctional preoccupation with extrinsic rewards that can discourage risk taking and creativity, as it is hard to determine exactly what to do and how to evaluate performance ([Azoulay et al., 2011](#)). An optimal incentive scheme that motivates exploration is fundamentally different from standard pay-for-performance schemes used to motivate effort ([Manso, 2011](#)). [Harrell-Cook and Ferris \(1997\)](#) argue that due to increased risk placed on the agent's compensation has in turn resulted in decreased involvement of the agent in the research, development, and innovation. [Hellmann and Thiele \(2011\)](#) propose a model which is based on task exploitation and job exploration. The former refers to the standard

task of a person's job, whereas, the latter to innovation. The authors suggest incentive contracts for tasks that are well understood and measurable ex-ante; thus, stressing that innovation involves tasks for which the outcomes cannot be anticipated ahead of time. [Hellmann and Thiele \(2011\)](#) examine the interaction of innovation with the provision of optimal incentives for planned activities. When innovations are firm-specific, the principal wants to cut incentives for planned activities so as to create an "elbow room" for unplanned exploration. The authors argue that on the contrary, if an agent can capture most of the value of innovation, the principal keeps the incentive high for core activities so as to keep the employee focused on standard tasks ([Hellmann and Thiele, 2011](#)).

Determining the exact performance measure has often been insufferable. The principal knows in general terms what he/she wants from the agent, but the range of possible actions that the agent can take and the range of possible outcomes are only known to the agent. [Baker et al. \(1988\)](#) believe that it would be very pricey for the principal to delegate ex-ante explicit rewards and punishments to all possible outcomes. For instance, the exact performance formula for an agent; especially a professional agent cannot be explicitly defined; although, many of the job components can be identified. These authors are against the melodic theme of using a priori any explicit formula to judge a professional's performance, as it would adversely affect his/her level of self-esteem.

2.7 Do Incentives Matter in the Education Sector?

[Hansen \(2008\)](#) argues that introducing incentives for teachers would actually result in increased efforts; whereas, improving students learning is a question, which has empirically not been answered satisfactorily. [Casson Jr \(2007\)](#) holds the view that lack of explicit incentives in the educator's contract do not necessarily indicate that teachers are withholding efforts because the outcomes of a teacher's effort are not manifested promptly. Therefore, the teachers will receive an implicit incentive for expanding efforts, and will be rewarded with better career opportunities in the future and earn repute in the marketplace.

Providing financial incentives for teachers to increase students' performance is an increasingly popular education policy and practice around the world ([Fryer, 2011](#)). Incentive contracts in the education sector have mainly involved merit pay and bonuses for teachers; based on either students' test score or some other proxy measure used to determine a teacher's effectiveness. Incentives are provided to the teachers for student higher level performances, which is manifested as an increase in their test score ([Gorman, 2013](#); [Fryer, 2011](#)). Psychologists in the developed countries essentially agree that the pay on its own does not increase motivation ([Guajardo.J, 2011](#)). [Bennell et al. \(2007\)](#) confirm pecuniary motives to be dominant in the countries where people are struggling

with their basic household needs for survival, as opposed to the developed countries; where, the financial situation is different and people rise beyond monetary incentives to think about “higher-order-needs”.

Most empirical studies on teacher incentives are focused on the outcomes, and only a few have analysed the effect of incentives on teacher behaviour (Hansen, 2010). The author is not sure, if incentives actually increase an agent’s effort on his/her work, or is it just a redistribution of effort, between different tasks. The interest of teachers and their principals are often not aligned, for example, the school administration may be interested in attracting more students to raise their revenue; whereas, the teachers might want some students who are difficult to teach, out of their classrooms (Vegas and Umansky, 2005). Prendergast (1999) and Holmstrom and Milgrom (1991) argue that the use of incentives has resulted in the educators behavioural problems, such as a “teacher game playing” and “narrowing down curriculum”. Moreover, changes in the incentive structure can affect those who choose to enter and remain in the teaching profession (Vegas and Umansky, 2005).

2.8 Equity Theory and its Role in Employee Perception

The concepts of equity and expectancy have a deep connection with the employee behavioural responses in the workplace. The perception of equity and expectancy determine the level of effort that goes into an employee’s work performance. Dolan et al. (2005) confirm that procedural justice has a positive effect on employee OCB. Procedural justice affects an employee’s attitude and beliefs that later translate into his/her actions (Lind and Tyler, 1988). The employees’ attitudes towards their work and workplace are influenced by their perception of the organizational justice system that underpins the reward system and other HR practices of the organization (Rousseau, 1997). Equity perception can play a central role in the normalisation of agency relationship while the expectancy of rewards valued by the employee acts as an inducement to his/her effort exertion.

The inequity experienced by an individual will motivate him/her to struggle for the achievement of equity (Adams, 1965). The magnitude of motivation will be proportionate with the inequity perceived (Dulebohn and Werling, 2007). Adam’s equity theory attempts to explain relational satisfaction in terms of the degree of fairness of distribution of resources and also the processes used to reach those decisions. Much of the research on fairness has used equity theory as its basis (Grover, 1991). Heneman III (2002) discusses the importance of distributive justice and procedural justice in the payment system; referring to the concept of equity. Employees who are underpaid will experience anger and resentment and will try to regain equity by either decreasing inputs or using psychological means (e.g., using a different comparison other). When

employees are not fairly rewarded, they tend to waste their time on getting the desired levels of compensation and not on improving their work (Türk, 2008; Aguinis et al., 2013). Moreover, Werner and Ones (2000) claim that the employees who are overpaid experience guilt and try to regain equity by increasing inputs or using some form of psychological means, e.g., cognitive distortion.

Equity theory has been applied to investigate the performance effects of organizational pay structures (Brown et al., 2003). Employees “exchange relationship” on the basis of comparisons of their perceived ratios of inputs and outputs to the perceived ratios of others. Any perceived inequity will lead to adjustment and readjustment of the agent’s inputs and outputs. If pay policies are perceived as equitable by the employees, it will project a positive image of the organization (Kuhn, 2009).

Brown et al. (2003) stress upon the importance of a greater level of knowledge, skills, and abilities (SKA) to be associated with greater earnings. Consequently, the payment system that provides insufficient differences in human capital could yield feelings of inequity for such people who have higher SKA. Bozionelos and Wang (2007) conducted a study of 106 white collar employees at the Chinese state owned enterprise, and the results prove that the individuals’ attitudes towards equity-based rewards were more positive, compared to equality-based rewards. Considering the critical nature of the knowledge workers, Flood et al. (2001) suggest that equity has a direct bearing on the organizational commitment and the intention of the employees to remain with the employer. Bozionelos and Wang (2007) criticise the equitable reward system. However, an equity-based incentive scheme may be against the set norms of an organization and can become a challenge for the management (Kaplan and Henderson, 2005).

Dulebohn and Werling (2007) building upon the equity theory; developed a general theory of social inequity to explain the causes and consequences of the absence of equity in human exchanges. The authors confirm that the employees’ perceptions are mostly conditioned by equity concerns. Carraher (2011) elaborates that how equity is determined, how individuals respond to unfair situations, and what lead individuals to believe that they are being treated equitably to be satisfied with the current situation. Equity perception plays a major role in implicit contracts, which are self-enforced. This notion is also supported by Milgrom and Roberts (1992). The employment contract is a signal to the agent, which he/she incorporates into his/her psychological contract (perception) (Kidder and Buchholtz, 2003). Thus, the psychological contract plays its role in determining an employee’s workplace behaviour, along with the economic contract. Baruch and Hall (2004) acknowledge that the psychological contracts and career systems in a unique set-up of higher education system reflect the transactional psychological contracts of the modern business world (Rousseau, 1996). Implicit contracts need not be mutually agreed upon as it is based upon individual perception. The author argues that psychological contracts are solid with specific

duration, observable outcomes, and impersonal tone. [Dulebohn and Werling \(2007\)](#) criticise Adam's work for focusing less on reality and more on the perception of rewards.

[Baron and Kreps \(1999\)](#) discuss the application of agency theory to some non-economic facts of life. The authors believe that rewards should be consistent with the social status of an individual while reinforcing the organizational culture. Moreover, the authors demand payment proportionate to the individual's contribution. However, the term "contribution" is not clear, as to whether it refers to the efforts exerted or profits generated. The answer varies according to the circumstances and also according to the individuals. The knowledge workers' perception about fair and equitable treatment will help develop and enhance their organizational commitment; organizations are reluctant to lose them ([Giauque et al., 2010](#)). [Baron and Kreps \(1999\)](#) consider equitable treatment of workers over a longer period of time, as a gift from the employer. In return, the employees will have a greater concern for their firm, thus increasing employee loyalty to the firm. Employees will evaluate this exchange relationship in terms of rewards they receive from the organization for their performance ([Chien et al., 2010](#)). Rewards are organizational resources; therefore, resource allocation procedures, as well as the employee's actual share in the rewards have to be just. Equity theory highlights the difficulty in the extrinsic reward system ([Mills et al., 2006](#)). An employees' perception of the organizational justice would not only affect his performance level, but also have an impact on the quality of relationship with the principal. The proponents of social exchange claim that the higher the quality of exchange relationship, the more an employee will engage in positive behaviours at the work place ([Chien et al., 2010](#)). A basic framework of the equity theory has been provided in [Figure 2.2](#).

Condition	Person	Referent	Example
Equity	$\frac{\text{Outcomes}}{\text{Inputs}}$	$= \frac{\text{Outcomes}}{\text{Inputs}}$	Worker contributes more inputs but also gets more outputs than referent
Underpayment Equity	$\frac{\text{Outcomes}}{\text{Inputs}}$	$< \frac{\text{Outcomes}}{\text{Inputs}}$	Worker contributes more inputs but also gets the same outputs as referent
Overpayment Equity	$\frac{\text{Outcomes}}{\text{Inputs}}$	$> \frac{\text{Outcomes}}{\text{Inputs}}$	Worker contributes same inputs but also gets more outputs than referent

Fontaine, C. (2010). *Motivation theory and practice*. [Web]. Retrieved from www.professorfontaine.com/files/Motivation.PPT

Figure 2.2: Equity Theory
Source: Fontaine (2010)

2.9 Expectancy Theory and Employee Perception

Motivation is a complex phenomenon. Many theories have failed to take into account the complexity of human behaviour and nature of their work. Mills et al. (2006) stress the challenge of using the right theory appropriately; scholars should be able to mix and match theories as circumstances change. The authors consider motivation to be a dynamic process, which is significantly influenced by the reward system of an organization. Expectancy theory is well-researched and applied in many modern organizations. Expectancy theory or VIE theory is one of the strongest theories to help explain the motivational pattern of individuals through a conscious approach that a reasonable person would be able to apply, which was originally developed by Vroom (1964). A thought process is required to make connections between performance, effort, and outcomes. The theory organises and integrates existing knowledge in the field of vocational psychology and motivation (Lee, 2007). Read (2005) suggests that incentives have its effect on the employees through influence on one or more of the three factors, such as cognitive exertion, motivational focus, and emotional triggers. Vroom's expectancy theory premises the importance of motivation from the perspective of "why" people choose a particular action or behaviour (Lee, 2007). It partially provides an answer to the question of the motivational issues in employees that contribute to their dysfunctional behaviour, by choosing one set of behaviours over another. The basic idea behind the theory is that people will be motivated because they believe that their decision will lead to the desired outcomes (Redmond, 2013).

Expectancy theory connects the hard work and good performance given by an individual in his/her work (Mills et al., 2006). Individuals accordingly modify their efforts based on their calculation of anticipated outcomes (Chen and Fang, 2008). The authors presume that the employee's effort choices will depend on maximizing his/her benefit while minimising his/her effort cost. The expectancy theory suggest that people make decisions among alternative plans of behaviour, based on their reward perceptions, which are conditioned by valance (Redmond, 2013). The theory further assumes that likely benefits are broken down into expectancies and valances in an unconscious manner (Miller and Cohen, 2005). Vroom's variables are split up into three categories, which include: force, valance and expectancy (Gyurko, 2011). All of these components need to be strong to enhance the motivation. Werner and Ones (2000) argue that an individual will be motivated to exert a higher level of effort if he/she believes that a good probability exists that his/her effort(s) will lead to the attainment of a goal. Values are the key beliefs people hold of what is important to them that can vary greatly among people and affect their attitudes, actions, and goals (Mills et al., 2006). The author apprehends that if the reward system is unclear, or the link between effort and outcome is muddy, motivation to exert effort is unlikely (Miller and Cohen, 2005). Incentives in the form of monetary rewards are the basic need of the people; if they do not see an incentive in doing some task, they will see an incentive in shirking that activity. Generally speaking,

motivation can be regarded as selective and preferential aspects of specific behaviours. Expectancy theory revealed implications of the motivating factors of individuals in various situations (Lee, 2007).

Robinson and Rousseau (1994) reserve the opinion that although expectancy theory has been criticised, but it is the most widely used theory in explaining the issues of individual motivation. Both equity and expectancy theories are the building blocks of today's incentive systems (Dulebohn and Werling, 2007). The role of expectancy theory can easily fit into the concept of multitasking. Figure 2.3 articulates the relationship of variables, which constitutes the expectancy theory, which has theoretical and practical implications with respect to employee workplace motivation.

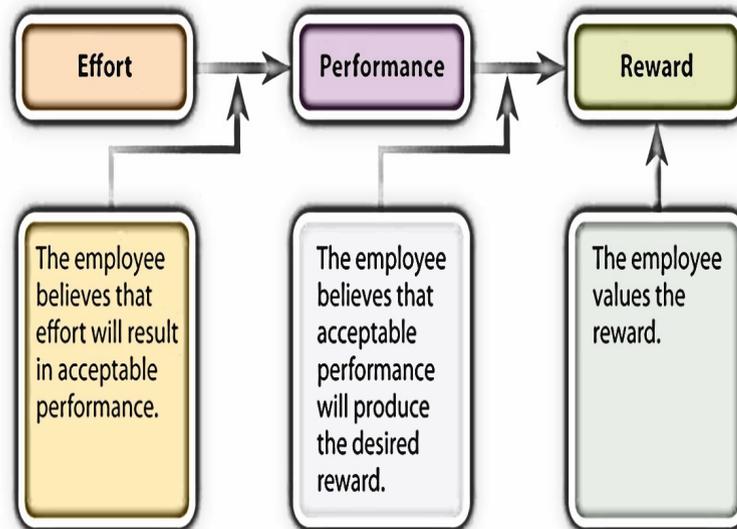


Figure 2.3: Expectancy Theory
Source: Google Images

2.10 What is Organizational Justice?

With an influx of knowledge workers, employees in contemporary organizations have been differentiated from the traditional employees. [Deutsch \(1985\)](#) considers the issue of justice as a dominating theme in organizational life because employees are more concerned about issues related to whether they have received the appropriate outcomes (i.e., distributive justice), and whether correct and fair decision-making procedures have been used by management to arrive at those outcomes (i.e., procedural justice) ([Tyler, 1989](#)). Professional employees are aware of their rights; hence, they need different types of motivational techniques for better work performances.

Organizational justice has several dimensions – each representing a different facet of the organizational fairness. The founding components of the organizational justice include: procedural justice, distributive justice, and interactional justice. Procedural justice looks at fairness from the aspect of the processes involved in the way decisions are made about the employee rewards ([Greenberg, 2011](#)) and is closely linked to the concept of equity, as discussed earlier. Procedural fairness is a universal and low-cost measure to improve performance, when output or process control is not feasible ([Frey et al., 2013](#)). Research shows that reaction to organizational procedures is a strong factor in determining how people perceive, evaluate, and react to the organizations ([Lind and Tyler, 1988](#)). The authors recommend that the managers should look at the procedural justice system, to enhance the quality of work life and internal cohesiveness of the organization. Employees would be less motivated, to modify their behaviour, if they sense “unfair” ratings ([Folger, 1995](#); [Greenberg, 2011](#)). Fairness is crucial to the organization’s success because its implications can impact job attitudes and behaviours of employees at work ([Rynes et al., 2004](#)); affecting the bottom line.

Many studies have found that in contrast to the equity theory, people accept a perceived unfair distribution of the rewards as long as the process that has led to the distribution is perceived as fair ([Tyler, 1989](#); [Tyler and Blader, 2003](#)). If procedures are perceived as fair, employees will feel respected and valued by the organization and the enacting authority, and consequently will trust this authority; intending to maintain long-term relationship with the firm ([Tyler and Lind, 1992](#)). According to [Leventhal \(1980\)](#), to enhance procedural justice, the processes should involve characteristics of: consistency, accuracy, ethicality, and lack of bias. When the employees perceive any of the four characteristics missing, they will tend to game the system to restore the perception of fairness. While the employees are usually clear what the targets are, they may be less clear on how the performance management system works, and how their performance will be assessed. If the perceived credibility of the system of appraisal is stumpy, employees may not consider the targets as worthy of extra effort. A performance management system should be based on the principles of fairness and transparency ([Holbeche, 2005](#)).

The second type of organizational justice, which is distributive justice, refers to the fair outcomes in the decisions and distribution of resources. Distributive justice can be defined as the treatment on an equal basis of employees in terms of salary, working hours, promotion, and other rewards (Adams, 1965). Cropanzano and Ambrose (2001) argue that distributive justice has been loosely equated with economic benefits; whereas, procedural justice with socio-emotional benefits of the employees. One party's fairness of procedures and policies for dealing with its counterpart – vulnerable cronies – primarily refers to the even-handedness of the means used to determine the outcomes in the relationship (Kumar, 1996). The author admits that procedural justice produces a stronger effect than distributive justice in agency relationships, as the agents see the system of procedural justice more reflective of the principal's real attitudes towards them.

Interactional justice is considered as the third dimension of organizational justice, which includes interpersonal justice and informational justice. The former refers to the perception of respect and modesty in one's treatment at work place; whereas, the latter refers to providing adequate explanations to the employees on a timely basis and with truthfulness. Besides, procedural and distributive justices, "sensitivity to others" has been named as one of the most significant dimensions of interpersonal skills for managers (Hogan, 1995). It refers to the "what" and "how" of information provided to the employees, as employees may react differently to the same piece of information, which is conditioned by their personality traits, perceptions, and positions. The authors stress the need for managers that to understand the employees' intentions, values, and attitudes; should communicate clearly, respect their wishes, and project courtesy and friendliness towards them. Therefore, all possible interactions between the supervisor, employees, and the organizational culture should be examined closely.

Folger (1995) labels the importance of interpersonal skills in interaction and communication as the "Churchill Effect", which is based on the statement by Winston Churchill that, "If you have to kill a gentleman, it costs you nothing to be polite". Pay-system communication appears to be an important component of procedural justice (Werner and Ones, 2000). The perception of procedural justice is likely to be affected by two factors: the actual fairness of formal procedures, and interactional justice (Bies and Moag, 1986; Greenberg, 1990, 2011; Moorman et al., 1993). Interactional justice refers to the way in which those procedures are carried out, including the explanation of the formal procedures (Brockner and Wiesenfeld, 1996; Cobb and Frey, 1996; Moorman et al., 1993). Thus, pay system communication is also a part of an organizational impression management process that enhances employee perceptions of procedural justice (Greenberg, 1990).

The employees' experience of a high level of procedural justice raises their perception of fair evaluation of supervisor across the dimensions of distributive justice (Sweeney and McFarlin, 2005). Murtaza and Malik (2011) conclude that procedural justice is about

the means while distributive justice is about ends. It won't; however, be wrong to say that procedural justice precedes distributive justice, as the outcome follows the process. The employees prefer fair outcomes, followed by a fair procedure (Creamer, 2005). The author confirms that the effects of procedural justice are most strongly observed when outcomes are unfavourable. Tang and Sarsfield-Baldwin (1996) support the notion that employees' perceptions of procedural justice are related to different aspects of satisfaction (i.e., pay, promotion, and supervision). Although, theoretically distinct, however, the perceptions of the distributive justice and procedural justice are found to be highly related, in field settings.

In the previous studies, more stress was applied to procedural justice and distributive justice, which were normally processed as separate variables (Andrews and Kacmar, 2001; Aryee et al., 2002; Lam et al., 2002). Kumar (1996) and Hertel et al. (2002) state that these two types of justices have been applied to identify how fairly a principal treats the agent. DeConinck (2010) and Liljegren and Ekberg (2009) have used a three factor model; while Greenberg (1990) and Sweeney and McFarlin (1993) have used a two factor model, in which interpersonal justice is subsumed under the rubric of procedural justice; yet, some other studies suggest a four factor model which best fits the data (Colquitt et al., 2001).

Petty et al. (1991) approve that an individual's behaviour is affected by his own work attitudes, as well as the behaviours of his peers. Among the behaviours affected by procedural justice are: task performance, compliance with decisions and laws, and participation in institutional activities (Lind and Tyler, 1988). People are fundamentally concerned with the personal opportune of the results they get from their employers and value their personal contentment. Lawson (2000) believes that individual performance and pay have to be in accord; only then is it possible to motivate people enough, to up-scale their performance and extract work quality (Türk, 2008).

To summarise the views of scholars provided in the literature review, it can be concluded that organizational justice includes: procedural justice, distributive justice, and interactional justice (interactional justice and informational justice). Employee perception of the fairness of the system incorporates all these types. Nevertheless, as discussed in the preceding paragraphs, the researchers' have given preference to one type over another, but it does not reduce the importance of any of the dimensions of organizational justice.

2.11 The Problem of Performance Measurement in the Educators

Rousseau (1997) considers performance measurement and performance management as the primary theme of organizational studies. Van Thiel and Leeuw (2002) refer to it

as a “performance paradox”. Performance measurement is a simple concept; without a simple definition (Lichiello and Turnock, 1999). A performance measure is the specific quantitative representation of a capacity, process, or outcome; deemed relevant to the assessment of performance and it measures progress towards the organizational goal or objective (Lichiello and Turnock, 1999). Neely (2005) consider performance measurement as a process of quantifying action where measurement is the process of quantification and action leads to carrying it out. Measurement may be the “process of quantification”, but its effect is to provoke action (Mintzberg, 1978). It is only through consistency of action that strategies are realised (Neely, 2005). Neely et al. (2002), Tangen (2005), and Ishak and Sahak (2010) all have a consensus that a performance measurement system, is a system of quantifying performance; using quantitative metrics to assess the success of achievement of an act that is aimed at organizational productivity enhancement. Ishak and Sahak (2010) argue that the institutions must establish its core competencies, based on its mission and vision; besides, thinking of its current resources and state of competitiveness.

Usually, performance is taken synonymous to outcome, however, there is a clear-cut distinction between the two terms. Mental and physical efforts lead to performance, which are under the control of an individual, whereas, an outcome refers to performance plus other factors. Performance measures may be roughly categorised into: inputs, behaviours or actions, and end products. Inputs include an employee’s skills, knowledge, abilities, and effort, whereas, behaviour refers to doing the job the way it needs to be done, which will produce the desired outputs (Beer et al., 2004). Outputs are the productivity measure of an employee, group, or establishment. The authors agree that the ability to connect performance and reward is a function of the design and administration of the performance appraisal system of the organization.

Defining what constitutes performance in professionals, is a brain teaser. Performance management is a continuous process of: identifying, measuring, and developing the performance of employees, in accordance with the strategic goals of the organization (Aguinis, 2009). Lockett (1992) states that performance is a multidimensional composite construct; comprising of efficiency, quality, responsiveness, cost, and overall effectiveness, as generic factors; associated with the organizational performance. Armstrong and Baron (2000, p. 9) extend the definition to performance management by stating that:

It is a means of getting better results from the organization, teams, and individuals by understanding, and managing performance within an agreed framework of planned goals, objectives, and standards of achievement and competence.

In case of multitasking, as the outcome is not easily observable therefore the principal has to select certain random variable or proxy measure(s) to determine the employee’s outcome and link it with the organizational goal (Gomez-Mejia, 1992). In situations

where full observation of natural processes is either impossible or prohibitively costly, imperfect estimators are used in contracting (Hölmstrom, 1979). The author suggests the use of estimators when complete monitoring is either unacceptable or excessively pricey. The job of a professional is the best example of multitasking individual. The author claims that there is a direct relationship between increased knowledge, autonomy, independence, and subversive behaviour of the employees.

The early agency models explain how incentives can motivate and reward good performance, whereas, more recent works address occasions where performance measures communicate objectives that correspond imperfectly to the organization's true goals (Courty and Marschke, 2003). According to the authors, the principal adapts the measurement system in response to new information that is discovered only after the measure is activated. This misalignment results in resource inefficiency (Holmstrom and Milgrom, 1991; Baker, 1992, 2002; Feltham and Xie, 1994; Courty and Marschke, 2003). A teacher's job encapsulates a large number of both professional/technical as well as managerial/ supervisory activities (Shedd and Bacharach, 1991). It, thus, sits well in the framework of multitasking and has inherited all the tribulations of multitasking. Teachers' performance comprises of two dimensions, such as quantity and quality. Independent measures do exist for objective tasks, but not for the subjective ones (Ishak and Sahak, 2010). The authors argue that the quantitative output can be measured with less trouble, but measuring qualitative output requires proxy performance indicators, as these cannot be measured directly, and are messy. Performance indicators convert the performance constructs into operationalised terms, to bring out the validity in measurement. Anything that cannot be measured cannot be evaluated, and anything that cannot be evaluated cannot be rewarded fairly. The performance indicators are the performance component of PRP; whereas, the incentive scheme is the pay component (Cromwell et al., 2011). Neely (2005) quotes a renowned British physicist, Lord Kevin that:

When you can measure what you are speaking about, and express it in numbers, you know something about it...[otherwise] your knowledge is of a meagre and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely in thought advanced to the stage of science.

Due to this difficulty, the issue of performance measurement in educators has occupied a central and critical place for incentive system design. Karl et al. (2013) agree that the interest in measuring a teacher's and institutional contributions toward their students' learning has increased due to the recent focus on accountability in the education sector. Performance appraisal is an integral part of performance measurement (Rasheed et al., 2010). It is a continuous process through which an employee's performance is identified, measured, and improved in the organization. The process includes regular feedback to the employees, on how they have done in the previous period. Performance appraisal is an activity that enables the principal to determine whether the employees' performance

is in accordance with the established objectives or not (Fletcher, 2001; Irs and Türk, 2012). The authors stress that performance appraisal should be primarily based on the appraisal of the employees' work results, work behaviour, and competence. This clearly shows that the process should not be conducted as an independent activity, but should be linked to other HR practices for prolific results, as important management decisions are based on employee assessment. Boyd (2004) is of the opinion that a broader approach towards employee appraisal should be adopted. The authors comment on the fact that performance appraisal, besides covering job specific behaviours and core job responsibilities; should also be extended to non-job specific behaviours, such as cooperation, enthusiasm, dedication, and persistence, which form the contextual performance, but are no doubt important factors, due to the increased work complexities. The non-job behaviours seem trivial from an appraisal point of view, but these factors have an equal impact on performance, especially in the service sector their prominence increases manifold.

Beer (1981) looks at the performance appraisal from an employee's perspective. The author considers it as an opportunity for the employee to gain knowledge about their performance on the job because if they are kept in the dark about their performance, the chances of improving the future performances would be slim. Bowen and Ostroff (2004) state that performance appraisal is a process through which the management can convey their values and expectations to the employees.

The educators have mentioned the sources of classroom observation, competence testing, peer review, and students' achievement and students' rating as the prime evaluation methods (Usmani et al., 2012). Student ratings are widely used to evaluate teacher performance in higher education institutions. The authors consider this source of information collection as inexpensive, yet, highly reliable. However, the questions of validity and bias still remain. No matter how sophisticated an appraisal technique might be, there will still be some paucity in it. Choosing which method to exercise is largely contingent upon the cost-benefit analysis by the employer (Prendergast, 2002). Rasheed et al. (2010) consider 360 degree feedback appraisal system to be the most promising; covering an employee performance from every possible angle; including all those sources that have relevance to an employee's workplace performance. Feedback should be comprehensive and must be linked to salary increments and promotions of the employees (WorldBank, 2000). The grandness of the teachers in education calls for a performance management system which is systematic to administer, evaluate, and enhance teacher's performance (Rasheed et al., 2010). Upholding the significance of faculty evaluation, it is thus imperative to consider the process earnestly by the concerned authorities, and acknowledgement of its good performance; whereas, any weaknesses in its performance should be eradicated through proper training and counselling.

To sum up, the problems of multitasking include: division of agent's cost between tasks that receive high and low-powered incentives, providing incentives for tasks that have

different values to the principal and agent, providing high-powered incentives for tasks for which the outcome is stretched over a time period, assessing an agent's outcome of activities that are beyond his control, and measuring performance of unstructured tasks, etc. This also explains the existence of moral hazards in professionals, as they are asymmetrically informed, and the available performance measures are not good enough. Together these problems need to be analysed in the light of available literature and also by conducting empirical research.

2.12 Moral Hazard in the Context of Education

The economic theory depicts employees as greedy, slothful, and concerned entirely with ends rather than means (Baron and Kreps, 1999). Agents are opportunistic, seeking self-interest with guile (Williamson, 1985; Wright et al., 2001). Opportunism includes, but is not restricted to more blatant forms, such as lying, stealing, and cheating. More generally, opportunism refers to an incomplete or distorted disclosure of information. Hill (1990) considers opportunism as a calculated attempt to mislead, distort, disguise, obfuscate, or otherwise confuse another party. Smith (1937) suggests that managers of other people's money cannot be expected to watch over it with the same anxious vigilance as one would expect from owners; therefore, laxity is bound to persist. The agents act to maximise their outcomes, without extending efforts towards achieving the principal's objectives (Eisenhardt, 1989a). Jensen and Meckling (1976) confirm that the problem of inducing an agent to behave in a way to maximise the principal's welfare is universal, as exists in every organization and in all cooperative efforts, as well as at all levels in agency relationships.

"Moral hazard" is a generic term used for all deviant behaviour of employees that increases their monetary or non-monetary benefits – keeping all other things constant. Thus, employee *shirking*, *opportunism*, and *holding back information* from the employer, are behaviours that can be encapsulated under the rubric of "moral hazard". The term *moral hazard* refers to a behavioural problem, which promotes the short term satisfaction of the individual wants and needs, to the detriment of the long term well-being of the system's participants. Thus, agents who have a short planning horizon will act differently than people who are looking at the long-run effect of their behaviour. Moore (2012) calls it the "horizon problem". Changing the institutional arrangements to encourage long-term thinking among employees can help to prevent grosser forms of dysfunctional behaviour. Lazear and Shaw (2007) argue that moral hazard is an information problem, which entails the difficulty and cost of monitoring for enforcing appropriate work behaviour of the employees. According to Bohnet and Eaton (2003), if an employee's performance is not verifiable the problem of "moral hazard" arises; this is especially true in the public sector (Delfgaauw and Dur, 2010). Agents can thus use

information asymmetry to their advantage, by manipulating the performance measures to maximise their private rewards (Burgess et al., 2012).

With increased specialisation, the chances of an agent falling prey to inefficient job behaviour increases – an idea, which was more familiar with the early management proponents (MacDonald and Marx, 2001). Like other multitasking professionals, the faculty has also become a prey to the epidemics of “moral hazard”. Within the institutional documents, it is an established fact that the faculty is responsible for teaching, pursuing research, and engaging in service to the discipline, institution, or broader community (Gravestock et al., 2009). Although, a multitude of tasks constitute the total job of the faculty, in practice only teaching and research are treated as core activities, and the real competitors for the faculty’s time, attention, and effort (Holmstrom and Milgrom, 1994; Gautier and Wauthy, 2007). In multitasking jobs, weightage is given to any task in a bundle of tasks that holds a higher level of significance to the principal, and the same will be mirrored in the degree to which a particular task is incentivised. It is mainly due to problems like these that Quiggin (2004) propose complementarity between the core tasks of the faculty; yet, there are still others who support the substitution theory (Gautier and Wauthy, 2007). The modern university is founded on the assumption that research and teaching are complementary activities, but paradoxically; perhaps, it is precisely this measurement difficulty that accounts for the lack of direct evidence for complementarity between teaching and research (Quiggin, 2004). Research is now kept at par with teaching, and even in some research-oriented universities, it has been given more weightage for innumerable factors; one of which is essentially related to the university’s prestige. This fact has been acknowledged by Rosselló-Villalonga (2006) as one of the biggest requirements in the knowledge-based industry. Teaching Quality Assessment (TQA) has raised the quality of education; however, there is an overwhelming agreement that it has not raised the esteem or value of teaching as compared to research (Drennan and Beck, 2000).

Ramsden and Moses (1992) have enlisted six principles of effective teaching in higher education, which include: interest and explanation, concern and respect for student and learning, appropriate assessment and feedback, clear goals and intellectual challenge, independence, control and active engagement, and learning of the students. Feldman (1976) identifies “stimulation of interest” and “clarity of presentation” as the two most important constructs amongst the 22 – identified for effective teaching, however, the list extends to many more. Each of these areas has loopholes, and the faculty members – due to information asymmetry – know how to dodge the system, to enhance their personal benefits. Several misconducts in the educators can be witnessed from the extant literature, which relate to different tasks and aspects of their job. Moral hazard in the academe can be expressed in a variety of ways; mostly relating to the task of teaching and research. Moral hazard related to teaching has been discussed for a long time by the scholars, and it still remains as the most critical aspect of

a teacher's job, which has the greatest impact on education quality. Hansen (2008) considers discretionary absences as a proxy for the effort that is translated into teaching effectiveness, which can only approximate effort input. Burgess et al. (2001), Jacob and Levitt (2003), Bedeian et al. (2010) and Quiggin (2004) among others, declare that falsified exam scores, teaching to the test, coaching and changing the intake of students or focusing on high achievers to improve the results, as cheating acts by the faculty. Furthermore, Ryan and Weinstein (2009) point towards a few deviant behaviours in the faculty, such as narrowing of curricula, crowding out of enriching student activities, test preparation resulting in poor generalisation of gains; besides other corruptions. Test scores are a natter indicator of students' achievement (Solmon and Podgursky, 2000). Whenever, the teachers' performance outcome is linked to the student's achievement, we find incidences of "teaching to the test", encouraging weak students to remain absent from the examination, compilation of easy papers so that the students can score well, lenient grading by the teachers to reduce dropouts, etc. Teachers neglect activities, such as inculcating creative thinking in the students and refining their oral and written communication skills, and rather teach a narrowly defined basic set of skills that are tested on standardised exams (Dzagourova and Smirnova, 2003). Moreover, (Radda, 2009) points towards the problem of wrongful marking of the transcripts by stating:

During marking, lecturers are left with their creator, conscience, and characters as there are no reliable and transparent methods of checks and balances regarding fair and objective marking of students' scripts.

The faculty members interaction with their students, both inside or outside the classroom shows a profound impact on their learning (PEP, 2006). Koehler and Mishra (2009) warn that ignoring the complexity inherent in each knowledge component and their interplay, can lead to oversimplified solutions or failure. Teaching in the absence of learning is just talking (Sajjad, 2011). The author accepts that the most accepted criteria for measuring good teaching is the amount of students' learning. Ideal university, according to Hoodboy (2009), should create a modern citizenry capable of responsible decision-making. The author further stresses that the university graduates should be able to think independently and scientifically, and should be capable of coherent expression in speech and writing. Unfortunately, most university teaching amounts to a mere dictation of notes, which the teacher had copied down when he/she was a student in the same department (Hoodbhoy, 2003). Hoodbhoy (2005) accuses the faculty of cutting down on the course, excessive absenteeism, and their slow course progression during the term; most of which goes unnoticed by the management.

Some scholars are more focused on the problems related to the faculty's research and publication activities. Although, both teaching and research are equally important tasks in the faculty's job; yet, in practice, research activities receive more weighted in a university's profile and also hold a central place in the accreditation process; therefore, the task of teaching is not kept at par with research, rather it is given a secondary

position. Universities and research institutes should place greater emphasis on mobilising research for advancing innovation in the economic system (UNESCO, 2008). According to Baruch and Hall (2004), universities expect scholars to create knowledge and publish, thus sharing it with the masses. The authors consider it as one of the major criteria for the reputation and promotion of an academic is his/her publication profile. Presentation of papers in highly academic conferences and the ability to bring grant money is seen by the universities as an ipso-facto indication of research and scholarly excellence (Baugher, 2008). Bui2010 emphasise the personal attributes of eagerness to widen the boundaries of knowledge as a critical factor for academic scholars. Personal learning of the scholars may occur via attending conferences, supervising PhD students, self-learning, learning at work and learning through peers (Baruch and Hall, 2004).

Research activities carried out by the faculty usually enhances the rating of a university, at national, as well as international level; therefore, these are taken seriously by the management. The faculty is incentivised and encouraged for making publications, but it does not mean to compromise the quality of publications. Gomez-Mejia and Balkin (1992) consider citation and journal quality as the prime indicators of research productivity. According to Baruch and Hall (2004), a major measure of research success is the number of citations to the persons work. Blenkinsopp and Stalker (2004) stress that academic positions need a track record of research publications. Another reason for teaching and research disparity may be due to the fact that the impact of good or bad teaching is confined to the individual faculty member, as evaluations which are usually teaching bound (for the BPS faculty) – can have an impact on their future career advancement. It can further be inferred that due to quick realisation, research outputs can easily boost university ranking in a short span of time. Thomas and Li (2009) stress the importance of research, especially for research-oriented institutes, as a reputation enhancing tool. Wood and Oate (2009) state that:

The public's inability to assess educational quality, directly coupled with institutional efforts to create a brand mystique that will take them out of pure competition into monopolistically competitive market model has resulted in side effects of the corporate branding model, and drifted universities away from their educational essence.

Scholars have shown how the tasks of research and publication can be exploited by the faculty and its adverse impact on the quality of higher education. Martin (2013) points towards plagiarism, self-plagiarism, redundant publication, and data fabrication or falsification, as the most common problems related to research. The authors stress the problem of research misconduct to be substantial in scale and growing rapidly, especially the problems of “free-riding” and “plagiarism”. The problem of “free-riding” has frequently appeared in the literature. Aggarwal and O'Brien (2008, p. 256) define “free-riding” or “social loafing” as, “a behaviour pattern wherein an individual working in a group setting fails to contribute his or her fair share to a group effort as perceived by

group members.” Free riding occurs when people work in groups (Aggarwal and O’Brien, 2008; Davison et al., 2014), adversely affecting group work projects (Hall and Buzwell, 2012). According to Bohnet and Eaton (2003), PRP given for a team performance has the tendency for creating incentives to “free ride”. Thus, “free riding” is a crucial feature of incentives provided to teams (Holmstrom, 1982). Latane et al. (1979) and Price et al. (2006) refer to social loafing as an act on the part of some inefficient people who are working in a team, do not put forth as much effort as their due share if they were working alone. Loafers usually have a tendency of investing less effort towards a common goal of a group. Some members of the group do not contribute anything, yet get the credit equal to those who have made contributions.

Closely related to the problem of “free-riding” is the problem of “plagiarism”. Plagiarism can be defined as stealing and publishing the work of another author’s words, ideas, thoughts, or concepts, and representing them as one’s own original work. Martin (2013) defines plagiarism as:

Copying of ideas, data, or text (or various combinations of the three) without permission or acknowledgement. It is important to stress that this definition explicitly includes the copying of ideas – in other words, it is not confined merely to the copying of text.

The author warns that such types of plagiarism can be easily missed out by the softwares, which are used as to detect his problem. Plagiarism at higher education institutions is a big menace to the research standards (Saeed et al., 2011). The concept of plagiarism is not clear to many and is understood by the people from a very narrow perspective. Scholars usually take plagiarism on its face value, such as adding text to one’s work without any changes; whereas, plagiarism means much more than this. The ideal university should have first-rate faculty that does first-rate research (Hoodboy, 2009). Lack of research culture has forced scholars into plagiarism (Sahi, 2012). Evidence shows that scholars also have the tendency towards plagiarising by claiming another person’s work as their own (Bedeian et al., 2010; Enders and Hoover, 2006). Bedeian et al. (2010) point towards the research misconducts of inappropriately accepting or assigning authorship credit. Widespread use of the internet and easy access to the unlimited repository might be a couple of the reasons (Dey and Sobhan, 2006). Plagiarism, already a problem in the universities has increased, and even at the best institutions and some of the professors are alleged of plagiarising (Neelakantan, 2007).

Quiggin (2004) canvass this problem by stating that many aspects of research and teaching are subject to asymmetric information. Yet, the issue of performance measurability is lesser in research productivity as compared to teaching quality. Research output is arduous to measure, yet more easily measurable and quantifiable than the quality of teaching. According to Martin (2013), there seems to be a decline in the morality level of the researchers’, which is the dark side of the hyper-competitive

environment that is more focused on funding and the number of publications (Fang and Casadevall, 2011). More and more academic researchers seem intent on playing the game to maximise their score (Martin, 2013); upholding the slogan of today's higher education "publish or perish" (Miller et al., 2011). Although, the stimulants are said to have increased the number of papers published in international journals by a whopping 44%; however, there is little evidence that this increase in volume is the result of an increase in genuine research activity (Hoodbhoy, 2005). According to Baugher (2008), the publish-or-perish mania that results from the struggle for tenure, often detracts from the quality of instruction that the undergraduates receive. The author points out that in an effort to inflate the publication count to achieve tenure, the faculty breaks up a complete piece of research into separate little units; under the concept of "least publishable unit". Moreover, the author warns that sometimes faculty members are able to churn the system and boost their publication count by publishing the same research over and over again, simply by changing the title, slightly rearranging things, or by making other small changes; labelling such publications as an inflated currency which is worthless. Some faculty members have found short cuts to easy and quick publications that will provide a boost to their careers, and also fetch them quick financial rewards. The faculty would usually resort to such practices when the condition of tenure is linked to publication count. Since, publication outlets vary in terms of rigour of review process, acceptance rates, number of revisions requested, and time investment, the faculty may be tempted to maximise its research output by publishing in easier outlets (Gomez-Mejia and Balkin, 1992). The authors suggest that to curtail the problem of hopeless publications, principals should reward only those faculty members whose manuscripts appear in reliable outlets – known for their quality – and to use this pairing of rewards and performance outlets as an effective form of incentive alignment. This act will also cover for the information asymmetry in connection with publications and distribute the rewards in a defensive manner.

Bedeian et al. (2010) have identified a number of misconducts in the faculty and divided these into three categories. According to the authors, category (I) refers to severe crimes in research, which include: data fabrication, falsification, and plagiarism. "Data fabrication" refers to fake data or results and reporting the same. "Falsification" refers to changing research material, processes, or equipment, which distorts the facts. "Plagiarism" refers to using another person's work, such as ideas, results, processes, or terminology without giving due credit to the original author. Infractions included in category (II) are: "questionable research practices", such as using university's property for private benefit, piecemeal publication, also known as splitting a complete research into the "smallest publishable units" for inflating publication count, accepting or awarding honorary or gratification authorship of publication, thus taking undeserved credit for other's intellectual achievement, reproducing publication of data, and maintaining incomplete research records. Category III violations include: "other

misconducts”, which might be related to research, and are usually subject to general legal and social penalties; more simply related to OCB.

Thus, it can be concluded that the form in which the problem of moral hazard is manifested differs, but the nature remains unchanged. Many a times these moral hazards are difficult to establish *prima facie* unless the principal is knowledgeable and vigilant to identify, and catch such practices. [Ryan and Weinstein \(2009\)](#) call these corruptions as motivated phenomena, due to the contingency attached to them. According to [Jacob and Levitt \(2003\)](#), policy makers should seek to reward overall good teaching, not simply “teaching to the test” or worse “outright cheating”, which maximises an educator’s private benefit while other dimensions of student learning are neglected ([Hansen, 2008](#)).

2.13 Pay System in the Higher Education Sector

Keeping the market forces intact, PRP has emerged as an alternative payment system for many sectors; including the education sector – as a replacement or supplement – to the traditional mechanistic time scale pay system. The concern of the employer has shifted from “paying enough to paying right”. Pay for performance is essentially liberating from seniority-based compensation system towards a PRP ([Rousseau, 1997](#)). Compensation systems have started reflecting higher levels of variations, and are now an accepted way of rewarding professional agents. The growth of the knowledge-intensive service industry has furthered incited this process. The PRP can be viewed as a system through which the market based incentives can be got within the precincts of an organization; primarily, due to increased competition, new technology, and change in the nature of employment. [Kessler and Purcell \(1992\)](#) characterise performance-based pay as a system through which organizational goals are transformed into personalised performance criteria while simultaneously preserving the sanctity of the grading system. It is a system that drifts away from appraising employees on personal qualities, towards a more meaningful evaluation of assessing performance against set objectives. Performance-based pay is “discretionary” pay, which could instigate the employees to work more effectively and to permit managers to clearly single out good performance ([Bohnet and Eaton, 2003](#)). According to [Milkovich et al. \(1991\)](#) PRP is a generic term that encompasses a wide variety of payment systems that links a sizeable portion of a workers annual compensation – partly or solely – to a firm’s overall success, rather than an individual’s performance. [Cromwell et al. \(2011\)](#) defines PRP, a set of performance indicators linked to an incentive scheme. This implies rewarding employees on their output, rather than the input. The system is quite popular in the West ([Campbell et al., 2009](#)), where different authors have attempted to provide their own definition of the system according to their understanding.

With the delayering of organizations, promotion chances for employees have shrunk. Rewarding employees for higher performances would consider incentives, instead of automatic increments and promotions. In essence, [da Silva Rosa et al. \(2000\)](#), consider performance-based pay as paying the worker for his or her value, rather than the value of the job. Irrespective of the design of reward, the single most important intent of the management is to improve employees aggregate performance; converting the pay bill from indiscriminating machine to a more finely-tuned mechanism, sensitive and responsive to the company and its employees' needs ([Brading and Wright, 1990](#)).

[Weber \(1919\)](#) was amongst the pioneers in the area of faculty pay; enthusing the interest of organizational scientists regarding this clan of professionals ([Weber, 2009](#)). [Türk and Roolaht \(2007\)](#) assert that in the educational institutes and universities top researchers and talented faculty are competitive, not only in the local and national labour markets, but also internationally. Recognising the importance of these professionals, the authors have apprehensions about the conservative type of management in the higher education sector, which needs to be changed. The authors stress upon the adoption of new management practices; introducing a contemporary appraisal and management of performance, and also recognition of the faculty's effort through PRP. [de Silva \(1998\)](#) alleges the increase in atypical forms of employment that does not allow itself to easy supervision, which has also pushed for alternative kinds of payment. [Balkin and Gomez-Mejia \(1987\)](#) assert that the success of any organization, to a greater extent depends on a proper match between compensation strategies, the organization, and environment, rather than equity concerns of the pay recipients. Educators who have a rich research profile, are scarce in the market therefore the universities will be ready to yield a bounty to the people whose scholarly productivity is exceptional.

[Balkin and Gomez-Mejia \(1987\)](#) and [Gomez-Mejia \(1992\)](#) indicate that there is scarcely any evidence of the organizations pay systems being attached to its objectives; despite the fact that payroll costs comprise more than half of the total monetary values in most systems. The authors have apprehensions that the pay policies in most establishments do not coincide with their environmental demands, and the same is true of the higher education sector. Moreover, the authors stress that superordinate organizational goals and objectives should influence the relative emphasis the principal places on performance dimensions for pay allocation purposes. Rewards must be aligned with the technical core of an organization. The payment system of an educational institution is also influenced by the revenue model it follows ([Gomez-Mejia, 1992](#)). The above perception about the pay systems has also been upheld by ([Heneman et al., 2002a](#)).

[Belfield and Heywood \(2008\)](#) consider low compensation offered to the faculty members as a cause of their low productivity and higher turnover rate. The authors propose one solution to this problem, which is PRP. [Gomez-Mejia \(1992\)](#) raises some important questions, i.e., how to determine the educators pay and how can equity be maintained regarding their earnings. Nowadays, the profession of teaching, especially in universities,

places dual demands on staff. Besides, academic teaching in formal classroom settings, with fixed schedules and quantified work, they have to be involved in rigorous research. A question arises that in multitasking jobs, does the compensation, which these professionals are getting reflect their personal time and effort. The single salary schedule, which was originally called “position-automatic schedule”, has been criticised for its standard remuneration – depriving teachers of pay according to their performance – as it does not reflect labour market realities [Podgursky and Springer \(2007\)](#). The traditional pay system ensures that all teachers with the same level of education and experience receive uniform pay; passing through standardised steps. As a protest to the traditional salary system for teachers, numerous PRP systems were proposed. The two prominent reward reform schemes are the merit-based pay, and knowledge and skill-based pay ([Podgursky and Springer, 2007](#)). [Fryer Jr et al. \(2012\)](#) agree that the most popular incentives used in the education sector are the bonuses given to teachers for improving their students’ examination scores. Theoretical arguments have been raised against PRP that it can not be provided to the educators because teaching is believed to be an area that does not lend itself to performance related compensation, and because of this the incentive problem arises. [Storey \(2000\)](#) argues that the staff room culture in the education sector must be changed, before any PRP system can be implemented successfully. This may be overcome relatively easy, by including teachers’ input in the design and implementation of reward system ([Harvey-Beavis, 2003](#)). Participatory culture is what the current situation demands.

In the service sector, however, there were mixed reactions regarding the introduction of PRP. The system has little success and many firms, which implemented this contemporary system, either curtailed its scope or totally abandoned it in favour of the orthodox scale pay system. The reasons for switching over from performance based pay to the old system were many, which include: problems in implementation, costly administration, resistance from the unions, improper and underdeveloped appraisal system, difficulties in target-setting, etc. [de Silva \(1998\)](#) considers the traditional payment system as a secure one, where pay increases through automatic increments, and performance is partly rewarded through promotions.

Appendix (1 A) provides a Table that shows the demographics of education in Pakistan – with a special emphasis on KPK, along with a graph that shows the growth of universities in both the public and private sector in Pakistan. In the appendix (1 B) a brief literature review has been provided on the reforms introduced in the HE sector in Pakistan. Moreover, appendices (2 A) and (2 B) show the parallel pay systems prevalent in the higher education sector.

2.14 Setting the Stage for Hypotheses

The hypotheses are embedded in the literature; showing different relationships between the chosen variables. Bloom (1999) assert that theory, research, and practice about the factors and mechanism that shape the reward system are expanding. The study focuses on the interaction between the incentive system and other organizational systems that lead to the employee behavioural responses at the work place. Most managers are not sure of the likely consequences of spending on their employees pay will provide the desired input from the employee (Armstrong et al., 2011).

The use of incentive system needs to be supported by a sound performance management system for effective results (Lavy, 2007; Aguinis et al., 2012b). Milkovich et al. (1991) uphold the proposition that PRP plans affect employee performance given under certain conditions. It would be necessary to examine the conditions under which the motivational effect of pay can be maximised (Armstrong, 1993). Employees' perception of the organizational justice and reward expectancy are believed to have an impact on their behavioural patterns (Karuhanga, 2010). The concept of distributive justice has been referred to as the economic benefits of the employee; whereas, procedural justice has more do with socio-emotional benefits (Cropanzano et al., 2005). Expectations about the performance-reward relationship shape the motivation of an employee to exert a certain level of effort before it actually affects employee work behaviour (Thierry, 2002). The corporate environment is expected to facilitate ethical performance towards the achievement of rewards (Fudge and Schlacter, 1999).

2.14.1 Relationship between Employee Disposition towards Incentives and Moral Hazard Tendency

To harness the real potential of employees, the design of the reward system should fit the organizational values and culture (Rynes et al., 2004; Milkovich, 2013). Incentives will provide an input to an employee's behavioural response by signalling the organizational preferences and value system (Perry et al., 2009). The effectiveness of a reward system increases in the presence of certain conditions, such as convergence in perceptions of what is important for the organization and what is valued by the organization (Czarnitzki et al., 2011; Schneider et al., 2013; Milkovich et al., 1991). Nevertheless, a wrong implementation might lead to failure of the PRP system (Perry et al., 2009). An incentive system that fails to align the interest of the agents and the principal may not always increase productivity (Gielen et al., 2010). Employees might misuse the system by resorting to inappropriate behaviours, such as "shirking" or acting opportunistically (Gomez-Mejia, 1992; Parks and Conlon, 1995; Rezaee et al., 2001). Shirking tends to reduce an agent's cost and result in extracting higher rents than they would otherwise obtain from the principal therefore increasing the cost to the principal (Gomez-Mejia,

1992). Prevalence of unethical practices will have an adverse effect on the quality of education (Usman, 2014). More, explicitly the employee might get entangled in the acts of “moral hazard”. The problem is especially common in professional agents and has become a great challenge for the principal (Hansen, 2010; Grant, 2013). It can be therefore expected that an employee’s higher tendency towards explicit incentives will be associated with higher tendencies to engage in moral hazard. Accordingly, the first hypothesis of the study can be framed as:

Hypothesis 1. The employee’s disposition towards incentives will have a significant positive impact on his/her moral hazard tendency.

2.14.2 The Effect of Incentives on Reward Expectancy

The expectancy theory posits that people make decisions among alternative plans of behaviour, based on their reward perceptions, which are conditioned by valance (Storey, 2000; Redmond, 2013). This is because expectancy theory assumes that the likely benefits are broken down into expectancies and valances in an unconscious manner (Miller and Cohen, 2005).

Expectancy theory suggests that employees must believe they can achieve what is being asked for, and must believe that achieving this will reliably generate the reward, and they must value the reward sufficiently (Storey, 2000, p. 518).

Prior research has shown that employees who receive incentives exert a higher level of efforts than those receiving flat-wage contracts (Sprinkle, 2000). This has been referred to as “line-of-sight” criteria (Lawler, 2000). Lawler believes that weak line-of-sight rewards cannot produce the much needed motivation effect for an employee. If the pay is unclear or the link between effort and outcome is hazy, motivation to exert effort is unlikely (Miller and Cohen, 2005). Employees should understand how rewarding processes work, and how they will be influenced by them (Case, 2001; Penttila, 2009). Empirical evidence suggests that cognitions occupy an intermediate position between reward and motivation (effort allocation), profoundly influencing the effects of work rewards (Guzzo, 1979). When employees have a liking towards explicit incentives; it will influence their effort distribution choices, which has been referred to as the disposition towards incentives. Therefore, it can be hypothesised that:

Hypothesis 2: Employee disposition towards incentive will have a significant positive impact on his/her reward expectancy.

An optimal incentive scheme should assure that there is no deformation in an employee endeavour (Susarla et al., 2002). Performance measures must look beyond simple financial measures and must integrate all-inclusive tangible and intangible outcomes (Buller and McEvoy, 2012). Vroom’s expectancy theory premises the importance of

motivation from the perspective of why people choose a particular action or behaviour (Lee, 2007). People will be motivated because they believe that their decision will lead to a desired outcome (Redmond, 2013). However, incentive pay per se, is by no means a silver bullet to provide a quick fix to the problems of employee efficiency (Figlio and Kenny, 2007). Moreover, incentives provided to the employees for performance improvement can sometimes result in outcomes, which might adversely affect their performance (Atkinson et al., 2009). Thus, it can be hypothesised that:

Hypothesis 3: Reward expectancy of the employee will have a significant positive impact on his/her moral hazard tendency.

2.14.3 The Mediating Role of Reward Expectancy

One way in which reward expectancy can mediate the influence of disposition towards incentives on employee moral hazard tendency is through a phenomenon of cognitive generalisation in which effort exertion is linked to the valance of a reward. Murphy and Margulies (2004) and Wikina (2008) stress that there is a need for aligning performance goals to expected outcomes for better results. This further implies that professionals generally are receptive to financial incentives and will fine-tune their performance accordingly (Young et al., 2012) because people are rational and will find ways to capitalise on their own utility (Chambers and Quiggin, 2005; Kunz and Pfaff, 2002). The authors consider “utility” as some amalgamation of income and leisure. Cho and Perry (2012) support this notion by confirming that high levels of extrinsic reward expectancy weaken the link between intrinsic motivation and satisfaction. DeNisi and Smith (2014) claims that even the most sophisticated performance appraisal system - which leads an employee towards the “right” set of behaviours - will have little impact on firm-level outcomes; unless linked to the commensurate rewards that ensures employee motivation.

Cho and Perry (2012) claim that providing extrinsic incentives to the employees, make them believe that their behaviour is under the control of the rewards, thus lowering down the intrinsic motivation. The measurability of performance and multi-dimensionality of tasks have an important role in determining the effectiveness of incentives to raise performance (Burgess et al., 2012). Performance measures must look beyond simple financial measures and must integrate all-inclusive tangible and intangible outcomes (Buller and McEvoy, 2012). It can thus be hypothesised that:

Hypothesis 4: Reward expectancy will mediate the relationship between the employee disposition towards incentives and his/her moral hazard tendency.

2.14.4 The Rationale for Organizational Justice Perception as a Moderator

Employees always uphold fairness in the organizational processes and outcomes, based on the decisions flowing out as a result of these processes (Milkovich, 2013; Kuvaas, 2006). An adequately functional appraisal system potentially diffuses concerns about justice and increases employee performance through motivating (Mulvaney et al., 2012). Fair systems should reward good performance, as well as discourage substandard performers; so that they can rise up to the standard (Karuhanga, 2010). Thus, the effect of incentives to some extent depends on maintaining perceptions that the system is valid, fair, and non-political (Perry et al., 2009). To understand the mechanism of how HRM influences performance, it is imperative to know the employees' perception and reaction to these practices, among which rewards are the top priority (Boon et al., 2011; Jiang et al., 2012; Boxall, 2013). Messersmith et al. (2011) refer to it as "unlocking the black box". Managers must accept performance appraisal of employees as an integral part of their job, rather than treating it as a hassle (Sillup and Klimberg, 2010). (Cropanzano, 2001, p.206) stresses that if researchers want to understand the reason of why people in organizations become avengers, it is necessary that they apprehend the avenger's perspective. Organizational justice perception; having strong effects on the workers' attitude towards workplace behaviours, become an important antecedent of their organizational citizenship behaviour (Bakhshi et al., 2009; Dolan et al., 2005). Scott et al. (2006) conclude that the evaluation processes used by most organizations are inadequate, and the most powerful evaluation methods are seldom used. The Monetary component is only one part in influencing the employees attitudes; affecting their job behaviour (Peters, 2011). Fair evaluation processes, participation in decision-making, and proper communication appear to be equally critical in affecting work attitudes of the employees (Mulvaney et al., 2012; Piening et al., 2013; Messersmith et al., 2011; Kehoe and Wright, 2013). Accordingly, the study hypothesise that:

Hypothesis 5a: Organizational justice perception will act as a moderator between the employee disposition towards incentives and his/her reward expectancy.

Hypothesis 5b: The effect of employee disposition towards incentives on reward expectancy will vary with the different levels of organizational justice perception, such as the higher the organizational justice perception, the greater will be the impact.

2.14.5 Conditional Indirect Effect of Disposition towards Incentives on Moral Hazard Tendency

One of the limitations in analysing the mediation and moderation inferences is that they adopt a piecemeal approach, which raises the issue of how well the parts might fit together when combined in a unitary whole (Grant, 2013). It would be useful to

obtain a better understanding of the interplay between the organizational systems. Incentives, together with the employee perception of fairness of the system and reward expectancy, will fill the gap in the faculty's performance. Both the incentive system and performance appraisal need to be viewed as an input-output mechanism, which are profoundly embedded in the organizational context. Accordingly, it can be hypothesised that:

Hypothesis 6a: Organizational justice perception will act as a moderator between the indirect effect of employee disposition towards incentives on his/her moral hazard tendency through reward expectancy.

Hypothesis 6b: The indirect effect of employee disposition towards incentives on his/her moral hazard tendency through reward expectancy will vary with the different levels of organizational justice perception, such as the higher the organizational justice perception, the greater will be the impact.

The two hypotheses, 6a and 6b are an extension of the previous mediation and moderation relationships as discussed earlier, and the relationship inferred is more complex, as it involves interaction of different variables at different levels that can explain the phenomenon of moral hazard in an organizational context in more detail. The hypotheses are visually summarised in Figure 2.4.

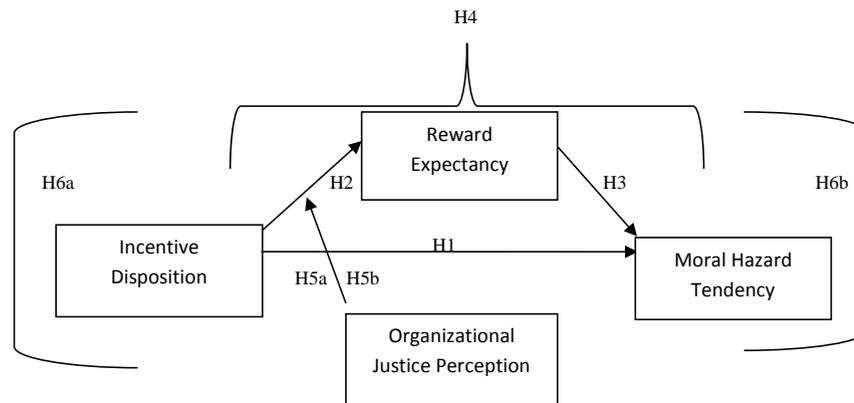


Figure 2.4: The Framework for Moral Hazard
Source: Author

2.15 Conclusion

This chapter has provided a detailed and systematic review of the literature on all the central concepts of the study, such as moral hazard, incentive contracts, organizational justice perception, and reward expectancy. The concepts were discussed within the purview of their respective theories. Linkages between and among the theories were developed throughout the literature review. The work of previous researchers was analysed in detail, and a number of gaps were identified in the extant knowledge. The chapter concludes with a set of hypotheses that emanate from the theoretical framework. The next chapter will present the design of the current study.

Chapter 3

The Research Design

3.1 Introduction

The research design is the “blue-print” of what the researcher intends to achieve – finding a way through the labyrinth. In this chapter, the research philosophy and the paradigm have been discussed at length, along with some other important steps adopted for this study, to resonate with the research questions. Moreover, the case study design has also been stretched out in this chapter.

3.2 The Choice of Research Philosophy

The research philosophy has important assumptions about the way the researcher views the universe. These assumptions underpin the research strategy and subsequently, the methods chosen for the study (Saunders, 2009). Usually, competing approaches in the social sciences are contrasted on the foundation of ontology, epistemology, and methodology (Della Porta and Keating, 2008). Ontology refers to the existence of literal and objective world; simply put, it means the target of the investigation. Epistemology is related to the possibility of experiencing this world and the forms this knowledge would involve. Moreover, methodology refers to the technical instruments used to acquire knowledge. Epistemological orientations shape and determine our particular view of the world and of the reality (Yeganeh et al., 2004). Thus, the epistemological positions, according to the author, are in close relations with the methodological approaches and they affect the research process, by permitting us to develop certain questions, design the study, and adopt appropriate research strategies. Saunders (2009) considers the method of research, secondary to the questions of ontology, epistemology, and axiology. The philosophy of social sciences has both a descriptive and a prescriptive side. Della Porta and Keating (2008) categorise ontologies and epistemologies on the basis of certain fundamental questions, as provided in Table 3.1. The responses will determine whether

the philosophical position of the research, is more inclined towards the positivist or the humanistic end.

Table 3.1: Research Paradigms

	Positivist	Post-Positivist	Interpretive	Humanistic
Ontological issues				
Does social reality exist?	Objective; realism	Objective; critical realism	Objective and subjective as intrinsically linked	Subjective; science of the spirit
Is reality knowable?	Yes, and easy to capture from	Yes, but not easy to capture	Somewhat, but not as separate human subjectivity	No; focus on human subjectivity
Epistemological issues				
Relationship between the scholar and his/her object	Dualism: scholar and knowledge are two separate things; inductive procedures	Knowledge is influenced by the scholar; deductive procedures	Aims at understanding subjective knowledge	No objective knowledge is possible
Forms of knowledge	Natural laws (causal)	Probabilistic law	Contextual knowledge	Emphatic knowledge

Source: ([Della Porta and Keating, 2008](#), p. 8)

Following the arguments of [Della Porta and Keating \(2008\)](#), the research philosophy for the study resembles that of “critical realism”. There is always an intense debate within the social sciences about the different approaches and methodologies that should be adopted. Hermeneutics maintains that natural science methods are essentially unsuitable in social science domains ([Yeganeh et al., 2004](#)). The author confirms that while the positivists attempt at explaining the phenomena (erklären), the hermeneutics aim to understand them (verstehen). The explanation (erklären) and understanding (verstehen) may have some blurred boundaries, but they have substantive differences. Granting to the author, nature cannot be disembodied from humans; seeing the relationship between humans and nature is more primal than the realisation that an organism coevolves with its surroundings. [Sayer and Sayer \(2000\)](#) assert that in considering the philosophy and methodology of social science research, “critical realism” provides an alternative path to the contrasting approaches of positivism and interpretivism. The author stresses a law-finding science of society, which is based on natural science methodology, as well as the counter-naturalist or interpretivist

reductions of social science to the interpretation of meaning. Moreover, the authors argue that by simultaneously challenging common conceptions of both natural and social science disciplines – particularly with regards to causation – critical realism proposes a means of combining a modified naturalism with recognition of the necessity of interpretive understanding of the meaning in social life. For realists, social skill is neither nomothetic (that is, law-seeking), nor idiographic (concerned with documenting the unique). The critical realists posit that while interpretative understanding is an important and necessary characteristic of any social science, it does not imply that there was no scope for a causal explanation (Sayer and Sayer, 2000). According to Danermark (2002), one of the reasons for the development of “critical realism”, is the criticism of the positivist approach, which dominated much of the social sciences since the 1930’s.

3.2.1 What are the Underlying Traits of Critical Realism?

Danermark (2002) attributes critical realism to a philosophical view of knowledge, which on the one hand, maintains that it is possible to gain knowledge about the outside world, for it is independent of the human mind or subjectivity. However, on the other hand, it upholds the view that the outside universe is as it is perceived. Making out that perception is a function of, and thus, fundamentally marked by the human mind; it accepts that one can only attain knowledge of the outside world by critical observation on the perceptual experience and its populace. That is why it has earned the nomenclature of “critical”.

Contemporary critical realism, most commonly refers to a philosophical approach and thoughts; combining a general philosophy of science (transcendental realism) with a philosophy of social science (critical naturalism), to describe an interface between the natural and social world (Bhaskar, 2010). The two terms were later elided to form “critical realism”. According to the author, transcendental realism claims that the “empirical” is only a subset of the “actual”, which is itself a subset of the “real”. Empiricism and positivism are more aimed at developing causal relationships between events. Critical realism locates them at the level of generative mechanism, which means that constant conjunctive relationships between these events are neither sufficient nor necessary to establish a causal relationship. The law of probability can be applied in the case of critical realism (Della Porta and Keating, 2008).

Science is an ongoing process, and any relationship cannot be squared off by coincidental evidence between the dependent and the independent variables (Gralewski, 2011). Humans inside a structure get affected by the structure and this in turn affects the social systems. Bhaskar (2002) argues that critical realism provides an intuitively plausible middle ground that has now been given a rigorous intellectual justification. Within philosophy, critical realism is a switch-over from epistemology to ontology and a

switch-over from events to mechanisms. This is the core of critical realism (Danermark, 2002). According to the author, if we desire to gain knowledge about the underlying causal mechanisms, we must concentrate on these mechanisms and not only on the empirically observable events. Sayer (1992, p. 37) states that:

There is an interpretation and engagement of the frames of meaning of the reader and the text. We cannot approach the text with an empty mind in the hope of understanding it in an unmediated fashion. Furthermore, such *verstehen* of objects is universal.

Hence, theory and value-neutral observations are impossible (Mearman, 2006). Critical realism acknowledges a two-step operation, such as studying the phenomena for causation, which is followed by the interpretation of those phenomena according to the context. Table 3.2 presents the components of critical realism from the perspective of Sayer (2004).

3.2.2 Looking at the Problem from the Lens of Critical Realist

Social science has an emancipatory potential. Social practices are informed by ideas, which may or may not be true, and where researchers are concerned with discourses and the meaningful qualities of social practices; understanding these is not a matter of abstraction followed by concrete synthesis, but of interpretation (Sayer and Sayer, 2000). Marsh and Furlong (2002) argues that contemporary realism acknowledges two points; first, while social phenomena exist independent of our interpretation of them; however, our understanding/interpretation of these affect the outcomes. Social science, according to these authors, involves the study of reflexive agents who interpret and change structures. Second, our knowledge of the world is imperfect – it is theory-laden. We need to understand both external reality and the social construction of that reality, if we are to explain the relationship between social phenomena. The philosophy of critical realism does not claim to have a privileged access to the real world, as researcher's knowledge of the world is fallible (Sayer, 2004). Critical realism requires looking at the phenomena of interest from the perspective of both objectivism and subjectivism. It is the melding point of the two extreme paradigms. Differentiating the physical world from the social world – as posited by critical realists – can be justified in this study. Table 3.3 shows objectivity and subjectivity in the study.

The existence of moral hazard in the higher education institutions is a hard reality (objectivity), which is disconnected from the social world (subjectivity). Moral hazard is manifested by the educators in different ways, which affects the quality of higher education. However, manifestation and prevalence of moral hazard, and the frequency of incidences among educators depend on how the scholars interact with the organizational systems. It is a social phenomenon, which differs from place to place and from culture to culture. Much of this social interpretation comes from the perception of the employees,

Table 3.2: Components of Critical Realism and its Interpretation

Components of Critical Realism	Interpretation in this Research
Objects/Entities Building blocks for the critical realist explanations, i.e., as individuals, organizations, resources, attitudes, etc.,	Higher education institutions, faculty members, systems, structures, processes etc., are studied
Events/Outcomes What critical realists investigate are external & visible outcomes of behaviours of individuals, organizations, & systems, etc.,	Existence of moral hazard in the faculty in various forms related to different aspects of job
Causal powers Objects/entities have causal powers	Incentive system, organizational justice system & its interaction with the individuals can cause events. The causal powers exhibit themselves as determinants
Structure of entities Entities comprise of components which are internally related. In other words structures exist within structures	Firms comprise of individuals, systems, and procedures
Emergence Objects analysed at different levels	Performance can be analysed at individual, firm, or sector
Necessary and contingent relations Critical realism suggests two types of relations among entities. Necessary – when one entity is dependent upon the other. Contingent – when one entity may be influenced by another. Relations are explained using a combination of both	Necessary: firm & individual Necessary: systems & individuals Necessary: firm & HEC Contingent: b/w different firms Necessary or contingent: b/w individuals
Context Generalised perspective of contingent relations, include all relevant circumstances	Ways in which the object interacts within the context can result in the problem of moral hazard
Mechanisms Ways in which the objects cause events to occur. Mechanisms can be linear (requiring statistical models) or non-linear (descriptive in nature)	Quality of education is affected by the motivation, intention, skills, & knowledge, etc., of the individuals. However, individuals can be influenced by different factors (internal & external)
Structures of causal explanation & research process Main focus of critical realism is what caused the events. Rather than induction or deduction (moving from general to particular or vice versa), the focus is on retroduction—explaining events by explaining mechanisms which produce them	Objects having structures & causal powers will produce events under certain conditions. Actual explanation will be difficult, due to complexity in real life situations

Source: Adapted from [Sayer \(1992\)](#)

such as the extent to which they believe that the organizational systems are equitable and whether or not their expectations are met within the hierarchical set-up. This is one of the reasons that a particular system might be successful in one context, but it fails to render efficiency in another context. Although, like any natural phenomena, it does not have a physical existence, but the effects can be evidenced by an employee's workplace behaviours and assessment of performance. The output can be measured objectively in many different ways. The primary research questions also seek answers within a contextual setting.

3.2.3 The Relation of Critical Realism and Triangulation

All measurement is fallible; therefore, it is imperative to use multiple measures and observations so that one measurement tool can cover up or mitigate the different types of errors emanating from a single source. The need is to triangulate across multiple erroneous sources, to get a better idea of what is actually happening in reality (Trochim, 2006). The author stresses that for achieving objectivity, we should triangulate across multiple fallible perceptions.

3.3 Triangulation as the Research Method

Saunders (2009) suggests the use of triangulation, especially in a case study approach. The author refers to the use of different data collection techniques within one subject area, to assure that the data is close to the researcher's interpretation of it. Triangulation provides an important means of ensuring the validity of the case study research (Johansson, 2003). The author refers to triangulation as a compounding of different layers of techniques, methods, strategies, or theories. Triangulation checks out for consistency, which subsequently increases the credibility of the research (Mearman, 2006). The authors further state that triangulation can be used in methods, data, or investigators. The need for triangulation arises from the ethical need to confirm the validity of the processes, as this could be performed by utilising multiple sources of data (Yin, 2009). Hartley (2004) proposes that case study research design can be utilised with other research strategies, to address the research questions in different phases of a research project, and yet, a further strategy would be to begin with the exploratory case study research and later examine the emerging findings in a wider survey-based research. The purpose of a case study is to establish the meaning of the phenomena under investigation (Tellis, 1997).

The current study collects, both qualitative and quantitative data, and employs two different data analysis techniques. The qualitative data are amassed using semi-structured face-to-face interviews. This allows the researcher to capture the facial expressions and gestures; granting meaning to what is being said by the interviewee. In

Table 3.3: Objectivity and Subjectivity in the Phenomena

Objectivity	Subjectivity
The problem of moral hazard is present in the faculty	Individual perception that leads to moral hazard
Explicit structures of reward & performance appraisal	Procedures in application of systems and processes
Similar structures can be found anywhere. The basic structure of these systems has universality	Individual perception of equity and expectancy are tied to the system
Everywhere systems are designed by the management	Employees can affect the management to bring necessary changes in the organizational systems, if they do not work properly
Systems can be differentiated based on its structure	Adjustment of the systems according to the market demands & stakeholder's needs
The objectives, which an incentive system intends to achieve are usually clearly stated	Procedures involved in the pay structures are open to interpretations
The broad definition of what constitutes moral hazard is agreed by all	Manifestation of the problem of moral hazard in contextual setting is subjective. Different incentives have different meanings for different individuals.

collecting quantitative data, a survey tool was used. The data gathered from multiple sources, contribute to multiple analyses. [Bryman \(2006\)](#) accepts that there are relatively few guidelines about how, when, and why different research methods might be merged. Scholars, who have adopted a formalised strategy, use many examples to illustrate their types; yet, we have relatively little understanding of the prevalence of the different combinations. [Greene \(1989\)](#) provides five major purposes that are served; using a mixed-methods research, which include: triangulation, complementarity, initiation, development, and expansion. The researcher must assume two primary decisions; keeping either or both as dominant paradigms, and conducting the research phases concurrently or sequentially ([Johnson and Onwuegbuzie, 2004](#)). Nevertheless, these authors agree that the findings must be mixed or integrated at some stage. [Bryman \(2006\)](#) advocates the adequate use of survey methods and interviews in different mixed researches. In social science research, triangulation implies combining together more than one set of insights in an investigation; if it is considered beneficial ([Downward and Mearman, 2007](#)).

Table 3.4 shows the taxonomy of triangulation that can be exploited by a researcher, who wishes to adopt the approach of triangulation in the research; whereas, Figure 3.1 shows how the researcher has actually done triangulation in this study.

Table 3.4: Taxonomy of Triangulation

Data triangulation	Involves gathering data at different times & situations, from different subjects
Investigator triangulation	Involves using more than one researcher to collect & analyse the data
Theoretical triangulation	Involves making explicit references to more than one theoretical tradition to analyse data. This is intrinsically a method that allows for different disciplinary perspectives upon an issue. This could also be called a pluralist or multi-disciplinary triangulation
Source: (Downward and Mearman, 2007)	

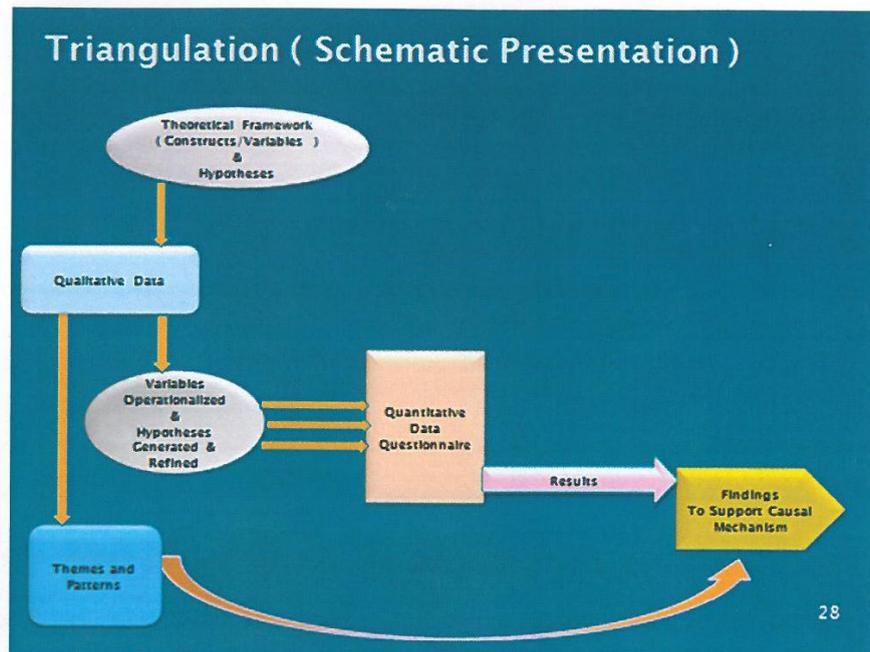


Figure 3.1: Triangulation for the Research
Source: Author

3.4 Case Study as the Research Strategy

Stake (1995) and Yin (2005) consider that the case study is a method of learning about a complex instance; based on a comprehensive understanding of that instance obtained by extensive description and the analysis of that instance in its context. The authors stress on thick descriptions, which signifies not just identifying people, issues, and positions, but also the interpretations of those, who are most knowledgeable. Gomez-Mejia and Welbourne (1988) and Heneman (2000) commend the use of case study in the issues related to rewards, stating that it would benefit from comprehensive case studies, interviews, and participant observation. Qualitative, along with quantitative research, can also be useful in understanding the employees behavioural problems that arise with the use of high-powered incentives. Thus, the problem of moral hazard would gain from a cross-disciplinary research.

