Determining the Relationship between Human Resources Management Practices and Organizational Innovation: The Case of Somali Telecom and Banking Firms

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ÖZET

İnsan Kaynakları Yönetimi Uygulamaları ve Örgütsel Yenilik Arasındaki İlişkinin Belirlenmesi: Somali Telekom ve Bankacılık İşletmeleri Örneği

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İnsan Kaynakları Yönetimi (İKY) uygulamalarının farklı türdeki organizasyonel performansa katkısının önemi ilgili literatürde genel kabul görmüştür. Ancak yine de bu konunun daha fazla incelenmesini gerektiren bazı zorluklar, kavramsal ve kuramsal eksiklikler vardır. Örneğin, hangi koşulların sözü edilen ilişkiyi etkilediğiyle ilgili bir takım belirsizlikler mevcuttur. Bu bağlamda bu tez çalışması, insan kaynakları uygulamaları ile örgütsel yenilik arasındaki ilişkiyi ve insan kaynakları çıktıları ile yenilikçi iklimin bu ilişkiye ne derece aracılık ettiğini ortaya koymayı amaçlamaktadır.

11 Somali telekomünikasyon ve bankacılık firmasında çalışan 375 personelden rassal veri toplamak üzere, ankete dayalı kesitsel bir araştırma tasarımı yapılmış ve veriler Yapısal Eşitlik Modellemesi (SEM) ile analiz edilmiştir. Araştırma sonucunda literatüre katkıda bulunulacağı düşünülen önemli bulgulara ulaşılmıştır: (a) İK uygulamaları, İK sonuçlarına önemli ölçüde ve olumlu biçimde katkıda bulunmaktadır. (b) Araştırmacının beklentisinin tersine, İK sonuçlarının İK uygulamaları ve örgütsel yenilik arasındaki ilişkiye aracılık ettiğini destekleyen hiçbir ampirik kanıt bulunamamıştır. (c) İKY uygulamalarının yeniliğe katkıda bulunmasına temel oluşturan mekanizma, kısmen algılanan bir yenilikçi iklimin varlığı ile açıklanmaktadır. (d) Yenilikçi iklime destek örgütsel inovasyonu önemli derecede ve pozitif olarak etkilemektedir.

Konuyla ilgili gelecekte yapılabilecek çalışmalar için kuramsal olarak ve uygulamada yapılabilecekler, mevcut kısıtlar ve birtakım öneriler de tez çalışmasında yer almaktadır.

Anahtar Kelimeler: İKY uygulamaları, İK sonuçları, Yenilikçi İklim, Örgütsel yenilik.

ABSTRACT

Determining the Relationship between Human Resources Management Practices and Organizational Innovation: The Case of Somali Telecom and Banking Firms

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Department of Business Administration

Anadolu University, Graduate School of Social Sciences, July 2019

Advisor: Prof. Dr. İ. Cemil ULUKAN

The importance of Human Resources Management (HRM) practices in contributing to different types of organizational performance have been recognized in the literature. Despite this progressive consideration, there are still some challenges, missing insights and lack of proper theorizing that deserves further investigation. For instance, there are uncertainties relating to which contingencies influence this relationship. The present study aims to determine the relationship between HRM practices and organizational innovation by considering the extent to which HR outcomes (job satisfaction, organizational citizenship behaviour (OCB) and employee involvement) and innovative climate model mediates this relationship.

A cross-sectional survey research design was used to randomly collect data from 375 employees working in 11 Somali telecom and banking firms and it is analyzed through Structural Equation Modelling (SEM). The researcher discovered several key important findings that include: (a) HRM practices significantly and positively contribute to HR outcomes. (b) Contrary to researcher's expectation, no empirical evidence was found supporting that HR outcomes mediate the relationship between HRM practices and organizational innovation. (c) The underlying mechanism through which HRM practices contribute to innovation is partially explained by the existence of a perceived innovative climate. (d) Support for innovative climate has a significant direct positive relationship with organizational innovation. Theoretical and practical implications along with limitations and suggestions for future research are also discussed.

Keywords: HRM practices, HR outcomes, innovative climate and organizational innovation.

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Finally, thanks to my entire family, especially my beloved mother and father for their prayers and words of encouragement which they have given me over all the years of my academic journey.

Awil M. NOOR EGAL

STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES

I hereby truthfully declare that this thesis is an original work prepared by me; that I have behaved in accordance with the scientific ethical principles and rules throughout the stages of preparation, data collection, analysis and presentation of my work; that I have cited the sources of all the data and information that could be obtained within the scope of this study, and included these sources in the references section; and that this study has been scanned for plagiarism with "scientific plagiarism detection program" used by Anadolu University, and that "it does not have any plagiarism" whatsoever. I also declare that, if a case contrary to my declaration is detected in my work at any time, I hereby express my consent to all the ethical and legal consequences that are involved.

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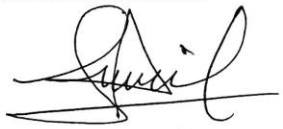


08/07/2019

ix

TABLE OF CONTENTS

FINAL APPROVAL FOR THESIS.....v
ÖZET..... vi
ABSTRACT..... vii
ACKNOWLEDGEMENT..... viii
STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES.....ix
LIST OF TABLES xiii
LIST OF FIGURES.....xiv
LIST OF APPENDICES xv
ABBREVIATIONS.....xvi
1. INTRODUCTION.....1
2. LITERATURE REVIEW.....5
2.1. Human Resources Management Definition 5
2.2. Approaches to HRM Practices 6
2.3.The Relationship between HRM Practices and Organizational Performance 10
2.4. Ability, Motivation, and Opportunity Framework.....15
2.5. AMO Framework and HRM Practices 17
2.5.1. Ability-enhancing HR Practices 19
2.5.2. Motivation-enhancing HR Practices 23
2.5.3. Opportunity-enhancing HR Practices.....27
2.6. Innovative Climate 31
2.7. HR Outcomes 34
2.8. Organizational Innovation 39
2.9.Summary: AMO-enhancing HRM and Organizational Innovation Literature 40
3. RESEARCH METHODOLOGY 45
3.1. Research Design.....45
3.2. Statement of the Problem.....46
3.3. The Objective of the Study 47
3.4. Hypotheses Formulation 48
3.5. The Significance of the Study.....50
3.6. The Research Model.....51
3.7. The Population of the Study.....54
3.8.Sampling Design 55

3.9.Data Collection Instrument Development 57
3.10.Research Variables Operationalization.....60
3.11.Data Collection Procedure 62
3.12.Data Analysis Method 64
3.13.Pilot Study: Validity and Reliability Test.....65
3.14.Research Setting: Somali Service Sector.....67
3.14.1. Telecommunications.....68
3.14.2. Financial Institutions 69
4. DATA ANALYSIS.....71
4.1.Data Normality Test: Skewness and Kurtosis.....71
4.2. Frequency Analysis 72
4.3. Model Fit Statistics Used in the Current Study.....74
4.4. Confirmatory Factor Analysis.....74
4.4.1. Original CFA Measurement Model (1) of HRM Practices 75
4.4.2. Modified CFA Measurement Model (2) of HRM Practices.....77
4.4.3. Original CFA Measurement Model (1) of HR Outcomes.....79
4.4.4. Innovative Climate CFA Measurement Model.....81
4.4.5. Organizational Innovation CFA Measurement Model.....83
4.5. Full Structural Equation Model Evaluation of the Study Variables.....84
4.5.1. Reliability and Validity Analysis of the Full Structural Equation Model.....86
4.6. Common Method Bias Analysis.....87
4.7. Correlation Matrices.....89
4.8. Structural Equation Model (SEM) and Hypotheses Testing.....90
4.9.Direct Hypotheses Test.....91
4.9.1.Hypothesis One: Ability-enhancing HRM Contributes to HR Outcomes.....91
4.9.2.Hypothesis Two: Motivation-enhancing HRM Impacts HR Outcomes 92
4.9.3.Hypothesis Three: Opportunity-enhancing HRM Affects HR Outcomes 93
4.9.4. Hypothesis Four: Innovative Climate Impacts Organizational Innovation ..94
4.10. Mediation Hypotheses Test.....96
4.10.1. Hypothesis Five: HR Outcomes Mediation Test 97
4.10.2. Hypothesis Six: Innovative Climate Mediation Test.....99
RESEARCH FINDINGS AND DISCUSSION.....102
CONCLUSION AND RECOMMENDATIONS.....111

REFERENCES.....118
APPENDICES 145
CURRICULUM VITAE (CV).....160

LIST OF TABLES

Table 2.1: Different Types of Bundles Used in the HR-performance Studies.....9
Table 2.2: The Content of HRM Bundles (Subramony 2009, p. 746).....18
Table 3.1: Comparison of Quantitative and Qualitative Methodology.....46
Table 3.2: The Private Somali Telecom and Banking Firms.....54
Table 3.3: Population and the Sample Size of the Stratified Proportionate Sampling...56
Table 3.4: Research Variables Operationalization.....61
Table 3.5: Validity and Reliability Test of the Study Variables.....67
Table 4.1: Skewness and Kurtosis Test.....72
Table 4.2: Demographic Characteristics of the Participants.....73
Table 4.3: The Model Fit Indices Used in the Current Study.....74
Table 4.4: The Goodness of Fit Indices for the Original HRM Practices Model (1).....77
Table 4.5: The Goodness of Fit Indices of HRM Practices CFA Model (2).....79
Table 4.6: The Goodness of Fit Statistics of HR Outcomes CFA Model 1 & 2.....81
Table 4.7: The Goodness of Fit Indices of CFA Innovative Climate Model 1 & 2…...83
Table 4.8: The Goodness of Fit Indices of Organizational Innovation CFA Model…..84
Table 4.9: The Goodness of Fit Statistics of SEM of the Study Variables.....85
Table 4.10: Standardized Regression Weights and Model Validity Analysis.....87
Table 4.11: Harman's One Factor Test Summary.....89
Table 4.12: Means, Standard Deviation and Correlations (N=375).....90
Table 4.13: Summary of Path Analysis and the Four Direct Hypotheses Test……..…95
Table 4.14: The Goodness of Fit Indices of the HR Outcomes Mediation Model.....98
Table 4.15: The Goodness of Fit Statistics of Innovative Climate Mediation Test….100
Table 4.16: HR Outcomes and Innovative Climate Mediation Model Test…….101

LIST OF FIGURES

Figure 2.1: Framework Summarizing Literature Review (Source: Research Author)...14
Figure 2.2: The AMO Framework Performance Model (Appelbaum et al., 2000).....17
Figure 3.1: The Research Model.....52
Figure 3.2: The Primary Data Collection Process Map.....64
Figure 3.3: Major Competitors in the Somali Telecom and Banking Industry.....70
Figure 4.1: The Original CFA Measurement Model (1) for the HRM Practices..,,.....76
Figure 4.2: The Modified CFA Measurement Model (2) for the HRM Practices.....79
Figure 4.3: The Original CFA Measurement Model (1) for the HR Outcomes.....80
Figure 4.4: The Modified CFA Measurement Model (2) for the HR Outcomes.....81
Figure 4.5: The Original CFA Measurement Model (1) for Innovative Climate 82
Figure 4.6: The Modified CFA Measurement Model (2) of Innovative Climate.....82
Figure 4.7: The CFA measurement Model of Organizational Innovation Construct.....83
Figure 4.8: The Full SEM Measurement Model of the Adopted Scale.....85
Figure 4.9: The SEM Model and the Goodness of Fit Indices for Hypothesis (1).....92
Figure 4.10: The SEM Model and the Goodness of Fit Indices for Hypothesis (2).....93
Figure 4.11: The SEM Model and the Goodness of Fit Indices for Hypothesis (3).....94
Figure 4.12: The SEM Model and the Goodness of Fit Indices for Hypothesis (4).....95
Figure 4.13: Mediation Analysis Process of Baron and Kenny (1986).....96
Figure 4.14: The SEM Model and Path Analysis for Hypothesis (5).....98
Figure 4.15: The SEM Model and Path Analysis for Hypothesis (6).....100
Figure 4.16: The Research Model Representing the Values of the Six Tested Hypotheses.....102

LIST OF APPENDICES

Appendix 1: Sample Calculation Table (Krejcie and Morgan, 1970)……..145

Appendix 2: The Research Survey Questionnaires…….....145

Appendix 3: Official Confirmation Letters from Survey Participating Firms…….152

Appendix 4: Curriculum vitae (CV).....160

ABBREVIATIONS

Abbreviation	Description
AGFI	: Adjusted Goodness of Fit Index
AMO	: Ability, Motivation and Opportunity
AMOS	: Analysis of a Moment Structures
AVE	: Average Variance Extracted
AWP	: Alternative Work Practices
C.R	: Critical Ration
C.R	: Composite Reliability
CBS	: Central Bank of Somalia
CFA	: Confirmatory Factor Analysis
CFI	: Comparative Fit Index
CLF	: Common Latent Factor
CMB	: Common Method Bias
CMIN	: Minimum Discrepancy
DF	: Degree of Freedom
DV	: Dependent Variable
GFI	: Goodness of Fit Index
GoF	: Goodness of Fit
HCWS	: High Commitment Work Systems
HIWP	: High Involvement Work Practices
HR	: Human Resources
HRM	: Human Resources Management
HPWPS	: High Performance Work Practices Systems
IV	: Independent Variable
KSA	: Knowledge, Skills and Ability
MI	: Mediation Variable
MI	: Modification Indices
MPT	: Ministry of Posts and Transportation
MTO	: Money Transfer Operators
NFI	: Normed Fit Index
OCB	: Organizational Citizenship Behaviour
PNFI	: Parsimony Normed Fit Index
RBV	: Resource-Based View
RMSEA	: Root Mean Square Error of Approximation
SD	: Standard Deviation
SE	: Standard Error
SEM	: Structural Equation Modelling
SHRM	: Strategic Human Resources Management
SRMR	: Standardized Root Mean Square Residual
SPSS	: Statistical Package for the Social Sciences

1. INTRODUCTION

The concept of Human Resource Management (HRM) was derived from the human relation movement of the early 20th century, when scholars started studying the way a business can create value through the strategic management of its workforce (Armstrong, 2006:12). The personnel administration (as referred) was basically concerned with the technical issues of hiring, evaluating, compensating and training employees and it was "individual level" function in organizations (Mahapatro, 2010:7). Since the 1980s, human resource practices have become an important topic in the management field and it had successfully achieved its importance because it promotes managerial efficiency and competitiveness of employees in the business world. The concern for managing human resource (HR) has always been on the manager's focus as it deals with the most important, valuable asset -the people in every organization (Andrew, et al., 2006). Since the 1990s, HRM practices have undergone certain pressures of changes to cope with the technological and economic shifts that completely created new directions and challenges for the managers and organizations of the twenty-first century, according to a survey by the Society for Human Resource Management (SMRM, 2002). A good example of these changes can be the emerging of the new approaches that focus on HRM practices and organizational performance links. Generally, HRM practices cover all the activities necessary for organizations in ensuring effective utilization of its human resources to achieve personal, group and organizational goals. These include: (a) personal aspects of workforce planning, selection, training, and development (b) welfare issues of health and safety, housing and quality of work life and (c) industrial aspects including union relation management and disciplinary policies (Truss, 2001).