The basic methodology for the case study has been adopted from Yin (2003a), due to its clear and simplistic design. It is the only viable method to elicit implicit and explicit data from the subjects (Zainal, 2007). The reason for choosing the case study was that the problem of moral hazard and its linkages with incentives, and employee fairness perception of the organizational justice system can be best understood in the organizational setting. Incentives should be examined as part of the overall human resource system, to understand how it fits into the larger picture of the organizational performance. The organizational context has an effect on the employee behavioural patterns. It is, thus, impossible to detach the phenomena from the organizational context to examine its “how” and “why”. Also, to pull out incentives from its natural settings cannot render a thorough discernment of how it affects the employee behaviour. Studying PRP, organizational justice, and moral hazard in an organizational context is thus a requisite of the research questions, which aims at resolving the “how” component. Although, it created several challenges for the researcher, as both qualitative and quantitative approaches were adopted for the phenomena to be understood from a wider perspective; nonetheless, the results suffice the painstaking. According to Yin (2003b, p. 14), the typical need for case studies arises out of the desire to understand complex social phenomena. Kohlbacher (2006) believes that the case study method allows investigators to retain a holistic and meaningful characteristics of real-life issues. A holistic inquiry of this phenomenon requires the collection of an in-depth and detailed data that are rich in the content. It involves multiple sources of data to sketch a three dimensional portrayal (Yin, 2003a; Harling, 2002).

3.4.1 Case Study Design

The design of case study has been mainly influenced by (Yin, 2003a). Yin considers that two important components of a case study design are: the research questions,

especially those pertaining to “how” and “why”, and the unit of analysis. The former has already been discussed in Chapters 1 and 6. However, the unit of analysis will be elaborated here. The unit of analysis should not be confused with the unit of observation. Yin (2003a) points out that the unit of analysis is primarily influenced by the way research question is framed. As the purpose of the study is to understand the problem of moral hazard in the faculty, within the context of higher education sector; therefore, the public sector universities and HEI’s remain the case; whereas, the unit of analysis is the faculty within these establishments. According to Stake (1995), a case must have specific boundaries. The boundaries in this study are characterised by the similar activities, which the universities and HEI’s deal with, as well as similar structures of these cases. Moreover, the unit of observation is the faculty members from whom data are gathered. Yin (2003b) differentiates between a classic case study, which comprises of a single case, with a multiple case study – with two or more cases; yielding four types of case study designs to select from. These four designs have been labelled as: Type 1 (single-holistic), Type 2 (single-embedded), Type 3 (multiple-holistic), and Type 4 (multiple-embedded) to examine the case within its contextual framework.

The current work fits into Type 4 design. The research covers different public sector institutions in district Peshawar (KPK). The research intends to examine the incentive system and performance appraisal system, which are components of the overall system of the internal environment of the higher educational setup. The aim was to uncover and understand moral hazard in the faculty. The case study design is considered as embedded for three reasons, which include: the focus of the study, which is on the incentive system and organizational justice system, with a special attention given to the performance appraisal system of the public sector institutions, the research is studying behavioural issues in the faculty that constitutes a portion of the total workforce in the higher education sector, and picking up only the public sector universities, refers to an embedded component of the entire higher education setup. The reasons given are plentiful to declare the research as a Type 4 design. According to Yin (2003b), no matter how the units are selected, the resulting design would be called an embedded case study design; in contrast to the one that adopts a holistic design, by examining only the global nature of an organization or of a program. Using a multiple case study can be justified because the cases selected have similarities; making it possible to apply the replication logic, and none of the cases were unique, critical, revelatory, typical or longitudinal, which according to Yin (2003a), requires a single case study design. Moreover, the case study design was embedded because the unit of analysis and the unit of observation both were embedded. Table 3.5 provides an overview of the study.

3.4.2 Type of the Study

Depending upon the type of the research question, the extent of control an investigator has over actual behavioural events, and the degree of focus on contemporary as opposed

Table 3.5: Overview of the Study

Aim of the Study	Explore and examine moral hazard
Research Objectives	<ul style="list-style-type: none"> * To understand the problem of moral hazard in the faculty. * To understand the role of incentives & organizational justice perception in the problem of moral hazard. * To determine the underlying causal mechanism for the problem of moral hazard.
Research Philosophy	Critical Realism
Context	Higher Education Sector
Case	Public Sector Universities & HEIs
Unit of Analysis	Higher Education Faculty
Unit of Observation	Individual Faculty Members
Phenomena Under Investigation	Moral Hazard
Case Study Design	Multiple-Embedded Case Study (Type 4)
Research Approach	Triangulation <ul style="list-style-type: none"> * Theory * Data * Analysis
Research Technique	Semi-structured interviews & Survey
Data Collection Sources	Primary Sources & Secondary Sources
Data Analysis Tools	NVivo, Word Processor, SPSS 19, SPSS (PROCESS), AMOS
Data Analysis Techniques	Cross-Case analysis based on replication logic & pattern matching; Hierarchical regression analysis using Baron & Kenny (1986), Aiken & West (1991), & Hayes (2013) PROCESS; SEM using Blunch (2010)

to historical events, the researcher has to make a choice between the types of case study designs, as categorised by (Yin, 2003a). The inquiry has adopted a mixed form of exploratory, as well as explanatory case study. The exploratory part constitutes of exploring the phenomena in its actual work setting, as different concepts might be understood and interpreted differently; depending upon the culture of the organization and the broader culture of the region. The explanation part is done by the interpretation of the results that are generated from both the qualitative and quantitative analyses, and explaining the causal mechanism that operates underneath the problem of moral hazard. It is also imperative for answering the “how” and “why” questions to move beyond exploring and describing a phenomena. Employee perception, combined with the understanding of the researcher of the situation; constitutes of the explanatory part of the study. Exploratory cases are sometimes considered to be a prelude to social research and may be used for conducting causal investigations (Tellis, 1997).

3.4.3 Why and How Exploratory and Explanatory?

To fix the study in both exploratory and explanatory case study, the researcher has to support it with a solid rationale. Before starting the data collection, a broad theoretical framework was developed from the literature review; providing some direction to the study of the areas that need to be probed and understood, and which could answer the research questions in the best possible manner. Thus, the main interview questions for the respondents cascaded from the preliminary theoretical framework. In-depth, semi-structured interviews helped in exploring the problem of moral hazard in its natural setting. The interviews helped identify the different types of moral hazards prevalent in the faculty, but more importantly, it helped in identifying the main determinants of the problem. It was interesting to see that the determinants identified by the qualitative data had similarities with what the literature had suggested. This exercise not only validated the preliminary theoretical framework, but it also helped in the refinement of the theoretical framework, by narrowing down the constructs and through the proper positioning of the variables. The qualitative data also facilitated the much needed operationalisation of the constructs in its actual context.

The main advantages or outcomes of the exploratory part of the research were:

1. Validation of the broad preliminary theoretical framework;
2. Further refinement of the variables used in the framework;
3. Proper positioning of the variables in the theoretical framework;
4. Operationalisation of the constructs, especially the construct of moral hazard and incentives;

5. Helped in the development of a new set of hypotheses, as well as refinement of some previous hypotheses, which were generated from the literature, making them more compatible with the study context;
6. Helped in the development of the questionnaire.

The gap identified in Chapter 1 (Section 1.2), has already pointed towards the lack of research and literature on the problem of moral hazard, as well as the incentives, especially in a non-western culture. These issues necessitated the exploratory part of the research using a qualitative approach.

Following the qualitative part, the quantitative research was brought into action, to statistically test out the proposed causal relationships between the variables of the theoretical framework. Finally, the explanatory part was executed by combining the results from both the approaches, along with the researcher's interpretation of these results; generated using empirical data. This increased the robustness of the results acquired from a single source (Eisenhardt, 1989a; Parkhe, 1993; Yin, 2003a; Herriott and Firestone, 1983; Saunders, 2009; Yin, 2009; Tellis, 1997; Johansson, 2003; Stake, 1995). Irrespective of whether the findings from one source are approved or disapproved by another source, the resultant inference would be a lot firmer; allowing the researcher to claim something with confidence. The findings of both types of data were congruent with what the literature has suggested, which further reinforced the results of the study. Chapter 9 triangulates the results of both approaches.

3.4.4 Logic for Using Multiple-Case Study

Yin (2003b) prefers a multiple case study design over a single case study, even if the number is just two. The author stresses that each case in a multiple design must be carefully selected, so that it either predicts similar results (a literal replication) or contrasting results, but for predictable reasons (a theoretical replication). Following the logic given by Yin, the researcher also opted for a multiple case study design, with the intention of checking the replication logic in the chosen cases, which was possible with a Type 4 design.

In short, the multiple case design was preferred over the single case study because it provided robust and rigorous grounds for good quality research that could be derived from the triangulation of evidence, as compared to a single case design (Eisenhardt, 1989a; Yin, 2003a). This approach is to gain insight into the way moral hazard is manifested in the faculty and the perceived determinants of its deviant behaviour. Moreover, to check out the role of incentives and performance appraisal, as to how these can affect the equity and expectancy perceptions of the faculty that determines its attitudes and workplace behaviours.

3.4.5 Case and Unit of Analysis

Yin (2003a) considers a case to be a problematic thing. What constitutes a case, in a case study research; is one of the fundamental questions that needs a clear and comprehensive answer before progressing any further in the research. A case can be defined as an “integrated system” bounded by time and place (Stake, 1995). A similar explanation has been extended by Miles and Huberman (1994), who consider it as a phenomenon of some sort occurring within a bounded context, which is the unit of analysis. The context in which the unit of analysis exists, is bounded by setting, concepts, and sampling; thus defining its boundary. A case always refers to a specified social and physical setting, unlike in quantitative studies where individual cases are devoid of their context. Tellis (1997) and Miles and Huberman (1994) declare the unit of analysis as a critical factor in the case study.

For the current study, six public sector higher education institutions constitute the cases. The faculty has been collectively referred to as the unit of analysis, whereas, the individual faculty members from whom the information was sought, is the unit of observation. The problem of moral hazard is the phenomena, which is investigated in the organizational context with reference to incentive system and organizational justice system. It is crucial in a case study analysis that the case and the unit of analysis are identified and depicted as objectively as possible because everything else revolves around it. Yin (2003a) stresses that a link between the unit of analysis and the embedded sub-units must be established. The author further makes a point that the unit of analysis must relate, to the way the initial research questions have been determined and the generalisations desired at the project completion. Table 3.5 provides the bird’s eye view of the case study design for the current research.

3.5 Generalisation

Tsang (2014) suggests that using a case study, the qualitative data can provide useful information for assessing the empirical generalisability of the results. Yin (2003a, p. 10) states that:

Case studies are generalizable to theoretical propositions and not to populations or universe. In this sense, the case study does not represent a “sample”, and in doing a case study your goal will be to generalize theories (analytical generalization), and not to enumerate frequencies (statistical generalization).

A common critique against the case study research has been put forward by the proponents of the quantitative research that it offers little reason for scientific generalisation. Case study seems a poor ground for generalisation (Stake, 1995). Any

generalisations made through a case study are referred to as “petite” generalisation by the author. The author further considers it is as unnecessary that a case study should always emanate new generalisations; it can even modify the existing grand ones. Stake (1995) supports the case study research that case studies are not usually opted for to optimise production of generalisations, more traditional and correlation studies can serve this purpose better, but valid modifications can also occur in the case study. The author asserts that a case is chosen to come closer to the phenomena and know it well. The current study is more interested in understanding the phenomena; therefore, it does not wish to claim absolute generalisation based on the research findings.

According to Yin (2003a), generalisation from multiple case studies can be in the form of replication. Replication refers to finding emerging themes and patterns repeatedly across the different cases to yield a good working hypothesis. The stronger will be the working hypothesis if the greater are the number of sites. Generalisation for the current study was made in the form of cross-case analysis, where cross-cutting themes were identified during the qualitative analysis, and generalisation is made across cases, in the form of theoretical generalisation. In case studies, the researcher seeks out common patterns among different cases so that the context can be discounted (Burawoy, 1998). Theoretical generalisation, or theory building from case studies, is an increasingly popular and relevant research strategy (Eisenhardt and Graebner, 2007). Moreover, the results were generated using quantitative technique, and they can also be generalised in similar settings, and with slight modifications in the research variables and strategy, it can even be generalised to other settings as well. A common type of empirical generalisation is statistical generalisation (Tsang, 2014).

3.6 Conclusion

This chapter has provided an overview of the research design – in the light of its philosophical underpinning and chosen research paradigm. An effort has been made to link every component of the research design to “Critical Realism”, which surfaced up as an appropriate paradigm to answer the research questions; aimed at uncovering the underlying causal mechanism of the problem of moral hazard in the faculty. The research paradigm has been mainly influenced from Della Porta and Keating (2008), Sayer (1992); Sayer and Sayer (2000), and Mearman (2006). A multiple- embedded case study (Type 4) design has been given preference, which has been borrowed from Yin (2003a) and partially influenced by Stake (1995). Context, case, unit of observation, along with other important features of the case study are presented at length, to justify the chosen design for this study. Moreover, the case study design has been complemented by mixed-methods, to fully answer the research questions. The ensuing Chapter 4 presents the procedures used for data collection and analysis, thus, unfolding the methodology for the current study.

Chapter 4

Research Methodology

4.1 Introduction

This chapter provides a basic sketch of the case study protocol as suggested by Yin (2003a). The author considers it as the blueprint for the case study research, which provides vital information in a concise form. The researcher has used this protocol to cover a number of cases, as demanded by the multiple case study design. Stake (1995) states that the case protocol is used to ensure accuracy, whereas, Yin (2003b) emphasises the development of the case study protocol as a major way of increasing reliability. This chapter also provides an overview of the links, such as connecting the research questions to their respective objectives and approaches. The chapter further unfolds operationalisation of the constructs used in the theoretical framework and concludes with a brief account of how ethical issues are addressed in this study.

4.2 Research Questions and Objectives

Research objectives and questions have already been discussed in Chapter 1 (Section 1.5 and 1.6). However, Table 4.1 shows linkages between different research objectives and its respective research question(s). Moreover, it depicts how different objectives were achieved and research questions answered; therefore, addressing the gaps that have been identified from the literature review, as provided in Chapter 1 (Section 1.2). Figure 4.1 shows the methodology adopted, to achieve the given set of objectives and answer the research questions of this study.

Table 4.1: Linking Research Objectives, Questions, and Approaches

Objective	Question	Gap	Approach
RO1	RQ1		Qul
To understand the existing problem of MH in the faculty	How is MH manifested in the faculty?	<p>*Lack of empirical studies on MH in the region</p> <p>* Non-availability of a comprehensive list of MH in the faculty</p>	
RO2	RQ2		Qul
To identify the main determinants of the problem of MH in the faculty	What are the main determinants of the problem of MH in the faculty?	<p>*Lack of case study research in public sector universities in the region</p> <p>*Lack of existing literature on the problem of MH in professionals</p> <p>*Lack of research in the local context</p> <p>*Dearth of studies that explores and analyses MH from holistic perspective</p>	
RO3	RQ3		Qun
To find out & understand the role of DTI in MHT	What is the role of DTI in MHT of employees?	<p>*Lack of research on incentives in multitasking professionals</p> <p>*Lack of methodological triangulation in the area</p> <p>*No evidence of the area being researched from critical realist perspective</p>	

(continued)

Objective	Question	Gap	Approach
RO4	RQ4		Qun & Qul
To find out if mediation is present b/w DTI & MHT through RE	Does RE play a mediating role b/w DTI and MHT	<p>*Lack of research that present a critical realist perspective using expectancy theory</p> <p>*Lack of empirical testing of the expectancy theory</p> <p>*Lack of theory triangulation in the field of economics & behavioural sciences</p>	
RO5	RQ5		Qun & Qul
To find out the moderating role of OJP b/w DTI & RE	Does OJP play a moderating role b/w DTI & RE, & if yes, then how?	*Inadequate studies to check out the role of perception in the problem of MH	
RO6	RQ6		Qun & Qul
To find out the conditional indirect effect of DTI on MHT	Is there any conditional indirect effect of DTI on MHT, & if yes, then how?	*Scarcity of complex models in empirical studies, which blends different theories & disciplines	

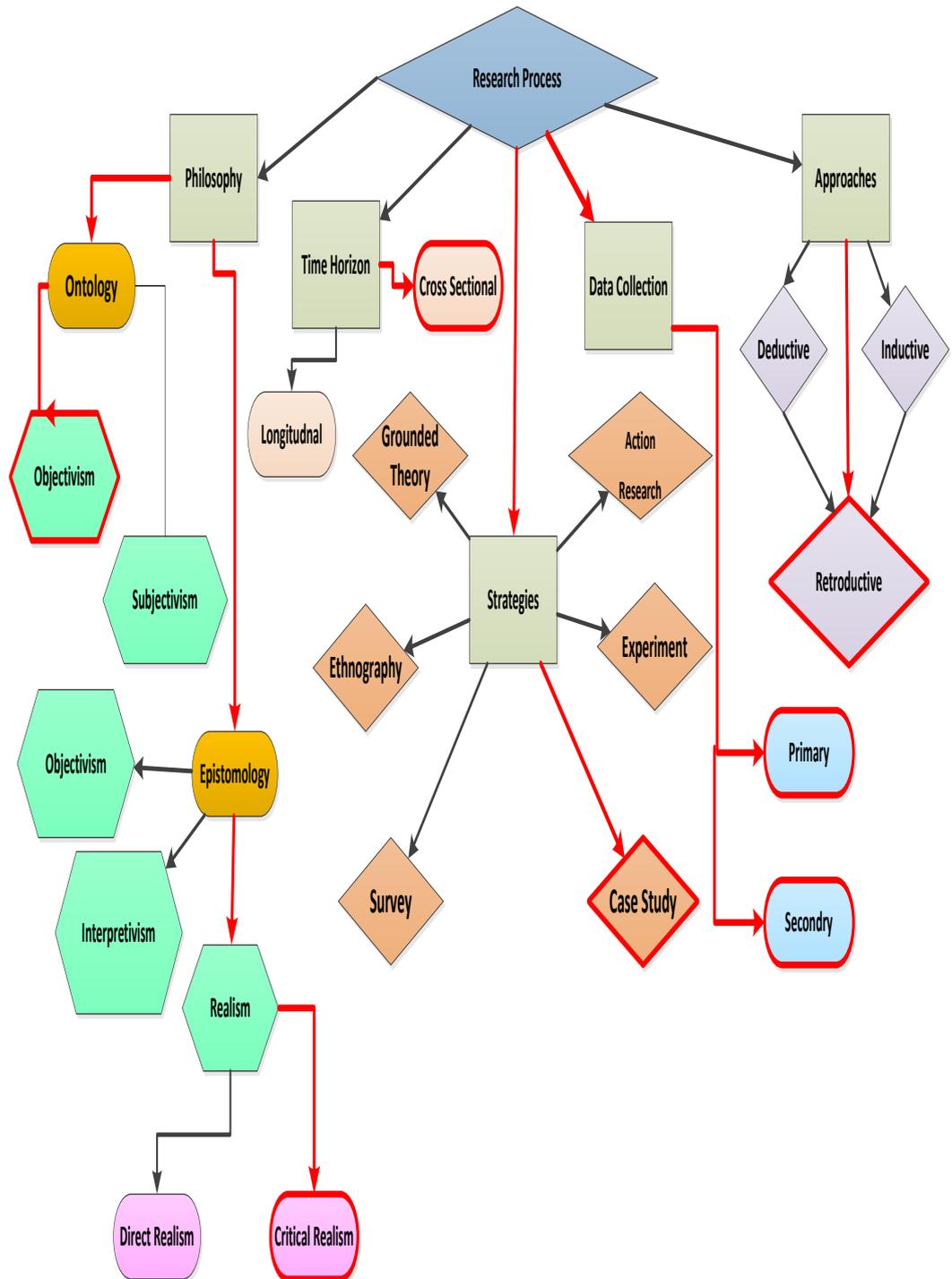


Figure 4.1: Research Methodology
 Source: Author

4.3 Case Selection for the Study

The selection of cases is the most difficult step in research design, as a researcher can easily get trapped in his/her emotions and experiences, and the resultant inclusion or exclusion of cases might not be a true representative sample of the population. Sometimes, a wrong case can tempt the researcher due to easy accessibility to the data, or acquaintance with the people and the place. On the other hand, a prospective case might be missed out because of the lack of interest of the researcher, due to some reason. Out of a total of eleven universities in district Peshawar (KPK), only six could qualify the test, and make it to the final run. Moreover, the inclusion of all eleven universities and institutes would have been a hectic and time-consuming process, without any significant impact on the results, due to homogeneity in the cases. When selecting a multiple case study design; a question that many researchers encounter, relates to the number of cases deemed necessary, or sufficient for the study (Paré, 2004). In a case study analysis, the number of cases is not as important as the inclusion of numerous relevant characteristics (Stake, 1995). Applying this principle – the education institutions chosen from the public sector has several similarities. However, the criteria for selecting cases were also intended to bring out diversity in the cases, which was essential for the study. Selection of the cases was therefore based upon the criteria, such as university/institute ranking, university/institute status (brand equity), size of the institution, repute, etc. It should; however, be noted that the ranking of all the higher education institutions is carried out by the HEC, which is the regulatory body for the higher education sector in the country. Following this criteria, the list of chosen education institutions for the study is provided in Table 4.2.

In total six cases were selected, which presented a perfect blend of the set criteria. These cases are considered as the educational hallmarks in the district. Moreover, these cases are from the same geographic region and have an almost similar service structure. This facilitates the understanding of the other contextual variables; providing a good ground for exploring the problem in detail. The number of replications is basically a matter of discretion and personal judgement, and it depends upon the certainty a researcher wants to achieve from the multiple-case results (Yin, 2003a).

4.4 Reasons for Excluding Private Sector Universities

The study is restricted to the public sector higher education establishments. The main reasons for excluding private sector universities are many. *First*, the research is directed towards studying the reward structure for the reason of uncovering moral hazard in the faculty. At private universities, the pay structures are tailor-made to suit the personal requirements of the principal, which is not the case in public sector universities that follow a similar reward structure. The pay structure of the public sector universities

comprises of – the BPS and TTS; albeit, within these two pay systems there are variations, but not so great as to violate the basic framework of the reward structure(s). *Second*, the replication logic would have not been upon inclusion of universities from both the sectors. *Third*, the government pays the HEC significant amount of funds to be spent on the higher education in the country. A large share of these funds is given to public sector universities for research and academic purposes; thus, dealing with such huge funds make these universities more prone to the problem of moral hazards. *Fourth*, public sector universities are not directly accountable to the public – to whom this money actually belongs – but to an agency, which acts as a conduit between the public and these higher education institutions. As a consequence of the indirect accountability, the problem of moral hazard has increased to a greater extent in the public sector universities. Thus, the prevalence of a bureaucratic model for accountability make these public sector universities nesting places for moral hazard. *Fifth*, the environment is generally centralised in public sector higher education institutions, where usually the interests of the agents are not aligned with that of the principal. The misalignment of interest creates a gap, which is manifested in the form of moral hazard in the faculty. *Sixth*, the aim of the research was not to do a comparative study between public and private sector higher education institutions, but to offer an analysis within a relatively homogeneous group of subjects. Besides, there are several other reasons for choosing only public sector universities for this study. The criteria for case selection are summarised in Table 4.2.

Table 4.2: Criteria for Case Selection

Reasons	Public Universities/HEIs	Private Universities /HEIs
Reward structure	uniform	tailor-made
Replication logic	possible	not possible
Accountability	bureaucratic model	business model
Interest alignment	not aligned	aligned
Aim	cross-case analysis	comparative study

4.5 Case Vignettes

Case accounts provide an overview of the selected cases. It tells the reader, the nature of the cases studied and presents the setting in which the research is conducted – before embarking upon the analysis. A brief description of each case has been provided in the succeeding paragraphs.

4.5.0.1 Case Study A: University of Peshawar

The University of Peshawar (abbreviated UOP) is a public sector co-educational university in the city of Peshawar, KPK, Pakistan. The university was established in October 1950 by Mr. Liaquat Ali Khan, the first Prime Minister of Pakistan, as an offshoot of Islamia College Peshawar, which was founded in 1913. It operates as a residential campus spread over 1,000 acres ($4km^2$). The university is ranked as the 4th best general purpose university by the HEC.

The university comprises six faculties with forty postgraduate departments, two centres of excellence, four colleges and three high schools. Student population on campus is over 20,000. The founder of Pakistan, Muhammad Ali Jinnah, who had visited the college in 1928, had great admiration for it, referring to it as “My College” and adopted it as one of the three heirs to his fortune, along with Aligarh University and Sindh Madrassa (his own school) in 1939. For Jinnah the university was a gift to students of the province, in recognition of the role played by them in the making of Pakistan. The University has two departments and nine constituent parts.

4.5.0.2 Case Study B: Agriculture University, Peshawar

Agricultural University, Peshawar is a research-based University in Peshawar, Khyber Pakhtunkhwa, Pakistan. The university is ranked as the second best in the field of agriculture after Agricultural University, Faisalabad. In 1974, the college became a Faculty of Agriculture under the University of Peshawar. It attained its autonomous status as Agricultural University, Peshawar in 1981. The university has three institutes: the Institute of Biotechnology and Genetics Engineering, Institute of Business and Management Sciences, and Institute of Development Studies. Each institute has several faculties and departments.

4.5.0.3 Case Study C: University of Engineering and Technology, Peshawar

The University of Engineering and Technology, Peshawar (or UET Peshawar) is a public, coeducational, university located in Peshawar, Khyber Pakhtunkhwa of Pakistan. In 1952, an engineering college was set up as a constituent college of the University of Peshawar with an enrolment of twenty students (according to the UET Peshawar Annual Report 2006 - 2007). This college was granted a charter to operate as an independent engineering university in 1980 under the name University of Engineering and Technology. Its main campus in Peshawar is in the University Campus area. In 2006, UET Peshawar introduced the Tenure Track System, which is a performance-based salary system

4.5.0.4 Case Study D: Islamia College University, Peshawar

Islamia College is a renowned educational institution located in the city of Peshawar in the Khyber Pakhtunkhwa province of Pakistan. It was launched in October 1913 by regional leader Nawab Sir Sahibzada Abdul Qayyum, and then Chief Commissioner of the province, Sir George Roos-Keppel, in an effort to provide quality education to the region's youth. When the new province of Khyber Pakhtunkhwa (previously N.W.F.P) was formed in 1901 after its separation from the Punjab, there was only one college (Edwards College) in the whole province. This scarcity of quality educational institutions forced local youth of the province to seek higher education in the region of (British India). This same lack of educational opportunities in the region motivated Nawab Sir Sahibzada Abdul Qayyum, and Sir George Roos-Keppel to establish a foundation that would not only cater the academic demands of the region, but also develop leaders from the region. In 1950 University of Peshawar was founded as an offshoot of Islamia College Peshawar, with the latter being associated with the university as a constituent college. In the year 2008 the college was given the status of a chartered university, with Mr Muhammad Ajmal Khan appointed as its first Vice Chancellor.

4.5.0.5 Case Study E: Khyber Medical University

Khyber Medical University, in Peshawar, Khyber Pakhtunkhwa, is the first public sector medical university. It was founded in January 2007 with jurisdiction in the entire province, including the Federally Administered Tribal Areas. The motto of KMU is "Service to Humanity by striving for excellence in medical education and research as well as for providing medical students with state-of-the-art knowledge, skills, and technology to deliver the highest standards of health care for the region." Degrees awarded are MBBS (Bachelor of Medicine and Bachelor of Surgery) and BDS (Bachelor of Dental Surgery).

4.5.0.6 Case Study F: Institute of Management Sciences, Peshawar

The Institute of Management Sciences, based in Peshawar, Khyber Pakhtunkhwa, is a young, innovative, and an enterprising business school, which is at par with the foremost management schools of the country. Unlike, the conventional academic institutes, IM/Sciences broadens its educational focus in response to new trends in the evolving field of management. Based on the social values of unity, honesty, professional excellence and a broad vision of life, the Institute aims to provide an educational experience that transforms its students into business leaders. Since its inception in 2001, the Institute has grown manifold in terms of its human resource and physical infrastructure. Currently, the Institute is offering a range of courses, undergraduate programs, and graduate degrees in the areas of Management, Computer Science and Information Technology,

Planning and Policy Analysis, Banking, Finance and Accounting, Marketing, Health Service and Hospital Management, and Local Government and Public Enterprises.

4.6 Operational Measures

Operationalisation of the constructs is important to bring out all the important dimensions and make it measurable. The constructs of the theoretical framework required prudent disintegration, to bring out its real meaning in an empirical setting. Survey items for the constructs of organizational justice perception and reward expectancy were borrowed from the past studies; however, the constructs of disposition towards incentives and moral hazard tendency were operationalised using guidance from the literature and empirical data. The available measures for the constructs of disposition towards incentives and moral hazard tendency, were mostly generic, which could not satisfy the need of this study. Therefore, the items used in the questionnaire were mostly created using qualitative data, such as from the sub-themes or categories generated under the broader themes of “perceived moral hazards in the faculty”, and “incentives provided to the higher education faculty”. However, some items used for the operationalisation of the construct of moral hazard were also borrowed from (Bennett and Robinson, 2000); pertaining to the employee deviant conduct, such as the issues of punctuality and reduced effort. The list is provided in Chapter 8, Table 8.2. It is, however, important to mention that there were several other items that were part of the survey, but due to their low loading in the exploratory factor analysis, these were excluded from further analysis.

4.6.1 Organizational Justice Perception

The current study has borrowed 16 items for measuring organizational justice perception from (Sweeney and McFarlin, 1997). The authors have measured organizational justice using the constructs of procedural justice and distributive justice. The index of procedural justice include items that are aimed at assessing fairness of the procedures; whereas, the index for distributive justice, measure the perception of the respondents' regarding distribution of rewards that include: pay raises, performance ratings, promotion, and other rewards distribution. The reason for choosing this survey is the high reliability and validity of items that have been tested from time to time by scholars; dealing with similar areas. The items chosen to measure the construct of organizational justice perception for this study are provided in appendix (3 A); using the original 5-point *Likert Scale*; ranging from, 1=strongly disagree to 5= strongly agree). The items that were included in the final list for further analysis are shown in Chapter 8, Table 8.2.

4.6.2 Moral Hazard Tendency

The construct of moral hazard has been operationalised; seeking help from the literature, as well as analysis of the qualitative data. First, a comprehensive literature review yielded a list of measurement items related to moral hazard that have been associated with the educators, as provided in Chapter 2 (Subsection 2.8). For easy interpretation, the items generated from the literature review have been divided into three categories; which include: moral hazard in teaching, moral hazard in research, and moral hazard in other academic activities. Later, items were added to the existing list from the analysis of the interviews or the qualitative data. Both the literature review and the qualitative analysis generated a list of 18 items related to deviant behaviour in educators – after removing the items that were either duplicated or inappropriate. Moreover, 9 items were added to the measurement scale from the study of [Bennett and Robinson \(2000\)](#), which as mentioned earlier pertains to employee deviant behaviour in the workplace – making the total items in the list of tendency towards moral hazard up to 27.

Table 6.2 provides some references from the literature for operationalisation of the term “effective teaching”. Also provided in Figure 6.2 are the main areas that have surfaced from the analysis of qualitative data, collected through interviews – where perceived moral hazards related to effective teaching – in different cases have been provided. Moreover, in Chapter 6 all the moral hazards that surfaced up from the interviews have been discussed in detail along with a summarised version of the same in Figures 6.2, 6.3, and 6.4, which categorises moral hazard into teaching, research, and other academic hazards. A list of moral hazard tendency items was subsequently compiled, based on past literature and the analysis of qualitative data.

The main behavioural problems identified from the analysis of qualitative data were converted into survey items, for example, to get the respondents’ view on teaching effectiveness, the questionnaire included items related to course management, teaching methodology, class preparation, student interaction, punctuality, examination, and student counselling. Similarly, the respondents’ interest in their own research as well as their interest in the student’s research was checked using the items related to free riding, publication count, plagiarism, providing time and guidance to research students, etc. Whereas, the faculty members tendency towards organizational citizenship behaviour was measured using items from [Bennett and Robinson \(2000\)](#). All the items were measured using a 5-point *Likert Scale*, where 1=strongly disagree and 5=strongly agree. The list of items, which measures the construct of moral hazard tendency is provided in appendix (3 B).

Due to lack of studies in the area of moral hazard in the academe, the researcher developed a survey tool that could reflect the respondents’ tendency with respect to “shirking” and/or “opportunistic” behaviour; while discharging their duties and fulfilling responsibilities. One of the reasons for the qualitative phase of the study to precede

the quantitative phase, was to identify an inclusive pool of examples of moral hazard in the faculty, so that together these behaviours reflect “opportunism and/or shirking” in meeting the definition of moral hazard tendency, as provided in Chapter 1 (Section 1.7.4).

4.6.3 Disposition Towards Incentives

The faculty disposition toward incentives is assumed to be the prime predictor and explanatory variable of the outcome, which is measured using a number of items; assessing the faculty’s readiness to act in the presence of explicit incentives. Just like the construct of moral hazard, the employee disposition towards incentives was measured using items that were constructed by the researcher. Most previous studies that involved incentives have been conducted using experimental designs (Gneezy and Rustichini, 2000; Rydval and Ortmann, 2004; Ariely et al., 2007; Levitt and List, 2009). These studies look into the impact of the provision of explicit incentives on employee productivity and performance, which did not serve the purpose of the existing study. The items measuring employee disposition towards incentives are measured using a 5-point Likert scale; ranging from 1=strongly disagree and 5=strongly agree. The list of items is provided in the appendix (3 C). The scale measures the faculty’s inclination towards incentives, which are actually provided to it for different academic activities in the universities; to boost its motivation and improve the quality of higher education in the region. These incentives have been identified from the cross-case analysis, which is furnished in appendix (11), such as explicit incentives provided for additional teaching load, publications in recognised journals, conducting research, supervising research students at different levels, and so forth.

4.6.4 Reward Expectancy

The construct of reward expectancy is used as a mediating variable in the theoretical framework. Measurement of this construct is based on the essence of expectancy theory, as provided by (Lawler III and Suttle, 1973). The authors have measured employee expectancies using a 38-item questionnaire; out of which 2 items measure $E \rightarrow P$ expectancies, and 18 items measure $E \rightarrow O$ expectancies. The questionnaire depicts effort by “working hard” and performance is represented by “good job performance”. 18 different outcomes are then linked to these two terms. The survey provided by Lawler III and Suttle (1973) has been slightly modified, as the purpose of this study is not to find out different types of expectancies and valences as intended by (Lawler III and Suttle, 1973).

(Lawler III and Suttle, 1973) have identified three factors: factor 1 consists of items, which are related to internally-mediated rewards, factor 2 with externally-mediated

rewards, and factor 3 with negatively-valued outcomes. To tap the reward expectancy of employees for the current study, factor 2 alone is sufficient. Therefore, the items that constitute factor 2 (externally-mediated rewards) are extracted from the given list and included in the study survey. The study did not focus on internally-mediated expectancies and negatively valued items. For the existing study it has been assumed that the faculty has an unconditional valance for explicit rewards, such as monetary rewards and promotion; therefore, the items that measured the valancies of employees have also been hushed. The list of items is provided in the appendix (3 C). 5-point *Likert Scale* was used for measuring this construct, where 1=strongly disagree and 5=strongly agree. In the original instrument, 1 to 7 point *Likert Scale* measured the employee feeling of frequency; when one factor leads to another. The original scale is slightly complicated, but the modified scale is relatively simple as it aims at measuring an employee's agreement or disagreement of the presence or absence of a certain set of externally-mediated expectancies that might further result in deviant behaviour through the improper distribution of effort. [Lawler III and Suttle \(1973\)](#) provide a variety of combinations of the core variables of expectancy theory. This study has picked up only the "*E* → *O* Associations" – a measure of the degree to which effort is expected to result in outcomes – such as pay and promotion.

4.6.5 Control Variables

The study has controlled for the variables of individual demographic characteristics, as these are potential factors in shaping an individual's perception. Particularly, age, gender, and career stage, have been used in many studies as pet variables. [Gomez-Mejia and Balkin \(1992\)](#) have used the variables of gender and career stage as controls – which proved to be significant in their study. [Bakhshi et al. \(2009\)](#) support the significance of age as a contributor to an employee's perception; affecting his/her workplace behaviour. [Nishii \(2013\)](#) has used age and tenure as controls, but the effects were not significant. Several other examples can be quoted in this regard.

In the current study, different control variables are included that are believed to have an effect on the interest variable. The control variables are generated at two levels: the individual level and the organizational level. The controls at the individual level include: age, gender, education, teaching experience, current position, time spent in current position, and career stage. A collective index of the time-based demographic variables is assessed through career stage. Career stage, as suggested by [Gomez-Mejia and Balkin \(1992\)](#) is measured using highly correlated demographic variables of age, position, time spent in the current position, and teaching experience. The Cronbach alpha for the standardised items of time-based variables is 0.81; averaging these into a composite indicator. The higher the score on this variable indicates that an individual is further along the career stage [Gomez-Mejia and Balkin \(1992\)](#).

University orientation was a complex variable to measure. However, the task was made easy by the HEC, as it has fixed criteria for measuring research and teaching output in all universities. Research orientation of a university is assessed upon: journals owned by a particular university, research centres instituted in a particular university, research funds secured from the HEC or any donor agency for conducting research, research publications by the faculty associated with a university, and the number of PhDs produced in a particular time period. If these criteria were missing than the alternative option was selected, such as a university is considered to be “teaching-intensive”, rather than “research-intensive”. If a particular university happens to be “research-intensive”, it was dummy coded as 1, on the other hand, for “teaching-intensive” university the dummy code was 2.

Another control variable chosen for the study is university reputation, which is directly linked to the Commission’s ranking. HEC ranks all universities and higher education institutions on a periodic basis, and makes the list available for public usage. There are a large number of factors, which are taken into account by the Commission for the purpose of ranking higher education establishments. The HEC ranking is quite reliable, as the rigorous composite criteria include three main weighted categories, such as research output, teaching output, and the standards of quality assurance. The weightage for teaching, research, and quality assurance is 40 points, 36 points, and 24 points respectively; amounting to a total score of 100. The criteria for teaching include: student teacher ratio, ratio of PhD faculty to the total faculty, selectivity (i.e., ratio of the total applicants against students selected), teacher evaluation, faculty trainings, and so on. The research criteria include: the number of HEC approved supervisors employed in a university or HEI, the number of indigenous and foreign scholarships availed by the faculty associated with particular university/HEI, the research grants approved other than by the HEC, publication in impact factor journals, the number of publications in HEC approved journals, the number of citations, the number of W, X, Y, and Z category journals published by the university, the internet bandwidth, the total PhD output of a university, and the number of conferences organised through HEC funding. Quality assessment criteria contain implementation and compliance with the code that the HEC has provided to the universities, such as the appointment criteria for faculty, criteria for MS, MPhil, and PhD, plagiarism standing committee, QEC categorization, and peer perception survey. All those universities or HEIs that appeared in the list of the top ten among all universities in Pakistan were considered highly reputable and represented by a dummy code 1. However, those universities that although did not appear in the top 20 universities list, but did manage to secure a position in the top five in their respective category was considered as a university of medium reputation and represented by a dummy code 2. If a university could not fit into either of the two categories, it was represented by a dummy code 3.

Gender has also been dummy coded, with 1 representing females and 2 representing

males. Age has been measured using blocks of (25 to 35 years), (35 to 45 years), (45 to 55 years), and (55 years and above); dummy coded as 1, 2, 3, and 4 respectively. Education has been categorised into Master, MS, MPhil, PhD, and Post Doctorate; dummy coded as 1, 2, 3, 4, and 5 respectively. Teaching experience has been divided into four blocks of (1 to 5 years), (5 to 10 years), (10 to 15 years), and (15 years and above), with dummy codes assigned as 1, 2, 3 and 4 respectively. The faculty can hold any of the four academic positions in a higher educational institution, which can be categorised as professorial and non-professorial. However, the dummy codes of 1, 2, 3, and 4 were assigned to the actual positions of, lecturer, assistant professor, associate professor, and professor. Time spent in the organization was blocked into (1 to 5 years), (5 to 10 years), (10 to 15 years), and (15 years and above) with dummy codes assigned as 1, 2, 3, and 4 respectively. These blocks facilitated the faculty members in providing information on this variable as they could not recall the exact number of years of employment in their employer institute.

4.7 Data Collection from Primary Sources

Primary data were collected for the research from three different primary sources, such as interviews, surveys, and participant observation. The geographic map of Peshawar district – from where the data were collected – is provided in the appendix (4).

4.7.1 Interviews

The interviews were conducted as the first step of data collection for the research. The data collected through the interviews were very helpful in providing a solid base for further data collection through the survey, as discussed in Chapter 3 (Section 3.4.3).

4.7.1.1 Structure of the Interviews

In-depth, semi-structured, face-to-face interviews were designed for the management. Such types of interviews are considered to be the most suitable method for data collection from people at the managerial level. A deliberate and careful list of interview questions was generated to encompass all the aspects of the research framework. Face-to-face interview has been given preference over any other medium of interviewing, such as telephonic interview – as the researcher can capture facial expressions and can give meaning to what is being said by the interviewee. Facial expressions have an important role in the communication, as the interviewer can tell, when the interviewee stresses something, is unsure about something, or is implying something to be of lesser importance, and so on. The lightest pauses in the conversation and the talking style of the interviewee carry its own meaning, which can only be judged by the interviewer while

the interview is in progress. Moreover, a face-to-face interview allows the interviewer to develop a rapport with the interviewee, which is very difficult by using any other medium. The purpose was to yield quality responses.

4.7.1.2 Sampling for the Interviews

Qualitative research, usually focuses in depth on relatively small samples that are selected purposefully (Patton, 2002). Purposeful sampling allows the researcher to select information-rich subjects for an in-depth study. The author believes that the researcher can learn a great deal about the issues from information-rich cases – which are of fundamental importance for the research. Saunders (2009) justifies the use of the non-probability sample for the case study because of two reasons: first, it might be possible that the sample frame is not available, and secondly, to fully answer the research question(s). Purposive sampling, also known as judgemental, selective or subjective sampling, is a type of non-probability sampling technique. In non-probability sampling, the units are investigated, based on the judgement of the researcher. Purposive sampling is very popular among social science researchers (Guarte and Barrios, 2006).

Interviews were conducted using purposive sampling, which is a type of non-probability sampling. The reason for choosing purposive sampling is that in all the selected cases, the management comprises of a relatively small number of people, and even in the management there is a usually a group of people who are more knowledgeable about the working of the organization. Non-probability sampling or non-random sampling provided the researcher an opportunity to choose a sample for the study according to her best judgement.

4.7.1.3 Conducting the Interviews

Semi-structured interviews go well with the elite class because such people are accustomed to timekeeping (Bernard, 2011). The researcher took a prior appointment with all the interviewees. Time and date were decided at the convenience of the interviewee because people in such responsible positions often have a tight work schedule. After getting appointments, the interviewer made sure to reach the specified venue well ahead of time, so as to prevent any unforeseen circumstances from interfering with the interview schedule.

Formal permission was sought from the interviewees before the commencement of the interview. The interviewer also presented a consent form to the interviewee at the start of the interview. The interviewees had the discretion to skip any question, which they did not want to answer, as the intent was not displeasing anyone, but to collect information in a cordial manner. On several occasions, the interviewer took a detour from the set pattern of questions; sensing something interesting and informative, which the

interviewee was ready to share. This required developing a rapport with the interviewee and making him feel that he has not been dragged into some boring activity.

An average interview lasted for approximately 50 minutes, which was enough time to extract vital information. Instead of focusing on the length of the interview, the aim was to generate quality information from the interviewees. New themes stopped emerging after about 13 interviews, and an acceptable interpretative framework was constructed; emerging from the previous theoretical framework. [Marshall \(1996\)](#) states that it is the stage of thematic and theoretical saturation. However, six more interviews were conducted; pushing the number of interviews up to 19, which was important to validate the existing information. Hence, a total of 19 interviews were conducted with the top-and middle-level management of the chosen cases. Besides, having position-based interviews, the researcher attempted to capture the opinions of knowledgeable individuals who could prove valuable aid for the study.

All interviews were tape recorded, and later transcribed verbatim; at the earliest possible instance. The researcher also took notes of anything interesting that was observed during the process; even the gestures were translated into words and saved as memos for later use in the analysis. To avoid any discrepancy or biases on the part of the interviewer, regarding the information provided by the interviewee, the latter was given a chance to skim through the transcripts to make sure that the information has been recorded accurately. During the interviews, certain points were jotted down by the researcher off camera, which the individuals were reluctant to provide while the recording was in process. Also, some individuals were camera shy, so to open them up, the researcher had to first engage them in some informal talk that was not directly related to the topic. Field notes were also taken during the visits to the selected cases and stored as memos. A sample memo has been provided in Chapter 5, Table [5.3](#).

4.7.1.4 Respondent Questions

At the heart of the protocol is a set of substantive questions, reflecting the actual line of inquiry ([Yin, 2003b](#)). The respondent or research questions were framed to resonate with the research objectives and main research questions. Table [4.3](#) shows a list of research questions for the semi-structured interviews. The objectives, which these questions are intended to serve are provided in Chapter 1 (Section 1.5), Chapter 4 Table [4.1](#), and in Chapter 6 Table [6.1](#).

Table 4.3: Semi-Structured In-Depth Interviews

Research Questions
1. What types of inefficient behaviour does the faculty exhibit?
2. What are the reasons for such behaviours?
3. Do you think the faculty has complete knowledge about the professional behaviours required of them in their job?
4. What is your opinion about incentives or rewards given to the faculty?
5. What types of incentives are given to the faculty members?
6. Do you think incentives have any impact upon their job performance?
7. Do you think incentives should be given to the faculty, and why?
8. Are you satisfied with the appraisal system used to evaluate the faculty's performance, if yes, then would you suggest any further improvement, and if no, then why?
9. What actions are taken by the management after the assessment of the faculty is carried out?
10. Do you think the appraisal tool used for the faculty covers all the essential tasks included in its job?
11. Are the evaluations discussed with the faculty and what actions are taken in case of good and bad performances?

12. How do you monitor the faculty's performance?
13. Do you involve the faculty in decision-making that effects it, if no then why not, and if yes, then, how?
14. Do you think the faculty is satisfied with the reward system of the organization?
15. In your opinion, what are the main advantages and disadvantages of the incentives given to the faculty?
16. What do think are the main challenges in PRP system?
17. What suggestions would you put forward, to improve the performance of the faculty?
18. Which activities do you consider should be prioritised in the faculty's job, to serve the institute better?
19. What are the core values of your institution?
20. Do you think incentives provided to the faculty serve the purpose of the institute and goals of the higher education?
21. Does your Institute support performance based culture?
The list provided is not exhaustive

4.7.2 Survey

The second round of data collection was done through the questionnaires, which was developed after the qualitative data collection and analysis. The logic for qualitative data collection taking precedence over the quantitative data has already been discussed in detail in Chapter 3 (Section 3.4.3). The manner in which quantitative data were collected will be discussed in the ensuing paragraphs.

4.7.2.1 Design of the Survey

A questionnaire was developed for the faculty members that reflected all the constructs of the theoretical framework. Qualitative constructs were broken down into items and included in the survey. Each item was either a component factor of the construct or a reflective factor of it. The items were measured along a *Likert Scale*. The questionnaire was divided into different sections; each section measuring a construct of the theoretical framework. Operationalisation of the constructs was a laborious procedure; going back and forth; to tap what the measures were actually intended to capture. The questionnaire took several months before it could have been ready to be floated for data collection. The results of any research are dependent upon the accuracy of the operationalisation of the constructs, and if this transformation goes wrong, it will lead to erroneous results. As a consequence, the conclusion withdrawn from it will end up measuring something else than what was actually intended.

The presentation of the questionnaire was kept simple, standard, and formal. The language was kept easy because English – although the medium of higher education – was still not the native language of the respondents. The jargon was replaced with communal words. To further facilitate the respondents, some technical terms used in the questionnaires were elaborated on and clarified with the help of examples, and even at times explicated by the enumerator. The aim of these efforts was to obtain quality data.

4.7.2.2 Sampling for the Survey

Higher education institutions are divided into different categories, such as Social Sciences, Physical and Numerical Sciences, Life Environmental Sciences, Management Sciences, Computer and Information Technology, and Liberal Arts. These categories are not an arbitrary creation of the researcher, but of the HEC. Each university is a combination of different disciplines, which are arranged into faculties and departments for the purpose of specialisation. At least two departments were selected from each category for the purpose of sampling. Thus, bringing out the diverse viewpoint of the faculty engaged in teaching and research activities; from different academic backgrounds

that can be truly representative of the higher education sector as a whole, and not just, of any one or a few categories. Care was exercised not to include departments where research activities are non-existent because it was the demand of the research questions. Moreover, the faculty in these institutions is broadly divided into professorial and non-professorial class; based on their academic qualification. Faculty members who have a higher academic degree, such as an MPhil or a PhD are included in the former category; whereas, without higher qualification the faculty fits into the latter category. The professorial faculty includes: assistant professors, associate professors, and professors, whereas the non-professorial faculty includes lecturers. The professors are mostly engaged in research activities; whereas, the lecturers due to their limited research and publishing skills, are mostly involved in teaching activities. It was rather difficult to obtain data from the professorial faculty, due to non-availability in their offices; however, every effort was made to get data from the professorial and non-professorial faculty alike; for the data to be truly reflective of the population. Diversity helped enrich the data, collected for the study. Thus, the respondents were not only from a diverse subject background, but also from different academic positions. Simple random sampling was applied to collect data from each category of the faculty. Moreover, a detailed discussion on the case selection criteria has been provided in Section 4.3.

4.7.2.3 Data Collection through Survey

In an effort to save time, two enumerators were hired for data collection. These enumerators were Master's level students, who could understand the purpose of data collection and judge the quality of information provided by the respondents. The enumerators were previously involved in data collection for other projects therefore had the know-how of the entire process. The enumerators were asked to interpret the questionnaire to test out their level of understanding of the tool. They were then given a brief orientation about the questionnaire with an intention that if the respondents had any queries regarding the questionnaire, the enumerators should readily respond to it.

The sample was drawn from a population of approximately 1, 277 faculty members in the selected universities and HEIs. The total strength of the faculty in all the 6 cases is provided in appendices (5) and (6). A total of 500 questionnaires were distributed to faculty in the six chosen universities. 350 were returned, out of which 311 were worthy of inclusion in the final analysis. The entire data collection process took several months.

4.7.3 Participant Observation

Using participant observation tool for data collection requires a vast amount of time on the part of the researcher. Yin (1994) suggests that data for the qualitative research are mostly acquired from documentation, archival records, interviews, direct

observations, and participant observation. Participant observation refers to a case, where the researcher assumes a role in the data collection process and is able to gain an inside perspective of the events. For the current study, the researcher happened to be a participant observer by default; being a lecturer in one of the chosen cases. She developed relationships with different faculty members, due to on and off discussion sessions; sometimes spontaneous and at times pre-planned. This provided an opportunity to the researcher to gain a deeper understanding of the problem of moral hazard prevalent in the academia. Nevertheless, the researcher had to detach herself from the entire situation and look at it from a distance to get the actual picture, instead of being driven by personal emotions. Moreover, the researcher was also mindful of the norms and traditions of the education sector; however, this has to be admitted that after embarking upon the study the researcher's observation became acute in this area. One possible tendency in such a situation was, for the researchers to become biased in data collection and interpretation. To overcome this problem the following actions were taken:

1. A protocol for the research was developed, as discussed earlier in this chapter;
2. The interviewees were given a chance to skim through the transcripts, to make sure that the information has been recorded accurately, as discussed in this Chapter (Subsection 4.7.1.3);
3. Memos were written about anything that was observed and was of interest to the study; while conducting the interviews. These notes were expanded at the earliest possible, so as to avoid any possibility of different types of errors, which also include personal sensitivity. A sample memo is provided in Chapter 5, Table 5.3;
4. Triangulation in the study was employed to overcome shortcomings associated with a single source, as discussed in Chapter 3 (Section 3.3);
5. The purpose of the research was not to make absolute generalisation of the research findings, but to explain the phenomena, as discussed in Chapter 3 (Section 3.5) and (Subsection 4.11.4) of this chapter. This also helped in reducing any intended or unintended personal bias on the part of the researcher.

4.7.4 Pilot Study-Three Rounds of Pilot Testing

Pilot study is conceptualised as a final preparation prior to a full fledge data collection (Yin, 2003a). The pilot study was divided into three phases, which helped the researcher to collect quality data. In stage one, mock interviews were conducted with three experts – using a tentative list of interview questions. Each participant was first oriented about the study background, so as to comprehend what the questions were aiming at while giving their feedback. The main objective of these mock interviews was to refine the list of respondent questions, such as rephrase, drop, or add questions on the existing list,

and also to check out the approximate time taken by the interviewees. The feedback was used to improve the content and quality of the questions, which were included in the actual list of interview questions as provided in Table 4.3.

After completion of the interview process; pilot testing of the questionnaire was done in two stages. The development of the questionnaire took around two months, before it could have been ready for pilot testing. The iterative process of going back and forth from questionnaire items to the literature, research objectives, and research questions seemed like an unending process and a test of patience for the researcher. Besides, checking the internal validity and reliability of the questionnaire, pilot testing also helped in regulating the time needed to fill out the survey by the respondents, which was important because the faculty members have a tight work schedule. It also served to inform the researcher about the accuracy of the phraseology of the items. The first stage of survey pilot testing was conducted by requesting 12 faculty members to fill out the prototype questionnaire, to test the robustness of the tool. The 12 respondents were hand-picked faculty members, which included statisticians and subject experts, to check out the content validity and face validity of the instrument, as discussed in Chapter 8 (Subsections 8.7.1 and 8.7.2). A few faculty members who were neither subject experts nor statisticians were also part of the pilot testing; for the purpose of checking out the general comprehension of the survey items.

The responses obtained from the survey pilot study identified some major flaws in the questionnaire. For example, many of the questions were not being measured through a proper scale, instead of assessing the degree of agreeableness or disagreeableness of the respondents, the scale measured the frequency of the incidences, which was not the intent of the research. Redundant questions were also identified and removed from the questionnaire through pilot testing – to enhance the quality of the instrument. Furthermore, some questions were either restructured, rephrased, or replaced with better ones. Survey questions, may be dropped or added based on the outcome of the pilot study (Tellis, 1997). An unforeseen outcome of this pilot study – which was later understood to be a miscommunication – was that some faculty members were seen to be unable to answer certain questions. The reason behind this was later discovered to be that what seemed to be common terminology for the researcher, turned out to be jargon for some faculty members. The jargon was removed before the second round of pilot testing was conducted. Feedback from the first pilot study of the survey was incorporated in the questionnaire, before the second round of pilot study of the survey was conducted. Pilot studies are often done with convenience sampling (Stake, 1995). The second round of pilot testing of the survey prototype involved 20 faculty members; using convenience sampling. The feedback obtained from the second round of pilot testing of the survey further improved the questionnaire content, layout, and presentation. The reliability statistic of the prototype questionnaire turned out to be satisfactory. Table 4.4 shows how the three staged pilot testing was conducted.

Table 4.4: Three Staged Pilot Testing

Stage	Pilot Test	Number of Participants
1	Mock Interviews	3
2	Prototype Survey 1	12
3	Prototype Survey 2	20

4.7.5 Data Collection from Secondary Sources

Besides, the collection of primary data; the researcher also relied on secondary data; collected from different sources, such as reports, newspaper articles, the HEC statute, memos, other PhD theses, office orders, websites, etc,. According to [Tellis \(1997\)](#), documents could be letters, memoranda, agendas, administrative documents, newspaper articles, or any document that is germane to the investigation.

4.8 Issues and Challenges during Data Collection

No matter, which research approach is adopted, data collection is usually the toughest part of the research. Reneged appointments and commitments were common problems encountered by the researcher, especially during the interview phase. During the exploratory stage, interviews were conducted at the top and middle level management of the educational institutes. The process of data collection was based on the guidelines as suggested by [Dick and Baskett \(1999\)](#):

1. Contact the respondents;
2. Explain the purpose of the research project to the respondents;
3. Establish good and unbiased relationship with the respondents;
4. Determine a date, time, and venue for the interview course.

Getting an appointment with the top and middle level management in the educational institutions was not less than a challenge. Even after confirmation of the interview, many-a-times it was difficult to get a hold of the interviewee, due to some urgent off-schedule meeting or other commitment. It was a test of patience for the researcher. This is also a cultural dilemma in Pakistan that the majority of the people do not strictly abide by their commitments, particularly if it involves time-related issues. Bearing in mind that all the interviewees were heads of educational institutions – who are very busy individuals – therefore no deliberate attempt was made in rushing up the interview process. All the interviews were conducted at a date, time, and venue convenient to the interviewees. After all the waiting, the researcher managed to interview 19 individuals. The interview structure had been kept flexible and adapted according to the demands

of the situation. [Lofland and Lofland \(1995\)](#) and [\(Mathers et al., 1998\)](#) assert that the flexibility and elasticity (which distinguish semi-structured interviews) allowed the changing and modifying of interview questions when required, to gain rich, reliable, valid, and accurate data during the interview process, and ask the same question in different ways to explain the same issue. The authors consider one of the influential strengths and advantages of the semi-structured interview technique to be the thorough exploration of the research issues, as it allows opportunities for both the interviewer and the interviewee to discuss the topics in more detail – enabling the interviewees to freely and fully express their views, beliefs, and thoughts. The list of interviewees is provided in the [Table 4.5](#).

4.9 Analysing the Evidence

[Tellis \(1997\)](#) argues that the analysis of a case study methodology is the most difficult; yet, the least developed process. There are several steps involved in this process, which must observe a consistent succession. [Yin \(2003a\)](#) maintains that data analysis consists of examining, categorising, tabulating, testing, or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study. The authors further acknowledge the limitations of a case study research that unlike statistical analysis, there are few fixed formulas or cookbook recipes to guide the researcher, and consider it as an intellectual thinking of the investigator; for sufficient presentation of evidence and deliberate consideration of alternative interpretations. All empirical studies, especially case studies, have a story to tell, which revolves around empirical data, and has a beginning, middle, and an end; the needed analytic strategy is a researcher's guide to crafting this narrative, and only rarely will the data do the crafting for the researcher ([Yin, 2003a](#)). Case studies are multi-perspective analyses, including the perception of the actors, as well as the interaction between different groups [Tellis \(1997\)](#).

For the existing study, two sets of data were analysed in a sequential manner. First, the qualitative data were analysed using NVivo 9, to generate different levels of codes that ultimately terminated in a cross-case analysis; using the replication logic. Cross-case findings and analysis according to [Yin \(2003b\)](#), are the most critical components of a multiple case study. Further discussion on cross-case analysis has been provided in [Chapters 6](#) and the [appendix \(11\)](#). The quantitative data analysis was done using SPSS version 19 and AMOS version 21. A detailed analysis of the quantitative data is provided in [Chapter 8](#).

Table 4.5: List of Interviewees

SR	Designation	Case	Duration	Code
1	Vice Chancellor	University of Peshawar	50 minutes	A1
2	Chairman Chemistry Deptt, Director QEC	University of Peshawar	1 hour, 10 minutes	A2
3	Dean of Social Sciences	University of Peshawar	57 minutes	A3
4	Vice Chancellor	Agriculture University, Peshawar	1 hour	B1
5	Director Advanced Studies & Research, & ORIC	Agriculture University, Peshawar	47 minutes	B2
6	Director Advanced Studies & QEC	Agriculture University, Peshawar	1 hour, 5 minutes	B3
7	Dean Faculty Crop Production Sciences & Genetics	Agriculture University, Peshawar	1 hour, 20 minutes	B4
8	Vice Chancellor	University of Engineering & Technology, Peshawar	1 hour	C1
9	Dean Electrical Engineering	University of Engineering & Technology, Peshawar	1 hour, 15 minutes	C2
10	Vice Chancellor	Islamia College & University, Peshawar	48 minutes	D1
11	Dean, Physics & Numerical Sciences,	Islamia College & University, Peshawar	57 minutes	D2
12	Chairman Statistics, Director QEC	Islamia College & University, Peshawar	55 minutes	D3
13	Vice Chancellor	Khyber Medical University Peshawar	40 minutes	E1
14	Director QEC	Khyber Medical University Peshawar	30 minutes	E2
15	Director	IMSciences, Peshawar	55 minutes	F1
16	Deputy Director	IMSciences, Peshawar	45 minutes	F2
17	Coordinator MSc Applied Economics	IMSciences, Peshawar	1 hour, 44 minutes	F3
18	Coordinator BBA	IMSciences, Peshawar	40 minutes	F4
19	Chairperson, Committee for Development of Social Sciences	HEC	40 minutes	G1

4.10 Intertwining Qualitative and Quantitative Data

Mixed-method has been used in the study to answer different types of research questions. The details of how different research questions were answered are provided in Table 4.1. The results generated through quantitative research were supplemented by qualitative data in explaining the results. In Chapter 9, the findings from qualitative and quantitative data have been triangulated. Thus, convergences of results arising from different methods validated the results of the study and also elaborated the findings. Triangulation was done in the study to fulfil the demands of *critical realism*, as discussed at length in Chapter 3 (Section 3.3). The main points of triangulation as can be summarised as following:

1. The research questions required both types of data;
2. Initial part was exploratory, followed by the explanatory part;
3. Quantitative part is slightly dominant in the study for the reasons mentioned below:
 - a. Most of the research questions were answered using a quantitative approach;
 - b. The faculty is the unit of analysis and the prime focus of the study. Quantitative data were collected from these actors using a survey tool, which were analysed using statistical techniques – mainly regression analysis.

4.11 Addressing Quality Issues in the Case Study

Quality issues need to be addressed in all types of researches, but it becomes of paramount importance in empirical studies, which are prone to several such tribulations. There are different opinions of experts, as to how the quality of a case study can be determined. Scholars have highlighted the quality of case study according to their perspective of what seems important to them. This is due to the lack of any formal structure of the case-study research. The quality of any research – especially of a case study – is determined by the degree of its validity and reliability. The two types of data approaches require slightly different ways to address quality issues. The issues of external validity, internal validity, reliability, and construct validity were addressed to mitigate the issues of quality in a case study research (Yin, 2003a).

4.11.1 Reliability

The term reliability refers to the consistency, which means the same procedure – when applied – is liable to produce similar results. In the current study reliability has

been discussed from two perspectives. Yin (2003a) suggests that the use of the case study protocol and study databases for this job. A detailed case study protocol was developed and elaborated to provide a blueprint for the study. The research questions for the semi-structured interviews, the theoretical framework, structured questionnaire for quantitative data collection, etc., ensured reliability in the case study and kept the data collection on the right track.

4.11.2 Construct Validity

Construct validity refers to choosing the correct measures regarding the concepts that are being investigated. The construct validity of the case study is ensured by triangulation of data collection and data analysis (Eisenhardt, 1989a; Greene, 1989; Stake, 1995; Patton, 2002; Yin, 2003a; Mearman, 2006), among others. Conflicting and supporting literature was also enfolded into the discussion (Robson, 1993), to compare and contrast the emergent findings with the extant literature (Bui, 2014). The findings of the literature matched with both the qualitative and quantitative results, which ensured construct validity of the case study. The determinants of moral hazard that have been identified by the qualitative analysis were similar to those found in the literature. This enhanced the construct validity of the case study.

4.11.3 Internal Validity

Internal validity refers to the extent of correctness of the results achieved from the research (Zikmund et al., 2012). Claiming validity in a case study research is not less than a challenge, as there are alternative inferences available besides the ones the researcher is claiming. LeCompte and Goetz (1982) emphasise on internal and external validity. Internal validity is of prime importance to case studies that are explanatory and causal in nature (Yin, 2003a). According to Yin, the internal validity of a case study can be done by pattern matching and explanation building. The current study is both exploratory and causal in nature. It focuses, not only on the problem of moral hazard in the faculty, but also on the determinants of the problem. Moreover, the study seeks answers to the questions that are predominantly causal in nature, such as the role of incentives and faculty perception of equity and expectancy in the problem of moral hazard. The expected patterns, in the form of hypotheses, were supported by the measured values in testing causal relationships as suggested by Hak (2010). Some of the questions were answered using a single approach, but others required a combination of both the approaches – qualitative and quantitative – to satisfactorily answer the inquiry. Hence, inferences were drawn by the combination of two types of data, where one set of data validated and reinforced the results generated by another set of data. The technique of pattern matching was used to identify similar patterns from the data. Eisenhardt (1989b) claims that different types of data combination can be synergistic.

4.11.4 External Validity

Yin (1994) points out that the case study results cannot be generalised from the sample to the population in a similar fashion, as it can be done in a quantitative study. A small sampling does not allow a researcher to go for stronger and wider generalisations. Although, the study has employed both qualitative and quantitative approaches; nevertheless, the aim was not an absolute generalisation of the results to the population, or to claim something with absolute certainty, but to understand the phenomena of moral hazard in the higher education sector. This was not even the requirement of the critical realism because the paradigm claims that absolute reality can never be achieved. Thus, the appropriate strategy is “analytic generalisation”, rather than “statistical generalisation”, as suggested by Yin (2003a). Using multiple case study design and *replication logic*, increased the robustness of the research outcomes. The use of econometric models, along with the analytic strategy of replication logic for cross-case analysis also reinforced the external validity of the case study.

Moreover, the statistical model developed for the study was generalisable to some extent as it achieved the threshold of PRATIO, tested through SEM. The parsimony ratio (PRATIO) of the model was .67, which is above the threshold level of .60, as suggested by Blunch (2010); therefore qualifying the test for generalisation.

4.12 Gaining Access to Cases

The cases selected for the study are located in close geographic proximity because these are in the same district and within a few kilometres range. Except for a single case – which was the researcher’s employer institute – access to other cases was gained using the researcher’s personal contacts, by virtue of her professional affiliations; as all higher educational institutes in a particular district are closely knitted together. Giving people a clear account of the intention of the visit, further facilitated the accessibility to the cases. It also increased the credibility of the researcher in the eyes of the respondents, who were kind enough to relinquish the required information. Moreover, being a native and resident of this region, the research was familiar with the norms and culture of the people and workplaces, and knew how to gain access to other educational institutes. Last but not least, females in this region are facilitated in every possible way, as part of the cultural norm. However, several security issues created problems in data collection.

4.13 Ethical Issues

All universities in the region are operating under the patronage of the HEC; therefore, the universities and their constituent parts are accountable for their actions to this

body, due to the authority vested in it. The researcher sought prior permission from the Commission for data collection – clearly expressing the nature of information required from the cases and more specifically the purpose of information aggregation. Likewise, all the interviewees were provided a consent form for the formal consent of their audience. The pattern has been furnished in the appendix (7).

To protect the identity of the respondents and ensure confidentiality, the respondents' name exhibition was excluded from the survey. This protected the identity of the respondents and tracing back to them. The employees were taken into confidence by ensuring that the information provided will not be leaked out or used to their disadvantage, in any way. The questionnaires were kept in a safe place after duly filled out and returned by the respondents. Moreover, on the financial side, the research ethics were equally adhered to, as the enumerators hired for the collection of the quantitative data, were paid at the current market rate for each completed questionnaire.

4.14 Conclusion

This chapter has provided details on data collection and a cursory view of data analysis procedures undertaken in this study, which includes the case study protocol for all the six cases. The case protocol is a summarised version of how the case study strategy is used in the research, especially the tables provided in this chapter have compressed vital information in a format, which is easy to read and comprehend. Moreover, the chapter shows that mix-method approach has surfaced up as the appropriate methodology for the study to satisfactorily answer the research questions. Chapter 5 shows the process adopted for analysis of the qualitative data; whereas, Chapter 7 will elaborate the process employed for analysis of the quantitative data.

Chapter 5

Qualitative Data Analysis Process

5.1 Introduction

This chapter is based on the analysis of qualitative data; generated through in-depth, semi-structured interviews, from the top and middle level management in the selected cases. The chapter step by step exposes the entire data analysis process; uncovering all the details of how data were sorted and analysed. Data analysis for this study is mainly influenced by the approach suggested by (Miles and Huberman, 1994). Moreover, it has also borrowed some analysis techniques from (Patton, 1990) and (Dey, 1993).

The cross-case analysis is a research method that facilitates the comparison of the commonalities and differences in the events, activities, and processes across multiple cases. Individual cases were analysed to establish an initial coding scheme, and then the cross-case analysis was conducted; where themes cut across multiple cases. The intent of the study is not to do a comparative analysis, but to explain the behavioural responses of the faculty; using incentives and perceptions of equity and expectancy. To explain the problem of moral hazard from a holistic perspective, the findings were clustered and organised around the research questions. Cross case analysis is usually done for two main reasons, such as generalisation of the findings, and to deepen understanding and explanation. As already claimed in Chapter 3 (Section 3.5) that the aim of this study is not to generalise findings in absolute terms, but to know something about the phenomena in detail (Herriott and Firestone, 1983).

5.2 The Power of Qualitative Analysis

Qualitative research produces new puzzles more frequently than it solves the old ones (Harling, 2012); however, qualitative analysis according to Miles and Huberman (1994), is a powerful way of assessing causality, as it can identify mechanisms going beyond

absolute association. It also gives contextual meaning to the causal relationships established through inferential testing of the hypotheses. Albeit, regression analysis provides the quantitative evidence of the causal relationships between the variables of the study, but the explanatory power of these relationships is provided by the contextual data – generated by using the qualitative approach. Qualitative analysis, with its rich data – backed up by human judgement – facilitates the explanatory power of the causal mechanism of the phenomena under investigation. Miles and Huberman (1994) suggest that quantitative analysis is unrelentingly local and deals with the complex network of events and processes in a situation.

5.3 Developing Causal Models for the Study

Both Stake and Yin refer to the conceptual framework, but have failed, to fully describe how to make one (Baxter and Jack, 2008). Miles and Huberman (1994) propose that a conceptual framework is a visual or written product that explains how the key factors, concepts, or variables are related to each other. Causal models can be parted into inductive or deductive models. The former is also known as constructive or generative; while the latter is known as enumerative or conceptual (Miles and Huberman, 1994). The author believes that such a framework already carries some causal freight. The themes generated out of the qualitative data were utilised in refining the theoretical framework, with a proper positioning of the constructs to give it more logical power, and helped in hypothesis development and refinement as discussed in Chapter 3 (Subsection 3.4.3). For example, prior to qualitative data collection and analysis, a basic model was developed taking guidance from the literature, as provided in Figure 5.1. The role of theory development, prior to conducting data collection, is a point of difference between case studies and related methods, such as ethnography (Lincoln and Guba, 1985) and grounded theory (Corbin and Strauss, 1994). Different streams of the phenomena were identified that led to an outcome and then grouped together. It was like letting the data speak for itself, instead of speaking for the data. Although, the model is just a rough sketch, it can; nevertheless, help the reader to understand the interest area of the study through eye-balling. The researcher generates research questions, codes, samples of people, events, and processes that give the framework a chance of working out (Miles and Huberman, 1994). However, it can never guarantee the framework to work as predicted by the researcher. The final framework was developed as the result of a comparative analysis of all the cases using variables that were considered to be more important in accounting for the problem of moral hazard.

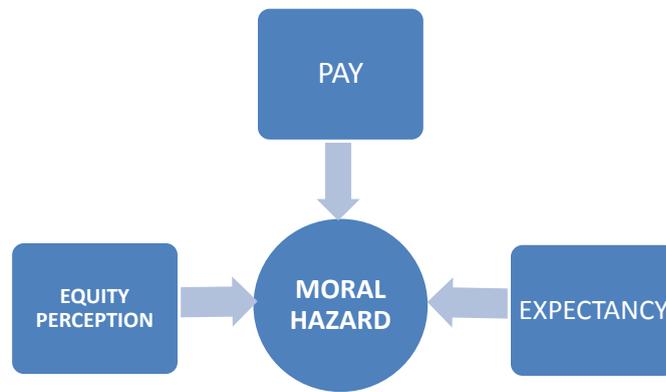


Figure 5.1: Model Prior to Qualitative Data Collection and Analysis
Source: Author

5.4 Qualitative Data Analysis

Two sets of data, such as the qualitative and quantitative were analysed using two different analysis techniques. Qualitative data analysis started with data sorting, followed by generation of codes at different levels, memos, and ultimately ending up in a cross-case analysis – through pattern matching. The cross-case analysis, on the manifestation of moral hazard in the faculty and the main determinants of this problem, has been provided in Chapter 6. Also provided in the appendix (11) is a cross-case analysis of the incentives provided to the faculty, and the performance appraisal system prevalent in the public sector higher education institutions.

5.4.1 Data Sorting

For the qualitative part – the audio-video interviews recorded on tape – were carefully transcribed and converted into intelligible “write-ups”. Due diligence was exercised during the process of transcriptions, so as not to miss out any important information. Sometimes – during the interviews – an interviewee would be discussing one thing and suddenly he would switch over to another. These fragmentary statements were given a flow by the researcher; keeping the context in mind at the time when the interview was conducted. It is, essentially for this reason that the interviews are to be transcribed at the earliest possible time so that meanings are not lost. “Write-up” is an intelligent product, which can be easily read, edited for accuracy, commented on, coded, and analysed using any analytical method (Miles and Huberman, 1994). All the transcriptions in the form of write-ups were stored in word files in a separate folder and later transferred to NVivo 9 data file. Each case (university/HEI) was represented by an alphabet, such as A, B, C, D, E, and F – highlighted in red – while the interviewees/respondents are represented by separate codes – highlighted in blue – as shown in Table 5.1. Using codes for the interviewees/respondents, instead of their names, were important to conceal their identity.

5.4.2 Three Levels of Codes

Once the data were transferred to NVivo 9, the next step was to generate codes at different levels, to help explain the data. Data coding is an iterative process that requires careful thinking by the researcher to fit bits and pieces of data that are coherent. According to Guba (1978), in a qualitative analysis the researcher first might deal with the problem of convergence, such as figuring out what things fit together; leading to a classification system for the data (Patton, 1990, 1980). Guba refers to turning data into systematic categories for further analysis. The coding technique generated different levels of codes, such as descriptive and inferential codes from the data – which was

inspired by the approach suggested by Miles and Huberman (1994). The inferential codes have more explanatory power than the descriptive codes.

Code generation at different levels was facilitated by the “splitting” and “splicing” techniques suggested by Dey (1993). According to the author, splitting up a category into subcategories and then putting the data bits under a specific sub-category is known as “splitting data”. The author believes that there might be some data bits that need further breaking up if initially we have applied a broad-brush technique, but even if we have used a fine grained approach, there still might be some bits of texts that are arbitrarily assigned to a particular category, and sorting might be left out for later analysis. Creating sub-categories implies getting a step closer to the data and the context. Splitting allows the researcher to get deeper into the data to find out new meaning, information, or idea.

Through the application of the splitting approach; line-by-line coding was done for the fine-grained analysis in the beginning. Categorisation and sub-categorisation were done upon the judgement and analytical skills of the analyst; keeping the actual meaning intact. There were instances where, after coding, a sub-category had either one or a couple of data bits – making the sub-categorisation list too long to handle – using analytical judgement, the analyst either revisited the previous distinction in sub-categorisation or placed them in another sub-category retaining its original contextual meaning. Dey (1993) suggests that whenever sub-categorisation is done, the analyst must bear in mind certain things, such as whether the subcategories are conceptually related to the conceptual framework, and whether doing so is practical or

Table 5.1: Cases and Interviewees

SR #	Case	Abbreviation	Case Code	Interviewee Code
1	University of Peshawar	UOP	A	A1, A2, A3
2	Agriculture University, Peshawar	AU	B	B1, B2, B3, B4
3	University of Engineering and Technology, Peshawar	UET	C	C1, C2
4	Islamia College and University, Peshawar	ICU	D	D1, D2, D3
5	Khyber Medical University, Peshawar	KMU	E	E1, E2
6	Institute of Management Sciences, Peshawar	IMS	F	F1, F2, F3, F4

not. For example, according to the author, if a sub-category has too few data bits, it deserves to be revisited. There might be a wise way to do away with it, by placing the data bits under another other sub-category where it sits well. The same holds true when a category is overloaded; the analysts can create sub-categories as long as these are conceptually and practically sane. The author further suggests that sub-categorisation if conceptually sound, but does not hold any connection with the data is of no use. In a sub-category – if required – further sub-categories can also be done, as long as these make sense conceptually and are empirically instantiated and relevant, and practically useful.

The second technique used by [Dey \(1993\)](#), is the “splicing” technique, which is opposite of “splitting”. In splicing, the data is consolidated by creating links between the categories. Splicing is like braiding the different strands of data for greater integration and pulling the data bits together to form meaningful chunks. According to the author, with fewer, but powerful categories the analysis can be more intelligible and coherent. All the strands that emerged from splicing were not carried forward, as it would have merely overloaded the analysis; instead of sharpening the focus on the objects of interest. Comparison within and between categories was done, to interweave these into a coherent whole. Links, which are created that do not relate to the overall analysis and have no practical implications are of no use ([Dey, 1993](#)). The author proposed several possible links that could be established between the categories, such as explaining, exculpating, rationalising, supporting, opposing, and criticising, etc. According to Lincoln and Guba (1985), the coding procedure in the study cycle can be named as: filling, extension, bridging, and surfacing ([Miles and Huberman, 1994](#)). Codes are tags or labels for assigning meanings to the descriptive or inferential information of the cases, which are attached to the chunks of data ([Miles and Huberman, 1994](#)). Data coding is a very hectic and time-consuming activity.