After a review of the existing literature and researches of HRM practices and performance field, it is agreed that HRM is a very important contributor to different types of organizational performance indicators regardless of the HRM approach used from the *Universalistic* perspective to the *Configuration approach* (e.g. Combs, Liu, Hall, and Ketchen, 2006; Delaney and Huselid, 1996; Jiang, Lepak, Hu, and Baer, 2012; Macduffie, 1995). However, at present, HRM-performance studies are focusing on how and when HRM influences performance rather than examining whether it affects performance (Guest, 2011; Jiang, Lepak, et al., 2012; Paauwe, 2009; Wright and

McMahan, 2011). But surprisingly, Hannele and Diehl's (2016) review of 35 HRM/innovation empirical studies of the last 25 years, found that the majority of past studies have paid attention to studying the direct HRM-performance links. The so-called HRM-organizational performance is divided into four levels; employee outcomes (behavioural and attitudinal), organizational outcomes (efficiency and productivity), financial outcomes (profit and sales) and market-based outcomes (Savaneviciene and Stankeviciute, 2011:428). This rapidly expanding area of study has been addressed from various perspectives rooted in industrial relations, organizational behaviour, sociology, economics, and organizational psychology. The focus was to understand the effect of different bundles of HRM practices on various performance outcomes at the individual and organizational level of analysis (Paauwe, 2009:129).

Many organizations recently realized the importance of developing employees' intellectual capital to strive for success and out-compete those firms in the same industry. As a result, HRM studies have attracted the interest of great scholars in this field (see e.g., Gordon, 1992; Beard Well, Holden and Claydon 2004; Laursen and Foss, 2003). This great interest in the HRM-performance relationship is owed to the fact that employees are the key sources of competitive advantage in organizations since they are not imitable by other competitors and the significance of other sources of competitive success in organizations (e.g. technology and material) are decreasing gradually according to resource-based view (RBV) of the firm (Wernerfelt, 1984). Despite the considerable progress of empirical researches made in the HRM-performance relationship, there are still some challenges, missing insights and lack of proper theorizing that needs further investigation.

First, many of previous HRM-performance studies examined the direct contribution of HRM practices to organizational performance in general (e.g. Tan and Nasurdin, 2003; Li, 2006; Laursen and Foss, 2003; Jiang, 20012; Dunford, 2001; Chen and Huang, 2009). The majority of these studies have agreed on the positive relationship between HRM practices and organizational performance (e.g. Huselid 1995; Collins and Smith 2006; Sun, Aryee and Law 2007; Guthrie, Flood, Liu and MacCurtain 2009), but, current studies are moving away from analyzing such direct relation to asking the question of how and why HRM practices affect performance that still needs to be answered (Guest, 2011; Jiang, Lepak, et al., 2012; Paauwe, 2009;

Wright and McMahan, 2011). According to Paauwe (2009:132), the most debated HRM challenges in the last two decades are the linkages between HRM practices and performance outcomes. Mainly, there are two views on whether the relationship between HRM and organizational performance is direct or not. The first view shows that there is a direct relationship between the two and the second argument suggests that the relationship is indirect and mediated by a range of attitude and behavioural practices (Wright, 2001). The latter view is in line with the contingent approach argument that states the HRM-performance relationship is influenced by other factors (Delery and Doty, 1996:807). However, much of the empirical research made in HRM-performance link focused on exploring the direct link between them while studies relating to the understanding of the mediating link have received less research attention (Sung and Choi, 2014; Laursen & Foss, 2003). This mediating link is defined as any factor that affects and explains the relationship between HRM practices and organizational performance (Baron and Kenny, 1986).

Second, there is a disagreement of the likely mediating variables, its content and impact it has on HRM-performance relationship in which many scholars termed as the "black box" since what exactly it contains is unclear so far (Boselie, Dietz, Boon, 2005 Becker and Huselid, 1998:96–97, 2006:899–902,908; Messersmith and Guthrie, 2010). Although the role of the "black box" is to uncover the mechanism in which HRM practices contribute to organizational performance, past studies that admitted the existence of a mediating link between HRM practices and performance examined relatively a small number of potential mediating variables in isolation. However, these studies failed to agree which mediating variables may foster the desired organizational outcomes. In fact, studies relating to understanding the "black box" concept have been mostly ignored.

Third, in general, not all strategically planned HR policies are normally the implemented ones. A clear difference exists between planned HR practices, implemented and those perceived by employees. The perceived HR practices are the policies that drive employees' innovative work behaviour, but most past empirical papers failed to measure the perceived HR practices from employees' point of view and considered that the implemented HR practices themselves as predictor for employees' innovative work behaviour (Conway and Monks, 2008; Gratton and Truss, 2003;

Snapeand Redman, 2010). Hence, this study intends to uncover the "black box" phenomena through proposing the concept of innovative climate and HR outcomes as a model that is expected to mediate the relationship between bundles of HRM practices and organizational innovation. An innovative climate is defined as the employees' shared perception of formal and informal policies, practices, and routines of the organization that affects both employees' attitudes and organizational innovation outcomes (Reichers and Schneider, 1990; Schneider, White and Paul, 1998). Some authors have suggested that an innovative climate may act as an important intermediary element between HRM practices and organizational innovation (e.g. Ostroff and Bowen, 2000; Lepak et al., 2006). In addition, employees' HR outcomes were also considered to act as a mechanism through which HRM practices affect firm performance (Jiang et al., 2012). This is in line with earlier studies on this matter that have admitted that a range of individual attitudes and behaviours may mediate the HRM-performance relationship.

Based on the works of Guest (1997), Boselie, Dietz, and Boon (2005); Paauwe and Boselie (2005); Wright (2013), for their writings on the HRM-performance linkages, the purpose of this study is to determine the relationship between HRM practices and organizational innovation by empirically examining some mediating effects (innovative climate and HR outcomes) that occur in the HRM practices and innovation relationship in the context of Somali telecom and banking industry using Structural Equation Modeling (SEM). This service sector is considered as the most important sector in Somalia's economy, contributing to technological innovation, employment and economic growth (Wilson, 2016:52 and Abdu & Ali, 2013:54). Also, the telecom industry is the leading telephone lines in number in East Africa and its tariffs are among the lowest in Africa according to (Greg, 2009:204).

This study is divided into four parts.The first chapter relates to the research background. The second part is the literature review that focuses on study variable definitions and review of previous researches conducted in the field of HRM practices and organizational innovation. The third chapter deals with the research methodology used to conduct the study, including research design and data collection and analysis procedures. The final fourth chapter covers data analysis, research findings, discussion and the conclusion of the study.

2. LITERATURE REVIEW

2.1. Human Resources Management Definition

Armstrong, (2006:4) defined Human Resources Management (HRM) as those policies and processes of organizing the people working at the organization who individually and collectively contribute to achieving its objectives. As Storey stated HRM can be considered as a *'set of interrelated policies with an ideological and philosophical underpinning*'. HRM is based on philosophies, strategies, policies and process in which each of these provides the guiding basic principles of the whole HRM system. For instance, HR philosophies describe the dynamic values and guidelines that should be adopted when managing people and work, HR strategies define the HRM direction and where it intends to go. HR policies are the guidelines explaining how HRM values, strategies and principles should be aligned with organizational goals. At the same time, HR processes and practices are the formal and informal procedures and methods used to put HR policies and strategies into action. HRM can also be defined as a process of acquiring, developing, motivating as well as maintaining human resources towards achieving certain desired outcomes in an organization (Armstrong, 2010:5:7).

According to Edwin (1980:3), HRM is part of other management functions which is concerned in human resource planning, organizing, directing and controlling their actions and activities at the workplace to accomplish clear individual and societal goals. The overall aim of HRM systems is to enable organizations to attain its objectives through managing their people. Armstrong, (2010:8) stated that HRM practices are the core foundations of firms' capabilities that ensure organizations to learn and utilize new opportunities. Based on this, we argue the fact that HRM is concerned with practices and policies that determine its competencies and performance. These practices and policies include knowledge management, human capital management, reward management and diversity management. On the other hand, strategic HRM practices are derived from HRM which is the study that deals with understanding how HRM practices can contribute to the measurable organizational outcome (Amstrong, 2010:13). The strategic HRM practices consist of group practices within the HRM system used to discover how HRM policies affect performance in organizations (Armstrong, 2006:13). However, since HRM appeared in the management field, there is disagreement among

scholars on what constitutes an effective HRM practice and there is no sign of any settlement made over this issue up to date.

Therefore, HRM is an action-oriented activity since it focuses on implementing policies rather than record keeping. It is people-oriented as it treats employees on an individual basis by taking care of their needs and welfare. Also, HRM is a global-oriented activity that is being practiced in each and every organization around the world. We can also describe HRM practices as strategic-oriented regarding its concern in enabling organizations to achieve their objectives in the future by offering skilful and motivated employees.

2.2. Approaches to HRM Practices

The researchers of strategic HRM and performance relationship links admitted the importance of employing bundles of HR practices rather than studying the effect of individual HR practices in isolation (MacDuffie, 1995; Boselie, Dietz, and Boon, 2005). This resulted in the emergence of HR system-oriented perspective approaches in the study of HRM-firm performance link (Wright and Boswell, 2002). The literature that deals with HRM-firm performance as bundles can be divided into three main schools of thoughts. These are the *Universalism*, *Contingency* and *Configuration* approaches (Gooderham et al., 2008). The Universalism approach such as those proposed by (Huselid, 1995, Osterman 1995 and Pfeffer, 1994) assumes that a particular set of HRM practices is better than others and organizations should adopt these best practices to gain competitive advantage. This means there is a direct association between HRM practices and organizational performance. This theory argues that organizations perform better when they apply some ideal group of HR practices regardless of the context and industry. Generally, the authors of this approach employ individual HR practices and analyzed how it affects organizations' performance (Boselie, Paauwe, and Jansen, 2001:3).

A notable contributor of this individualistic HR practice is Pfeffer (1998), who proposed what he calls the "best sixteen HR practices" including job security, employee selection, self-managing team works, training, information sharing and compensation performance-based practices as mentioned by (Boselie, Paauwe, and Jansen, 2001:3). The advocates of this approach also employed more than one single HRM practices.

The *Universalistic* approach is becoming more common in combining certain HR practices to explain how the HRM-performance relationship works.

However, the methodological and theoretical argument of *Universalistic* approach has been criticized as being lack of clarity on what constitutes best HR practices and the conditions under which such contribution results in high performance (Delery, 1998). The measurement performance indicators used in this approach were narrowly financial criteria with few studies considered other performance indicators (e.g. employees' satisfaction and welfare). Also Crocker and Hefter (1996), questioned this approach's validity by arguing that firms differ from the kind of management practices implemented as the context in which they operate differ and these two aspects determine which HR practices best fits in their context. In addition, Purcell (1999), has also pointed out the inconsistency between best approach and the Resources Based View (RBV) of the firm which argues that managing organizations through differentiation strategies is what makes them achieve sustainable competitive advantage.

The second approach to HRM practices is *Contingency* theories of HR practices which were also identified by Delery and Doty, (1996:807) and it states that achieving high performance depends on considering the fit between a firm's strategy and HR practices. Accordingly, the effectiveness of HRM practices is achieved when they are integrated with organizational context. As a result, according to *Contingency* approach HR practices should be aligned with organizations' culture, external environment, and operational processes. This approach criticizes the *Universalistic* assumption by arguing that there can be no *Universalistic* HR practices that best fits all circumstances, but it depends on the context under consideration and organizations should practice what HR systems work for their context and eliminate those do not. This is based on the fact that what works well for certain organizations may not work for another because they are different in culture, technology, working practices, and strategy.

This matching model of HR practices has also a limited effect on performance due to the difficulties of modeling all contingent variables and because showing how each HR practice affects another is difficult. As Purcell stated, organizations should be more concerned with what works for them and should be less sensitive to best fit or best practices. Boxal and Purcell (2003), suggest that both best practices and best fit may

contribute positive outcome each in their own way, however, HR systems should be unique to the organizational context.

The third theoretical perspective of HRM literature is the C*onfiguration* approach. The configuration approach proposes that a good fit between various HRM practices and organizational strategy would improve the HRM-firm performance relationship (Becker & Gerhart, 1996). This holistic perspective assumes that a firm's performance depends on combining and reinforcing interrelated bundles of HR practices. Configuration theorists argue that HRM-firm performance relationship involves complex interactions between HRM systems and outcomes (Arthur, 1994; MacDuffie, 1996). These authors believe that complementary HR practices will produce better performance than individualistic HR practices. They also believe such practices are ideal and effective in all conditions. For instance, both Arthur (1994:672) and Becker & Huselid (1998), found supporting evidence showing those bundles of HRM practices contributes positively to organizational performance.

However, some authors (e.g., Paauwe & Boselie, 2005; and Boxall & Purcell, 2003) agreed that the U*niversalistic* and *Contingency*-based HR systems are more appropriate in explaining HRM-performance research. Under the *Universalistic* school of thought, there are some approaches, including High performance work systems (HPWS), High Commitment Work Systems (HCWS), High Involvement Work Practices (HIWP) and also Alternative Work Practices (AWP). All of these practices employ integrated bundles of HR practices to enhance employees' ability, motivation, and involvement in decision-making. These terms are not necessarily used to describe the same practices as each is more focused on different practices. For instance, whereas HPWS focuses on work-related practices, HCWS focus more on employee-related practices. Meanwhile, high involvement and high commitment practices lead to highly committed employees with innovative work behaviour. Although the practices included in these bundles differ across studies, they normally contain skills, empowerment and motivation domains and it is expected that these HR systems have a positive effect on various performance outcomes as a group of reinforcing practices (Subramony, 2009:750). The reason being we consider that individual HR practices do not function in isolation since practically employees are exposed to different HR practices simultaneously. The authors' choice of bundles adopted is guided by the kind of theoretical perspective in use. Several recent

studies have used the concept of HRM practices as the bundles in their research on the HRM-performance link as in the Table below. Generally, these papers found that HRM practices contribute to different organizational outcomes more effectively when they are combined as bundles of interrelated practices rather than applying as individual practices.

Table 2.1: *Different Types of Bundles Used in the HR-performance Studies*

Study	HR Bundles	Findings
Bal et al., (2013)	The developmental and accommodative HR system	This study found supportive evidence regarding the role of rebalancing psychological contract (having a more relational and less transactional contract) relates positively to employee outcome. Also, they confirmed that HRM relates positively to employees outcome through multiple pathways (U*niversalistic or Contingent*).
Batt and Colvin, (2011)	Investments and inducement bundle and performance enhancing bundle	This paper examined the rationale behind the use of High Involvement Work Practices in the service industry. The study found that Telecom firms in the US tend to adopt a segmentation strategy in accordance with their customers' demand characteristics to match the level of complexity and potential revenue stream from the customer to the skills of the employees that shapes the customer-employee.
Chang et al., (2013)	Flexibility-oriented HR practices	This study investigated the influence of FHRM systems (resource flexibility and coordination, flexibility) on market responsiveness and firm innovativeness. The empirical data of High-tech firms indicated that FHRM practices foster positively both market responsiveness and firm innovativeness by enhancing, acquiring and developing employees' skills.
Collins and Clark, (2003)	Network-building HR practices	The study explored the "black box" between the relationship of HRM practices (network-building HR practices) and firm performance through studying 73 high-technology firms in the mid-Atlantic region of the United States. The collected data results show that the relationship between firm's performance (sales and stock growth) were mediated by the kind of firm's top manager's external and internal social networks as these networks may hold information of potential value to the firm.
Gardner, Wright, and Moynihan, (2011)	Skill-enhancing practices Motivation-enhancing practices Empowerment-enhancing practices	The empirical paper examined the effect of collective commitment as a mediator of motivation, empowerment, and skill-enhancing HR practices and voluntary turnover. The findings are drawn from 20 top HR managers and 1,748 employees from 93 different positions show that collective commitment mediates the negative relationship between motivation, empowerment, and ability-enhancing HR practices. This means those HRM practices that enhance employees' skills, knowledge, and abilities positively influence voluntary turnover.

Table 2.1: *Different Types of Bundles Used in the HR-performance Studies Continue*

Lopez-Cabrales et al. , (2009)	Knowledge-based HRM practices Collaborative HR systems	This paper intended to test the mechanism through which HRM practices and employees' knowledge affect the development of innovative capabilities and firm performance. The paper concluded that HR practices relate positively with innovative capabilities when employees' knowledge is taken into consideration
Teo et al., (2011)	Human capital-enhancing practices	This research sought to answer the contribution of frontal employees towards the performance of SME of manufacturing firms in Australia. The study shows that SME firms tend to adopt a strategic approach in managing front line employees through the use of HRM human capital ranching practices and the importance of front line employees in firm's performance.

Source:The research author

2.3. The Relationship between HRM Practices and Organizational Performance

Despite the impressive amount of research on innovation, on one hand, and in human resources management (HRM), on the other hand (see, for example, Becker & Huselid, 1998; Boxall And Macky, 2009; Macduffie, 1995), our knowledge base regarding the link between HRM and innovation is still developing slowly (Laursen & Foss, 2014). This is despite the fact that the first theories that integrate HRM and innovation were presented within the last two decades. The last few years, however, have witnessed the publication of a growing number of empirical studies on this theme. This increase is not surprising given that innovation is linked to maintaining competitive advantage and performance (Becker and Gerhart, 1996). It is assumed that an organization's capability to innovate resides in its employees' ability and motivation and that HRM is involved in all innovations process, because employees' production is necessary for the development and implementation of innovations (Jiménez-Jiménez and Sanz-Valle, 2008). Despite the widespread recognition of the importance of human resource management for innovation, it has barely been treated so far in innovation studies (Laursen and Foss 2003). The literature on HRM, which studied the relationship between human resource management and innovation, is mainly from a *contingency* perspective. The detailed findings of the reviewed studies are discussed as follows:

Divina (2008), studied the top 1,000 core organizations in Philippine using descriptive research design and find out that HRM practices significantly influence organizational innovation and that job involvement and organizational commitment

mediate the relationship between innovative HR practices (recruitment and selection, employee relations, compensation, training, and performance management) and organizational performance outcomes (e.g., higher productivity, low turnover, and customer satisfaction). In a similar finding, Heffernan et al., (2009), explored the mechanisms through which HRM affects performance drawing on a secondary data of the top 2,000 high performing firms in Ireland. They found the existence of a significant direct relationship between HRM systems, team creativity climate and organizational performance outcomes. They concluded that team creativity climate serves as a potential mediator between HRM and organizational innovation measured on the basis of total sales in the last 12 months. The result showed that involvement and communication are particularly important in creating a culture of creativity climate.

Further, Lopez et al., (2009) examined how collaborative and knowledge-based HRM practices and employee's knowledge influence organizations' innovative activities. Using a sample of 86 Spanish manufacturing firms, the researchers discovered that HRM practices are not directly related to organizational innovation unless employees' knowledge management are taken into account as mediator. The study measured innovation performance on the basis of perceived product innovation.

Michie and Sheehan (1999), carried out a survey research to investigate the relationship between a group of organization's HRM practices (flexible work hours, HR systems and industrial relations) and corporate performance using a sample of 480 UK firms drawn from the UK's 1990 Workplace Industrial Relations Survey. The authors found what they termed "low-road" practices-short-term employee contracts, lack of employee commitment, low level of training, were negatively related to good corporate performance. In contrast, they found that "high-road" work practices (high commitment and supportive work environment) were positively related to corporate performance. They also found that collective HRM practices contribute to competitive organizational performance.

In another empirical research, Chen and Huang (2008), assessed the impact of knowledge management capacity (acquisition, sharing and use of knowledge) on innovation performance from a knowledge management point of view. The study used regression analysis to test its hypothesis in a sample size of 146 Taiwanese organizations. The finding showed evidence that knowledge management capacity plays

a mediating role between Strategic Human Resource Management (SHRM) practices and organizational innovation.

Quantitative research emphasizing on high-tech organizations in China was carried out by Jiang, and Zhao, (2012). They observed no existing relationship between training and administrative innovation when considering creativity as a mediator. Also, Lau and Ngo, (2004) reported that organizational culture mediates and affects the relationship between HR systems and organizational innovation. Other supporting findings of Hffernan, Dundon, and Cafferkey, (2009) confirmed that high performance work systems (HPWS) impacts on firms' ability to innovate through their effect on the mediating variables of creativity climate.

At the same time, another time-lagged research examined the effect of training and development on organizational innovation covering 260 Korean companies, which were carried out by Sung and Choi, (2014). The authors revealed that corporate expenditure for on-the-job training promotes interpersonal learning and knowledge sharing practices. They also discovered that the positive relationship between interpersonal learning and knowledge sharing on one hand, and innovative performance, on the other hand, is stronger within organizations whose innovative climate is supportive.

Anastasia, (2013) examined the effect of HR practice on different indicators of organizational performance by considering the role of the psychological contract as a mediating factor. The study used Structural Equation Model and collected its data from Greece's manufacturing and service public and private sectors between 2008 and 2010. The result of this study provided employees' attitudes of commitment, motivation and satisfaction mediates in the HR practices and organizational performance relationship. This means employees' attitudes positively contribute to organizational performance outcomes (effectiveness, efficiency, development, quality, and innovation).

Alfes et al., (2013) examined a model testing the relationship between perceived line manager behaviour, perceived HRM practices and individual-level performance of task performance and innovative work behaviour exploring the effect of employee engagement as a mediating variable. The study surveyed 1796 workers in recycling and waste management firms in the UK. After analyzing the data using the Structural Equation Model, the study revealed that perceived line manager behaviour and

perceived HRM practices have a significant indirect relationship with employee engagement and that engagement mediates the relationship with individual performance. They argued that HRM affects performance outcomes indirectly and those practices such as effective selection and performance management of line managers and strategies of employee engagement are the factors that foster high levels of performance.

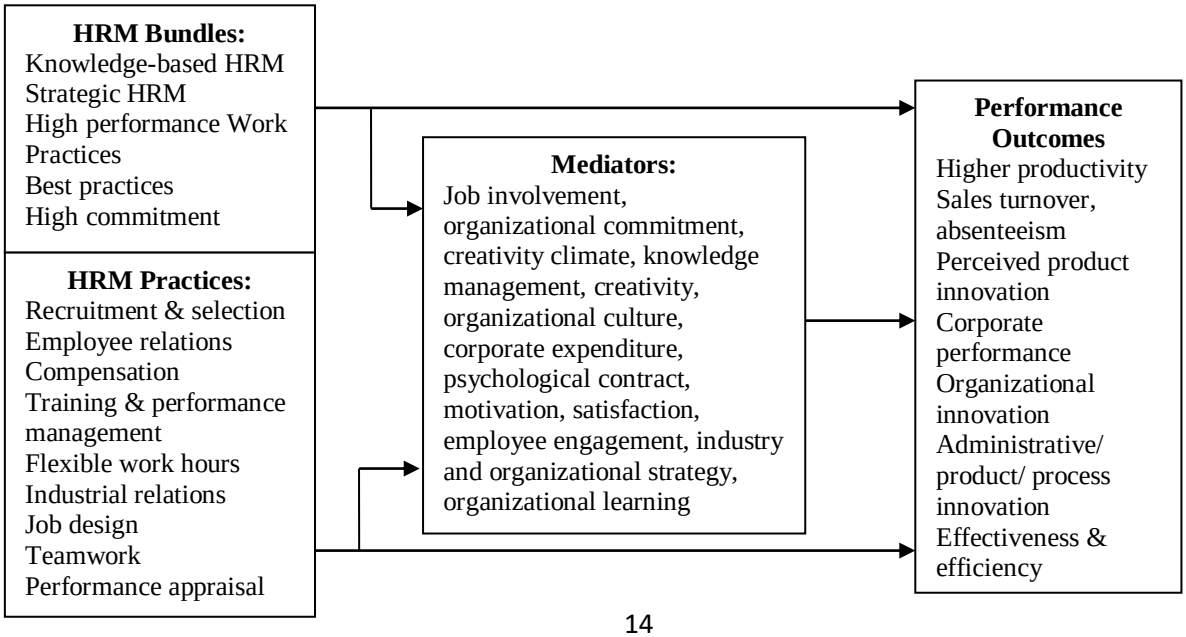
Moreover, Jiang and Wang, (2012) surveyed 106 of the most innovative firms in China between 2007 and 2008 to explore how these HRM practices (recruiting and selection, training, performance appraisal, reward, job design, and teamwork) relate to organizational innovation through employees' creativity as mediator. To eliminate single source bias in the survey response (Podsakoff et al., 2003), the data were collected from three different sources (HR managers, production/operation managers, and employees). The result demonstrated that out of the six variables in the study only four HRM practices (recruiting and selection, reward, job design, and teamwork) had a strong positive relationship with the mediating employees' creativity and organizational innovation. However, the other two variables (training and performance appraisal) were not directly related to both employees' creativity and innovation performance. The authors controlled firm's size, age, ownership type, firm's industry and its profitability for the innovative scale while average employees' age, the level of education and gender were included in the control for employee creativity.