In the beginning of the analysis, when the data was scattered the analyst did not have a clue, from where to start and how to organise the data into meaningful categories, it therefore took a while to get oriented with what the data suggested. Initially, a provisional list of codes, known as the “Start List”, was developed basically from the conceptual framework. The “start list” comprises of master codes, as furnished in [Table 5.2](#); however, it is not exhaustive of the codes generated during the analysis process. [Table 5.2](#) shows the descriptive and inferential codes. The codes highlighted in red are descriptive codes; whereas, those highlighted in blue are inferential codes.

Preliminary, coding was done manually. Descriptive codes were written down on the left hand side of the interview transcription sheets; after several readings. Descriptive codes entail little interpretation, and a class of phenomena is attributed to a chunk of text ([Miles and Huberman, 1994](#)). The same segment of text can be handled more interpretively. The analyst – keeping in mind the interview context and reading the transcriptions again and again – came up with interpretative codes. Working further

Table 5.2: Provisional Start List of Codes

Short Description	Code
Existing Reward Systems	ExRS
ExRS: Objectives of the Reward Systems	ExRS-Obj
ExRS: Equity in the Reward Systems	ExRS: Eqt
ExRS: Incentives in the Reward System	ExRS: Inc
ExRS: Centralized Reward System	ExRS: Cent
Moral Hazard	MH
MH: Hazards related to Research	MH-Rsrh
MH: Hazards related to Teaching	MH:Teah
MH: Hazards related to Other Tasks	MH:OtrTsk
Performance Appraisal System	PAS
PAS: Performance Appraisal of Employees	PAS-Emp
PAS: Appraisal by the Students	PAS-Stud
PAS: Peer Appraisal	PAS-Per
PAS: Appraisal by the Supervisor	PAS-Spvr
PAS: Appraisal by the Management	PAS-Mgt
PAS: Work Targets	PAS-WrkTrgt
PAS: Job Description	PAS-JD
PAS: Subjective Measures	PAS-SbjMsr
PAS: Noisy Measures	PAS-NsyMsr
PAS: Biases in Appraisal	PAS-Bis
PAS: Qualitative Aspect of a Task	PAS-Qul
PAS: Quantitative Aspect of a Task	PAS-Qnt
Motivation	MOT
MOT: Effort Exertion	MOT-EfExt
MOT: Task Completion	MOT-TskCmp
MOT: Intrinsic	MOT-Intr
MOT: Extrinsic	MOT-Extr
Organizational Culture	ORGCUL
ORGCUL: Centralised Organizational Culture	ORGCUL-Cent
ORGCUL: Formalised Organizational Culture	ORGCUL-Fml
ORGCUL: Political Culture	ORGCUL-Pol
ORGCUL: Performance Based Culture in Organization	ORGCUL-PB
Challenges in Performance Related Pay	CHLGPRP
CHGPS: Pay Systems Integration	CHLGPRP-Intg
CHGPS: Transparency in Pay System	CHLGPRP-Trsp
CHGPS: Funding the System	CHLGPRP-Fnd
Control System	CNTSYS
CNTS: Control through Hierarchy	CNTSYS-HCont
CNTS: Control through Incentives	CNTSYS-IncCont
Source: Adapted from Miles and Huberman (1994)	

with the data to generate inferential codes was becoming difficult to deal with manually; therefore, it was decided to use NVivo 9, for further coding process. Line by line coding of all interview transcripts, and memos was done using NVivo 9. Some codes which were previously created became redundant or superfluous later in the analysis and were deleted from the list due to a lack of logical and conceptual match with the empirical data, as well as the conceptual framework. For example, a few sub-categories under the main category of moral hazard were readjusted and merged to make them more meaningful. Such modifications made the categories sharper and clearly distinguishable, and its role became more defined in the analysis. Any overlapping in the sub-categories, which surfaced up during this phase was eradicated. A total of 185 codes were generated, out of which 20 were descriptive codes and 165 interpretive codes. Codes were stored as nodes. 20 descriptive codes became the parent codes; sitting underneath the parent codes were clusters of 165 children nodes. Moving the codes around in NVivo 9 was very practical and easy; allowing the analyst to change the location of the children nodes, to see where these fit well.

The codes were explained from a technical and contextual angle after the preliminary coding was completed. For example, the code ExRS (Existing Reward System) – which is a master code – refers to the two parallel payment systems prevalent for the faculty; the BPS and the TTS. The reward systems were further elaborated by discussing the objectives of the two systems, the perception of the participants regarding these systems, and the incentives offered under each system, using the descriptive codes of ExRS-Obj, ExRS-Prcp, and ExRS-Inc, respectively. Similarly MH (Moral Hazard) has been defined as any lapse in the core responsibility of the faculty with respect to its profession and workplace; whereas, the descriptive codes of MH-Rsrh, MH-Teah, and MH-OtrTsk, refer to research, teaching, and other tasks included in the faculty's job. These tasks were discussed in detail later in the analysis. Thus, first all the main categories or parent nodes were briefly discussed and then one-by-one the children nodes were explained, and its connection with the parent node was made clear. The categories and sub-categories were revisited several times to find out the connections with the literature review and the purpose of the study. The whole process was extremely iterative.

Guba (1978) suggests that in focusing the analysis of qualitative data, an evaluator first must deal with the problem of “convergence”. The problem of convergence is figuring out what things fit together; leading to the classification of the data. The analyst begins by looking for “recurring regularities” in the data, which represent patterns that can be sorted into categories. Pattern codes are even more inferential and explanatory (Miles and Huberman, 1994), as it identifies an emergent theme, configuration, or explanation (Dey, 1993). According to the authors, these codes pull together a lot of material into meaningful and parsimonious units of analysis, and are sort of a “meta-code”. Categories can be judged by two criteria: internal homogeneity and external homogeneity. The first criterion is concerned with the extent to which the data that belong to a certain category

hold together or dovetail in a meaningful way. The second criterion is concerned with the extent to which differences among categories are bold and clear (Patton, 1990). The first set of coding according to Miles and Huberman (1994), is a device for summarising segments of the data; pattern-coding is putting the data into meaningful clusters, sets, themes, or constructs. The utility mentioned by these authors regarding pattern-codes is; data reduction in smaller units and laying the grounds for cross-case analysis by surfacing common themes. Patton (1990) labels the process of identifying, categories, themes, and patterns in data as “inductive analysis”.

Every effort was made to establish a link between the data bits and sub-categories in an effort to draw out the meaning, and how these contribute to the main categories. This helped in identifying the main themes of the research. The themes and sub-themes are provided in Chapter 6, as well as in the appendix (11). Thus, codes can be generated at different levels of analysis; ranging from the descriptive to the inferential. Second, they can be created at different times in the analysis; usually the descriptive codes are created first and the inferential later. Third, and most importantly, codes are astringent; they pull a lot of material, thus, permitting the analysis (Miles and Huberman, 1994).

5.4.3 Memos

Miles and Huberman (1994) suggest that a memo links two pieces of data conceptually into meaningful clusters and does not simply report it. Memos show instances of general concepts and can go beyond the codes and their relationships to any aspect of the study, such as personal, methodological, and substantive. Glaser (1978) has defined a memo as:

The theorizing write-up of ideas about the codes and their relationships as they strike the analyst while coding. It can be a sentence, a paragraph, or a few pages ...it exhausts the analyst's momentary ideation based on data with perhaps a little conceptual elaboration (Miles and Huberman, 1994, p. 72)

150 memos were generated during the analysis, most of these pertinent to the interviews; however, some were general. A sample of the memo generated during one of the interviews is provided in Table 5.3.

5.4.4 Cross-Case Findings and Cross-Case Analysis

Cross-case findings and analysis, according to Yin (2003a), are the most critical components of a multiple case study. Each case is first studied independently and then compared with the other cases to look for similar patterns, which might emerge due to common factors, and thus, leads to a common account of the phenomena under

Table 5.3: Sample Memo

Memo 1
<p>Interviewee Designation: VC</p> <p>University: Agriculture University, Peshawar</p> <p>Time: 9am</p> <p>Date: 2nd January, 2012</p> <p>Venue: VC Office</p> <p>HEC provides evaluation form to the universities for the faculty evaluation. This practice seems to be misaligned with the culture of the university. Every university has a different set of needs, and thus different culture. Viewing these through a single lens would give a wrong picture of the faculty evaluation. The culture and needs of any university must be clearly reflected in all their practices. The HEC has overshadowed the top management, which is left for mere policing of the faculty. The Commission has further tied the hands of management by providing it with the basic policy framework, deviation from which is not acceptable. Public sector universities are classical examples of highly centralised organizations.</p>

study. Yin (1981) stresses that regardless of which approach is used; the researcher must preserve a chain of evidence for each step in the analysis.

For data analysis, the strategies of pattern matching and cross-case analysis have been adopted from Yin (2003a). Patterns, identified by analysing the qualitative data, were later matched all across the cases, to look for similarities or differences. Inferences were drawn from the themes brought forth with respect to the context. Harling (2012) stresses that in the multiple case-study, a typical format is to furnish a detailed description of each case, and then present the themes within the case (within case analysis); followed by thematic analysis across cases (cross-case analysis). In the final interpretative phase, the researcher reports the lessons learnt from the analysis. Stake (1995) stresses that the most distinctive characteristic of a qualitative inquiry is its interpretation, which should not be confined to the identification of the variables. The data collector records objectively what is happening, but at the same time examines its meaning and redirects the observation to refine or substantiate those meanings. Yin (1994) encourages the researchers to make every attempt to bring forth an analysis of eminent character.

5.5 Conclusion

This chapter has provided the reader with a pathway to the qualitative analysis adopted for the study; starting with an emphasis on the power of qualitative analysis and terminating with the generation of codes and memos. The chapter has presented the entire coding process of the qualitative data. The end product of the qualitative analysis in the form of cross-case analysis has been provided in Chapter 6 and also in the appendix (11).

Chapter 6

Depiction of the Problem of Moral Hazard in Educators

6.1 Introduction

This chapter presents a cross-case analysis to address the research questions and to achieve a matching set of objectives as provided in Table 6.1. The focus is on understanding the problem of moral hazard in the faculty, by exploring and examining the phenomenon in its local context. With the predisposition of critical realism, the existence of different types of moral hazards in the faculty have been considered as events, with its presence affecting the overall quality of higher education. The “how” question refers to the variety of moral hazards present in the faculty, whereas, the “why” component tends to search the probable determinants of the problem. The research has focused only on a few hazards along with some high potential factors causing these; for a more comprehensive analysis. Also provided at the end of this chapter is a table that matches the perceived moral hazards with the perceived potential determinants of this problem, so as to identify situations in which it will be suitable to keep the incentive power either high or low, to mitigate the problem of moral hazard.

6.2 Perceived Moral Hazards in the Faculty

The study illustrates a wide range of moral hazards that are prevalent in the faculty. Some of the problems are generic and are manifested in every sector while others are either sector-specific or context-specific. It would be difficult to enlist and discuss all the problems in this study, however some are worth narrating as these indicate the role of incentives in the faculty’s deviant behaviour. Educators have found short-cuts to teaching, research, and other academic activities that supplement these two core activities. The inefficient behaviours in the career employees can be witnessed in the

Table 6.1: Linking Research Objectives to Research Questions

Objective	Question	Approach
RO1	RQ1	Qualitative
To understand the existing problem of moral hazard in the faculty	How is moral hazard manifested in the faculty?	
RO2	RQ2	Qualitative
To identify the main determinants of the problem of moral hazard in the faculty	Why is the problem of moral hazard manifested in the faculty?	

ensuing paragraphs, with a special reference to the case-wise manifestation of these problems. The main hazards that have been identified through cross-case analysis are tabulated in Figure 6.1.

Moral hazards in the selected cases can be broadly divided into teaching, research, and others. Teaching and research are the core activities of the faculty therefore any lapse in these areas will have a direct adverse effect on the quality of higher education. However, other activities refer to citizenship behaviour, such as abiding by professional ethics and code of conduct. The other activities do not have a direct bearing on the core job activities of the faculty, but its prevalence earns a bad name for the institution, and indirectly soaks up the energies of these professionals by indulging in unproductive activities.

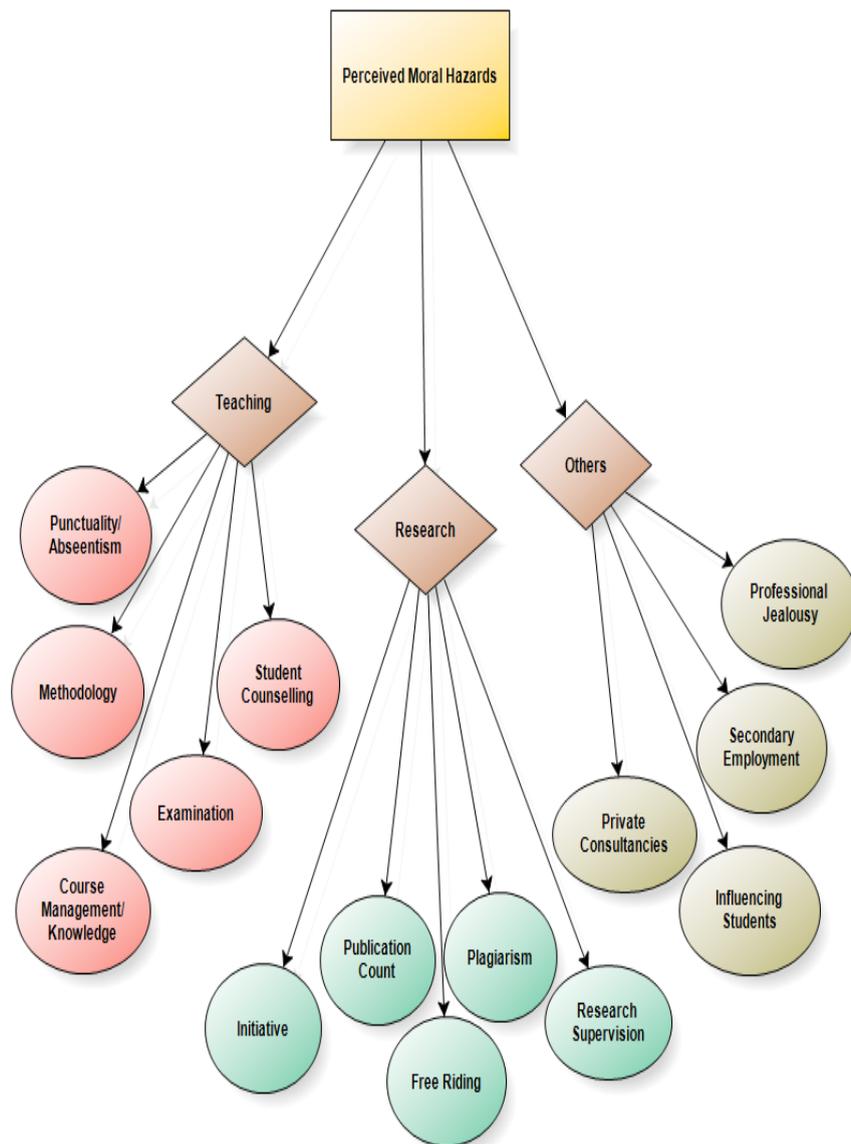


Figure 6.1: Perceived Moral Hazards in the Faculty
Source: Author

6.2.1 Perceived Moral Hazards Related to Teaching

Innumerable dimensions/elements of effective teaching have been identified from the literature, but only those are retained which have coherence with the elements generated from the interviews analysis. Although, the literature has identified eight ways of effective teaching, which have been provided in Table 6.2, only 6 main areas emerged from the empirical data, which according to the participants, were the building blocks of teaching effectiveness that include: punctuality, teaching methodology and knowledge, course management, student counselling, and examination. The areas of teaching methodology and knowledge have been merged into a single category. The reason for merging the two areas will be clear from the analysis. All the six areas have been discussed from the perspective of the interviewees, as well as supported by the literature.

6.2.1.1 Lack of Punctuality

The overall governance of public sector universities portrays a grim picture, and it has been identified by Mahmood and Shafique (2010) as one of the key areas that needs to be addressed. The issue of punctuality according to the interviewees has been discussed under its respective case.

Case A

Maintaining [the] faculty's punctuality is very difficult. The chairmen and deans monitor the faculty's behaviour...we have adopted a persuasion method. We consult the faculty members and counsel them, whenever we have such a problem. However, most of the faculty members feel accountable towards the students...(A1).

Although, punctuality is monitored through a hierarchical control system, where academic heads keep a check on this issue; however, the problem seems to be beyond the management's control. In fact, it seems to be a global problem, as the literature is choke full of such incidences. The management has adopted a persuasion strategy to make the faculty realise its responsibilities. This includes reminding the faculty about its core responsibilities in faculty-management meetings – which are usually held periodically; issuing notices of reminders, and also motivating it informally. However, the management perceives that the faculty members are responsible individuals, who hold themselves accountable for their actions before their students due to their sense of obligation. But, in practice this is far from reality and the faculty has to be constantly reminded of its responsibilities as teachers, researchers, and mentors. Maintaining punctuality of the faculty has become a nuisance for the management. The students usually complain to the management about the faculty being absent without prior notification and also about the non-observance of class timings.

Table 6.2: Teaching Effectiveness

Effective Teaching	Used in Literature
Punctuality	(Fryer, 2011; Duflo and Hanna, 2005; Licata, 1986)
Methodology and Knowledge	(Khandelwal, 2009; Licata, 1986)
Student Interest	(Awan et al., 2008; Apodaca and Grad, 2005; Ramsden and Moses, 1992; PEP, 2006)
Course Management	(Baugher, 2008; Awan et al., 2008; Ishak and Sahak, 2010; Khandelwal, 2009; Ory, 2001; PEP, 2006)
Student Counselling	(Khandelwal, 2009; Licata, 1986; Baugher, 2008)
Student Rapport	(Awan et al., 2008; Apodaca and Grad, 2005; Ramsden and Moses, 1992; Licata, 1986; Khandelwal, 2009)
Communication Skills	(Awan et al., 2008; Apodaca and Grad, 2005)
Examination	(Awan et al., 2008; Apodaca and Grad, 2005; Ory, 2001; Baugher, 2008; Ishak and Sahak, 2010)

Case B

We do keep a check on the faculty to make sure that there are no idle classes. Usually the deans and department heads, along with the administrative staff are busy going around the classrooms and noting down if any instructor has skipped the routine class. I don't know what else we can do, to ensure presence of the instructors in the scheduled classes, but I guess we are not alone in facing this dilemma (B1).

Case B portrays a typical public sector institution, where punctuality and attendance of the faculty have been relegated to the backstage. The faculty members are not only late for their classes, but there are instances when they do not even appear for days; leaving the students stranded. Students who are eager to seek education are disappointed and enraged as their precious time is wasted.

Case C

[The] faculty's attendance and punctuality are twin problems that are difficult to control (C1).

The vice chancellor of case C is also concerned about the faculty's inefficient behaviour that adversely impacts the quality of education and poses a challenge to the university. As a consequence the management has resorted to direct monitoring.

Case D

The faculty members have their own timings of coming to the class and leaving the class, which has become a university norm. The management knows about the problem, but has done little to tackle it. The students follow the footsteps of their teachers – who are their mentors and role models – by adopting a similar behaviour (D3).

University D, like other public sector universities, is diseased by the problem of the faculty's discipline, due to un-notified absenteeism and liquid punctuality. Looking at the response of the interviewee, it seems that although the management is aware of this problem; yet, an earnest effort has not been exerted to solve this issue. The reason can be that either the management is incapable to keep a check on the faculty, or it is simply indifferent towards this issue. Irrespective of the reason, the pandemic has also spread to the students, who are indifferent towards class instruction.

Case E

Majority of the faculty does not observe class timings, and even worse, some faculty members do not even appear in their classes for many days and weeks, but nobody has taken any action against them (E2).

The problem of attendance and punctuality is omnipresent. Like all the other universities, case D is also engulfed by this issue. The management is aware of the problem, but seems to be helpless.

Case F

Punctuality of the faculty is monitored, but regularity is not present, due to non-existence of a system that can ensure presence of the faculty at the beginning and end of the class, such as there is no register where the faculty members can place their signature, to record their attendance. A faculty member may be absent from the scheduled classes for several days and can ensure that such acts goes unnoticed (F3).

[The] faculty is the major stakeholder in higher education, so its suggestions should be heeded and incorporated whenever possible. For example, the installation of the biometric attendance system was suggested by the management, but opposed by the faculty; therefore, the idea was dropped. Similarly, in certain other administrative matters, the faculty suggestions are upheld by the management. The Institute has a very strict system of monitoring faculty, as it is controlled through class attendance. Habitual case of attendance problem calls for a serious action against the delinquent faculty member. However, usually the faculty member is called to the office and advised, and it seems to work (F1).

One way to keep a check on the faculty is that the coordinators try to spread the workload in such a way, which keeps it on the campus throughout working hours. In the absence of such an arrangement, faculty members might disappear after taking their classes in the morning (F4).

The faculty's punctuality is the main problem encountered by the management; especially with respect to class timings. The problem – though more common with rescheduled classes – is also frequently witnessed in scheduled (routine) classes. To keep a check on the faculty's punctuality, the commencement of class is monitored by the administrative staff; however, the exit time of the faculty from the classroom goes unchecked. Incidences of non-observance of punctuality by the faculty, have been frequently reported to the management. This is, however typical of most professionals working in the public sector. The management has to be tactful in managing knowledge workers by keeping a balance between coercion and persuasion strategy. Professionals need to be motivated for observing the prescribed code of conduct. The problem of punctuality has been particularly highlighted by all the six cases, posing a challenge to the management.

Absenteeism with prior notice to the administration or management is permissible under certain circumstances, but the faculty has become habitual in such infractions. The

faculty; however, remains absent without informing the concerned authorities. If a faculty member has an urgency to attend to a personal matter during office hours, he/she is liable to inform the management about his/her absence. Realising the gravity of the situation; in one of the universities, the management decided to opt for mechanistic control measures, to ensure attendance of the faculty on campus during office hours. Nevertheless, the plan did not materialise because it was believed to have serious repercussions for the Institute in the long run, due to a non-acceptance by the faculty, who consider it against their dignity and self-esteem. The problem of the faculty's absenteeism has adversely affected the students, especially when they need guidance in course-related issues. The faculty tends to be forgetful about an integral part of its job; dedicating time to the students outside the classroom to solve their academic queries.

To ensure presence of the faculty on campus, during working hours – the program coordinators have spread over the workload of the faculty in such a way that if a faculty member takes one class in the morning; whereas, the second class is scheduled in the afternoon. This will discourage the faculty members to sneak out of their workplace to fulfil their personal commitments at the cost of the institute's time. The term "spread-over" has been borrowed from the Industrial Relation Ordinance (1964), which refers to a timetable that shows the workers active work timings and rest breaks, during a full day's work.

6.2.1.2 Outdated Knowledge and Inappropriate Methodology

Requiring formal degrees for the higher education faculty is the first step (Hoodboy, 2009). The author considers it as sensible first-order approximation to assume that an individual with a higher degree possesses a higher degree of knowledge and is relatively more suitable for teaching in the higher education institutions. Hoodbhoy (2003) asserts that the intellectual improvement of Pakistan has little to do with resources, and more to do with inappropriate values and attitudes. According to Mahmood and Shafique (2010), the education system in Pakistan is unable to produce people who have logical thinking and are equipped with the skills of research. Hoodbhoy (2005) states that:

Rote learning is common in Pakistani universities where students are not encouraged to ask questions in the class, and courses are rarely completed by the end of the semester. Most university students cannot indulge in an intelligent argument.

This might account for the very low passing score of our students in the international standardised competitive examination, such as SAT, GRE, TOFEL etc., as it is more a test of knowledge than anything else. From the International Institute for Education, which publishes a year wise report for every country, one learns that in academic year 2008-09, 5,298 students from Pakistan were studying in the United States (down 0.9% from the previous year). The number decreased again by 1% in 2007-08, and again by

0.9% in 2008-09 (Hoodboy, 2009). An average US university student has GRE subject scores in the 70-75 percentile range. Many Chinese, Indian, and Iranian entrants make it even to the 90th percentile bracket. On the other hand, Pakistani students score in the 40th percentile with a few exceptions (Hoodbhoy, 2008). The average GRE scores of different countries can be seen in Table 6.3.

Table 6.3: GRE Averages by Country (2011-12)

Country	Number of Test Takers	Quantitative	Writing	Verbal
U.S.	318,240	152.9	149.5	3.9
China	29,255	145.9	162.9	3.1
India	33,504	144.7	154.1	3.1
South Korea	2,933	147.5	158.2	3.2
Canada	4,924	156.0	153.6	4.3
Britain	1,341	157.1	152.9	4.4
Brazil	1,032	148.9	150.5	3.1
Germany	1,482	152.3	155.5	3.9
Hong Kong	643	147.7	159.5	3.5
Israel	442	151.4	156.7	3.5
Australia	491	158.4	155.7	4.5
Saudi Arabia	2,972	137.4	142.8	2.2
Turkey	2,764	144.1	158.7	3.0
Source: www.insidehighered.com				

Case A

[The] faculty members can use the internet to improve their knowledge and become aware of what new things are happening in their respective field. Every scholar has time to surf the internet, and [to] read research papers for innovations and updated knowledge, but the faculty members do not want to trouble themselves, and prefer to use notes and display slides that have been created ever since they started their teaching career (A1).

Non interactive lectures bore the students, and they lose track of what the instructor is teaching in the class... sometimes an instructor asks questions in the class, and the students are totally lost (A2).

The educational institutions are shifting towards more interactive classroom sessions. This is also a requirement for effective teaching, where the instructor adjusts his/her mode of teaching according to the need of subject and level of the students. The evidence in higher education institutions is opposed to it. The majority of the faculty is still stuck with an ineffective teaching methodology and monotonous classroom instruction.

Students consider such sessions as a waste of time and resort to exchanging text messages with their friends or surf on the internet using their cell phones during the class instruction. Teaching that does not aim at student learning is useless. Usually student interest in lectures is low, but it is the responsibility of the faculty to attract students to the classroom and keep their interest alive. This issue surfaces when a faculty member ignores the use of appropriate methodology for class instruction that justifies the course requirement.

Case B

University faculty should have time to think and not simply repeat the slides; as some faculty members are in a habit of doing so. Teaching at a higher level, requires higher skills. Moreover, the course books that are followed by the educators are written by Western authors that reflect their local context. Many concepts that have been used in these books are totally unfamiliar to our culture and environment. When instructors follow these books from page to page, the students instead of learning the concept and its application are left to wonder (B1).

The Vice Chancellor of case B perceives higher education as an area that should not to be taken lightly; one which should not be confined to traditional monologue, but should include interactive teaching. Those instructors, who are not ready to break the status quo in pedagogy, are wasting precious time of their students, as real learning in these environments is at a minimum level. The interviewee has also pointed towards the issue of the faculty using foreign books for classroom instruction; without making the concepts clear, by showing its practical implication in the local context. It is a disgrace that books of local authorship are very scarce in the market – almost non-existent. Instructors are forced to teach from books of foreign authorship. These books, mostly come from the western countries, which are far ahead of developing countries in technological expertise and knowledge. Use of foreign concepts confuse the students who have no idea about its implication, and the faculty is incapable of explaining these with real-life examples from their surroundings. As a result, the students resort to memorisation of notes and textbooks in an effort to pass the examination and achieve good grades. The faculty members should make the students understand the subject, by using examples from daily life; relating the concepts to things with which the students are familiar.

Case C

Being from outside academia, I look at things in a slightly different way than from my colleagues. I think the higher education sector is realising now that universities are not about fishing classroom teaching and distribution of certificates. Universities have a bigger role... the new paradigm is that universities should be actively involved in the economic uplift of the society and community development. They must start to put some hope back into

the youth and the people because things have become so hopeless. These are the higher tier objectives of the universities and higher education sector these days. I find these objectives close to my heart because this is how I am and how I think. I look at things from out of the box than other people who are cocooned in academics all their life (C1).

Education is the backbone for the uplift of any society and plays a major role in economic development, but we are still stuck with the age old technologies, and the same is taught by the educators; whereas, the world is moving fast. Educators should start realising this fact and the severity of its consequences, if we want to move ahead and complete globally (C2).

In the field of hard sciences, knowledge has a limited shelf life. Teachers in such disciplines have to be on their toes and keep themselves abreast of the latest technological developments in their respective areas. With bigger objectives to attain— higher education has also to adopt a new and bigger role which is all-encompassing – universities have to prepare graduates who are able to compete in the global market. Universities should encourage innovation and urge the scholars for persistent and quality research, which is linked to the community problems and contribute to the overall growth of a knowledge-based economy.

Case D

Providing handouts to the students is an attribute of effective teaching, but making the students parasites by providing them outdated notes, is at par with spoon-feeding, especially when the exam papers are strictly based on these notes. This practice lowers curiosity in the students, strangles their creativity, and suppresses their inquisitive nature. Most of these programs are still operating in an outdated lecture-memorisation paradigm and are hindered by other difficulties (USAID, 2010).

I know many teachers who do not want to be disturbed by the students during their lecture, and therefore discourage students asking questions. Some faculty members mind it to the extent that if a student wants to engage in a discussion, the instructor will hush him/her by passing snide remarks; i.e., you think you are smarter than me (D3).

Book is the minimum level and just a guideline for the teacher. The faculty members need to upgrade their knowledge and incorporate new ideas into what is taught to the students. In simple words, a teacher needs to be dynamic. Over here teachers are in the labyrinth of books and notes that have been passed on to the students from generations. Teachers need to change the notes culture as the education culture is changing rapidly (D1).

The faculty's indifference towards updating its knowledge, are the drums beaten in other cases as well. Faculty members, who are teaching at the undergraduate or

graduate levels, should treat the textbooks as a reference material that aid students in understanding the concepts in detail. Reading from textbooks should not be the job of the faculty, especially at this level. Inside the classroom, the instructor should be more focused on making the students absorb the concepts through practical examples and engage in discussions, to make them more inquisitive. However, the dilemma is that this aspect is missing in the academic institutions and the students blindly follow the *course books*. Strict adherence to the “course books”, at this level should be discouraged, instead students should be encouraged to study published material for the purpose of learning. Students should be liberated from the narrow focus on the so-called *course books*.

Case E

In the undergraduate program there has been a system for the last 50 years and same is being taught by worst teachers. The course is outdated and the faculty never bothers to provide updated knowledge to the students. Students are least interested in typical class lectures that are time-bound (E1).

The university has received complaints against the faculty’s orthodox teaching methodology and outdated knowledge. The syllabi are more focused on theoretical knowledge; handicapping the students in practical implication of the knowledge. The situation is not only embarrassing for the graduates, but it also puts a big question mark on the quality of higher education. It is evident from the interview excerpts that this problem can be termed as a “universal” problem of public sector educational institutions.

It is astute to first look into the nature of the problem and the conditions under which it is manifested, as valid inferences need to be drawn, which are based on reality. The faculty’s failure to update the course, might be due to the tight schedule of classroom instruction, setting exam papers, checking transcripts, checking assignments, providing time to the research students, attending meetings, participating in academic activities, enhancing its academic degrees, and many other tasks. Due to tremendous work pressure, the faculty is usually stressed out and even at times the stress reaches the level of *burnout* – a condition that has serious effects on the physical and mental health of these professionals. This situation has also disturbed the “work-life balance” of many educators; straining relationship with their family members. However, advocating for the educators, do not relieve them of their obligations or provide them a license to execute deeds that amount to performance inefficiency, but acknowledging reality will make comprehension of the problem easy.

Case F

Universities lack effective teaching, as teachers fail to arouse critical thinking of the students to help them in real learning. Effective teaching means that

an instructor is able to convey the concept to the students and help them in learning to explore alternative ways of communicating the idea, and inculcate a sense of critical thinking in the students. The faculty should readily accept questions from the students and respond in a knowledgeable manner. Our higher education system has placed people in a race to acquire higher level degrees. As a result, the job for which lower qualification is required is now filled by people who hold higher degrees, without any need for a higher degree. We are not developing the society through education, but producing graduates who are surplus in the market (F3).

We have book teachers. They even remember the page numbers because the same book is being taught over the years (F2).

There are many subjects that need to be taught to the students from a practical aspect, alongside with the theory. Students are unable to work independently when they lack practical implication of the knowledge. The problem becomes evident while conducting research and dissertation writing, as part of their course requirements. Most of the dissertations are plagiarised and of low quality, as students are not aware of the principles and practice of scientific research, even after submitting their dissertation to the school. The overall trend of the educational system is very mechanistic and superficial.

6.2.1.3 Deception in Course Management

Educators often operate in very hierarchical and authoritarian system with limited opportunities for participation and delegation of responsibilities (Bennell et al., 2007; Guajardo, J., 2011). The authors assent that educators are often seen as passive implementers or technical inputs rather than partners in reform. The time-tested democratic style of management proves to be more successful compared to its rival autocratic style, when it comes to managing knowledge workers. Wright (1998) claims that time is the most important variable at the teacher's disposal. The block schedule is the manipulation of time that presents the educator with multiple opportunities. Hoodboy (2009) asserts that in some universities the actual number of teaching hours adds up to less than half of what is required.

Case A

Teachers' consent prior to course allocation can rescue the faculty, the management, and even the students from problems, which might be manifested later in the semester. In practice, teachers are assigned courses for which they are not fully qualified. The faculty tackles such situations by craftily changing the course contents, and the management cannot even detect this gaming strategy of the faculty. Some teachers even willingly accept this situation for teaching overtime, to make more money. Faculty

members should be given extra classes only if they satisfy a certain quality benchmark through their performance evaluation. If a teacher's evaluation is above 70% on all the courses, it is an indication of the teacher being effective. This will make the faculty put more effort into teaching to improve the quality (A3).

Identifying the correct and objective measures for multiple tasks that are included in the faculty's job, is not only difficult, but close to impossible. Several tasks are measured by instituting proxy measures. The subjective assessment of the faculty by different stakeholders in the higher education, also provides a useful input to make up for the measurement problem; however, proxy measures can never be a complete substitute for direct measures that utilises objective measurement criteria. The performance measures for tasks that cannot be measured objectively, are prone to gaming by the employees, e.g., assessing teaching effectiveness.

Case B

If a teacher misses out a class due to any reason, the make-up classes are arranged just to cover up for the lost teaching hours, and not necessarily for the purpose of student learning (B2).

This is especially true for the rescheduled classes – to make up for the deficient credit hours. The problem of cutting down the actual instruction time by the faculty is more frequently manifested in the make-up classes, as usually the purpose behind this exercise is to fill up their attendance sheet. Mock classes have become a nuisance for the management and the students alike, due to non-serious attitude of the faculty.

Faculty members are busy increasing their own gains at the cost of quality education, as there is an incentive in teaching more, rather than teaching better. Due to the fact that the quality of teaching is not taken into account, therefore the teaching load of the faculty has gone up. It is believed that the quantity of teaching hours has an inverse relationship with the quality of teaching, such as teaching effectiveness.

Case C

Some faculty members play smart and change the course contents; not on paper, but in actual classroom lectures. Other than the very basic subjects or the introductory courses, we don't know what a teacher is teaching when it comes to highly specialised modules. Only the teacher knows what is being taught and actually what needs be taught (C2).

Flexibility in the course contents up to a certain extent is permissible and every university allows it, but a complete detour or modification to an extent that changes the nature of the subject is an act that is excruciating. There is no way the management can find out about this intentional crime; therefore, it makes the faculty bold in future acts of such

kind. A conjoined problem is skipping out important topics in an assigned course outline or cutting down the contents to a bare minimum. There are instances where the faculty has changed up to 40% of the course contents from the actual course outline, whereas, the permissible threshold is only 10% to 15%. The course contents do not change on the paper, but are manipulated in practice.

Case D

The real problem is that it is very difficult to see what the teacher is teaching in the class, and whether he/she is teaching to the students what is supposed to be taught. Teachers take advantage of this [situation] and they teach anything that is easy for them, which might or might not be the course requirement (D3).

The interviewees in case D have pointed towards similar issues of ineffective teaching as discussed in the other cases; for example, the inconclusive nature of what the faculty teaches in the class, leaves the management and the students to a mere guess work of what actually should be taught. Some faculty members tend to act opportunistically as they have an edge of information asymmetry over their counterpart.

Case E

The faculty members do not have much choice in deciding the course contents, but still can easily deceive the management if they want to do so. Cases have been reported where the teachers teach only the main topics and leave the rest for the students to cover. We have no choice, but to trust the faculty. Teachers even apply pressure tactics of victimising students if they file a complaint against them. [However], this act should not be generalised to the [entire] population, as exceptions are always there (E2).

This problem is usually witnessed in the senior faculty, who has permanent employment. Moreover, lack accountability mechanisms in the higher education sector, adds to performance lapses. The literature is choke full with examples of such incidences related to the tenured faculty, as accountability is closely linked to job security and pay security.

Case F

Completing the course is one of the responsibilities of a teacher, but taking course completion on its face value is not enough. The basic aim of education is knowledge transfer, which happens through effective learning (F3).

Course deception mainly includes: cutting down or changing the course contents. The faculty is perceived to be in a rush to complete the assigned courses before the commencement of the examination. This is also a necessity, especially in a semester system where the course division is linked to periodic exams – usually held on a monthly or mid-term basis. Shortage of time leaves the faculty with no option, but to put a tick

against the checklist of the provided course outline. Whatever the reason might be, but rushing through the course contents amounts to a compromising strategy. Another problem that corrupts effective teaching, is the allocation of courses to the faculty by the program coordinators, without looking into its area of expertise; resulting in faculty-subject mismatch.

6.2.1.4 Indifference Towards Student Counselling

Student counselling is an important component of effective teaching, as it has been proved from the literature. However, many faculty members consider it as a secondary activity and detach it from their core responsibilities.

Case A

It is like a cat chasing a rat. Students wait outside the offices of their teachers in hope to find them, but are often disappointed. However, some lucky ones are able to catch them. We receive complaints from the students, but like them, we are also helpless in this regard (A3).

The multitasking nature of an educator's job requires him/her to wear different hats in fulfilling the work obligations. The responsibility of the faculty extends beyond classroom instruction and research. Solving students' academic issues and mentoring them; are tasks of equal importance. If the faculty members intentionally keep away from their offices to avoid the students – is an act which can affect students' learning.

Case B

Personal ego type things have corrupted the system (B3).

Some faculty members are trapped in their personal egos. Perceiving that they are superior to their students, by virtue of their knowledge, makes them arrogant and shrewd. They treat their students and even the lower-level administrative staff as creatures subservient to them. This creates a gap between the instructor and the students. The faculty should change its mentality and consider students as clients of its services and stakeholders in the education system – who need to be treated with dignity.

Case D

Teaching in the class for a fixed number of hours and then disappearing from the office amounts to only partial fulfilment of the responsibilities by the faculty. The teachers should be present on campus during their official timings – from 8 am till 4pm, but we have witnessed that mostly the faculty vanishes from the premises after delivering lecture(s); knowing that its unavailability is a source of distress for the students (D2).

Students who need guidance and counselling on academic issues, are frustrated when they have to wait for days or even weeks to discuss something with their teachers outside the classroom. Thus, non-availability of the teacher outside the classroom; during official timings can be considered as a moral hazard, as part of their responsibilities remains suspended. Some faculty members have even secretly adopted dual employment, which is prohibited by the university employment policy.

Case E

Teachers have a bureaucratic approach towards the students and many are indifferent towards the students' genuine problems (E3).

Faculty members either deliberately – due to negative attitudes towards their work and workplace, or due to time constraint, seems to be least bothered about the students' problems. Students look up to their teachers as “messiah” and when they get disappointed from their unresponsive behaviour towards them, they don't find an emancipator to turn to; thus, taking bad memories from their universities. It damages the university's image in the long run, as unpleasant word of mouth is spread by the alumni.

Case F

The faculty's availability is important for the students to deal with the issues related to its respective modules... but, we rarely see the schedules affixed outside the faculty office doors (F2).

The responsibility of the faculty extends beyond classroom instruction; demanding its presence in offices to accommodate students' queries and academic problems that might be a source of concern for them. Deferring students' issues instead of resolving will not mitigate, but rather magnify the problem with time. The management must be cognisant of the fact that giving extra classes to the faculty can affect the quality of education, as classroom instruction needs to be complimented by outside classroom guidance and student counselling to complete the picture of effective teaching.

6.2.1.5 Cheating the Examination System

Problems in the examination system do get noticed by the management, but the dilemma is that the management usually opts for a reactionary strategy and rarely for a proactive one. The faculty cheating the exam system is a problem that exists everywhere in the world, especially when the student's achievements or test scores are linked to the faculty's reward and recognition.

Case A

Examination has always been a controversial area that creates tension between the teachers and [the] students. The male faculty is believed to

favour female students, by awarding them higher grades in the examination than what they actually deserve (A3).

It is a stereotype that female students are hard workers because they regularly attend classes and take keen interest in classroom instructions. Due to their docile nature, they are less bothersome for the faculty. The problem of stereotyping creates a positive image in the minds of some faculty members, who might be generous in awarding marks to the female students, irrespective of whether they deserve it or not. It is very difficult to challenge and prove any personal prejudice exercised by the faculty in this regard.

Case B

Result delays have become a norm and students have got used to it (B3).

Teachers after conducting the paper, are usually forgetful about marking the transcripts and preparing the results. Result submission is usually delayed for months; putting the management and the administration in an awkward position, as the ultimate responsibility falls on their shoulders.

Case C

To get good evaluations, teachers make easy papers. There are many explanations for such acts on the part of the faculty. First, teacher evaluations are tied to the students' results. Second, making easy papers means that there will be less trouble in marking the transcripts. Third, the faculty wants to create a soft corner in the hearts of the students, so as to get a higher evaluation score. The instructors usually set the examination easy, so that all the students can get good marks and then the bell curve looks like something else. There are a few exceptionally good students, few below mediocre, and the rest is an average lot. The entire population of the students should be reflected in the way examination papers are set. It is not like we make them sit an exam and say you have passed (C1).

An incidence was reported by the students where the exam paper had two questions because the teacher taught only a couple of chapters in the entire semester. We trust the faculty, but many a times it has let us down. Students come to us complaining about the teachers giving out questions in the exams about which they have no idea, as the teacher never taught these topics in the class (C2).

Adopting short cuts in teaching, deprive the students of gaining real knowledge. The faculty should facilitate the learning process of the pupil and not necessarily award them higher grades, if they do not deserve.

Case E

Exam scoring has evidence of negligence and favouritism on the part of the faculty. Students are not satisfied with the way transcripts are checked and that is why there are many issues of rechecking and re-totalling. The management has to face embarrassment, especially where litigation issues are involved. As far as the result submission is concerned, we do not have any problem in this area. The university has provided a specific time period to the faculty for paper checking and submission of results to the examination department. The results are announced on fixed dates, which the students are aware of a priori (E3).

Case E encounters a similar problem as mentioned by the interviewees in case C. However, unlike case C, this university does not seem to have any problem of delayed result submission. The exam is a serious business for the students, and are very sensitive to any issue that will have an impact on their future career prospects. The negligence of the faculty shows that its interests are not synchronised with those of the students, especially on this issue; remaining a bone of contention between the two major stakeholders of the higher education sector.

Case F

A student should not be judged by his grades, as the teacher can make a lenient or tough paper to change the grades. Multiple choice exam papers are usually copied from the online test banks, irrespective of whether these are relevant to what the teacher has actually taught in the class or the module contents. The setting of a question paper requires time devotion. Several cases of lapses in marking the transcripts were reported, mainly due to negligence of the faculty (F2).

The result submission is always late and even after several reminders the teachers do not make a sincere effort to submit the results on time. The misery of the students and their parents is prolonged, due to pending results. Late submissions create problems and delays in the students' enrolment into the next semester (F3).

Exam setting is a tedious task that consumes a great deal of time of the faculty. To save time, some faculty members resort to short cuts as mentioned by the interviewee. Sometimes the downloaded papers have discrepancies with the course contents, which have been discussed in the class; making the downloaded paper redundant, due to non-compatibility with the class instructions. Moreover, late submission of the results seems to be a generic problem of the faculty, which has been witnessed in all the cases. Despite the fact that the Institute has a policy of result submission within 12 working

days after the examination has ended; nonetheless, the faculty seems to be least bothered to comply with this policy.

Figure 6.2 summarises a detailed list of the moral hazards, which have been identified from the interviews. The letter X represents missing information from a particular case.

Perceived Moral Hazards Related Teaching

	Punctuality	Absentism	Methodology	Course Management	Student Counseling	Examination
Case A	*Non-observance of class timings	X	*Outdated notes *Linear lecturing *Non-interactive instruction	*Changing course contents	*Non-availability of teacher outside class	*Gender discrimination *Delay in result
Case B		*Absence without prior notice	*Linear lecturing *No practical examples	*Wasting time in the class	*Teachers are trapped in personal egos	X
Case C	*Non-observance of class timings	*Absence without prior notice	*Outdated knowledge	*Changing course contents	X	X
Case D	*Non-observance of class timings	X	*Linear lecturing *Non-creative teaching *Book Mania *Notes culture	*Changing course contents	*Non-availability of teacher outside class	*Make easy papers *Exam based on few topics
Case E	*Non-observance of class timings	*Absence with notice	*Lack of critical thinking	*Focusing on few topics	*Teachers follow a bureaucratic approach	*Negligence in transcript checking *Favouritism
Case F	X	*Absence with notice		*superficially covering the course	*Non-availability of teacher outside class	*Using test banks for paper setting *Negligence in transcript checking *Favouritism

Figure 6.2: Effective Teaching

6.2.2 Perceived Moral Hazards in Research and Publication

The task of research can be implicitly split into self-research and student research. Self-research refers to all the research activities that a faculty member executes to enhance his/her research profile, whereas, a student's research refers to supervision of a research student by the faculty member. Research supervision is provided by the faculty at different levels, and the incentive for each level is different. This division is necessary, as the moral hazards in these two areas are a different nature and have different implications. Figure 6.3 shows an array of moral hazards related to the research activities of the faculty.

6.2.2.1 Lack of Research Initiative

In Pakistan, the overall trend is to import ready-made models from foreign cultures and replicate them in the local context, which may include: policies, statutes, systems, structures, and procedures, etc.. Ditto implementation of such imports has usually been an utter disaster, especially when the models are not customised to the local cultural characteristics of the community. Academic research needs to be linked to the local industries, so that the problems of the community can be solved using in-house expertise and knowledge. According to [Naqvi \(2007\)](#), innovation drives the advanced economies, and creativity is prized more than the natural resources. In a knowledge-based economy, the higher education system of a country can be a strategic asset if industry-academia linkages are established and strengthened ([Mowery and Sampat, 2005](#)). Lack of research may handicap preparation of efficient developmental policies. Usually academics – who have a higher degree and experience in research – are better equipped for this task. However, the majority of the scholars has failed to render useful services to the community, to fuel the engine of innovation. Due to lack of research culture, scholars in Pakistan are hesitant to use their advantage to intimidate those who sought progress through research. [Sahi \(2012\)](#) argues that the HEC has started a mass campaign of producing PhDs, without creating a culture of creative writing and research in the first 14 years of our higher education system.

[Mahmood and Shafique \(2010\)](#) consider research as a weak area of higher education sector in Pakistan. The authors acknowledge that the quality of research is low and lacks relevance to national requirements – an area that needs urgent attention of the policy makers, practitioners, and academicians alike. People are still unaware of the real importance of research to the development of the society. The fact is endorsed by a survey statistic, which points that:

Among 57 member states of the OIC, there are approximately 1800 universities. Of those, only 312 publish journal articles. A ranking of the 50 most published yields these numbers: 26 are in Turkey, 9 in Iran, 3

each in Malaysia and Egypt, 2 in Pakistan, and 1 in each in Uganda, the UAE, Saudi Arabia, Lebanon, Kuwait, Jordan, and Azerbaijan. For the top 20 universities, the average yearly production was about 1500; a small but reasonable number. However, the average citation per article in Pakistan is less than 1.0 (the survey report does not state whether self-citations were excluded (Hoodbhoy, 2003)).

Case A

In a power-oriented culture, people love to be more controlling, rather than productive. People want to extract more power from administrative activities, without realising that their potential can be spent more productively elsewhere. There is no harm in becoming more powerful, as long as it does not adversely affect a person's sense of responsibility. Teachers are provided every opportunity for research, but they are less interested in capitalising those opportunities (A1).

Faculty members at times fall prey to different decelerating tactics, which apply brakes on their professionalism and waste their potential by engaging in non-constructive activities; reducing their performance efficiency. Instead of focusing their energies on research, they are busy accumulating resources to make them all-powerful in their individual spheres of action; standing aloof from the problems of the society that could be solved through genuine research ventures.

Case B

The progressing societies require constant innovation, and universities can play a key role in building up the society. [The] research culture is slowly picking up in Pakistan, still there is little research in the hard sciences. Acquiring grants for research activities is not a problem. The actual problem is individual initiative. Faculty members are reluctant to take up research projects as it requires a lot of effort and hard work. That is why, despite having the capability [the] faculty members have to be urged for research endeavours (B2).

Giving importance to research will develop the much needed research culture in universities in Pakistan (B4).

Previously, grants were considered as a main hurdle in carrying out research activities, but with the establishment of the HEC this problem has been subsided to a greater extent. In fact, the HEC encourages universities to involve the faculty members in research activities in their respective areas of specialisation. Conducting a full-fledged research is no doubt tedious and time-consuming as it requires total devotion and dedication to achieve something worthy, as pointed out by the interviewees in case B.

Case C

We are pushing them [the faculty members] for writing papers because this is in line with what the higher education commission is asking them for their career advancement, especially for the TTS faculty – whose research profile is carefully monitored (C1).

There are a few centres of excellence and only a handful [of them] are properly functioning, due to lack of motivation in the faculty. The faculty appointed on the BPS, keeps on progressing in its scale, which is contingent upon the time spent in the organization. Therefore, [the] majority of the faculty members do not realise the importance of research until and unless they aspire to higher professorial positions (C2).

Publishing is an art, and many faculty members are devoid of this art. Despite the fact that publication in quality journals is an integral part of the faculty's job, many scholars fail to make publications in prestigious journals. Faculty members publish for two reasons: it is a decisive factor for upward movement in their career ladder, and publications are incentivised through explicit reward. The emphasis on increasing publications is itself a phenomenon of a symbolic branding culture.

Case D

In Pakistan the research culture was introduced in the universities by Dr. Atta Ur Rahman. Majority of the faculty is still in denial of the research culture. In the UK, the faculty teach for 2 to 3 credit hours and the rest of its worktime is dedicated to research, but in Pakistan people don't understand this concept. Usually, it is the senior faculty members, who contribute towards the research activities and are able to publish research material. The junior faculty has left this task to its seniors. There are, again, only a few faculty members who have overshadowed this task. I do not understand why some faculty members are doing all the research work, acquiring all the grant money, and going to conferences. It seems as if someone has divided the tasks of teaching and research between the senior and the junior faculty (D3).

Universities have a few faculty members who drive the research engine by actively engaging in securing research grants for the university and have a rich profile of publications. The research faculty is in high demand in the market. The dilemma is that when such a scholar opts to exit the institute, he/she also takes away the publication credit with him/her; debiting the research account of the university. The strains of the problem have appeared in the literature and has been termed as "asset specificity" or "idiosyncratic" transaction by [Williamson \(1979\)](#), which has a close connection with opportunism.

Case E

We have never come up with any new medicine that is an invention of our scholars. We have become parasites on Western research and wait for their inventions. Even for many of our native diseases we look to the West to provide us with curative measures. When will we come up with something and feel proud about it, and stop complaining that we do not have research facilities (E3).

Research and publication are at the heart of innovation, especially in the hard sciences, where the existing knowledge becomes outdated very quickly; having a limited shelf life. It is through constant research that these professionals can keep themselves updated on new technologies and procedures, which can have a great practical implications in their respective fields. Research and publication are usually not intrinsically driven – as the faculty publish out of compulsion to achieve the targets – therefore assassinating the real essence of research and publications by stripping down quality; leaving only the bare minimum features intact. The citations for the publications from Pakistani universities have been provided in Table 6.4.

Table 6.4: Citations of Publications from Pakistan (2006-2010)

Year	Citation	Research Ranking in the World
2006	10097	47
2007	11522	*
2008	13131	45
2009	9107	*
2010	5239	43

Source: HEC (2011)

Case F

We do not have a culture of publishing and for producing books. To develop a research culture in the universities, the faculty receives research grants.... It should involve students in establishing a research group (F3).

The staff does not get the proper training for research purposes. It involves a researcher to be self-eager, and seek assistance from senior colleagues in learning the techniques for research (F4).

Case F is also confronted with the issue of research and publication, as narrated by the other cases. A small section of the faculty population is busy in research work, whereas the majority has hardly any publication to its credit. Another issue related to publication is that the scholars have an easy access to different editorial boards of journals and do not hesitate to publish anything that could fetch them quick rewards.

The resultant increase in the publication count has brought a decline in the quality of academic papers. The waiting time for a publication to appear in a local journal is hardly a couple of months; putting a big question mark on the quality and credibility of these journals, which are mostly not peer-reviewed.

6.2.2.2 Inflating the Publication Count

According to the HEC officials, scholars were conferred the responsibility to enhance research experience and promote a research-based culture among the students, but the academicians alleged that the scheme so far only helped increase the number of publications of the faculty members in international research journals that mostly helped them secure their promotion to higher levels. Hoodbhoy (2005) urges the need for the cessation of rewarding that really is not research, but only a number game. The graph provided at the end of appendix (1 A), succinctly demonstrates the impact of the HEC on research publications originating from Pakistan. According to the UNESCO (2014), Pakistan has witnessed a significant growth in its publication output, with a compound annual growth rate of 15.8%.

According to Sahi (2012), fake journals are not unique to Pakistan and scholars are making good use of such journals by making overnight publications. The author confirms that an associate professor working in the University of Punjab had 35 publications to her credit – almost all co-authored with her professor husband. 19 of her research articles were published in a journal, which was edited by her spouse. The author has pointed towards other incidences of similar nature.

Case A

Yes, the problem does exist with some faculty members. I said some because only some are publishing and not all. We have our own journals and any faculty member can have his/her work published in the journal on priority basis. We give preference to publications of our own faculty. The faculty has realised the importance of publications, after the HEC has made the publication count and research work as the main criteria for higher academic positions; however, the inertia still persists, and those who were previously publishing are now publishing more (A1).

Case B

Our University has its own journal that has been rated in the X category by the HEC. My faculty has an easy access to publications because I am the chief editor of my university's journal. We give preference to work of our own faculty over outsiders (B1).

There are publications of hardly a couple of pages that are of low quality, which found its way into the local journals; using personal links. A complete research is also broken into parts and then each part is published as a separate publication. Some people consider it as ethically correct while others label it as a moral hazard (B3).

Ethics demand that universities should not differentiate between the faculty on the basis of “ours vs. them” and extend equal opportunities of publications on merit to all. The main purpose of publication is to make a scholar expert in any particular area of studies, but in the current scenario the focus is more on career advancement and monetary reward. However, for quick publications, the faculty usually uses its personal and/or professional links. Another tactic used by the faculty, is to break up a complete piece of research work into smaller units so as to make several publications from a single research. It is an acceptable norm, but to what extent a research work can be broken down, is an issue that needs to be looked into by the experts and academicians. This issue basically refers to the majority sub-standard publications that comprise one or two pages literature review, a couple of correlation tables, and hardly a few lines conclusion. Publishing such papers is an academic sin, as the reader gains nothing out of it; whereas, for the scholar it is just a point scoring activity. Moreover, it ruins the image and prestige of the journal, and puts the credibility of the University and the Commission on shaky grounds.

Case F

The research findings are never opened up to the people and never justified in the real sense. Usually the researchers inform the people about their work through seminars and working papers, but we lack such practices. The scholars engage in research projects in isolation, and the findings remain only to the person who has conducted the research unless and until it gets a chance of publishing in any journal – even though the utilisation of the Institute’s fund makes it obligatory to expose the research findings – so that the people can benefit...if there would have been proper seminars, much of the information and knowledge would have been more widely dispersed (F3).

The interviewee in Case F has pointed towards a similar problem, such as low quality publications. Such publications are just like putting a stone on top of the mountain, as most of the papers are not worth reading. The faculty usually finds short-cuts for publication, to earn overnight fame. Two problems have been highlighted by the interviewees under this category: low quality publications by the scholars, and withholding of research findings. Mostly, the interviewees have talked about the problem of the scholars publishing in low quality journals to inflate their publication count, but some of the interviewees have also expressed their grief that the faculty – after conducting research – does not share its research findings on different academic forums.

The current trend of producing PhDs by providing both foreign and indigenous scholarships by the HEC has pushed up the number of highly qualified people from three to four digits. Unfortunately, the faculty members upon completion of their higher degree get stuck in instrumental factors. They never share their research experiences and best practices that they have learnt during their academic expedition. Therefore, the investment – which has been made by the HEC – has limited returns, as the benefit usually accrues to individuals, instead of cascading to the masses for general good. The HEC basically wanted to develop a research culture in the Pakistani society, through people who have the necessary skills and could work as independent researchers. In developed societies, the scholars create research groups and engage students in research activities, who learn by actually participating in the research projects; under the skilful eyes of their mentors.

We need academia-industry linkages so that scholars can generate research findings, which can be implemented in different sectors. I am afraid, this much needed link is still missing (F2).

The scholars are hesitant and shrewd in exposing their research findings on the right forum that can make way to policy improvisation. The scholars seem to carry out the exercise for the sake of justifying research grants to the funding agency. The main purpose of the HEC of promoting and incentivising such endeavours is to encourage research scholars to find solutions to the innumerable problems confronted by the society – through applied research. A research is of no use if it fails to accomplish this function; especially in a state like Pakistan, which is in desperate need of the problems resolution through innovative ideas. This act of the faculty can be considered as a subtle act of moral hazard; as the grants will only be fully vindicated when the fruits of the research are shared with the community for common good. In connection to the problem of withholding research findings, the interviewee of case F pointed towards the gap between academia-industry linkages, which is responsible for slackness in innovation. As a result pre-cooked solutions are imported from developed the societies, with ditto replication of the same in a foreign culture; leading to dubious success. The mock drill of research among the scholars should be discouraged, as it results in wastage of precious finances. Accountability of the research funds is an important element because it makes the researcher more responsible and cautious in spending the grant money.

6.2.2.3 Free-Riding

Free riding is also common among Pakistani scholars. It is manifested in different forms, but the most common is crediting other person's publication profile either for making the research more credible, or simply accommodating a friend or peer. Peer reviewing is considered critical to maintain the integrity and quality of the scholarly journal in particular, and scholarly discipline in general (Baugher, 2008).

Case A

If a faculty member includes the names of 15 to 20 people in his publication, he must be queried by the management. Although, there are papers with a very high number of authors and co-authors, but these are justified by the nature of the research or project (A1).

Case B

If I understand the term free riding correctly, then yes, this is a usual trend, especially in the faculty who share the same field, and also in family members if they happen to be in academia. If a spouse shares the same profession, then each spouse will give another a free ride. We dismiss these things, although knowing it to be immoral and unethical (B4).

Case D

You scratch my back and I will scratch yours. I guess it says all (D2).

Free riding is reciprocal, as friends and family members include each other's name in publications. The reason for this enactment is that for each publication a certain number of points are awarded to the authors and co-authors that help them in their higher appointments. The points awarded to a principal author are higher than the co-authors; however, they mutually share the benefit of this unethical practice.

Case E

It's an age old practice and is very much alive till this day. Mostly, the senior faculty is involved in "free-riding". The juniors include the names of their seniors, simply to please them because the latter can extend favours to the former in different ways (E3).

Case F

There has been even a three page publication which includes the names of three authors. The ground for such publication is that most of the published work is never peer-reviewed. Joint authors should be able to distinguish and identify their role in the inquiry. There can be a right way of getting to it and achieve an expected benefit, but there can [likewise] be an adverse way of achieving a person's goal, e.g., increasing publications through free-riding. Anyone can judge the quality of such publications. However, people are not ashamed of free-riding (F3).

It is not reasonable to include everything in the category of moral hazard; for example, before giving a verdict on free-riding it is significant to analyse the nature of the task. Some studies have a very wide scope or are very complex, and cannot be conducted by a single or couple of individuals. It calls for teamwork and a group of the scholars who hold

mastery over their specific area in the research. In such instances, joint authorship or co-authorship might include the names of many people, which is legitimate and justified.

6.2.2.4 The Problem of Plagiarism

The aim of the Commission is to defeat plagiarism and cleanse the academia from this disease. The HEC has a zero tolerance policy for plagiarised work of the faculty and students alike (PES, 2013). It has provided plagiarism detection software “Turnitin”, to all the universities to expedite and validate the authentication of research. Stealing intellectual property is unethical and leads to serious consequences (PES, 2013). Data stealing also comes under the rubric of plagiarism. According to a professor, teachers use the data collected by their students, in their research papers (Sahi, 2012). The author confirms that scholars tend to adopt inappropriate ways and use loopholes in the system for personal benefit. Nevertheless, the Commission is trying its level best to insure that the research culture in Pakistan is fool proof.

Case A

What can be done if the defender of a system becomes the violator? Although the HEC has put in place the plagiarism software “Turnitin” in every university, the faculty and even the students know how to fiddle with this software. Plagiarism from the universities cannot be ruled out entirely, but it can be mitigated to a greater extent through proper grooming of the faculty (A1).

The vice chancellor of case A, acknowledges the presence of this problem and the university is trying to control it with the use of technology, but still there are many reported and unreported cases of this crime that speaks of the enormity of the situation. Those individuals who know how to use this software, are also aware of how to turn and twist it to their benefit. Several incidences have been reported of changing the sequence of the borrowed text – without acknowledging the original author, or pasting it as a picture is one’s own research; can furnish an escape path for the researcher. Providing software is the initial step in curbing the problem of plagiarism, the actual step in this regard would be giving the faculty proper trainings on how to use this software and educate them about this academic sin.

Case B

The software has already been provided to all the universities by the HEC. The software has, to some extent controlled unethical practices in research and improved the calibre of research; however, the problem cannot be completely uprooted. I bet there are scholars who do not completely understand the meaning of plagiarism, [then] even if they are plagiarising, they actually might not know that are doing something wrong (B3).

People can engage in plagiarism intentionally or unintentionally, but the consequences of both are drastic and punitive for the researcher.

Case D

Some faculty members steal the work of their students and rearrange things to give it a different look. Students can never identify their work because the scholars are masters in this act. This should not be generalised to all the faculty (D4).

Case F

There is confusion about the concept, as many people do not understand what amounts to plagiarism. Direct copying of the text from another author's paper is considered plagiarism, but stealing a concept is excluded from this act. Scholars rephrase other person's work, without acknowledging the original author or referring to it. People think that they are safe when they change the text or rephrase the ideas of any other person. Since teachers and students are not familiar with the code of ethics in research, they resort to unprofessional conduct without embarrassment (F3).

Plagiarism is a common practice in this part of the world. The scholars have become indifferent towards this moral and academic crime. Moreover, academics have further become accustomed to publishing in counterfeit journals.

6.2.2.5 Indifference Towards Research Students

At times, the faculty experience a role overload, that affects the quality of work, and effectiveness of its contribution to their institution. [PEP \(2006, p. 18\)](#) narrated that:

people suffer from personal anguish when they see that their often considerable time is spent on work in which they have little interest or little talent, and does not either advance them toward their professional goals or result in personal satisfaction.

According to [Hoodbhoy \(2008\)](#), some university teachers who are paid by the HEC an extra 5,000 per month for every PhD student enrolled under their name, are energetically lobbying to lower down the pass mark for a PhD student from the current 40th percentile. The reason being that the supervisors are supervising a large number of PhD students – on average up to 10 – whereas, the international standard demands not more than 5.

Case F

In the recent past, problems with the students' dissertation were pointed out by the Director, and the Research Coordinator was informed about the substandard quality of such reports; at the same time teachers who were

supervising these students were issued a warning for faulty reports. Students' dissertations, not all, but there are many, that do not qualify the quality bar set by the Institute and the HEC (F3).

The faculty usually does not show interest towards supervision of the research students. There are several reasons to justify this attitude of the educators. First, the faculty has very little incentive to supervise research students, especially at the undergraduate and graduate level. The reward given to faculty members for supervising research students at this level is only Rs.1, 000, which amounts to less than 6 pounds per student, and the period of supervision is around four to six months. Teachers do not look forward to supervising students at this level because it consumes a lot of their time and effort; whereas, the reward has little value for them. Second, many of the faculty members - due to their improper training when they were students- do not actually know how to provide proper guidance to their research students. Third, the faculty has so much work to do that they are hardly left with any time to properly supervise research students. The resultant dissertation produced by the student is deficient in every respect and is of low quality. Graduates from universities in this region, have almost zero skills and know-how in scientific research. This is one of the reasons that hardly any of the students' research would get published in any recognised journal. The dissertations end up in the library just to serve a life sentence.

Figure 6.3 shows the perceived moral hazards that have been pointed out by the interviewees, with respect to research. X in the table shows missing responses of a particular event.

Perceived Moral Hazards Related to Research

	Initiative	Plagiarism	Publication Count	Free-Riding	Student Supervision
Case A	*Lack of initiative, Wasting energies	Gaming software	Publishing in university own journal Publishing for career advancement	Too many co-authors	X
Case B	*Lack of initiative Lack of research culture	Lack of complete awareness	Publishing in university own journal Publishing least publishable unit	Faculty does not understand the meaning of free-riding Including names of friends and family members Indifferent towards the problem	X
Case C	*Lack of interest in publications Lack of research culture	Stealing student's work		X	X
Case D	*Only senior faculty publish			Tit for tat	
Case E	*Not interested in publications	X		Seniors include their names in publications by juniors	X
Case F	*Not interested in publications *Lack of initiative *Lack of skills *Not sharing findings *Lack of applied research	Lack of complete awareness, Cultural thing	Appearance in low quality outlets	Indifferent towards the problem Too many co-authors Work not peer-reviewed	Substandard dissertations

Figure 6.3: Research

6.2.3 Perceived Other Academic Hazards

Public sector universities in the region have adopted a business model for higher education sector over the last few decades. [Stilwell \(2003\)](#) argues that the universities and HEIs have adopted more of a business model, rather than an educational model; influencing both broad institutional policies and the faculty. According to [Pfeffer and Fong \(2004\)](#), higher education – especially the business education is seen as an industry, instead of focusing on socialising and educating the students ([Thomas and Li, 2009](#)). The role of a scholar has been drastically changed from a mentor to a businessman. Altogether, these changes in the education sector did not appear overnight, but have been a consequence of incompetent leadership of the country, caught up in their vested interests and ending up making wrong policies that suit their personal needs, instead of the demands of the society. The repercussions were bound to be manifested after a time lapse.

The prominent problems with the faculty, which are not directly related to their core job activities, but has an adverse affect on its work efficiency include: professional jealousy, secondary employment, and pursuing consultancy work, etc. However, these issues will not be discussed in the analysis, but will be displayed in [Figure 6.4](#), which shows the faculty's engagement in moral hazard that are not directly related to either teaching or research, but are still part of its job.

Perceived Moral Hazards in Other Activities

	Professional Jealousy	Secondary Employment
Case A	*Cultural thing *Junior faculty exploited by senior *Creating Blockades	X
Case B	X	X
Case C	X	X
Case D	*Go-Slow	*Teaching in other educational institutions *Dual jobs *Private tutoring
Case E	X	X
Case F	X	X

Figure 6.4: Other Academic Hazards

6.3 Summary and Critical Reflection on Cross-Case Analysis

In this section, justification of why something has been included or left out from the interviews is provided to avoid potential confusion. Due to a highly sensitive theme, it was real hard to grind out the desired information from the interviewees- who were from the management slots. The management is usually the custodian of the organization's good name in the market, and because the demands of the topic were exposing the deficiencies in their organizational system, they turned to a defensive mode. The reason for adopting such a defensive strategy by the interviewees was obvious. All the interviewees were public servants and leakage of information could be lethal for their career and their organization. At times, indirect questions or proxy questions were employed in the interviews to substitute for the actual questions, so as to obtain a feel of the real state of affairs.

The cases were examined and compared to each other on the available information; adding the researcher's personal inference to it. Nevertheless, care was exercised not to distort or part away from the actual information to the desired one. The issues that surfaced up from different cases regarding effective teaching were similar to the problems manifested in the literature. The reason for similarities might be that these problems are inherent in the nature of a teacher's job. Nevertheless, due to cultural impact, the intensity and magnitude of the problem changes from place to place and across educational institutions. The analysis focused on those moral hazards that have been pointed out by the interviewees - either implicitly or explicitly.

The education system in Pakistan- including higher education - calls for revamping. The teachers are cognisant of the fact that improving their performance is not going to make much difference to their motivation level, due to the management's miserly recognition. Most of the appraisal goes around the teaching aspect of the faculty's job, but in that respect there is no tangible output of this exercise. This explains the deteriorating quality of education in the country.

The problem to which the cases have unanimously agreed is related to the faculty's absenteeism and punctuality. It seems that the faculty is least bothered about the time utility of its pupil. Disappearing from the workplace has become a norm and second nature for these professionals. This problem is not unique to the educational institutions; in fact, the practice is common across all public sector establishments. Different reasons might be accounted for this.

First, by default, monitoring of professionals is not possible – typical of multitasking jobs, and second, lack of accountability is missing from the system. According to [Huisman and Currie \(2004\)](#), universities should have accountability because these institutions are liable for providing quality education and research, and are responsible

to the society. Usman (2014) believes that the prevalence of unethical practices in the education sector is due to lack of external accountability; having an adverse effect on its quality. Currently monitoring is lacking in some aspects and accountability is also missing creating a chance for moral hazard Gerhart et al. (1992). At times the management is well aware of what is happening right in front of their eyes; yet, their hands are tied, due to cultural constraints. Knowing that the management will not hire any action against the faculty – especially those members who are tenured or have reached permanent status – makes it bold to repeat such acts in the future. This attitude of the management also holds true for those faculty members with idiosyncratic skills, knowledge, and talent.

A *second* issue highlighted by the interviewees, is of course management by the faculty. The problem has been discussed from a different perspective. Cases A, C, and D have talked around the problem of the faculty intentionally detouring from the required course outline. Altering the course outline is acceptable up to a certain limit, allowing the faculty to adapt a course to the level of the students' understanding. Nevertheless, if modifications in the course contents are established to the extent that changes the nature of the module – with any ill intention as described by the interviewees in different cases – can be regarded as an academic sin. The problem has been termed as “information asymmetry” in the literature and is characteristic of multitasking professional agents.

For cases B, E, and F the worrisome situation in teaching effectiveness is the completion of course contents in a particular semester or particular period, before commencement of the examination. They have concerns about the teachers wasting time in the classroom, by indulging in discussions that do not have a direct bearing on the students' learning or the assigned module. As a consequence, the faculty is left with no alternative, but either to drop important topics or rush through the course; leaving the students learning to a bare minimum. Effective teaching demands proper distribution of time among all the topics that constitutes a module. If this balance is lost the resultant performance will fall short of effective instruction.

Third issue related to effective teaching, is the usage of outdated methodology by the faculty for class instruction and lack of knowledge in the subject area. Cases A, B, C, and D complain about the teachers using linear lecturing for classroom instruction. Linear lecturing over here refers to a faculty member's failure to indulge students in intellectual discussions to arouse critical thinking, which are often boring and the monotonous; keeping the students away from class sessions. Case F has specifically referred to this problem in effective teaching. Case D also talks about the problem, by referring to it as *non – creative thinking*. Critical thinking enhances the pace of actual learning, as the student approaches the problem from a different perspective; using out of box thinking. According to Hoodboy (2009) closed minds cannot innovate; whereas, modern education is all about individual liberty, willingness to accept change, intellectual honesty, and constructive rebellion. Critical thinking allows individuals to make a revolutionary

difference and to invent the future – else they will merely repeat the dysfunctional past.

The faculty rather chooses to cling to their own notes or confine its to a particular course book. The trend of providing outdated notes to the students is a striking feature of the education system. This practice makes it convenient for the teachers at saving time in lecture preparation because teaching the same thing over and over again needs no preparation. The faculty has prepared handouts, which are passed from one semester to another, without updating these notes. It is important to understand the slight distinction between a course book and a reference book or reference material. When the teacher recommends a course book it signals the importance of that book to the students with the presumption that the examination papers will be grounded on the contents of that book only– thus, entrapping the students in a tunnel vision. However, the term reference book or reference material refers to any material that facilitates the understanding of the main concepts of a given subject; hence, breaking the tunnel vision. Cases A, D, and E have specifically noted this problem, which can be extrapolated to all the other cases because it is a cultural occurrence in the education sector in Pakistan. The monotonous class lectures have become a deterrent for student's class attendance. Things are changing quickly in academics. Knowledge is short lived, and becomes redundant in a jiffy, due to ceaseless innovation. Scholars should realise the dynamics of academics and keep their knowledge updated by incorporating novel ideas and concepts in their instruction. In the present era access to knowledge is only a click away, as one can get an easy access to millions of academic journals, to see what is current in a particular discipline.

Fourth, non-availability of the faculty in its offices, is a problem referred by cases A, D, and F. Whereas, cases B and E have termed this problem as the *personal ego* and *bureaucratic approach* of a teacher. The problems mentioned by these interviewees boil down to teacher counselling or student rapport, which is an important dimension of effective teaching. Educators have a responsibility that stretches beyond the block schedule of class teaching to counselling and guiding their students by resolving their inquiries related to academics; both inside and outside the classroom. The educator's failure to counsel the students, leaves a gap in effective teaching and slows down the process of learning. For a course/module to be taught well, the class instruction time needs to be coupled with counselling time – outside the class. Teachers should display outside their office doors, the timings in which students can come to them to discuss academic issues – if they wish to do so. Classroom interaction, along with the student counselling, renders the responsibility of a teacher for instructing a specific module. Case C did not mention anything regarding this issue. The reason may be that either the teachers are not indifferent towards their students, or maybe the interviewees did not wish to talk about it – which might have exposed all of the wrongful acts of their

cohorts – as the faculty and the management have also informal relations, besides the formal work place relationships.

Fifth, the dilemma of the faculty cheating the exams, has also emerged as a pet area of the scholars in the literature of moral hazard and incentives. Normally, teaching effectiveness can be observed in how the students score in their exam. In the literature, the problem has been referred to as “teaching to the test”; when teachers try to inflate the test scores of their students applying different techniques because this is an observable measure and an important part of their performance evaluation. Under the rubric of cheating the examination system, the faculty has been accused of making easy papers and showing impartiality in exam scoring. Cases A and E have particularly stressed upon this problem.

Some teachers are trapped in stereotyping, where marking of exam transcripts is conditioned by personal prejudice of likes and dislikes. Sometimes the papers are set easy; allowing a provision for the students to score well. The faculty is also erred by the problem of leniency and/or strictness. Overall, the examination system shows anomalies. Again, cases B and C withheld their opinions on this issue; suggesting that they are satisfied with the overall examination system of their respective university.

Delayed result submission, is a problem connected with the faculty’s inability to earnestly discharge its responsibilities; becoming a menace for the students and the administration/management alike. Results are usually kept pending till the commencement of the next semester; creating confusion in the enrolment of the students for the upcoming semester. Despite the generic problems associated with the examination, some faculty members have been alleged of downloading ready-made papers from the internet for the examination, especially when the teacher opts for examination papers, which are based on multiple choice. The discrepancies in this area have been discussed earlier in the analysis.

The establishment of the HEC in 2002 has boosted the research productivity among the scholars. The HEC persuaded the universities and higher education institutions for increasing research output. To motivate the faculty, universities provide incentives for the twin tasks. As a result, the amount of published material increased during the last decade; however, the quality of research and publications remains in doldrums. The quality of research is judged from its importance and impact upon academic or industrial production, jobs created, rise in the company stock, etc., (Hoodboy, 2009). None of this seems to be happening as a result of faculty research. With the jump in publications, the same trend was not observed in the quality of research work, which could easily be assessed from the low number of patents secured by the educational institutions and sporadic publications in the impact factor journals. The fact is not suggestive of lack of talent in the faculty, but there are a number of things that can be blamed for this problem. The ensuing discussion is dedicated to the cross-case analysis of research

hazards that are prevalent in the higher education faculty – representing the general population.

First, the most common of these hazards is lack of research initiative in the faculty, which is manifested across all cases, except for case D. Case F has even added an annex to this problem by charging the faculty members of holding back information from their colleagues and policy makers, with respect to their research findings. Research should not be treated as a stand alone activity, but as a contribution to the community, by finding solutions to the problems. From the interviewees' point of view, one can sense that this region lacks a research culture. Academicians are not intrinsically driven, but put into motion through external stimuli – using explicit incentive to break the inertia. Although, case D is silent on the issue, general trends and moods of the academia allow for generalisation of this problem over all the cases, due to a similar culture.

A *second*, fraudulent practice brought into the limelight – related to research – is inflation of publication count. Case B has pointed towards the faculty members breaking a complete research into smaller units, which is an acceptable way of doing, but when it is done to the extent that a piece of work loses its separate identity then it becomes worrisome. In the literature, the problem has been referred to as the *least publishable unit*; losing strength and rigour of a normal research, by revealing only half the truth. This act can even create problems for the reader to establish any sense out of a piece of publication. The faculty has incentives for publications, such as monetary reward and upward career movement therefore it would publish anything to achieve these incentives.

Third, free riding and plagiarism have become the biggest moral hazards in the faculty. Cases A and F have talked about gaming the plagiarism software. Only last year (2013) there was a huge scam about a professor in case D, who was removed from service and his doctorate degree was cancelled, on the pretext that his PhD thesis was plagiarised. If this is occurring at the doctorate level, one can only guess the plight of routine publications.