The newly published article of Hannele and Diehl (2016), reviewed 35 empirical studies published in the last 25 years (1990-2015) written on how both HRM bundles and best practices related to organizational innovation. Also, the authors investigated the role of macro-level moderators (e.g., industry and strategy) and micro mediators (e.g. Creativity and knowledge management) as a mechanism that explains how HRM affects innovation. The article observed a number of neglected research areas and recommended three main further research areas to be considered in the future: (a) they argued that a careful consideration should be given to different phases of the innovation process because the role of HRM practices in the exploration phase may differ from the implementation phase, (b) different types of innovation should be given further attention as the novelty degree of innovation may require special consideration. For instance, process vs. product innovation influence HRM practices differently. Also,

HRM practices support incremental innovation rather than radical innovation, but only flexible working hours have been found to positively impact radical innovation and the authors suggested further research on how HRM practices can support different types of innovation, (c) the underlying theories of the HRM-innovation relationship should be developed further and extended as the authors observed that few papers were based on the specific theoretical framework. The reviewed papers mostly used knowledge management and organizational learning as an explanatory mechanism. Finally, they recommended the use of AMO (ability, motivation, and opportunity) framework to explain the effect of the "black box" in the relationship between HRM practices and innovation.

All the reviewed past studies have presented some form of common agreement that the relationship between HRM practices and organizational performance outcomes is mediated by a number of different variables. But they disagreed generally the effect of these mediating variables on organizational performance outcomes. This is because up to now our understanding of the role of the mediating variables in the HRM-innovation relationship is still scattered. These mediating variables vary in terms of their level of analysis, from the individual level, such as engagement to the organizational level of analysis, such as organizational culture (Hannele and Diehl, 2016:14). Meanwhile, these contradicting findings encouraged the researcher of this study to seek further assessment-oriented empirical research to support or reject the above arguments. The summary of the reviewed studies is displayed in Figure 2.1.

Figure 2.1: *Framework Summarizing Literature Review (Source: The research author)*



2.4. Ability, Motivation, and Opportunity Framework

To develop a theoretical framework for this study, the researcher adopted the AMO theory. This theory was chosen for its explicit nature and theoretical relevance in explaining the complexities underlying the relationship between HRM practice organizational innovation and its ability to explain the nature of the black box phenomena.

The Ability, Motivation and opportunity (AMO) framework has been validated in many empirical studies for its role in explaining the mechanism through which HRM practices affect organizational innovation (e.g., Appelbaum, Bailey, Berg and Kalleberg, 2000; Boxall and Purcell, 2003). The AMO framework was first proposed by (Applebaum et al., 2000; Boxall and Purcell, 2003) and its roots can be traced to industrial psychologists and social psychologists views. The industrial psychologists' argument is based on the fact that employees' performance is a function of their KSA (knowledge, skills, and ability), while social psychologists assume that an attractive reward system and employee empowerment is a function of higher performance in organizations (motivation and opportunity) (Maclnnis and Jaworski, 1989). The main assumption of the model argues that skillful, motivated employees with a supportive working environment serve best the interest of the organization. In another way, organizational performance goals are best achieved when effective HR systems are implemented, perceived and felt by employees. The reason being, the positive perception of the implemented HR practices increases employees' knowledge, intrinsic and extrinsic motivation and empowers them to fully utilize their capabilities.

As Gerhart, (2005:175) argued, according to the assumptions of the AMO framework, HRM practices can affect employees in the following ways:

(a) Enhances employees' abilities: by designing an effective recruitment and selection system and training policies that attract and train employees,

(b) Increases employees' intrinsic and extrinsic motivation: by designing an attractive, rewarding system and appraisal management, and

(c) Fosters employee empowerment: by giving employees autonomy and participation in the decision-making process to help the firm achieve its performance goals.

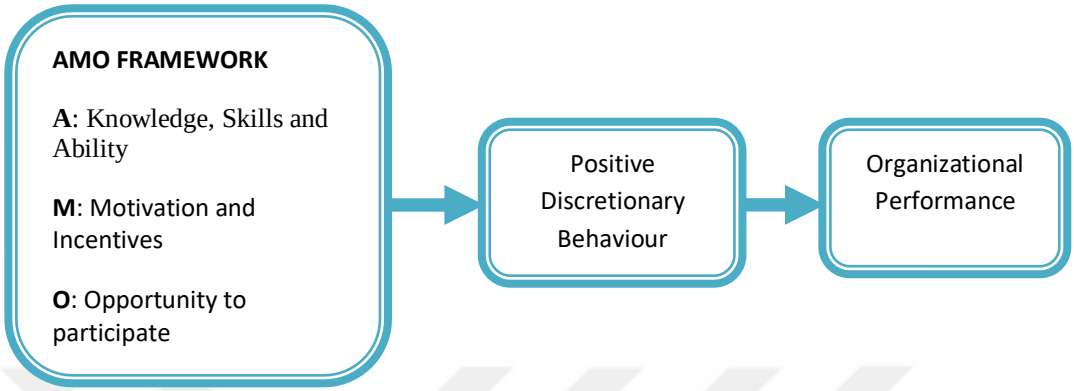
Thus, in order for the organizational performance to be achieved, all the values of this model should be available; otherwise, performance will suffer (Blumberg and Pringle, 1982). For instance, if employees have the necessary skills and knowledge and motivation to carry out their work effectively, but not empowered to make decisions or not communicated with the right information, most likely performance will not occur in this situation. Given the centrality of this model in HRM/ performance relationship, the author believes that the AMO framework can be applied in explaining the "black box" phenomena in the relationship between HRM practices and organizational innovation. According to Macky and Boxall (2007), almost half of HR practices and performance links studies have adopted the AMO framework either directly or indirectly.

Thus, the logic of adopting this framework in the current work is that the theory explains how and why HRM practices affect performance (e.g., innovation) by first impacting the proposed mediating model of HR outcomes and innovative climate. AMO framework divides HR practices into three bundles: (a) skill-enhancing HR practices (recruiting and selection, training and development), (b) motivation-enhancing HR practices (performance-based pay and job design) and (c) empowerment-enhancing HR practice (self-managed teamwork and communication). The effective implementation of these bundles results in the creation of discretionary positive behaviour (e.g., organizational citizenship behaviour and job satisfaction), which will affect positively performance (Purcell, Kinnie, Hutchinson, Rayton and Swart, 2003).

Although some authors argued that the AMO factors of ability, motivation, and opportunity go together on affecting performance -P=f(A+M+O), another group of scholars argued that only ability can independently affect performance either directly or indirectly. Thus, motivation and opportunity are also important, but they do not have an interactive effect on their own. In order to support their assumptions, these authors have applied the model to line managers' performance and they found that performance can best be explained by the function of P= F A (1+O), meaning motivation is not significantly related to performance (Bos-Nehles et al., 2013). Finally, even though the AMO framework is a useful tool in providing a better understanding of contextual factors that link HRM practices to performance, yet many other factors can affect the implementations of these practices such as individual's attitude and the context

involved. The Figure below depicts the AMO framework and how it contributes to better organizational performance:

Figure 2.2: *The AMO Framework Performance Model (Appelbaum et al., 2000)*



2.5. AMO Framework and HRM Practices

The Ability, Motivation, and Opportunity (AMO) framework is a helpful tool in understanding the HRM-performance linkages and in explaining the mechanism through which HRM affects performance (Boselie et al., 2005; Demortier et al., 2014; Knies & Leisink, 2014). According to the framework, HR practices improve employees' performance by enhancing their abilities, skills, motivation and opportunities. These three components are essential factors employees need to develop discretionary behaviour that facilitates innovative work behaviour. Therefore, employees' performance is a function of their skills, motivation and opportunity to perform. Discretionary behaviour was defined by (Kim et al., 2015) as "*the degree of choice people have over how they perform their job and recognizes that employees can contribute more to the organization than simply enough to get the job done*". This discretionary effort is in place when employees have the following characteristics:

a. Employees have developed the necessary work requirement skills and abilities to do their work effectively
b. Employees are well-motivated to go "extra mile" beyond the basic work requirement
c. Employees are given the opportunity to use their developed skills and abilities and are encouraged to contribute with their opinion and participate in decision-making.

A quite number of HRM studies adopted this framework in their understanding of how and why HRM practices affect performance (e.g., Bailey, Berg, and Sandy, 2001; Batt, 2002; Gardner et al., 2011; Huselid, 1995; Kehoe and Wright, 2013; Liao, Toya, Lepak, and Hong, 2009; MacDuffie, 1995; Subramony, 2009). According to the literature, the concept of AMO-enhancing HR practices and innovative climate are identified to be important for business innovation. As the empirical papers of (Bos-Nehles et al., 2013; Alfes, Truss, Soane, Rees, Gatenby, 2013) addressed the AMO framework on managerial perspective by focusing the line manager's ability, motivation and opportunity in implementing HR practices effectively, we adopted employees-based perspective by exploring how their skills, motivation, and empowerment contributes to innovative climate and organizational innovation. This is because we argue the fact that in order to ensure the organization's climate is an innovation-driven, how employees feel and perceive about HR practices is more important than what the HR managers plan and implement.

Based on these studies and since bundles of complementary HRM practices have a greater impact on firm performance, according to Subramony (2009), our HRM practices in this study will consist of ability-enhancing HR practices (training, development, recruitment and selection), motivation-enhancing HR practices (job design and performance-based reward) and opportunity-enhancing HR practices (communication and teamwork). This is in line with the comment made by Subromony (2009) that most HRM practices are classified into ability, motivation and empowerment enhancing practices as presented in the Table below.

Table 2.2: *The Content of HRM Bundles (Subramony 2009, p. 746)*

Ability-enhancing Bundles	**Motivation-enhancing Bundles**	**Empowerment-enhancing Bundles**
Job descriptions /requirements generated through job analysis	The formal performance appraisal process	Employee involvement in influencing the work process/outcomes
Job-based skill training	Incentive plans (bonuses, profit-sharing, gain-sharing plans)	Formal grievance procedure and complaint resolution systems
Recruiting to ensure availability of large applicant pools	Linking pay to performance	Job enrichment (skill, flexibility, job variety, responsibility)
Structured and validated tools/procedures for personnel selection	Opportunities for internal career mobility and promotions	Self-managed or autonomous work groups
Recruitment, training, and development	Health care and other employee benefits	Employee participation in decision-making

The combination of these HRM bundles is in line with the best-fit approach, which assumes that managers can select the most appropriate HR practices and align them to firm's internal and external context (Dean and Snell, 1999). The literature consulted (e.g Guest, 1997; Kehoe and Wright, 2003; Paauwe and Boselie, 2005; Shipton et al., 2005; Wright and Kehoe, 2008) show that ability of employees can be increased through adoption of certain HR practices such as an effective selection system, providing training and development. Also, employees' motivation can be enhanced through providing compensation based on employees' performance, and job specifications (Guest 1997; Paauwe and Boselie 2005). Furthermore, the empowering-enhancing HR practices are concerned with increasing employees' work participation through building teamwork and effective communication structure in the organization (Guest, 1997; Katou, 2008; Paauwe and Boselie, 2005).

2.5.1. Ability-enhancing HR Practices

Ability-enhancing HR practices are those practices that aim to ensure new employees have the skills and abilities to perform their work and also current employees are given continuous skill development and training. Employees' abilities can be developed through adaptation of an effective hiring and selection system while their current skills can be advanced by providing tailored training and development to fill any knowledge gap that they might have (Batt, 2002; Delery and Shaw, 2001; Gerhart, 2007). In this study, we expect that ability-enhancing HR practices have an indirect influence on organizational innovation and this relationship is mediated by the kind of climate that exists in the organization as a result of employees' perceived HR practices. However, previous empirical papers showed that these HR practices influence employees' knowledge, skills, abilities, and opportunity positively (e.g., Jiang et al., 2012; Liao, Toya, Lepak, and Hong, 2009; Takeuchi, Lepak, Wang, and Takeuchi, 2007). This perception is supported by Jiang et al., (2012) who found those employees' ability and knowledge, task-specific skills support innovation as their intellectual ability to think creatively and to come up with new ideas increases. Our skill-enhancing HR practices are recruitment, selection, training, and development practices as these practices are assumed to relate closely employees' abilities.

2.5.1.1. Recruitment and Selection Practices

These two HR functions include one of the important HR functions that each organization must have to function properly. These HR practices refer to the process of attracting and selecting a qualified candidate for filling the position at the organization. The effectiveness of recruitment system determines the kind of employees be selected and HR managers have to ensure deployment of an effective recruitment system that attracts and chooses the right candidates who are risk-taking and capable of fitting organization's knowledge needs. Employees' skills should fit the new role and the organization's culture as these fits will increase their innovative work behaviour and any misfit will not only be a cost but can cause negative consequences of the other HR practices. One of the primary prerequisites of an innovative climate in an organization is having skilled employees with knowledge sharing supportive attitude as these characteristics enhance their ability to innovate and to contribute to the attainment of the organizations' goals (Paauwe and Boselie 2005). Recruitment refers to the process of identifying and attracting a qualified candidate to become a potential new worker. It is a set of policies and practices that organizations use to make sure they acquire and hire suitable individuals.