The problem of plagiarism is not unique to the faculty in this part of the world, but it is a universal phenomenon. Different softwares have been introduced to control this mounting hazard. The problem is dealt sternly in the progressive countries, who are staunch believers of innovation through research. According to Hoodbhoy (2007), higher education reforms now must primarily aim at improving teaching quality. It was incorrect to have focused so heavily on financing research, much of which is of doubtful quality and usefulness. Van der Stede (2009) insists that the public agency should use a mix of incentives provided to professors and to universities.

Several perceived moral hazards were identified, which can be either included in the category of teaching or research, but those hazards which could not fit neatly into either, were included in *other academic hazards*, such as professional jealousy among the career employees, go-slow, and opting for secondary employment.

First, the problem of professional jealousy among career employees is expressed by case A. This is a natural instinct that seniors are usually incredulous about their juniors and feel insecure that the junior employees might surpass them in the future, due to their zeal and zest for advancement. Case A considers it as a cultural thing, as juniors are usually submissive to their seniors in a collectivist culture. A senior employee will attempt to exploit the situation by acting opportunistically while dealing with the juniors. The juniors to get into the good books of their seniors will do all that is demanded by the latter because they can influence decisions with respect to their future appointments to higher positions, or transferring from contractual to permanent status, etc.,. People have become accustomed to “rent-seeking” behaviour in organizations. The senior faculty – out of professional jealousy – can even stoop so low, as to tarnish the image of a junior faculty member in the eyes of the top management, especially if someone is progressive. This includes making the juniors work, but snatching away the credit, overloading them with menial tasks, and asking them for out of the way favours, etc.,.

The *second* problem is rather unique and unheard of in an educational context; as it is normally manifested in employees in the production sector. One interviewee talked about the seniors not allowing the juniors to exceed the work pace that has been set by them in the past. Although, the word go-slow was not used by the interviewee; however, the researcher linked it to this terminology, which was conceptualised and formally defined in the Industrial Relation Ordinance (1969). The situation canvassed by the interviewee posits well with the conventional definition of “go-slow”.

The *third* problem brought to the front line is the complication of the faculty opting for secondary employment. In fact, different issues that are closely linked with each other are clumped into this category. The problem of private tutoring seems to be the biggest challenge faced by the education sector. The fact is heart-wrenching and needs urgent attention from the policy makers or it might overshadow the formal higher education set up – in the close future, and crop up as a potent contender.

The academic staff works as a clique, and they have a moral obligation to conceal certain immoral acts of their colleagues. Most of them declined to provide information on the basis that the management is not concerned beyond the core job responsibilities of the faculty, such as teaching and research.

6.4 Perceived Determinants of Moral Hazard

Faculty members are the key determinants of the quality of education, but regrettably an area where Pakistani universities are particularly weak (Mahmood and Shafique, 2010). Research in the West confirms that the faculty behaviour and attitude show a striking effect on pupil learning and engagement (Umbach and Wawrzynski, 2005). The most frequently cited causes of dysfunctional behaviour in professionals are information asymmetry, risk insurance, and goal misalignment between the principal and the professional agent. Altogether, the above are the basic assumptions of agency theory, which have been examined by scholars and researchers, and are deemed to be reliable. The ensuing discussion will attempt to determine the reasons for the occurrence of the problem of moral hazard among the university faculty members, through the views of the respondents; supported by evidence from the literature. Figure 6.5 shows the layout of the main determinants from the interviews.

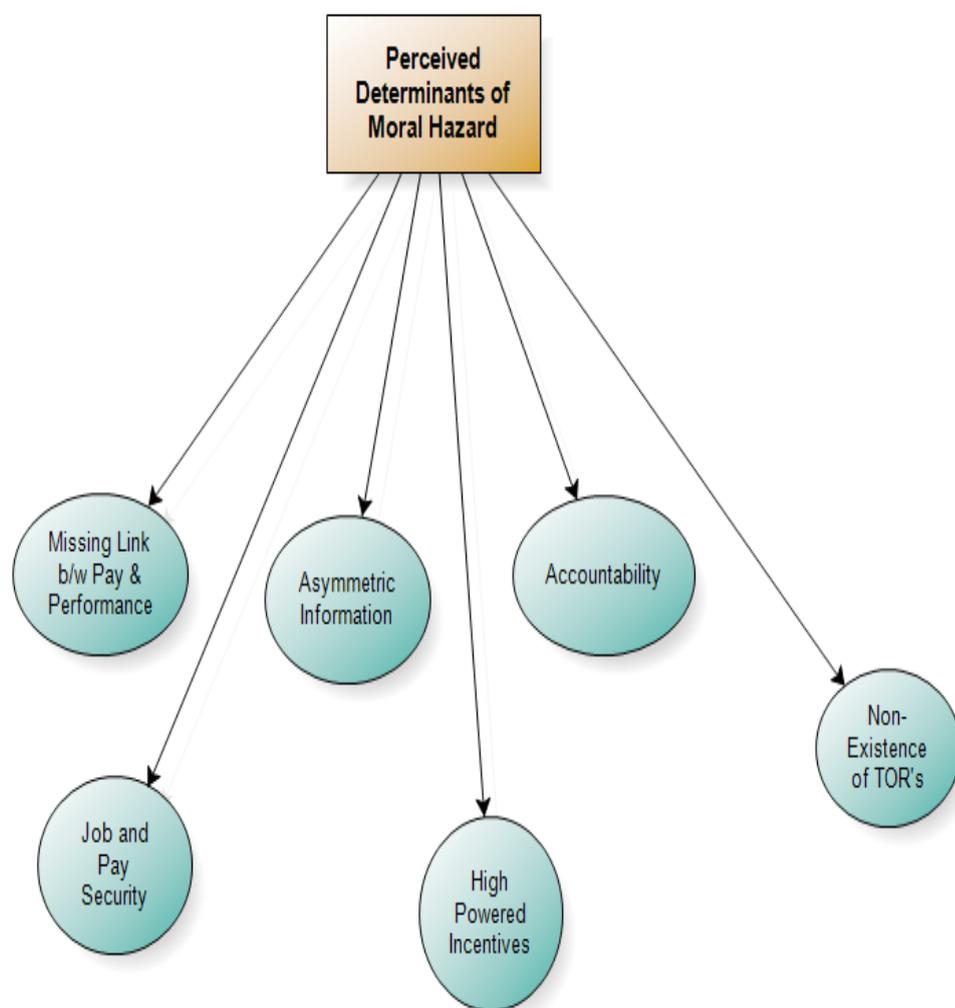


Figure 6.5: Perceived Determinants of Moral Hazard
Source: Author

6.4.1 The Faculty is Asymmetrically Informed

The multitasking nature of the educator's job involves information asymmetry. Usually, the efforts expended by these employees and the performance outcomes can be concealed in a way that works to the advantage of faculty members. [Sharma \(1997\)](#) state that:

Principal-professional exchanges are inherently those in which professionals' expertise, functional indispensability, and intrinsic ambiguity are associated with the services they provide. Such agency exchanges involve information asymmetry that is particularly severe, since principals do not possess the technical knowledge to evaluate the effort invested or the outcome accomplished by professional agents.

Case A

We admit that in the system there are loopholes, but they exist universally. Nevertheless, such troubles are common in knowledge workers. We can monitor the physical presence of a teacher in the class, but we cannot monitor and judge that a teacher is actually doing what he/she is supposed to do (A1).

The faculty has an upper hand over its supervisors and the management, and will tend to exploit this situation; leading to academic corruption. In an attempt to maximise their personal benefits, the faculty opts for opportunistic behaviour, such as resorting to shortcuts in performance – bypassing some elements that are not cost-effective, or altering the appearance of the performance outcomes that apparently seem to be more impressive.

Case B

These kinds of problems arise due to information irregularity. The management is less knowledgeable about the subject matter of the teacher. Even if a supervisor goes to class to monitor what the teacher is teaching, he/she cannot determine the genuine effort extended by a teacher. This makes direct monitoring less effective (B4).

There are instances, when the management knows that not all is proper with the employee performance, but cannot quite decide what the trouble is, due to information asymmetry. The principal has limited knowledge at the time of selection of the performance measures, as to whether these will communicate the right aspects of the employees' behaviour to the management. Only over a period of time, will the principal be able to discover the agent's response, and can utilise this additional information to improve performance outcomes. This implies that performance criteria must be an evolutionary process.

Case D

The real problem is that we can't judge the level of teaching quality directly, so how can we say how effective a teacher is teaching to the students (D2).

The respondents mostly point towards the unsettled nature of teaching effectiveness, but no one has talked about the activity of research in the context of information asymmetry. One of the reasons might be that research outputs are objectively measured and entail less noise, as compared to teaching effectiveness. The quality of publications can be judged from their impact factor and citation count. Besides, there is a more general consensus among experts on assessing research, as compared to congruence regarding effective teaching – since the latter has several facets. It is really difficult for the management to tell how hard a teacher is exerting efforts in the class instruction, as there is no yardstick to evaluate teaching effectiveness. Mostly, scholars have linked it to students learning, but even that is an abstract term.

Case E

Educators are subject experts, and telling them what they should be teaching or how they should be teaching, is strangling the essence of educational activity. Teachers are given autonomy in deciding the course contents because they know better than the management about the requirements of a particular subject and nature of their job. Again, if they detour from the prescribed course outline, we believe it will be in the best interest of the students, but we cannot be sure of this (E1).

The faculty members should have autonomy in their job, as they are specialised individuals in their respective areas of knowledge. Dictating to them the work ethics and expecting strict adherence to the given agenda, might be discouraging and counterproductive.

6.4.2 Job Security and Pay Security

Prior to 1973, universities in Pakistan had their own pay structure, but after the educational reforms introduced in 1973, a unified structure (BPS) was introduced and imposed evenly across all public sector institutions, including the educational sector. In 2002, TTS was introduced as a parallel pay system for the higher education faculty; who hold a higher degree. Entry of a non-PhD is barred from the system. Currently, all public sector universities run two parallel pay systems; comprising the overall reward structure of the higher education sector. Revisions have been made to these structures in a mechanistic fashion, keeping in perspective the financial constraints of the government, without addressing the inherent deficiencies and anomalies of the scheme upfront ([Ashraf, 2007](#)).

According to [Baugher \(2008\)](#), in medicine and natural sciences, the tenured faculty members have to spend a lot of time in fund raising; thus, for faculty who is not on the tenure track, it is often a relief to be free of the constant pressure to seek and obtain grant support from external funding agencies. According to the HEC survey, a total of 25% of the faculty in Pakistan hold a doctorate degree; whereas, holding a PhD degree is universally considered to be an essential pre-requisite to imparting quality higher education. Up to March 2013, a total of 1,750 faculty members have been appointed on TTS in 70 public sector universities and DAIs, which accounts for 2.49% of the total faculty employed in higher education ([HEC, 2011](#)). [Hoodbhoy \(2005\)](#) asserts that the goal of the HEC was to produce 1,000 PhDs per annum, with an additional 500 to be trained overseas; increasing the total number of PhDs from the current 2000 or 1750 (the number fluctuates between 50-250) to 20,000 over the next ten years – in 2013, at the time of this research, the number still revolves around 2,000. Granting to the latest economic survey by [PES \(2013\)](#), in Pakistan in 2012-13 the total number of university teachers stands at approximately 70,100 (70.1) and the expected figure for 2013 is 81,600 (81.6).

Case A

Selection board is held for the appointment of any faculty member. Once appointed he/she has to complete the probationary period of employment. At least this is what our policies tell us... only when it comes to implementation, things get shaky as we have reasons for it (A1).

In the public sector institutions – including higher education sector – all appointments to permanent posts are made through rigorous selection procedures, as the candidates are required to obtain clearance from the selection board. The selection board comprises of experts, which assesses and confirms the transfer of a faculty member from contractual to permanent status, and also appointment to higher academic/professorial positions. Once appointed, the employee has to successfully complete a probationary period to attain employment permanency in that organization.

...pay increments are automatic, not meritocratic (A2).

Besides job security, the faculty is also insured against pay fluctuation, which is not performance-contingent. Advancement within the class is through automatic increments, which are consolidated to the base pay on a yearly basis. The employees' pay is therefore fully insured under the BPS, which rewards loyalty. This is a pandemic across the public sector institutions in Pakistan. Dismissal of a permanent employee, is a very tedious task; posing a challenge to the management for the removal of incompetent public servants. On various occasions, the management overlooks such cases, where the faculty's inefficiency can lead to bitter consequences. The management's dislike for dismissal, apart from the reasons mentioned above, is also induced by factors such as protecting the image of the organization, preventing a distasteful work environment by

preserving cordial management-employee relations, etc. Any wrong decision usually dovetails litigation. Moreover, many appointments are made on either personal or political affiliations that are hard to remove. Complete job security and the lack of control mechanisms, make the employees valiant, and they become indifferent towards their duties and responsibilities conferred upon them.

Majority of the faculty, especially the non-PhD, draws its pay from the Basic Pay Scale system. The longevity of the system for more than 4 decades is a sign of its success. The scheme is simple and easily administered because pay calculations are easy. BPS upholds the principle of *equality* rather than *equity*, which implies that seniority is embraced and progression in the scale is made through automatic annual increments, thus breaking the pay-performance linkage (equity). With changes in the higher education system, it is time to modify the pay structure and make it compatible to needs of the faculty and bigger goals of the higher education.

TTS was introduced so as to provide immunity to the scholars to enable them to conduct research in their area of interest, without being influenced by anyone or having the fear of being reprimanded – if their minds clashed with the well-established beliefs of the society or opinions of those in authority. This immunity would liberate the mind of a scholar from any fear or favour. With this intention the new system was implemented, but even after more than a decade, it nevertheless remains in its stages of infancy, and has failed to meet the expectations of the people. Many faculty members are hesitant to take on employment under the TTS. The greatest fear that haunts the faculty, is the possibility of the failure to attain tenure, after investing several years of service. Under the current reward system, the remuneration awarded to the faculty members is completely insured against substandard performance, as terminations are rarely linked to teaching or research performance. For terminations, the management must have evidence that the faculty members were engaged in serious and purposeful acts of unlawful conduct, which are ordinarily connected to different aspects of their employment. Most of the ensuing discussing will be from the perspective of the BPS faculty, as the percentage of the TTS faculty is minimal.

Case B

In Pakistan the system is such that once a teacher becomes permanent, he/she cannot be removed from service. In the government job people feel secure, and therefore the faculty does not care about its performance (B3).

In our system, teachers have job security and pay security, as [the] majority of the faculty is on the pay scale. What else does an employee needs, and why should he/she work efficiently after such assurances. BPS is based on inequity. People get the same pay regardless of their performance. Equity also does not demand rewarding only the outstanding lot, it rather implies fair treatment to all (B1).

Job security has a positive and a negative side. The positive aspect of job security emancipate employees from the fear of losing their jobs. With job security, an employee can be more focused on work, instead of focusing energies on less fruitful activities, such as “rent-seeking” behaviours. Job security increases an employee’s satisfaction level with respect to his/her workplace and work; even so, a cautious exercise of this kind of security is warranted. Looking at both, the good and bad performers through the same lens is unjust and creates resentment among employees – particularly the hard workers.

Case C

Additional efforts should be remunerated and this is what equity demands. We want to divorce the public sector grading system and revert to pre-1973 rules, when universities had their own payment system, and then it would be easy to incorporate performance based rewards into it. However, we cannot do it in the national pay scales, as it is really difficult (C1).

The interviewee shows dissatisfaction with the current reward system and aspires to reintroduce the system that was prevalent prior to the introduction of BPS and TTS in public sector universities. This will provide autonomy to the public sector universities in matters regarding pay and performance of the employees. The current remuneration system, especially the BPS, is considered honourable by those faculty members who are not “go-getters”; however, those who have the zest to excel in their career through their good performance are disappointed by the BPS.

Case E

Initially, it was believed that the faculty would opt for the TTS after its implementation... [the] faculty was really pushed hard to opt for this new system. Tenure Track System is considered as highly risky for those people who do not work hard. Young professionals find it more challenging at the start of their career, as they believe that if they do not publish, their job and career would come to an end. This acted as a repellent for the faculty to join the TTS (E1).

BPS embraces the length of service and increments are linked to the number of years, rather than to performance; therefore, disregarding of how a person performs, as the remuneration would not change. People give preference to job security over incentives for performance. On attaining a permanent position; removal, dismissal, or sanction of [the] faculty becomes cumbersome, and many times, issues are overlooked (E3).

Under the TTS, the faculty is given rigorous teaching, research, and service targets. The fulfilment of these targets puts pressure upon the faculty to persistently perform hard work. We do not have a culture supportive of intense hard work; hence, many faculty members seem to experience greater stress when chasing the set targets. The faculty

prefers BPS as compared to TTS, and when given a choice, it opts for the former. The respondents concede that the people of KPK are not forward-looking; they are satisfied with their earnings as long as they know that their pay and increments are secure from periodic fluctuations.

Case F

Pay is fixed for the faculty regardless of how hard it works. We do not receive any extra rewards for higher performances. If high performers are paid the same salary as low performers, then of course this is inequity. Under the existing pay structure, annual increments are paid to everyone (F1).

The university pays its faculty members, a fixed sum of earnings based on their status and duration of service. When the pay is standardised, it misses the concept of fairness – by viewing good, mediocre, and bad performers through the same lens. TTS on the other hand is linked to work targets. An employee performance is judged upon the achievement of those targets. Thus, the employment status, as well as the annual increments are determined upon the judgement of an employee's performance.

The possibility that all employees will perform at the same level is very rare because there will always be individuals who will be either average, above, or below average performers, due to differences in their capabilities, experience, education, and motivation level. These variations are ignored in the current pay system prevailing in the universities. Paying more is not the same as equity, if the link between pay and effort or performance is missing. The faculty members – across the board – are paid the same, irrespective of their performances.

6.4.3 Lack of Clear and Explicit Job Description for Faculty

The job description is the starting point of performance management in any organization. It provides a list of the work activities, along with the corresponding duties and responsibilities, to an incumbent. To avoid ambiguity, job description should be provided to the employees.

Case A

In many higher education institutions, job description of the faculty is taken for granted. In an attempt to cut down the risk being transferred to the organization, universities have to define the workload and provide performance targets to the faculty members. TOR will make the outcome both objective and easily measurable.

Usually teachers do not receive any job description upon joining. It is implicitly assumed that the faculty members recognise their basic responsibilities and they do not require to be stated about these. Besides,

the primary responsibilities of teaching and research, faculty members are given responsibilities by the management as per requirement (A1).

The faculty is not provided with a comprehensive job description. Due to the missing terms of reference, the faculty members follow their judgement in fulfilling their job requirements. The faculty has a vague idea of its job and generally tends to focus on the teaching part. However, assuming that the educators know their responsibility, does not mitigate the issue of missing TOR for these professionals, and it also does not liberate the management of its obligation.

Case B

Undocumented code of conduct makes it difficult for the faculty to display the preferred behaviours expected by the management, as it cannot define a priori the “ought and ought-not” (B1).

Job description should be expressed in a clear and explicit language, which wipes away any potential ambiguity that may arise due to technical terminology. Any doubt in the minds of prospective faculty members needs to be cleared prior to formally joining the employment.

Case D

There is no TOR; therefore, the faculty is confused (D2).

Granting to the interviewees of Case D, the faculty does not receive a comprehensive orientation regarding the requirements of its job – an issue also expressed by the interviewees in other cases. Without any explicit and comprehensive documentation of the responsibilities, even if the faculty tries its level best to meet the job demands, it will be unable to do so because of ignorance of the full range of expectations regarding its duties as teachers, researchers, and active members of the academic community. The job description provides direction to an employee’s effort towards performance. Without a comprehensive job description, the efficiency and effectiveness of an employee do not reach its full potential.

Case F

The TOR for the faculty is non-existent, but these documents do exist for other administrative staff. The TOR basically provides guidance to the employees on the work, i.e., the duties and obligations that are expected of them, thus, providing them the necessary guidance on their jobs. The faculty members – by default – are aware of their primary duty, which is teaching. They prepare course outlines and discuss these with the program coordinator in an informal manner... the faculty members know that if they want promotions, they must hold seminars and publish research papers (F1).

The faculty is not provided a clear job description, which seems to evolve over time. The coordinators seem to have a lot of discretion because there are no prescribed activities (F3).

The problem has also been accepted by the interviewees in Case F. The reason for the non-provision of a TOR to the faculty, is its non-existence. The management assumes that the faculty has knowledge of the tasks that need to be done; therefore, it does not consider mandatory to provide TOR to the faculty. The first and foremost requirement for the accountability of employees is their awareness of what the management expects from them in the form of preferred job behaviours. An organization cannot reprimand employees for any expectation that has not been passed on to them. Thus, ignorance is a bliss for the employees, but misery for the management. Due to missing job descriptions, the faculty cannot be legally held accountable for any activity, which is left unattended. Job description gives an employee a clear idea of how to contribute towards the organizational ends – forcing the employee to channelise efforts accordingly; resulting in better performances.

In the absence of a TOR, the faculty members follow the whims of their superiors; making the management all-powerful and atrocious. Some universities attempted to solve this problem by coming up with a preliminary job description for the faculty, which only encompasses a limited number of tasks, such as the number of teaching hours and the general responsibilities of a teacher. The faculty is left to use its professional judgement about better job performance.

6.4.4 The Incentive Problem

According to [Lavy \(2007\)](#), all teachers should be eligible for the incentives offered, but only a subset of teachers should be rewarded in practice because if too many teachers are rewarded, incentives will lose their motivational force. The distribution of output can be altered through effort ([Dewatripont et al., 2000](#)). This concept is explained well by [Vroom \(1964\)](#) who states that individuals will maximise the expected rewards by sensibly choosing among different options. [Eggleston \(2005\)](#) stresses on the use of mix payment when PRP metrics are imperfect for rewarding service-specific quality efforts. This will help to balance incentives for quality effort across services. The author suggests a cautious use of PRP, as long as the quality is rewarded only partially, or the metrics are imperfect. In general, the less precise the measure of performance, the lower should be the power of incentives.

Incentives fundamentally signal the preferences of the employer to the employee, through the selection of metrics. Incentives should be linked to organizational goals; otherwise, will do more harm than good. According to [Gerhart et al. \(1992\)](#), from the employees' point of view, pay has an important influence on the standard of living, status, and security of an employee. Looking at the situation from an employer's point of view,

the payment of salaries is a major cost of doing business, which needs to be controlled. Pay should be considered as an investment that generates adequate returns in terms of employees' attitudes, skills, behaviour, and organizational performance. The problem is that not all incentives have positive effects. The quantity of production may be raised by using incentives, but this may come at the expense of quality, especially when the current focus is on TQM (Gerhart et al., 1992).

Not all incentives motivate individuals. The size of the incentive should not be so small that it fails to trigger the motivational drive, nor should it be so large that it incurs unnecessary costs for the organization. Incentives are a cost that needs to be controlled while maximising productivity and creativity (Combs et al., 2006). According to Lavy (2007), incentives should balance individual rewards with fostering a cooperative culture, and should match the preferences of the employees. Incentive schemes that tie the teachers' pay to the achievements of the students may create more opportunities for the faculty to cheat or to engage in opportunistic behaviour. No incentive system can be a perfect substitute for monitoring because almost all incentive schemes can be manipulated; employees behaviour thus needs to be monitored. (Podgursky and Springer, 2007). Hoodbhoy (2005) asserts that the faculty in KPK tends to be more concerned about money and promotions, and less worried about research, knowledge creation, teaching, and working on social issues. The author believes this to be a poorly thought-out and dangerous scheme of the HEC, which involves giving cash awards to the faculty for publishing papers. According to McKinney (2000), teachers do not protest to incentive pay that measures teacher effectiveness; however, they object to the receipt of incentive pay that is not based on classroom performance.

Case A

Monetary incentives should be present, but should not be the sole objective of a teacher and should be given a secondary position. One should not work for monetary benefits alone. Making a contribution towards the society should take precedence over monetary incentives. However, in practice, good or bad teaching is of little importance, as long as a teacher publishes and is able to attract research grants (A3).

Teachers should be given incentives to motivate them to higher performances and to properly distribute their efforts among the different tasks that are part of their job. Some people are of the opinion that teachers should not be given monetary incentives, as this is against the spirit of education; assuming that teachers are intrinsically driven. Some even consider monetary incentives as being detrimental to the teaching profession for different reasons, some of which seem to be logical; whereas, others are just myths. Teachers, like other people in society, also have basic needs, which can only be satisfied with money. The divided opinion of people as to whether or not monetary incentives should be given to the faculty has turned into a controversial debate among the academicians

and policy makers. Keeping aside this debate, some individuals are in favour of providing incentives to the teachers as an additional income source, which will help them in fighting against the inflation index. However, if the incentives exceed a certain bound, they can backfire; encouraging teachers to aim for money-making; hence, leaving the real and bigger objectives of higher education unfulfilled.

Under the current incentive practices in universities and higher educational institutions, faculty members are given incentives for teaching more and not teaching better. Incentives are not linked to better performance, but are tied to taking on an additional teaching load, over and above the faculty's maximum teaching hours. The incentive to teach more, causes the faculty members to compromise teaching quality; thus, transmitting wrong signals to the faculty members. Lack of incentives fails to induce an effort, but misaligned incentives induce an effort in the wrong direction, which has no positive effect on goal achievement.

Two insights are particularly significant as to how we weigh multiple performance measures: *first*, this study demonstrates that the employees' actions can be aligned with the organizational goals by linking extrinsic incentives to the right performance measures; *second*, all else being equal, encouraging effort for tasks in a more precise manner requires more weighted incentives for specific measures. For example, teaching has two components; credit hours and effectiveness. Incentives with less weight are required for credit hours, and high-weight incentives are required for effectiveness. Thus, altering the incentive weights will have a better impact on the employee's job performance.

Case B

The evaluation instrument is based on qualitative criteria; especially in the BPS system, which is more subjective as compared to TTS. TTS is based on objective criteria regarding faculty evaluation, such as the impact factor is considered in the evaluation, the number of projects and courses are looked at, and different aspects of a faculty member's job are reflected upon, in assessing their performance. [However,] this is not the case in the BPS system (B1).

Under the BPS system no targets are set for the faculty performance and the process of assessing an individual's performance is based on subjective criteria, but in the TTS, work targets are pinned down and performance is gauged against set targets. As a consequence, performance measurement also becomes more objective. Identifying the correct and objective measures for different tasks included in the faculty's job is not only difficult, but impossible. Several tasks are therefore measured using proxy measures. The subjective assessment of the faculty, by different stakeholders in the higher education sector also offers a useful input to make up for the inadequacy of the measurement problem. Proxy measures can never be a perfect substitute for direct measurement that

utilises objective measures. Performance measures for tasks that cannot be objectively measured are prone to manipulation by the employees. Measurement of the teaching effectiveness cannot be managed with direct measures and are therefore often exploited by the faculty members.

Equating the teaching profession with some sort of social work is a wrong perception of the masses. This would be like stating that doctors should not charge a fee for examining patients because the patients are already in misery, or that lawyers ought not to charge their clients because they are already in trouble. If we start thinking like this, then all professions would turn into social work, and all people would become social workers; however, the reality is different. Teachers join educational institutions for the sake of money, apart from other good reasons. They expect monetary rewards in return for the effort and time they invest in their work. A teacher should therefore not be denied monetary incentives. The real need is to provide them with better and more accurate incentives that will improve the quality of their work.

Promotions in universities depend upon a faculty member's research profile.

In the field of science, if a faculty member does not conduct research activities, he/she will not even be considered as a teacher, or allowed to supervise research students (B3).

Promotion is another important incentive that has a high valance for most of the faculty members, particularly those seeking a career in teaching. Many faculty members are active in performing tasks that are directly accredited to their upward career movement. Most significant are the publications appearing in recognised and reputed journals. This task has been emphasised to an extent that a faculty member is not acknowledged to be professionally competent until he/she builds up a strong research and publication profile.

Case C

It is a dilemma, how the system should recognise goodness. There is no silver bullet to fix the system. Sometimes one knows a person is really good, but then one can't do anything, as people go to court, and for one to defend one's stance becomes very difficult. To prove in front of the judge that one person is better than another becomes very subjective... financial incentives should be given to teachers who are ready to work more (C1).

The incentive system introduced in the universities is very rigid; emphasising only measurable activities. There are also other activities that are equally important in a faculty's job, but have unequal weightage in the incentive system.

Case F

The faculty prefers to spend time and divert its effort towards tasks that are perceived to be important for the organization. Activities that are easily measurable and entail high-powered incentives will be given preference by the employees and vice versa.

We do not have proper distribution of efforts among teaching and other activities (F1).

The university's orientation also determines the extent to which different tasks and activities are incentivised. Some universities are more teaching-oriented; whereas, others are research-oriented. Universities should not be labelled as one type or the other because both teaching and research are the core concerns of higher educational institutions. Besides, there are certain other academic and non-academic activities, which have its own significance in education. The reward system should be an all-embracing one, which balances knowledge transfer with knowledge generation.

Incentives can boost performance, for instance, teachers prefer administrative posts to get extra remuneration, status, and benefits (F2).

Incentives are expected to improve the work performance of faculty members by prompting them to give higher-level performances. The current salary of the faculty is regarded as reasonable, but looking at the inflation rate in the country for most of them it is a perpetual struggle between their needs and finances, especially if they come from a weak financial background. A university can create opportunities for the faculty to realise its potential and earn a better living, instead of forcing talented teachers to quit this profession and seek alternative jobs for a more prosperous living. Any extra money besides the fixed pay can mitigate the financial problems of these professionals.

6.4.5 Lack of Accountability

Accountability demands that the faculty members should be held responsible for all their job related acts. The recruitment, deployment, and promotion of teachers are not generally transparent and are influenced by politics (Guajardo.J, 2011). Allowing easy employment for incompetent people will lower the quality of higher education. PEP (2006, p.19) states that, "poor selection criterion makes it easier for persons with ineffective teaching skills to become teachers." Hoodboy (2009) calls it a "patronage system" that appoints people with political and personal connections.

Case A

It is very difficult to reprimand a permanent faculty member, even if he/she is found guilty of not fulfilling his/her obligations as a teacher. [However], we try to advise such faculty members to be cautious in the future (A1).

Accountability is one of the chief means to control the aberrant activities of the employees, especially those who have a greater degree of autonomy at their place of work. This can help to curtail harmful activities or potential hazards in the employees. Lack of accountability is a problem in all public sector institutions, either due to the management's indifference towards corrupt practices, or because the management is not sufficiently knowledgeable about the employees' performance. Policy statements are clear about the adverse performance of staff; yet, the delinquent employees are rarely penalised, due to the preference given to personal relationships over professional norms. The management's indifference towards the inefficiencies in the workplace can be accounted for by its limited stake in the organization's success or failure. As already discussed, job permanency provides a shield to an individual from wrongful acts, especially in the case of academic staff. On the other hand, the management's stance on accountability is quite stern towards the non-academic staff. This is open discrimination in the system against professionals and non-professionals in the higher education setup.

Case B

Accountability is present in the policies, but lacking in practice. We know a lot of cases where the faculty is at fault, but we have barely seen any punitive steps taken against it to teach them a lesson for the future (B3).

Case C

The principle and practice are entirely different. While institutional autonomy is indispensable for nurturing quality, it is relentlessly bargained by the political thinking of the management. In an environment like this, people resort to rent-seeking behaviours as an easy outlet to troubles (C2).

The interviewee in Case B candidly expressed his opinions, which is an indication of the weak implementation of the policies by the management. Policy formulation needs to be supported by strong implementation, for fruitful results. Academia, like any other profession involves the game of power and politics, which is played both inside and outside of these august institutions. Public sector universities are directly under the control of the provincial regime, which is empowered to appoint all top-grade positions in public sector universities. In some universities, even lower-level appointments are fixed on political connections; where merit is the runner-up to acquaintances and influence. All permanent positions – at the professorial level as well as at the level of lecturers – are appointed by the selection board, which is a panel of experts constituted for this purpose and is comprised of internal and external experts. Faculty members who are appointed through the selection board have a permanent job status. Removal of any such member – even due to a justified reason – is a mammoth task and involves litigation issues, which are further made cumbersome by bureaucracy.

The government to sustain a firm grasp on the universities, places its preferred people in the top positions; doing so allow the bureaucrats and politicians to subsequently gain favours from the university management, for their own personal benefit. Replicating the same strategy, the internal recruitment authorities of the university induct people on the basis of kinship and friendship. Inductions made on the ground of kinship strengthen cliques, which paves the way for highly partial and biased decisions. As the axiom goes, “there is strength in numbers”, is reflected in the practices in public sector educational institutions. The wrongful induction of people into education institutions is a sign that the people are involved in the game of power and politics to serve their personal ends. This conduct is deeply ingrained in the national culture, and has engulfed all public sector institutions across Pakistan.

Case D

Accountability is weak in public sector universities because the culture is non-supportive of placing the accused in the prosecution box (D3).

Usually, a faculty member is inducted as a grade 18 officer and holds a sound standing in the society. Many a times, personal acquaintances or relationships become a hurdle in the path of accountability. This is also a salient feature of the collectivist culture, which upholds relational contracts as opposed to transactional contracts.

Case E

Minor omissions are overlooked. However, we have issued warnings to the faculty members who have been found guilty of misconduct [in the past]. Dismissals are very rare, especially in the case of permanent faculty. We have never withheld the increment of any faculty member, due to of his/her irresponsible behaviour (E3).

Accountability is closely linked to job security as well as pay security.

Case F

The coordinator is not in a position to punish the faculty for any wrongful act. At the most he/she can analyse cases of adverse behaviour, and submit the report to the competent authority. The faculty is at times given a chance to clear its position, but it depends upon the severity of the case; as there is no single monitoring unit, the interpretation is done in such a way that it can be depicted as severe or otherwise. Severity depends upon the nature of the action – e.g., teacher’s behaviour in the class with students, dealing with students’ assignments, or examinations, and at times it relates to other parts of their work (F4).

The coordinator is only the reporting body and has no authority regarding the faculty accountability. This leaves everything to be decided by the top management, creating

bottlenecks; therefore, the bulk of decisions is either delayed or even dies out in the process. It is the right of every employee that if the management decides to take unfavourable action against him/her, he/she must be given a fair chance to clear his/her stance before the decision is executed. This is particularly important in cases of dismissal, withholding of increment, demotion, and so forth.

6.4.6 Missing Link between Pay and Performance

Pay can be linked to performance through a series of activities, where the output of one activity becomes an input for the other. According to [Ghurchian and Rahgozar \(2010\)](#), the input indicators include: policy and strategy, leadership and management, customers and the market, human capital, process and organizing, partnerships and resources; whereas, the output indicators include: results of HR, results of society, financial and economic results, and performance results. Pay is the expectation of an employee from the organization; whereas, performance is what the management expects from the employee in return for the pay and additional rewards. Linking the two comes under the domain of performance management. When this connection is broken, employees tend to be dissatisfied and prone to moral hazards. The crucial ingredient of any PRP model is the link between the salary and the measures of performance [Ellerson \(2009\)](#). According to [Scriven \(1991\)](#), evaluation is a process of systematically and objectively determining the merit, worth, or value of the object of evaluation. Without such a process, there is no way to distinguish the worthy from the worthless ([Berk, 2005](#)).

Case A

HEC confers the best teacher award to the best performer– from the faculty – based on the individual’s previous 5 years performance. There is otherwise no system to link pay to performance (A2).

Case B

If evaluation is really good, then an award is given to the faculty member, but again, this is given only to the top performer, and there are no runner-ups. The faculty’s performance evaluation has no effect on its promotions, except for the HEC Best Teacher Award, on pre-determined criteria, which is performance-based. Substandard evaluations have no effect on the faculty. In the case of tenure track the increments are linked to promotion, but not in BPS (B2).

Linking pay to performance is the core concept of equity. Employees get frustrated if they experience inequity in their organization’s reward system. Under the existing system, universities nominate their best faculty member based on the performance of the individual over the previous two to five years. The nominations are then sent to

the HEC, which formally confers the award to the best faculty member. This practice is a motivational tool for the faculty; however, it is perceived to apply entirely to those faculty members, who secure the top positions in different universities. People have reservations that university nominations for this award are biased. Moreover, only the PhD faculty can fit into the criteria, set for the achievement of this award. Due to the low number of PhDs amongst the faculty, around 80% do not even qualify for the contest. This deprives many faculty members of a fair chance of participation in the competition, based on their actual performance.

Linking rewards to performance does not always imply that the faculty should be rewarded for higher performances, nor does it imply that poor performers should be made to suffer the consequences, by either losing their annual pay increments or even facing a reduction in their current pay. The latter option is not feasible as in the public sector, a benefit, once extended to an employee, cannot be taken back; this is against the service statutes. Nevertheless, the former option can be given a thorough thought by the management.

The two different payment systems; (TTS and BPS) are founded on different principles, but in practice, the faculty on the tenure track are closely assessed based on their publication targets rather than on teaching effectiveness. The faculty is liberated to a greater extent from the consequences of good or bad teaching evaluations, especially the permanent faculty, or those who have achieved tenure.

Case C

The TTS is for the outstanding lot, but the BPS is not so clear (C1).

For the TTS faculty, the targets are very clear and objective; the question of whether they are achievable or not under the existing conditions is a different matter. As mentioned on several occasions, a negligible percentage of the faculty is on TTS; for example, in Case E, only two faculty members serve on the tenure track at present; whereas, the remaining faculty serve under the BPS. The notion that the faculty pay is linked to performance cannot be generalised in this context. We can say that the TTS is a very objective system, where performance measures are integrated with clear targets; but practically, when it comes to the performance evaluation of employees, there are many loopholes in the system. For instance, the assessment is carried out by the supervisors, which might involve different types of errors that are associated with the rater biases. Effective teaching involves subjectivity, and appraisals are corrupted by personal prejudices.

Case D

When principal pretends to pay, then the agent pretends to work (D2).

The interviewee in Case D articulates this problem tersely, and yet, this statement says a great deal about the issue of the pay-performance linkage. The management conducts performance appraisals and projects an image to the faculty that management decisions are based on these evaluations; however, this image is nothing more than a deception, and the faculty knows well that it is being deceived.

Case E

Right now there is no incentive attached to the people who have achieved their goals or not (E1).

The faculty's lackadaisical attitude – towards performance or the performance evaluation– is due to their belief that it makes no difference, either to its pay or promotion. The threshold level for the evaluation of the faculty is 60%; if a faculty member falls below this threshold in the evaluation and fails to improve his/her performance, then he/she is cautioned by the management and warned about drastic results. However, the ground reality does not support this policy.

Case F

Unlike the corporate sector, we do not possess any such system where a payment and performance link can be built (F1).

We have an evaluation system; yet, the importance of that input cannot be clearly expressed. The faculty is aware of the fact that they it not evaluated on effective teaching; [hence], there is no incentive to teach effectively (F3).

The faculty appraisal is not taken seriously because evaluations are disconnected from the decision-making process of the management, with regard to pay and promotion. The essential goal of the performance appraisal should be to ameliorate the quality of education; through an improvement in faculty skills, knowledge, and abilities. However, the evaluations are barely used for any constructive purposes, such as the faculty training and development, hiring and firing, compensation decisions, and enhancement of the quality of pedagogy. No training is given to the faculty members, even if the evaluations demand this to be done. The results are hardly even shared with the faculty members and are never discussed to inform them of how they can improve their performance. The entire exercise of the performance appraisal thus becomes pointless, if it is not linked to other HR functions. The only action taken in relation to the appraisal results is the termination of the faculty members, who on contract; if their performance is substandard. Faculty members have developed a negative image of the performance appraisal process, as it can be used by the management to take punitive action against any faculty member, who is being discriminated against. There must be some mechanism to link performance outputs to pay because according to the equity and expectancy models, employees are not motivated when the connection between performance and pay is broken.

6.5 The Contingency Table

A contingency table has been developed as a result of cross-case analysis, which contains three columns. The first column shows different determinants of moral hazard that have been identified from the literature and qualitative analysis; whereas, column two shows the high or low existence of these determinants. Together, the first two columns are denoted by input for the last column. Finally, column three displays the preferred incentive power, when the determinant for moral hazard tendency is either high or low – as given in the input column. For example, as shown in the table, when accountability in an organization is high, employees are perceived to have a lower tendency towards moral hazard, due to the fear of being answerable to the principal for his/her acts. In such a situation, employees can be given high-powered incentives – as it is evident from the analysis that when employees are offered explicit incentives, there must be a mechanism of accountability to control “opportunism”. Hence, when accountability is low, *MHT* is perceived to be high; making an employee prone to “opportunistic” behaviour, and encouraging him/her to misuse the available incentives; increasing the chances of an employee engaging in deviant behaviour. Low-power incentives will preclude the employees’ desire to exploit the situation.

Similarly, when the task structure is high, an employee’s *MHT* is perceived to be low because tasks that are highly structured are easy to measure, due to availability of clear and objective performance measures. This, in turn, lowers an employee’s *MHT*, as manipulation of the system becomes difficult; therefore, high-powered incentives can be provided to the employees in such a situation. The reverse will be true when the task structure is low. The relationship between other determinants and incentive power can be explained in a similar fashion.

The above explanation is deficient in many aspects, but it will provide a basic understanding to the reader regarding the main idea behind the “Contingency Table”. Figure 6.6 shows the contingency table, where a given set of inputs will determine the preferred incentive power.

Contingency Table

Input		Preferred Incentive Power
Accountability	High	High
MHT	Low	
Accountability	Low	Low
MHT	High	
Task Structure	High	High
MHT	Low	
Task Structure	Low	Low
MHT	High	
Pay Performance link	High	High
MHT	Low	
Pay Performance link	Low	Low
MHT	High	
Performance Based Culture	High	High
MHT	Low	
Performance Based Culture	Low	Low
MHT	High	
Job Security	High	Low
MHT	High	
Job Security	Low	High
MHT	Low	
Organizational Politics	High	Low
MHT	High	
Organizational Politics	Low	High
MHT	Low	

Figure 6.6: Contingency Table
 Source: Author

6.6 Managerial Implications of the Contingency Table

Moral hazard can be caused by either a single factor or a set of factors. The action taken by the faculty – due to the presence of high or low intensity of the causal factor – is translated into its tendency towards moral hazard. Humans are by default utility maximisers and will tend to act opportunistically whenever they get a chance. Humans are, by default, utility maximisers, and will tend to act opportunistically whenever they get a chance. It is, thus, crucial to remove or thin out the opportunities that will incentivise employees to engage in aberrant behaviour. Uprooting the problem completely will be close to impossible, but the intensity or degree of the problem can be reduced through addressing its causes. Employees' effectiveness can be easily enhanced by altering the determinants of moral hazard, rather than by changing the employees' choices of activity. This can be referred to as "control at source". The contingency table can be of use to managers in a variety of situations, to help reduce the problem of moral hazard by identification of the cause(s), and proper use of incentives.

6.7 Summary and Critical Reflection on Cross-Case Analysis

There can be several factors which could trigger employee tendency to engage in self-interested behaviour to the detriment of the organization. This disposition can be linked to the personal traits of the individual, or it might be referred to some outside stimuli. The causes can be many, but there is a single issue, which is the reduction of the organization's efficiency due to private activities.

Only those determinants that have emerged as the most important factors; perceived by the interviewees, are included in this analysis and talked about at length. Granting to the interviewees, the primary reasons for the deviant behaviour of faculty members, with regard to their duties and responsibilities as teachers and as researchers include: asymmetric information, job security and pay security, the incentive problem, lack of accountability mechanisms, and the missing link between reward and performance. Traces of these determinants are also clearly present in the literature, thus, making them more reliable.

Multitasking jobs; by nature of their complexity, are problematic. Roberts (2004) considers the task structure as being one of the main problems in incentive contracts. The faculty recognises that it holds an edge over its principal by the virtue of information asymmetry, and it will attempt to manipulate this fact when it has a chance to behave tactfully. Case A considers the problem of information asymmetry as a universal phenomenon, and a striking characteristic of knowledge workers, who are usually professionals and specialised people. The problem has been identified by several other

researchers, which include [Drucker \(1998\)](#), [Giauque et al. \(2010\)](#), and [Denisi and Pritchard \(2006\)](#).

Managers can monitor the physical presence of the faculty members in the classrooms and in their offices, but they do not have methods to reliably evaluate the effectiveness of its teaching. Case B concurs with Case A and calls it a problem of information irregularity, which signifies that the faculty has a lion's share in the information; making it more knowledgeable and posing difficulty for the management to challenge its acts. Case C also relates this problem to the monitoring difficulty faced by the management. Case E further extends this problem to state that due to information asymmetry, the management is left with no option, but to extend greater autonomy to these professionals in rendering their day-to-day decisions. Autonomy contradicts standardisation. When work is not standardised or structured, monitoring and assessment become unmanageable for the management. Cases D and F are silent on this issue.

The second factor that adversely affects the faculty's performance is job security. Case A stresses upon the weak implementation of policies, which makes the faculty members more courageous in performing illicit acts because they are well aware that there will be no negative consequences if they have performance lapses. Case B places the responsibility on the system for reinforcing the problem. Upon attaining permanent status, a faculty member becomes immune to harsh sanctions, and virtually obtaining a license to act upon personal whims, rather than a sense of responsibility. Cases C and E share the arguments put forward by Case B.

Referring to the issue of pay security, one of the factors that increase the faculty's tendency towards shirking behaviour, is the insulation of pay from the risk of variation. The faculty receives a fixed pay under the BPS system, where automatic increments are added to the base pay contingent upon the time spent in the service. This arrangement applies to the majority of the faculty, i.e., more than 90%, in the region of KPK province. The parallel pay system (TTS), has curbed this problem to some extent, as the faculty pay is exposed to risk, but only of a small degree. The respondents in Case B have also mentioned inequity in the payment system, but this is in the context of the security of pay from fluctuation. This means that the faculty members do not have to worry about their inefficient performance; making them irresponsible.

A strange fact was reported in almost all the cases, except Case C, which is the absence of job descriptions for faculty members. The faculty does not know the entire range of duties and responsibilities that it has to perform, with respect to its job. The TOR is a written document, which defines the main responsibilities, duties, and tasks of an employee. The faculty members, thus, do not know the management's expectations a priori because this crucial guiding document is missing in the higher education institutions. The faculty is simply driven by its teacher's instincts in performing the

job. The TOR is an important document for the accountability of the employees. It provides guidelines for matching the preferred performance with the actual performance, hence, revealing the gap in the performance.

In multitasking jobs, the problem of providing the correct incentives is omnipresent. Incentives do not always work wonders, and this fact has also been pointed out in the literature; even worse – instead of producing the desired effect and the expected results – incentives can also produce the exact opposite effects. It is not practical to reward teachers based only on their performance evaluations, due to the lack of consensus regarding the goals of education, the complexity of the tasks undertaken by the teachers, the problems of measuring the impact of teaching on students' learning, the chances of demoralisation, and the possible breakdown in cooperation (Ballou, 2001). Lepper et al. (1973), Frey and Jegen (2001), and Prendergast (1999) argue that intrinsic motivation can be crowded out by extrinsic incentives and can thus have negative consequences on the employees' behaviour and performance (Schaubroeck et al., 2008). The incentive system, on average, makes up around 40% of the total operational cost of an organization. If incentives fail to get the desired consequences, it is a considerable financial liability for the organizational budget.

The literature is full of expert opinions that the power of incentives should be kept low in situations, where the employees' output cannot be readily or directly measured (Roberts, 2010). High-powered incentives are often suggested to be suitable for mechanistic jobs, where the work output is easily observable and readily measured. Mostly, production workers and sales personnel are covered by such schemes. The problem of multitasking refers to the challenge of designing incentives to motivate the appropriate effort across multiple tasks; when the desired outcome of some of the tasks is more difficult to measure than that of others (Holmstrom and Milgrom, 1991). According to Dewatripont et al. (2000), distribution of output can be altered through effort allocation.

Considering the issue of accountability, Case C takes a detour from the other cases and highlights this problem in the context of the political nature of appointments at the higher educational level. Wrongful inductions are not only made at the top level, but also at the lower levels of academic and non-academic staff. The interviewee basically refers to the problem of accountability from a broader perspective. When accountability is missing at the top level, one can hardly expect its presence at the lower levels. Schacter and Thum (2004) stress upon institutional reforms for uplifting higher education in the country, by building accountability-based and performance-based evaluations and incentives, which are fair and transparent.

Cases A, B, D, and E all subtly refer to the same problems, such as policies for punishment are not exercised. The permanent faculty members are rarely truly sanctioned, due to the onerous and challenging bureaucratic process, and the chances of litigation faced by the management. Moreover, in a collectivist culture, implementing

harsh punitive policies based on an individual's professional performance is not welcomed by the multitude. At best, the management can only prompt the faculty members to avoid any purportedly wrongful act, by issuing them a verbal or written warning. Linking payment to performance enhances the expectation level of an employee, as it reinforces the rule of equity and improves the psychological contract between the employee and the governing body.

6.8 Concluding the Problem of Moral Hazard in Educators

The changing trends in the higher education show a paradigm shift over the past decade. The HEC has set higher tier goals and objectives for the universities and HEIs. The emphasis these days is not upon awarding degrees to the pupils, but upon making them better people who can contribute positively to the community, in terms of innovation and research aimed at community betterment. (Jennings and Greenberg, 2009, p. 492) state that:

Socially and emotionally competent teachers set the tone of the classroom by developing supportive and encouraging relationships with their students, designing lessons that build on student strengths and abilities, establishing and implementing behavioural guidelines in ways that promote intrinsic motivation, coaching students through conflict situations, encouraging cooperation among students, and acting as a role model for respectful and appropriate communication and exhibitions of prosocial behaviour.

Academia needs to be cognisant of the problems of the community, and should work actively to surmount them. Change has to be introduced from inside. Importing and implementing models from the developed countries will not relieve the society from the perils caused by the weak systems prevalent in the society. Introducing change is not an easy undertaking, particularly in this region of the globe, where people's views have a sure level of inertia. The collectivist culture also poses certain impediments for the introduction of change which is against its norms.

With the shifting tendencies in the higher education sector, it is imperative that faculty members are ready to cope with this change. The faculty must be motivated to be actively involved in knowledge transfer and knowledge creation, which require the right incentives. The existing pay structure shows that both the TTS and BPS systems have a limited effect in terms of motivating the faculty to introduce its best effort in work performances. The salary structure does not protect the interest of faculty members, and has nothing to do with their performance levels. Holding in view the motivational theories of equity and expectancy, the staff needs some alteration in the existing pay structure to include incentives for hardworking faculty members. Any change needs to be designed meticulously, taking into consideration the involvement of all stakeholders,

and caution needs to be exercised to defend the values of the organization and the deeper goals of higher education sector. Overhauling the higher education system is imperative, under the existing conditions of academic quality in the country at large and the KPK region in particular. The graduates produced by these universities are unable to compete in the national and global markets, which is a sign of the ailing health of the higher education in this part of the world.

The causes of the degenerating quality of higher instruction in Pakistan can be many. Some of these reasons can be directly ascribed to the faculty, who shoulder the responsibility for imparting quality education; however, it would not be fair to fix the entire blame on the faculty, as other players are also involved. There are flaws in the higher education system that need to be rectified. Some of these have a direct while others have an indirect effect on the performance of educators. The main reasons for the poor quality of education that have surfaced from the analysis have been discussed in the preceding paragraphs. The determinants of moral hazard can be attributed to the individual, organizational factors, and some factors can even be attributed to the societal culture.

6.8.1 Conclusion

This chapter has presented research outcomes in the form of two main themes, such as the types of moral hazard prevalent in the faculty, along with the main determinants of this problem, which were generated from cross-case analysis of the qualitative data. This Chapter has answered one of the primary research questions as provided in Chapter 1 (Subsection 1.6). The outcomes suggest that a wide range of moral hazard is present in higher education faculty, which are mostly related to the activities of teaching and research, besides some other areas of its job. Most of the hazards, as well as the determinants that were identified from analysis of the empirical data have been witnessed in the extant literature; improving the validity of the study findings. However, some unique and interesting findings were also discovered, which show how the problem can change its form in a different contextual setting. This was also the aim of the study to explore and examine the problem of moral hazard in a non-western culture and then check out for similarities or differences in the results. The next chapter presents the process employed for analysis of the quantitative data.

Chapter 7

Quantitative Data Analysis Process

7.1 Introduction

This chapter presents the procedure used to reach the findings of the quantitative data and the logic for the use of each technique in the analysis. This includes an account of the data screening, reliability of the instrument, sample size adequacy, response rate, addressing the problem of common method bias, justification of the exploratory factor analysis and confirmatory factor analysis, an overview of addressing the validity issues of the measurement tool, and finally, the methods adopted to test the hypotheses of this study.

7.2 Data Screening

Data screening is the first step in analysing and testing the quantitative data. According to [Odom and Henson \(2002\)](#), a statistical analysis must begin with a careful inspection of the research data, as failure to inspect the data may result in erroneous findings and conclusions. Data screening provides the researcher with an opportunity to identify potential problems in the data, by identifying wrong data entries, missing values in the data set, possible outliers, and certain other features of the data. Thus, prior to any analysis that was undertaken, all of the variables were checked to verify the accuracy of the data entry in SPSS (Statistical Package for the Social Sciences). This includes examining missing data and calculating and analysing the means and standard deviations of the given set of data.

7.3 Checking the Reliability

Determining the reliability of a measurement scale is of premier importance in any hypothetico-deductive method (Nunnally and Bernstein, 1978). The reliability of a scale refers to the extent to which a measure can produce similar results with repeated use. There might be different sources of errors, which can lead to variability in the data collected using the same scale. This is referred to as “measurement error” – which includes “systematic error” and “random error”. Systematic error is the inherent tendency of variability in the data caused by a random factor and can never be completely eliminated. Random error refers to a scaling method to favour particular outcome. Thus, a scale is considered as reliable if the error of measurement is small and the level of reliability exceeds a particular threshold.

The most commonly used method to determine the reliability of a scale is the Cronbach’s Alpha Coefficient (Easterby-Smith.M and Lowe.A, 1991), especially in all psychological and social science research that uses multiple-item attitudinal scales (Cortina, 1993; Streiner, 2003). Cronbach’s Alpha Coefficient will be used to examine the reliability of the instruments, which measure the constructs employed in this study, using the SPSS software package. According to Nunnally and Bernstein (1994), a Cronbach alpha value of .70 or higher is generally accepted, and this rule was applied to the different constructs of the model. The model was slightly modified using confirmatory factor analysis. According to Guadagnoli and Velicer (1988), if a factor has 4 or more loadings greater than .60, it is reliable regardless of the sample size, and if a factor has 10 or more loadings greater than .40, it is reliable if the sample size is larger than 150.

7.4 Sample Size Adequacy

The concept and estimate of an ideal sample size differ with the type of statistical analysis that is being adopted (Field, 2009). Therefore, it is important that the sample size adopted for the study should satisfy the particular aims of that type of analysis. To conduct a factor analysis, some basic guidelines need to be followed so as to determine the adequacy of the sample size. According to Comrey and Lee (1992), 300 plus respondents are considered as a safe sample size. The sample size of the present study was 311, which therefore adheres to the concept of (Comrey and Lee, 1992). However, the nature of the particular study at hand is the most important factor to be taken into consideration while deciding upon a particular sample size. Thus, the sample size is dependent upon the research question. For virtually all non-probability sampling techniques, there are no rigid rules for the sample size (Saunders, 2009).

7.5 Controlling for Common Method Bias Test

Empirically measuring the relationship between two or more constructs can be problematic, as the measures of one construct might correlate with the other. Reliance on a single source of data can cause methodological problems, among which is the common method bias (Campbell and Fiske, 1959; Podsakoff and Organ, 1986). It is claimed that the use of a single source – usually involving self-reported measurements – inflates the level of correlation identified during the analysis (Williams and Brown, 1994; Lindell and Whitney, 2001). This is termed as “common method bias”. CMB can have detrimental effects on the empirical answers, leading to erroneous conclusions. One of the ways to control CMB is to collect measures of a given construct from different sources (Podsakoff et al., 2003). To reduce CMB in the data, some of the issues were addressed at the source (during the data collection process), whereas others were later tested through statistical techniques.

7.6 Conducting Factor Analysis

Exploratory factor analysis is used to extract relevant factors, with an aim of reducing the large number of items included in the questionnaire to some essential underlying factors. This makes the interpretation of the survey data more manageable, by clustering sets of items that explain similar latent variables. Exploratory factor analysis (EFA) is utilised to reduce data to a smaller set of variables and to explore the underlying theoretical structure of the given data set (Gorsuch.R., 1982). For the current study factorability of the constructs of disposition towards incentives, organizational justice perception, reward expectancy, and moral hazard tendency was conducted.

Confirmatory factor analysis is a verification technique of the set of observed variables, to assess their distinctiveness (Tabachnick and Fidell, 2007). As several variables in this study were conceptually related; therefore, a CFA is conducted to establish the uniqueness of these variables. CFA is conducted on the constructs of the conceptual framework. CFA is assessed from the goodness-of-fit indices, which commonly include: χ^2 , GFI, CFI, RMSEA, and SRMR (Tabachnick and Fidell, 2007).

To address the validity issues in a measurement scale, different types of validities will be examined, which include: face validity, content validity, and construct validity. Face validity is also known as “logical validity”, as the content of the measure should appear to reflect the construct being measured. Content validity refers to the degree to which the items are representative of the dimensions of the construct being measured (Hu et al., 2012). Content validity of the survey tool is checked prior to data collection. Russel (2000) stresses that if an instrument has appropriate content for measuring a complex construct, it is said to have construct validity. Construct validity is the most important,

which refers to the extent to which a construct is accepted as meaningful, and the extent to which measurement tools quantify it effectively (Kline, 2013). Construct validity is further branched off into the convergent validity and discriminant validity (Hair et al., 2006).

The factor extraction was conducted on 70 items, with an oblique rotation using Direct Oblimin. The rotation was used to maximise the load of an item on the four chosen factors; while simultaneously, minimising the load of a similar item on the other factors. This facilitated the interpretation of the variables used in the analysis. In social science or behavioural science research while measuring abstract constructs, oblique rotation is a better and more realistic premise, as it measures the correlation of the factors instead of putting them into watertight compartments. According to Tabachnick and Fidell (2007), if correlations exceed .32, then there is 10% (or more) overlap in variance among factors, enough variance to warrant oblique rotation unless there are compelling reasons for orthogonal rotation. Moreover, the reason for choosing Direct Oblimin – which is a type of oblique rotation – was that the variables analysed could be placed under a single generic factor (e.g., analysing cognitive ability variables); in contrast with the orthogonal rotation, where the factors analysed are uncorrelated.

Direct Oblimin generated two matrices, which were rather useful for the analysis: the pattern matrix and the structure matrix. The pattern matrix shows the regression coefficients associated with the factors on each variable, which represent the unique contribution of each variable to a factor; whereas, the structure matrix shows the correlation between the factors and variables (Robins et al., 2009). The author considers the pattern matrix to be better than the structure matrix, as the former clearly expresses the simple structure achieved by oblique rotation. To suppress the items with small coefficients, the absolute value was set to .3, as with a sample of 100 this is considered as significant loading (Kline, 2002). According to Stevens (2002), for a sample size of 300, a loading of .298 is considered to have significant meaning (Field, 2009). However, the actual significance of the loading can be gauged by squaring the loading, to give an estimate of the amount of variance in a factor accounted by a variable (like R^2). In this regard, Stevens (2002) indicates an absolute value of .4, which accounts for 16% of the variation in a variable, although some people prefer to keep it at .3 (Field, 2009).

7.7 Multiple Regression Analysis

Empirical data collected through the attitudinal survey are analysed for two main purposes: to examine the relationships between the constructs of the theoretical framework and to test the hypotheses underlying this research. The primary aim of this study was to demonstrate whether a significant link exists between the predictor variables and the outcome variable. This was important for analysing the underlying

causal mechanism, for understanding the problem of moral hazard. Multiple regression will be applied for modelling and analysing a variety of relationships between a dependent variable and one or more independent variables.

Three main strategies of multiple regression can be adopted to test causal relationships between a given set of variables, which include: standard multiple regression, sequential or hierarchical multiple regression, and statistical or stepwise multiple regression. To test different statistical models for this study, a hierarchical regression analysis has been adopted. Hierarchical regression allows the researcher to control the development of the regression process. Moreover, it is also the demand of the set of hypotheses generated, to test different relationships. Nonetheless, for running a regression analysis, the data must qualify certain assumptions, such as the sample should be adequate, data should be normally distributed, and data should not have issues of multicollinearity.

Moreover, the causal models developed for the study have been tested in two ways; using the traditional approach, as well as the contemporary approach. The mediation and moderation models have been tested using the traditional approach of [Baron and Kenny \(1986\)](#), [Aiken and West \(1991\)](#), and the technique of Structural Equation Modelling. The same models were tested using the SPSS PROCESS macro, which was developed by [Hayes \(2013\)](#). The purpose was to introduce the contemporary approach to testing of both simple and complex models that involve mediation and moderation, or even a combination of the two.

7.8 Testing the Data for Normality

It is important to examine the linear relationship between the dependent variable and the independent variable, before conducting a linear regression. Linearity was checked visually, by generating histograms, normal Q-Q plots, and box plots. To confirm the visual representation, statistical tests for normality were also conducted, such as the skewness and kurtosis test.

7.8.1 The Box Plots

The box plot is a useful method of visual inspection of the data to check its normality. In a box plot, the size of the whiskers determines whether the data is normally distributed or not. The box plot divides the data into quartiles, and the length of the whiskers will determine if there is any issue in the data. If the length of the whiskers differs greatly, this indicates a problem in the data, which implies that the data is skewed towards one side.

Histograms, normal Q-Q plots, and box plots do confirm data normality, but these do not offer a complete picture of the data. Statistical tests reinforce the visual representation

of the data regarding its normality. The most common problem in the distribution of the data is the problem of skewness and kurtosis.

7.8.2 Testing Data for Skewness and Kurtosis

The conventional way of testing the data for skewness and kurtosis is the division rule. After deriving the actual values for skewness and kurtosis, these are divided by their respective standard errors. If the values obtained fall within the range of -2 and +2, this means that the data has no problem of skewness or kurtosis. On the contrary, if the value obtained from this division exceeds 2 then there are normality issues with the data. Some experts suggest that the value should fall between the range of -1.96 to +1.96, for the data to be declared safe for regression. Multivariate non-normality exists when an absolute value of skewness index averages greater than 3 and the absolute value of kurtosis index averages greater than 5 (Kline, 2005). Nevertheless, it depends upon the personal judgement of the researcher if the data slightly deviate from the stated rule.

7.9 Checking for Multicollinearity

Multicollinearity represents the correlations among three or more predictor variables (Hair et al., 2006). Multicollinearity does not affect the fitted coefficients of the regression model, but it generally biases the standard errors of those fitted coefficients by inflating them. It also inflates the size of the confidence intervals that are built for the coefficients and biases the t-statistics, thus creating problems for the regression model. To test for multicollinearity, the Variance Inflation Factor (VIF) was computed. Studies have suggested that a VIF value of 10 or more is a sign of serious multicollinearity issue; however, VIF up to the threshold of 5 is within the acceptable limit.

7.10 R^2 and Adjusted R^2

R^2 value explains the amount of variance explained by the independent variable(s) in the dependent variable. The p-value or the F-ratio can determine the significance of the R^2 . A p-value of .05 or less shows that the R^2 is significant. On the other hand, adjusted R^2 is an estimate of the R^2 from the population, rather than the sample. For an adjusted R^2 to be significant the p-value has to be .05 or less. Both the R^2 and the adjusted R^2 has values very close to each other (Tabachnick and Fidell, 2007; Cohen.J and Aiken.L, 2003).

7.11 Interpreting Regression Coefficients (B_i and β_i)

The regression coefficient B_i is significant if the p -value is less than .05. Therefore, the smaller the p_i – value, the greater the contribution of X_i towards a regression model.

7.12 Statistical Modelling for Regression Analysis

Human conduct is too perplexed to be reduced to some mathematical model, and no model would be complete and accurate (MacCallum, 2003). Despite these limitations, three causal models, namely the mediation, moderation, and moderated-mediation models, were developed to test the set of hypotheses, as provided in Chapter 2 (Section 2.10), and Table 8.17. The analysis will commence with the mediation model, extend with the moderation model, and terminate with the moderated-mediation model.

7.12.1 Mediation Analysis

Answering the “How” questions analytically, are approached through mediation analysis (Baron and Kenny, 1986; MacKinnon, 2008; Judd and Kenny, 1981). Mediators explain how external stimuli, take an internal psychological significance (Baron and Kenny, 1986). Mediation implies that in a given situation, the effect of an independent variable on the dependent variable can best be explained by a third variable – the mediator. In other words, instead of X (the exogenous variable) causing Y directly, X effects the mediator M (the endogenous variable), and M in turn produces an effect on the Y (endogenous variable). The causal relationship between X and Y in this case is said to be indirect.

7.12.1.1 Conceptual and Statistical Modelling of Mediation

The mediation analysis in this study is tested in two ways, using: Baron and Kenny (1986) approach, and Hayes (2013) approach. Both these approaches use regression analysis; nevertheless, there is a little difference in the output, as can be determined from Table 8.7, and 8.8. Statistical modelling for the two approaches slightly differ. Equations (7.1), (7.2), and (7.3) show statistical modelling for Baron and Kenny (1986) approach; whereas, equations (7.4) and (7.5) depict modelling for Hayes (2013) approach. The conceptual and statistical modelling of the mediation model is provided in Figure 7.1, which shows the positioning of the variables in the proposed model, where DTI , MHT , and RE , are the predictor, criterion, and mediating variables respectively. The error terms for M and Y are also depicted in the model.

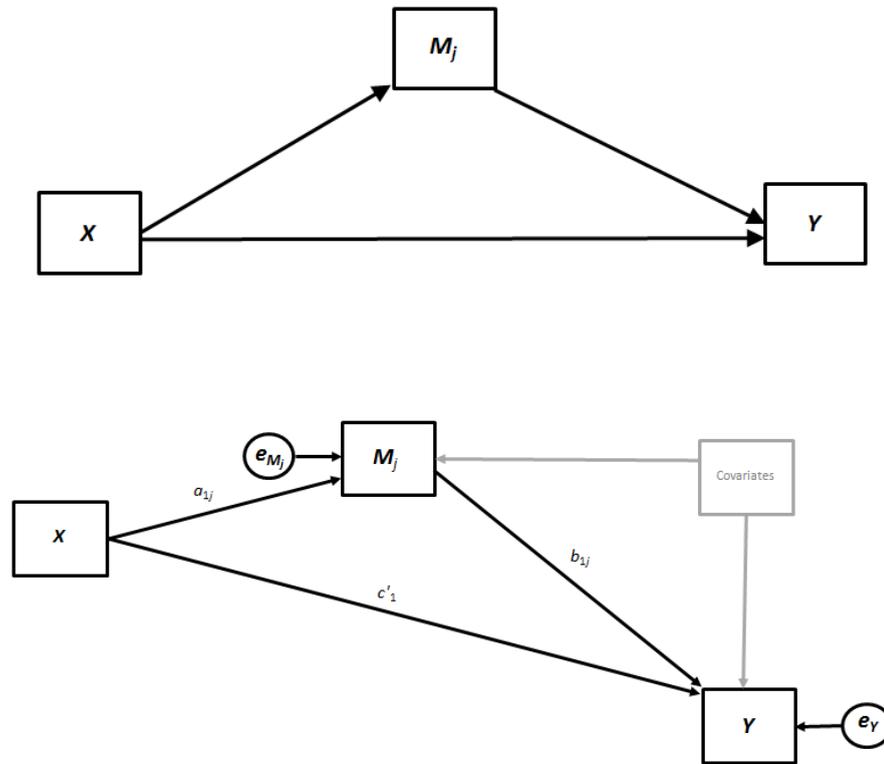


Figure 7.1: Conceptual and Statistical Model for Mediation
Source: (Hayes, 2013)

7.12.1.2 Steps for Testing Mediation as Suggested by Baron and Kenny (1986)

The basic approach for finding out the mediation effect was taken from the approach of (Baron and Kenny, 1986). Moderators, according to these authors, specify “when” certain effects occur, and mediators, on the other hand, discuss “how” and “why” such effects occur. These authors suggest that a mediation model should not be tested, unless all the variables stand at a zero order significance relationship to each other. Hierarchical linear regression and the Sobel test are normally conducted to test mediation. Mediation is defined through the succeeding steps:

- (1) To confirm a significant relationship between the predictor variable X and the outcome variable Y .
- (2) To confirm a significant relationship between the predictor variable X and the mediator M .
- (3) To confirm a significant relationship between the mediator M and the outcome variable Y , using M in the presence of the X , ($M|X \rightarrow Y$).
- (4) To confirm either the insignificance or the reduction in the effect of the direct relationship between X and Y in the presence of M . This step is used to assess whether the mediation is pure or quasi.

Steps 3 and 4 can be confirmed using the same regression model. The regression models are statistically expressed as equations (7.1), (7.2), and (7.3).

$$Y = \alpha_1 + \beta X + \epsilon_Y \quad (7.1)$$

$$M = \alpha_2 + \beta X + \epsilon_M \quad (7.2)$$

$$Y = \alpha_3 + \beta X + \beta M + \epsilon_Y \quad (7.3)$$

7.12.1.3 Interpreting the Regression Output for Mediation Model – (Baron and Kenny, 1986)

In these equations, α_1 , α_2 and α_3 , are the regression intercepts; whereas, ϵ_M and ϵ_Y are the error terms of regression in the estimation of M and Y , respectively. βX , and βM

are the regression coefficients generated by these models. The coefficients of the model are treated as estimates of the presumed causal influences of each variable in the system on others. The analytical aim is to estimate these coefficients, dovetail them, and come up with a valid interpretation.

7.12.1.4 Estimation of the Mediation Effect in PROCESS

Mediation can also be tested using SPSS PROCESS macro developed by (Hayes, 2013). The model has been tested, using the basic conceptual framework of *model 4*, as provided by (Hayes, 2012, 2013), which specifically checks for mediation traces. The conceptual and statistical models are provided in Figure 7.1.

7.12.1.5 Customised PROCESS Command Structure

PROCESS vars =DTI RE MHT Reputation Orientation Career Gender/y = MHT/x = DTI/m = RE/model = 4/total = 1/effsize = 1/boot = 10000/normal = 1.

By running PROCESS on the customised command, will generate the following results, which are deterministic of any mediation effect present in the proposed relationship.

- Estimates the total and direct effect of *DTI* on *MHT*, as well as the indirect effect of *DTI* on *MHT* through *RE*.
- Generates a bias-corrected 95% bootstrap confidence interval for the indirect effect using 10,000 bootstrap samples.

Appending the *total = 1* produces output for the total effect, and *normal = 1* generates the normal theory-based Sobel test for the indirect effects in the mediation model.

Mediation using PROCESS is statistically expressed as equations (7.4) and (7.5):

$$M = \alpha_1 + aX + \epsilon_M \quad (7.4)$$

$$Y = \alpha_2 + cX + bM + \epsilon_Y \quad (7.5)$$

7.12.1.6 Interpreting the Regression Output for Mediation Model – (Hayes, 2013)

For the two outcome variables, two linear models are required for testing; with one model used for each resultant. Where, α_1 and α_2 , are regression intercepts, ϵ_M and ϵ_Y are the error terms in the estimation of M and Y , respectively. a , b , and, c' are the regression coefficients generated by these models. The output generated by SPSS PROCESS is provided in Table 8.8.

A series of regression models are fitted and appear as three main outcomes in Table 8.8, which include: outcome for M regressed on X , outcome for Y regressed on X and M , and outcome of M regressed on X . Moreover, the total, direct effects, and indirect effects of X on Y are given in a separate table. Also generated are the ratio of R^2 mediation effect, and Normal Theory Test for indirect effect. Besides, other results are also generated and displayed in the PROCESS mediation matrix, as can be observed from Table 8.8 in Chapter 8.

7.12.1.7 Sobel Testing for Indirect Effect

To see whether RE mediates the relationship between DTI and MHT , the Sobel Test is conducted. Sobel (1982) provides an approximate test for the indirect effect of the independent variable on the dependent variable, through the mediator (Baron and Kenny, 1986). The Sobel test is expressed as equation (7.6), which is function of a and b and their standard errors.

$$S\epsilon_{ab} = \sqrt{a^2 S\epsilon_b^2 + b^2 S\epsilon_a^2 + S\epsilon_a^2 S\epsilon_b^2} \quad (7.6)$$

7.12.2 Moderation Analysis

Moderation answers the questions of “when” (Hayes, 2012). The most conventional way of conducting moderation is using the approach of (Aiken and West, 1991). Moderation plays a central part in the majority of social science theories; providing the conditional effect, which is always present in any organizational context and from which a researcher can never escape. Therefore, adopting moderation models become more of a prerequisite for any social and behavioural science study, rather than the choice of a researcher. Figure 7.2 shows the conceptual and statistical modelling for the proposed moderation model, where X is the predictor, Y is the criterion variable, and M is the moderator variable in the given model.

7.12.2.1 Conceptual and Statistical Modelling of Moderation

Moderation analysis is tested in two ways using: Aiken and West (1991) approach, and Hayes (2013) approach. Both these approaches use regression analysis; however, there is a slight difference in the output, as can be seen in Table 8.11, and 8.12. Statistical modelling for the two approaches also slightly differ. Equations (7.8), (7.9), and (7.10) demonstrate the traditional approach of Aiken and West (1991) for testing moderation; whereas, equations (7.11) and (7.12) depict modelling for Hayes (2013) approach. Moderation is also known as *Statistical Interaction*. Moderation shows the conditions under which a given predictor is related to an outcome. Moderation implies an interaction effect, where introducing a moderating variable tends to change the direction or magnitude of the relationship between two variables. This is to ascertain, whether or not the effect of the independent variable on the dependent variable differs across the levels of the moderator variable. If this is the case, then the independent variable interacts with the moderator variable, producing a conditional effect of X on Y . Hierarchical linear regression is applied to evaluate the effects of the moderating variable. The litmus test for moderation is the statistical significance of the interaction term.

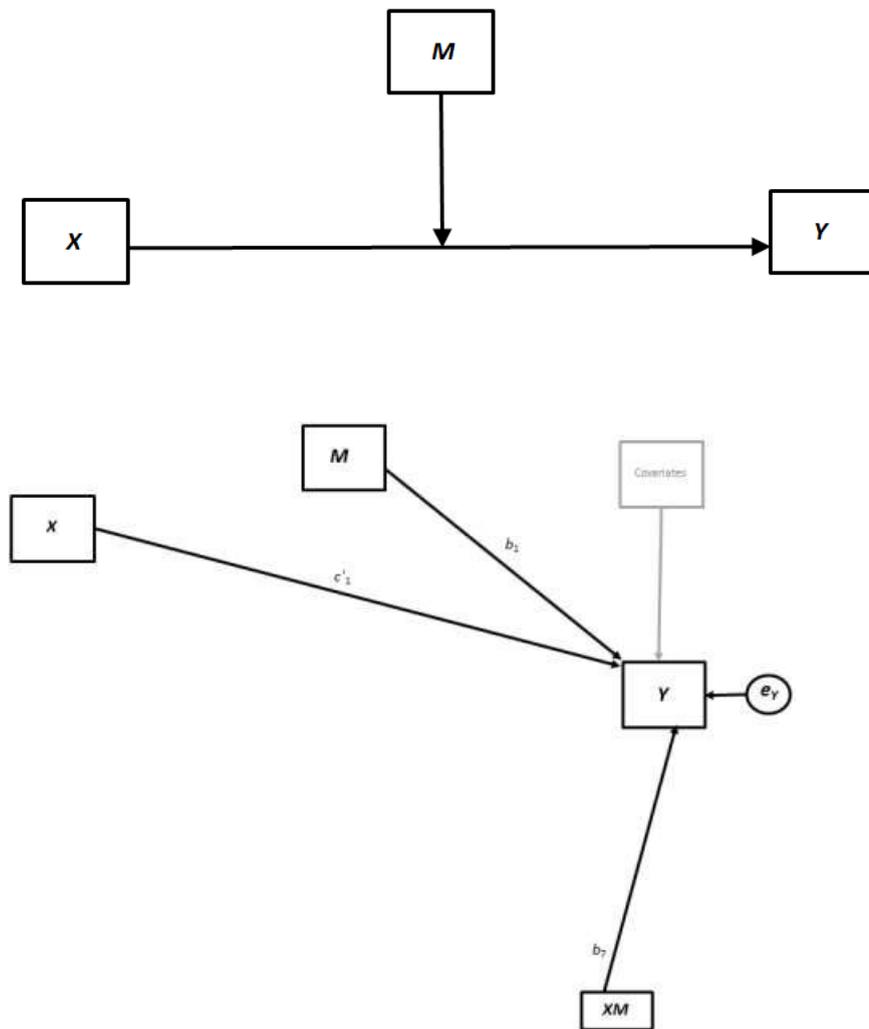


Figure 7.2: Conceptual and Statistical Model for Moderation
Source: (Hayes, 2013)

The simple moderation model used in the study is statistically expressed as equations (7.8), (7.9), and (7.10):

$$Y = \alpha_1 + b_1X + \epsilon Y \quad (7.7)$$

$$Y = \alpha_2 + b_1X + b_2M + \epsilon Y \quad (7.8)$$

$$Y = \alpha_3 + b_1X + b_2M + b_3XM + \epsilon Y \quad (7.9)$$

7.12.2.2 Steps in Testing Moderation

To test the moderation model, the first step is to mean centre the predictor variable and the moderator variable to avoid any possible multicollinearity issues while creating the interaction term. Second, the interaction term is created as a new variable, by the combination of the mean centred predictors used in the study. Next, the hierarchical linear regression is conducted, using three regression models as provided in equations (7.8), (7.9), and (7.10).

(Park and Blenkinsopp, 2011) propose that, “If $b_2 \neq 0$, but $b_3 = 0$, M is not a moderator, but simply another IV. If $b_2 = 0$, but $b_3 \neq 0$, then M is a pure moderator. If $b_2 \neq 0$ and $b_3 \neq 0$, then M is a quasi-moderator.”