According to Aswathappa (2008), the main objective of the recruitment process is to ensure a good number of the potential pool of qualified applicants are identified and reached. The range and quality of attracting candidates depend on the methods utilized and the kind of audience targeted as well as the ability to reach a wide number of competent applicants. There two types of recruitment sources; these are the external and internal sources (Aswathappa, 2008:150). The external recruitment source is attracting competent potential candidates outside the organization through advertising in newspapers, the internet and at universities, while the internal source of recruitment is current employees and employees' referrals. The kind of recruitment sources to be adopted depends on the recruitment strategy of organizations and the kind of skills they require. Adopting adequate recruitment procedures that give the opportunity to a large number of qualified individuals followed by a suitable selection process affects the level of ability and knowledge possessed by employees in the organization (Huselid, 1995). On the other hand, the selection is also the process of evaluating and assigning the right applicants from the pool of candidates recruited to fill the relevant position (Jiang et al.,

2012). The selection process requires the use of certain methods and criteria to evaluate whether an applicant meets the skills and experience needed. The main aim of both recruitment and selection process is to get the needed number of human capital to cover the workforce requirement of the organization (Armstrong, 2010:411).

An effective recruitment and selection system should involve defining recruitment needs, planning a hiring campaign, attracting the potential candidates and selecting the most qualified candidates (Armstrong, 2010:411-416). The quantity and level of the human capital necessary should clearly be defined and justified according to the organizations' human resource planning policies. First, HR managers should access and analyze whether the human resource gap exists, a new workforce is needed and whether they should fill an already existing role or a new one. The prospective candidate characteristics have to match the job specifications by making sure their competencies, attitude, qualifications, experience and other requirements fit the job being advertised (Armstrong, 2010:414).

2.5.1.2. Training and Development Practices

Similar to recruitment and selection practices, training and development practices ensure employees have required knowledge and skills that relate to their specific work. Training is defined as a capacity building process that covers all planned activities that are intended to enhance the employees' level of skills, knowledge, and competency to fill performance gap and to perform current work efficiently and effectively (Gordon, 1992). On the other hand, development is a set of multi-faceted activities undertaken to prepare employees for future growth and job requirements to ensure that adequate skilful human resources are available in the long-term (Gordon, 1992). The main aim of training and development practices is to improve both employees and organizational performance as the knowledge gained through training improves their effectiveness and efficiency and thus contributes to achieving organizational goals. Training and development practices have been found to support the ability factor of the AMO framework as the main goal of the training program is to build the skills and knowledge of employees (Paauwe and Boselie, 2005; Kehoe and Wright, 2013).

We assume that the effectiveness of training is affected by the training design process (e.g., training needs assessment, creating a learning environment, knowledge

transfer, and evaluation of training), the method of training adopted (e.g., on-the-job and off-the-job methods) and corporate training investment to carry out the training program. These variables are inputs for effective training and development policies, according to (Arvind, and Haque, 2008). The training design process is a systematic step undertaken in order to ensure effective planning and implementation of training and development activities. These steps involve formulating objectives, assessing training needs, selecting, delivering methods and evaluating the effectiveness of training after its completion. Therefore, in order organizations to achieve innovative outputs, they need to create a continuous training policy and learning organization, as a result, learning organization culture is expected to create an innovative climate in which employees are satisfied with their role, are more involved and given job enlargement. Through training and development practices, employees' abilities, knowledge skills are enhanced and as a result, they show a culture of organizational citizenship that encourages them to assume more responsibilities at the organization.

The Training design process consists of four main activities that contribute to the effectiveness of training practices. The first step is assessing whether training is needed, that is, whether a knowledge gap that should be filled exists in organizational, individual and task levels. The second step involves creating a learning environment in order for learning to occur. While the third and fourth steps addresses in ensuring whether the knowledge gap is filled and employees apply the learned knowledge to their jobs and evaluating whether the training objectives have been achieved (Arvind, and Haque, 2008).

On-the-job training is an internal training method that occurs when employees are given training in the work environment by observing how work is performed under the direct supervision of a more skilful co-worker (Armstrong, 2006). This method is more appropriate for inexperienced new employees and upgrading senior employee's skills when new ways of doing work are introduced. On-the-job training includes mentoring, job rotation, apprenticeship, and orientation. Normally the decision of adopting this internal training method depends on the organization's strategy, availability of resources for training and the kind of skills needed to be developed (Armstrong, 2006).

While off-the-job training is an external training method where employees are given training away from the environment of the organization (Schuler and Jackson,

1996). This method may be appropriate to adopt when the consequence of error is very high and risky. For instance, training a pilot on a flight board than in flight simulators. This method also covers training employees through lecturing, attending conferences, role-playing and case study techniques (Schuler and Jackson, 1996). This method is also used when complex capabilities and skills are expected to be mastered or when such skills are not available at daily routine work. Although this method's cost is high, still it is believed that learning from external specialists and professional vocational colleges help employees increase their skills and job confidence, thereby employees' openness to innovative ideas and their ability to propose constructive changes is advanced (Chen and Huang, 2009). The corporate training investment is to allocate financial resources on a yearly basis to implement planned training and development programs for enhancing employees' knowledge-gaps of both short-term and long-term perspectives (Bassi and McMurrer, 1998).

Planning and investment in training are also another important strategies that enable training to be one of the core functions of HRM practices. It can take a form of in-house or off-the-job training and development methods directed to improve employees' task skills required by the current job position and financial support for education to meet self-development goals that may be needed for their future career development (Bassi and McMurrer, 1998). Investment in employees' training and development can be a good indicator of the level of top management's commitment to developing employee's knowledge and increase employees' perceptions that that the organization cares about them and improving their existing skills which in turn increases their discretionary attitudes (Galunic & Anderson, 2000; Tannenbaum, Mathieu, Salas, & Bowers, 1991). However, only allocating a budget for this function is not enough to ensure innovative performance is achieved. This is because an innovative performance requires an effective transfer of knowledge by utilizing the learned behaviour and skills in the workplace (Chen and Huang, 2009).

2.5.2. Motivation-enhancing HR Practices

According to Ployhart and Moliterno (2011:133), motivation-enhancing HR practices are intended to make use of the knowledge, skills and abilities developed and retained which employees do not utilize the best interest of the organizational goal achievement. These acquired talents are considered the "capacity to do" representing the

non-cognitive form of HR practices. However, employees' knowledge may not have value unless accompanied by a "will to do" which is the driving force that leads to effective work performance. The motivation here refers to the extent to which an employee is willing to behave in a certain positive way towards their work (Kim et al 2015). These HR practices are designed to influence employees' efforts to accomplish organizational objectives and leads to a high level of performance. Merit-based pay and flexible job design are said to have a positive influence on employees' motivation (Gardner et al., 2011). This is in line with the incentive theory of motivation that argues individuals are attracted to policies that offer positive incentives.

Thus, we assume that performance-based pay may motivate employees to enhance their work performance. According to Veli et al., (2013), researchers in the industrial city of Kocaeli in Turkey, HRM capabilities positively contribute to knowledge sharing which leads to innovation. Motivation-enhancing HR practice includes performance-based pay and job design. Both of these two practices support employees' motivation to become innovative and develop the willingness to use their know-how at work to produce novel products according to (Chandler, Keller, and Lyon, 2000:35).

2.5.2.1. Job Design

Job design has been defined as the process of organizing tasks, structuring and specifying the relationship between jobs so as to meet the organizational and technological needs as well as personal needs of the job holder (Opatha, 2002:122). It is also a systematic way of organizing job content and position requirements containing jobholder qualification requirements and experience in a way that it facilitates satisfying both organizations' and jobholder goals. Job design influences employees' motivation and organizational productivity since poorly designed jobs discourage employees and thus their performance decreases. In this study, job design is meant identifying and grouping tasks into forming an interesting role in a way that it increases employees' motivation.

According to Herzberg's et al., (1957), two-factor theory, there are two important aspects of motivators in job design that should be differentiated as (Parker and Ohly, 2008) stated in their article. The first one is intrinsic motivating factors, including recognition, responsibility, and achievement which have potentially the opportunity to

increase employees' motivation in the workplace. The second type is extrinsic hygiene factors such as working environment, remuneration, job security, and supervision. If these hygiene factors exist in the workplace, they do not motivate employees, but they have the opportunity to potentially de-motivate employees if not taken into account. This theory stated that even though the only challenging job has the opportunity to foster achievement, growth, motivation and recognition, at the same time, hygiene factors are also important as they enhance employees' motivation in the workplace. According to the job characteristics theory, five core job characteristics should be carefully constructed in every job role when designing jobs in order to increase intrinsic motivating factors, satisfaction and employees' performance:

- *Skill variety* refers to the degree to which a job needs different activities involving the utilization of a variety of skills and abilities to enhance advancement and job satisfaction.
- *Task identity* refers to the job deliverables and outcomes to be achieved from the job and having some degree of control over one's role.
- *Task significance* describes the extent to which the performed task is important and contains a meaningful contribution to the organization and the jobholder.
- *Autonomy* is defined as the degree in which the jobholder is given substantial freedom and control to perform their work. For instance, allowing the jobholder to prioritize their work and take decisions to achieve job objectives independently.
- *Feedback* means giving employees direct information relating to how well they are performing their work and how they can perform better.

The job characteristics model states that when the above job characteristics exist in the workplace, employees tend to develop certain important physiological conditions. They develop meaningfulness over their work, responsibility for their actions and knowledge of the impact of their work. As employees' motivation, satisfaction on jobs and growth increases, absenteeism and turnover are expected to decrease. However, as (Hackman and Oldham, 1974) stated, these innovative behaviour is developed only when employees have the skills, ability and their growth need is higher. When the three core psychological states are met as a result, employees tend to develop other important behaviours, including internal work motivation and organizational citizenship behaviour.

2.5.2.2. Performance-based Compensation

As stated earlier, motivation-enhancing HR practices include performance-based compensation systems of the organization as (Jian et al., 2012) stated. When employees are rewarded based on their efforts and performance their motivation and satisfaction increases by showing positive behaviour such as idea generation, idea adaptation and idea application as employees perceive that the reward system is fair. Performance-based compensation is used to align the interest of employees with those of the organization to create meaningful goals that should be pursued. Developing an effective reward system motivates employees to be creative, offer new ideas and increase their willingness to show innovative behaviour. Reward-based pay for performance contributes to employee motivation in three ways. First, an attractive reward system can attract talented employees to the organization and retain them (Starkey Tempest and McKinlay, 2004). Second, such an attractive reward system motivates employees to go the extra mile needed for innovation and creativity (Shipton et al., 2006). Third, reward systems combine different types of internal motivators such as the opportunity to pursue one's ideas, promotions, recognition, performance appraisal and merit-based compensation (Amabile et al., 1996).

In order organizations to encourage employees to be more creative, they should introduce special compensation policies such as profit sharing by involving the profit to the extent of ideas proposed and implemented because we argue that innovation-linked rewards contribute positively to the overall level of employees' creativity in the organization. Employees will show innovative work behaviour only when they feel that the reward system in place is fairly rewarding for their contribution. In today's competitive business environment, organizations tend to link pay to performance for motivating workers in providing greater effort to achieve organizational goals (Booth and Frank, 2009). Milkovich and Newman (1996), stated that societies, employees and organizations view compensation from different perspectives. For instance, societies consider compensation as a tool to measure equal work for equal pay. This reflects how societies are interested in achieving a balanced distribution of rewards in society. In contrast, employees view compensation as an exchange for their rendered services by considering as a return for their personal worth in terms of skills, education, and training they have acquired. Organizations, on the other hand, seek compensation from

two perspectives. First, they see it as unavoidable cost and second, a mechanism to influence employees' behaviour and attitudes through adopting an effective performance-based pay compensation strategies. This mechanism of influencing both workers attitudes and behaviour as well as organizations productivity and effectiveness can become a source of competitive advantage (Milkovinch, 1998:16).

Performance-based pay is a system of remuneration that links employees' performance with pay. Armstrong, (2005) defined it as the process of providing financial rewards to employees by connecting directly to the individual, team and organizational performance. However, as Schuler argued, performance-based pay is not limited to financial incentives, but also involves other benefits including recognition appraisals. An effective rewarding system motivates employees to be more innovative as some studies have pointed out, adding that the use of pay for performance and profit sharing has a positive effect on organizational innovation. The reason is such a reward system can be used both in attracting new talented human capital as well as keeping innovative employees in the organization. Cano and Cano (2006), conducted research and concluded that recognizing employee's achievement and restoring an attractive financial rewards system can stimulate motivation as pay for performance is a basic tool for innovative behaviour.

However, it is important to mention that some scholars whose views are humanist tradition have suggested that aligning rewards to performance undermine creativity by negatively affecting the intrinsic motivation of workers (Amabile, 996, Collins and Amabile, 1999). These authors have supported their argument with empirical evidence. For instance, meta-analysis research conducted on this issue has shown that performance-contingent pay has some negative effect on innovation and creativity (Byrob and Khazamchin, 2002). To conclude, failure to recognize the importance of establishing an effective performance-based pay system will not only result in an unfair compensation structure, but also may lead to a variety of negative outcomes for the organization such as lower performance and turnover (Colquitt, Scott and Livingston, 2009).

2.5.3. Opportunity-enhancing HR Practices

Opportunity-enhancing HR practices are concerned with empowering workers through participation in decision-making, flexibility, information sharing, autonomy,

self-managing teams and other empowerment-oriented practices (Subramony, 2009). Individuals in the organization need to be empowered to think out of the box in order to solve workplace problems by proposing innovative problem-solving initiatives (Aryee et al., 2013). When employees have the skills, ability and are motivated to perform effectively, organizations must also provide them with necessary opportunities to put their skills into action (Lepak et al., 2006:233). Opportunity is meant employees' immediate work environment and the contextual mechanism that enables employees to perform well their duties whereby they are provided support for idea expression and involvement (Boxall and Purcell, 2003). This empowerment can influence employees' perception of how they see the organization from the way they are treated in the workplace. Such positive perception leads to developing a positive discretionary behaviour that enhances their motivation. Implementing a set of reinforcing empowerment HR practices (autonomous work teams, employees' participation, and upward communication system) results in synergistic performance and increases their sense of responsibility by considering themselves as part of a larger organizational system that enhances their extra role behaviour. This extra role behaviour includes trying new ways of doing their jobs, improving work processes and assuming more responsibilities (Bowen and Ostroff, 2004).