7.12.2.3 Interpreting the Regression Output for Moderation Model

In testing for moderation, the hypothesis is not just to confirm X 's effect on Y , contingent on M , but also to determine whether b_3 deviates too far from zero or not. If testing for b_3 shows that it is statistically different from zero, then moderation is confirmed. The interpretation of the estimates of b_1 , and b_3 , hold greater relevance for the moderation model. α_1 , α_2 , and α_3 are the intercepts for the three regression models, as given in equations (7.8), (7.9), and (7.10).

7.12.2.4 Estimation of the Moderation Model Using PROCESS

Moderation model can also be analysed using the SPSS PROCESS, by selecting the specific code for the given model, which in this case is model 1.

7.12.2.5 Customised PROCESS command structure

PROCESS vars= DTI OJP RE Reputation Orientation Career Gender/y = RE/x = DTI/m = OJP/model = 1/center = 1/plot = 1/boot = 10000/seed = 34421.

- Estimates a simple moderation model with the effect of *DTI* on *RE* moderated by *OJP*.
- *DTI* and *OJP* are mean centred prior to the analysis.
- Generates the conditional effects for “simple slopes” of *DTI* on *RE* at values of *OJP* equal to mean, 1 S.D above and below the mean.
- Produces a table of the estimated values of *RE* for various values of *OJP*.
- Conditional effects are produced at a 95% bias corrected bootstrap confidence.

A random seed number of 34421 was also appended to the model which produces a BCI based on the same set of bootstrap samples. SPSS PROCESS executes all these functions automatically by applying a simple code as specified by (Hayes, 2013).

The simple moderation model used in this study is statistically expressed as equation (7.10):

$$Y = \alpha_1 + b_1X + b_2M + b_3XM + \epsilon_Y \quad (7.10)$$

XM in the equation (7.10) is a variable that is created by the interaction of X and M , where X is the independent variable, and M is the moderator variable. The modelling depicts X 's effects on Y , are conditioned by M , as can be seen from equation (7.11).

$$\theta_{X \rightarrow Y} = b_1 + b_3M \quad (7.11)$$

7.12.2.6 Interpreting the Regression Output for Moderation Model – (Hayes, 2013)

α_1 is the intercept for the regression model, b_1 and b_2 are the regression coefficients for the variables X and M , respectively; whereas, b_3 is the coefficient for the interaction term of XW . ϵ_Y is the error term in the estimation Y , as given in equation (7.10).

$\theta_{X \rightarrow Y}$, shows the conditional effect of X on Y . Where, $\theta_X \rightarrow Y = b_1 + b_3M$, shows the conditional effect of X 's effect on Y through M .

7.12.3 Structural Equation Modelling

One limitation of analysing mediation and moderation separately adopts a piecemeal approach, which raises questions about the overall model fit when the paths are estimated simultaneously (Grant, 2013). To test the entire moderated-mediation model, the Structural Equation Modelling (SEM) technique was used. Structural Equation Modelling (SEM) is an extension of the general linear model (GLM), which enables a researcher to test a set of regression equations simultaneously. In SEM, the model fit is evaluated in two stages: the validation of the measurement model, and the validation of the structural model (Henriksen and Pedersen, 2007). The authors stress that one way to establish both the measurement validity and the structural validity of the model is to test for the goodness of fit. The goodness fit indices that need to be reported include: Chi square, degrees of freedom, one absolute fit index (e.g. goodness of fit index (GFI)), one incremental fit index (e.g. normed fit index (NFI)), and one badness of fit index (e.g. root mean square error of approximation (RMSEA)) (Hair et al., 2006). For the *Structural Equation Model (SEM)*, it has been a standard practice to evaluate model fit indices; using the rule of thumb, cut-off criteria (e.g., CFI .95, RMSEA .06, SRMR .08) (Wu et al., 2009). The χ^2 test is used to determine the *Goodness of Fit* between the theoretical and experimental data or the expected values from a specific model. The use of χ^2 is analogous to the use of t statistics or F statistics of a distribution.

7.12.4 Moderated-Mediation Analysis or Conditional Process Analysis

As the research areas mature, the focus tends to shift away from the establishment of simple relationships between variables, towards a more intricate process of understanding the mechanisms by which an effect happens, and establishing the boundaries and contingencies of this event (Hayes, 2012). The Conditional process analysis is used, when the goal of a research is to understand the causal mechanism; by which one variable transmits its effect on another and testing hypothesis about such contingent effects (Hayes, 2013). Recently, methodologies have come up that focus on not only answering “how” or “when”, but combining them together to obtain a fuller picture of “what” is happening (Hayes, 2012). Such a combination can be depicted in either “moderated-mediation”, “mediated-moderation”, or “conditional process modelling” (Edwards and Lambert, 2007; Fairchild and MacKinnon, 2009; Muller et al., 2005; Preacher et al., 2007).

According to Hayes (2013), conditional process modelling or conditional process analysis is used, when one’s research goal is to understand and describe the conditional nature of the mechanism by which one variable transmits its effect on another variable. This includes the testing of the hypotheses about such conditional mechanisms. By combining the mediation and moderation models, the resulting integration is the conditional process model – this includes a fourth variable, the moderator to the mediation model.

7.12.4.1 Conceptual and Statistical Modelling for Moderated-Mediation

Moderated-Mediation analysis is conducted using the approach of Hayes (2013). The indirect effect of *DTI* on *MHT* through *RE* is modelled as moderated in the first stage by *OJP*. The direct effect of *DTI* on *MHT* is modelled as un-moderated, which can be seen in Figure 7.3. In this figure, *X*, *Y*, *W*, and *M* are the predictor, criterion, moderator, and mediator variables respectively, along with the error term for *M* and *Y*. Whereas, *XW* is the interaction term, which is a new variable formed by the interaction of the variables *X* and *W*. The covariates in the model refer to the control variables, tested through this model. The conditional process model contains a moderation process of the ($X \rightarrow M$), affected by *W*, combined with the mediation of ($X \rightarrow M \rightarrow Y$). The moderated-mediation model is expressed as statistical equations (7.12) and (7.13).

$$M = \alpha_1 + a_1X + a_2W + a_3XW + \epsilon_M \quad (7.12)$$

$$Y = \alpha_2 + cX + bM + \epsilon_Y \quad (7.13)$$

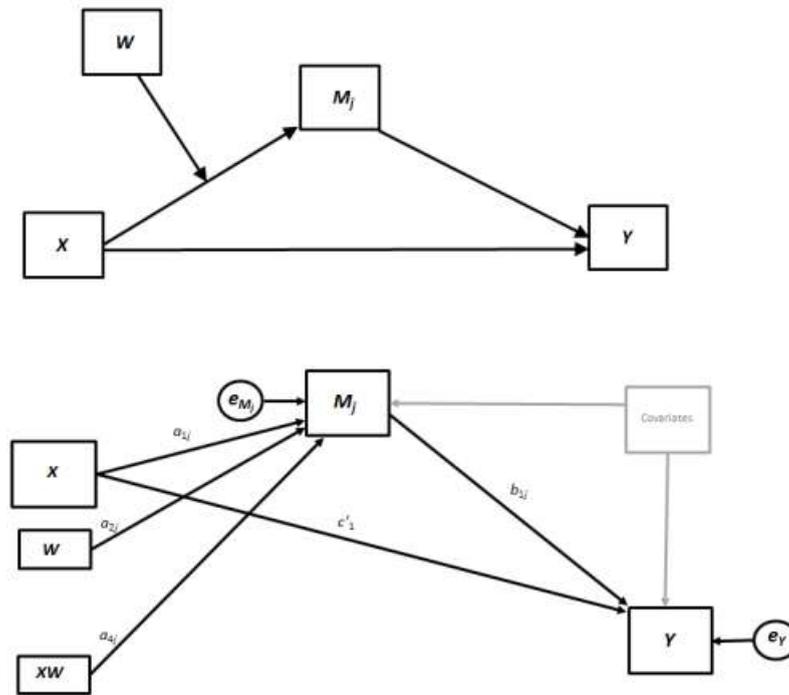


Figure 7.3: Conceptual and Statistical Model for Moderated-Mediation
 Source: (Hayes, 2013)

7.12.4.2 Estimation of the Moderated-Mediation Model Using PROCESS

The parameters given in these two equations are estimated using OLS regression, one for M and one for Y . In equation (7.12) M is the outcome variable, which is estimated from X , W and XW , such as, the antecedents, DTI , OJP and interaction term of $DTI * OJP$. In this equation, α_1 refers to the intercept or constant, which is the unstandardised regression coefficient. Whereas, a_1X is the unstandardised regression coefficient for DTI , a_2W , is the unstandardised regression coefficient for the moderator variable which is OJP , and a_3XW is the unstandardised coefficient of the interaction term, which has been mean centred prior to regression analysis. ϵ_M refers to the error term of M . Similarly, in equation (7.13), α_2 is the intercept for the regression of Y on X and M . c' , is the estimation of the direct effect of X on Y and b is the estimation of the path M to Y . ϵ_Y refers to the error term of Y . The two regression models are analysed simultaneously, using the suggested PROCESS code for model 7.

PROCESS vars = DTI RE MHT OJP Reputation Orientation Career Gender/y = MHT/x = DTI/m = RE/w = OJP/model = 7/center = 1/boot = 10000/seed = 34421.

- Estimates the direct effect of DTI on MHT , as well as the conditional indirect effects of DTI on MHT through RE operating in parallel. The effects of DTI on RE are modelled, as moderated by OJP .
- Generates 95% confidence intervals based on 10,000 bootstrap samples for the conditional indirect effect of DTI at the mean and 1 S.D above and below the mean of OJP .
- Seeds the random number generator for bootstrap sampling with the value 34421 produces a BCI based on the same set of bootstrap samples.

The specific values of the moderator, i.e., the OJP were mean centred metric because the centre option was triggered by adding `/center=1` to the already provided minimum code for *model 7*. The output also provided asymmetric bias corrected BCI for inference about the conditional indirect effects; using 10000 bias corrected bootstrap samples as requested with the boot option.

7.13 Conclusion

This chapter has discussed the process of how empirical data – collected through the survey – have been quantitatively analysed. Providing a step by step data analysis makes comprehension of the entire process easy for the reader. It further facilitates in understanding the results generated from different statistical procedures in Chapter 8,

which are inferential in nature; involving hypotheses testing. Moreover, the Chapter shows that using the SPSS PROCESS macro is a much simpler way of testing a wide variety of simple and complex models; generating results which are similar to those of the traditional approaches for testing similar models. The ensuing chapter will reveal the results of quantitative data.

Chapter 8

Results of Quantitative Data Analysis

8.1 Introduction

This chapter presents to the reader the results generated from empirical data collected through the survey. This includes how procedures provided in Chapter 7 were adopted to achieve the results, and how the results are interpreted. The results are disclosed following the step by step procedure provided in the previous chapter. The chapter terminates with inferential testing of the given set of hypotheses for this study.

8.2 Data Screening

According to [Hair et al. \(2006\)](#), if the pattern of missing data is random, and each variable has less than 10% of missing data, then no corrective action is required, or listwise deletion is applied. The data entered in SPSS had no missing values, as mentioned in Chapter 4 (Subsection 4.7.2.3), because the questionnaires, which were not properly filled out or had deficient information were not included in the analysis. Moreover, there were around 70 missing values in the variable of job status; therefore, it was totally excluded from the analysis. The frequencies and percentages of the demographics are provided in Table 8.1, whereas, the means and standard deviations for the variables are provided in Table 8.6.

8.3 Sample Size for the Study

Out of the 500 surveys that were distributed among the faculty, only 311 were in usable form; amounting to a 62% response rate, which is well above the the current

trend of response rate in the academic research of about 48.2% (Baruch, 1999; Baruch and Holtom, 2008). Sampling for the survey has already been discussed in Chapter 4 (Subsections 4.7.2.2 and 4.7.2.3).

8.4 Characteristics of the Sample

Descriptive analysis provides the reader a bird's eye view of the sample of 311 respondents, with regard to the demographic variables of age, gender, education, teaching experience, current position, and time spent in the current position. The frequencies and percentages pertaining to each of these variables are provided in Table 8.1. Data were analysed using the frequencies function of the SPSS software package. This includes missing data, measures of central tendency, variance, and skewness and kurtosis of the data set. Moreover, *Likert Scale* items, associated with each construct were grouped together through the SPSS(transform/compute variable/mean) function. As noted earlier, there were no missing values in the data set; therefore, no corrective action was taken. The means and standard deviations for the collective items measuring different constructs are provided in Table 8.4.

From Table 8.1 it can be assured that the bulk of the sample is made up of male academicians between the ages of 35 and 45, who possess Master's degrees, have work experience of around 5 to 10 years, and hold the position of lecturers. Most of the respondents have spent 1 to 5 years in their current position.

8.5 Controlling and Testing for Common Method Bias

As suggested by Podsakoff et al. (2003), biases were controlled at the response collection stage, as the questionnaire provided an alternate for the respondents to remain anonymous; if they cared to do so. The study was cross-sectional; therefore, anonymity did not pose any challenge to data collection. The respondents were further reassured that no data would be habituated to their disadvantage, and the sole aim of the survey is to infer the problem under investigation. This enthused the respondents to break an honest opinion to the survey items.

Furthermore, the constructs of the study were carefully operationalised. Any ambiguity in the questionnaire items was removed through pilot testing, as discussed in Chapter 4 (Subsection 4.7.4). Tourangeau et al. (2000) suggest that researchers should refrain from using "double-barrelled" items in the survey, as well as bipolar scales. Consequently, the questionnaire items were kept simple and specific, avoiding double barrelled items, words with multiple meanings, technical jargon, and bipolar scales.

Table 8.1: Demographic Characteristics with Frequencies and Percentages

Variable	Frequency	Percentage
Age		
25-35	111	35.69
35-45	117	37.62
45-55	73	23.47
55 and above	10	3.21
Gender		
Male	196	63.02
Female	115	36.97
Education		
Master	93	29.90
MS	82	26.37
MPhil	62	19.93
PhD	73	23.47
Post Doctorate	1	.32
Teaching Experience		
(1-5) years	163	52.41
(5-10) years	52	16.72
(10-15) years	22	7.07
(15 & above) years	74	23.79
Current Position		
Lecturer	180	57.87
Assistant Professor	82	26.36
Associate Professor	23	7.39
Professor	26	8.36
Time Spent in Current Position		
(1-5) years	177	56.91
(5-10) years	45	14.5
(10-15) years	33	10.6
(15 & above) years	56	18

Podsakoff et al. (2003) also suggest certain statistical remedies for controlling the problem of CMB, which includes Harman's single factor test and Confirmatory Factor Analysis. The authors state that Harman's single factor test is the simplest among the tests conducted for assessing the CMB. Both Harman's single factor test and CFA were conducted to check for CMB. The *Common Method Bias* test was executed in SPSS, using Harman's Single Factor method as prescribed by (Podsakoff and Organ, 1986) and (Spector, 2006). Instead of extracting four factors using the factor analysis extraction method, only one factor was extracted, to see the magnitude of a single factor accounting for the total variance. The total variance by using a single factor was 14.97%. As a rule of thumb, when a single factor explains less than 50% of the variance, then it is within the acceptable limit. Moreover, the confirmatory factor analysis indicated that the single-factor model did not fit the data well, $\chi^2(54, N=311)=538.183$, $p=.000$, GFI=.781, AGFI=.68, RMR=.09 and NFI=.533. The results suggest that the common method variance is not an issue.

8.6 Exploratory Factor Analysis

An exploratory factor analysis with oblique rotation was performed on the data set to determine the underlying factors. To ensure that each attribute loaded on one factor only, the items which had a loading of lower than .4 or cross-loading on more than a single factor were eliminated. An exploratory factor analysis was conducted on all the 70 items provided in appendices (3 A), (3 B), and (3 C) – it should be noted that the chronological succession of these items do not observe the actual sequence of the questionnaire. The EFA suggests that the items loaded on four factors.

Appendix (3 A) comprises of 16 items, which measure the construct of organizational justice perception. The construct of OJP includes items associated with both procedural justice and distributive justice. Provided in appendix the (3 B) are 27 items, measuring the construct of moral hazard tendency, in which items 1 to 18 measure the faculty's tendency towards moral hazard – particularly related to the different aspects of its job – mainly focusing on the tasks of teaching and research. Whereas, items 19 to 27 are generic measures to assess an employee tendency towards the organizational deviant behaviour (OCB). Appendix (3 C) contains items measuring two constructs – in the former part; items 1 to 10 are directed towards measuring reward expectancy, and in the latter part; items 1 to 17 measure employee disposition towards incentives. The variables that clustered on the same factor suggested that factor 1 represented *OJP*, factor 2 represented *DTI*, factor 3 represented *RE*, and 4 represented *MHT*. These factors accounted for 20.90%, 7.85%, 6.28%, and 5.76% of the variance respectively. Together, these factors explain 40.79% of the total variance. Only those items are retained, which has a value of .30 and above. Also items which bore a high loading on more than one factor were excluded from further analysis. Out of a total of 70 items,

only 36 satisfied these criteria. Thus, 14 items were retained for OJP, 13 items for DTI, 3 for RE, and 6 for MHT, as shown in the pattern matrix in Table [8.2](#).

Table 8.2: The Pattern Matrix

Items	1	2	4	4
OJP 1. The procedures used to evaluate my performance have been fair and objective.	.746	.440	.223	-.221
OJP 2. There are adequate procedures to get my performance rating reconsidered if necessary.	.719	.133	-.191	-.081
OJP 3. I understand the performance appraisal system being used in this organization.	.714	.275	.292	-.303
OJP 4. I will be demoted or removed from my position if I perform my job poorly.	.699	.194	.033	-.133
OJP 5. Promotions or unscheduled pay increases here usually depend on how well a person performs on his/her job.	.646	.322	.144	-.170
OJP 6. Performance appraisals do influence personnel actions taken in this organization.	.640	.221	.061	-.210
OJP 7. I am told promptly when there is a change in the policy or rules and regulations that affects me.	.560	.380	.162	-.193
OJP 8. I will get a cash award or unscheduled pay increase if I perform especially well.	.535	.271	.273	-.019
OJP 9. Under the present system, financial rewards are seldom related to employee performance.	.525	.103	.055	-.153
OJP 10. In the past, I have been aware of what standards have been used to evaluate my performance.	.455	.229	.364	-.100
OJP 11. If I were subject to an involuntary personnel action, I believe my agency would adequately inform me of my grievance and appeal rights.	.446	.201	.172	-.285
OJP 12. My performance rating presents a fair and accurate picture of my actual job performance.	.414	.252	.271	-.025
OJP 13. There is a tendency for supervisors here to give the same performance ratings regardless of how well people perform their jobs.	.389	.253	.200	-.348
OJP 14. In general, disciplinary actions taken in this organization are fair and justified.	.342	.101	.190	-.130

continued

Items	1	2	3	4
DTI 1. Financial rewards are important to motivate teachers to work harder.	.151	.791	.279	-.211
DPT 2. I take extra classes for extra remuneration.	.055	.617	.096	-.055
DTI 3. My effort choices are linked to how tasks are incentivised.	.189	.580	.251	-.044
DTI 4. I do not mind working on off days if I receive financial rewards.	.177	.578	.206	-.262
DTI 5. I like teaching because of financial incentives.	.222	.572	-.071	-.033
DTI 6. Incentive are important for research and publications.	.270	.548	.188	-.178
DTI 7. I like to publish because publications are important for my career advancement.	.377	.467	.254	-.165
DTI 8. My effort choices are contingent upon incentive power.	.205	.468	.256	-.145
DTI 9. I would like to do more of those tasks that are incentivised.	.300	.438	.156	-.211
DTI 10. I like teaching profession because of better rewards.	.019	.415	.222	-.166
DTI 11. I would leave teaching if I am offered better pay elsewhere.	.108	.403	.339	-.244
DTI 12. My publications have increased with the introduction of financial incentives.	.199	.330	.222	-.245
DTI 13. Monetary incentives are important in life.	.191	.302	.133	-.178
RE 1. My hard work will fetch me awards or recognition.	.112	.276	.838	-.099
RE 2. My hard work will fetch me pay raise.	.159	.213	.822	-.199
RE 3. My hard work will fetch me promotion.	.110	.189	.757	-.256
MHT 1. Including names in publications without contribution is an academic crime.	-.078	-.015	.266	-.951
MHT 2. Punctuality is strictly observed.	-.045	.187	.056	-.947
MHT 3. Can get absent without any genuine reason.	-.199	.139	.236	-.588
MHT 4. Supervising research students is as important as one's own research.	-.201	.202	.161	-.574
MHT 5. New teaching methodology is given preference over the traditional approach.	.160	.109	.146	-.472
MHT 6. Class lectures are well prepared.	-.120	.222	.195	-.429

*Extraction Method: Principal component analysis
*Rotation Method: Oblimin with Kaiser Normalisation

8.7 Confirmatory Factor Analysis

As the variables in this study might be conceptually related, a CFA was conducted in AMOS 21 to verify the distinctiveness of particular variables measuring the latent constructs of this study. CFA confirmed the distinctiveness of the four factors, such as organizational justice perception, disposition towards incentives, reward expectancy, and moral hazard tendency. After performing a confirmatory factor analysis on all items to search a structural equation model, which best fitted to the data and also to confirm the patterns, which emerged from the exploratory factor analysis, the “Goodness of Fit” indices have been provided in Table 8.3.

Table 8.3: Goodness of Fit Indices

Goodness-of-fit	Values	Desired values for goodness-of-fit
χ^2	84.170	$p > .05$
df	47	≤ 0
GFI	.9957	$\geq .90$
CFI	.983	$\geq .90$
RMSEA	.051	$\leq .08$
SRMR	.049	$\leq .08$

Only 20 items were retained – 7 items measuring OJP, 4 items for MHT, 6 items for DTI, and 3 items for RE. Thus, 7 items were deleted from OJP, 7 items for DTI, and 2 items from MHT, whereas, all the 3 items for RE were retained in the confirmatory factor analysis; amounting to a total of 20 items that were applied in further analysis. The value of Kaiser-Meyer-Olkin Measure – for sampling adequacy – is (.77), which is quite reasonable. The items highlighted in red in the pattern matrix in Table 8.2 were the final items, which were used in subsequent analysis, after verification through CFA. These items are also provided in the following paragraphs.

Organizational Justice Perception (OJP) – 7 items loaded onto this factor – namely, the perceptions associated with: (i) “The procedures used to evaluate my performance have been fair and objective”, (ii) “There are adequate procedures to get my performance rating reconsidered, if necessary”, (iii) “I understand the performance appraisal system being used in this organization”, (iv) “I will be demoted or removed from my position, if I perform my job poorly”, (v) “Promotions or unscheduled pay increases here usually depend on how well a person performs on his/her job”, (vi) “Performance appraisals do influence personnel actions taken in this organization”, and (vii) “I am told promptly, when there is a change in the policies, rules, or regulations that affects me”.

Disposition Towards Incentives (DTI) – 6 items loaded on this factor. These items reflect the employee inclination towards explicit rewards, which include: (i) “Financial

rewards are important to motivate teachers to work harder”, (ii) “I take extra classes for extra remuneration”, (iii) “My effort choices are linked to how tasks are incentivised”, (iv) “ I do not mind working on off days if I receive financial rewards”, (v) “I like teaching because of financial incentives”, and (vi) “Incentive are important for research and publications”.

Reward Expectancy (RE) – 3 items loaded onto this factor, indicating effort-rewards expectancy, which include: (i) “My hard work will fetch me awards or recognition”, (ii) “My hard work will fetch me pay raise”, and (iii) “My hard work will fetch me promotion”.

Moral Hazard Tendency (MHT) – 4 items loaded on to this factor. These items show an employee tendency towards deviant behaviour, which include: (i) “Including names in publications without contribution is an academic crime”, (ii) “Punctuality is strictly observed”, (iii) “Can get absent without any genuine reason”, and (iv) “ Supervising research students is as important as one’s own research”.

8.8 Addressing Quality Issues in the Survey Measures

Validity is important because it decides what measures to use, and helps assure that researchers are using items that truly measure the issues of importance. The validity of a survey refers to the degree to which it measures, what it claims to measure. Several different types of validity must be considered when designing and deploying research survey instruments.

8.8.1 Content Validity

Content validity of the survey tool was achieved by operationalisation of the latent variables/constructs, to the extent possible in the actual contextual setting, and also guided by the literature. The constructs were first broken down into its sub-components/elements, and later into items – which is the smallest indicator and the most possible objective unit of measurement, e.g., the construct of organizational justice perception was first broken down into its constituting elements, such as procedural justice and distributive justice, and further each element was measured using different items that were representative of these dimensions. Moreover, discussions with the subject experts enhanced the content validity of the quantitative instrument as suggested by [Agarwal \(2011\)](#). Content validity can also be assessed from the literature as well as from the domain experts ([Straub et al., 2004](#)).

8.8.2 Face Validity

Face validity requires that the respondents are satisfied with the measures. It is the weakest form of validity and cannot be measured numerically. Face validity of the survey tool was achieved by pilot testing, as discussed in this chapter 4 (Section 4.7.4).

8.8.3 Construct Validity

The construct validity of the survey is assessed after data collection. It refers to whether the items used to measure a particular construct are actually measuring that construct and nothing else. Convergent and discriminant validity together refers to construct validity. Construct validity for the latent constructs used in the questionnaire was checked through factorial validity, which refers to the clustering of correlations of responses by grouping items in the questionnaire. High factor loading items were retained, such as .5, for high convergent validity (Hair et al., 2006). According to the author, convergent validity is assessed by examining the factor loading and variance extraction of the items, which are provided in Table 8.2. The results indicate that 67% of the standardised factor loadings were above the threshold of .5. Moreover, all the factor loadings were statistically significant at ($p < .001$). This supports the convergent validity. Discriminant validity requires that the relationship between the items of different constructs should be low. This was assessed by comparing the variance extracted estimates of each item, with the squared inter-construct correlations associated with that item. Moreover, by excluding items that had an equal or high cross-loading on two or more factors, also achieved the discriminant validity of the measuring tool. Discriminant validity is problematic when the correlation between the two variables exceeds .85 (Kline, 2005). In the current study all the correlations were below .85, as provided in Table 8.4; establishing the discriminant validity of the measurement scales. Hence, the four factor solution was supported as empirically distinct constructs.

8.8.4 Checking the Reliability

Operationalisation of latent constructs, used in the survey, require a reliability test to see the consistency of the measurement tool. All the items in the questionnaire were put to reliability test, using the *Cronbach Alpha* coefficient test. The cronbach α of all the latent variables was above 0.70, which is an acceptable threshold for organizational and social science research. The actual values of cronbach α coefficients of the constructs are displayed in Table 8.4.

Table 8.4: Cronbach Alpha for the Variables

Variables	Number of Items	Cronbach's Alpha
Organizational Justice Perception	7	.82
Moral Hazard Tendency	4	.81
Disposition Towards Incentive	6	.73
Reward Expectancy	3	.88

8.9 Results for Descriptive Statistics

A descriptive analysis was conducted on the different scales, which were developed for measuring the latent constructs of this study. This was to establish that the data were suitable for conducting multiple regression (Kline, 2005; Field, 2009). Sample size adequacy was checked using different formulas. Suitability of the data for conducting multiple regression was checked visually, using the box plots and the residual plots for assessing heteroscedasticity. Moreover, normality of the data was established statistically by calculating the values of skewness and kurtosis, along with Shapiro-Wilk statistics. The data were also tested for multicollinearity through VIF statistics.

8.9.1 Sample Size Adequacy

To run a multiple regression, a common rule of thumb is that there should be between 10 to 15 cases of data for each predictor (Field, 2009). The total number of predictors in the present study is 8 (including 4 control variables). Therefore, $8 \times 10 = 80$ or $8 \times 15 = 120$ cases will be required to attain the required sample size. Therefore, it is clear that the requisite sample size is considerably less than the actual sample size of 311. Although, a bigger sample size is considered as better for attitudinal based research (Field, 2009); however, such a large sample might not always be advantageous in terms of analysis (MacCallum et al., 2001). Moreover, by applying the formula suggested by Yamane (1967), the sample size seems to be adequate for quantitative analysis.

$$n = \frac{N}{1 + N(e)^2} \quad (8.1)$$

Where (e) stands for the p value at 95% probability or any chosen value of p. This rule has also been reinforced by Israel (1992), who has provided a table for choosing the sample size for a given population.

8.9.2 The Box Plots

The box plots for the variables used in the regression models are provided in appendices (9 A) and (9 B), which show normality in the data. The line in the box plots, for all the tested variables, more or less passes through the centre of the box. This implies that the bulk of the data lies close to the sample mean, such as in the 50th quartile.

8.9.3 Testing Data for Skewness and Kurtosis

Limiting ones decision to only the normalcy of the data is not enough. To confirm whether or not the data is skewed and/or kurtotic, the actual values of skewness and kurtosis obtained by running normality tests are divided by its respective standard error. There are different ways of calculating the values of skewness and kurtosis. For the given variables, both the skewness and kurtosis were checked and were found to be within the normal range. The results for skewness and kurtosis are given in Table 8.5.

Table 8.5: Skewness and Kurtosis

Variable	Value for Skewness	Value for Kurtosis
Moral Hazard Tendency	1.53	1.09
Disposition Towards Incentive	1.85	1.60
Reward Expectancy	1.85	1.15
Organizational Justice Perception	1.33	1.59

To further confirm normality of the data, the Shapiro-Wilk statistics for all the variables were statistically insignificant, at $df = 311$, having significance values of .20 for *MHT*, .10 for *DTI*, .07 for *RE*, and .78 for *OJP*. These values suggest that the population from which the sample was drawn was normally distributed.

8.9.4 Checking for Multicollinearity

The VIF statistics were computed by running a multicollinearity test in the SPSS, and was found to be 1.078, 1.508, and 1.499, respectively, when the variables of *DTI*, *RE*, and *OJP* were rotated turn by turn, as the dependent variable. Because the VIF is much below 5, which is the threshold, the data can be articulated to be free of the problem of multicollinearity. This confirmed that multicollinearity was not an issue for the regression analysis (Hair et al., 2006; Cohen et al., 2013). Moreover, to see whether the error term was related to one of the explanatory variables, the test for heteroscedasticity was conducted. The residuals from the regression were saved, and the residual plots were generated. The plots are given in the appendices (10 A) and (10 B).

Table 8.6: Inter Variable Correlation and Summary Statistics

Variable	Mean	Std. Dev.	1	2	3	4	5	6	7	8
1-Gender	1.38	.50	—							
2-Career	2.06	1.19	-.23**	—						
3-Orientation	1.94	.70	-.15*	.24**	—					
4-Reputation	1.72	.45	-.06**	.15**	.83**	—				
5-DTI	3.40	1.21	-.16*	.10	.32**	.39**	—			
6-OJP	3.05	.43	-.16*	.23**	.80**	.80**	.39**	—		
7-RE	2.82	.31	-.17*	.07	.45**	.45**	.63**	.58**	—	
8-MHT	3.03	1.08	-.14	.03	.16*	.20**	.60**	-.25**	.54**	—
N=311										

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 8.6 provides the inter-variable correlation matrix, along with the summary statistics for the given data, where r refers to the Pearson correlation between different variables at a significance level determined by the value of p . It is apparent from the table that the highest correlation is between the dependent variable (MHT) and the independent variable (DTI), at ($r = .60^{**}$).

8.10 Mediation Analysis

To test hypotheses 1 to 4, as provided in Table 8.17, a hierarchical regression analysis was adopted for testing mediation using the traditional approach of Baron and Kenny (1986). The conceptual and statistical modelling for mediation is provided in Chapter 7 (Subsection 7.2.1.1). The steps included for testing mediation have been provided in Chapter 7 (Subsection 7.2.1.2). The output for hierarchical regression is provided in Table 8.7.

Table 8.7: Regression Output for the Mediation Model

Variables	B	$s\epsilon$	β	t
Step 1 ($X \rightarrow Y$)				
X (c)	1.02	.07	.61	13.78***
$R^2 = .38$ $\Delta R^2 = .38$ $F = (189.88^{***})$				
Step 2 ($X \rightarrow M$)				
X (a)	.79	.05	.64	14.72***
$R^2 = .41$ $\Delta R^2 = .41$ $F = (216.77^{***})$				
Step 3 ($M|X \rightarrow Y$)				
X (c')	.71	.09	.43	7.68***
M (b)	.39	.07	.29	5.16***
$R^2 = .43$ $\Delta R^2 = .43$ $F = (116.11^{***})$				
N=311, * $p < .05$, ** $p < .01$, *** $p < .001$				

Using the contemporary approach as suggested by Hayes (2013), the output generated by the SPSS PROCESS is provided in Table 8.8.

Table 8.8: Regression Coefficients for the Mediation Model Using PROCESS

Variables	coeff.	<i>s</i> ε	t		
$X \rightarrow M$					
X (<i>a</i>)	.79	.05	14.72***		
$R^2 = .41$ $F = (216.77***)$					
$(M|X \rightarrow Y)$					
M (<i>b</i>)	.39	.07	5.16***		
X (<i>c'</i>)	.71	.09	7.68***		
$R^2 = .43$ $F = (116.11***)$					
$(X \rightarrow Y)$					
X (<i>c</i>)	1.02	.07	13.78***		
$R^2 = .38$ $F = (189.88***)$					
Total Effect of X on Y	Effect	<i>s</i> ε	t	LLCI	ULCI
	1.02	.07	13.78***	.87	1.16
Direct Effect of X on Y	Effect	<i>s</i> ε	t	LLCI	ULCI
	.71	.09	7.68***	.53	.89
Indirect Effect of X on Y	Effect	<i>Boot</i> <i>s</i> ε		<i>Boot</i> LLCI	<i>Boot</i> ULCI
	.30	.06		.19	.44
Normal Theory Test for Indirect Effect	Effect	<i>s</i> ε	z		
	.30	.06	4.86***		
N=311, * <i>p</i> < .05, ** <i>p</i> < .01, *** <i>p</i> < .001					

8.10.1 Reporting the Results for Mediation

The results are reported using the regression output provided in Table 8.7. The direct effect of the predictor variable on the outcome variable is statistically significant, as hypothesised. The standardised coefficient for *path c'* = .43, ($t = 7.68^{***}$). Inferential testing confirms rejection of the $H_0 = 0$, in favour of support for $H_a \neq 0$, which claims the presence of a direct effect of X on Y , with 95% confidence interval. Thus, *hypothesis 1*, which infers that an employee's DTI is positively related to the MHT has been supported. To predict M from X , to determine the significance of *path a* from the model. The inferential testing of the $H_0 = 0$, proved the presence of the effect of DTI on RE , at an estimated value of standardised coefficient of *path a* = .64, ($t = 14.72^{***}$). Thus, resulting in rejection of $H_0 = 0$, in favour of acceptance of $H_a \neq 0$, at a 95% confidence interval. Thus, *hypothesis 2*, which infers that DTI is positively related to the employee RE has been supported.

To proceed further with the mediation testing, the third linear regression that regresses Y on both the antecedent variables, such as X and M in which the effect of X was partialled out to see for the effect of M on Y , to determine the significance of *path b* is crucial for determining mediation. The standardised coefficient for *path b* = .29, ($t = 5.16^{***}$), confirms the significant effect of M , such as RE between the causal effect of X on the outcome variable Y . This confirms the third condition for mediation and also resulted in rejection of $H_0 = 0$ and acceptance of $H_a \neq 0$. Thus, *hypothesis 3* was supported.

Figure 8.1 shows the standardised coefficients for the different paths in the mediation model, which have been obtained from the hierarchical linear regression, as shown in Table 8.7.

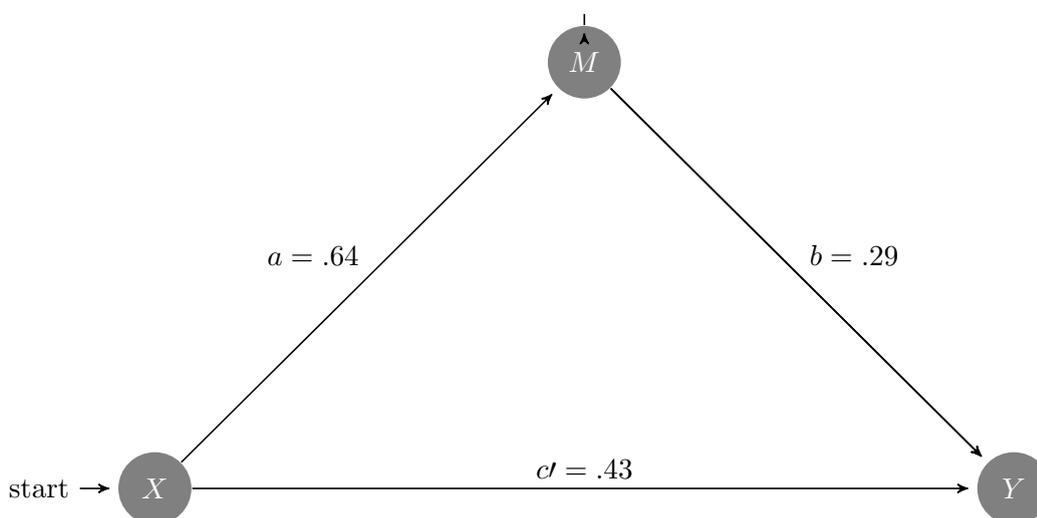


Figure 8.1: Regression Coefficients for the Paths

8.10.2 Results of Sobel Test

Sobel Test was conducted using a specially designed calculator. The input for the test comes from the estimates of a and b , from the regression analysis, along with their respective standard errors. To corroborate the results of this test, further testing was done using the t terms of both a and b . The results of the two tests should match. The input provided for this specially designed calculator will generate the critical ratios, as a test of whether the indirect effect of the independent variable on the dependent variable via the mediator is significantly different from zero. The reported p-values are drawn from the sample under the assumption of normal distribution of a two-tailed z – test. Calculation of the z value is given in equation (7.7).

$$Zvalue = \frac{ab}{S\epsilon_{ab}} \quad (8.2)$$

The input values are taken from Table 8.7; whereas, the outputs for the Sobel Test are provided in Table 8.9 and 8.10.

Table 8.9: Calculation for Sobel Test Using Estimations and Standard Errors

	Input	Test Statistic	Std.Error	p-value
a	.79	5.25	.05	.000
b	.39			
S_a	.05			
S_b	.07			

Table 8.10: Calculation for Sobel Test Using T Statistic

	Input	Test Statistic	p value
t_a	14.72	4.87	.000
t_b	5.16		

Mediation is present when the confidence interval does not include a zero (Shrout and Bolger, 2002). The confidence interval for the indirect effect does not include a zero, as can be seen from Table 8.8; therefore, the presence of mediation is confirmed.

8.10.3 Assessing the Indirect Path in the Mediation Model

In mediation models, when a path leads from the predictor variable X to the criterion variable Y , it involves other variable(s), and the overall strength of the path is estimated by multiplying the coefficient for each leg (a) and (b). This path is denoted by (ab), which is the multiplicative effect of the leg (a) and (b). The indirect effect of DTI on MHT through RE is estimated by multiplying the coefficient of *path a* with the coefficient of *path b* as given in Table 8.8. The indirect effect is .30 and is statistically significant with a $LLCI = .19$ and $ULCI = .44$, which does not straddle a zero. The inferential testing has confirmed the rejection of the $H_o = 0$, in favour of accepting the $H_a \neq 0$. *Path a* remains significant even when the mediator is added; indicating that the mediation is not complete. However, adding the mediator changed the strength of the coefficient between the predictor and the dependent variable suggesting quasi mediation.

8.10.4 Estimating the Total Effect in the Mediation Model

The total effect of incentives on moral hazard corresponds to path $c = c' + ab$, for which the estimated value is $c = .61$, $t = 13.78^{***}$, as provided in Table 8.7.

8.10.5 Argument as to Whether Reward Expectancy Mediates or Not

Hayes (2013) argues that the method suggested by Baron and Kenny (1986) for testing mediation analysis has become outdated, and the author has put forward several arguments to support his claim. Refuting the logic of Baron and Kenny (1986), Hayes (2013) stresses that instead of basing the estimate of mediation on individual hypothesis tests of a and b in a mediation model; inferencing should be done on ab , which is the proper estimate for mediation. The indirect effect is not estimated as a and b , but rather a product of a and b . Thus, if ab is statistically different from zero, there is evidence of mediation effect in the tested model. Besides, there are other points as well on the basis on which Hayes (2013) has divorced the Baron and Kenny (1986) approach to mediation testing. Complete and partial mediation is just an empty claim, with no substantial value or meaning, and should be abandoned for the concepts deeply ingrained in social and behavioural sciences. The Sobel Test, as well as the significant coefficients generated from the regression, should be enough to claim the presence of the mediation effect in the proposed model, rather than an investigation of the issues of complete or partial mediation.

8.10.6 Control Variables

None of the control variables are statistically significant in any of the three regression models, except for university orientation, which is statistically significant in the first model of mediation with $b = .24$, ($t = 2.58^*$).

8.11 Moderation Analysis

To test hypotheses 5a and 5b – as given in Table 8.17– a hierarchical regression is adopted, as suggested by Aiken and West (1991). The conceptual and statistical modelling for moderation has been provided in Chapter 7 (Subsection 7.10.2.1). The steps included in testing moderation have been provided in Chapter 7 (Subsection 7.10.2.2). Table 8.11 shows the hierarchical regression output for the moderation model using the traditional approach of Aiken and West (1991).

Table 8.11: Hierarchical Regression

Variable	B	se	β	t	B	se	β	t	B	se	β	t
DTI	.79	.05	.64	14.72***	.56	.05	.45	11.49***	.50	.05	.41	9.80***
OJP					.95	.08	.47	12.01***	.94	.08	.47	11.99***
DTI*OJP									-.03	.01	-.12	-3.19**
F Value		216.77***				230.806***					161.868**	
R^2		.41			.60			.61				
Adjusted R^2		.41			.60			.61				
ΔR^2		.41			.19			.01				
Outcome= RE												
N=311, * $p < .05$, ** $p < .01$, *** $p < .001$												

Moderation model is tested using the contemporary approach of Hayes (2013). The regression output using SPSS PROCESS Macro can be seen in Table 8.12.

Table 8.12: Regression Output for the Moderation Model Using PROCESS

Variables	coeff.	$s\epsilon$	t
X (b_1)	.50	.05	9.91***
M (b_2)	.94	.08	11.99***
XM (b_3)	-.03	.02	-3.19**
$R^2 = .60$ $F(161.87***)$			
increase in R^2 due to interaction $\Delta R^2 = .01$ $F(10.20**)$			
N=311, * $p < .05$, ** $p < .01$, *** $p < .001$ (2 tailed)			

The conditional effect of X on Y , at different values on M for the given model, can be seen from the Table 8.13.

Table 8.13: Conditional Effect of X on Y at Values of M

$(\theta_{X \rightarrow Y} = b_1 + b_3M)$	Effect	p	LLCI	ULCI
$M_L(-3.79)$	.62	.000	.52	.73
$M_M(.00)$	.50	.000	.39	.60
$M_H(3.79)$	.37	.000	.23	.52
Mean, +1 S.D, -1 S.D				

8.11.1 Reporting the Results for Moderation

Looking at Table 8.11, where $b_3 = -.12$, ($t = -3.19**$) is statistically different from zero via a hypothesis test. This implies that the $H_0 = 0$ is rejected in favour of $H_a \neq 0$, at a 95% BCI. This is indicative of the fact that the conditional effect is present in the population from which the sample was drawn. Thus, hypothesis 5a is supported.

For hypothesis 5b, such as the effect of DTI on RE will vary with the different levels of OJP the $H_0 = 0$ was declined in favour of $H_a \neq 0$, as Table 8.13 shows that none of the values straddle a zero and are statistically significant. However, as inferred that the higher the organizational justice perception, the greater will be the impact of X on Y proved out to be opposite. Thus, hypothesis 5b was partially proved.

8.11.2 Change in the R^2 and Adjusted R^2

Adding the interaction to the regression model of RE , the explanatory power of the regression model RE is strengthened, as the Adjusted R^2 changes from .41 to .61, and the effect of DTI greatly changed from $b_1 = .64$, to $b_1 = .41$ – both values having a highly significant p value. This shows that OJP moderates the relationship between the two variables. The adjusted R^2 for the three models is .41, .60, and .61 respectively. The R^2 change for model 1 is $\Delta R^2 = .41$, for model 2 the $\Delta R^2 = .19$, whereas, for model 3 it is $\Delta R^2 = .01$. The first two models are statistically significant at $p < .001$, whereas, the third model has as a significance of $p < .01$. One predictor variable in a regression model 1, DTI was able to explain about 41% of the variance. Adding a second predictor variable in the model explained 60% of the variance, and three predictors in model including the interaction term, $DTI * OJP$, explained 61% of the variance of reward expectancy. By adding the interaction term the (*Adjusted* R^2) changed from .41 to .61. The effect of DTI on RE also changed greatly from $b_1 = .64^{***}$ to $b_1 = .41^{***}$, which confirms quasi moderation. The variance in the outcome variable using 3 predictors can be seen in Table 8.11.

8.11.3 Visualising the Interactions

Visualising the conditional effect of X on Y , requires a set of estimates of Y from various combinations of X and M , using the regression model, and then plotting Y as a function of X and M is of immense convenience to the reader, who can, at a glance make sense of what is happening in the model. The values, which have been selected for plotting the moderation graph are conditioned by the values of mean, one standard deviation above and 1 below the mean, of the distributions of the OJP as suggested by Cohen et al. (1983) and reinforced by Aiken and West (1991).

This is also referred to as the simple slope of regression of Y on X ($b_1 + b_3M$), which depends upon the particular value of M at which the slope is considered. The simple slope ($b_1 + b_3M$) combines with the regression coefficient of Y on X (b_1) with the interaction coefficient (b_3), as given in Table 8.13. To generate a graph of the interaction; these values can then be plugged into any graphing program of choice (Hayes, 2013). The conditional effect was plotted using a scattergram in SPSS. Figure 8.2 shows the interaction effect of DTI and OJP on RE . Lines were constructed for people with high and low organization justice perception. The relationship between DTI and RE in Figure 8.2 shows that DTI makes more of a difference for people with low OJP in effecting their RE , than it does for people with high OJP , as the slope for people with high OJP varies less. The DTI appears to have less of an impact on the RE of people with a high OJP .

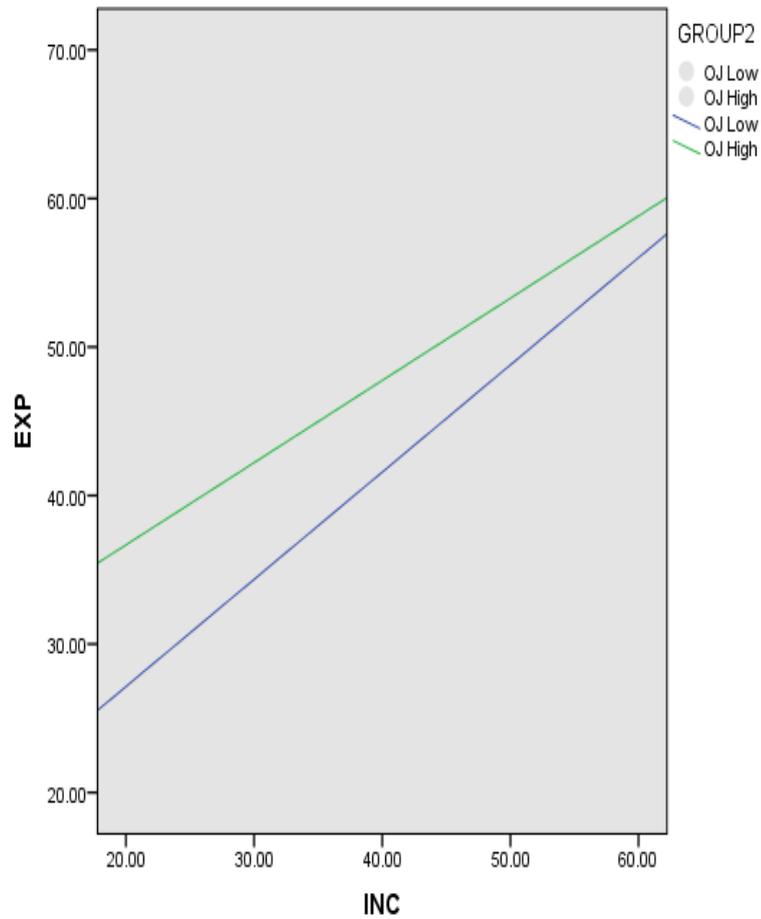


Figure 8.2: Conditional Effect of Simple Slopes

The prediction that the effect of *DTI* on *RE* will be higher, when *OJP* is higher, does not seem to be in compliance with the regression results, as can be seen from Table 8.13. The conditional effect seems to become weak, as the *OJP* of the employees change from

unfair to fair. The effect decreases from .62 to .37 as *OJP* becomes fairer. However, all the effects are highly significant at the 95% BCI, as none straddle a zero. Thus, the nature of the relationship between *DTI* and *RE* changes as a function of *OJP*, at different levels of the moderator.

This relationship can also be confirmed by the correlation, which can be calculated from the R^2 linear on the right hand side of the graph. The R^2 linear for the *OJP* at low and high values, were turned into their square roots, to find out the relationship between *DTI* and *RE*; moderated by the *OJP*. Thus, the regression effect is the strongest at the low level of *OJP*. This strong regression effect is indicated by the blue line in Figure 8.2. The regression effect of the high level of organizational justice perception is $R^2 = .27$ (green line); whereas, for the low *OJP* this value is $R^2 = .38$ (blue line). Thus, the correlation between *DTI* and *RE* is .51 at the high level of *OJP*; whereas, the regression effect of *DTI* on *RE* at the low level of *OJP* has a correlation value of .61.

8.11.4 Control Variables

University reputation was statistically significant at $b = -.24$, ($t = 2.65^{**}$), whereas, career stage was also significant at $b = -.10$, ($t = -2.13^*$) in the moderation model.

8.12 Results for Structural Equation Modelling

A *Confirmatory Factor Analysis (CFA)* on 20 items from the pattern matrix that represents the four constructs, was performed in AMOS. CFA was performed to cross-validate the four factor solution obtained from the factor analysis. The output from the AMOS version 21, generated a data fit statistic, to check the goodness of model fit. The *Goodness of Fit*, for the mediation model shows a ($\chi^2_{39} = 71.12$, $p < .001$, $CFI = .985$, $RMSEA = .05$, $SRMR = .06$). The *Goodness of Fit* for the moderation model, shows, ($\chi^2_{125} = 243.77$, $p < .001$, $CFI = .937$, $RMSEA = .05$, $SRMR = .06$). The statistics for the model is suggestive to be a good fit for the proposed moderation model. Moreover, in evaluating the fitness of the overall model, or the moderated-mediation model the ($\chi^2_{47} = 84.17$, $p < .001$, $CFI = .98$, $RMSEA = .05$, $SRMR = .05$) suggest a good fit for the overall model where ($N = 311$). Each dimension exhibited a high reliability of the constructs, as given in Table 8.14. This further implies that the proposed models can be helpful in explaining the causal phenomena.

Table 8.14: Goodness of Fit for Models

	df	χ^2	NFI	CFI	RMSEA	PCLOSE	SRMR	GFI
Mediation	39	71.123	.968	.985	.052	.423	.0662	.960
Moderation	125	243.770	.880	.937	.051	.190	.0663	.924
Mod-Med	47	84.170	.963	.983	.051	.459	.0493	.995

8.12.1 Goodness of Fit Index (GFI)

The goodness of fit index tells you what proportion of the variance in the sample variance-covariance matrix is accounted for by the model. This should exceed .9 for a good model. For the mediation model the $GFI = .96$, for the moderation model the $GFI = .92$, and for the moderated-mediation model the value of $GFI = .99$, as provided in Table 8.14. Comparing the three models, it can be suggested that the moderated-mediation model turns out to have the best GFI .

8.12.2 Normed Fit Index (NFI) and Comparative Fit Index (CFI)

The NFI is simply the difference between the two model's χ^2 divided by the χ^2 for the independence model (Bentler and Bonnet, 1980). NFI for the mediation, moderation, and moderated-mediation models are: .97, .88, and .99 respectively. The NFI values for mediation and moderated-mediation models as provided in Table 8.14 are satisfactory, but the NFI index for the moderation model is slightly lower than the threshold level, which is .9. However, looking at the statistics of all other indices of the moderation model seems to be satisfactory. NFI has a tendency to underestimate the fit in small samples; therefore, it has been modified to CFI (Bentler, 1990), which takes into account the degrees of freedom of the respective models.

8.12.3 Root Mean Square Error of Approximation (RMSEA)

$RMSEA$ also known as *Ramsey* is the most popular measure for *Goodness of Fit* of a model. Different opinions exist about its value, such as .05, .08, and .10, where .10 has been suggested as a cut-off point for the poor fitting models (MacCallum et al., 1996). The $RMSEA$ value for all the three models is .05, which is within the acceptable limit, as provided in Table 8.14.

8.12.4 p of Close Fit (PCLOSE)

If the value of this index is greater than .05, it is concluded that the model fit is close. For the Mediation and the Moderated-Mediation model, *PCLOSE* value is greater than .45; whereas, for the moderation model, this value is lower than the other two models, such as *PCLOSE* = .19. Although, greater than the minimum criteria of < .05, all the three models show a good fit for the data, as provided in Table 8.14.

8.12.5 Standardised Root Mean Square Residual (SRMR)

The SRMR is defined as the standardised difference between the observed correlation and the predicted correlation. A value of .08 is generally considered as a good fit (Hu and Bentler, 1999). The value of *SRMR* is not generated by default in AMOS output, when a *Confirmatory Factor Analysis*. The *SRMR* for the mediation and moderation models is the same, such as .066. However, for the moderated mediation model, the *SRMR* value is .049, which is slightly lower than the previous two models, as provided in Table 8.14.

The *Goodness of Fit* indices for all the three models show satisfactory signs that the models fit the data well.

In path analysis the structural relations among observed variables vs. the latent variables are modelled (Lei and Wu, 2007). SEM is used to estimate the relationship between the variables simultaneously using the AMOS 21.0 software package. The standardised path coefficients are provided in Figure 8.3. All the relationships were highly significant as displayed by the path coefficients in Figure 8.3. The standardised coefficients show that the effect of *DTI* on *RE* is considerably strong with a regression weight=.60. The effect of *DTI* is also greater on *MHT* with a regression weight=.44 as compared to *RE*.

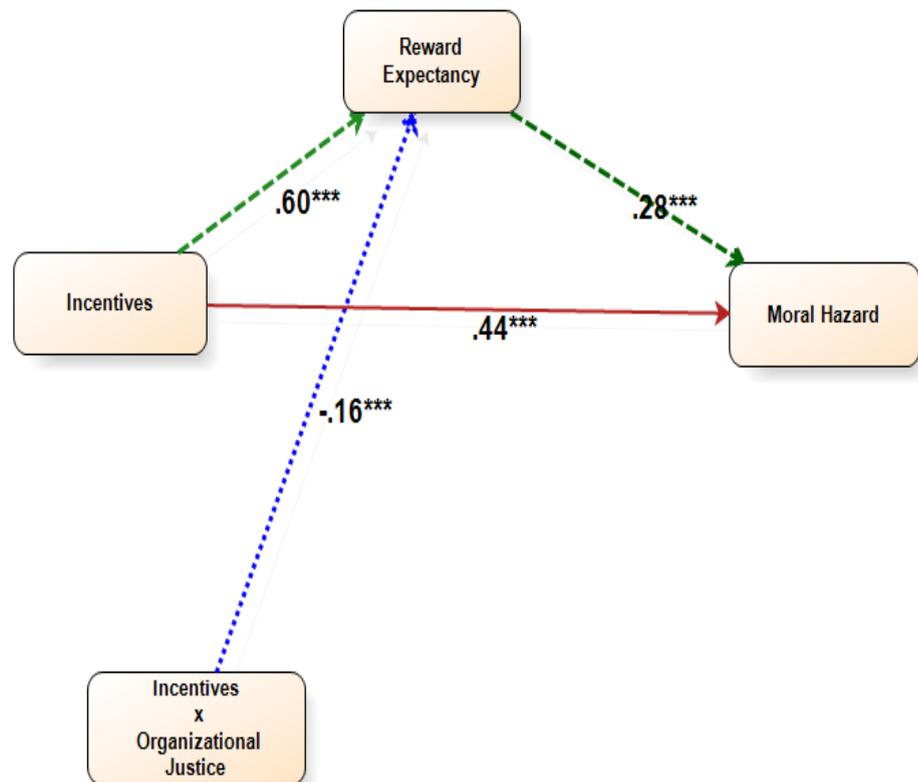


Figure 8.3: Path Estimation in AMOS

8.13 Moderated-Mediation Analysis

Moderated-mediation analysis is conceptually an old idea, but practically it is novel. To test hypotheses 6a and 6b, as given in Table 8.17, a hierarchical regression was adopted, as suggested by Hayes (2013). The conceptual model and statistical modelling for moderation has been offered in Chapter 7 (Subsection 7.10.4.1). The SPSS PROCESS macro code for the model has been provided in Chapter 7 (Subsection 7.10.4.2). Table 8.15 shows the hierarchical regression output for the moderated-mediation model using the contemporary approach of Hayes (2013).

8.13.1 Regression Output for Moderated-Mediation Analysis or Conditional Process Analysis – Hayes (2013)

The regression coefficients for the moderated-mediation model using PROCESS are provided in Table 8.15

Table 8.15: Regression Output for the Conditional Process Model Using PROCESS

Variables	coeff.	<i>se</i>	t
a_1	.50	.05	9.80***
a_2	.94	.08	11.99***
a_3	-.03	.01	-3.19**
$R^2 = .61$ $F(161.88***)$			
b	.39	.07	5.16***
c'	.71	.09	7.68***
$R^2 = .43$ $F(116.11***)$			
N=311			
* $p < .05$, ** $p < .01$, *** $p < .001$ (2 tailed)			

8.13.2 The Conditional Indirect Effect of X on Y

The indirect effect of DTI on MHT through RE is the product of two effects, which include: conditional $(\theta_{X \rightarrow M}) = a_1 + a_3W$, and unconditional (b). As one of the components of the indirect effect is conditional, so is the indirect effect, which is expressed as equation (7.15);

Table 8.16: The Conditional Indirect Effect of X on Y at the Values of W

	OJP	Effect (B)	Boot se	BootLLCI	BootULCI
Exp	-3.79	.24	.05	.15	.35
Exp	.00	.19	.05	.12	.30
Exp	3.79	.14	.05	.06	.27
Mean, +1 S.D, -1 S.D					

$$\theta_{X \rightarrow Mb} = (a_1 + a_3W)b \quad (8.3)$$

There is no single numerical estimate of the conditional indirect effect that can be used to characterise this process, rather the value of the conditional indirect effect can be obtained by putting the values of W from Table 8.16 into the equation (7.15). Thus, $\theta_{X \rightarrow Mb} = (.50) + (-.03W)(.39)$. It can be seen from Table 8.16 that the conditional indirect effect of X on Y through M , which is conditioned by W ; is consistently decreasing, as the value of W increases. The significance of the moderated-mediation model speaks for the fact that the indirect effect of DTI on MHT is conditioned by the varying values of OJP . The conditional indirect effect has been assessed at the mean, and 1 S.D above and below the mean value of OJP . The consistently decreasing trend of the conditional indirect effect – with the varying values of OJP – shows that the effect has not happened by chance, but it is actually present in the population from which the sample was drawn. A graph similar to that for a moderation model can also be developed for the conditional process model.

The conditional indirect effect of DTI on MHT through RE is statistically significant at all the values of OJP , as can be seen from Table 8.16; supporting hypothesis 6a, which infers that employee disposition towards incentives will have a significant effect on his/her moral hazard tendency through reward expectancy, which will be moderated by organizational justice perception. Thus, the inferential testing of $H_0 = 0$ is rejected. The inferential testing also supported hypothesis 6b, but partially. The indirect effect of DTI on MHT is consistently significant at a 95% BCI because none of the values straddle a zero, but the effect is decreasing with an increase in the OJP , as opposed to what was inferred, such as the higher the OJP , the greater will be the indirect impact; proved to be the opposite. These values can be seen in Table 8.16.

8.13.3 The Direct Effect

The direct effect of incentives on moral hazard is neither hypothesised to be moderated nor estimated for any such effect. Thus, there is only one direct effect in this model that

is estimated by $c' = .71$, ($t = 7.68^{***}$), as given in Table 8.15. Because this estimation is positive; therefore, a unit increase in *DTI* will bring a .71 units change in *MHT* while holding the effect of *OJP* constant. In this model the conditional direct effect of *DTI* on *MHT* is unmoderated; therefore, inferencing will be done in the same manner, as in the simple mediation analysis.

8.13.4 Control Variables

Both the variables of university reputation and career stage are found to be statistically significant in the moderated-mediation model; having a coefficient of $b = -4.17$, ($t = -2.64^{**}$), $b = -.19$, ($t = -2.13^*$), respectively in model 1 (which is moderation), where reward expectancy was the outcome variable. The negative beta for career stage suggests that when an employee moves up in the career stage, his/her reward expectancy decreases. This may be even linked to the plateauing stage in an employee's career. The variable of career stage has also been used by Gomez-Mejia (1992), which proved to be highly significant in pay determination of the faculty.

8.14 Summary of the Hypotheses

Table 8.17 shows the hypotheses, which have been either completely supported or partially supported through inferential testing.

Table 8.17: Hypotheses Summary

Hypothesis 1: An employee's disposition towards incentives will have a significant positive impact on his/her moral hazard tendency.	Supported
Hypothesis 2: Employee disposition towards incentive will have a significant positive impact his/her moral hazard tendency.	Supported
Hypothesis 3: Reward expectancy of an employee will have a significant positive impact on moral hazard tendency, after controlling for disposition towards incentives.	Supported
Hypothesis 4: Reward expectancy will mediate the relationship between the employee disposition towards incentives and his/her moral hazard tendency.	Supported
Hypothesis 5a: Organizational justice perception will act as a moderator between the employee disposition towards incentives and his/her reward expectancy	Supported
Hypothesis 5b: The effect of employee disposition towards incentives on reward expectancy will vary with the different levels of organizational justice perception, such as the higher the organizational justice perception, the greater will be the impact.	Partially Supported
Hypothesis 6a: Organizational justice perception will act as a moderator between indirect effect of employee disposition towards incentives on his/her moral hazard tendency through reward expectancy.	Supported
Hypothesis 6b: The indirect effect of employee disposition towards incentives on his/her moral hazard tendency through reward expectancy will vary with the different levels of organizational justice perception, such as the higher the organizational justice perception, the greater will be the impact.	Partially Supported

The analysis supports the full moderated-mediation model. The chi-square of the full model $\chi^2(47) = 84.17$, CFI = .98, SRMR = .049. Disposition towards incentives predicted moral hazard tendency (Hypothesis 1), Disposition towards incentives predicted reward expectancy (Hypothesis 2); moral hazard tendency, in turn, was predicted independently by reward expectancy (Hypothesis 3); and the relationship between disposition towards incentives – while still significant – dropped after inclusion of reward expectancy. In support of mediation (Hypothesis 4), model fit was $\chi^2(39) = 71.123$, CFI = .98, SRMR = .07. Finally, the interaction between disposition towards incentives and organizational justice perception, was negative, but significant to predict reward expectancy (Hypothesis 5a).

8.15 Conclusion

The findings presented in this chapter suggest that an employee's disposition towards incentives has a direct, an indirect, and a conditional indirect effect on his/her moral hazard tendency, as the relationships between these factors were seen to be highly significant in different models. The indirect effect of an employee's disposition towards incentives on his/her moral hazard tendency was also significant when reward expectancy was considered as a mediator. Moreover, the moderating role of organizational justice perception in the relationship between disposition towards incentives and reward expectancy was also significant. A more complex relationship between an employee's disposition towards incentives and his/her tendency towards moral hazard was tested using a moderated-mediation model. The conditional indirect effect of disposition towards incentives on moral hazard tendency through reward expectancy was seen to be significant, which was moderated by organizational justice perception in the first stage.

This chapter has also offered a detailed statistical analysis for the inferential testing of the given models. It has further suggested testing of the same inferences using a contemporary approach to hypotheses testing, besides the traditional techniques. Both the approaches have yielded similar results, thus, validating the results generated by using the contemporary approach to hypotheses testing. The next chapter – which is the final chapter – shows the main findings of the empirical data, along with the major contributions and recommendations of this study in the light of these findings.

Chapter 9

Findings, Contributions, and Recommendations

9.1 Introduction

This chapter comprises of the aggregated findings and conclusions of both the qualitative and quantitative analyses. The chapter focuses on the main themes generated through cross-case analysis, as well as the results obtained from testing the statistical models developed for establishing the causal relationship between the variables included in the theoretical framework. The purpose is to corroborate the outcomes of the study using mixed methods. The findings are split into parts, which are connected to different facets of the variables in the theoretical framework. Each part is preceded by a brief discussion of evidence from the literature, followed by empirical evidence. The chapter also throws light on the theoretical and practical contributions made by this study. Moreover, a brief discussion on the results and the main challenges of this study, have been presented. The chapter finally terminates in recommendations for future work.

9.2 Moral Hazard and its Relationship with the Incentives: Evidence from the Literature

Moral hazard is a complex human behaviour, due to confounding human variability; therefore, it is difficult to study. The problem manifested in whatever configuration is detrimental to an individual's performance and the organizational health. Employees usually resort to ineffective behaviours in their job, whenever they have an incentive to do so. Incentives should be geared towards the positive and productive behaviour of employees, rather than advancing them to resort to "shirking" and "opportunism". When the agent is asymmetrically informed, the performance measurement problem

becomes one of trying to induce the agent to use his/her information productively while at the same time avoiding giving the agent an incentive to engage in dysfunctional actions (Baker, 1992).

All organizations have to bear the cost of business transactions; however, they strive to keep this cost at the minimum possible level (Gerhart et al., 2009; Hewitt, 2012). In the educational institutions, the faculty and related staff salaries and fringe benefits account for 70-80% of most operating budgets (Mortimer and Tierney, 1979). With 10-70% of total costs wrapped up in it, reward tends to be one of the worst-managed parts of an organization's cost structure (Group, 2013).

Contingent pay has become popular in response to the traditional pay policies in the government (Perry, 1986). Incentives are provided to the agents to lower the cost of business, by enticing them to exercise higher levels of effort, especially in the case of professional agents. It is a universally accepted fact that incentives motivate employees, but whether or not for the right task is another topic. According to Gneezy et al. (2011), the basic law of behaviour is that higher incentives will result in increased effort exertion, and thus higher performance because individuals have a lust for extrinsic rewards (Benabou and Tirole, 2003), but it always comes with a price (Schwartz, 2009).

The motivation of an employee can be assessed at three levels, such as an employee diverts effort towards the incentivised tasks, then raises the level of effort, and further keeps the effort persistent at that level (Campbell, 1990). The author emphasises that the only way to discuss motivation as a direct determinant of behaviour is one or more of these choices. An employee's allocation of time and attention cannot be monitored by the employer; therefore, the marginal rates of return to employees for the desired activities must be kept at least equal to, or greater than, the rates of return for those activities that are not desired; otherwise, they will receive little or no time and attention (Milgrom and Roberts, 1992).

The dilemma of incentives is that it does not always raise the intended output, consequently such schemes, rather than doing well for the organization, achieve unintended results – causing a great deal of harm to the organization. Heywood and Wei (2006) conclude that higher payments do not always lead to greater job satisfaction.

Business management is full of warnings about incentives that rely heavily on quantitative, rather than qualitative measures (Ellerson, 2009). The education sector has plentiful examples in which highly flawed and inaccurate measures have produced unintended consequences (Gorman, 2013). The incentive system has improved the apparent performance of the faculty, but not the genuine execution that is purported by the HEC. This scenario explains the point of Eisenhardt (1989a) that an agent usually acts to maximise his/her own positive outcome, without extending efforts towards achieving the principal's objectives. On the contrary, optimal contracts focus on maximising the principal's outcomes (Levinthal, 1988). Fryer (2011) also supports

the notion that incentives provided to the teachers have no effect on improving students' performance, attendance or graduation. Moreover, there is also no evidence that incentives have any favourable effect on the teachers' behaviour in improving the quality of education. Although, [Duflo et al. \(2012\)](#) claim that incentives do reduce teacher absence, bringing it down by 21%; relative to the control group, which was not provided with incentives, and also that they improve the students' test scores. [Andrabi et al. \(2010\)](#) blame inappropriate incentives as one of the leading causes of the faculty's low level of effort exertion for improving students' learning. According to [Stilwell \(2003\)](#), scepticism among academics about the legitimacy of the performance measures, may undermine the effectiveness of incentives. [Lepper et al. \(2005\)](#) argue that the people's intrinsic motivation drops with the age – is an alarming fact, which needs attention so as to prevent a decrease in the level of intrinsic motivation that occurs with age, rather than finding ways to supplant it with extrinsic motivation. Thus, extrinsic incentives may produce higher performances in teachers, but at the expense of the well-being of others ([Schwartz, 2009](#)).

One of the main reasons associated with the adverse effects of high-powered incentives is the problem of performance measurement. It is difficult to establish criteria to measure quantity, as well as all the important behaviours in a given job ([Lawler, 1971](#)). If an employee is not evaluated in terms of an activity, he/she will not be motivated to perform it. Result-oriented measures often have a higher degree of incentive intensity ([Gerhart et al., 2009](#)). ([Benabou and Tirole, 2003](#)) has misgivings that incentives are only weak reinforcers in the short run and negative reinforcers in the long term. Most incentive schemes are far from perfect – even worse, they are often seriously flawed. It is, therefore, important to understand, where the system falls short and how these shortcomings can be addressed. Distorted incentives, when left unchecked, can have devastating effects ([Van der Stede, 2009](#)). Incentives require clear work standards, which at present appear to be missing in the higher education system ([Bloom and Milkovich, 1998](#)). Employees, therefore, need to know what constitutes an acceptable level of performance ([Strebler, 2004](#)). [Jenkins Jr et al. \(1998\)](#) argue that the performance-outcome relationship is influenced by the use of PRP, but it has a greater effect on the quantity of work and for rather trivial tasks. The authors further state that this interpretation may seem provocative to the proponents of PRP, but it is supported by reviews of empirical field research. Putting this in the context of educators, the author stresses that incentives do not improve teaching ability; put more succinctly, money alone is not the answer. According to [Figlio and Kenny \(2007\)](#), incentive pay is not a panacea to the problem of employee efficiency.

9.2.1 Empirical Findings: The Effect of Incentives on Faculty's Deviant Behaviour

The research has sought to ascertain the nature of the role played by incentives in individual workplace behaviour and organizational performance, in the light of existing evidence from theory and empirical data. Incentives influence the faculty's motivation at three levels, such as effort direction, effort exertion, and effort persistence; which ultimately determine the performance on different tasks, and overall aggregate performance on the job. The HEC offers funds to the universities for improving the quality of higher education. The faculty members are provided with different types of incentives to motivate them to exert a higher level of effort in its job. Detailed discussion on the incentive scheme for the faculty has been provided in appendix (11).

The faculty is virtually divided into teaching and research cadre. The senior faculty is more involved in research and publication activities, as opposed to the junior faculty, who opts for a greater teaching load because of its limited capability to conduct research and to publish papers. Research and publication have two incentives for the faculty, which include: quick monetary rewards and career progression. These incentives have pushed some faculty members to resort to "free riding" and "plagiarism" to inflate its publication profile. The findings suggest that free riding is seen as an acceptable norm, and many faculty members do not even know that by doing this they are indulging in moral extortion (Bedeian et al., 2010). Hence, research is done by the faculty for the sake of gaining short-term personal benefits and not for the noble cause of knowledge generation or innovation. According to Stilwell (2003), pure research leads to epoch-making technological changes. The author further argues that the current market models may score higher marks for their short-run characteristics, but not towards the long-term economic development of the community. The resultant research is of low quality, which does not address the community issues and is usually not worth being considered as a classic piece of publication. Faculty members do not follow the quality standards for publications, as their only intention is to enhance personal gains because publication count is directly linked to their career advancement and also entails pecuniary rewards. Incentives have improved the income of those faculty members who want to avail this opportunity, without having any substantial impact on improving the quality of higher education. The upward trend in the publication graph provided in appendix (11), also speaks of the fact. The same holds true for the junior-level faculty who is more interested in teaching extra classes; whereas, paying little heed to the quality aspect of teaching.

Moral hazard is manifested in the faculty, in a number of ways; creating quality challenges for the higher education sector. Incentives can also sometimes become a source of moral hazard, when they tempt an individual to act "opportunistically". It is evident from the findings of the qualitative data that the problem of incentives has

emerged as one of the main determinants of moral hazard in the faculty. A detailed analysis of the problem of moral hazard has been furnished in the cross-case analysis in Chapter 6. These findings are further corroborated by the statistical testing of the quantitative data, to look for the effect of an individual's disposition towards incentives on moral hazard tendency. The effect has been tested in three different ways, such as direct, indirect, and the conditional indirect effect of disposition towards incentives on moral hazard tendency. All these effects turn out to be highly significant. This in turn is a clear indication that the problem of moral hazard can be predicted from the faculty's disposition towards incentives.

The findings imply that the stake of the universities seems to be misaligned with certain objectives of the HEC. The incentives provided to the faculty are linked to the wrong performance measures, thus encouraging moral hazard in the employees. Such incentives have failed to achieve the larger objectives set by the HEC for improvement of the quality of higher education. Moreover, it has been witnessed that higher education has minimal relevance to the needs of the community and is not compatible with international criteria. The study findings further suggest that there is no evidence that incentive provision is a supervisor way to mitigate the agency problem in professional employees. Moreover, it upholds the complexity of incentive provision in professionals, due to the myriad problems related to multitasking and unstructured tasks. Nonetheless, research on the use of incentives in a contextual setting is limited to making inferences with absolute assurance, as the effects may vary from one setting to another.

9.3 Moral Hazard and its Relationship with Cognitions: Evidence from the Literature

Different studies have taken employee perception of organizational justice and expectancy – as both mediating and moderating variables in behavioural studies – that looks into the impact of financial incentives on employee behavioural outcomes (Durant et al., 2006). Performance can be gesticulated either by actions or outcomes of those actions (Govindarajan and Fisher, 1990). Equity perceptions are therefore influenced by decision-making and the outcomes of those determinations. Sillup and Klimberg (2010) propose that regular and consistent feedback should be provided to all employees; however, most companies do not accomplish this very well (Chambers et al., 1998). More than half of the employees experience a sense of resentment that their supervisors deprive them of their performance feedback (CIDP, 2009).

(Purcell, 2003) consider performance appraisal as one of the eleven HR practices, which has potential links to employee performance. However, Gratton (2004) considers the process of performance appraisal as “dehydrated rituals” in which managers and employees are simply going through the motions of the process (Chubb C, 2011; de Waal

and Counet, 2009). Most organizations fail to consider it as a change process (Colville and Millner, 2011). The performance appraisal system in the higher education sector does not complement the validation mantra. This is particularly due to the difficulty of tapping the essential behavioural measures that constitute good teaching. Finding operational measures for the behavioural component of a job has been a failure on the part of the management. The alternate proxy measures do not replicate the actual performance; leaving a gap between the actual performance and the observed performance, and between the intended and expected performance. For example, absences are used as a proxy for the teacher's effort, but this can only approximate the input of effort (Hansen, 2008). The situation is further exacerbated due to the noise in performance outcomes to which these measures are directed. Noise refers to any distortion in performance assessment, which cannot be accounted for or linked directly to an individual's level of effort. It may likewise refer to the time lapse that separates the performance outcome from the actual performance. Baker (1992) considers a performance measure as being satisfactory when the marginal product of an agent's action on the performance measure is highly correlated with the marginal product of these actions on the principal objective – the resulting contract is considered as efficient. On the contrary, the contract will induce outcomes that significantly deviate from the first-best. The criteria for teaching effectiveness are embedded in the content of these measures (Berk, 2005).

Student appraisal is a proxy for effective teaching (Dzagourova and Smirnova, 2003). The main issues regarding students' appraisal of the faculty include: the students' unawareness, attitude, lack of training, biases, etc. Little is known about the factors that are actually considered by the appraisers when they decide how to fill out the evaluation forms (Milkovich et al., 1991). Thus, a multi-system assessment of the faculty is important, which calls for subjective assessment by the supervisor(s) (Lazear, 2003). Supervisors need to see the "Big Picture" to recognise how the various parts of the system fit together, just like a jigsaw puzzle (de Waal and Counet, 2009).

Reward expectancy plays an important role in shaping an individual's choice of effort distribution between different tasks that await execution. Effort distribution is a function of the valance associated with the expected reward. Even the most sophisticated performance appraisal system; which guides the employee towards the "right" set of behaviours, will have little impact upon the firm-level outcomes, unless these are linked to valuable rewards that can ensure employee motivation (DeNisi and Smith, 2014). In multitasking jobs; activities which hold a greater valance for an individual in terms of reward will receive more effort and time, due to the employee's attraction towards their desired outcome (Redmond, 2013). Employees may prioritise the activity that is reflected in the index (Abe, 2007), and neglect the remaining activities (Umansky, 2005; Springer et al., 2010; Jensen and Murphy, 2010). The aim of PRP is to motivate

employees to work harder, but the link between performance and reward must be clear (Deckop et al., 1999). Expectancy theory establishes this link (Mills et al., 2006).