Employee empowerment is one of the most effective techniques adopted in organizations in helping employees utilize their knowledge and motivation to improve their work performance. Opportunity-enhancing practices in this study have two component bundles; communication and teamwork practices which are expected to empower employees to put their development skills and motivation into action.

2.5.3.1. Communication Practices

Human resources with knowledge and creativity who are able to access and utilize information are considered to be the source of competitive advantage in today's business environment. Due to this fact, organizations are recognizing the role of internal communication in strengthening employee empowerment and engagement. When an internal communication system is in place, it builds a culture of transparency and trust between the organization and workers. According to Mishra and Mishra (2014:1), employees are more productive and likely feel more comfortable in a working environment where they " *trust the people they work for, have pride in what they do and*

enjoy the people they work with". The fact is that these positive feelings in the workplace environment are due to open communication and empowering the workforce by giving them control over their duties. According to Business Ethics scholar Carrol, (2006), ethically sound organizations put their employees at the centre of their policies and practices through establishing trustworthy effective communication channels, acting with integrity and showing respect for employees. Carrol further explained that the level of employee trust of their managers depends on the extent managers demonstrate empowering practices such as integrity, willingness to listen and honesty.

Internal communication is two-way information sharing between the organizations' managers and their employees (Dolphin, 2005). It can be informal and formal interaction that reflects top managers' willingness to empower and establish positive relationships between internal stakeholders and the management (Welch and Jackson, 2007).

Employees should be given a certain degree of control over planning their work objectives and manage their assigned tasks. Having a supportive relationship with top managers helps employees to have a sense of importance and personal growth. Top managers should ensure that employees have adequate tools and material supplies that give them the opportunity to perform better and participate in achieving organizational goals. These practices also increase active participation of employees. The more organization communicates well with its employees, the more employees become loyal and committed to their work. The result of effective communication includes an increase in employee self-worth, esteem, less turnover and absenteeism. Empowering employees requires the presence of empowerment elements, which are information sharing, relevant training, power and attractive rewards. Fully empowered workers have easy access to the company's information, and its performance reports whereby no information about the organization is kept secret. Also, proper empowerment needs some level of power delegation that is traditionally held by top managers that facilitates decision-making and assuming greater responsibility.

2.5.3.2. Teamwork Practice

Teams are defined as sets of two or more recognizable people who interact, independently and dynamically to achieve certain shared valued objectives. Effective teams successfully perform both task-work and teamwork. Task work relates to

performing certain specific work activities that each team member has to complete in order to achieve the overall team goals. On the other hand, teamwork involves more on the commonly shared behaviour (e.g., what team members see as correct) attitudes (what team members feel or do), and cognitive (what team members know or think). Both task work and teamwork are important elements of team performance and each re-enforces the other in ensuring task work is performed effectively. Similar to employees' participation, teamwork provides employees with empowerment opportunities to utilize their knowledge and motivation (Jiang, 2012).

Guest, Conway, and Dewe (2004), acknowledge that teamwork promotes the creation of a positive working environment and innovation. Teamwork helps employees build positive work relations by sharing knowledge and information. In order for organizations to continue innovating in the long run, existing skills should be transformed and utilized through forming teams. Team building enhances the exchange of tacit knowledge by providing an enabling environment for team members (Cabrera and Cabrera, 2005). This argument is supported by the findings of Laurson and Foss, (2003) that forming teams are considered as one of the practical ways employees can transfer knowledge to each other and make better use of the existing knowledge in the organization as the longer teams exist, the better their cooperation is, the more they exchange knowledge of a higher quality. The individual innovation level is supported by sharing the skills among experienced employees with the less experienced ones (Shipton, 2007).

Teamwork promotes organizational performance and innovation as far as team members are intrinsically motivated and work in supportive working conditions (Shipton, 2004). At the same time, because teams are equipped with diverse skills and each member bring his/her expertise to the team, they achieve higher innovative performance than when everyone works individualistically. For instance, by working with other members of the team, individuals are encouraged to raise questions of the areas they may face work obstacles and get feedback over their performance that can lead to achieving higher performance (Shipton, 2006). Thus, we argue that the existence of team work spirit predicts the kind of innovative climate in the organization. But most importantly, autonomous teams without the support of top managers and proper training

may result in lower productivity. The top management support is achieved by an organic organizational design that decentralizes decision-making process.

2.6. Innovative Climate

A good number of scholars have suggested that innovative climate acts as a key intermediate mechanism that explains how HRM practices foster organizational outcomes (Ostroff & Bowen, LePak et al., 2006). They argued that the effective HR system enhances organizational climate by influencing their motivation, the way they perceive work and how they perform. Based on the argument of social exchange theory, employees feel obliged and respond with something of value when they perceive the organization is valuing them by rewarding their innovative ideas and work environment encourages them risk-taking attitudes. This innovative climate condition is created through the existence of AMO framework values in the organization. The interest on how HRM practices foster innovative climate has increased in recent years (Shipton et al., 2006). Therefore, it is important to explain how an innovative climate is created and how it contributes to organizational innovation. Innovative climate is the existence of a positive atmosphere in the organizational environment that enables employees to show "extra role" behaviour in achieving organizational goals based on their positive perception acquired from the implemented HRM practices**.** There are some recent studies that provide a different level of analysis of climate facets including psychological climate, employee relations climate, service climate and innovative climate (Scneider, Smith, and Goldstein, 2000) representing the way organizations cognitively are represented individually and collectively. In this study, the organizational climate is conceptualized as an individual and organizational level. We consider organizational climate as a concept that defines the behaviour of a group of people at the workplace. Organizational climate and culture are closely related as both of them are transferred through interaction in the organizational environment however, they are not necessarily similar.

However, there are some differences between the two concepts. While organizational culture describes the underlying structure of an organization represented by values, beliefs and assumptions of its members, the organizational climate, on the other hand, reflects that observable behaviour at the surface of the organization that tends to be temporary and limited to the perceived aspects of accepted, valued and

supported behaviour in the organization. Organizational climate reflects how employees feel about the attributes of the organization such as its practices, procedures, rewards and policies (Neal, West and Patterson, 2005:496). Therefore, we assume that HRM practices influence organizational climate and that organizational climate influences innovation. Due to this, we argue that innovative climate predicts organizational innovation rather than HRM practices that predict themselves innovation. Innovative climate can be either open or controlled. The open or flexible climate exists when employees work in a supportive environment with high team spirits and trust in which employees show extra role discretionary behaviour. Yet, controlled or closed climate exists when an employee's job satisfaction is low and they lack the courage to create new ideas or take the risk due to fear of being blamed or fired. We need to understand that innovative climate is a broad concept that covers a certain fundamental range of climate aspects. The dimensions of innovative climate that we desire to study are risk-taking tolerance, flexibility to change, creativity and problem-solving. When these aspects are strong and positive in an organization's environment, we can say such organization has a positive innovative climate (Patterson et al., 2004). The reason is that such elements create a suitable facilitating environment that promotes innovative work behaviour and organizational innovation (Tidd and Bessant 2009). These values may be the drivers of innovative outputs and it is important to investigate to what extent these elements contribute to productivity and organizational innovation.

We argue that the process that links HRM practices and organizational innovation is explained by innovative climate dimensions of risk-taking tolerance, flexibility to change, creativity and problem solving. In order for employees think freely and propose creative new ideas, they should not fear being fired or blamed when their ideas fail. Instead, they must feel protected by introducing a policy that rewards employees' try and error. When a higher level of failure tolerance culture is in place, employees develop a trusting relationship with top managers and coworkers by understanding that their new ideas are normally accepted and rewarded instead of being rejected or punished (Shipton et al., 2005).

Therefore, since the existence of an innovation supporting environment favours organization's innovative outputs, the relationship between AMO-HRM practices and innovative performance may disappear when such innovative climate is unfavourable or

do not exist in the organization (Laursen and Foss, 2003). To explore new innovative ideas in an organization, it is important to encourage employees to take a calculated risk. Calculated risk-taking through prototyping is done by presenting and testing the practicability of the new idea at early states before it is invested (McGrath, 2011). This may enable the organization to ensure whether such new idea will be considered for further development or to be cancelled before it is too late. According to Kley, Kiegesmann and Schwering (2005), in an attempt to create risk tailored climate and acceptance of shortcomings, BMW established an innovative program called "*Creative Error of The Month*" which invites employees to take calculated risks and make mistakes. This program improved a positive perception and culture of taking risky and accepting any mistakes during the process of exploration needed for creativity and innovation. Employees' willingness to taking risks in exploring new innovations ideas is best achieved when they perceive they are supported and their failure is tailored by their supervisors. Thus, employees who are satisfied with the support of their line managers will show innovative behaviour involving idea generation, idea championing and its implementation.

Allowing employees to break operational routine rules to challenge the status quo facilitates the process of innovation. Supervisors should be supportive and friendly when mistakes occur and they should delegate reasonable responsibilities to employees so that employees have the autonomy they need to try and error process. A collaborative approach and open discussion between supervisors and lower employees on what attempts worked and failed has a profound effect on employee recognition and learning from mistakes (Krause, 2004). Organizational stories of success or failure are vital in the innovation process. Sharing workers with such stories is one of the ways they can learn, motivate and enhance their ability to believe themselves that they can also come up with innovative ideas. To give an example, Buckler and Zien, (1996) explained that in order to help employees of the 3M Company in developing an innovative atmosphere, a consultant was hired to share some success and failure stories. These researchers concluded that story telling has helped employees of the 3M Company to establish a cohesive and collective culture, which resulted in motivated employees who are eager to discover innovative ideas and challenge uncertainties. Normally, the innovation process involves uncertainty and potential failure in any stages of innovation. Therefore, workers with risk avoidance behaviour are the least in innovating

and performing. It has been discovered that an innovative climate is characterized by a high level of flexibility and supportive-oriented culture, which encourages creative efforts to explore novel ideas (Jiang, Lepak and Baer, 2012).

Supporting employees with required resources for innovation (e.g., information sharing and equipment) contributes to their success. The essential elements of developing failure tolerance culture are enhancing employees' ability, skills and knowledge (KSA) through empowering and motivating them for generating innovative ideas. The HRM policy of the organization should be designed in a way that it rewards individuals who come up with improved ways of doing work. This HRM policy should recognize and reward individuals who show innovative behaviour with both tangible and intangible rewards for taking risks and trying new ways of reducing costs, altering processes and performing their work.

2.7. HR Outcomes

Employee HR outcomes are immediate key outcomes of well planned, implemented and positively perceived HRM practices and act as key antecedents to organizational innovation and creativity (Jiang, 2012). Thus, HR outcomes are the positive job-related attitudes that may impact an organization's performance. Previous studies that investigated the underlying mechanism through which HR practices affect innovation have considered a set of employees' attitudes, which are outcomes of implemented and positively perceived HR practices. For instance, Wright et al., (2001) developed a model of employee job satisfaction and commitment-oriented practices such as OCB, which they indicated as the mediating links that connect HR practices to firm performance. The people-performance model of Purcell et al., (2003) illustrated that HRM outcomes of employees' attitudes (e.g., commitment, job satisfaction, OCB, and motivation) create a discretionary behaviour, which is necessary for any innovation-supportive organizational environment. This framework highlights the importance of considering employees' overall attitudes to determine how HR practices affect innovation. According to the argument of the Resource-based View (RBV) of Barney (1991), HR practices has an impact on employees' attributes such as their skills, motivation, and empowerment that leads to improved organizational performance.

Past studies of HR/performance link have extensively considered a wide range of employees' attitudinal practices in order to determine how HR practices affect

innovation. These include employee engagement (Alfes et al., 2013), job satisfaction (Turek and Turek 2010, Gardner et al., 2001, Yee and Sern 2014, Ching-Sung et al 2013), OCB (Turek and Turek 2016, Turnipseed and Turnipseed, 2013), innovative work behaviour (Boss-nehles et al., 2017), collective commitment (Gardner et al., 2011), and AMO attitudes (Purcell et al., 2003). Perhaps the reason these behavioural perspective approach is considered by these authors is due to the fact that higher organizational performance is achieved only when HR-related outcomes (motivation, job satisfaction, OCB, innovative work behaviour, affective commitment etc.) are achieved. Therefore, we intend to explore the role of job satisfaction, OCB and employee involvement as a potential mediating link between HR practices and organizational innovation in the context of the Somali service firms.

2.7.1. Job Satisfaction

Job satisfaction is a willingness and desire to achieve organizational goals as a result of being satisfied with the job content, payment status and the organization's goals (Armstrong, 2006). In their research, Abdul and Aamer, (2011) found that individuals who perceive HR practices positively were more satisfied than those who negatively perceive it. This is because when employees' well being is taken into consideration through focusing their skills, motivation and empowerment; they very likely feel that the organization is valuing them by investing in them. This, in turn, will increase their efficiency and discretionary behaviour at work by giving back to the organization that leads to innovative outputs. As employees are familiar with their role in the organization, both turnover and absenteeism may be low while their productivity is expected to be high. Job satisfaction is an important value for many positive outcomes such as employee commitment, trust and loyalty. The level of satisfaction or dissatisfaction an employee has experienced in the workplace indicates job satisfaction. Employees with positive job satisfaction tend to be more innovative than those with low job satisfaction and tend to show a positive attitude towards their work. It is that favourable feeling an employee has due to extrinsic and extrinsic characteristics relating to their work environment and personal life. Extrinsic motivators relate to attributes of the work environment such as the level of trust and support employees receive from their supervisors, while intrinsic sources of satisfaction have something to do with the

attitudes and behaviour of individual employees such as self-esteem (Purcell et al., 2003).

Several studies show that certain HR practices such as team works, open communication and performance-based pay enhances employees' level of satisfaction and thus may lead to a higher productivity (Robbins, 2005). According to Mathis and Jackson (2001), employees with low job satisfaction are less productive, more frustrated, have poor records of absenteeism, show higher rates of turnover and have overall poor performance. The extent to which work environment fulfils employees' expectations, needs and values represent the level of person-environment fit.

2.7.2. Employees' Involvement

The perception and active participation of employees in organizations' decision-making process is defined as employees' involvement as Divina, (2008) have defined. Others separated the difference between job involvement and employee involvement as the former emphasizes the degree of attachment an employee has towards their job, while the latter refers to the extent they are given the opportunity and empowerment to participate the process of decision making and whether employees can actually influence such decisions Newstrom, (2007:206). A number of studies have identified some management practices that encourage employees' involvement, including recruiting the right employee in the first place, providing training and skill development, job security, and performance-based payment policies. Employee involvement can have a positive effect on their performance, wellbeing, creativity and innovation. For instance, a highly engaged employee will develop improved decision-making capability; will show commitment, low turnover, and high productivity. The concept of employee involvement has four main dimensions: interaction, influence, autonomy and information sharing.

Recently, scholars exerted more emphasize on understanding employee involvement and participation by arguing that the out-dated models of motivation were replaced with High Involvement Work Practices (HIWP) which is the modern HRM strategy practices that focus on engaging employees through the application of attractive work practices (Boxal, Hutchison and Wassenaar, 2014). Also, HR scholars and practitioners argued that organizations adopting HIWP strategies tend to have lower costs, enhanced employee motivation, higher productivity and increased innovation

(Boxal, 2009). Employee involvement is achieved when employees perceive and feel that (a) they have the ability and the empowerment to make decisions in their working environment (b) they are shared with necessary information for making such decisions (c) they have the opportunity to acquire any knowledge-gap that hinders them from making decisions and (d) they are rewarded and recognized when they improve the effectiveness and performance of the organization as the result of their involvement in the decision-making process. The attributes of power, knowledge, information sharing and reward must be accompanied together to influence and add value to the decision-making process. For instance, information and knowledge without power and reward can lead to lower motivation and frustration since employees cannot utilize their expertise. Employee involvement can be studied as a group and individual level as both levels promote a sense of collectivity and predict the extent to which employees can assume extra role behaviour in an organization's divisions and workgroups.

Previous studies narrowed employee involvement by limiting it only to participation in decision-making, but in this study, we operationalize it as a multivariate concept that covers both participatory and perception process. The reason is when participation in decision-making is examined in isolation; it is found that the participative process alone does not contribute to better performance or the perception of employees. A meta-analyses study conducted in this regard reported participation itself does not increase productivity, but when it is combined with value creation attributes (e.g., information sharing, reward, autonomy and recognition) (Spector, 1986).

2.8.3. Organizational Citizenship Behaviour (OCB)

OCB is a positive and constructive behaviour that was first defined by (Organ 1988:91) as "*individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate, promotes the effectiveness and efficiency of the organization*". It is discretionary and voluntary behaviour beyond the job requirement which is not recognized in the formal setting of the reward system, but of vital to the proper functioning of an organization as (Organ, 2006) have suggested. The definition of OCB covers three main characteristics: (a) it is a voluntary behaviour that not included in the formal contract of employees, (b) it is a positive behaviour which is essential to the effectiveness and efficiency of the

organization and (b) it reflects the degree of commitment and loyalty employee have towards their job and the organization. Innovative organizations with innovative climate require workers who will not only perform their duties, but also perform beyond their contracted role as the flexible nature of the workers' role in modern organizations necessitated workers to perform beyond their specified obligations. This voluntary act of OCB has an observable effect on individual and organization's performance because it is a productive behaviour in which employees help each other to meet deadlines and create a sense of belonging and supportive working environment. It is expected that employees with higher OCB are more likely willing to share knowledge with other co-workers and it is assumed it mediates the relationship between HRM practices and organization's innovation outputs predicting whether employees will show creativity and innovative work behaviour in an organization. The proper implementation of HRM practices, positive work environment, employees' loyalty and commitment create OCB.

Several studies have reported that OCB acts as a performance indicator of individuals, teams and organizations, but the question is how it is created and under what conditions this behaviour is felt? Although the real driving force of OCB may be disputed between authors, according to Organ (2006:95), the factors that constitute to such behaviour are those relating to attitudes (e.g., job satisfaction, employee engagement, motivation, and the level of trust between employees and supervisors), and leadership style (e.g., supportive leadership, transformational and transactional leadership). This collective behaviour creates a friendly atmosphere that influences the perception of socio-organizational climate by supporting innovation Organ, et al., (2006). Such socio-organizational climate is the result of proper implementation of HRM practices, fit between organizational environment and individual characteristics that facilitate employees' innovative work behaviour. A worker who exhibits OCB is obedience to the organization and acts a desirable manner by respecting its rules through conducting their jobs. They are loyal to their organizations' goals and committed to staying in the long run. These loyal employees voluntarily participative in organizational activities such as attending meetings, suggesting opinions and are more involved in organizational issues.

2.8. Organizational Innovation

Organizational innovation has been defined as using new knowledge (e.g., technological or market related), creative ideas and skills to offer a new (or improved) product or service that customers need to improve business practices (Sung, and Choi 2014). This can be a new process adopted, services provided or systems improved. It is widely accepted that innovation is the key driver of today's economic growth and development, and the key source of the innovation process is the knowledge, behaviour, and skills of the intellectual capital of the organization. This means that the important element for sustainable innovation is the human capital side of the equation. For instance, and Sung and Choi, (2014) reported in their paper the existence of a strong association between AMO-enhancing HRM practices and organizational innovation. Based on this, we can argue that employees who are equipped with KSA (knowledge, skills, and ability), motivation and empowerment are the drivers of organizational innovation.

Although there are several categories of innovations (Damanpour and Evan, 1984), normally they can be differentiated on the basis of their nature such as whether innovation is technological-oriented or administrative-oriented. The former is related to changes in products, services, production processes while the latter involves changes in activities, social processes and structures. At the same time, innovations can be described by the reference to their novelty and risk; radical or incremental in nature. It is also important to mention that creativity is critical to innovation, but they are not synonymous. Innovation can be described as successful implementation of creativity which is more subjective and context-specific (Meron, Erez and Neveh, 2004) and does not necessarily mean that there is any economic value for the persons concerned (Anderson et al., 2004). For that reason, we emphasize on innovation and employee innovativeness, rather than on creativity. Hence, the present study will explore the technological innovation which covers product and service innovation.

2.8.1. Product Innovation

Product innovation is defined as the development of a new product or changing the characteristics of the existing product's features and design. Therefore, it can be either introducing a new product or service to the organization or marketplace or adding value to the already existing product to satisfy the market needs (Damanpour and Evan,

1984). In this study, we operationalize product innovation both offering a new product or service to the marketplace and improving or adding value to the existing products. The kind of innovation in place is a function of the kind of people who are in the organization because when developing new products or services, organizations need creative, skilful employees who are ready to take risks, tolerant towards ambiguity and uncertainty according to (Barney, 1991).

The creation of sustainable and successful product innovation relies much on human capital capabilities, their skills, and information technology as inputs (Nonaka and Toyama, 2005). In another word, the key driving force that creates long-lasting innovation of any kind is employees' training and development programs achieved through learning on-the-job and knowledge sharing across the organization as argued by (Nonaka and Toyama, 2005). The role of an innovative climate as a driver of product innovation has been recognized because it is assumed that informal communication, a supportive working environment, and collaborative culture influences positively productivity and performance.

2.8.2. Process Innovation

Process innovation is another form of technological innovation, which is viewed as the creation of new ways of doing work or altering the current process to improve quality or reduce the cost of production (Damanpour and Evan, 1984). Process innovation brings many benefits to firms and leads them to achieve competitive advantage. However, many attempts of process innovation have failed in the past years due to lack of critical contingencies that contribute to such innovation according to (Douglas and Judge, 2001). The critical contingencies are meant here any factor that contributes to the success of the innovation. This includes a high level of decentralization that allows lower-level managers to solve problems as they occur, flexible working hours and continuous training to all levels of employees**.**

2.9.Summary: AMO-enhancing HRM and Organizational Innovation Literature

As per the literature considered in this study, HRM practices do not necessarily lead to neither better organizational innovation climate nor innovation; rather, they influence attitudes, skills and behaviours of employees as organizations achieve their goals through people (Guest, 1997). This influence is recognized through the effect of the mediating variables that explain how HR practices influence organizational

performance. This is the argument of our study that HR-innovation link is understood through employing the mediating variables that are termed as the "black box" by many researchers (e.g., Huselid, 1995). We are intending to determine the role of the mediating model (HR outcomes and innovative climate) of the relationship between AMO-enhancing HR practices and organizational innovation. As Kinnie, Hutchinson, Purcell and Swart (2006:41) stated, due to the essentiality of employees' knowledge, attitudes and behaviour for organizational survival and innovation, AMO-enhancing HR practices develop human capital in the three following ways:

(a) Ability-enhancing HR practices (training and development, hiring and selection)
(b) Motivation-enhancing HR practices (job design and performance-based pay)
(c) Empowerment-enhancing HR practices (autonomous team and communication)

In other word, human capital achieves organizational goals (e.g., innovation) when three conditions are met in the workplace:

i. Employees have the capacity to perform (ability)
ii. They are willing to do so (motivation) and
iii. Organizations provide the opportunity to perform their work (empowerment)

Based on this argument, and mobilizing AMO framework, we argue that these AMO-enhancing HR practices impact employees' innovative behaviour which leads the creation of an innovative climate and organizational innovation. The logical reason behind dividing HR practices into sub-dimensions is that according to Jiang et al., (2012a), different HR practices have different impacts upon employees and organizations. This is in line with the argument of several authors who pointed out that HR practices can be summarized as having two basic functions: (i) developing an effective human capital by investing in them to improve their expected outcomes and (ii) expectation-enhancing HR practices intended to improve employees' contribution towards the achievement of organizational goals (Batt and Colvin, 2011). For instance, in his meta-analysis article, Subramony, (2009) divided HR practices based on their effects on business performance. Also, Minbaeva, (2013) have adopted the same model to theoretically explore the effect of HR practices on organizational knowledge-based performance (e.g., innovation). The author specifically emphasized the importance of understanding the "black box" phenomena and the mechanism through which various HR practices contribute to better organizational performance. However, none of the

above researchers empirically explained how this relation works. To fill this gap, we intend to justify the role of AMO-enhancing HR practices and organizational innovation in connection with the mediating model of HR outcomes and innovative climate.

Since ability-enhancing HR practices relate positively to the development of an effective human capital more than other employees' characteristics, such as their motivation and empowerment. Therefore, it is necessary to consider ability-enhancing HR practices as synergies reinforcing on each other. The other good reason for dividing HR practices into bundles is that some business sectors (e.g., communication companies, banks and law firms) require a qualified intellectual human capital with professional experience in their respective industrial sector. This highly qualified intellectual experience is based on tacit knowledge that provides competitive success in the labour market. Due to this, organizations are required to attract, attain and train both potential and current employees and this can only be achieved through implementing ability-enhancing HR practices. After qualified employees are attracted and trained, they need to be motivated and engaged in their jobs to perform beyond their roles by using motivation-enhancing HR practices. Additionally, well-trained and motivated employees must be communicated with the right information and allowed a certain reasonable level of autonomy and flexibility (empowerment-enhancing HR practices).

Employees' competitiveness and ability to work in a challenging environment is supported by having the necessary skills and knowledge and it is achieved through implementing ability-enhancing HR practices (training, development, hiring and selection). While Motivation-enhancing HR practices (performance-based pay and job design) increase employees' willingness to work beyond their role and to develop positive organizational citizenship behaviour (OCB) as this aligns both intrinsic and extrinsic motivators needed for citizenship and satisfaction behaviour. At the same time, the perceived climate of support and participating decision-making process in the organization is enhanced when empowerment-oriented HR practices (communication and teamwork) are adopted.

The ability-enhancing HR practices encompass hiring and training-related practices which primarily focus on employees' ability, skills and knowledge, as they are the prerequisite for employees' discretionary and innovative behaviour used for innovation process (Subramony, 2009; Aryee, 2013). The motivation-enhancing HR practices are

aimed to direct employees' efforts towards the achievement of the organizational goals by aligning their intrinsic and extrinsic interests with that of the organization through attractive job design and performance-based rewards. Whereas, opportunity-enhancing HR practices focus on empowering employees through inclusive, effective communication and adopting self-managed teams to facilitate employee participation in decision making and to help them think out of the box and initiate innovative solutions (Subramony, 2009; Gardrer et al., 2011).

On the other hand, the importance of employees' innovative behaviour is derived from the fact that in order organizations to survive, they have to remain competitive as the business environment is ever changing with a high level of uncertainty (Prieto and Perez 2014). It is obvious that organizations achieve competitive advantage through either differentiation or lower cost strategies and it is the individuals in the organization who makes these strategies happen by process improvement or differentiation from competitors through innovation. According to Shipton, Fay, West, Patterson and Birdi, (2005), organizations are required to create the appropriate conditions of innovation through motivating and empowering employees and establishing an organizational innovative environment that supports and rewards innovative behaviour.