9.3.1 Empirical Findings: Organization Justice Perception and Reward Expectancy

The current performance management system in the higher education sector is deficient in several aspects, as discussed in detail in appendix (11). The performance appraisal system fails to achieve the basic purpose for which it was designed, such as precise measurement of the faculty performance and advancement of operational functions related to it. Many talented people in the Pakistan do not opt for the teaching profession because there is no proper mechanism for evaluating teachers' performance and furnishing them with rewards that appreciate their honest work. From the analysis of the qualitative data; absent job descriptions, the problem of measurement, and the missing link between pay and performance have emerged as the some of the main determinants of the problem of moral hazard in the faculty. These factors pertain to organizational justice and reward expectancy.

The performance appraisal process in the higher education sector is reduced to a mere drill, which does not improve the employees' understanding of the organizational goals and performance related standards. Evaluation is a very informative process; nevertheless, the outcomes of this process are not optimally utilised, leading to the wastage of time and resources. Evaluation by the management is overpowered by cultural norms and personal prejudices. Sporadic discussions are carried between the supervisors and the faculty members, after evaluations are handed over to them – these are further restricted to extreme performance cases only. Therefore, the bulk of the staff never gets a chance to talk about their concerns or resolve their problems through upward feedback channels. Additionally, the credibility of the supervisor is compromised due to personal bigotry, lack of knowledge of the supervisors about the faculty, and low degree of interest in the faculty welfare. The nature of this type of work environment has pushed up the level of scepticism and misgivings of the employees in the system. There are strains in the literature suggesting that the supervisors have a tendency to disfigure employees' ratings, which may, amongst other reasons, include achievement of the outcomes they value. Little is known about the factors actually considered by the appraiser while appraising the faculty. The supervisors usually appraise the faculty through an indirect source of information; either getting informal feedback from the students or the administrative staff responsible for monitoring and maintaining a record of different activities of the faculty, such as punctuality, absenteeism, and examination, etc. This information, although objective, is too rigid; missing out the human element in assessing the faculty's performance. The instinctive assessment of the supervisor is affected at two levels, such as direct and indirect assessment. Direct assessment is prone

to all the evils of the personal biases of the rater; whereas, indirect assessment involves problems, which are associated with the assessment by students and monitoring by the administrative staff. Some of these issues, which relate to the faculty's appraisal include: students' indifference towards the teacher appraisal, the problem of the comprehensibility of assessment tool, problems of the validity and accuracy of the appraisal instrument, the mechanistic approach of administrative staff, etc. Thus, performance appraisals are subject to distortion and perversion at many levels in the higher education institutions.

There is also evidence that the faculty appraisal has no connection with the decisions made by the management pertaining to these cadre employees. The most important among these decisions relate to pay and promotion; yet, both are time-bound. The role of evaluations in the faculty's promotion is only symbolic. Decoupling pay and promotion decisions from the evaluations adversely affects the expectancy perception of these professionals and de-motivates them in their endeavour.

The quantitative findings confirm the organizational justice perception; moderating the effect of an individual's disposition towards incentives on his/her reward expectancy. The conditional effect varies with the different values of the organizational justice perception. The quantitative results also confirm the conditional indirect effect of disposition towards incentives on the moral hazard tendency of individuals, through reward expectancy, which are conditioned by the organizational justice perception. The interaction effect in both the moderation and moderated-mediation models were statistically significant and were confirmed through inferential testing. Moreover, the mediating role of reward expectancy between employees' disposition towards incentives and their moral hazard tendency has also been statistically confirmed to be significant. Although, the mediating relationship is partial; it is still highly significant. Consequently, expectancy perception has a significant impact on the professional behaviour of the faculty.

The quantitative findings confirm the causal nature of the organizational justice perception and reward expectancy as antecedents of the problem of moral hazard. The findings of quantitative data are likewise backed by cross-case analysis, in the form of sub-themes, such as the lack of job descriptions, the problem of performance measurement, problems in the performance appraisal, and the missing link between pay and performance. Thus, both the qualitative and quantitative data analyses confirm the importance of organizational justice perception and reward expectancy, as the underlying causal mechanism of the problem of moral hazard. Moreover, the empirical findings of this study are also congruent with the literature – further validating the results.

9.4 Discussion

The job of the faculty involves all sorts of tribulations, such as measurement problem, information asymmetry, and the notorious incentive problem. Survey findings suggest

that the faculty is faced with the problem of effort choices between multiple tasks and multiple dimensions of a single task. The choice of effort allocation of the faculty is linked with the power of incentive, and based upon the degree of valence a reward generates for these professionals.

The notion of fabrication as proposed by Ball (2000); resonates with the study findings. The author points towards “blizzard of hype, (pseudo) information and impression management that contributes to opacity rather than transparency”. More subtly, the pressure is to engage the faculty in teaching and research activities that are tailored to serve corporate plans, which mostly pertain to marketing goals (Stilwell, 2003). The overall picture of the quality of higher education is discouraging and dismal, due to the politicised culture. Appointments demand affiliation and acquaintance with the appointing authority; whereas, dismissals are subject to the personal whims of those in power. Higher education, which is considered as a messiah for the society – has fallen prey to the vested interests of the stakeholders. Stilwell (2003) argues that the management stresses on “performativity” to the extent that this is regarded as a fabrication by a managerial class; seeking to justify its own existence and actions. The author agrees that the observable scepticism among academics is not surprising.

An awkward mix of feudal, collegial and democratic ideologies and practices has pervaded universities in the past. As this is displaced by a managerial model in which power is centralised in the hands of the Vice Chancellors and those around them to whom they delegate authority, the ordinary academic staff, concerned directly with teaching and research, become subordinates within the structure of decisions and incentives determined by the former group (Stilwell, 2003, p. 58).

The majority of the faculty seems to be apathetic towards the students’ academic problems and is not interested in genuine student learning. Due to the faculty’s orthodox teaching methodologies, students have little or no interest in the classroom instruction. The resultant product is deficient in every regard. The faculty is rarely penalised for such behaviours that do not comply with the ethics of professionalism. Poor implementation of the sanction policy for wrongdoers and unconditional job security after attaining a permanent status – provides the faculty with a license for abhorrent behaviour. A large number of educators commit academic fraud without being ever noticed (Hoodbhoy, 2003), and even when it is proved, no stern action is taken against the delinquent faculty member. Hence, cases of adverse behaviours usually diffuse after a time lapse. Lack of a proper and effective accountability system for the faculty, and information asymmetry serve as incentives to “shirk” responsibilities and game the system.

The findings; however, suggest a useful advance in research in the area of moral hazard and incentives, as no previous study has combined economic variables with organizational behaviour variables in a complex model. This study presents

an exploratory discussion on the potential for a multi-disciplinary approach to understanding the role of employees' perceptions with respect to incentives, in determining their tendency towards moral hazard; such an understanding is important for the long-term viability and functionality of any organization. Thus, a huge potential exists for further empirical investigation; aiming to discover the underlying causal mechanism of the problem of moral hazard in organizations. A better understanding of these causal mechanisms would allow organizations to anticipate the individual's tendency to fulfil short-term goals of profit maximisation, which are detrimental to the long-term benefit of the organization.

From the analysis of the problem of moral hazard, it is evident that the universities and the faculty have a shared interest in attaining short-term economic advantages. The public relies more and more on flamboyant measures of success of universities, and the managers present a fake picture of success; using fabricated facts and figures. [Gomez-Mejia \(1992\)](#) proposes that decision-makers must find actual measures or proxy measures to link the faculty's work with the university's goals. The goals set by the HEC do not seem to resonate with the real essence of academia as a whole. Moreover, the academia seems to be trapped in discipline-specific goals, rather than reaching towards the higher-level goals of the community. Besides, academia – with its “introspective tendency” – has fallen prey to isolationism, instead of finding solutions to wider societal problems through collective endeavours.

The myth that managers can unconditionally use incentives to improve employees' performance has been disproved based on the empirical findings of this research. The findings will encourage researchers to search for alternative routes towards effective – conceptual and analytical– techniques in mainstream research regarding incentives and moral hazard. The preponderant tendency to discount the actual social problem at hand, in favour of viewing the situation as an objective phenomenon, and the tendency to provide an over-simplified logic for complex social phenomena, has created a gap between research and reality; viewing the situation through a myopic vision. Researchers have over-emphasised the use of incentives as an alternative means of employee control while under-emphasising the role played by the larger social system (e.g., interactions with other systems and employees' perceptions) in which moral hazard arises – thus furnishing an inadequate explanation for their findings. Examining the phenomenon without its social setting does not offer much explanation of the problem of moral hazard. The researchers stress on their findings without having an insight into the complexity of the problem and the web of intricate relationships that surrounds it. This attitude of the researchers needs to be addressed to get the real meaning of the research results.

This research aims to respond to the concerns that the current system of incentives in the higher education sector has been erroneously designed, thus increasing the tendency of the faculty towards deviant behaviour. Furthermore, different causal models have been constructed and tested in this study, using empirical data. The

models have been choreographed around the factors of incentives, moral hazard, reward expectancy, and organizational justice perception; considering the various arrangements of mediation, moderation, and moderated-mediation effects. The results generated by testing these models are noticeable, as the combined effect of the incentive system and the organizational justice system exposes the causal mechanisms underlying the problem of moral hazard from a different perspective. Moral hazard is a behavioural problem, which is influenced by the action, reaction, and interaction between the objectivity of social systems and the subjectivity of human perceptions. For instance, upon initial visual inspection, the findings related to the slopes for the organizational justice perception seem to contrast with the proposed theory; however, through microscopic analysis these results make an idiosyncratic contribution by liberating the tunnel vision and widening the horizons of recent theoretical progress on incentives and moral hazard. Although, the faculty members hold a generic perception about the organizational justice system, variations in their perceptions cannot be dismissed. The results of this study also suggest the same, as the conditional effect of incentives on reward expectancy, and the conditional indirect effect of disposition towards incentives on the moral hazard tendency, varies with the more and less fair perceptions of the organizational justice system. Capturing this variance, is of theoretical and practical interest.

The general stance of the previous research is that incentives have a significant impact on reward expectancy. The findings of this study also concur with this stance therefore reinforcing the standpoint within a different cultural context, where the evidence of such research in the past, is non-observant. Moreover, the results are made more tempting when linked with the conditionality of organizational justice perception. The resultant inferences drawn have a more vertical and horizontal depth. [Skarlicki and Folger \(1997\)](#) indicate that if an employee feels that the organizational justice system is either biased, political, or irrelevant, then the appraisal process can become a cause of extreme dissatisfaction for him. The fairer an organizational justice system is perceived to be, the more positive it will have an affect on the link between incentives and reward expectancy, which is common wisdom and an idea supported by many scholars.

Employees, in an effort to restore justice, will resort to different self-sufficing strategies; expressed in their job behaviour, which will in turn determine their productivity level. It is further assumed that the cumulative productivity of the employees will affect the organization-level productivity. When employees are able to establish a cognitive link between their efforts and performance on the one hand, and their performance and rewards on the other; they will be motivated to perform better – according to the expectation of the principal. But, the idea that the fairer the organizational justice perception, the depressed will be this link, is a new understanding which this study has provided. These unexpected results encourage researchers to seek an innovative explanation for a relationship that counters what most scholars have proposed.

Understanding the dynamics of moral hazard and incentives is highly important for organizational success. According to Eisenhardt (1989a), organizational research should look beyond the economic paradigm – additional exceptions may lurk around the corner, and additional conditions may need to be taken into account. Researchers thus need to further elaborate and expand the horizons of research in this area. The effects of incentives cannot be easily separated from the broader organizational context, which includes all systems and operations that interact with an employee's perception of the organization. To find any meaningful relationship between incentives and reward expectancy of the faculty, it is imperative to include the effect of organizational justice as a moderator, to ascertain if it makes for any part in the result of incentives upon reward expectancy before it affects employees' performance. The traditional approach to answering research questions, using either a quantitative or a qualitative approach, fails to capture the real dynamics of the problem. Mixing and merging paradigms and cross-cutting disciplines should be the norm of the day.

9.5 Contributions of the Study

Research that does not make any contribution, to knowledge in its domain, is akin to making an empty claim. The current study has several theoretical, practical, and methodological contributions, which are discussed in the ensuing paragraphs.

9.5.1 Theoretical Contributions

This study highlights the importance of social context in examining the phenomena that are complex and deeply embedded in their social environment, and which cannot be disentangled from their natural settings. The results show that an employee's inclination towards incentives has a significant impact on the moral hazard tendency. This impact is supplemented by the employee's perceptions of the organizational justice system and reward expectancy. The study makes an important contribution to the research in human resource management and organizational behaviour, by testing a theoretical framework that adds the employees' perception as an important variable in the relationship between incentives and employee behaviour – breaking the rigidity of agency theory that has mostly analysed contracts from the perspective of economic exchanges. (Davis et al., 1997) suggest that a variety of theoretical and empirical projects are necessary to help researchers fully understand complex situations.

Previous research has shown mixed results, such as incentives having a positive effect (Heneman et al., 2002b; Fryer, 2011), negative effect (Prendergast, 2002), or no significant effect on employee's attitude and behaviour in multitasking jobs. In the current study, the evidence of causality between disposition toward incentives and moral hazard tendency has highlighted the difficulty in out-come based contracts in

the principal-professional exchanges. Moreover, the results reinforce the problematic nature of the use of high-powered incentives in professional agents, especially when the performance measures in a given job are hazy. The results thus support the notion that the use of high-powered incentives should be kept at a minimum level to avoid crowding out the intrinsic motivation of an employee, or even worse to urge him/her towards acts of deviance behaviour.

The current study provides evidence of the direct and indirect significant relationship between employee disposition towards incentives and tendency towards moral hazard; thus upholding the “crowding out” effect of economic incentives (Kreps, 1997; Fehr and Gächter, 2002; Gneezy et al., 2011). This study agrees with the point of view of social psychologists that there are “hidden costs of reward” (Frey and Oberholzer-Gee, 1997). Gneezy et al. (2011) argue that cognitive frames, interests, and incentives all interact and coevolve – a firm cannot be treated as the macro-level whole. As a prerequisite to understanding the real impact of incentives, we must consider the cognitive frames of individuals who have a stake in the firm. Gomez-Mejia (1992) stress that a firm must not be considered as a “cognizer”, but rather an aggregation of people, with different interests and cognitions. The author argues that sophisticated managers who understand the tight linkages between these themes can intervene to create effective coalitions for radical action. Social sciences deal with the people both inside and outside the organization, who are bound to business contracts, of exchanging goods or services. The general assumption of agency theory is that agents are utility maximisers, and whenever they get a chance they would act opportunistically to increase their personal benefits. Jensen and Ruback (1983) and Eisenhardt (1989a) consider that individuals are driven by their self-interest, which is why moral hazard becomes a problem for contracting. The agency theory posits that an agent’s behaviour can be either controlled by monitoring mechanism or by providing incentives (Gneezy et al., 2011), contingent upon the nature of the task and the cost factor to the principal (Hewitt, 2012). It is very difficult to monitor the productivity of professionals, due to specialised knowledge (Liefner, 2003; Lane and Kivisto, 2008). Therefore, Hölmstrom (1979) suggests the use of estimators when complete monitoring is either unacceptable or excessively expensive. Moreover, incentives provided to the educators might not function the way it performs in other agency exchanges, as teacher incentives are focused on outcomes and not their behaviour (Hansen, 2008) – a common problem in professional exchanges. The results of this study have therefore questioned both these mechanisms for professional agents because of measurement complications. Consequently, the study poses some interesting questions, such as do the faculty members actually need incentives to be propelled to give higher performances in their job?, and if so, then how should an optimal incentive system be designed?

Enforcing a contract is an essential cost of organizations for doing business. The principal must control this cost to the greatest extent possible for the business to be efficient.

The two main strategies that have been discussed in the literature for controlling organizational cost are: direct monitoring of the employees, to prevent them in engaging in fraudulent activities, or providing incentives to the employees, to induce them towards the expected behaviour. Two things emerge from this: *First*, the terminology of cost should be modified to perceive it as an investment. Instead of equating it with a cost, it should be treated as an investment, which will have more pleasant psychological effects on the employees and thus provide long-term benefits for the principal. Employees need to be treated like a precious resource, which provides a competitive edge to the organization. *Second*, the management instead of being impelled into the alternative of picking one strategy, can employ both the strategies, such as monitoring and providing incentives to employees, as per the requirements of a job in question. For example, inputs can be incentivised; whereas, outcomes monitored. Outcome has a noise factor due to external conditions therefore if incentives are attached to the outcomes, it will de-motivate the effort input of the faculty; e.g., linking incentives to the “students’ test score”; as this involves factors other than effective teaching, such as the student’s motivation level, background, and preparation for the examination, which are outside the educator’s control. Therefore, the two strategies can be treated as complementary, rather than mutually exclusive.

The study has made an important contribution towards the literature of human resource management, and organizational behaviour, by studying moral hazard via the use of high-powered incentives. The study has also made a significant contribution towards the literature of moral hazard, especially in professionals in the education sector, by identifying a wide range of moral hazards, which pertains to the faculty and further categorises these issues under the heads of teaching, research, and other academic activities – all of which are components of the educator’s job. Furthermore, the study has also provided a list of determinants, which are perceived to be the potential causes of moral hazard in the faculty. No previous work has explored the problem of moral hazard in such length and comprehensiveness. Hansen (2008) indicates that all empirical studies on teacher incentives are focused on the outcomes, and merely a few investigate the effect of incentives on the educators’ behaviour. Furthermore, the study has also provided a list of determinants, which are perceived to be the potential causes of moral hazard in the faculty. No previous work has explored the problem of moral hazard in such length and comprehensiveness. Hansen (2008) indicates that all empirical studies on teacher incentives are focused on the outcomes, and merely a few investigate the effect of incentives on the educators’ behaviour.

Moreover, the findings of this study confirm the basic assumption of agency theory that agents are “opportunistic” and whenever they get a chance they maximise their personal benefits (Eisenhardt, 1989a), in a non-western culture, where the evidence of any previous research in this area is absent. However, it is likewise significant to look at the design of the incentive system, which might be pushing an employee’s behaviour

in the wrong direction. Perrow (1986) criticises the agency theory to be unrealistically one-sided. Thus, it can be stated that agency theory has looked into at the problem of designing contracts strictly from the principal's perspective, and not from the viewpoint of the agents. The current study has studied incentives from the perspective of the agents, thus attending to this gap. Contracts should be planned in such a manner that would preserve the interest of both the parties to the contract. Hence, addressing the cause of opportunism will help mitigate the problem at root.

The research framework is a blend of theories from different disciplines, which were chosen to generate results that were closer to the context. The current study has analysed agency relationship by inserting process theories of motivation. In serving so it addresses the agency theorists, not entirely to consider professional agency exchanges from an economic perspective, but also from a behavioural perspective – to acquire a rich discernment of the actual problems related to principal-agent contracts. It is indicated that employee perception also plays a pivotal role in behavioural changes of an employee – an area that has lacked empirical research in the context of incentives. Moreover, still other cross-themes and disciplines can be validly intermingled within studies in this domain, to provide mixed outcomes. Organizational relationships are more intricate to be simply analysed through agency theory. Hence, the propositions of agency theory may not apply in all situations.

9.5.2 Practical Implications

The results of this research can be utilised for different practical purposes. It offers general recommendations for the managers and specific testimonials for the academia. The exploration and explanation of the problem of moral hazard, and testing of statistical models is of immense use, if the findings are properly incorporated by the managers and policy makers to improve the systems that would lead to enhanced employee motivation and performance. The statistical modelling tries to explain a complex phenomenon by looking into the underlying causal mechanism, which would otherwise be very difficult to comprehend with simple models – or by merely looking into the correlation between the variables.

9.5.2.1 Lessons for the Management

This study has enlisted a variety of moral hazards manifested in the educators. Some of these moral hazards are generic, and one can easily find them in almost all organizations; whereas, others are firm specific. The study has also surfaced up the potential determinants of moral hazard, which can be helpful predictors for employee behaviours in diverse sectors – particularly in the education sector. Managers can quickly identify the problem of moral hazard in the employees, and try to address this by controlling

its potential causes. This will help managers better equip themselves to combat the problem, by adopting a proactive strategy instead of opting for a reactive strategy.

Failure to serve the organizational purposes; the money spent on incentives becomes a bad debt for the organization. The findings caution the managers regarding proper use of high-powered incentives for multitasking professionals, to ward off any adverse effects. [Schwartz \(2009\)](#) argues that extrinsic incentives should be used in educational settings only with great care, as there are technical problems in the establishment of appropriate reward structures for the educators, based on merit. [Creech and Board \(2000\)](#) argue that “what is being measured is not always important and what is important is not always measured”. Throughout the study, emphasis has been laid on the problem of measurement, and the argument has been raised that incentives provided to the faculty have been linked to incorrect performance measures. If corrective measures are taken for the performance measurement of unstructured tasks, this can to some extent restore equity in the system, and thus mitigate the problem of moral hazard in professional employees. Presently, the incentive system seems to be disassociated from the cultural and contextual aspects of the workplace – elevating the wrong dimensions of the employee’s performance, which has ensued in an increased tendency among the faculty towards opportunistic behaviour.

Managers and incentive designers – particularly in the knowledge intensive industry – must be mindful of the complex nature of the work, and design an incentive system that has clear links with the work measures that need to be promoted. An incentive system needs to be designed properly in multitasking jobs, which will ensure a proportionate effort distribution by the employee among different activities, to avoid partial fulfilment of the job responsibilities. Thus, the incentives for multitasking jobs need to be treated and designed differently from incentives provided in simple jobs, as the impact on employee behaviour and performance will vary. The results of the study confirm the intermediary role of reward expectancy between the effect of employees’ disposition towards incentives on their tendency towards deviant behaviour. This implies that the incentive system design will impact an employee’s effort distribution and will therefore in turn determine his/her performance outcome. Moreover, the outcomes of this study question the organizational incentive system that is pushing employees to enhance their personal benefits, instead of achieving the noble cause of education. These findings have various implications for academia, especially if education is aimed, in part, at promoting the well-being of the community.

Another important implication of this study is to guide the development of an incentive system that is viable and motivates the faculty towards the right tasks, thus serving to reduce dysfunctional behaviour. This can be achieved by selecting measures that are correlated with the true objectives of the higher education, instead of the university’s objectives, whenever the two are in conflict. According to [Milkovich \(2013\)](#), the incentive scheme must be interwoven into the overall fabric of the compensation system, and the

total HR strategy. Thus, considering a holistic perspective, offers a different way to designing an incentive system. Managers should also seek alternative ways of motivating employees, which are more cost-effective, rather than spending huge sums of money on explicit incentives. The management must attend to the employee's dispositional characteristics, which can forestall or reduce deviant behaviour (Beauregard, 2014). Personality testing can be helpful in identifying individuals with a disposition towards incentive, whom can be offered training interventions to help improve their quality of thinking. Personality tests could explain more than 5% to 10% of the variance in work performance (Oswald and Hough, 2011; Li et al., 2014). Moreover, cognitive therapy can help teach employees, who hold a higher disposition towards incentives, to rearrange their priorities between education and money making. This will discard their negative thoughts with more rational thoughts.

Although, the factor of organizational justice perception was examined as a global construct, it may be of significant utility to the managers, academicians, and policy-makers to fortify the foundations of the organizational justice system, by incorporating fair performance appraisal practices; linked with other HR practices. The findings of this study suggest that organizations should institute a sound appraisal system, which is free of bias and subjectivity of the supervisors. Thus, besides improving the appraisal system, a strong leadership and a well-established accountability system are equally important for the effective performance of the employees. Many scholars have ascribed the failure of PRP, due to its poor implementation or weak top management commitment (Perry, 1986). Structural changes must precede individual-level solutions. The organization is responsible for preventing injustice and for proper implementation of the policies. Organizational justice thus needs to be brought into mainstream research to find ways and means to prevent excessive costs. Feedback can also be used as an input to improve weak areas of performance, which will affect the overall appraisal of the faculty. Thus, the appraisal can be used as an input as well as an output. The study adds to the body of work that suggests equity considerations to be important antecedents of individual conduct in organizations.

9.5.2.2 Lessons for the Academe

This research acts as a stimulant for scholars, who intend to work in the area of incentives and moral hazard, especially with the educators. Furthermore, the operationalisation of the constructs of moral hazard and incentives in the local context can be quite beneficial for future research of the kind. The validity of questionnaire can be further tested by researchers who aspire to use the constructs of moral hazard and incentives in similar studies. Future studies can more acutely focus on the operationalisation of moral hazard in university educators and can tap the construct more effectively and comprehensively.

The findings indicate that incentives have a direct, indirect, conditional, and a conditional indirect effect on moral hazard, are of immense use to the higher education sector in particular, and other sectors in general. “Teacher salaries typically account for more than 80% of education budgets. So governments with limited financial resources are often faced with critical policy trade-offs in seeking to offer quality instruction” (UNESCO, 2014). The recent report of the Commission states that none of the Pakistani universities appear on the ranking list of top 500 universities worldwide; whereas, the neighbouring countries such as China, Iran, and India are far ahead in the global university ranking, is alarming. Despite the fact that the HEC provides a huge portion of its budget to the faculty in the form of incentives; to improve the quality of teaching and research in the country – the results are heartbreaking. These alarming facts suggest that the Commission is persistently struggling with improving the quality of higher education in the region, and needs to re-evaluate and re-visit the prevalent incentive system for the faculty.

9.5.2.3 Global Utility

The generic use of incentives in different sectors warrants a wider applicability of the proposed models in other settings. This study provides an insight into the behavioural problems of professionals in the service industry, which are caused by the use of high-powered incentives. The models developed for the study can be replicated in any other sector and setting – private and public domains – to examine the impact of incentives with respect to their contextual setting.

9.6 Methodological Contributions

One of the gaps identified from the literature as provided in Chapter 1 (Section 1.2) shows the scarcity of the use of critical realism paradigm and mixed-methods in moral hazard research. The current work has attempted to bridge this gap, by taking an empirical research in the field of moral hazard; using the options of critical realism and mixed-method, which is a rare contribution. The research has adopted the strategy of triangulation at different levels and at different steps in the research, for instance, the prospects and perceptions of different layers of employees in the educational establishments have been commingled to get a three-dimensional picture of the problem of moral hazard. Triangulation has also been done in the data collection stage, and subsequently carried forward into the data analysis stage; to yield robust conclusions. Moral hazard has been analysed in detail using different layers of perceptions and by integrating the findings of mixed-methods that provide a unique insight into the “how”, “what”, and “why” of the problem.

Moreover, the research offers a unique cognitive aspect of incentives using the paradigm of critical realism, which has never been used in this area. Looking at the softer side of incentives, provides a fresh dimension to the problem of moral hazard, which is missing from the extant literature. Using the paradigm of critical realism and the mixed-method approach, the underlying causal mechanism of the problem of moral hazard has been eventually exposed. Adopting either a positivist or an interpretivist paradigm, with a single methodological approach would have yielded only superficial results. Thus, another main contribution is that the study has moved beyond exploring and reporting events, and looked into the causal powers, which have generated these events – embracing a striking feature of “critical realism”. Coupling the paradigm of critical realism with mixed-methods, the research has identified the extant determinants of moral hazard in a field setting; collecting data from the actual actors.

Another methodological contribution of the study is that besides testing the statistical models; using the traditional approach, it has tested the same models using a contemporary approach – SPSS PROCESS Macro as suggested by Hayes (2013), thus, formally introducing a novel technique for statistical testing of causal models. Formal presentation and formal application of the contemporary technique in academic research is a seminal work of this study. Testing data – using SPSS PROCESS Macro – has paved the way for future researchers, by orienting them with a user friendly technique. The contemporary approach has not only the ability to deal with a variety of complex models – using the basic technique of regression analysis – but can also generate advanced results with slight modification of the minimum code for each model because the macro uses model codes for statistical testing. Hayes (2013) claims that mediation and moderation have been treated as separate models with separate concepts and different analytical procedures; whereas, a comprehensive analysis should attempt to model the mechanism at work by linking antecedent(s) to consequent(s); while simultaneously allowing those effects to be contingent on context, circumstances, or individual differences. The current study has thus a major contribution towards testing complex statistical models in a more comprehensive way, which has never been witnessed in the previous research.

9.7 Caveats and Limitations

Every study is faced by challenges – some of which are specific to that research; whereas, others are generic in nature. Challenges, if not met properly and on time, are converted into limitations. The contributions of this study need to be examined in the light of its existing limitations, to allow an objective assessment of the research achievements. The current study has dealt with several limitations at different phases of the inquiry. Some challenges were conquered; whereas, others were attenuated. The primary limitations that posed this study can be fixed into personal limitations and the study limitations,

which can be transformed into prospective areas for future inquiry. These challenges and limitations are provided in the ensuing paragraphs.

9.7.1 Personal Reflections

The researcher was more sensitive towards the study, as she belongs to the profession of teaching. Although, different measures were taken to reduce the personal bias of the researcher at different stages of the research as provided in Chapter 4 (Subsection 4.7.3). However, still it was difficult to maintain objectivity in data collection and data analysis phases, as the background effect at times engulfed the researcher's neutral judgement. While designing the questionnaire – instead of approaching it with an impartial mind – the researcher approached it with a predisposed mind-set that led to over emphasise or ignoring different aspects of the topic under study. This bias could have been avoided, had the researcher not been a part of this profession. Every effort was made to disentangle the researcher's personal feelings from the study requirements; nonetheless, it would be difficult to conclusively assert that the research was free from the researcher's personal bias.

Moreover, adopting a mixed-method approach was rather challenging, particularly due to the researcher's lack of statistical background. Extensive preparation was undertaken to enable the researcher to learn and apply two different approaches (qualitative and quantitative), and ultimately triangulating the findings. The entire process was mentally exhausting and consumed a great deal of time and effort; while changing over from one approach to another.

9.7.2 Study Limitations

The current inquiry is founded on a rigorous and robust pattern of mixed-methods; nevertheless, it did not rule out some of the limitations that affected the quality of the study results. Objectivity demands that the limitations of the research must be acknowledged and presented clearly to the readers. Some of the major limitations of the research are discussed below.

9.7.2.1 Metaphysical Ontology of Moral Hazard

The current study has inherited all tribulations associated with the paradigm of “critical realism”. The research is based on the premise of “critical realism” as posited by [Sayer \(2004\)](#), which admits that the researcher has privileged access to the real world; therefore, all knowledge of the world is fallible. Critical realism acknowledges the fact that achieving absolute truth is not possible, although it accepts the ontological stance that things exist independent of the human mind, but the researcher's choice of what to

measure lends itself to subjectivity, which can be challenged. Moreover, using “double hermeneutics” is open to all sorts of biases in interpreting data. The social phenomena investigated by this research may or may not be true, but according to [Sayer and Sayer \(2000\)](#) understanding these is not a matter of abstraction followed by concrete synthesis, but of interpretation. Therefore, determining the metaphysical ontology of moral hazard through this research on whether it is the actual truth or not is quite difficult and restricts the researcher’s ability from claiming wider generalisation of the findings.

9.7.2.2 Cross-Sectional Data

The data were cross-sectional, which makes it difficult to establish causal linkages between the different sets of variables chosen for the study. A study of a causal nature requires some causal arrangement, such as the collection of longitudinal data ([Springer et al., 2010](#)). Longitudinal data would provide an order in time and space, for the manifestation of the effect of one variable on another. Moreover, causal inquiries can also be better addressed by using experimental methods – instead of a field study – where the researcher can rarely manipulate the conditions to see the real effect of hypothetical causes on the interest phenomena ([Levitt and List, 2009](#)).

9.7.2.3 Narrow Focus of the Study

The primary focus of the current study, is on teaching and research; muting other areas included in the faculty’s job. Examining the effect of incentives on the faculty for tasks besides teaching and research could have yielded a more compact picture of the effect of incentives on employees’ deviant behaviour. The study thus provides only part of the entire picture.

9.7.2.4 Scant Literature

The absence of previous studies in the area of incentives, moral hazard, and reward expectancy within the local context; created a genuine challenge for the researcher, with regard to the operationalisation of the constructs, and to develop and design the questionnaire. After innumerable trials and errors, the questionnaire gained its final shape. Tapping latent constructs through a set of items and measuring them quantitatively is not only difficult, but always subject to critique.

Moral hazard is a sensitive issue and had to be measured in a technical way. The sensitivity of the topic further aggravated the problem of measurement of latent variables by replacing the actual measures with the proxy measures. This study intended to measure the faculty’s intention towards engagement in moral hazard in the workplace; where both actual and proxy measures were used to measure the latent

scale. Quantifying all the items using actual/direct measures would not have been the right scheme for measuring this construct, as the answers would have been biased, e.g., asking a faculty member whether he/she is involved in acts of “free-riding”, or is he/she comfortable with the idea of “plagiarism”, the answer would have been on the extreme lower end of the scale, i.e., strongly disagree. However, extracting the same information by using proxy measures; yielded realistic responses from the respondents. Sanity demanded using a mix of actual and proxy measures for measuring the scale. The questions that were included in the survey covered a broad range of activities that are included in the faculty job, with a focus on the core tasks of teaching and research.

Unearthing this tricky information needed tact on the part of the researcher, but by no means should it be taken as a misdemeanour of the research ethical norms. To surmount this challenge, the questions were couched in such a manner that they did not disturb the sensitivity level of the respondents. Using proxy measures has its own limitations and is just the second-best substitute for direct measures. This strategy was adopted to ease the respondents in dealing with sensitive matters. Nonetheless, using proxy measures created interpretation problems for the analyst. Russel (2000) suggests that, “all variables are measured by their indicators, and indicators are defined by their values”.

9.7.2.5 Non-Availability of the Data

Non-availability of the required data for the research increased the challenges of the researcher manifold. For instance, the compensation practices and employee evaluation record – in almost all organizations – are kept confidential for different reasons, but the researcher was pressed hard by the demands of the study to generate as much quality information as possible for quality results. Nonetheless, extracting this information from the managers and administrators was an uphill task. This involved the researcher to give the respondents, sound and repeated pledges that the data would not be leaked out, and would only be used for research purposes, which helped to warm up the respondent’s attitude.

Obtaining information from the faculty members and encouraging them to confide in the researcher, was a task of matching difficulty. Employees always have reservations about their employment security. Giving out the truth, can at times, put them in an awkward situation. The faculty members were reluctant to explicitly give out all or any of the information, due to a possible threat to their future employment, as well as their career. Excluding the respondents name from the questionnaire, provided the respondents with some surety of the confidentiality of their information, which avoids tracing back the responses to the respondents, as discussed in Chapter 4 (Section 4.13).

9.7.2.6 Limited Focus on Incentives

Another restriction of the current study is that it did not constitute an endeavour to examine “total quality” or “organizational revitalization” movements – often linked with the implementation of performance based pay (Milkovich et al., 1991). The subject area focuses on incentives aimed at the motivation of individuals; whereas, different theoretical considerations can come into action when incentives are based on team or organizational performance (Bokhour et al., 2006; Guthrie and Hollensbe, 2004; Kim and Gong, 2009).

Furthermore, as the study was focused on the moral hazard in the employees, the results could therefore have been ameliorated by adding certain other psychological factors and personality traits of the employees, which have a deep connection with the phenomena under investigation. The discussion of control variables was also cut down to a bare minimum, so as to leave ample room for the detailed explanation and discussion of the findings of the main variables of the study, which to some extent subtracted from the quality of the current study.

9.7.2.7 Limited Generalisation

The findings of this work are limited solely to the public-sector higher education institutions in the area of the KPK; excluding lower-grade schools and other educational institutes. The findings can be extended to other sectors, where incentives are offered to employees as a motivational tool. Despite making claims, the researcher does not make an absolute claim to generalisation of the study findings. Case studies seem to be a poor basis for generalisation, yet generalisation is a part of the case study Stake (1995). The author further argues that:

Generalizations about a case or few cases in a particular situation may not be thought of generalizations and may need such label as petite generalization, but they are generalizations that occur all along the way in the case study (1995, p. 7).

Akin to the challenge of generalisation, is the challenge of “assertions”. On the basis of collected data, the researchers draw their own conclusions (assertions), which is also a form of generalisation. Recognising that other interpretations do exist for the one proposed by the researcher, Stake (1995) suggests that a sophisticated researcher presents one or more of those other interpretations, perhaps attributing them to a real source or generic source. The dilemma is that not many guidelines are available for transforming observations into assertions.

9.7.2.8 Regional Conditions

Poor security conditions in the region (KPK) – which has become a national catastrophe – posed a huge challenge to this research project. Mobility became limited in such conditions; affecting the data collection process. Likewise, educational institutes were often shut down for days or even weeks due to security concerns; bringing the data collection to a complete halt. The unforeseen breaks thus extended the completion time of this study.

9.8 Delimitations of the Study

The key delimitations of the study are provided below;

1. Inferences drawn from the faculty's job might not readily be applicable to other types of jobs, due to differences in the nature of the work;
2. Inferences drawn from the public-sector higher education establishments might not readily be applicable to other public-sector institutions, due to differences in the occupations, trends, and context;
3. Due to cultural differences, the findings of this study might not readily be applicable in a different culture; therefore, caution needs to be exercised.

9.9 Future Direction-Unlocking Avenues

One of the objectives of conducting research regarding professional agents' exchanges is to encourage future empirical research into models for multitasking professionals, as the demand for talent is increasing ([Chambers et al., 1998](#)). Future research can modify or extend this study along several dimensions; casting a wider net around the phenomena or problem of moral and incentives. The current study has just scratched the surface of the role of incentives in the problem of moral hazard in multitasking professionals.

9.9.1 Inclusion of Other Variables

The significant results of the causal models of this study suggest that similar models can be tested with different variables, or with even more components of the existing constructs. Further investigation is required, which should include the examination and empirical testing of other variables, such as organizational leadership, organizational culture, personality traits of the employees, self-esteem, locus of control, employee commitment, emotional intelligence, loyalty, etc. Furthermore, the variables identified in the theoretical framework are also likely to be more complex in their interaction

with each other, as well as with the system holding these variables, these complexities might have been missed out or over simplified. The framework is sufficiently elastic and receptive to the addition of other variables, which might provide a deeper insight into the problem.

9.9.2 Testing with New Assumptions

The models developed for this study can be tested with other assumptions of the agency theory. For this study, the basic assumption of agency theory has been adopted that consider agents as “opportunistic” and have a tendency to engage in “shirking” behaviours. This assumption was adopted for simplification, which could be viewed as a limitation. The theory needs to be tested with other assumptions that are empirically embedded in such types of contracts.

9.9.3 Using Longitudinal Study and Experimental Design

Causal studies can be better explained with experimental design, or longitudinal data (Springer et al., 2010), where manipulation of the control variables, as well as some additional control measures can yield interesting results, which could facilitate robust causal inferences (Kuvaas, 2006). Future research could incorporate experimental research designs (Levitt and List, 2009); in applying similar models. A longitudinal study design in a field setting can be helpful to understand the employee behavioural patterns ex-ante and ex-post to the incentive provision.

9.9.4 Comparative Analysis

A comparative study of the public and private sector universities can further enhance the understanding of the problem; since the two sectors function along different lines while catering to the same customers. Moreover, a comparative analysis of the higher education sector with other public sector establishments, with deference to the provision of incentives and its effect on the moral hazard tendency of an employee, can generate interesting results.

9.9.5 Methodological Refinements

Conducting research in this area using a single approach, such as either induction or deduction, will reveal only half the truth; retrodution should be chosen as a preferred approach to sweep over the limitation of both the approaches and to capitalise on the strengths of both.

Moreover, including other stakeholders in the higher education sector (e.g., students, parents, accreditation agencies, citizens, etc.); in similar types of research, can improve the quality of the results. The study has ignored other stakeholders in this sector, along with extraneous elements that can have an impingement on the quality of higher education. Thus, several methodological refinements to this study are warranted.

9.9.6 Cross-Cultural Research

Agency theory has been criticised for ignoring social relations that incorporate new perspectives, by recognising cultural contexts, and social and hierarchical relations, which can yield interesting results. Cross-cultural research is needed in the fields of moral hazard and incentives. Comparing and contrasting results of the studies conducted in different cultures, can provide interesting insights to the academicians and researchers; acknowledging the fact that that Eastern cultures show strong preferences for behavioural-based pay, in comparison to Western cultures ([Brown, 2004](#)).

9.9.7 Testing the Model(s) Using Other Theories

There is conceptual and practical merit in moving towards testing more complex theories with empirical data. Fiedler's contingency theory, goal-setting theory, game theory, and so forth, can yield deeper answers to questions about causality with respect to moral hazard; as a result of incentives offered to the employees.

9.10 Conclusion

This chapter has presented a summary of the research outcomes and discussed the broad contributions to theory and practice. The findings obtained from both the qualitative and quantitative approaches have been triangulated for mutual validation. Moreover, the empirical findings have been juxtaposed with the literature, to increase its robustness and enhance the internal validity of the study. The researcher has also highlighted the main caveats in the study and future opportunities available to the scholars who are interested in similar topics.

The evidence from different sources has suggested that incentives, along with the employees' perception of equity and expectancy, have a significant impact on the employees' tendency to engage in moral hazard. However, the results cannot be ascertained with absolute precision, due to the nature of the phenomena that involve latent variables. Yet, these findings can provide the basis for questioning the use of explicit incentives to enhance the quality of education.

References

- Abe, M. (2007). Why companies in Japan are introducing performance-based treatment and reward systems-The background. *Japan Labor Review*, 4(2):7–36.
- Adam Jr, E. E. and Foster Jr, S. T. (2000). Quality improvement approach and performance: Multisite analysis within a firm. *Journal of Quality Management*, 5(2):143–158.
- Adams, J. S. (1965). Inequity in social exchange. *Advances in Experimental Social Psychology*, 2:267–299.
- Agarwal, N. K. (2011). Verifying survey items for construct validity: A two-stage sorting procedure for questionnaire design in information behavior research. *Proceedings of the American Society for Information Science and Technology*, 48(1):1–8.
- Aggarwal, P. and O'Brien, C. L. (2008). Social loafing on group projects: Structural antecedents and effect on student satisfaction. *Journal of Marketing Education*, 30(3):255–264.
- Aguinis, H. (2009). An expanded view of performance management. *J. Smither and M. London. Performance Management: Putting Research into Action*, pages 1–43.
- Aguinis, H. et al. (2012a). The best and the rest: Revisiting the norm of normality of individual performance. *Personnel Psychology*, 65(1):79–119.
- Aguinis, H., Gottfredson, R. K., and Joo, H. (2012b). Using performance management to win the talent war. *Business Horizons*, 55(6):609–616.
- Aguinis, H., Joo, H., and Gottfredson, R. K. (2013). What monetary rewards can and cannot do: How to show employees the money. *Business Horizons*, 56(2):241–249.
- Aiken, L. S. and West, S. G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Sage Publications.
- Allcock, D. and Filatotchev, I. (2010). Executive incentive schemes in initial public offerings: The effects of multiple-agency conflicts and corporate governance. *Journal of Management*, 36(3):663–686.

- Allen, D. G., Bryant, P. C., and Vardaman, J. M. (2010). Retaining talent: Replacing misconceptions with evidence-based strategies. *The Academy of Management Perspectives*, 24(2):48–64.
- Andrabi, T. R., Das, J., and Khwaja, A. I. (2010). Education policy in Pakistan: A framework for reform.
- Andrews, M. C. and Kacmar, K. M. (2001). Discriminating among organizational politics, justice, and support. *Journal of Organizational Behavior*, 22(4):347–366.
- Apodaca, P. and Grad, H. (2005). The dimensionality of student ratings of teaching: Integration of uni-and multidimensional models. *Studies in Higher Education*, 30(6):723–748.
- Appling, S. E., Naumann, P. L., and Berk, R. A. (2001). Using a faculty evaluation triad to achieve evidence-based teaching. *Nursing and Health Care Perspectives*, 22(5):247–251.
- Ariely, D., Bracha, A., and Meier, S. (2007). Doing good or doing well? image motivation and monetary incentives in behaving prosocially. Technical report, IZA Discussion Papers.
- Armstrong, M. (1993). *Managing Reward Systems*. Open University Press Buckingham.
- Armstrong, M. and Baron, A. (2000). Performance management. *Human Resource Management*, pages 69–84.
- Armstrong, M., Brown, D., and Reilly, P. (2011). Increasing the effectiveness of reward management: An evidence-based approach. *Employee Relations*, 33(2):106–120.
- Arrow, K. J. (1984). The economics of agency. Technical report, DTIC Document.
- Arrowsmith, J., Nicholaisen, H., Bechter, B., and Nonell, R. (2010). The management of variable pay in European banking. *The International Journal of Human Resource Management*, 21(15):2716–2740.
- Aryee, S., Budhwar, P. S., and Chen, Z. X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model. *Journal of Organizational Behavior*, 23(3):267–285.
- Ashraf, M. (2007). Factors affecting female employment in male-dominated occupations: Evidence from the 1990 and 2000 census data. *Contemporary Economic Policy*, 25(1):119–130.
- Atkinson, A., Burgess, S., Croxson, B., Gregg, P., Propper, C., Slater, H., and Wilson, D. (2009). Evaluating the impact of performance-related pay for teachers in England. *Labour Economics*, 16(3):251–261.

- Awan, H. M., Bhatti, M., Bukhari, K., and Qureshi, M. (2008). Critical success factors of tqm: Impact on business performance of manufacturing sector in Pakistan. *International Journal of Business and Management Science*, 1(2):187–203.
- Azoulay, P., Graff Zivin, J. S., and Manso, G. (2011). Incentives and creativity: Evidence from the academic life sciences. *The RAND Journal of Economics*, 42(3):527–554.
- Baker, G. (2002). Distortion and risk in optimal incentive contracts. *Journal of Human Resources*, pages 728–751.
- Baker, G., Gibbons, R., and Murphy, K. J. (1997). Implicit contracts and the theory of the firm. Technical report, National Bureau of Economic Research.
- Baker, G. P. (1992). Incentive contracts and performance measurement. *Journal of Political Economy*, 100(3):598–614.
- Baker, G. P., Jensen, M. C., and Murphy, K. J. (1988). Compensation and incentives: Practice vs. theory. *The Journal of Finance*, 43(3):593–616.
- Bakhshi, A., Kumar, K., and Rani, E. (2009). Organizational justice perceptions as predictor of job satisfaction and organization commitment. *International Journal of Business and Management*, 4(9):145–154.
- Balkin, D. B. and Gomez-Mejia, L. R. (1987). Toward a contingency theory of compensation strategy. *Strategic Management Journal*, 8(2):169–182.
- Balkin, D. B. and Gomez-Mejia, L. R. (1990). Matching compensation and organizational strategies. *Strategic Management Journal*, 11(2):153–169.
- Ball, S. J. (2000). Performativities and fabrications in the education economy: Towards the performative society? *The Australian Educational Researcher*, 27(2):1–23.
- Ballou, D. (2001). Pay for performance in public and private schools. *Economics of Education Review*, 20(1):51–61.
- Baron, J. N. and Kreps, D. M. (1999). *Strategic Human Resources: Frameworks for General Managers*, volume 149. John Wiley New York.
- Baron, R. M. and 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):1173–1182.
- Baruch, Y. (1999). Response rate in academic studies- A comparative analysis. *Human Relations*, 52(4):421–438.
- Baruch, Y. and Hall, D. T. (2004). The academic career: A model for future careers in other sectors? *Journal of Vocational Behavior*, 64(2):241–262.

- Baruch, Y. and Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, 61(8):1139–1160.
- Baugher, J. F. (2008). Thoughts on academic tenure. www.joe.baugher.com/Tenure.htm. [Accessed:20.05.2013].
- Baxter, P. and Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4):544–559.
- Beauregard, T. A. (2014). Fairness perceptions of work- life balance initiatives: Effects on counterproductive work behaviour. *British Journal of Management*, 25:772–789.
- Becker, B. and Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39(4):779–801.
- Bedeian, A. G., Taylor, S. G., and Miller, A. N. (2010). Management science on the credibility bubble: Cardinal sins and various misdemeanors. *Academy of Management Learning & Education*, 9(4):715–725.
- Beer, M., Cannon, M. D., Baron, J. N., Dailey, P. R., Gerhart, B., Heneman, H. G., Kochan, T., Ledford, G. E., and Locke, E. A. (2004). Promise and peril in implementing pay-for-performance. *Human Resource Management*, 43(1):3–48.
- Beer, S. (1981). *Brain of the Firm: The Managerial Cybernetics of Organization*. J. Wiley New York.
- Belcher, D. W. (1962). Toward a behavioral science theory of wages. *Academy of Management Journal*, 5(2):102–116.
- Belfield, C. R. and Heywood, J. S. (2008). Performance pay for teachers: Determinants and consequences. *Economics of Education Review*, 27(3):243–252.
- Benabou, R. and Tirole, J. (2003). Intrinsic and extrinsic motivation. *The Review of Economic Studies*, 70(3):489–520.
- Bennell, P., Akyeampong, K., and Britain, G. (2007). *Teacher Motivation in Sub-Saharan Africa and South Asia*. DfID London.
- Bennett, R. J. and Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3):349–360.
- Bentler, P. and Bonnet, D. (1980). Significance tests and goodness of fit in the analysis of covariance structure. *Psychological Bulletin*, 88(3):588–606.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2):238–246.

- Berk, R. A. (2005). Survey of 12 strategies to measure teaching effectiveness. *International Journal of Teaching and Learning in Higher Education*, 17(1):48–62.
- Bernard, H. R. (2011). *Research Methods in Anthropology*. Rowman Altamira.
- Berrone, P., Makri, M., and Gomez-Mejia, L. R. (2008). Executive compensation in north american high-technology firms: A contextual approach. *The International Journal of Human Resource Management*, 19(8):1534–1552.
- Bhaskar, R. (2002). The philosophy of meta-reality. *Journal of Critical Realism*, 1(1):67–93.
- Bhaskar, R. (2010). *Reclaiming reality: A critical introduction to contemporary philosophy*. Taylor & Francis.
- Bies, R. J. and Moag, J. S. (1986). Interactional justice: Communication criteria of fairness. *Research on Negotiation in Organizations*, 1(1):43–55.
- Birnik, A. and Billsberry, J. (2008). Reorienting the business school agenda: The case for relevance, rigor, and righteousness. *Journal of Business Ethics*, 82(4):985–999.
- Blenkinsopp, J. and Stalker, B. (2004). Identity work in the transition from manager to management academic. *Management Decision*, 42(3/4):418–429.
- Bloom, M. (1999). The performance effects of pay dispersion on individuals and organizations. *Academy of Management Journal*, 42(1):25–40.
- Bloom, M. and Milkovich, G. T. (1998). Relationships among risk, incentive pay, and organizational performance. *Academy of Management Journal*, 41(3):283–297.
- Blunch, N. J. (2010). *Introduction to Structural Equation Modeling Using IBM SPSS Statistics and Amos*. Sage Publications.
- Bohnet, I. and Eaton, S. C. (2003). *Does Performance Pay Perform? Conditions for Success in the Public Sector*. J. Donahue and J. Nye, Jr. (eds.), *In For the People: Can We Fix the Public Service?* Washington, D.C: Booklings Institution.
- Bokhour, B. G., Burgess, J. F., Hook, J. M., White, B., Berlowitz, D., Guldin, M. R., Meterko, M., and Young, G. J. (2006). Incentive implementation in physician practices: A qualitative study of practice executive perspectives on pay for performance. *Medical Care Research and Review*, 63(1 suppl):73S–95S.
- Bonner, S. E., Hastie, R., Sprinkle, G. B., and Young, S. M. (2000). A review of the effects of financial incentives on performance in laboratory tasks: Implications for management accounting. *Journal of Management Accounting Research*, 12(1):19–64.
- Bonner, S. E. and Sprinkle, G. B. (2002). The effects of monetary incentives on effort and task performance: Theories, evidence, and a framework for research. *Accounting, Organizations and Society*, 27(4):303–345.

- Boon, C., Den Hartog, D. N., Boselie, P., and Paauwe, J. (2011). The relationship between perceptions of hr practices and employee outcomes: Examining the role of person–organisation and person–job fit. *The International Journal of Human Resource Management*, 22(01):138–162.
- Boston, C. (2002). The concept of formative assessment. ERIC Digest.
- Bowen, D. E. and Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the strength of the HRM system. *Academy of Management Review*, 29(2):203–221.
- Boxall, P. (2013). Mutuality in the management of human resources: Assessing the quality of alignment in employment relationships. *Human Resource Management Journal*, 23(1):3–17.
- Boyd, N. M. (2004). Expanding the view of performance appraisal by introducing social justice concerns. *Administrative Theory and Praxis*, 26(3):249–278.
- Bozionelos, N. and Wang, L. (2007). An investigation on the attitudes of chinese workers towards individually based performance-related reward systems. *The International Journal of Human Resource Management*, 18(2):284–302.
- Brading, E. and Wright, V. (1990). Performance-related pay. *Personnel Management Factsheets*, (30).
- Brickley, J. A. and Zimmerman, J. L. (2001). Changing incentives in a multitask environment: Evidence from a top-tier business school. *Journal of Corporate Finance*, 7(4):367–396.
- Brockner, J. and Wiesenfeld, B. M. (1996). An integrative framework for explaining reactions to decisions: Interactive effects of outcomes and procedures. *Psychological Bulletin*, 120(2):189–208.
- Brown, G. T. (2004). Teachers’ conceptions of assessment: Implications for policy and professional development. *Assessment in Education: Principles, Policy and Practice*, 11(3):301–318.
- Brown, M. P., Sturman, M. C., and Simmering, M. J. (2003). Compensation policy and organizational performance: The efficiency, operational, and financial implications of pay levels and pay structure. *Academy of Management Journal*, 46(6):752–762.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6(1):97–113.
- Bui, H. T. (2014). Student–supervisor expectations in the doctoral supervision process for business and management students. *Business and Management Education in HE*, 1(1):12–27.

- Buller, P. F. and McEvoy, G. M. (2012). Strategy, human resource management and performance: Sharpening line of sight. *Human Resource Management Review*, 22(1):43–56.
- Burawoy, M. (1998). The extended case method. *Sociological Theory*, 16(1):4–33.
- Burgess, S., Propper, C., Ratto, M., and Tominey, E. (2012). Incentives in the public sector: Evidence from a government agency. Technical report, Discussion Paper series, Forschungsinstitut zur Zukunft der Arbeit.
- Burgess, S. M., Croxson, B., Gregg, P., and Propper, C. (2001). *The intricacies of the relationship between pay and performance for teachers: Do teachers respond to performance related pay schemes?* University of Bristol, Centre for Market and Public Organisation.
- Butnaru, C. (2009). Social psychology and marketing: The consumption game – Understanding marketing and consumer behavior through game theory. *Review of Economic and Business Studies*, (4):165–185.
- Campbell, D. T. and Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56(2):81–105.
- Campbell, J. P. (1990). *The role of theory in industrial and organizational psychology*. M. D. Dunnette & L. M. Hough (eds.), *In Handbook of industrial and organizational psychology*. Palo Alto, CA: Consulting Psychologists Press.
- Campbell, S. M., Reeves, D., Kontopantelis, E., Sibbald, B., and Roland, M. (2009). Effects of pay for performance on the quality of primary care in England. *New England Journal of Medicine*, 361(4):368–378.
- Carraher, S. M. (2011). Turnover prediction using attitudes towards benefits, pay, and pay satisfaction among employees and entrepreneurs in Estonia, Latvia, and Lithuania. *Baltic Journal of Management*, 6(1):25–52.
- Case, J. (2001). When salaries aren't secret. *Harvard Business Review*, 79(5):37–49.
- Casson Jr, M. H. (2007). Reducing teacher moral hazard in the us elementary and secondary educational system through merit-pay: An application of the principal–agency theory. In *Forum for Social Economics*, volume 36, pages 87–95. Springer.
- Chambers, E. G., Foulon, M., Handfield-Jones, H., Hankin, S. M., and Michaels, E. G. (1998). The war for talent. *McKinsey Quarterly*, pages 44–57.
- Chambers, R. G. and Quiggin, J. (2005). Incentives and standards in agency contracts. *Journal of Public Economic Theory*, 7(2):201–228.

- Chen, Y.-Y. and Fang, W. (2008). The moderating effect of impression management on the organizational politics–performance relationship. *Journal of Business Ethics*, 79(3):263–277.
- Chib, V. S., De Martino, B., Shimojo, S., and O’Doherty, J. P. (2012). Neural mechanisms underlying paradoxical performance for monetary incentives are driven by loss aversion. *Neuron*, 74(3):582–594.
- Chien, M. S., Lawler, J. S., and Uen, J.-F. (2010). Performance-based pay, procedural justice and job performance for R&D professionals: Evidence from the Taiwanese high-tech sector. *The International Journal of Human Resource Management*, 21(12):2234–2248.
- Chiles, T. H. and McMackin, J. F. (1996). Integrating variable risk preferences, trust, and transaction cost economics. *Academy of Management Review*, 21(1):73–99.
- Cho, Y. J. and Perry, J. L. (2012). Intrinsic motivation and employee attitudes role of managerial trustworthiness, goal directedness, and extrinsic reward expectancy. *Review of Public Personnel Administration*, 32(4):382–406.
- Chubb C, Reilly P, B. D. (2011). Performance management: Literature review. Technical report, HR Network Paper MP90, Institute for Employment Studies.
- CIDP (2009). Meeting the UK’s people management skills deficit. Technical report, CIDP.
- Cobb, A. T. and Frey, F. M. (1996). The effects of leader fairness and pay outcomes on superior/subordinate relations. *Journal of Applied Social Psychology*, 26(16):1401–1426.
- Cohen, J., Cohen, P., West, S. G., and Aiken, L. S. (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Routledge.
- Cohen, J., Cohen, P., West, S. G., and Aiken, L. S. (2013). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Routledge.
- Cohen, J., Cohen P, W. S. and Aiken, L (2003). *Applied Multiple Regression/Correlation Analysis for Behavioural Sciences 3rd (ed.)*. Mahwah, New Jersey: Lawrence Erlbaum.
- Collins, C. J. and Smith, K. G. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of Management Journal*, 49(3):544–560.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O., and Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86(3):425–445.

- Colville, K. and Millner, D. (2011). Embedding performance management: understanding the enablers for change. *Strategic HR Review*, 10(1):35–40.
- Combs, J., Liu, Y., Hall, A., and Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3):501–528.
- Comrey, A. and Lee, H. (1992). *A first course in factor analysis*. Lawrence Erlbaum Associates.
- Conceição, P., Ehrenfeld, J., Heitor, M., and Vieira, P. S. (2006). Sustainable universities: fostering learning beyond environmental management systems. *International Journal of Technology, Policy and Management*, 6(4):413–440.
- Corbin, J. and Strauss, A. (1994). Grounded Theory Methodology. *Handbook of Qualitative Research*, pages 273–285.
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1):98–104.
- Courty, P. and Marschke, G. (2003). Dynamics of performance-measurement systems. *Oxford Review of Economic Policy*, 19(2):268–284.
- Creamer, E. G. (2005). Promoting the effective evaluation of collaboratively produced scholarship: A call to action. *New Directions for Teaching and Learning*, 2005(102):85–98.
- Creech, J. D. and Board, S. R. E. (2000). *Linking higher education performance indicators to goals*. Southern Regional Education Board.
- Cromwell, J., Trisolini, M. G., Pope, G. C., Mitchell, J. B., and Greenwald, L. M. (2011). *Pay for Performance in Health Care: Methods and Approaches*. RTI Press.
- Cropanzano, R. (2001). *Justice in the Workplace: From Theory to Practice*, volume 2. Psychology Press.
- Cropanzano, R. and Ambrose, M. L. (2001). Procedural and distributive justice are more similar than you think: A monistic perspective and a research agenda. *Advances in Organizational Justice*, 119:151.
- Cropanzano, R., Byrne, Z. S., Bobocel, D. R., and Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior*, 58(2):164–209.
- Cropanzano, R., Goldman, B. M., and Benson III, L. (2005). Organizational justice. *Handbook of Work Stress*, pages 63–87.
- Currall, S. C., Towler, A. J., Judge, T. A., and Kohn, L. (2005). Pay satisfaction and organizational outcomes. *Personnel Psychology*, 58(3):613–640.

- Czarnitzki, D., Hussinger, K., and Schneider, C. (2011). Commercializing academic research: the quality of faculty patenting. *Industrial and Corporate Change*, 20(5):1403–1437.
- da Silva Rosa, R., Izan, H., Steinbeck, A., and Walter, T. (2000). The method of payment decision in australian takeovers: An investigation of causes and effects. *Australian Journal of Management*, 25(1):67–94.
- Dalton, D. R., Hitt, M. A., Certo, S. T., and Dalton, C. M. (2007). The fundamental agency problem and its mitigation: Independence, equity, and the market for corporate control. *The Academy of Management Annals*, 1(1):1–64.
- Danermark, B. (2002). *Explaining society: Critical realism in the social sciences*. Psychology Press.
- Datar, S., Kulp, S. C., and Lambert, R. A. (2001). Balancing performance measures. *Journal of Accounting Research*, 39(1):75–92.
- Davis, J. H., Schoorman, F. D., and Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1):20–47.
- Davison, H. K., Mishra, V., Bing, M. N., and Frink, D. D. (2014). How individual performance affects variability of peer evaluations in classroom teams a distributive justice perspective. *Journal of Management Education*, 38(1):43–85.
- de Silva, S. (1998). *Performance-related and skill-based pay: An introduction*. ILO.
- de Waal, A. A. (2004). Stimulating performance-driven behaviour to obtain better results. *International Journal of Productivity and Performance Management*, 53(4):301–316.
- de Waal, A. A. and Counet, H. (2009). Lessons learned from performance management systems implementations. *International Journal of Productivity and Performance Management*, 58(4):367–390.
- Deckop, J. R., Mangel, R., and Cirka, C. C. (1999). Getting more than you pay for: Organizational citizenship behavior and pay-for-performance plans. *Academy of Management Journal*, 42(4):420–428.
- DeConinck, J. B. (2010). The effect of organizational justice, perceived organizational support, and perceived supervisor support on marketing employees' level of trust. *Journal of Business Research*, 63(12):1349–1355.
- Delfgaauw, J. and Dur, R. (2010). Managerial talent, motivation, and self-selection into public management. *Journal of Public Economics*, 94(9):654–660.
- Della Porta, D. and Keating, M. (2008). *Approaches and Methodologies in the Social Sciences: A Pluralist Perspective*. Cambridge University Press.

- DeNisi, A. and Smith, C. E. (2014). Performance appraisal, performance management, and firm-level performance: A review, a proposed model, and new directions for future research. *The Academy of Management Annals*, 8(1):127–179.
- Denisi, A. S. and Pritchard, R. D. (2006). Performance appraisal, performance management and improving individual performance: A motivational framework. *Management and Organization Review*, 2(2):253–277.
- Deutsch, M. (1985). Distributive justice: A social-psychological perspective.
- Dewatripont, M., Jewitt, I., and Tirole, J. (2000). Multitask agency problems: Focus and task clustering. *European Economic Review*, 44(4):869–877.
- Dey, I. (1993). *Qualitative Data Analysis: A User Friendly Guide for Social Scientists*. Routledge.
- Dey, S. K. and Sobhan, M. A. (2006). Impact of unethical practices of plagiarism on learning, teaching and research in higher education: Some combating strategies. In *Information Technology Based Higher Education and Training, 2006. ITHET'06. 7th International Conference on*, pages 388–393. IEEE.
- Dharwadkar, B., George, G., and Brandes, P. (2000). Privatization in emerging economies: An agency theory perspective. *Academy of Management Review*, 25(3):650–669.
- Dick, W. and Baskett, P. (1999). Recommendations for uniform reporting of data following major trauma: A report of a working party of the international trauma anaesthesia and critical care society (itaccs). *Resuscitation*, 42(2):81–100.
- Division, P. (2005). Supervisor's guide to performance management and appraisal process. Technical report, West Virginia Division of Employee Relations Section.
- Dixit, A. (2002). Incentives and organizations in the public sector: An interpretative review. *Journal of Human Resources*, pages 696–727.
- Dolan, S. L., Tzafrir, S. S., and Baruch, Y. (2005). Testing the causal relationships between procedural justice, trust and organizational citizenship behavior. *Revue de Gestion des Ressources Humaines*, 57:79–89.
- Downward, P. and Mearman, A. (2007). Retrodution as mixed-methods triangulation in economic research: Reorienting economics into social science. *Cambridge Journal of Economics*, 31(1):77–99.
- Drennan, L. T. and Beck, M. (2000). Teaching and research—equal partners or poor relations? Available: www.leeds.ac.uk/educol/documents/00001405.htm. [Accessed 24 July 2013].

- Drucker, P. F. (1998). *Harvard business review on knowledge management*. Harvard Business Press.
- Duffy, R., Fearn, A., and Hornibrook, S. (2003). Measuring distributive and procedural justice: An exploratory investigation of the fairness of retailer-supplier relationships in the UK food industry. *British Food Journal*, 105(10):682–694.
- Duffo, E. and Hanna, R. (2005). Monitoring works: Getting teachers to come to school. Technical report, National Bureau of Economic Research.
- Duffo, E., Hanna, R., and Rya, S. P. (2012). Incentives work: Getting teachers to come to school. *The American Economic Review*, 102(4):1241–1278.
- Dulebohn, J. H. and Werling, S. E. (2007). Compensation research past, present, and future. *Human Resource Management Review*, 17(2):191–207.
- Durant, R. F., Kramer, R., Perry, J. L., Mesch, D., and Paarlberg, L. (2006). Motivating employees in a new governance era: The performance paradigm revisited. *Public Administration Review*, 66(4):505–514.
- Dzagourova, N. and Smirnova, M. (2003). Inefficiency of the basic contract in the Russian economic universities. In *Annual SASE Conference*, volume 3.
- Easterby-Smith, M., T. and Lowe, A. (1991). *Management Research: An Introduction*. London Sage.
- Ederer, F. and Manso, G. (2013). Is pay for performance detrimental to innovation? *Management Science*, 59(7):1496–1513.
- Edwards, J. R. and Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological methods*, 12(1):1–22.
- Eggleston, K. (2005). Multitasking and mixed systems for provider payment. *Journal of Health Economics*, 24(1):211–223.
- Eisenberger, R. and Cameron, J. (1996). Detrimental effects of reward: Reality or myth? *American Psychologist*, 51(11):1153–1166.
- Eisenberger, R., Pierce, W. D., and Cameron, J. (1999). Effects of reward on intrinsic motivation: Negative, neutral, and positive: Comment on Deci, Koestner, and Ryan (1999). *American Psychological Association*, 125(6):667–691.
- Eisenhardt, K. M. (1989a). Agency theory: An assessment and review. *Academy of Management Review*, 14(1):57–74.
- Eisenhardt, K. M. (1989b). Building theories from case study research. *Academy of Management Review*, 14(4):532–550.

- Eisenhardt, K. M. and Graebner, M. E. (2007). Theory building from cases: opportunities and challenges. *Academy of Management Journal*, 50(1):25–32.
- Elayan, F. A., Lau, J. S., and Meyer, T. O. (2003). Executive incentive compensation schemes and their impact on corporate performance: Evidence from New Zealand since compensation disclosure requirements became effective. *Studies in Economics and Finance*, 21(1):54–92.
- Eldridge, D. and Nisar, T. M. (2006). The significance of employee skill in flexible work organizations. *The International Journal of Human Resource Management*, 17(5):918–937.
- Ellerson, N. M. (2009). *Exploring the Possibility and Potential for Pay for Performance in America's Public Schools*. American Association of School Administrators.
- Enders, W. and Hoover, G. (2006). Plagiarism in the economics profession: A survey. *Challenge*, 49(5):92–107.
- Fairchild, A. J. and MacKinnon, D. P. (2009). A general model for testing mediation and moderation effects. *Prevention Science*, 10(2):87–99.
- Fama, E. F. and Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, pages 301–325.
- Fang, F. C. and Casadevall, A. (2011). Retracted science and the retraction index. *Infection and Immunity*, 79(10):3855–3859.
- Fehr, E. and Gächter, S. (2002). *Do incentive contracts undermine voluntary cooperation?* Zurich IEER Working Paper.
- Feldman, K. A. (1976). The superior college teacher from the students' view. *Research in Higher Education*, 5(3):243–288.
- Feltham, G. A. and Xie, J. (1994). Performance measure congruity and diversity in multi-task principal/agent relations. *Accounting Review*, pages 429–453.
- Field, A. (2009). *Discovering Statistics Using SPSS*. Sage Publications, 3rd edition.
- Figlio, D. N. and Kenny, L. W. (2007). Individual teacher incentives and student performance. *Journal of Public Economics*, 91(5):901–914.
- Finance (2012-2013). Pakistan economic survey. Technical report, Ministry of Finance.
- Fischer, R. (2004). Rewarding employee loyalty: An organizational justice approach. *International Journal of Organizational Behavior*, 8(3):486–503.
- Fletcher, C. (2001). Performance appraisal and management: The developing research agenda. *Journal of Occupational and Organizational Psychology*, 74(4):473–487.

- Flood, P. C., Turner, T., Ramamoorthy, N., and Pearson, J. (2001). Causes and consequences of psychological contracts among knowledge workers in the high technology and financial services industries. *International Journal of Human Resource Management*, 12(7):1152–1165.
- Folger, R. (1995). Unfair at work: Potential for violence? In *41st Annual Convention of the Southwestern Psychological Association, San Antonio, TX*.
- Folger, R. (1998). Fairness as a moral virtue. *Managerial ethics: Moral management of people and processes*, pages 13–34.
- Folger, R. and Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32(1):115–130.
- Frey, B. S., Homberg, F., and Osterloh, M. (2013). Organizational control systems and pay-for-performance in the public service. *Organization Studies*, 34(7):949–972.
- Frey, B. S. and Jegen, R. (2001). Motivation crowding theory. *Journal of Economic Surveys*, 15(5):589–611.
- Frey, B. S. and Oberholzer-Gee, F. (1997). The cost of price incentives: An empirical analysis of motivation crowding-out. *The American Economic Review*, pages 746–755.
- Fryer, R. G. (2011). Financial incentives and student achievement: Evidence from randomized trials. *The Quarterly Journal of Economics*, 126(4):1755–1798.
- Fryer Jr, R. G., Levitt, S. D., List, J., and Sadoff, S. (2012). Enhancing the efficacy of teacher incentives through loss aversion: A field experiment. Technical report, National Bureau of Economic Research.
- Fudge, R. S. and Schlacter, J. L. (1999). Motivating employees to act ethically: An expectancy theory approach. *Journal of Business Ethics*, 18(3):295–304.
- Gagné, M. and Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4):331–362.
- Gardner, D. G., Dyne, L., and Pierce, J. L. (2004). The effects of pay level on organization-based self-esteem and performance: A field study. *Journal of Occupational and Organizational Psychology*, 77(3):307–322.
- Gautier, A. and Wauthy, X. (2007). Teaching versus research: A multi-tasking approach to multi-department universities. *European Economic Review*, 51(2):273–295.
- Gerhart, B. (2005). Human resources and business performance: Findings, unanswered questions, and an alternative approach. *Management Review*, 16(2):174–185.
- Gerhart, B. and Milkovich, G. T. (1990). Organizational differences in managerial compensation and financial performance. *Academy of Management Journal*, 33(4):663–691.

- Gerhart, B., Rynes, S. L., and Fulmer, I. S. (2009). 6 pay and performance: Individuals, groups, and executives. *The Academy of Management Annals*, 3(1):251–315.
- Gerhart, B. A., Milkovich, G. T., and Murray, B. (1992). *Pay, Performance, and Participation*. In D. Lewin, O. Mitchell, & P. Sherer (ed.), *Research frontiers in industrial relations and human resources*. Madison, WI: IRRA.
- Ghoshal, S. and Moran, P. (1996). Bad for practice: A critique of the transaction cost theory. *Academy of Management Review*, 21(1):13–47.
- Ghurchian, NG., J. P. and Rahgozar, H. (2010). Designing a model for performance evaluation in iranian universities based on the organizational excellence indicators. *European Journal of Social Sciences*, 17(3):434–441.
- Giauque, D., Resenterra, F., and Siggen, M. (2010). The relationship between HRM practices and organizational commitment of knowledge workers. Facts obtained from Swiss SMEs. *Human Resource Development International*, 13(2):185–205.
- Gibbons, R. (1998). Incentives in organizations. Technical report, National Bureau of Economic Research.
- Gibbons, R. (2005). Incentives between firms (and within). *Management Science*, 51(1):2–17.
- Gielen, S., Peeters, E., Dochy, F., Onghena, P., and Struyven, K. (2010). Improving the effectiveness of peer feedback for learning. *Learning and Instruction*, 20(4):304–315.
- Gittleman, M. and Pierce, B. (2013). How prevalent is performance-related pay in the united states? Current incidence and recent trends. *National Institute Economic Review*, 226(1):4–16.
- Gneezy, U., Meier, S., and Rey-Biel, P. (2011). When and why incentives (don't) work to modify behavior. *The Journal of Economic Perspectives*, 25(4):191–209.
- Gneezy, U. and Rustichini, A. (2000). Pay enough or don't pay at all. *Quarterly Journal of Economics*, 115(3):791–810.
- Gomez-Mejia, L., Wiseman, R. M., and Dykes, B. J. (2005). Agency problems in diverse contexts: A global perspective. *Journal of Management Studies*, 42(7):1507–1517.
- Gomez-Mejia, L. R. (1992). Structure and process of diversification, compensation strategy, and firm performance. *Strategic Management Journal*, 13(5):381–397.
- Gomez-Mejia, L. R. and Balkin, D. B. (1992). Determinants of faculty pay: An agency theory perspective. *Academy of Management Journal*, 35(5):921–955.
- Gomez-Mejia, L. R. and Welbourne, T. M. (1988). Compensation strategy: An overview and future steps. *Human Resource Planning*, 11(3):173–189.

- Gorman, L. (2013). The methodological problems with pay for performance. *Journal of American Physicians and Surgeons*, 18(4):115.
- Gorsuch, R. (1982). *Factor Analysis*. Psychology Press.
- Govindarajan, V. and Fisher, J. (1990). Strategy, control systems, and resource sharing: Effects on business-unit performance. *Academy of Management Journal*, 33(2):259–285.
- Gralewski, M. (2011). The philosophical underpinnings of social constructionist discourse analysis. *Lodz Papers in Pragmatics*. 115-171.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91:481–510.
- Grant, A. M. (2013). Rocking the boat but keeping it steady: The role of emotion regulation in employee voice. *Academy of Management Journal*, 56(6):1703–1723.
- Gratton, R. (2004). Teacher appraisal: A lesson on confusion over purpose. *International Journal of Educational Management*, 18(5):292–296.
- Gravestock, P., Greenleaf, E., and Jones, G. (2009). Defining academic work: An analysis of faculty tenure and promotion policies in canadian universities. In *annual meeting of the Canadian society for the study of higher education, Ottawa, May*, pages 25–27.
- Greenberg, J. (1986). Determinants of perceived fairness of performance evaluations. *Journal of Applied Psychology*, 71(2):340–342.
- Greenberg, J. (1990). Organizational justice: Yesterday, today, and tomorrow. *Journal of Management*, 16(2):399–432.
- Greenberg, J. (2011). *Organizational justice: The dynamics of fairness in the workplace*. American Psychological Association.
- Greene, J.CCaracelli, V. (1989). Toward a conceptual framework for mixed-method evaluation design. *Education Evaluation Policy Annals*, 11:255–274.
- Griesinger, D. W. (1990). The human side of economic organization. *Academy of Management Review*, 15(3):478–499.
- Group, H. (2013). The Hay group total rewards framework. Available from: <http://www.haygroup.com/uk/services/index.aspx?id=10150>. [Accessed 23 July 2012].
- Grover, S. L. (1991). Predicting the perceived fairness of parental leave policies. *Journal of Applied Psychology*, 76(2):247–255.
- Guadagnoli, E. and Velicer, W. F. (1988). Relation to sample size to the stability of component patterns. *Psychological Bulletin*, 103(2):265–275.

- Guajardo, J. (2011). Teacher motivation: theoretical framework, situation analysis of save the children country office, and recommended strategies. Technical report, Save the Children Basic Education Intern.
- Guarte, J. M. and Barrios, E. B. (2006). Estimation under purposive sampling. *Communications in Statistics, Simulation and Computation*, 35(2):277–284.
- Guba, E. G. (1978). Toward a methodology of naturalistic inquiry in educational evaluation. CSE monograph series in evaluation, 8.
- Guthrie, J. P. and Hollensbe, E. C. (2004). Group incentives and performance: A study of spontaneous goal setting, goal choice and commitment. *Journal of Management*, 30(2):263–284.
- Guymon, R. N., Balakrishnan, R., and Tubbs, R. M. (2008). The effect of task interdependence and type of incentive contract on group performance. *Journal of Management Accounting Research*, 20(s1):1–18.
- Guzzo, R. A. (1979). Types of rewards, cognitions, and work motivation. *Academy of Management Review*, 4(1):75–86.
- Gyurko, C. C. (2011). A synthesis of vroom’s model with other social theories: an application to nursing education. *Nurse Education Today*, 31(5):506–510.
- Hair, J. F., Tatham, R. L., Anderson, R. E., and Black, W. (2006). *Multivariate data analysis*, volume 6. Pearson Prentice Hall Upper Saddle River, NJ.
- Hak, T., . D. J. (2010). *Pattern Matching*. In Albert J. Mills, G. Durepos, & E. Wiebe (eds.), *Encyclopedia of Case Study Research*. (pp. 664-666). Thousand Oaks, CA: Sage Publications.
- Hall, B. J. and Murphy, K. J. (2000). Optimal exercise prices for executive stock options. Technical report, National Bureau of Economic Research.
- Hall, D. and Buzwell, S. (2012). The problem of free-riding in group projects: Looking beyond social loafing as reason for non-contribution. *Active Learning in Higher Education*, 14:37–49.
- Hansen, M. (2008). Career concerns incentives and teacher effort. *Unpublished manuscript, University of Washington*.
- Hansen, M. (2010). How career concerns influence public workers’ effort: Evidence from the teacher labor market.
- Harder, J. W. (1992). Play for pay: Effects of inequity in a pay-for-performance context. *Administrative Science Quarterly, Special Issue: Process and Outcome: Perspectives on the Distribution of Rewards in Organizations*, 37(2):321–335.

- Hardt, L. (2009). The history of transaction cost economics and its recent developments. *Erasmus Journal for Philosophy & Economics*, 2(1):29–51.
- Harling, K. (2002). An overview of case study. *Retrieved August*, 4:1–07.
- Harling, K. (2012). An overview of case study. Available at SSRN: <http://ssrn.com/abstract=2141476> or <http://dx.doi.org/10.2139/ssrn.2141476>, pages 1–07.
- Harrell-Cook, G. and Ferris, G. R. (1997). Competing pressures for human resource investment. *Human Resource Management Review*, 7(3):317–340.
- Harris, J. and Bromiley, P. (2007). Incentives to cheat: The influence of executive compensation and firm performance on financial misrepresentation. *Organization Science*, 18(3):350–367.
- Hartley, J. (2004). *Case Study Research*. Sage Publications.
- Harvey-Beavis, O. (2003). Performance-based rewards for teachers: A literature review. In *Paper distributed at the third workshop of*.
- Hayes, A. F. (2012). Process: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling. *Manuscript submitted for publication*.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. *Methodology in the Social Sciences*. The Guilford Press, New York.
- Hayward, F. M. (2008). Strategic planning for higher education in developing countries. *Ann Arbor: Society for College and University Planning*.
- HEC (2008). Model tenure track process statutes. Technical report, Available from: www.hec.gov.pk.
- HEC (2011). Statistical information unit, higher education commission. Technical report, www.hec.gov.pk.
- Hellmann, T. and Thiele, V. (2011). Incentives and innovation: A multitasking approach. *American Economic Journal: Microeconomics*, 3(1):78–128.
- Heneman, R. L. (2000). The changing nature of pay systems and the need for new midrange theories of pay. *Human Resource Management Review*, 10(3):245–247.
- Heneman, R. L., Greenberger, D. B., and Fox, J. A. (2002a). Pay increase satisfaction: A reconceptualization of pay raise satisfaction based on changes in work and pay practices. *Human Resource Management Review*, 12(1):63–74.

- Heneman, R. L., Ledford Jr, G. E., and Gresham, M. T. (2002b). The changing nature of work and its effects on compensation design and delivery. *Strategic Reward Management: Design, Implementation, and Evaluation*, pages 35–73.
- Heneman III, H. G. (2002). Compensation research directions and suggestions for the new millennium. *Human Resource Management Review*, 12(1):75–80.
- Henriksen, A. and Pedersen, P. (2007). The application of structural equation modelling in information systems research. *European Conference on Information Systems*.
- Herriott, R. E. and Firestone, W. A. (1983). Multisite qualitative policy research: Optimizing description and generalizability. *Educational Researcher*, pages 14–19.
- Hertel, G., Aarts, H., and Zeelenberg, M. (2002). What do you think is fair? Effects of ingroup norms and outcome control on fairness judgments. *European Journal of Social Psychology*, 32(3):327–341.
- Hewitt, A. (2012). Consulting talent & rewards consulting talent and rewards total rewards survey transforming potential into value. Technical report, Aon Hewitt, Consulting Talents and Rewards.
- Heywood, J. S. and Wei, X. (2006). Performance pay and job satisfaction. *Journal of Industrial Relations*, 48(4):523–540.
- Hill, C. W. (1990). Cooperation, opportunism, and the invisible hand: Implications for transaction cost theory. *Academy of Management Review*, 15(3):500–513.
- Hogan, J. (1995). Interpersonal skills at work. In *April, 41st, Annual Convention of the Southwestern Psychological Association, San Antonio, TX*.
- Holbeche, L. (2005). *The High Performance Organization*. Routledge.
- Hölmstrom, B. (1979). Moral hazard and observability. *The Bell Journal of Economics*, 10(1):74–91.
- Holmstrom, B. (1982). Moral hazard in teams. *The Bell Journal of Economics*, 13(2):324–340.
- Holmstrom, B. and Milgrom, P. (1987). Aggregation and linearity in the provision of intertemporal incentives. *Econometrica: Journal of the Econometric Society*, 55(2):303–328.
- Holmstrom, B. and Milgrom, P. (1991). Multitask principal-agent analyses: Incentive contracts, asset ownership, and job design. *Journal of Law, Economics, and Organization*, 7:24–52.
- Holmstrom, B. and Milgrom, P. (1994). The firm as an incentive system. *The American Economic Review*, 84(4):972–991.

- Hoodbhoy, P. (2003). Pakistans decrepit universities. *Islamabad Express-Prospect Magazine*, December 20.
- Hoodbhoy, P. (2005). Reforming our universities. *The Daily Dawn*.
- Hoodbhoy, P. (2008). Reckoning time for HEC. *The Daily Dawn*, pages 14–16.
- Hoodbhoy, P. A. (2007). Science and the islamic worldthe quest for rapprochement internal causes led to the decline of Islams scientific greatness long before the era of mercantile imperialism. to contribute once again, muslims must be introspective and ask what went wrong. *Science*.
- Hoodboy, P. (2009). The Saudi-isation of Pakistan. *Newsline*.
- Horwitz, F. M., Heng, C. T., Quazi, H. A., Nonkwelo, C., Roditi, D., and Eck, P. v. (2006). Human resource strategies for managing knowledge workers: An Afro-Asian comparative analysis. *The International Journal of Human Resource Management*, 17(5):775–811.
- Hu, L.-t. and Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1):1–55.
- Hu, Q., Dinev, T., Hart, P., and Cooke, D. (2012). Managing employee compliance with information security policies: The critical role of top management and organizational culture. *Decision Sciences*, 43(4):615–660.
- Huisman, J. and Currie, J. (2004). Accountability in higher education: Bridge over troubled water? *Higher Education*, 48(4):529–551.
- IADI (2013). Enhanced guidance for effective deposit insurance systems: Mitigating moral hazard. Technical report, Research and Guidance Committee, International Association of Deposit Insurers.
- Irs, R. and Türk, K. (2012). Implementation of the performance-related pay in the general educational schools of Estonia: Perspectives and possibilities. *Employee Relations*, 34(4):360–393.
- Ishak, A. H. M. and Sahak, M. D. (2010). Discovering the right key performance indicators in libraries: A review of literatures. *Universiti Putra Malaysia*, 43400.
- Israel, G. D. (1992). *Determining sample size*. University of Florida Cooperative Extension Service, Institute of Food and Agriculture Sciences, EDIS.
- Jacob, B. A. and Levitt, S. D. (2003). Rotten apples: An investigation of the prevalence and predictors of teacher cheating. *The Quarterly Journal of Economics*, 118(3):843–877.

- Jenkins Jr, G. D., Mitra, A., Gupta, N., and Shaw, J. D. (1998). Are financial incentives related to performance? A meta-analytic review of empirical research. *Journal of Applied Psychology*, 83(5):777–787.
- Jennings, P. A. and Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1):491–525.
- Jensen, M. C. and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4):305–360.
- Jensen, M. C. and Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, 98(2):225–264.
- Jensen, M. C. and Murphy, K. J. (2010). CEO incentives it's not how much you pay, but how. *Journal of Applied Corporate Finance*, 22(1):64–76.
- Jensen, M. C. and Ruback, R. S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial Economics*, 11(1):5–50.
- Jiang, K., Lepak, D. P., Hu, J., and Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6):1264–1294.
- Johansson, R. (2003). Case study methodology. In *the International Conference on Methodologies in Housing Research, Stockholm*.
- Johnson, R. B. and Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7):14–26.
- Judd, C. M. and Kenny, D. A. (1981). Process analysis estimating mediation in treatment evaluations. *Evaluation Review*, 5(5):602–619.
- Junaidi, I. (2011). Pakistan stands 43rd in the scientific research publication. Newspaper, www.dawn.com.
- Kang, S.-C. and Yanadori, Y. (2011). Adoption and coverage of performance-related pay during institutional change: An integration of institutional and agency theories. *Journal of Management Studies*, 48(8):1837–1865.
- Kaplan, S. and Henderson, R. (2005). Inertia and incentives: Bridging organizational economics and organizational theory. *Organization Science*, 16(5):509–521.
- Karl, A. T., Yang, Y., and Lohr, S. L. (2013). A correlated random effects model for nonignorable missing data in value-added assessment of teacher effects. *Journal of Educational and Behavioral Statistics*, 38(6):577–603.

- Karuhanga, B. N. (2010). Challenges of performance management in universities in Uganda. In *International Research Symposium in Service Management Le Meridien Hotel, Mauritius*.
- Kehoe, R. R. and Wright, P. M. (2013). The impact of high-performance human resource practices on employees attitudes and behaviors. *Journal of Management*, 39(2):366–391.
- Kessler, I. and Purcell, J. (1992). Performance related pay: Objectives and application. *Human Resource Management Journal*, 2(3):16–33.
- Khan, T. (2006). Teacher job satisfaction and incentive: A case study of Pakistan. *Is there a teacher motivation crisis in Sub-Sahara Africa and South Asia. London: DFID*.
- Khandelwal, K. A. (2009). Effective teaching behaviors in the college classroom: A critical incident technique from students' perspective. *International Journal of Teaching and Learning in Higher Education*, 21(3):299–309.
- Kidder, D. L. and Buchholtz, A. K. (2003). Can excess bring success? CEO compensation and the psychological contract. *Human Resource Management Review*, 12(4):599–617.
- Kim, H. and Gong, Y. (2009). The roles of tacit knowledge and OCB in the relationship between group-based pay and firm performance. *Human Resource Management Journal*, 19(2):120–139.
- Kline, P. (2002). *An Easy Guide to Factor Analysis*. London: Routledge.
- Kline, P. (2013). *Handbook of Psychological Testing*. Routledge.
- Kline, R. B. (2005). Principles and Practice of Structural Equation Modeling. *New York, NY: Guilford*.
- Koehler, M. and Mishra, P. (2009). What is technological pedagogical content knowledge (tpack)? *Contemporary Issues in Technology and Teacher Education*, 9(1):60–70.
- Kohlbacher, F. (2006). The use of qualitative content analysis in case study research. In *Forum: Qualitative Social Research*, volume 7.
- Konovsky, M. A. (2000). Understanding procedural justice and its impact on business organizations. *Journal of Management*, 26(3):489–511.
- Kreps, D. M. (1997). Intrinsic motivation and extrinsic incentives. *The American Economic Review*, 87(2):359–364.
- Kuhn, K. M. (2009). Compensation as a signal of organizational culture: The effects of advertising individual or collective incentives. *The International Journal of Human Resource Management*, 20(7):1634–1648.

- Kumar, N. (1996). The power of trust in manufacturer-retailer relationships. *Harvard Business Review*, 74(6):92–106.
- Kunz, A. H. and Pfaff, D. (2002). Agency theory, performance evaluation, and the hypothetical construct of intrinsic motivation. *Accounting, Organizations and Society*, 27(3):275–295.
- Kuvaas, B. (2006). Work performance, affective commitment, and work motivation: The roles of pay administration and pay level. *Journal of Organizational Behavior*, 27(3):365–385.
- Kwon, V. A. P. K., Bae, J., and Lawler, J. J. (2010). High commitment hr practices and top performers. *Management International Review*, 50(1):57–80.
- Lado, A. A. and Wilson, M. C. (1994). Human resource systems and sustained competitive advantage: A competency-based perspective. *Academy of Management Review*, 19(4):699–727.
- Lam, S. S., Schaubroeck, J., and Aryee, S. (2002). Relationship between organizational justice and employee work outcomes: A cross-national study. *Journal of Organizational Behavior*, 23(1):1–18.
- Lane, J. E. and Kivisto, J. A. (2008). Interests, information, and incentives in higher education: Principal-agent theory and its potential applications to the study of higher education governance. In *Higher Education*, pages 141–179. Springer.
- Latane, B., Williams, K., and Harkins, S. (1979). Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology*, 37(6):822–832.
- Lavy, V. (2004). Performance pay and teachers' effort, productivity and grading ethics. Technical report, National Bureau of Economic Research.
- Lavy, V. (2007). Using performance-based pay to improve the quality of teachers. *The Future of Children*, 17(1):87–109.
- Lawler, E. E. (1971). *Pay and Organizational Effectiveness: A Psychological View*. McGraw-Hill New York.
- Lawler, E. E. (2000). *Rewarding Excellence*, volume 13. Jossey-Bass San Francisco.
- Lawler III, E. E. and Finegold, D. (2000). Past, present, and future: Individualizing the organization. *Organizational Dynamics*, 29(1):1–15.
- Lawler III, E. E. and Suttle, J. L. (1973). Expectancy theory and job behavior. *Organizational Behavior and Human Performance*, 9(3):482–503.
- Lawson, P. (2000). *17 Performance-related pay*, in R. Thorpe and G. Homan (eds.), *Strategic Reward Systems*,. Harlow: Pearson Education.

- Lazear, E. P. (1996). Performance pay and productivity. Technical report, National Bureau of Economic Research.
- Lazear, E. P. (2003). Teacher incentives. *Swedish Economic Policy Review*, 10(2):179–214.
- Lazear, E. P. and Oyer, P. (2007). Personnel economics. Technical report, National Bureau of Economic Research.
- Lazear, E. P. and Shaw, K. L. (2007). Personnel economics: The economist’s view of human resources. Technical report, National Bureau of Economic Research.
- LeCompte, M. D. and Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52(1):31–60.
- Lee, C.-H., Hsu, M.-L., and Lien, N.-H. (2006). The impacts of benefit plans on employee turnover: A firm-level analysis approach on Taiwanese manufacturing industry. *The International Journal of Human Resource Management*, 17(11):1951–1975.
- Lee, S. (2007). Vroom’s expectancy theory and the public library customer motivation model. *Library Review*, 56(9):788–796.
- Lei, P.-W. and Wu, Q. (2007). Introduction to structural equation modeling: Issues and practical considerations. *Educational Measurement: Issues and Practice*, 26(3):33–43.
- Lepper, M. R., Corpus, J. H., and Iyengar, S. S. (2005). Intrinsic and extrinsic motivational orientations in the classroom: Age differences and academic correlates. *Journal of Educational Psychology*, 97(2):184–196.
- Lepper, M. R., Greene, D., and Nisbett, R. E. (1973). Undermining children’s intrinsic interest with extrinsic reward: A test of the” overjustification” hypothesis. *Journal of Personality and Social Psychology*, 28(1):129–137.
- Leventhal, H. (1980). Toward a comprehensive theory of emotion. *Advances in Experimental Social Psychology*, 13:139–207.
- Levin, J. (2003). Relational incentive contracts. *The American Economic Review*, 93(3):835–857.
- Levinthal, D. (1988). A survey of agency models of organizations. *Journal of Economic Behavior & Organization*, 9(2):153–185.
- Levitt, S. D. and List, J. A. (2009). Field experiments in economics: The past, the present, and the future. *European Economic Review*, 53(1):1–18.
- Li, N., Barrick, M. R., Zimmerman, R. D., and Chiaburu, D. S. (2014). Retaining the productive employee: The role of personality. *The Academy of Management Annals*, 8(1):347–395.

- Licata, C. M. (1986). *Post-Tenure Faculty Evaluation: Threat or Opportunity?* ASHE-ERIC Higher Education Report No. 1. ERIC.
- Lichiello, P. and Turnock, B. J. (1999). *Guidebook for Performance Measurement*. Turning Point.
- Liefner, I. (2003). Funding, resource allocation, and performance in higher education systems. *Higher Education*, 46(4):469–489.
- Liljegen, M. and Ekberg, K. (2009). The associations between perceived distributive, procedural, and interactional organizational justice, self-rated health and burnout. *A Journal of Prevention, Assessment and Rehabilitation*, 33(1):43–51.
- Lincoln, Y. S. and Guba, E. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage Publishing.
- Lind, E. A. and Tyler, T. R. (1988). *The Social Psychology of Procedural Justice*. Springer.
- Lindell, M. K. and Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1):114–121.
- Lockett, J. (1992). *Effective Performance Management: A Strategic Guide to Getting the Best from People*. Kogan Page.
- Lofland, J. and Lofland, L. (1995). *Developing analysis*. In J. Lofland & L. Lofland (eds.), *Analyzing Social Settings*. Belmont, CA: Wadsworth.
- MacCallum, R. C. (2003). 2001 presidential address: Working with imperfect models. *Multivariate Behavioral Research*, 38(1):113–139.
- MacCallum, R. C., Browne, M. W., and Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2):130–149.
- MacCallum, R. C., Widaman, K. F., Preacher, K. J., and Hong, S. (2001). Sample size in factor analysis: The role of model error. *Multivariate Behavioral Research*, 36(4):611–637.
- MacDonald, G. and Marx, L. M. (2001). Adverse specialization. *Journal of Political Economy*, 109(4):864–899.
- MacKinnon, D. (2008). *Introduction to Statistical Mediation Analysis*. Routledge.
- Magrassi, P. (2002). How IT helps leverage intellectual capital. Technical report, Gartner Report AV-17-0029, TopView, www.gartner.com.
- Mahmood, K. and Shafique, F. (2010). Changing research scenario in Pakistan and demand for research qualified LIS professionals. *Library Review*, 59(4):291–303.

- Manso, G. (2011). Motivating innovation. *The Journal of Finance*, 66(5):1823–1860.
- Manzoor, M. M., Siddiqui, A. A., and Khan, W. A. (2009). Assessing the quality of education at universities of Pakistan. *Statistical Sciences*, 17:133–137.
- Marsh, D. and Furlong, P. (2002). A skin not a sweater: Ontology and epistemology in political science. *Theory and Methods in Political Science*, 2:17–41.
- Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice*, 13(6):522–526.
- Martin, B. (2013). Whither research integrity? Plagiarism, self-plagiarism and coercive citation in an age of research assessment. *Research Policy*, 42(5):1005–1014.
- Mathers, N. J., Fox, N. J., and Hunn, A. (1998). *Using interviews in a research project*. NHS Executive, Trent.
- McKinney, P. A. (2000). *A study to assess the relationships among student achievement, teacher motivation, and incentive pay*. PhD thesis, Virginia Polytechnic Institute and State University.
- Mearman, A. (2006). Critical realism in economics and open-systems ontology: A critique. *Review of Social Economy*, 64(1):47–75.
- Memon, G. R. (2007). Education in Pakistan: The key issues, problems and the new challenges. *Journal of Management and Social Sciences*, 3(1):47–55.
- Messersmith, J. G., Patel, P. C., Lepak, D. P., and Gould-Williams, J. S. (2011). Unlocking the black box: Exploring the link between high-performance work systems and performance. *Journal of Applied Psychology*, 96(6):1105–1118.
- Miles, M. B. and Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Sage Publications.
- Milgrom, P. R. and Roberts, J. (1992). *Economics, organization and management*, volume 7. Prentice-Hall Englewood Cliffs, NJ.
- Milkovich, G. (2013). Does performance-based pay really work: Conclusions based on the scientific research. *Revista sobre Relaciones Industriales y Laborales (Parte II)*, (32).
- Milkovich, G. T., Gerhart, B., and Hannon, J. (1991). The effects of research and development intensity on managerial compensation in large organizations. *The Journal of High Technology Management Research*, 2(1):133–150.
- Milkovich, G. T., Newman, J., and Milkovich, C. (2005). *Compensation*, 8th (ed.).
- Milkovich, GT & Newman, J. (2002). *Compensation 7th (ed.)*. New York: McGraw-Hill.

- Miller, A. N., Taylor, S. G., and Bedeian, A. G. (2011). Publish or perish: Academic life as management faculty live it. *Career Development International*, 16(5):422–445.
- Miller, R. D. and Cohen, N. H. (2005). The impact of productivity-based incentives on faculty salary-based compensation. *Anesthesia and Analgesia*, 101(1):195–199.
- Mills, J. C. H., Bratton, J., and Forshaw, C. (2006). *Organizational behaviour in a global context*. University of Toronto Press.
- Mintzberg, H. (1978). Mintzberg's final paradigm. *Administrative Science Quarterly*, 23 (letter):635–636.
- Mohd-Sanusi, Z. and Mohd-Iskandar, T. (2006). Audit judgment performance: Assessing the effect of performance incentives, effort and task complexity. *Managerial Auditing Journal*, 22(1):34–52.
- Moore, L. (2012). Symbolic interactionism and moral hazards in higher education. *Administrative Issues Journal: Education, Practice and Research*, 2(2):26–39.
- Moorman, R. H., Niehoff, B. P., and Organ, D. W. (1993). Treating employees fairly and organizational citizenship behavior: Sorting the effects of job satisfaction, organizational commitment, and procedural justice. *Employee Responsibilities and Rights Journal*, 6(3):209–225.
- Mortimer, K. P. and Tierney, M. L. (1979). The three "R's" of the eighties: Reduction, reallocation, and retrenchment. *ERIC*.
- Mowery, D. C. and Sampat, B. N. (2005). Universities in national innovation systems. *The Oxford Handbook of Innovation*, pages 209–239.
- Mujtaba, B. G. and Shuaib, S. (2010). An equitable total rewards approach to pay for performance management. *Journal of Management Policy & Practice*, 11(4):111–121.
- Muller, D., Judd, C. M., and Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89(6):852–863.
- Mulvaney, M. A., McKinney, W. R., and Grodsky, R. (2012). The development of a pay-for-performance appraisal system for municipal agencies: A case study. *Public Personnel Management*, 41(3):505–533.
- Muralidharan, K. and Sundararaman, V. (2006). Teacher incentives in developing countries: Experimental evidence from India. Technical report, Mimeo, Harvard University.
- Murphy, T. H. and Margulies, J. (2004). Performance appraisals. In *Presentation, ABA Labor and Employment Law Section, Equal Employment Opportunity Committee, Mid-Winter Meeting*.

- Murtaza (2013). Alarming state of education in Pakistan. Available: <http://archives.dailytimes.com.pk>. [Accessed: 26 August 2013].
- Murtaza, G., S. and Malik, S. (2011). Impact of organizational justice on employees job satisfaction: Evidence from Pakistan. In *International Conference on Management ICM 2011 Proceeding*, pages 1123–1135.
- Nagar, V. (2002). Delegation and incentive compensation. *The Accounting Review*, 77(2):379–395.
- Nahapiet, J. and Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2):242–266.
- Naqvi, S. (2007). Overview of the higher education commission (HEC) support for academia in Pakistan. In *CBM-CI International Workshop by NEDUET, Karachi, Pakistan*.
- Neelakantan, S. (2007). In Pakistan, the problems that money can bring. *Chronicle of Higher Education*, 53(20).
- Neely, A. (2005). The evolution of performance measurement research: Developments in the last decade and a research agenda for the next. *International Journal of Operations and Production Management*, 25(12):1264–1277.
- Neely, A. D., Adams, C., and Kennerley, M. (2002). *The Performance Prism: The Scorecard for Measuring and Managing Business Success*. Prentice Hall Financial Times London.
- Nisar, T. M. (2007). Evaluation of subjectivity in incentive pay. *Journal of Financial Services Research*, 31(1):53–73.
- Nishii, L. H. (2013). The benefits of climate for inclusion for gender-diverse groups. *Academy of Management Journal*, 56(6):1754–1774.
- Nordhaug, O. (2004). Contributions to an economic theory of human resource management. *Human Resource Management Review*, 14(4):383–393.
- NRIC (2006). A report on the system of education in Pakistan. Technical report, Nordic Recognition Information Centres.
- Nunnally, J. C. and Bernstein, I. (1978). *Psychometric Theory*. New York: McGraw-Hill.
- Nunnally, J. C. and Bernstein, I. H. (1994). *Psychometric Theory*. New York: McGraw-Hill.
- Odden, A. R., Kelly, J., and Co-Directors, S. (2008). Strategic management of human capital in public education. *Madison, WI: Consortium for Policy Research in Education*. Retrieved January, 5:2010.

- Odom, L. R. and Henson, R. K. (2002). Data screening: Essential techniques for data review and preparation. *ERIC*.
- Organ, D. W., Podsakoff, P. M., and Podsakoff, N. P. (2011). Expanding the criterion domain to include organizational citizenship behavior: Implications for employee selection. In S. Zedeck, *APA Handbook of Industrial and Organizational Psychology*, 2:281–323.
- Ory, J. C. (2001). Faculty thoughts and concerns about student ratings. *New Directions for Teaching and Learning*, 2001(87):3–15.
- Osterloh, M., Frey, B. S., and Homberg, F. (2007). Performance evaluation and pay for performance: Does it really motivate public officials? In *EGPA Conference*, volume 24, page 2009.
- Oswald, F. L. and Hough, L. M. (2011). Personality and its assessment in organizations: Theoretical and empirical developments. *Selecting and developing members for the organization. APA Handbooks in Psychology.*, (pp. 153-184). Washington, DC, US: American Psychological Association, viii, 598 pp, 2.
- Oviatt, B. M. (1988). Agency and transaction cost perspectives on the manager-shareholder relationship: Incentives for congruent interests. *Academy of Management Review*, 13(2):214–225.
- Paarlberg, L. E. and Perry, J. L. (2007). Values management aligning employee values and organization goals. *The American Review of Public Administration*, 37(4):387–408.
- Paré, G. (2004). Investigating information systems with positivist case study research. *Communications of the Association for Information Systems*, 13.
- Park, H. and Blenkinsopp, J. (2011). The roles of transparency and trust in the relationship between corruption and citizen satisfaction. *International Review of Administrative Sciences*, 77(2):254–274.
- Parkhe, A. (1993). Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation. *Academy of Management Journal*, 36(4):794–829.
- Parks, J. M. and Conlon, E. J. (1995). Compensation contracts: Do agency theory assumptions predict negotiated agreements? *Academy of Management Journal*, 38(3):821–838.
- Patton, M. Q. (1980). Qualitative evaluation methods. *Sage Publications, Inc.*
- Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods*. Sage Publications, Inc.

- Patton, M. Q. (2002). Designing qualitative studies. *Qualitative Research and Evaluation Methods*, 3:230–246.
- Penttila, C. (2009). The salary secret is out. *Entrepreneur*, 37(1):23.
- PEP (2006). A report on the system of education in Pakistan (2006). Technical report, Nordic Recognition Information Centres.
- Perrow, C. (1986). Economic theories of organization. *Theory and Society*, 15(1):11–45.
- Perry, J. L. (1986). Merit pay in the public sector: The case for a failure of theory. *Review of Public Personnel Administration*, 7(1):57–69.
- Perry, J. L., Engbers, T. A., and Jun, S. Y. (2009). Back to the future? Performance-related pay, empirical research, and the perils of persistence. *Public Administration Review*, 69(1):39–51.
- PES (2012-2013). Pakistan economic survey. Technical report, Ministry of Finance, www.Pakistanfinance.gov.pk/survey.
- Petera, P. (2011). Evaluating the quality of rewards systems. *European Financial and Accounting Journal*, (3):66–91.
- Petty, R. E., Unnava, R. H., and Strathman, A. J. (1991). Theories of attitude change. *Handbook of Consumer Behavior*, pages 241–280.
- Pfeffer, J. and Fong, C. T. (2004). The business school business: Some lessons from the us experience. *Journal of Management Studies*, 41(8):1501–1520.
- Piening, E. P., Baluch, A. M., and Salge, T. O. (2013). The relationship between employees perceptions of human resource systems and organizational performance: Examining mediating mechanisms and temporal dynamics. *Journal of Applied Psychology*, 98(6):926–947.
- Pink, D. H. (2001). *Free Agent Nation: How Americans New Independent Workers Are Transforming the Way We Live*. Hachette Digital, Inc.
- Podgursky, M. J. and Springer, M. G. (2007). Teacher performance pay: A review. *Journal of Policy Analysis and Management*, 26(4):909–950.
- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., and Blume, B. D. (2009). Individual-and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 94(1):122–144.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., and Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5):879–903.

- Podsakoff, P. M. and Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4):531–544.
- Pour Ezzat, A. A. and Somee, P. (2009). The study of personnel and customers' perception of organizational justice. *Iranian Journal of Management Studies*, 2(2):97–113.
- Pravettoni, G., Cropley, M., Leotta, S., and Bagnara, S. (2007). The differential role of mental rumination among industrial and knowledge workers. *Ergonomics*, 50(11):1931–1940.
- Preacher, K. J., Rucker, D. D., and Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1):185–227.
- Prendergast, C. (1999). The provision of incentives in firms. *Journal of Economic Literature*, 37(1):7–63.
- Prendergast, C. (2002). Uncertainty and incentives. *Journal of Labor Economics*, 20(S2):S115–S137.
- Prentice, G., Burgess, S., and Propper, C. (2007). Performance pay in the public sector: A review of the issues and evidence. *Office of Manpower Economics*.
- Price, K. H., Harrison, D. A., and Gavin, J. H. (2006). Withholding inputs in team contexts: Member composition, interaction processes, evaluation structure, and social loafing. *Journal of Applied Psychology*, 91(6):1375.
- Purcell, J. (2003). *Understanding the People and Performance Link: Unlocking the Black Box*. CIPD Publishing.
- Quiggin, J. (2004). Research and teaching: Complements or substitutes. *Australasian Journal of Economics Education*, 1(1):18–29.
- Radda, S. I. (2009). Unethical practices in the nigerias university system: Pattern, causes and solutions. In *9th Annual Ben-Africa Conference*, pages 3–5.
- Ramsden, P. and Moses, I. (1992). Associations between research and teaching in Australian higher education. *Higher Education*, 23(3):273–295.
- Rasheed, M. I., Aslam, H. D., and Sarwar, S. (2010). Motivational issues for teachers in higher education: A critical case of iub. *Journal of Management Research*, 2(2).
- Read, D. (2005). Monetary incentives, what are they good for? *Journal of Economic Methodology*, 12(2):265–276.
- Redmond, E. (2013). Competency models at work: The value of perceived relevance and fair rewards for employee outcomes. *Human Resource Management*, 52(5):771–792.

- Reid, N. (2008). Quality assurance in higher education in pakistan-focus on the learner. In *2nd International Conference on Assessing Quality in Higher Education ICAQHE*.
- Rezaee, Z., Elmore, R. C., and Szendi, J. Z. (2001). Ethical behavior in higher educational institutions: The role of the code of conduct. *Journal of Business Ethics*, 30(2):171–183.
- Roberson, L., Galvin, B. M., and Charles, A. C. (2007). 13 when group identities matter: Bias in performance appraisal. *The Academy of Management Annals*, 1(1):617–650.
- Roberts, G. E. (2002). Employee performance appraisal system participation: A technique that works. *Public Personnel Management*, 31(3):333–342.
- Roberts, J. (2004). *The Modern Firm: Organizational Design for Performance and Growth*. Oxford University Press.
- Roberts, J. (2010). Designing incentives in organizations. *Journal of Institutional Economics*, 6(1):125–132.
- Roberts, P. W. and Greenwood, R. (1997). Integrating transaction cost and institutional theories: Towards a constrained-efficiency framework for understanding organizational design adoption. *Academy of Management Review*, 22(2):346–373.
- Robins, R. W., Fraley, R. C., and Krueger, R. F. (2009). *Handbook of Research Methods in Personality Psychology*. Guilford Press.
- Robinson, S. L. and Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior*, 15(3):245–259.
- Robson, C. (1993). *Real World Research. A Resource for Social Scientists and Practitioner Researchers*. Oxford: Blackwell Publishers.
- Rosselló-Villalonga, J. (2006). Incentives to research activities in European public universities. *Universitat Illes Balears, material nieopublikowany*.
- Rousseau, D. M. (1996). Changing the deal while keeping the people. *The Academy of Management Executive*, 10(1):50–59.
- Rousseau, D. M. (1997). Organizational behavior in the new organizational era. *Annual Review of Psychology*, 48(1):515–546.
- Rousseau, D. M. (1998). The problem of the psychological contract considered. *Journal of Organizational Behavior*, 19(S1):665–671.
- Russel, B. H. (2000). *Social Research Methods: Qualitative and Quantitative Approaches*. Sage Publications.

- Ryan, R. M. and Weinstein, N. (2009). Undermining quality teaching and learning a self-determination theory perspective on high-stakes testing. *Theory and Research in Education*, 7(2):224–233.
- Rydval, O. and Ortmann, A. (2004). How financial incentives and cognitive abilities affect task performance in laboratory settings: An illustration. *Economics Letters*, 85(3):315–320.
- Rynes, S. L., Gerhart, B., and Minette, K. A. (2004). The importance of pay in employee motivation: Discrepancies between what people say and what they do. *Human Resource Management*, 43(4):381–394.
- Saeed, S., Aamir, R., and Ramzan, M. (2011). Plagiarism and its implications on higher education in developing countries. *International Journal of Teaching and Case Studies*, 3(2):123–130.
- Sahi (2012). Cheating at the highest level. *the NEWS, Islamabad*.
- Sajjad, S. (2011). Effective teaching methods at higher education level. Available from Internet: <http://www.wfate.org>.
- Saunders, M Lewis, P. T. A. (2009). *Research Method for Business Students (Fifth p.)*. Harlow, England: Pearson Education Limited.
- Sayer, A. (1992). *Method in Social Science: A Realist Approach*. Psychology Press.
- Sayer, A. (2004). Why critical realism? *Critical Realist Applications in Organisation and Management Studies*.
- Sayer, R. A. and Sayer, A. (2000). *Realism and Social Science*. Sage Publications.
- Schacter, J. and Thum, Y. M. (2004). Paying for high-and low-quality teaching. *Economics of Education Review*, 23(4):411–430.
- Schaubroeck, J., Shaw, J. D., Duffy, M. K., and Mitra, A. (2008). An under-met and over-met expectations model of employee reactions to merit raises. *Journal of Applied Psychology*, 93(2):424–434.
- Schneider, B., Ehrhart, M. G., and Macey, W. H. (2013). Organizational climate and culture. *Annual Review of Psychology*, 64:361–388.
- Schwartz, B. (2009). Incentives, choice, education and well-being. *Oxford Review of Education*, 35(3):391–403.
- Scott, D., McMullen, T. D., and Sperling, R. S. (2006). Evaluating pay program effectiveness: A national survey of compensation and human resource professionals. *World at Work Journal*, 15(3):47–53.

- Scriven, M. (1991). *Beyond formative and summative evaluation*. University of Chicago Press.
- Shapiro, S. P. (2005). Agency theory. *Annual Review of Sociology*, 31:263–284.
- Sharma, A. (1997). Professional as agent: Knowledge asymmetry in agency exchange. *Academy of Management Review*, 22(3):758–798.
- Shedd, J. B. and Bacharach, S. B. (1991). *Tangled Hierarchies: Teachers as Professionals and the Management of Schools*. Jossey-Bass San Francisco.
- Shrout, P. E. and Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4):422–445.
- Shuaib, S. (2008). Managing knowledge workers. *Research Journal of the Institute of Business Administration Karachi, Pakistan*, 3(1):117–132.
- Shuaib, S. (2012). Cultural context and its affect on management practices in organizations-a special focus of compensation practices. *IBA Business Review*, 7(1).
- Sillup, G. P. and Klimberg, R. (2010). Assessing the ethics of implementing performance appraisal systems. *Journal of Management Development*, 29(1):38–55.
- Sinclair-Desgagné, B. (1999). How to restore higher-powered incentives in multitask agencies. *Journal of Law, Economics, and Organization*, 15(2):418–433.
- Skarlicki, D. P. and Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 82(3):434–443.
- Smith, A. (1937). *The Wealth of Nations [1776]*. na.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13(1982):290–312.
- Solmon, L. C. and Podgursky, M. (2000). The pros and cons of performance-based compensation. *UD Department of Education, ERIC*, page 28.
- SPDC (2002). Economic survey of Pakistan. Technical report, Human Development Report Social Policy and Development Centre, Islamabad.
- Spector, P. E. (2006). Method variance in organizational research truth or urban legend? *Organizational Research Methods*, 9(2):221–232.
- Springer, M. G., Ballou, D., Hamilton, L., Le, V.-N., Lockwood, J., McCaffrey, D. F., Pepper, M., and Stecher, B. M. (2010). Teacher pay for performance: Experimental evidence from the project on incentives in teaching (point). *Nashville, TN: National Center on Performance Incentives at Vanderbilt University*.

- Sprinkle, G. B. (2000). The effect of incentive contracts on learning and performance. *The Accounting Review*, 75(3):299–326.
- Stajkovic, A. D. and Luthans, F. (2001). Differential effects of incentive motivators on work performance. *Academy of Management Journal*, 44(3):580–590.
- Stake, R. E. (1995). *The Art of Case Study Research*. Sage Publications.
- Steers, R. M., Mowday, R. T., and Shapiro, D. L. (2004). Introduction to special topic forum: The future of work motivation theory. *The Academy of Management Review*, 29(3):379–387.
- Stilwell, F. (2003). Higher education, commercial criteria and economic incentives. *Journal of Higher Education Policy and Management*, 25(1):51–61.
- Storey, A. (2000). A leap of faith? Performance pay for teachers. *Journal of Education Policy*, 15(5):509–523.
- Straub, D., Boudreau, M.-C., and Gefen, D. (2004). Validation guidelines for is positivist research. *The Communications of the Association for Information Systems*, 13(1):380–427.
- Strebler, M. (2004). *Tackling poor performance*. Institute for Employment Studies.
- Streiner, D. L. (2003). Starting at the beginning: An introduction to coefficient alpha and internal consistency. *Journal of Personality Assessment*, 80(1):99–103.
- Stroh, L. K., Brett, J. M., Baumann, J. P., and Reilly, A. H. (1996). Agency theory and variable pay compensation strategies. *Academy of Management Journal*, 39(3):751–767.
- Summers, T. P. and Hendrix, W. H. (1991). Modelling the role of pay equity perceptions: A field study. *Journal of Occupational Psychology*, 64(2):145–157.
- Susarla, A., Barua, A., and Whinston, A. B. (2002). Multitasking and incentives in application service provider contracts for customer relationship management. In *Proceedings of the Americas Conference on Information Systems*. Dallas, Texas. Citeseer.
- Sweeney, P. D. and McFarlin, D. B. (1993). Workers' evaluations of the ends and the means: An examination of four models of distributive and procedural justice. *Organizational Behavior and Human Decision Processes*, 55(1):23–40.
- Sweeney, P. D. and McFarlin, D. B. (1997). Process and outcome: Gender differences in the assessment of justice. *Journal of Organizational Behavior*, 18(1):83–98.
- Sweeney, P. D. and McFarlin, D. B. (2005). Wage comparisons with similar and dissimilar others. *Journal of Occupational and Organizational Psychology*, 78(1):113–131.

- Sweeney, P. D., McFarlin, D. B., and Inderrieden, E. J. (1990). Research notes: Using relative deprivation theory to explain satisfaction with income and pay level: A multistudy examination. *Academy of Management Journal*, 33(2):423–436.
- Tabachnick, B. and Fidell, L. (2007). Multivariate analysis of variance and covariance. *Using Multivariate Statistics*, 3:402–407.
- Tang, T. L.-P. and Sarsfield-Baldwin, L. J. (1996). Distributive and procedural justice as related to satisfaction and commitment. *SAM Advanced Management Journal*, 61:25–31.
- Tangen, S. (2005). Demystifying productivity and performance. *International Journal of Productivity and Performance Management*, 54(1):34–46.
- TaskForce (2000). *Higher education in developing countries: peril and promise*. Number 440. World Bank, Task Force on Higher Education and Society.
- Tellis, W. (1997). Application of a case study methodology. *The Qualitative Report*, 3(3):1–17.
- Thiele, V. (2007). Performance measurement in multi-task agencies. *Research in Economics*, 61(3):148–163.
- Thiele, V. (2010). Task-specific abilities in multi-task principal–agent relationships. *Labour Economics*, 17(4):690–698.
- Thierry, H. (2002). *Enhancing performance through pay and reward systems. Enhancing performance through pay and reward systems. In S. Sonnentag (Ed.), Psychological management of individual performance*. Wiley Chichester.
- Thomas, H. and Li, X. (2009). Mapping globally branded business schools: A strategic positioning analysis. *Management Decision*, 47(9):1420–1440.
- Thomas, R., Goddard, V., Reid, A., and Nicholson, D. (2013). Voices in practice: Will performance-related pay improve teaching and learning? *Learning and Teaching Update*, (62):1–5.
- Tiessen, P. and Waterhouse, J. H. (1983). Towards a descriptive theory of management accounting. *Accounting, Organizations and Society*, 8(2):251–267.
- Tirole, J. (1999). Incomplete contracts: Where do we stand? *Econometrica*, 67(4):741–781.
- Tirole, J. (2009). Cognition and incomplete contracts. *The American Economic Review*, 99(1):265–294.
- Tosi Jr, H. L. and Gomez-Mejia, L. R. (1989). The decoupling of ceo pay and performance: An agency theory perspective. *Administrative Science Quarterly*, 34(2):169–189.

- Tourangeau, R., Rips, L. J., and Rasinski, K. (2000). *The Psychology of Survey Response*. Cambridge University Press.
- Tribune (2011). Education is one of the most corrupt sectors. *The Express Tribune with the International New York Times*, 24 October.
- Trochim, W. M. (2006). Positivism and post-positivism. *Research Methods Knowledge Base*.
- Tsang, E. W. K. (2014). Generalizing from research findings: The merits of case studies. *International Journal of Management Reviews*, 16:369–383.
- Türk, K. (2008). Performance appraisal and the compensation of academic staff in the university of tartu. *Baltic Journal of Management*, 3(1):40–54.
- Türk, K. and Roolaht, T. (2007). Appraisal and compensation of the academic staff in estonian public and private universities: a comparative analysis. *TRAMES: A Journal of the Humanities and Social Sciences*, 11(2).
- Tyler, T. R. (1989). The psychology of procedural justice: A test of the group-value model. *Journal of Personality and Social Psychology*, 57(5):830–838.
- Tyler, T. R. and Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7(4):349–361.
- Tyler, T. R. and Lind, E. A. (1992). *A Relational Model of Authority in Groups*. Academic Press.
- Umansky, I. (2005). A literature review of teacher quality and incentives. *Incentives to Improve Teaching*, page 21.
- Umbach, P. D. and Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, 46(2):153–184.
- UNESCO (2008). National report on development of education Pakistan ministry of education. Technical report, International Bureau of Education, Pakistan, UNESCO.
- UNESCO (2014). Higher education in Asia: Expanding out, expanding up: The rise of graduate education and university research. Technical report, Institute of Statistics.
- USAID (2010). Rationalization of pre-service teacher education programs in Pakistan. Technical report, Pre-Step.
- Usman, S. (2014). Governance and higher education in Pakistan: What roles do boards of governors play in ensuring the academic quality maintenance in public universities versus private universities in Pakistan? *International Journal of Higher Education*, 3(2).

- Usmani, M. A. W., Khatoon, M. S., Shammot, M. M., and Zamil, A. M. (2012). Meta evaluation of a teachers evaluation programme using CIPP model. *Archives Des Sciences*, 65(7).
- Van Ameijde, J. D., Nelson, P. C., Billsberry, J., and Van Meurs, N. (2009). Improving leadership in higher education institutions: A distributed perspective. *Higher Education*, 58(6):763–779.
- Van der Stede, W. A. (2009). Designing effective reward systems. *Finance and Management*, 170(170):6–9.
- Van Thiel, S. and Leeuw, F. L. (2002). The performance paradox in the public sector. *Public Performance & Management Review*, 25(3):267–281.
- Vegas, E. and Umansky, I. (2005). Improving teaching and learning through effective incentives: What can we learn from education reforms in Latin America?
- Vroom, V. H. (1964). *Work and Motivation*. New York: Wiley.
- Weber, G. A. (1919). *Organized efforts for the improvement of methods of administration in the United States*. Number 6. Appleton.
- Weber, M. (2009). *From Max Weber: Essays in Sociology*. Routledge.
- Werner, S. and Ones, D. S. (2000). Determinants of perceived pay inequities: The effects of comparison other characteristics and pay-system communication1. *Journal of Applied Social Psychology*, 30(6):1281–1309.
- Werner, S. and Ward, S. G. (2004). Recent compensation research: An eclectic review. *Human Resource Management Review*, 14(2):201–227.
- Wikina, S. B. (2008). Effective performance improvement and management strategies for the information technology industry. *Performance Improvement*, 47(9):19–25.
- Wildman, J. L., Bedwell, W. L., Salas, E., and Smith-Jentsch, K. A. (2011). *Performance measurement at work: A multilevel perspective.*, volume 1. American Psychological Association.
- Williams, L. J. and Brown, B. K. (1994). Method variance in organizational behavior and human resources research: Effects on correlations, path coefficients, and hypothesis testing. *Organizational Behavior and Human Decision Processes*, 57(2):185–209.
- Williamson, O. E. (1979). Transaction-cost economics: the governance of contractual relations. *Journal of Law and Economics*, 22(2):233–261.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. Simon and Schuster.

- Williamson, O. E. and Ouchi, W. G. (1980). *The markets and hierarchies program of research: Origins, implications, prospects*. University of Pennsylvania, Center for the Study of Organizational Innovation.
- Wiseman, R. M. (2001). Rewarding excellence. *Academy of Management Review*, 26(1):135–138.
- Wiseman, R. M. and Gomez-Mejia, L. R. (1998). A behavioral agency model of managerial risk taking. *Academy of Management Review*, 23(1):133–153.
- Wood, J. K. and Oate, T. (2009). Brand ex: The unhappy marriage of branding and higher education.. In Greg Giberson and Tom Giberson, (eds.), *Knowledge Economy: The Commodification of Knowledge and Information in the Academic System*,, pages 191–201.
- WorldBank, R. (2000). *Higher education in developing countries: Peril and promise*. Number 440. Task Force on Higher Education and Society.
- Wrege, C. D. and Hodgetts, R. M. (2000). Frederick W. Taylor’s 1899 pig iron observations: examining fact, fiction, and lessons for the new millennium. *Academy of Management Journal*, 43(6):1283–1291.
- Wright, P., Mukherji, A., and Kroll, M. J. (2001). A reexamination of agency theory assumptions: Extensions and extrapolations. *The Journal of Socio-Economics*, 30(5):413–429.
- Wright, P. M., McMahan, G. C., and McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource-based perspective. *International Journal of Human Resource Management*, 5(2):301–326.
- Wright, V. S. (1998). *Breaking the Time Barrier: Algebra Instruction in an Alternate-Day Block Schedule*. PhD thesis, Virginia Polytechnic Institute and State University.
- Wu, W., West, S. G., and Taylor, A. B. (2009). Evaluating model fit for growth curve models: Integration of fit indices from SEM and MLM frameworks. *Psychological Methods*, 14(3):183–201.
- Wyatt, M. (2013). Motivating teachers in the developing world: Insights from research with english language teachers in Oman. *International Review of Education*, 59(2):217–242.
- Yamane, T. (1967). *Statistics: An Introductory Analysis*,. New York: Harper and Row, 2nd edition.
- Yeganeh, H., Su, Z., and Chrysostome, E. V. M. (2004). A critical review of epistemological and methodological issues in cross-cultural research. *Journal of Comparative International Management*, 8(2):1–18.

- Yin, R. (2003a). *Case Study Research: Design and Methods*. Thousand Oaks, CA: Sage Publications.
- Yin, R. K. (1981). The case study crisis: Some answers. *Administrative Science Quarterly*, 26(1):58–65.
- Yin, R. K. (1994). *Case Study Research: Design and Methods*, volume 2. Thousand Oaks, CA.
- Yin, R. K. (2003b). *Applications of Case Study Research (Applied Social Research Methods)*. Thousand Oaks, CA: Sage Publications, 4th edition.
- Yin, R. K. (2005). *Introducing the World of Education: A Case Study Reader*. Sage Publications.
- Yin, R. K. (2009). *Case Study Research: Design and Methods*, volume 5. Sage Publications.
- Young, G. J., Beckman, H., and Baker, E. (2012). Financial incentives, professional values and performance: A study of pay-for-performance in a professional organization. *Journal of Organizational Behavior*, 33(7):964–983.
- Zainal, Z. (2007). Case study as a research method. *Jurnal Kemanusiaan*, 9(9):1–6.
- Zikmund, W., Babin, B., Carr, J., and Griffin, M. (2012). *Business Research Methods*. Cengage Learning.

Appendix

Appendix 1 A

Table 1: Demographics of Education in Pakistan with a Special Emphasis on KPK

Population under the age of 25 years	63%
Illiterate	30%
GDP spent on education	2.3%
GDP spent on higher education	0.22
Accessibility to higher education between the age of 17-23 years	7.8%
Accessibility to higher education in India	12.2%
KPK public sector universities	16
KPK private sector universities	10
PhDs produced per year	850
PhDs produced per year in India	8.900

Source:UNDP

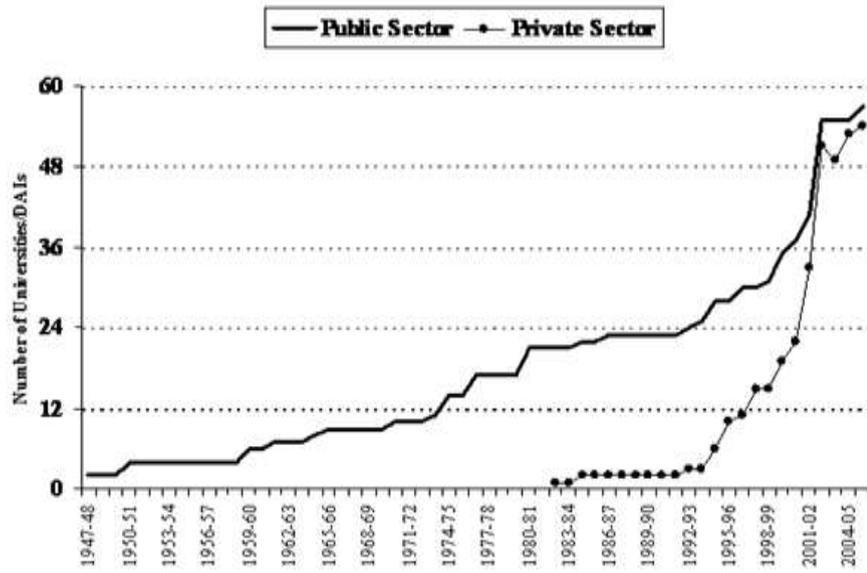


Figure 1: Growth of Universities in Public/Private Sector
 Source: HEC Website

Appendix 1 B

Reforms in Higher Education

The [WorldBank \(2000\)](#) states:

Pakistan has a long history of failed reforms. The National Commission on Education 1959 argue from the perspective of Pakistan's education system that being poor and not investing in education will only make the country perpetually poor, which goes against the concept of economic planning of the country. Investments in higher education are justified on the basis that it will have a positive social impact and can contribute towards fostering a just, democratic, and enlightened society.

The report further states:

Pakistan Task Force Report on Higher Education has set out a vision for higher education to reform its programs that aim to transform Pakistani institutions into the world class seat of learning, and advancement of knowledge to create a modern, progressive, tolerant, and prosperous society that values the dignity of labour, craftsmanship, spirit of inquiry, critical thinking, and public duty ([WorldBank, 2000](#)).

According to the [Boston \(2002\)](#) Pakistan missed out on the opportunity of the great wave of industrialization, but it got another chance to capitalize on the golden opportunity on the new wave of services-production globalization. Success in this new era depends on “brain power”, which comes from university educated workforces and communication links. The report further points out that Pakistan has got a potential to compete on this front. By producing high quality and quantity of graduates it can become a *Service-Export Tiger*, competing with other developing countries. Thus, the goal of higher education is to create young people who are imaginative, multifaceted, socially mature, and achievement-oriented.

The problems that have been identified in the system mostly comprise of low quality teachers, low levels of student motivation, misalignment of course contents with the social or economic needs of the country, gender and class disparities, student discipline, outdated curriculum and course material, fiscal insolvency, absence of research, non-conductive

environment for teaching and learning, and political issues. Teacher quality according to this report is adversely affected by poor compensation. Teachers receive low levels of salary (Reid, 2008), the benefits are almost negligible, and perverse incentives provided by the system for retention of good and qualified teachers and their promotion. The resultant product of education is deficient in all respects and fails to meet the international standards.

Many recommendations to uplift the plight of higher education, were suggested by the (TaskForce, 2000). Amongst these it was suggested that the faculty reward system must be revisited to acquire best talent from within Pakistan. Schacter and Thum (2004) further stress upon the institutional reforms for uplifting the higher education in the country, by building accountability and performance-based evaluations/ incentives, which are fair and transparent. This issue has even been highlighted as the main problem statement in the TaskForce (2000), such as the higher education institutes are unable to attract and retain talent in sufficient numbers and missing internal and external incentives for research. The country is not deficient in quality teachers, but the real problem is “brain drain” from this country. No proper mechanism for evaluation of the faculty performance exists; leaving a minimal role for merit in its advancement.

Appendix 2 A

BPS Pay Scales - 2011

Pay Scale	Initial Basic Pay	Annual Increment	HRA	Conveyance Allowance	Medical Allowance	ARA 2010	ARA 2011	ARA 2012	ARA 2013	Approx. Gross Pay
BPS-1	4800	150	1337	1700	1000	1485	446	960	720	12448
BPS-2	4900	170	1366	1700	1000	1518	455	980	735	12654
BPS-3	5050	200	1413	1700	1000	1570	471	1010	757	12971
BPS-4	5200	230	1458	1700	1000	1620	486	1040	780	13284
BPS-5	5400	260	1503	1840	1000	1670	501	1080	810	13804
BPS-6	5600	290	1544	1840	1000	1715	515	1120	840	14174
BPS-7	5800	320	1589	1840	1000	1765	530	1160	870	14554
BPS-8	6000	350	1649	1840	1000	1833	550	1200	900	14972
BPS-9	6200	380	1719	1840	1000	1910	573	1240	930	15412
BPS-10	6400	420	1780	1840	1000	1978	593	1280	960	15831
BPS-11	6600	460	1852	2720	1000	2058	617	1320	990	17157
BPS-12	7000	500	1960	2720	1000	2178	653	1400	1050	17961
BPS-13	7500	550	2090	2720	1000	2323	697	1500	1125	18955
BPS-14	8000	610	2214	2720	1000	2460	738	1600	1200	19932
BPS-15	8500	700	2349	2720	1000	2610	783	1700	1275	20937
BPS-16	10000	800	2727	5000	1000	3030	909	2000	1500	26166
BPS-17	16000	1200	4433	5000	1478	4925	1478	3200	2400	38914
BPS-18	20000	1500	5810	5000	1937	6455	1937	4000	3000	48139
BPS-19	31000	1600	8856	5000	2952	9840	2952	6200	4650	71450
BPS-20	36000	2350	1050	5000	3502	11673	3502	7200	5400	82782
BPS-21	40000	2600		5000				8000	6000	
BPS-22	43000	3050		5000				8600	6450	

Detailed Salary Chart of BPS

Source: www.pakistanhotline.com

Figure 2: Agency Theory
Source: [Tiessen and Waterhouse \(1983\)](#)

Appendix 2 B

Table 2: The Tenure Track System in Higher Education Sector

Position	Pay Scale	HR Allow	Utility Allow	Min Salary/Month	Max Salary/Month
Professor	65,000-9750-104,000	39,000-65,000	5% of pay	107,300	174,200
Associate Professor	45,000-6,500-65,000	19,500-26,000	5% of pay	67,000	94,300
Assistant Professor	32,000-3,900-48,100-0.000	13,000-15,600	5% of pay	47,000	66,100

Appendix 3 A

**Organizational Justice (Procedural Justice and Distributive Justice) Items
(Sweeney & McFarlin, 1997)**

1. The procedures used to evaluate my performance have been fair and objective.
2. There are adequate procedures to get my performance rating reconsidered if necessary.
3. I understand the performance appraisal system being used in this organization.
4. I will be demoted or removed from my position if I perform my job poorly.
5. Promotions or unscheduled pay increases here usually depend on how well a person performs on his/her job.
6. Performance appraisals do influence personnel actions taken in this organization.
7. I am told promptly when there is a change in policy, rules, or regulations that affects me.
8. I will get a cash award or unscheduled pay increase if I perform especially well.
9. Under the present system, financial rewards are seldom related to employee performance.
10. In the past, I have been aware of what standards have been used to evaluate my performance.
11. If I were subject to an involuntary personnel action, I believe my agency would adequately inform me of my grievance and appeal rights.
12. My performance rating presents a fair and accurate picture of my actual job performance.
13. There is a tendency for supervisors here to give the same performance ratings regardless of how well people perform their jobs.
14. In general, disciplinary actions taken in this organization are fair and justified.
15. I am aware of the specific steps I must take to have a personnel action taken against me reconsidered.
16. I am not afraid to 'blow the whistle' on things I find wrong with my organization.

Figure 3: Items for the Survey

Appendix 3 B

Moral Hazard Items (self generated)

1. Including names in publications without contribution is an academic crime.
2. Punctuality is strictly observed.
3. Can get absent without any genuine reason.
4. Habitual absenteeism should be discouraged by the management.
5. Falsify exam scores.
6. Class lectures are well prepared.
7. New teaching methodology is given preference over the traditional approach.
8. Supervising research students is as important as one's own research.
9. Strictly follow the result submission deadline.
10. Encourage students to ask questions during the class.
11. Students learn through discussions in the classroom.
12. Encourage students to come to the office for course related issues.
13. Never get absent without prior application to the management.
14. Skip classes without informing the management for personal work.
15. Can get absent without any genuine reason.
16. Make easy papers so that students can pass the exam.
17. Participate in co- curricular activities
18. Taken up secondary employment in other places during office hours to fulfill my financial obligations.

Moral Hazard Items (Bennett & Robinson, 2000)

19. Put little effort into your work.
20. Intentionally worked slower than you could have worked.
21. Taken property from work without permission.
22. Spent too much time fantasizing or daydreaming instead of working.
23. Taken an additional or longer breaks than is acceptable at your workplace.
24. Come in late to work without permission.
25. Littered your work environment.
26. Neglected to follow your boss's instructions.
27. Discussed confidential company information with an unauthorized person.

Figure 4: Items for the Survey

Appendix 3 C

Reward Expectancy Items (Lawler & Suttle, 1973)

1. My hard work will fetch me awards or recognition.
2. My hard work will fetch me pay raise.
3. My hard work will fetch me promotion.
4. My hard work will fetch me high pay.
5. My hard work will earn me respect from boss.
6. My hard work will earn me respect from other employees.
7. I get feeling of accomplishment from my work.
8. Working hard can provide me greater chances for independent thought and development.
9. My hard work will lead to personal growth and development.
10. My hard work can give me feeling of job security.

Dispositon Towards Incentive Items (self generated)

1. Financial rewards are important to motivate teachers to work harder.
2. I take extra classes for extra remuneration.
3. My effort choices are linked to how tasks are incentivized.
4. I do not mind working on off days if I receive financial rewards.
5. I like teaching because of financial incentives.
6. Incentive are important for research and publications.
7. I like to publish because publications are important for my career advancement.
8. My effort choices are contingent upon incentive power.
9. I would like to do more of those tasks that are incentivized.
10. I like teaching profession because of better rewards.
11. I would leave teaching if I am offered better pay elsewhere.
12. My publications have increased with the introduction of financial incentives.
13. Monetary incentives are important in life.
14. Faculty should be given overtime for additional work.
15. Incentives can create healthy competition among faculty.
16. Incentives can increase the feeling of equity among employees.
17. Linking pay to my performance, will make it clear to me what behaviors the organization values.

Figure 5: Items for the Survey

Appendix 4



Figure 6: Map of Pakistan and KPK

Appendix 5

S No		Total Strength	PhD's	Non-PhD's	Percentage (%) of PhD's	Percentage (%) of Non-PhD's	Total TTS Faculty	Total BPS Faculty	Ratio of TTS Faculty to BPS Faculty
1	UOP	597	172	425	28.8	71.1	21	576	1:27
2	ICU	157	72	85	45.86	54.14	8	149	1:19
3	AU	162	94	68	58.02	41.97	28	134	1:5
4	UET	203	37	166	18.22	81.77	36	167	1:5
5	KMU (excluding Faculty working in Teaching Hospitals)	67	4	63	5.97	94.02	2	65	1:32
6	IMS	91	25	66	27.47	72.52	15	76	1:5

Figure 7: Ratio of BPS Faculty to TTS Faculty

Appendix 6

S No	University/HEI	All the Faculty Appointed Under BPS and TTS				
		Professors	Associate Professors	Assistant Professors	Lecturers	Total
A	General University					
1	University of Peshawar	82	66	125	325	597
	University / Institute / Centre					
2	Islamia College University	17	11	44	107	179
B	Agriculture University					
3	University of Agriculture, Peshawar	71	20	73	78	242
C	Engineering University					
4	University of Engg. & Tech., Peshawar	32	13	59	99	203
D	Medical University					
5	Khyber Medical University, Peshawar	7	8	41	11	67
E	Degree Awarding Institutes (DAIs)					
6	Institute of Management Sciences, Peshawar	0	0	39	50	89
	Grand Total	192	107	337	563	1277

Figure 8: Population of Faculty in KPK Province

Appendix 7

UNIVERSITY OF
Southampton

Consent for Interview

Title of Research: Moral Hazard in a Moderated-Mediation Framework of Incentives and Organizational Justice Perception.

The principal investigator is interested in perceptions of management about deviant behavior in faculty and the perceived potential factors that might be causing this problem. The investigator is further interested to know the incentives provided to the faculty, as well as the processes and procedures used to evaluate the performance of faculty members in the public sector universities and Higher Education Institutions (HEI's). Based on the opinions of experts, such as; vice chancellors, deans, department heads, coordinators, and directors Quality Enhancement Cell (QEC), the problem identification and explanation will be done, in the natural work setting.

Principal Investigator: Shandana Shoaib

University regulations require a signed consent for participation in research involving human subjects. Please indicate your consent for interview by placing your name and signature on this form, and returning it to the principal investigator, Shandana Shoaib after the interview has been conducted.

Name of the Interviewee : _____

Signature : _____

Date: _____

Figure 9: Interview Consent

Appendix 8 A

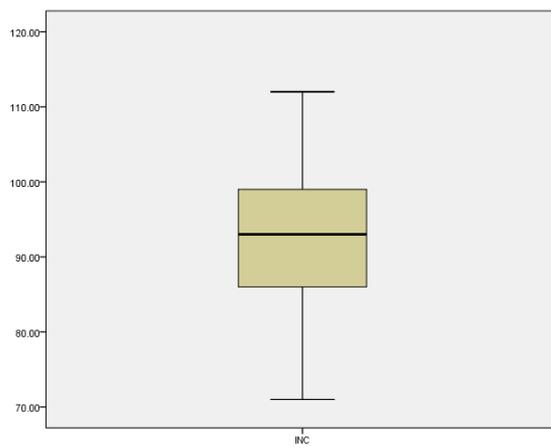
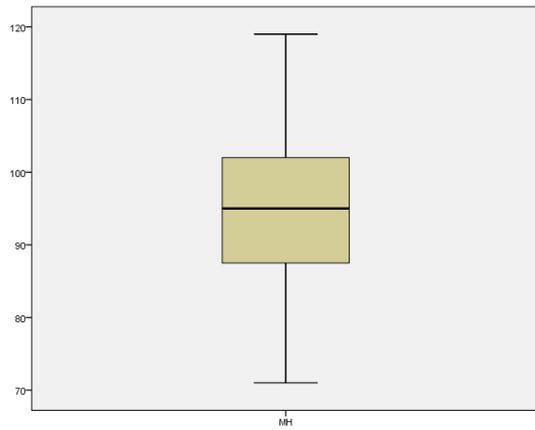


Figure 10: Box Plot for Moral Hazard and Incentive

Appendix 8 B

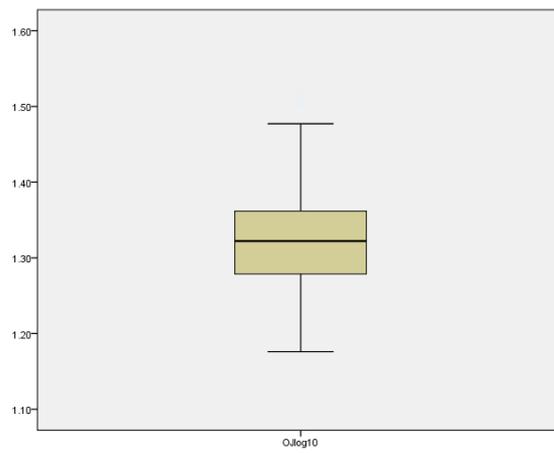
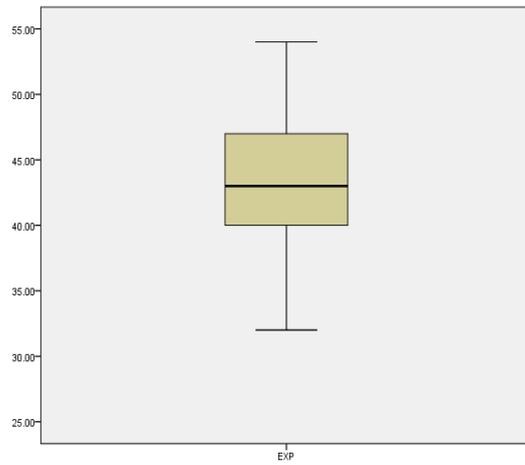


Figure 11: Box Plot for Reward Expectancy and Organizational Justice

Appendix 9 A

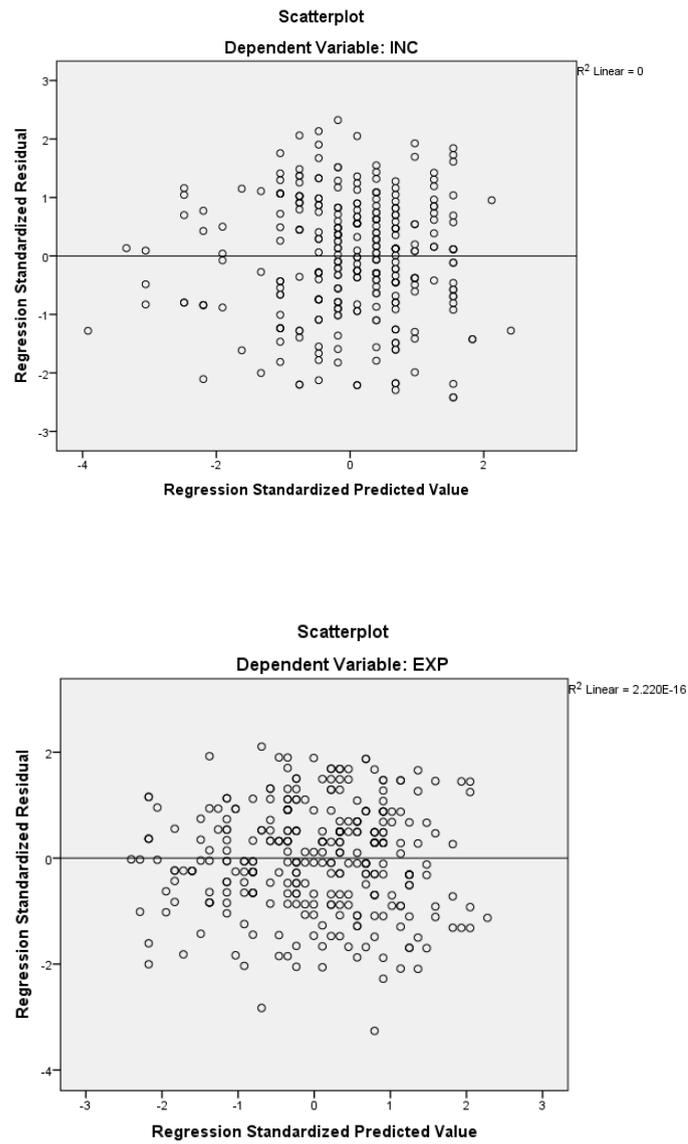


Figure 12: Residual Plots for Incentive and Reward Expectancy

Appendix 9 B

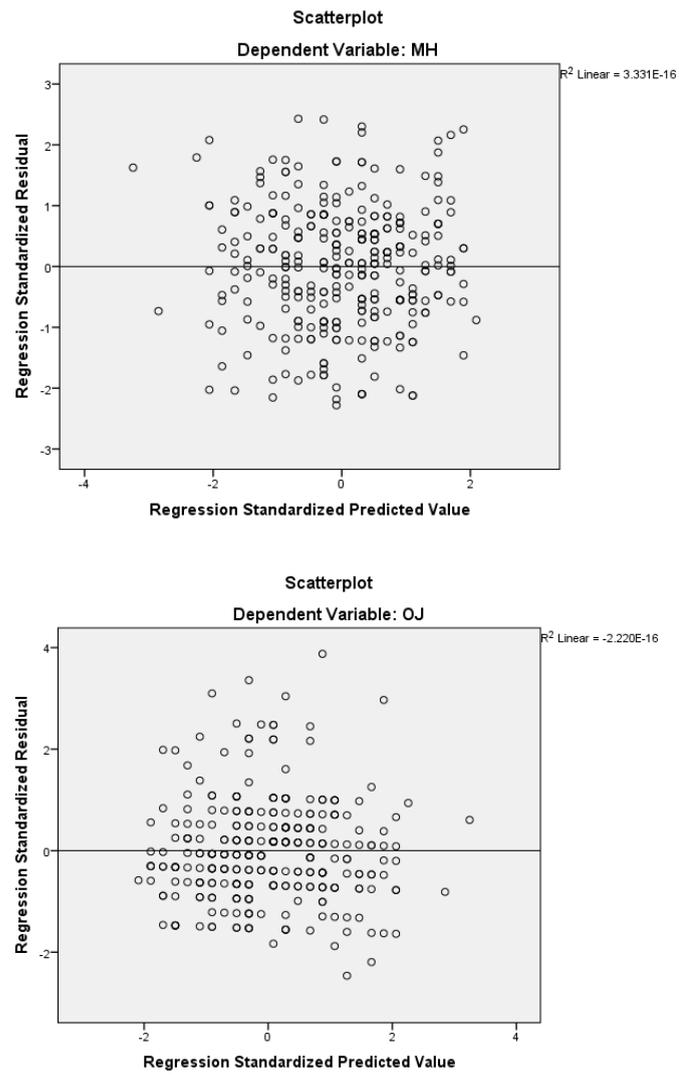


Figure 13: Residual Plots for Moral Hazard and Organizational Justice

Appendix 10

7 Models for Expectancy Theory

1. $E \rightarrow O$ Effort-Outcome Associations: A measure of the degree to which effort is seen to result in such outcomes as pay and promotions.
2. $\sum[(E \rightarrow O)(V)]$, Effort-Outcome Associations weighted by Valences: A measure of force or motivation computed as a sum or average of the $E \rightarrow O$ expectancies when each outcome is multiplied by its valence.
3. $E \rightarrow P$, Effort to Performance Association: A measure of the belief that effort will lead to good performance.
4. $\sum P \rightarrow O$ Associations: A measure of Expectancy II, computed as the sum or average of beliefs which link performance with first-level outcomes.
5. $\sum[(P \rightarrow O)(V)]$, Performance-Outcome Associations weighted by Valences: A measure similar to $P \rightarrow O$ expectancies, except that each outcome is multiplied by its valence.
6. $(E \rightarrow P) \sum(P \rightarrow O)$, Expectancy I multiplied by Expectancy II: computed as the product of the $E \rightarrow P$ and $P \rightarrow O$ variables.
7. $(E \rightarrow P) \sum[(P \rightarrow O)(V)]$, Motivation: A measure of the concept of motivation, computed as the product of the $E \rightarrow P$ and the $(P \rightarrow O)(V)$ variables. (Lawler III and Suttle, 1973, p. 485).

Appendix 11

Supplement Material-Incentive System for the Faculty and Performance Appraisal of the Faculty

1.1 Incentives as a Motivation Tool for the Faculty

The idea of incentives can be traced back to Tayloristic scientific management, when the piece rate was introduced for blue collar production workers in an effort to increase their productivity levels through increased efficiency. The plan was successful and later managers and HR specialists started thinking to work out such pay out plans on more formal lines. Money is a crucial incentive because as a medium of exchange it is the most instrumental ([Gerhart et al., 2009](#)). The author argues that compensation is the single largest operating cost—an organization's success depends not only on the magnitude of this cost, but also on what it gets in return for its investment. The use of economic inducements to motivate people has been a common practice in many societies and has generated a myriad of speculation and a plethora of research ([Milkovich et al., 2005](#)). Incentive based compensation serves both a motivational role, and a role in directing individuals' effort and attention among their various responsibilities ([Sprinkle, 2000](#)). Incentives have a potential to impact performance via its impact on employees' motivational states, holding attributes of the workforce constant. According to [Belcher \(1962\)](#), people have been taught that money is the key to satisfaction, so when they feel something is wrong with their life, they naturally ask for more money.

The HEC has urged the universities to provide different incentives to the faculty members so as to rejuvenate their motivation level for higher efficiency. This intention of the Commission has been incorporated in the 5 year plan which includes physical targets of promoting excellence in learning and research. Human resource development within the higher education sector has a dual objective of increasing institutional capacity and enhancing local research activities, the major thrust of programs in this area have

been primarily aimed at improving academic qualification of the university faculty (PES, 2013). Figure 14 shows the categories and sub-categories related to incentives; generated through qualitative analysis.

1.1.1 Incentives for Teaching

Universities have a dearth of good teachers as compared to the ratio of students seeking higher education. According to the HEC survey in 2009, 8,03,507 students were enrolled in higher education institutions, matched by 3,586 PhD faculty (HEC, 2011). Increased growth in the higher education sector in Pakistan in the last decade has created a dearth of good faculty members who are highly motivated and proficient in their job (Memon, 2007). 139 public and private universities were staffed by 70,053 faculty during the 2011-2012 (PES, 2013). The problem has been highlighted in almost all reports on Pakistan’s higher education; some exemplary ones are the Boston report, the World Bank report, the Task Force report, the UNESCO report, besides several other chronicles, newspaper articles, etc., from diverse forums.

The faculty is an important corner of the education triangle and are the face of an institution Memon (2007). Research in the West shows that faculty behaviour and attitudes show a dramatic effect on student learning and engagement (Umbach and Wawrzynski, 2005). The western world has progressed because it understands the importance of the various roles of the faculty in education and try to accomplish these PEP (2006). In Pakistan, the quality of higher education is deteriorating in both the public, and private sectors, although enrolment in both these institutions is rapidly increasing at 30% (Mahmood and Shafique, 2010). This is evident from the fact that Pakistan is placed 119th out of 127 countries in the EDI ranking by EFA Global Monitoring Report 2011, even lower than Bangladesh (112th) (Murtaza, 2013). Improvement in the quality of higher education in the fields of academic standard and research is the top priority of the Commission; there should be at least five Pakistani universities included in the ranking of top 300 universities of the world till 2015 (Khan, 2006). Currently, only a few universities are included in the top 500 list. The government has acknowledged officially that no Pakistani university is ranked in the top 100 universities of the world (Mahmood and Shafique, 2010). Table 3 shows the ranking of Pakistani universities.

Table 3: Ranking of Universities

Ranking	In top 100	In top 500	Enrolment ratio (18-23 years)
119 (Lower 4th Quartile)	None	Only a Few	Pakistan 3.7%

Source: Adapted from Mahmood and Shafique (2010)

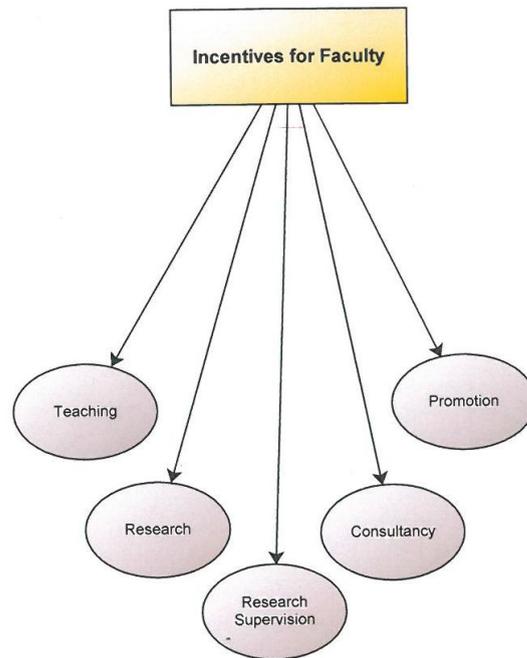


Figure 14: Incentive Regime for Faculty
Source: Author

Prentice et al. (2007) claim that there is evidence of teachers responding to financial incentives. The authors suggest that financial incentives can yield productivity improvements for teachers. Directly rewarded outcomes improve under incentive schemes; however, unrewarded outcomes are inconclusive. According to Rasheed et al. (2010), people in the developing country like Pakistan are more concerned about their financial constraints. The current emoluments are grossly inadequate to attract and retain good quality faculty (Boston, 2002).

Case A

A self-finance system is present for the faculty. When they teach over and above their required hours they receive extra remuneration. These opportunities will encourage teachers to stay most of the time on their campuses as they will have opportunities to earn more money inside the campus premises. It will also solve the problem of scholars' disappearing from their offices after taking a single or couple of classes and discourage private tutoring to some extent. (A2)

The interviewee considers the university's policy of paying monetary incentive for extra teaching as an opportunity for the faculty members to extract extra benefit for extra work. He considers this policy as a strategy to retain faculty members on campus during their office hours. There is no harm in providing such opportunities to the faculty; however, previously there were anomalies in this policy, as the upper limit of extra classes was not capped. Also, evening classes were considered as an additional teaching load. Senior faculty or those faculty members, who were well connected, used to skip their normal routine morning classes for which they were insured a fixed amount of pay irrespective of the class contact hours. Junior faculty members were resentful that they never got a chance to teach in the evening because all the evening classes were allocated to the senior faculty. The policy of incentives for additional teaching load was exploited by the faculty – as they opted for more and more teaching load – while ignoring the quality of instruction. To stop the misuse of this policy, recently teaching load was capped by the universities and also the differential between evening and morning classes was done away with by extending office hours from 8 am to 8 pm, earlier it was from 8 am to 4 pm. Due to this decision the situation was normalized to a greater extent, but not completely controlled, as still there are faculty members who cannot strike a balance between teaching effectiveness and teaching. Due to monetary benefit, the faculty won't even let go of additional teaching load.

We do not provide teachers any monetary reward for good teaching. They are public servants and already drawing a pay from the government exchequer, so how can we give them a second salary, besides their pay package. The HEC also gives best teacher award to the best performer based on the execution

of the previous five years. There is otherwise no performance based system.

(A3)

The faculty is incentivised in two ways: giving out a cash reward, and promotion/appointment to higher grades/academic positions. The incentive system is linked to the university's core activities of teaching and research. If a faculty member's teaching load exceeds its specified credit hours, he/she will be compensated through overtime payment, at the rate of Rs.1, 200 to 1,500 per hour. Similarly, the task of research and publication is also rewarded with monetary awards. Figure 15 shows the inflation rate in Pakistan for 2011, 2012, and 2013. For a lecturer who is getting a basic pay of a Rs. 34, 000 (300 dollars approx), the valance of monetary incentive cannot be underestimated, with the rocketing inflation index.

Since long, the teaching profession is considered to be underpaid for multiple responsibilities and roles, which a teacher has to shoulder. Low rewards preclude talented individuals from joining this profession, and makes the existing faculty prone to relinquishing for more lucrative jobs elsewhere in the hope of affluent life. By providing incentives, universities can create opportunities for faculty members who have the ability and capability to capitalise on their potential and earn a decent living. Currently, universities are confronted with the challenge of attraction and retention of the top faculty, due to motivational issues.

Case B

The faculty members get remuneration over and above their monthly salary, if they are willing to teach extra credit in our institute. Although the amount is not much Rs.500 per hour, but still the faculty welcomes it as an additional push for their income. The HEC also gives monetary awards for best teacher of Rs. 100,000, and a certificate. The HEC award is based on the faculty member's evaluation of the last 5 years. The best teacher award, which is given by the Commission, is based on better research performance; such as publication in respectable journals. We do not have any indigenious scheme to encourage all hard workers rather than singling out any particular individual. What about the faculty member who could not make it to the top position, but is equally competent and hard working? We do not want to discourage the runner up or all runner ups. (B1)

The motivational effects of these awards do not trickle down to all the entire faculty because the criteria for this award entertains only the senior level faculty. Secondly, the faculty does not trust the management, due to lack of transparency in nominating names for this award. Any award that is not provided to the deserving person will result in de-motivation, rather than motivation. Merit should be upheld in genuine competitions. Supervisors should strive to distinguish their better performers from those who may not be and relate to them that their good work is appreciated. If supervisors fail to



Figure 15: Inflation Rate in Pakistan (2011-2013)
Source: UK Office Investment

do this, the better performers will have no reason, aside from personal satisfaction, for continuing to perform at a high level, and the mediocre employees will have no reason to improve their performance.

Case C

We have started programs in the evening. Faculty members who want can teach in the evening can now do so, and financially they are fine. (C1)

The arrangement of giving extra classes to the faculty members is a mixed bag. It has increased the income of hard working faculty members, by giving them an opportunity to earn extra money for exerting extra effort. It has also extended the stay of the faculty members on campus because they have an incentive to stay instead of going out for private tuitions. But there is also a negative side to this practice. The faculty members have entered into a race for money that has turned them into money making machines, where everything else is considered secondary. Secondly, it has increased the potency of the supervisors, as they can allocate extra courses to those faculty members who are on good terms with them. Therefore, those faculty members who are interested in teaching overtime, resort to rent-seeking behaviour, to get extra classes. An additional income of Rs. 7,000 to Rs. 9, 000 per month for a single extra class, is an attractive incentive. According to the HEC statute, the faculty can take two extra courses over and above their specified workload, which means an increase in the earnings by about Rs. 14,000 (41% of BP) to Rs. 18,000 (53% approx of BP). Teaching is not about racing through the course and completing credit hours of a particular course, it is all about student learning and their intellectual growth, by developing their critical skills.

In practice, this incentive has tempted some faculty members to take as many classes as they possibly can; surpassing the HEC guidelines in this regard. Incidences were reported where some faculty members were teaching up to 10 courses per semester. The glimmer of money has drifted them away from the real essence of teaching, putting teaching effectiveness on shaky grounds; however, there are always exceptions; for some faculty members, the job of teaching is more than just a profession. They are passionate about imparting knowledge to the students, and money holds a secondary place for them, but the number of such faculty members is close to negligible.

Case D

The University is always in need for its own faculty because of the increased workload, and for this purpose any faculty member who is willing to teach over and above his/her assigned classes is remunerated at the rate of Rs. 1000 per class. I think this measure is enough to motivate the faculty to take extra work load. An opportunity was created for the faculty to earn extra money, but in an ethical way. (D3)

The chairman of case D appreciates the University's policy for overtime compensation, as it provides an opportunity for the faculty members to earn extra income, which they would have otherwise earned by doing secondary employment elsewhere. Due to increased number of students, universities have to run morning and evening sessions. This raises the demand for qualified faculty to teach in dual shifts. It is always convenient that an organization offers overtime to its own employees instead of bringing in people from the outside for extra work. The main reason being that the existing employees already know the work patterns and are familiar with the environment – can become productive immediately – as opposed to the visiting staff or temporary employees who need time to socialise before they could yield the desired productivity level. Second, it is the right of existing employees that if they are willing and have the capacity for additional work, they should be given a chance over outsiders. Although, providing a very minimal amount of Rs. 1000 per hour to a person with higher degree is not justified, but if we compare it with other professions, especially employees working in the public sector, the higher educational institutions are better employment places for grabbing such opportunities. Despite the fact that overtime can increase the income level of the faculty who is in need of money; however, it fails to motivate those for whom the above mentioned amount holds little valance. The rate differs from university to university and ranges between Rs.500 to Rs. 1000 for the non-PhD faculty and up to Rs. 1500 per hour for the PhD faculty, who opts for additional teaching hours – the normal workload is 4, 3, and 2 classes, for a lecturer, assistant professor, associate professor, and professor, respectively.

Case E

Our university does not provide teaching overtime to the faculty, but it does do get a tax relief on its income. (E1)

All medical colleges are affiliated with a public sector teaching hospital. The doctors who are working in these hospitals as are also required to teach to the medical students, both inside the campus and also in hospitals; get a salary for being primarily employed as doctors and their induction is done through public service commission, which is a government recruiting body. However, the teaching staff gets a slight rebate on their income tax; a rule that applies across the board to all teachers in the public sector.

Case F

Like the other cases, case F has also provided this opportunity of overtime to its academic staff.

Anything over and above their assigned workload, i.e., active classroom teaching is rewarded in the form of overtime. (F4)

As compared to other universities, case F provides better overtime rates to its faculty. When a teacher can increase his/her fortune in-house, why would he/she go anywhere

else in search of providence? This ensures the presence of the faculty on campus for a longer time period. The students can also benefit from their presence regarding their academic problems. In some universities, the faculty is also paid for checking transcripts and examination duties held in the evening. For example, the faculty gets Rs.50 for marking a single transcript and Rs. 1000 per hour for exam invigilation. This practice has also an incentive for the faculty members, and they try to grab maximum invigilation duties.

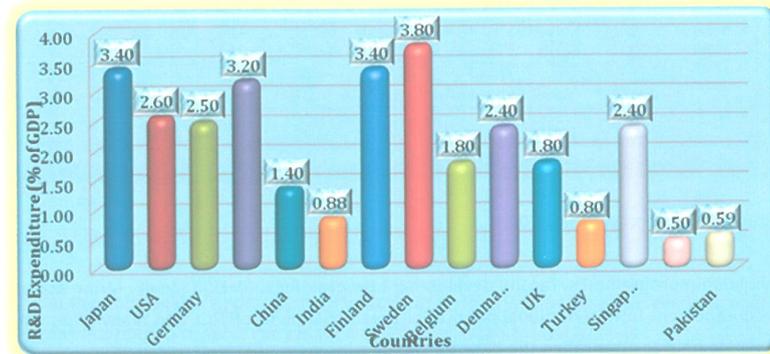
1.1.2 Incentives for Research

To promote research culture in universities, which are a hub for innovation, the HEC not only fund universities for the promotion and growth of research, but also provides several incentives to the faculty who is interested in research and has the necessary skills for conducting it. The incentives provided to the faculty in this regard have laid the basis of a research culture in the region. The activities of research and publications have increased manifold during the past decade. The graph provided below depicts the situation of research in Pakistan after the establishment of the HEC in 2002. The HEC has been encouraging the faculty for participation in academic activities, by providing travelling grant for conferences and seminars. Despite all these facilities, the faculty seems to be indifferent towards conducting quality research, as the spark seems to be missing. Figure 16, clearly shows an upward in publications from Pakistan before and after the establishment of the Commission. The steep upward shoot from 2002 onwards shows that with the establishment of the HEC publications have increased manifold.

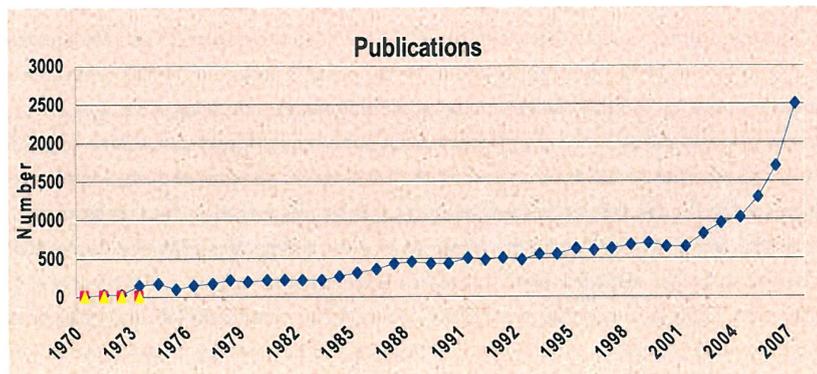
The HEC has vowed to improve the research aspect in Pakistan through higher education institutions. Today's slogan of the HEC is "publish or perish", and for this purpose monetary incentives are provided to the faculty. Rigorous research activities are also believed to improve the rating of their university or institute. Hence, research and publication not only boosts the faculty's profile in-house, but also enriches the prestige of the scholar in the academic market. Research and publication are also incentivised through upward career movement of the faculty. The trend of publication is more common in the senior faculty as compared to the junior faculty. According to the worldwide scientific journal ranking (SJR),

Pakistan published 6,987 research documents in 2010. However, the same year the United States was on top with 502,804 papers followed by China with 320,800, and the United Kingdom with 139,683 research documents. On the other hand, India ranked ninth worldwide. Among the Islamic countries, Pakistan trailed behind Turkey and Iran, which published 30,594 and 27,510 research documents, respectively (Junaidi, 2011).

The quality of the majority of the publications is not up to the mark, as the citation count shows a declining trend 1, 00, 97, 11, 522, 13, 131, 9, 107, 5, 239 in year 2006 7 8 9 10,



Source: PCST Survey 2008-2009



Source: PCST Survey (2008-2009)

Figure 16: The Trend of Publications in Pakistan
Source: PCST Survey (2008-2009)

respectively. According to [Van der Stede \(2009\)](#), universities should strengthen controls on the efforts that professors could devote to those activities that do not contribute towards the university's prestige.

A faculty member whose publication appears in an indigenous, or internationally recognised journal, gets a monetary reward of Rs. 10,000 and Rs. 25,000 respectively, with the condition of being the principal author. This criterion has been set by the Commission; HEC's rating of a journal is taken as a *gold standard* for entrusting quality on a piece of publication and the same holds true for foreign journals. Universities normally get funding from the HEC for providing these incentives to the faculty, under different incentive schemes. Besides cash award to the faculty, any publication expense incurred by the author is reimbursed by the university.

Such substandard publications are only a point scoring activity without serving the real purpose for which the incentives are extended to these professionals. This can explain, why people in this part of the world have very few patents and their citation count is almost negligible, as compared to the work of faculty members in other parts of the world. One of the reasons being that the majority of the journals are not peer reviewed to filter out quality papers for securing a place in the journal.

Publication and research incentives, although, having a motivational effect on the faculty, also have some adverse effects on the quality of the publications. Faculty members have started publishing anything which could fetch them quick money. This refers to the gloomy side of incentives; encouraging the faculty to indulge in corrupt practices, such as gaming the plagiarism software, reaching out for easier publication outlets, free-riding, and publishing in parts etc.,. [Hoodbhoy \(2005\)](#) considers practices like plagiarising papers, multiple publications of slightly different versions of the same paper in different research journals, fabricating scientific data, and seeking out third-rate foreign journals with only token referees etc., as academic abuses. [Bedeian et al. \(2010\)](#) has reported infractions of research ethics, such as revealing half-truth of the research findings and even data or result fabrication. This does not mean that all publications are substandard or all journals are not peer reviewed, but the number is quite low and their credibility is questionable. Limited numbers of journals are recognised on an international level, the rest is competing on national grounds. According to [Hoodbhoy \(2003\)](#), many universities today are awash in research funds and special incentives. [Hoodbhoy \(2005\)](#) considers it as a poorly thought out, and dangerous HEC scheme, which involves giving cash awards to university teachers for publishing papers.

Universities and research institutes shall place greater emphasis on mobilising research for promoting innovation in the economy ([UNESCO, 2008](#)). According to the Executive Director of the HEC, the budget allocated to this activity has risen to over Rs. 300 million annually and the demand increases on a monthly basis ([Naqvi, 2007](#)). Travel grants for attending academic conferences, seminars, and training programs are all

sponsored by the HEC by extending financial assistance to genuine cases of attendances. The amount of research grants received from the HEC under different heads adds to the university's profile, and pushes up its rating and ranking. Table 4 shows the statistics of National Research Grants in Pakistan.

Table 4: Research Activities in Pakistan from 2011-13

National Projects for 3 Years	Travel Grants	Seminars	Conferences
2011-12(Rs 1463m)	579	175	6210
2012-13(Rs 315m)	848	394	105

Source: (PES, 2013)

These incentives are tempting for the faculty, and can easily allure it for quantitative work; at the cost of work quality. The outcome of the quality of a teacher's job; especially in teaching is manifested after a time lapse; whereas, the incentives are immediate and short term oriented, plus more focused on quantity of work. Incentives provided to the faculty, do not serve the actual purpose for which this system is devised, yet it has at least initiated a research culture in the academic circles because a decade ago many of the faculty members were not even aware of the research work and its importance to their work. It is evident from the fact that:

24 research awards were distributed in 5 different categories during 2009 by the Commission while 33 awards were given in 2011 under the project of HEC's *Outstanding Research Awards Series*. 55 books were published by HEC in these 5 years under development projects of R & D, *Monograph and Textbook Writing Schemes*. 28 patents were filed under *Patent Filing Project* (Finance, 2013).

Case A

Citations are important for the faculty, as well as the university as it shows the impact of the author in a particular field (Baugher, 2008). A citation means that other people in the same field consider your research/ publication worthwhile to be mentioned in their work. This increases the robustness and credibility of the research.

According to Eble (1982), while observers agree that the three broad areas of teaching, research, and service make up the three legged stool upon which faculty evaluation is based, the amount of emphasis each area receives is not constant (Licata, 1986). Research is considered as the most important aspect of a teacher's job, as the majority of the incentives are given to the faculty for this purpose, and it is even connected to the long term success on the job. Irrespective of a scholar being good teacher, if he/ she fails to publish the chances of moving to higher academic positions become slim. Thus, research is the most important prerequisite for career advancement of the faculty. Baugher (2008) suggests that the faculty members should confine their

publications to their respective discipline, and should not try to range too far afield because if a candidate for tenure has too many papers in widely divergent fields, this might be an indication of lack of focus or commitment to a given subject area, and would count against them during tenure review. The author further stresses that the articles published in high-impact journals are worth a great deal more than an equal number of articles printed in lower-status journals.

Promotions and appointments are only based on publications (focusing on one area), which is a very tough criteria and helps in judging the worth of our faculty. Nevertheless, there are productivity awards on articles, monograph, and books, etc. Publishing a good book is conceived as an article published in an X category journal which is a big accomplishment for a faculty member. (A1)

Pakistan Council for Science and Technology gives Research Productivity Award (RPA) on impact factor and citations. If the value is less Rs. 50,000 is given and as the value increase, so does the reward money. (A2)

Theoretically, it is envisaged that teaching and research are kept at par but practically there is a wide gap. The reason could be that publication output is easily observable and can be measured objectively, such as appearance in quality journals, citation count, etc., but to measure teaching effectiveness is based on personal judgement of the stakeholders and also the outcomes might be manifested after a break. Furthermore, the outcome entails noise. The interpretation and definition of what constitutes good and effective teaching differs from person to person and place to place, but the quality of publication has a gold standard.

Case B

Incentives are given for publishing in impact factor journals, and that is the publication expenses only. Research productivity allowance is given by the Pakistan Scientific Foundation. (B2)

Case B offers pecuniary awards to those faculty members, who publishes in impact factor journals, but this award is in the form of expenses incurred on such publication/s. However, an external agency to promote quality publication, motivates the faculty by giving them research productivity allowance that is based on some criteria in research and publication.

Case D

The HOD has given them free access to approach him for help. Time adjustment is made, but no cash is given from the university side, but HEC pays something. (D2)

Case E

Cash prize being given at the end of the year is linked with publication rather than teaching. (E1)

The HEC is asking more of impact factor publications from the academic staff. Impact factor publications have been linked to the tenure decision of the TTS faculty, as well as the BPS faculty. An impact factor publication has more points as compared to non-impact publications, as these are accepted and recognised worldwide due to the nature of the work and not limited to a specific journal or location. In some universities the scholars are awarded cash prizes as an incentive, at the end of the year. This reward is associated with the publication aspect only. This attitude of the university shows that publication is seen as an extra work for the academic staff for which they need to be incentivised.

Case F

The faculty receives incentive for publication in the HEC recognised journals. For domestic publication they get Rs.10, 000, and for international publication the faculty gets slightly higher incentives, such as Rs.25, 000. The institute pays for a subscription fee of publication and also awards money if a paper is published in recognised journals. Full fledge research is encouraged through a scheme of the HEC and ORIC. Every research must have a proper planned budget for expenditure which is a blueprint for how the funds will be utilized. In the previous year, three studies were completed by the faculty, and still more funds were available but there were no more proposals for submission. (F1)

So far the research which is conducted by any faculty members has not found its way to or contributed towards policy making. In developed countries, universities consider publication as a serious concern. Most of their researches are linked with the industry and community at large. (F4)

There is a difference of opinion between participants, as some consider publication incentive as a practice that will encourage the researchers, yet there are others who hold a contradictory view and are against monetary incentives paid for publications as the individual will get its benefit in the long run. Implicit benefits or long term benefits do not easy motivate employees. Employees usually expect a quick reward for the hard work they have done and the efforts they have expended. Publications are not taken very seriously by the academicians except for their self-vested interests. People do not care whether their research is useful to the community or not but are blindly following the motto of “publish or perish”, and earning extra money. Neelakantan (2007) has apprehensions that many Pakistani scholars produce research of dubious quality, a problem created by the new reward system in which the commission awards 5,000 to 10,000 rupees to the authors, which is equivalent to dollars 112 to dollars 224, per publication. The author further asserts that the incentive, which has increased

publication by 40% in Pakistan, was designed to prevent stagnation which was due to the inbuilt progression within grades due to longevity. Research should be aimed at the betterment of the society and not just treated as a promotion seeking tool. Promotion will automatically come if the larger aims of the research are achieved.

1.1.3 Incentives for Consultancy Work

According to [Van der Stede \(2009\)](#), universities should fix a canon on professor's income-generating activities taking into account the negative effects of that canon on the efforts that professors might be willing to devote to research rather than to consultancy activities. Donor agencies are keen to confer different research, and training projects upon universities, and higher education institutions with an understanding that these places are better equipped for the projects to be conducted.

Case F

If any person takes an initiative or starts a project he/she can do so, and according to a fixed formula both the institute and the faculty member share the benefits of that project or idea. Once the project budget is allocated for a project, 30% of it goes to the institute and the rest is distributed amongst the team members according to their role and contribution. All such projects are approved by the board. So it is a win-win situation for both the Institute and the employees. (F1)

These side projects or consultancies do not affect the teaching activities of the faculty. So there is no harm if the faculty gets involved in activities besides its assigned tasks; playing a positive role in the society as well as earning extra bucks. The Institute provides a forum to any such person who is interested in such projects. The provision of such practices is even present in the ordinance of the Institute. (F2)

In Pakistan there is a famine of independent establishments which have a high profile in research activities. Faculty members are involved in different projects to provide their technical expertise as consultants. Working on these projects is a source of additional revenue for the scholars; due to heavy funding from the donor agencies. Besides, incentive for the faculty to work on these projects, universities are also earning additional revenue by providing a platform for such activities. Both the university and the faculty members enjoy the fruits of such endeavours.

1.1.4 Incentives for Supervising Research Students

The faculty gets monetary and non-monetary incentives for supervising research students. Monetary reward which is given to the faculty for different level research varies from

university to university. The points scored by the faculty upon successful completion of research by a research student whom he/she has supervised, counts towards his/her academic profile, and is taken into consideration for tenure decisions and appointment to higher level academic positions.

Case B

If a faculty member successfully supervises a PhD student, is awarded Rs. 100,000, whereas for an MPhil the award money is Rs. 25,000. (A2)

If a teacher produces a joint paper with his PhD student for that the incentive amount is Rs. 30,000. In engineering university incentives are linked with MPhil. Even in our University for MPhil degree the supervisor gets about 7500. (B2)

The task of research is virtually divided into two components: the research activities conducted by the faculty to enrich its profile, and the research conducted by the students under the supervision of the faculty. The two have different implications, and a different motivational drive for the faculty. The research for which the faculty is solely responsible, and that adds up to its profile is given preference over the research that is conducted by the research students – as a requirement of their undergraduate, graduate, or post-graduate degree.

The interviewee in case B states that those faculty members who have been enrolled by the HEC as supervisors, can supervise research students at the doctoral level. When a faculty member successfully supervises a post graduate level student, he/she is given a handsome amount of monetary reward.

Case F

The faculty is rewarded for research supervision. Teachers are calling for a higher monetary reward for research supervision. The teacher gets Rs. 1,000 for successfully supervising both undergraduate and graduate level student, and 25,000 for producing an MS student. (F1)

Usually, the faculty is indifferent towards the research of its students. The faculty is so busy doing multiple tasks, in a limited time budget that it usually faces work overload and role overload. This is a common problem in all multitasking professionals. Incentives are expected to improve the quality of research work produced by the students, which at present is in doldrums. The incentive for student supervision is not enough looking at the time and hard work that goes into it, nevertheless it is better than getting nothing.

1.1.5 Promotion as an Incentive for the Faculty

Incentive payment is advisable in jobs where the principal cannot easily monitor the agent's work due to job complexity. It boosts the motivational level of an employee and encourages him/her to do the job in a better way. This situation especially holds true in multitasking professionals who have an information edge over their counterpart employer, and also due to the delayed output of their work the principal cannot determine the level of their performance immediately. The incentive pay system is rarely based exclusively or even primarily, on quantitative output measurement for professionals. Ellerson (2009) argues that quantitative measures are used warily, and never exclusively. Employees also appreciate non-monetary incentives, but when it comes to comparison, monetary incentive leads by a quantum leap. The value of money is especially enhanced in economically backward countries like Pakistan. From the respondents aspect, incentives mostly refer to monetary benefit that is linked with performance or achievement of targets. However, the aspect that is missing in this definition is that people link incentives with the quantitative aspect of their work, such as more work will be justified with higher pay-offs. There is hardly any evidence of the qualitative dimension being stressed upon. Thus, the meaning of incentive according to the respondents is similar to that put forward by (Milkovich et al., 2005; Prentice et al., 2007).

Economists often emphasise that the basic law of behaviour is that higher incentives will lead to more effort and higher performances (Gneezy et al., 2011). According to Van der Stede (2009), what you measure is what you get because incentives work; it is clear that strong incentives will have strong effects both good and bad. So if what is measured is not what is intended, strong incentives will only get the organization faster to the undesired results. To mitigate this problem, the weights placed on the key dimensions of the job will have to be rebalanced so that a single dimension is not incentivised disproportionately, relative to others. Most incentive schemes are far from perfect – even worse, they are often seriously flawed. It is, therefore, important to understand where the system falls short and how these shortfalls can be addressed. Distorted incentives, when left unchecked; can have devastating effects.

There are three types of upward movements for the faculty: progression through the salary scale, jumping from lower to higher grade – also known as *move over*, and appointment to a higher academic position.

Case B

Incentives are already in place e.g. a faculty member is inducted directly in grade 18, whereas, any other public servant joins service in grade 17. Again a professor in the education sector is given grade 21; whereas, elsewhere in the public sector, the public servant with the same credentials gets grade 20. A

professor can even achieve grade 22, but it is only applied to the meritorious professors. (B1)

The Higher education system in Pakistan has the same unified pay scales that apply to any other public sector organization, except with the difference that in other public sector employment fresh inductions are done in grade 17, but in higher education system induction is done directly into grade 18. This shows that overall in higher education the faculty members have better grades than other public sector employees. Even this works as an incentive for the individuals who aspire to join higher education.

Case D

Promotions linked with research and publication output. If the research performance of a scholar is good, further promotion avenues are opened and further nourishment chances increases. Teaching performance is considered as a subsidiary thing in determining promotion. (D2)

The promotion has always been used an incentive by the principal to motivate the agents. The concept of promotion, in the higher education sector, is slightly different from the norms of promotion elsewhere; especially in the public sector. There is, however, a little confusion between the concept of promotion and appointment. Promotion – as understood in the other public sector organization – does not exist in public sector universities and institutions. Progression of the faculty within the scale is based on longevity in the organization, but a higher level position cannot be achieved, by the same criteria. Movement from a lower grade to a higher is time based, but movement from a lower position to a higher one is based on a number of criteria, including: achievement of higher degree, publication count, length of service and certain other matters. Performance evaluation does play a role in the promotion, but not a major one. Whereas, a change in the title and position of an individual through fresh induction in the known as appointment.

Appointment means when an individual applies for any vacant position, with the intention of being selected against that position. A faculty member becomes eligible for appointment to a higher level position, based on degree enhancement and publication count. Appointments and promotions under TTS are very different from that of BPS system and performance based. In BPS it is mostly service based along with certain other prerequisites, but in TTS it is mostly target based, and one can move up quickly through the career ladder if his/her performance while on the Tenure Track is outstanding.

Promotion of the faculty is based on the combination of two things; teaching experience and publications. Irrespective of the performance evaluation results of faculty members, they will be eligible for upward movement by serving for a certain number of years – in a particular university, and secondly; by achieving the publication targets required for going up from a lower to a higher grade. Not all rewards can be given for the short term

success; there are certain rewards for which the faculty has to wait before reaping its benefits. A balance of both – the short and long term rewards – is necessary for proper motivation of the employees.

There is an old dictum, “you can take a horse to the water, but you cannot force it to drink; it will drink only if it’s thirsty”. This situation applies to the faculty. Despite the different types of incentives given to faculty, a snapshot of the GRE test scores reveals the true picture of the quality of education in Pakistan. The score is below average; given that many of the GRE test takers in Pakistan are engineers and students from science majors. China and India, on the other hand, are leading from the forefront. China has the highest GRE quantitative scores, of around 163, which are indeed very high.

1.2 Summary and Critical Reflection on Cross-Case Analysis

The conclusion is corroborated by the arguments, viewpoints, empirical studies, findings and conclusions of various researchers and academicians. Incentives are important to keep the morale of the faculty high on the good work they are doing, but at the same time it should discourage practices that apply brakes on their performance efficiency. All the cases except for case E have an overtime policy for teaching extra credit hours, such as when they exceed the threshold of 2, 3, and 4 modules per semester for different level faculty. The visiting faculty is debarred from this rule; they can take as many classes as they want to, provided if they are offered classes. Although, case B did not mention anything about the existence of this rule, but there is provision in the university policy book.

The rate at which the teachers get overtime, differs from university to university, and usually depends upon the financial health of the institution and discretion of the management. The rate differs between Rs.500 to Rs.1, 200 per hour. Case F, pays the highest amount of monetary incentive, as overtime to the faculty. Besides, *Best Teacher Award* is also given to the top performer by the HEC for an all-round top performance. This award entails cash money of Rs.100, 000, along with a certificate of appreciation. The problem with this scheme is that not all faculty members are eligible, as the criteria is less performance-based and more degree-centred. Secondly, only one individual gets the award; de-motivating the runner up and other hard working faculty.

For the purpose of research and publications, all the universities and higher education institutions provide ample incentives for the scholars. These incentives are basically provided, by the HEC, for boosting research activities in the country. The HEC provides funds to universities for disbursement of research activities. Usually the incentives for publication in international journals are higher than domestic publications, and the

reason is obvious, that more hard work and waiting time is required for a publication appear to appear in an international journal of repute rather a domestic journal because of their global recognition, everyone aspires to make publication in international high ranking journals. The hard work is appreciated by the university in the form of higher cash reward. Some universities also cover the publication charges to encourage scholars.

The faculty is engaged in helping out students and supervising them in their research at the undergraduate, graduate, and postgraduate levels. The amount of monetary incentive increases with the level of research.

Case B has provided some additional information, such as besides monetary incentive, the faculty induction is done in grade 18 which is one grade up than induction in any other public sector institution. This also works as an incentive for the faculty because the people working in other public sector institutions have to wait for at least 5 years before they could be promoted to the next higher grade.

1.3 Conclusion on the Incentive System

Multitasking refers to the challenge of designing incentives to motivate appropriate effort across multiple tasks, when the desired outcomes of some of the tasks are more difficult to quantify than others (Holmstrom and Milgrom, 1991). The authors argue that the problem of providing incentives to agents according to is by far more intricate than is represented by standard principal-agent models. The authors have apprehension that the performance measures; upon which rewards are based may aggregate highly disparate aspects of performance into a single number and omit other aspects of performance that are essential if the firm is to achieve its goals. The authors further state that:

Given a highly incomplete set of performance measures and highly complex set of potential responses from the agent, how can the agent be motivated to act in the social interest? The incentive system needs to be analysed in totality and there must be a connection between the instruments used and the activities, to explain richer patterns of actual practice.

Eggleston (2005) proposes the use of mixed payments, when PRP metric are imperfect for rewarding service-specific quality efforts because it helps to balance incentives for quality effort across services. Incentives for performance are fundamentally trying to run away from the seniority-based compensation, to a variable one. Incentives have a substantial conceptual appeal; however, the success or failure of the organization depends on how performance is evaluated and incentives structured. The author, therefore, suggests cautious use of the PRP, as long as the quality is rewarded only partially, or metric are imperfect.

Incentives have a substantial conceptual appeal; however, the success or failure of the organization depends on how performance is evaluated, and incentives structured (Cromwell et al., 2011). The authors state that the devil is in the detail. Organizations may have a variety of performance-based rewards, but the concept remains the same, such as an individual is rewarded according to his performance. The theory of optimal incentive contract shows that when available measures are “noisy” (imprecise in their relation to the outcomes of ultimate interest) and “distorted” (improving the measure does not necessarily improve the outcome of ultimate interest), the portion of compensation that should be based on them is lower (Baker, 2002; Cromwell et al., 2011).

Teaching, research, and other parts of the faculty job are not treated on equal footings. First, teaching performance might have an impact, which is limited to the individual level; therefore, is not too significant for the university or institution. Whereas, research has more weightage in the rating of the university and in the accreditation process. The results of research are realised quickly; giving a boost to university ranking in the comity of educational institutions. This might be one of the reasons that research activities are incentivised. According to Gomez-Mejia and Balkin (1992), research work is considered privileged over teaching due to different reasons. The reasons mentioned by these authors are: the perceived quality and prestige of a university are highly correlated with the scholarly output of its faculty. *Second*, faculty members who are recognised for their scholarly work are counted as “boundary-spanners” in the external environment for their creation. For example, accomplished researchers’ have visibility in the market and can attract outstanding faculty and superior students, and tend to receive external grants. *Third*, since research has greater visibility in the external market as compared to teaching performance, outstanding researchers, hence, need to be well compensated to prevent their taking jobs with rivals. *Ultimately*, the principals can measure research productivity with more precision, rather than gauging teaching effectiveness, which is a behavioural process. Thus, research work can be expected to have greater influence over the distribution of rewards (Gomez-Mejia and Balkin, 1992). For each publication in the HEC recognised journal, cash reward is given to the faculty member, which acts as an incentive for more publications in the future. Research attracts research grants from the HEC and this also adds to the university profile. According to Stilwell (2003), a particularly bizarre aspect of the use of research grants is that it is taken as a proxy for the measure of research performance, which enhances the image of a university.

An incentive system needs to be planned by designers to conform to all parts of the faculty’s job; keeping special attention on the reduction of moral hazard in the faculty. According to Lavy (2007), performance-based incentives can improve teachers’ efforts exclusively towards rewarded activities. When there are multiple tasks, incentive pay serves not only to allocate risks and to motivate hard work, but also to direct the allocation of an agent’s efforts among various tasks and activities. Moreover, a direct consequence of this multidimensional nature is the fact that incentives for a task can

be provided in two ways: either the task itself may be rewarded or the marginal opportunity cost of the task can be lowered, by removing or reducing the incentives for task completion (Holmstrom and Milgrom, 1991; Dzagourova and Smirnova, 2003; Sinclair-Desgagné, 1999). This represents the first difference between the multi-dimensional theory, and the more common one-dimensional principal-agent models (Holmstrom and Milgrom, 1991).

Lavy (2007) has provided guidelines for designing effective incentive programs, such as the system must measure true performance to minimise random variation as well as undesired and unintended outcomes. Moreover, performance must be aligned with ultimate outcomes and monitored to discourage gambling. Adding to this Dzagourova and Smirnova (2003), before designing an incentive system, it is important to know whether the tasks in question are substitutes or complements, and how the two tasks can be measured. The researchers hold opposing views about the substitution or complementary nature of teaching and research. Holmstrom and Milgrom (1991) emphasise the analysis of an incentive problem in totality; one cannot make correct inferences about the proper incentives for an activity by examining the attributes of that activity alone. Moreover, according to these authors, the range of instruments that can be used to control an agent's performance in one activity is much wider than just deciding how to pay for performance.

The ideology of PRP for fair and accurate performance appraisals, serve important functions (Milkovich et al., 1991). These authors conclude that three things are important for any PRP plan: (i) the employee must understand performance goals and view them as "doable"; given their own abilities and skills and the restrictions posed by organizational context, (ii) there is a clear connection between performance and salary increases; consistently communicated and followed, and (iii) the pay increase is viewed as meaningful. Providing opportunities to make high salaries might provide an incentive for teachers to do a better job and for others to get into the field (Solmon and Podgursky, 2000). According to Hayward (2008), when the institute's culture is that of indifference, irresponsibility, and lethargy, the resolution usually requires incentives, besides other things and even in some cases positive results have been achieved. However, according to Muralidharan and Sundararaman (2006), how to set the ratio of incentives to base pay, as incentives if too low will not induce a higher level of effort and if too high will increase the risk premium and the undesirability of distortions.

Performance Appraisal System for the Higher Education Faculty

2.1 An Overview of the Performance Appraisal System

The initial part of analysis and discussion encompass the sources of performance appraisal; as to how each source supplements the entire process or the perils that impede this process. It is also imperative to understand the existing faculty appraisal system, as the research has tried to analyse the problem of moral hazard by linking it to different systems. Examination of these systems and processes will reveal the underlying mechanism in which events occur.

Studies in HRM and organizational science are geared towards how performance appraisal system functions to serve the organizational ends and employees needs, which beyond doubt should be its ultimate purpose. Performance appraisal is viewed more as a social and communication process, rather than a measurement process. This should not negate the significance of measurement accuracy, as discussed earlier, rather it as an opportunity to concentrate more on contextual factors that have a potential to support or deform appraisal system.

The performance appraisal process in the higher education sector is left to mere drill, which does not improve employee understanding of organizational goals and performance standards. Although, a conduit for enhancing communication between the management and the faculty, the system fosters a sense of inequity, due unfair practices of the management; strangling and suffocating their work motivation. Employees believe that performance appraisal is a system that serves individual needs, as well as organizational needs; by aligning the two. This is how performance appraisal should be viewed in the perspective of an organization's performance management system, such as motivating employees, assisting supervisory staff in making important decisions, and detecting distortions in employee performance that could lead to potential mischief.

The main objective of any performance appraisal process should be to bring an improvement in the organizational performance through properly equipped employees who are ready to deliver what they are expected. This purpose of performance appraisal as being the

ultimate goal of the exercise has been supported by [DeNisi and Smith \(2014\)](#) and [Denisi and Pritchard \(2006\)](#). The ensuing paragraphs will discuss the situation of performance appraisal system in the higher education sector with respect to the faculty. To better comprehend the existing situation of performance appraisal, it will be convenient to separate the performance appraisal process into the sources from which information is generated, and the challenges faced by the management with respect to appraising multitasking professionals. Figure 17 shows the performance appraisal sources and challenges that are present in the existing system.

2.2 The Sources for Faculty Performance Appraisal

Primary sources of information regarding the faculty performance are collected from the students, the immediate supervisor(s), and the top management. The faculty is appraised by multiple sources, but the most important one is the appraisal by the students. Some universities are totally dependent upon students' feedback, whereas, others use different sources. Irrespective of whether a university uses an individual source or multiple sources; student appraisal of the instructor is the most valued.

2.2.1 Appraisal by the Students

Student ratings are derived from students overall feelings that arise from an inseparable mixture of learning, pedagogical approaches, communication skills and affective factors that may or may not be important to student learning ([Khandelwal, 2009](#)).

Case B

Students are the best judge of the faculty performance in the class. This is the only documented evidence regarding the faculty's performance. (B1)

The information from the students is collected through appraisal sheets. The data from the duly filled out sheets is transferred into a computerised database, and the results are either emailed to the faculty members by their concerned supervisors or physically delivered. The same information also finds its way to the individual's personal record.

The interviewee in case B considers the faculty appraisal by the students as a monitoring technique for controlling the faculty work behaviour and its academic performance. The students get a chance to formally express their opinions about the good or bad performance of their respective teachers. The interviewee in case B is of the opinion that students are better placed to form an honest opinion about the faculty's performance. Being the direct recipients of their services, they are either the direct beneficiaries or sufferers. In either case, students' feedback is crucial to the management's decision-making with regard to the faculty. According to [Belcher \(1962\)](#), evaluations are an aid to

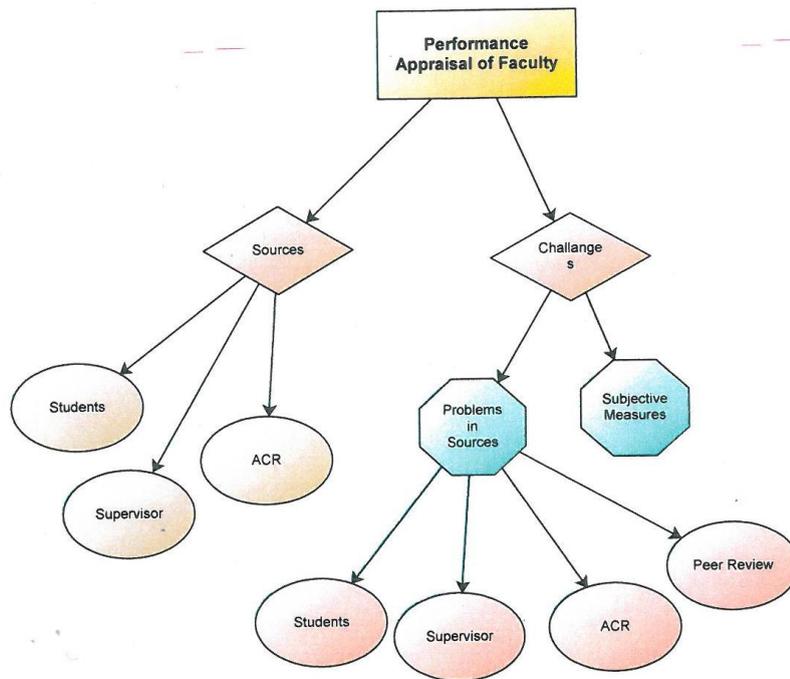


Figure 17: Performance Appraisal System

decision-making. Appraisal of the faculty by the students is believed to be a superior source compared to other sources.

Students are in a better position to evaluate the performance of an instructor on academic activities, such as; classroom teaching, subject command, class behaviour, course completion, teacher counselling, etc.

Case D

The best judge in this case is the student. If the teacher is not teaching properly, then the students are bold enough to report this to the concerned authorities because students are serious about their education and they have joined the college on the basis of merit. (D3)

Case E

Case E also conducts the faculty appraisal through its students in a regular fashion. The university conducts the process on appraisal sheets that try to capture the dimensions of teaching effectiveness.

Every semester we conduct faculty appraisal by involving students in the process because I think they should be involved in the process. Only students can tell about how a teacher is teaching in the class. Instead of calling it appraisal, I would rather call it student monitoring. Teachers can be monitored by their pupil in a far better way; especially for their punctuality, class teaching, and exam related issue. I would rather say that students monitoring is better than monitoring by the management; as they are in the class so can keep a better check on the teacher's class activities and routine. (E2)

Case F

The interviewee in case F, highly regards the information provided by the students because he considers it an authentic source. The interviewee is, however, silent on whether or not any of this information is utilised for future actions by the management.

The students are very candid about their teachers' performance and will demand any change if required. The change might be related to the teacher's teaching style or any other attribute of the instructor. Furthermore, if the students are totally dissatisfied with their instructor's knowledge base, they might even directly communicate this to the Director or Joint Director; for the instructor to be replaced (F1).

The students should take it seriously. We need to develop a culture, where evaluation information is used to improve the faculty's teaching skills. Feedback

from [the] students ensures course completion by the faculty members of their assigned courses. (F4)

Student appraisal, although, considered as the most valuable source of information, is given little importance as to how the appraisal process is carried by these stakeholders.

2.2.2 Appraisal by the Supervisors

Supervisors are also a critical source of feedback regarding the faculty's performance. The best way to understand what is going on is to get feedback from line managers (Armstrong et al., 2011). The authors stress a bottom-up approach in management. A supervisor is in direct contact with the faculty as he/she belongs to the lower management tier. According to Milkovich et al. (1991), supervisors are usually in a position to know their employees well and to have far more information available to them.

Case A

Before discussing this source of appraisal, it is important to clarify the meaning of a supervisor. Throughout this study, the word supervisor has been frequently used, which refers to the immediate boss of the faculty, e.g., HOD, Coordinator, Chairman etc., – the nomenclature changes with the type of education institution.

The heads have a huge responsibility on their shoulders regarding their subordinate teaching staff, yet they are not given any defined authority in this regard, which handcuffs them from fulfilling their responsibilities. Usually, the immediate supervisor has a say in the decisions that pertain to the faculty (A3).

The supervisors assign courses to the faculty and has a directly accountable for the teaching quality of the same to its immediate boss. Although, the supervisors are directly accountable to the upper level management, for the teaching quality of the faculty; however, they do not hold any meaningful authority to reward or punish any performance lapses of any faculty member. Nevertheless, the viewpoint of the supervisors is given weightage in deciding the fate of the tenure track faculty and also the appointment of the BPS faculty to a higher level academic status. Thus, the overall performance evaluations play a minor role in the upward career movement of the faculty.

Although, the supervisors are not actively involved in any formal appraisal process; like that of the students or top level management – the decisions of the top level management are influenced by the information, which is choreographed by the supervisor. Supervisors' or the immediate boss assess the performance of their respective faculty; based on different aspects of its job, as well as overall behaviour in the workplace. As the appraisal by the supervisors is based on subjective evaluation of their colleagues; however, it can break the rigidity of the appraisal conducted by the students. Supervisors assessment of

an employee adds human touch to it – going beyond the specified tasks into areas, that although does not directly constitute part of their job, however, add or subtract from the overall performance of an employee. For example, a student can only judge a teacher based on a limited number of attributes that have been included in the appraisal sheet, but a supervisor can tell whether a faculty member is a team player, easy going, has leadership qualities, takes initiative at work place, has problem solving skills, as well as other personal qualities that are contributory factors towards the work and workplace environment. Thus, the non-job attributes are covered by the subjective assessment of the supervisors.

Case E

Sometimes, very good teachers are not performing according to the students' expectation, and then we try to find out why. It is a small university, and we know which faculty members are doing well because we are just like an extended family. The information implicitly comes from the students, peers, and other staff members. The existing system is based on “word of mouth” and can be considered as a more person-oriented system. However, one limitation is that as the faculty and the management usually work together for many years; therefore, the management cannot give an objective picture of the faculty's performance; if there are performance lapses, due to informal relations that have developed over the years (E1).

The vice chancellor of case E looks at the faculty's appraisal from a different perspective. He considers the university staff, as one big family – where people socialise and are well aware of each other's performance. This is even a better way of beefing employees' performance in a very subtle way.

Case, F

The coordinators are in direct contact with the students and the faculty and are well informed. The supervisors understand the system better, as they have also been a product of this system. They know better how to appraise a faculty member, based on his/her personal experience and sound judgement (E2).

The deficiency left from one source of appraisal, can be covered by another. This is the beauty of using multiple sources for appraising employee performance.

2.2.3 Annual Confidential Report- ACR

The ACR is a summary prepared by the top level management; usually the head of the organization. The ACR has been around in the public sector for quite a while, as a traditional system of assessing junior employees by their seniors.

Case A

The ACR provides flexibility and also complements other appraisal methods used for faculty evaluation. The head of the department or the organization, is required to write this report, and keep it safe in the employees' personal record. The report is usually kept confidential, and not even revealed to the concerned person in normal circumstances. The ACR is a good tool, as it can cover for deficiency in other appraisal systems, but the trick is how to use it because it is based on subjective judgement of the superior. Care needs to be exercised to control any injustice creeping into the faculty evaluation (A3).

The ACR plays a significant role in appointments and promotion of the public sector employees. In higher education institutions, the ACR is prepared either by the VC, Dean or Director, who is usually the head of the university or the institute. An ACR is generally reviewed at the time of the faculty appointment to a higher level position or for attaining tenure. An ACR can make up for the deficiency left in the appraisal from other sources. Each source and method has its own limitation. The results of the appraisal are more reliable when the information is collected from multiple sources. Preparation of the ACR by a third party, such as a person who is not a direct boss of the faculty or the direct client of its services; is bound to reflect impartiality. The ACR provides a bird's eye view of the employee workplace performance. However, the boss opinion, to a larger extent is influenced by the opinion of the students and the immediate supervisor, as the boss assumes that these people are more knowledgeable about the faculty's professional proficiency.

Case B

The system of the ACR is already in place, and operational in the public sector since long. It is, therefore, a time tested tool. Every year the ACR's are prepared, which play a role in the promotion (B4).

Case F

The opinion of interviewee in case F, resembles those in other cases.

The ACR covers the gap in the appraisal that is left from other appraisal sources and methods (F1).

The importance of the ACR in public sector institutions is manifold because it is a feedback from the highest level in the hierarchy; which is usually considered to be dispassionate. It is usually the sole document for determining an employee's performance while deciding upon his promotion matters. As the ACR reflects the subjective judgement of the boss, it is receptive to human faults, which might be intentional or unintentional.

2.3 Challenges in the Performance Appraisal System

A performance appraisal system of any organizations aims at establishing clear and accurate measures that assess the periodic performance of employees, and also to facilitate some operational functions of an organization, especially relating to human resource management, such as; employee training and development, compensation management, communication of organizational objectives, as well as promotion decisions, beside others that hinges on this process. All these functional areas make it a crucial process and also an embedded system in the bigger performance management context.

Subjective evaluation is a necessary evil for appraising the faculty. The faculty appraisal is based on both objective and subjective criteria. The faculty appraisal is based on both objective and subjective criteria. According to Lavy (2007), subjective evaluation invites the problem of performance measure inflation; while, objective metric invite the problems of measurement cost and the inability to encompass all the organizational targets and goals. The authors confirm that given these limitations, it may be appropriate to use both-each imperfect, but still informative. To compensate for the subjectivity in the appraisal, multiple sources are employed for generating information about the faculty's performance; each adding to the jigsaw puzzle. Multiple indicators of effective teaching can add up to very accurate assessments (Solmon and Podgursky, 2000).

Objectivity increases when the appraisal is linked to performance goals, which are measurable, but when the appraisal is left to the judgement of the appraiser, it becomes idiosyncratic. According to Odden et al. (2008), performance criteria should be measurable. Not everything is measured in the faculty's job – so what cannot be measured directly or indirectly has to be left to human verdict. Because, humans are liable to err, thus, performance appraisal of the faculty is prone to contamination.

2.3.1 Subjectivity in the Performance Appraisal System

There is no compelling evidence that one appraisal format is significantly better than the other (Milkovich et al., 1991). However, subjective measures can be corrupted by evaluators with vested interests (Prendergast, 1999, 2002). As employees are becoming more aware of their rights, they try to use them whenever and wherever needed; keeping the management on its toes and vigilant regarding employee decisions. Hoodboy (2009) considers that a perfect objective assessment is simply impossible; inevitably involving value judgements.

Only lately, the National Education Management Information System (NEMIS) has started the operation of computing indicators. Even these indicators are those that have been internationally identified and developed by UNESCO or some of the donors for cross-cutting international programs like Dakar Framework of Action for EFA and

Fast Track Initiative (FTI) for the faculty. Indigenous requirements on a scale have not been assessed (UNESCO, 2008). The measures for teaching effectiveness are embedded in the substance of these measures (Berk, 2005). According to Lavy (2007), universities require a different set of performance measures to depict the true performance of its faculty, and should cover all outcomes of interest; including quality and quantity. Good quality in higher education is an essential part of this mandate (NRIC, 2006). The multi system assessment of instructors is important, which calls for subjective judgment by the supervisor (Lazear, 2003).

Case B

The vice chancellor of case B; stressing on the quality of the performance appraisal instrument refers to its objectivity. He considers that absence of objectivity might defeat the purpose of this activity.

In the evaluation certain specific weightage or marks are given to teaching; again if evaluations are well written and objective; it carries weight, but otherwise not. The faculty appraisal is not done in a structured manner. Usually, notifications and handouts are issued to them regarding different issues; although, this is an important requirement of the HEC (B1).

The HEC has provided appraisal guidelines to all universities and higher education institutes for mandatory appraisal of the faculty.

Case C

It is a dilemma that how the system should recognise goodness. There is no silver bullet to fix the system. Sometimes you know a person is really good, but then we can't do anything as people go to court and for us to defend; it becomes very difficult. To prove in front of the judge that someone is better than the other becomes very subjective (C1).

Relying solely on supervisors may lead to a biased, one-sided appraisal system. If the supervisors fail to exercise their judgement impartially and with integrity in appraising the faculty, it may deprive these professionals of their due share in the reward and punishment. Although, it is true that the performance appraisal results have no significant effect on the faculty members, still they have a right to fair appraisal.

Case D

The interviewee in Case D talks about the same issue of subjectivity in measuring the faculty's performance that would reflect the efficiency level of an individual through his/her contribution towards the institute in particular, and higher education in general. The nature and complexity of the faculty's job, do not allow many aspects of the job to be converted into a metric. For example, the number of credit hours spent in the classroom can be easily observed, but how that time was spent cannot be tape measured.

There is no institute where work related to different aspects of the faculty's job can be converted into points or credit hours, besides teaching load; to get a holistic view of the faculty's actual work load on all aspects of its job (D3).

The domino effect of performance metric is carried forward as an input for the appraisal process. This metric is just like a raw material for the final product. If the raw material is defective, the process through which it turns into the final product can never completely compensate for this deficiency. When more subjectivity is involved in the faculty's performance, the more will it be open to predisposition. The management is confused as to how, distribution of points for teaching, research, and other tasks of the faculty's job can be rationalised. Moreover, the dilemma is, how to strike a balance between the information collected from different sources, as decisions cannot be based on the feedback from a solitary source. Because there is no predetermined formula, therefore, much is left to experimentation.

Case F

[The] faculty evaluation is based on objective as well as subjective criteria, such as 70% performance standard comes from students' evaluation. Besides, a qualitative assessment is also carried out. The Institute so far hasn't come up with any mechanism to check supervisors' biases in faculty evaluation (F1).

It can be stated that the faculty is evaluated only on a part of its job and not the entire job. Besides teaching, other activities or aspects of the faculty's job are ignored in the evaluations or given lesser importance. The [evaluation] form needs to be revised, so as to get an objective opinion of the students, regarding the teaching aspect of [the] faculty (F3).

The evaluations should offer diagnostic feedback and align with the performance standards as well as intended outcomes. Teacher evaluation needs to be fair and should measure what teachers legitimately can be held accountable for. However, subjective judgements on the part of the management, are open to legal challenges by the faculty. A key deficit is the absence of clearly articulated minimum standards for most educational interventions and their outcomes. Even in some areas of the faculty's job, where standards have been set – the systematic follow-up is weak. As a result, the impact of the interventions remains subject to anecdotes or speculation and the true picture is blurred or it never even emerges.

Performance appraisal tool is outdated and not tailor-made to the demands of the faculty's job; giving an inaccurate and insufficient picture of its overall performance on the job. The design of the appraisal sheet fails to objectively capture the qualitative aspect of teaching and is not congruent with the multitasking nature of the educator's

job. Teaching effectiveness is being tapped in a very subjective way, which does not actually say much about the quality of the service, rendered by these professionals. The teaching effectiveness cannot be measured directly; therefore, proxy measures are used to substitute for non-availability of the direct measures. The proxy measures have several shortcomings, e.g., these might measure something, which is not intended by the principal. This is, especially due to the difficulty to tap essential behavioural measures that constitute good teaching. Proxy measures do not replicate the actual performance; leaving a gap between the actual performance or observed performance and intended or expected performance. The situation is further aggravated, due to noise in the performance outcomes towards which the measures are directed. Noise refers to any distortion in performance assessment that cannot be accounted for or linked directly to an individual's level of effort. It may, likewise, refer to the time lapse that separates the performance outcome from the actual performance.

2.3.2 Problems in the Performance Appraisal Sources

Effective evaluation is a portion of the continuous procedure of helping professionals to perform their job properly (Odden et al., 2008). According to Appling et al. (2001), each source of appraisal can supply unique information; however, each source is fallible, usually in a way different from the other sources. By drawing on three or more sources of evidence, the weakness of one source can be covered by the strengths of another; thereby, converging on a decision that is more accurate, rather than being based on a single source (Berk, 2005). The author confirms that this notion of triangulation is derived from a compensatory model of decision-making. Looking at the complexity of teaching measurement - while using a single source of measurement- the decision maker should collect information from other valid sources as well (Berk, 2005). Bohnet and Eaton (2003) allege that if the outcomes are agreed to be fair, even then performance can be negatively affected, if the process through which the outcomes are achieved is perceived to be unfair.

2.3.2.1 Inappropriate Appraisal of the Faculty by the Students

Student appraisal is a proxy for effective teaching, and educators can abuse the students' opinion (Dzagourova and Smirnova, 2003), but it is an important way to measure teaching effectiveness (Berk, 2005). The main issues regarding this source of appraisal are students' awareness, attitude, lack of training, biases, etc. Little is known about the factors actually considered by the rater when they decide how to fill out their evaluation forms (Milkovich et al., 1991). Hayward (2008) stresses that while the faculty do not object to student evaluations of instruction per se, it does not consider it to be a reliable way to evaluate teaching quality; which it was often manipulated by both the students

and the faculty. Considering all of the polemics over the value of student appraisal, the author still considers it as an essential component of the faculty's evaluation.

Case A

Significant weight is given to the students' feedback, and sometimes the faculty's evaluation is left completely at the mercy of this source.

Faculty appraisal system in our University or I would rather say, in our educational system is not a comprehensive one. Student and peer evaluations have been recently introduced, but the system is still in its developing phase. The students do not know the utility of this system (A1).

Case B

Students who fill out the assessment forms for the teachers do not recognise the importance of their feedback. They either consider it as an opportunity to take revenge from the teacher [they do not like] or to gain a soft corner. The student perceives that the teacher will award him/her marks in accordance with the evaluation he/she gets from a particular class. The students even link the class performance of a teacher with his personality traits (B4).

Case C

The appraisal done by the students reveal half of the truth. Teacher evaluations are biased, and at the mercy of the students, [which] all depends on personal preferences. (C1)

Case D

Review of the students and coordinators are taken into consideration for different decisions pertaining to the faculty, but sometimes a student will intentionally ruin a teacher's appraisal if he/she receives low grades in the examination (D3).

Case E

The appraisal tool is vague and [often] subjective. I am doubtful about the fairness of the system when the teacher is assessed by the students who are more interested in their examination scores rather than enhancing their learning (E3).

Case F

The students are petrified to give out their objective opinion about the faculty, for different reasons. Either, they do not understand certain questions and leave spaces blank while filling the appraisal sheet or they perceive it as a futile exercise, or they might even be afraid that their identity might be

leaked out and the teacher will victimise them later on. The confidentiality of the responses does not seem to be warranted. If the students are ensured the confidentiality of their feedback or if their names are not divulged; it might increase the objectivity of the student feedback. The students need to be educated on the importance of filling out the faculty evaluation form with integrity and objectivity; currently the teacher evaluation is based on expectation of receiving grades from a teacher (F3).

The students who are the primary stakeholders in faculty appraisal are unaware of its importance, and they lack understanding in using the instrument properly. Students take the teacher appraisal as an opportunity to vent their feelings, especially if a student has scored badly in any particular module. They usually link the faculty's appraisal with the examination score, e.g., if a student has received a low score in any subject, he/she will write adverse comments for that teacher or lower down his/her rating on different aspects, which might not be true and vice versa. Thus, evaluations are based on a quid pro quo premise.

Many of the students do not even properly understand the meaning of some of the words used in the appraisal form; as a result, they would either leave that box blank or fill out the appraisal sheet according to their understanding, which might not extract the intended information. This is because students do not get any orientation on how to use the appraisal instrument. Some teachers would make the students fill out the form in their presences, trying to influence the students for a favourable evaluation. Incidences have been reported where the students have been complaining of such unethical acts of the faculty. The students are reluctant to give out their objective opinion because they are afraid that they may be punished by the teachers if they write any adverse comments regarding their class performance.

The faculty has always contested appraisal by the students. It considers it defective; based on the pretext that the students do not know the importance of teacher appraisal and even do not understand how to fill out the appraisal sheet. Some students intentionally give out the wrong information for reasons of their own, such as personal likes or dislikes for a teacher. In the past, teachers have received comments from the students that were embarrassing and undignified. Such practices distort the appraisal outlook and defeat the aim of the process.

Student feedback can at times backfire on them. Another challenge, which has posed a serious threat to the faculty appraisal, is maintaining the confidentiality of the appraisal process. The faculty members can access the appraisal sheets if they wish to do so; especially in case of adverse comments from the students. If they are able to identify the handwriting or the writing style of the students, they embark upon vengeance.

2.3.2.2 Biased Appraisal by the Supervisors

The rivalry between the management and the employees can be dated back to the inception of agency theory. According to Eisenhardt (1989a), agency theory is concerned with resolving problems related to the agency relationship, such as goal conflict between the principal and the agent, and the difficulty to verify the agent's appropriate behaviour. The management expects that the employees will strictly follow the code of conduct, however, in cases of adverse performance, the management pulls their reins through their evaluation, which can be later used in vital decision-making by the management.

Case A

The faculty is harassed by the management and to act like puppets and dance to its tune. The teachers cannot even complain because the supervisors are the masters of their destiny and cannot afford to have strained relations with them. We were also once part of it, why do we forget this (A1).

Case B

The faculty needs to be treated a bit harshly, to make them work. It knows that the supervisors are the main drivers of evaluations, therefore, keeping it oppressed will improve their productivity (B4).

Case C

Yes, we have individuals in our system, who by default are hardliners. They should understand that quality teaching is not all about how students score we cannot put everything into a strait jacket. Faculty evaluation should be a package deal (C2).

The interviewee in case D, also beats the drums of subjectivity in the performance measurement of the faculty's work and errors in supervisor evaluation. Although, they all talk about the recurring issue; yet, no one seems to have an inkling how to curb the problem.

Case D

If we actually want to judge a teacher's performance than we must find a way to measure the value added to a students knowledge; at the time of their joining the institute and after completion of their degree. If this measure is absent, no matter how objectively a supervisor evaluates the faculty, there will be personal prejudice creeping into the process. Some supervisors fall prey to strictness or leniency error, some have personal likes and dislikes, such as stereotyping, still others are culture preachers; favouring employees on the basis of social, cultural and/or geographic proximity. The list of the errors is long, but supervisors have ample of these (D1).

Little attention is paid to the accuracy of performance measures. Not because measures are considered as unimportant, but because of the management's assumption that it implicitly measures what it intends to measure. Performance measures are considered adequate as long as it serves the organizational ostensible goals and objectives.

Case E

Every system has flaws. Our performance appraisal cannot change unless we put in efforts, to creating a better system. The supervisors should stop penalising the faculty for problems related either to the students, the environment, and factors that are beyond its control. The system needs collaborative efforts of all the stakeholders and not just the faculty. Supervisors usually make the faculty scapegoat, for under-performance of a program. Spoiling their evaluation will not help improve the system, but rather discourage people; in fact good teachers will be driven out of this profession (E1).

The interviewee in case E, admits that the system has shortcomings in one way or another, but he also stresses for making it better through collaborative approach, where all the stakeholders should contribute their input towards making the system a triumph. Real improvement does not come when we point fingers at others, but to make a little endeavour and stop condemnation.

Because the appraisal sheet cannot encompass all the aspects of the faculty's job; therefore, much is left to the discretion of the supervisor and department head, to sketch a portrait of the faculty's performance; using their subjective judgement. Supervisor's subjective assessment becomes necessary in jobs where all the outcomes are not easily observable or where the outcomes are delayed. There is no doubt regarding the importance of the source used for the faculty appraisal, but the point of contention is the way it is exercised. Subjectively may invite all sorts of biases that can turn and twist the actual appraisal of an employee. These biases usually include; stereotyping, cultural prejudices, leniency or strictness error, halo error, and the notorious recency error. The predispositions that are most common in the supervisors in Pakistan are the cultural prejudices and personal prejudices, which are frequently exercised by the supervisors while evaluating the faculty.

The supervisors should shun the negative connotation of appraisal and try to approach it from a more positive aspect. The purpose of the appraisal is not to harass or pressurise the faculty, but to make it understand and subtly remind it its responsibilities. The aim should be facilitation of the faculty, not thwarting it.

Humans differ from each other in their attitudes, experiences, personality traits, knowledge, and many other dimensions. Hence, it will be a folly to expect a set pattern of behaviour from them. However, there must be a benchmark for detecting deviance in human behaviour and controlling it to the extent possible for aberrant acts. The role of a

supervisor should of an expediter and enabler, with respect to faculty performance. Supervisors have to detach themselves from their personal likes and dislikes and the partialities that can hinder the faculty development, and even might even dissuade it from the teaching profession. The performance appraisal should always add something to the current performance of employees by providing them an opportunity to learn from the gaps in their performance.

2.3.2.3 Perils in the Annual Confidential Report

The ACR is another vital piece of information, which holds the highest value in most public sector institutions because promotions are mostly linked to these reports. In the higher education sector usually the VC or Director, or even an academic head (Dean) is required to write a report regarding the faculty's performance, as well as other aspects that might not be directed related to, but indirectly can have an influence on workplace performance. The ACR remains confidential, and the information is never revealed – even to the concerned faculty member to whom it relates. The ACR is usually considered to be impartial as already discussed, but no one can bet on its fairness due to lack of accountability mechanism for the top level management.

Case B

If a system has existed for long, this does not mean it is fair and flawless. People complain about the ARC, as the superiors have misused it the past, due to the subjective nature of the Report. The person who prepares the ACR should detach himself from personal prejudice and give a fair picture of the employee performance (B4).

Case F

Subjectivity is not a bad thing. The main concern is how this subjectivity is exercised by the individual who is making the ACR. It was done in universities in the USA and was kept confidential. If there were any adverse comments about the faculty member was given an opportunity to explain the reason for adverse performance (F3).

2.3.2.4 Absent Peer Review and Self-Assessment Report

An important appraisal source, such as peer appraisal seems to be missing in the universities in KPK province. Elsewhere in the world, peer appraisal is considered as a part of the overall faculty appraisal process and contributes towards its evaluation. Supervisor evaluation is substituted implicitly for peer appraisal as they are also senior faculty members.

With respect to the self-assessment report for the faculty members – who are serving on TTS, it is mandatory that they generate a self-assessment report of the previous year for their performance. The self-assessment report contains achievements of a faculty member related to teaching, research, advisory, consultative, and administrative services rendered in the previous year. Where appropriate the self-assessment report will be backed by documentary evidence that might include: course files, publications (published, submitted, in preparation, research project in progress and completed, report on industrial project undertaken, details of new courses developed or innovation introduced in course or laboratory work, requisite information about MSc, MPhil, and PhD students supervised, and advisory and administrative services rendered (HEC, 2008). However, this type of appraisal is missing for the faculty serving on BPS system; depriving the majority of the faculty of its say in the appraisal process, which is unfair.

There are several challenges in the performance appraisal system of higher education institutions. Some of the challenges are generic while others are idiosyncratic. However, the two main challenges that have emerged from the interview analysis include: issues in the sources of information and subjectivity in the measurement of the faculty's job. The former is due to the eccentricities of the actors involved in the appraisal process; whereas, the latter is by default due to multitasking.

2.4 Summary and Critical Reflection on Cross-Case Analysis

Much has appeared in the literature about performance appraisal in different contexts. The current study looks at the issue of performance appraisal from the standpoint of organizational justice. Organizational justice is used as a moderating variable in the theoretical framework of this study. The criticism will be based on the areas that have surfaced up from the discussion of experts and management personnel.

Case B, D, E, and F unanimously agree to students being the best judge of a teacher's performance, especially with respect to class instruction. They can provide feedback about the faculty's punctuality, communication skills, class preparation, rapport with the students, examination, etc. In fact, most of the dimensions that have been identified in constituting effective teaching are exhibited by a teacher during the class instruction, and the students can make a vital assessment of a teacher on the task of teaching. Case F, considers the appraisal of the faculty by students, as an alternative way to monitoring these professionals. The faculty cannot be monitored constantly by the management because monitoring is costly in two ways: physical monitoring is very problematic and against the self-esteem of professionals, and monitoring for anything else is close to impossible. Case B considers it as the only documented evidence of the faculty. The comments of the interviewees show that the appraisal of the faculty by the students is a

conventional way in an educational institution, which is still very much alive and kicking. With the increased awareness of the student, the importance of student feedback has proved its worth to the teacher and management alike.

Taking about the supervisor appraisal, cases A, E, and F consider this source of information as mature; coming from an experienced source, compared to the appraisal of the faculty by its pupil. However, the point of concern raised by case F, is a subjective assessment of the supervisor. However, the errors creeping into the process can be controlled when multiple supervisors evaluate a single faculty member. It will level out any prejudice exercised by a single supervisor. Cases B, C, and D were silent about this source of appraisal, whereas, Cases A, B, and F posit the use of the ACR as an age old tradition, which was instituted with the inception of public sector organizations. The ACR has not much familiarity with the public sector educational institutions; however, this does not underestimate its importance, especially in the faculty's appointment to higher professorial positions. The ACR is considered as a complementary document that can be assessed in combination with the information gathered from other sources. That is why case A and C contemplate the ACR as a source complementing other sources of appraisal. Case A consider the information of the ACR as impartial because usually summaries prepared by the top management are considered as less biased compared to information provided by the immediate supervisor(s). All the cases A, B, C, D, E, and F assuredly agree with the importance of student feedback about their teachers, but no rose is without thorns – appraisal of the faculty by its students faces many challenges. First and foremost is the students' comprehension of the appraisal forms. Students come from different backgrounds and not all are well versed in English. Because the form is in English – which is their second or third language – they are unable to understand thoroughly as to what information is being sought; making it a disability to getting quality information. In the comments section of the form because the students cannot express their earnest opinion; therefore, they either leave it blank or provide information that has not much relevance, to the class instruction. Comments, such as “I don't like the teacher”, “The teacher is beautiful” can be interpreted in several different ways and are little informative about the faculty's actual class performance. Another problem with the students' feedback is that it is based on caprices, which is usually driven by their examination scores. Some students are simply indifferent towards this exercise, and they don't see any point in filling out the appraisal sheets. They consider it as a mock exercise, without any fruitful outcomes. Students who are serious in this activity are discouraged by confidentiality lapses in the past – having dreadful consequences.

Two main issues which came to the forefront in the supervisor evaluation are: supervisor harassment and personal prejudices. Both are grave issues that need urgent retribution. With the recent implementation of “Harassment Act” especially in the educational institutions; can put the supervisor in hot water, should they fall prey to any such problems. Litigations are frequently linked to decisions based on wrongly painted picture

of the supervisor about the faculty's performance. The problem with the ACR is similar in nature as expressed by the interviewees in case A, C, D, and F. However, a point of concern raised by case F is the inability of an individual to defend himself/herself on adverse comment in the ACR, due to the deprivation of such chances.

The *second* main area of concern about the faculty appraisal is the generic problem of measurability in multitasking, which has been discussed at length in the literature review as well as in the analysis section. Cases B and E have not uttered anything on this issue, but the remaining cases postulate the difficulty of measuring the qualitative aspect of the faculty's job. Thus, this problem is more generic rather than eccentric.

A certain degree of formalisation is necessary for the smooth transaction of the business. Rules and regulations, restore order and discipline in the organization, and remove ambiguities from the minds of the employees. However, if organizations follow too much of rules and regulation, ignoring the demands of the situation, even then problems can arise. When formalisation exceeds a certain limit then an organization loses its flexibility. A good manager should be able to strike a balance between the two extremes. Another key issue is the implementation of rules and regulations, which are set with great enthusiasm, but never applied with the same gusto. Universities have an exhaustive list of rules and regulations, but to what extent these are applied, depends on the leadership skills of the management and the culture of the university. The feedback back from interview participants creates a vibe that universities are bureaucratic systems while at the same time following a business model.

2.5 Conclusion

Many talented people in Pakistan do not opt for teaching profession, on the pretext that there is no proper mechanism for evaluating teachers' performance and providing them incentives that appreciate their good work. Gratton (2004) calls it as "dehydrated rituals" in which managers and employees are simply going through the motions of the process (Chubb C, 2011; de Waal and Counet, 2009). Most organizations fail to consider it as a change process (Colville and Millner, 2011).

In some universities, performance appraisal has been introduced on formal lines in the recent past. Previously, the process was either non-existent or carried out in a haphazard manner. The HEC has made it compulsory for all the universities and higher education institutions that regular feedback of employees should be taken through standardised appraisal sheets. The basic framework of the appraisal sheets has been provided by the HEC. Although, the Commission is not directly involved in the evaluation process of the faculty, yet it has an involvement in an indirect manner. With the establishment of QECs in universities and higher education institutions by the directives of the HEC— things are expected to be streamlined and standardised. If the performance of a university

shows slackness and is not up to the mark, it will have trouble in securing finances from the Commission. One of the indicators of the university's performance is linked to the performance of its faculty.

Looking at the participants view, it is evident that public sector universities share many features of any other public sector institution nationwide. Universities have a highly centralised environment. The guidelines for all major decisions come from the HEC – being the funding and regulatory body. The HEC expects the universities to comply with its decisions in letter and in spirit. The main string, through which the HEC controls these universities, is through accreditation. Any university which is not accredited by the HEC cannot award degrees to the students, which means they will be either out of business or totally disabled. The HEC provides the main policy framework and the rest of the details are filled out by the universities. The Commission also provides a detailed list of all the core courses in the universities, thus standardising the syllabi. If any university wants to detour in this regard, it has to seek prior permission of the HEC. The appraisal process is also standardised across all universities by the HEC after the establishment of the QEC. Thus, the HEC has a strong hold on the universities and higher education establishments. It won't be amiss to say that the HEC is an all authoritative body monitoring the higher education in the region.

A worrisome situation is that the faculty's evaluation is not utilised as an input for other HR activities. Performance appraisal helps in identifying gaps in an employee performance, which are filled with appropriate HR actions, such as employee trainings, promotions or pay decisions. None of these actions appear to be executed with respect to the faculty. The sporadic trainings arranged for the faculty, hardly contribute towards enhancing their pedagogical skills and/or research skills. This is mainly due to the fact that the performance appraisal results are not utilised for any purposeful activity. It is just an exercise conducted on a periodic basis – the role of which has been marginalised.

The information gathering instrument has also several defects. Instead of focusing more on the quality of teaching in an objective manner, many irrelevant items have been incorporated. This reduces the content validity of the tool – which refers to the items that measure performance; does not depict the actual contents of the job.

Moreover, as discussed earlier the appointment of the faculty on the basis of kinship or friendship has shielded it from the consequences of substandard performance. Sending the faculty for foreign trainings, conferences, seminars, workshops, etc., or indigenous high profile trainings are decided upon the whims of the management. In a collectivist culture where relationships matter more than professionalism, the velocity of performance evaluation decelerates because management is handcuffed by societal values that promote seniority and affiliation. The double standard for the same cadre employees has incepted a seed of doubt in the minds of the faculty; adversely affecting its level of trust in the management's decisions.

Nevertheless, it will be incorrect to suppose that the faculty evaluation is a totally useless activity. Performance evaluation does play a role in the TTS faculty, but as mentioned earlier only a fraction of the faculty employed in the higher education sector is working on TTS.

The teaching component of the faculty's job comprises noise, due to diffused performance measures and also due to delayed performance outcome. In many previous researches conducted in the West, the students' test score has been used as an indicator of the teachers' performance for to determining their teaching excellence. Such indicators of teaching excellence cannot be applied evenly across the higher education institutions, which is particularly true for this region. The factors may include, but cannot be limited to: the students weak educational background, varying motivational level of the students for which the teacher cannot be held solely accountable, the notorious act of teacher favouritism and nepotism for marking transcripts, lack of objective criteria while assigning grades, cultural predisposition, etc. As an alternative, the students' appraisal is accepted on its face value to determine faculty's performance, dedication, and commitment towards their work. Discussing just these two areas would yield an idea to the reader of how and why incentives do or do not affect an employee perception regarding fair process of the appraisal and fair rewards for their services.

Unclear performance criteria and lack of communication of the same has led the faculty astray in terms of performance, who is disillusioned about the management's expectation. The faculty does not know in black and white what the management expects from it, in terms of workplace behaviour. The faculty is left totally to its judgement as to how best it can perform its job. No orientation and no targets are provided, which would guide its performance in a more focused manner, directed towards the right tasks. The only targets which are spelled for the faculty are related to teaching load and quantity of publications required for its upward movement. Providing work targets to the employees is one of the components of the performance management system and if this base line activity is missing it will have a domino effect on other components because these are entwined.

The evaluation results are communicated to the faculty members, as an obligation on the part of the management and the process dies there. Except for cases of extreme adverse performance of the faculty, the evaluation results are never discussed. "Common outcomes of an effective performance appraisal process are employees' learning about themselves, employees' knowledge about how they are doing, employees' learning about what the management values" (Beer, 1981). According to Stephan (1989), the outcomes of an effective performance appraisal should aim at improvement in the employees performance and also establishing relationships between performance and reward (Ghurchian and Rahgozar, 2010). Performance appraisal entails a negative connotation and is mostly used as a license to remove any contractual faculty member.

Performance appraisal aims at clarifying the employees' work expectations, improving employee development, linking pay with performance (de Waal, 2004) and assessing workforce development (Saeed et al., 2011). Employees become aware of the organization's expectations after performance evaluation, which helps them in improving their performance so as to match the organization's standard (de Waal, 2004). The purpose of the appraisal is not only sharing performance information with the faculty, but resorting to necessary action by the management or even the faculty for future improved performances. Training refreshes their knowledge and skills and gives motivation to work effectively with more courage and confidence (Rasheed et al., 2010). The faculty members get no guidance as to how they can improve their performance if the evaluations demand so.

Supervisors need to see the "Big Picture", to recognise how the various parts of the system fit together, just like a jigsaw puzzle (de Waal and Counet, 2009). The appraisal results have greater significance for the permanent faculty as its upward career movement is dependent on it, but even that is just symbolic. The permanent faculty is completely shielded from the adverse results of its performance appraisal. Becoming permanent or spending more time in the organization is no guarantee of a person's better performance in the future. Evaluation should be discussed with all, irrespective of whether a faculty member belongs to the junior non-permanent rank or senior permanent position. The basic premise of carrying out performance appraisal process is not an end in itself, but a means towards achieving the end.

An objective performance appraisal system needs to be supported by a well-established and well defined communication system, where the communication channels are not only confined to downward communication, but also incorporates upward and horizontal communication in the form of feedback from the employees. Poor performance on the part of an employee can usually be traced to one of the following reasons: the employee does not know what performance is expected, the employee does not know how he/ she is performing, the employee cannot do the job because he/she does not know how to do it, the employee lacks organizational support and help from the supervisor, the supervisor and the employee have developed a poor working relationship (Division, 2005). The huge influx of information is usually from top to bottom and very little the other way round. The flow of information needs to be a two way. Even if we assume that a proper communication system is in place, the next question that immediately emerges in one's mind that is it also intact. Performance appraisal is perceived to have little value for the employee as it is a non-participative process. Roberts (2002) stresses performance appraisal to be a participative process.

The empirical evidence shows a heart-rending picture of the performance appraisal system prevalent in higher education sector. Not only the information gathering sources are flawed, but the process is also truncated after the results are generated.