The literature reviewed indicates that innovative-oriented HR practices (motivation, ability and empowerment-enhancing) have a critical impact on increasing employees' HR outcomes and innovative behaviour. The organizational climate is an indication that employees understand and have a positive perception of the attributes of organizational activities (Neal et al., 2005). The expected HR outcomes stimulate employees' discretionary behaviour in achieving the needed motivation. In this study, we argue that HR outcomes need to embrace motivation, knowledge sharing, job satisfaction, employee's participation, and organizational citizenship behaviour. Additionally, support for innovative climate covers flexibility to change, problem-solving and ambiguity tolerance culture as workers only innovative when these characteristics are in place. As the authors indicated, individuals exhibit innovative behaviour when they are working in a supportive environment (Amabile, 1996). Shadur et al., (1999), mentioned that this innovative climate is the result of perceived innovative-oriented HR practices that influence employees positively. The role of organizational climate in organizational innovation is based on the argument that AMO-

oriented HR practices have strategic value in an organization due to its effect to generate an innovative climate. Moreover, employees' assumption of perceived AMO-oriented HR practices shapes their understanding of the underlying philosophy of organizational climate (Bowen and Ostroff, 2004).

However, like Wright (2011), believes AMO-enhancing HR practices are more effective when it can create the best fit between strategy, employees' expectation, culture and climate to send the right message that ensures the common perception among employees. Innovative climate plays a mediating role in the relationship between AMO-enhancing HR practices and innovative outcomes (product and administrative). This means HRM practices affect organizational performance (e.g., innovation) through ability, motivation and opportunity components (Lepak et al., 2006; Jiang et al., 2012). For instance, comprehensive recruitment, selective hiring and extensive training are designed to make sure employees have the ability and skills required for their specific task. Performance-based pay and attractive job design are HR practices that enhance employees' motivation. Finally, employees' involvement, participation and forming autonomous teams are HR practices that empower employees to effectively use their ability and motivation to contribute to organizational goals (e.g., innovation). Creating a sustainable organizational innovation climate needs the utilization of AMO-oriented HR practices to facilitate the transfer of knowledge, skills and motivation in the innovation process.

In summary, to ensure employees remain innovative in the long-run, organizations should provide: (a) the enabling factors of organizational innovation (e.g., ability, motivation and opportunity), (b) the mechanism through which those enabling factors should be utilized (e.g., innovative climate) to create an innovative culture and (c) retaining an innovative work behaviour-oriented work practices that empower employees towards the achievement of organizational outcomes in the long run.

3. RESEARCH METHODOLOGY

3.1.Research Design

A research design is a guiding roadmap for data collection, its measurement, and analysis to answer a research question. It describes the overall research plan of how the researcher will obtain answers to hypothesis and their operational implications to the last stage of data analysis (Cooper and Schindler; 2008:140). Research design explains the research problem structure (e.g., its framework and organization of the relationships among variables) and provides the strategy of obtaining empirical evidence on those relationships (Meyers, 2006).

As this study seeks to determine the relationship between HRM practices and organizational innovation by considering the mediating model of employee HR outcomes and innovative climate, a descriptive survey method is adopted. This is because we considered several research designs described by scholars (.e.g., Cooper and Schindler 2008; Zickmund 2003 and Mugenda and Mugenda, 1999). Researchers stated that the study objectives, the data collection period, and the nature of the analyses that will be performed must be taken into consideration before a research design is utilized**.** Thus, putting in mind these important factors, a cross-sectional descriptive survey research method is the research design of our study. Cross-sectional survey method is the process of collecting primary data at a point in time through either online or in person. That is to say, each participant answers only one questionnaire, once during the entire data collection period.

The cross-sectional survey method is considered as the most popular research design in social science studies that enables the researcher to gather data from a large population economically in testing the formulated hypothesis to answer a research question. In survey research method, quantitative method is mostly used which requires the use of standardized scales in order to describe and measure the relationship among the studied variables. For instance, Karami, Rowley and Analoui, (2006) investigated 120 articles published in top 20 Management Journals during the period of 1991-2000 and found that the survey questionnaires are the main tool adopted in management studies.

Unlike qualitative research design, the utilized research design in this study (quantitative) is able to explain and predict phenomena through theory testing by

employing larger probability sampling (Cooper & Schindler 2008:165). The Table below briefly summarizes and compares qualitative and quantitative research designs:

Table 3.1: *Comparison of Quantitative and Qualitative Methodology*

	Quantitative Methodology	**Qualitative Methodology**
The connection between theory and data	Deduction	Induction
Relationship to the research process	Objectivity	Subjectivity
Inference from data	Generality	Context

Source: Morgan, 2007:71

3.2. Statement of the Problem

Through assessing how HRM practices affect organizational innovation via the mediating innovative climate and HR outcomes, this study will tackle the following challenges:

Despite the growing body of studies in the field of HRM-performance, the simple question that Becker posed: "*how does HRM practices influence organizational performance*?" seems unanswered in empirical scholarly publications due to the lack of clear understanding and complexity of potential mediating factors and their effects on HRM/innovation links (Asta and Stankeviciute 2010:426). Theoretically, many researchers found strong evidence that some HR practices contribute to organizational innovation positively, but they are less clear as to exactly how this relationship works and its underlying process through which this effect takes place. Therefore, this is the main problem that we will tackle to answer. This is because some past studies that examined HRM/innovation link on one hand, and organizational innovation and performance, on the other hand, have provided mixed, contradictory findings and limitations. (Laursen and Foss, 2003; Rosenbusch, Brinckmann; Bausch, 2011). These limitations include ambiguity of the underlying mechanism through which HRM practices contributes to innovation, great disagreement on what constitutes as a "black box", the use of less sample size and response rate, and utilizing subjective measurement tools. Theorists have underlined the scarcity of existing empirical studies that investigated extensively the role of key mediating elements that connect the utilization of HRM practices to firm innovation. For instance, Hannele and Diehl, (2016) analyzed the most 35 cited HRM-innovative related published articles in the last

two decades and found the existence of theoretical gap problem highlighting the need to develop theoretical and empirical model to explain better the situations that HRM affects innovation under AMO (ability, motivation, and opportunity) framework. The content of the "black box" and its effect is also one of the undiscovered areas in HRM/innovative link and it remains poorly understood according to (Foss and Larson, 2003:2).

Furthermore, those studies that addressed the effect of mediating innovative climate in the relationships between HR practices and organizational innovation have mostly taken place in developed countries (Grimpe and Sofka, 2009; Liu and Buck, 2007). Also, their sometimes-conflicting findings need to be assessed further in developing countries. Because this inconsistency raises a concern of whether such evidence can be supported or rejected in the context of developing countries and yet this to be discovered generally in Africa and specifically in Somalia.

Therefore, the above previous research limitations reveal the existence of a considerable research gap problem that worth investigating and it is what motivates the researcher to do this study.

3.3. The Objective of the Study

The main objective of this study is to determine the relationship between HRM practices and organizational innovation by considering the influence of the proposed mediating model of HR outcomes and innovative climate by using Structural Equation Model (SEM). However, the study also intends to achieve the following specific objectives related to the main aim stated above. These objectives are to:

a. Examine the extent to which ability-enhancing HRM practices (recruiting and selection, training, and development) contribute positively to HR outcomes
b. Find out whether motivation-enhancing HRM practices (performance-based reward and job design) contribute positively to HR outcomes
c. Determine whether opportunity-enhancing HRM practices (teamwork and communication) contribute positively to HR outcomes.
d. Assess whether HR outcomes (job satisfaction, employee involvement and organizational citizenship behaviour) mediates the relationship between HRM practices and organizational innovation (product and process innovation).

e. Examine whether innovative climate mediates the relationship between HRM practices and organizational innovation (product and process innovation).
f. Investigate whether innovative climate affects organizational innovation positively.

3.4. Hypotheses Formulation

In an attempt to assess the above-mentioned research problem, this study will test the following hypotheses that have been developed based on the literature review and theoretical evolution of the subject matter of the research under investigation.

H_1. ***Ability-enhancing HRM practices (e.g., recruiting and selection, training, and development) positively contribute to HR outcomes (e.g., job satisfaction, employee involvement and OCB).***

This hypothesis is derived from a behavioural perspective approach that assumes higher organizational performance, including innovation, is achieved only when HR-related outcomes are realized first. Normally, HR practices including recruitment, selection, training and development are designed to create a discretionary behaviour which is necessary for any innovation-supportive organizational environment Wright, (2013:8). The AMO framework also argues that providing skill-enhancing HR practice shapes individual productive behaviour, which increases employees' performance (Martin, 2016:1042).

H_2. Motivation-enhancing HRM practices (e.g., pay for performance and job design) positively contribute to employee HR outcomes (job satisfaction, OCB and employee involvement).

The argument of this hypothesis is derived from AMO framework that states employees who receive intrinsic and extrinsic motivation feel obliged to return in kind through developing positive attitudes towards their organization such as satisfaction at work, trust and long-term commitment to the organizations' goals (Martin, 2016:1042). Intrinsic benefits can be a flexible job design, skill variety, and job rotation, whereas extrinsic rewards include higher payment benefits, fair remuneration policy and performance-based appraisals. Motivation-enhancing HR practices align individual and organizational interest together in a way that both achieve their goals.

H_3. Opportunity-enhancing HRM practices (teamwork and communication) positively contribute to HR outcomes.

The rationale of the expected relationship between opportunity-enhancing HRM and HR outcomes has been debated about in the literature. For instance, according to (Paauwe, 2009; Guest, 1997), HRM practices contribute to organizational performance through impacting HR outcomes. The theoretical framework of AMO suggests that empowering employees through knowledge sharing, participation in decision making and teamwork will contribute to certain attributes including job satisfaction, trust and commitment of the employees (Appelbaum, Bailey, Berg, and Kalleberg, 2000). Therefore, this hypothesis intends to test whether autonomous teamwork and communicating employees with company goals through providing effective communicating channels with top management can facilitate satisfaction in job content, organizational goals and other productive behaviours including OCB.

H_4. Innovative climate positively contributes to organizational innovation.

This hypothesis recognize the critical role of innovative climate as a driver of both service and product innovation in organizations. According to the assumptions of the AMO framework, the existence of positive discretionary behaviour in the workplace (e.g., support for innovative climate) influences the overall performance of organizations (Amabile et al., 1996). Also, this proposed hypothesis is supported by the assumption of social exchange theory that argues that the existence of an innovative climate strengthens employees' perceptions that innovative work behaviour is valued and supported by the organization which encourages them to repay in the form of creativity and innovation (Bos-Nehles and Veenendaal, 2017:3).

H_5. HR outcomes of job satisfaction, employee involvement, and organizational citizenship behaviour mediate the relationship between AMO-enhancing HRM and organizational innovation (product and process innovation).

Theoretically, the authors of Strategic HRM practices have agreed that HR employee outcomes are considered as one of the key significant mediators in the relationship between HRM practices and different organizational performance (Jiang et al., 2013:1453). To examine the extent to which HRM practices can influence firm's innovative performance by affecting first employees' HR outcomes, this hypothesis intends to test the existence of a mediation role in which different components of HR

outcomes (job satisfaction, OCB and involvement) can mediate the relationship between AMO-enhancing HR practices and innovation.

H_6. Innovative climate mediates the relationship between AMO-enhancing HRM and organizational innovation.

Based on the work of a good number of scholars (e.g., Ostroff and Bowen, Le Park et al., 2006, Bos-Nehles and Veenendaal, 2017:8) innovative climate is considered as a key intermediate mechanism that explains how and why HRM practices foster organizational performance. On this basis, we propose that innovative climate mediates the relationship between ability, motivation and opportunity-enhancing HRM (AMO) and organizational innovation.

3.5. The Significance of the Study

At a broad level, the study is important because it will contribute to our deeper understanding of strategic HRM literature by looking into the effects of several critical "black box" elements that link HRM practices to organizational innovation performance. Both the literature and findings of this research are expected to contribute specifically to academics and HR professionals in the following ways:

First, many researchers have avoided tackling the indirect relationship between HRM practices and performance and only focused on the linear direct relationship. The introduction of a new mediating model of HR outcomes and innovative climate is an attempt to address the simplistic input-output approach of past studies in the relationships between HRM-innovative performances. Thus, the significance of this study lies in answering many previous empirical research writing calls in the HRM-innovation link by shedding more light on how this relationship works and in answering the question raised by Becker: how and why HRM practices contribute to increased performance? (e.g., Sung and Choi, 2014:409; Hannele and Diehl, 2016:17). Secondly, the researcher hopes that by proposing and empirically testing the role of HR outcomes and innovative climate model, this study will reveal the extent to which AMO-enhancing HR practices impact employees' attitudes and organizational innovation. This is important for practitioners and theorists as employees are the cornerstones of organizational innovation and it is very important to discover clearly what HR policies influence their attitudes and behaviour so that they show innovative work behaviour at the workplace. When managers are aware of the specific HR practices, which foster

discretionary innovative work behaviour, it will be easy for them to plan and implement the most appropriate HR policies that stimulate innovation and performance. Thirdly, by implementing the expected recommendations, organizations can increase their innovation, growth and performance, which increase employment and productivity within their local environments. In this way, economic growth will be achieved and the wider society gains the benefits of high-performing organizations. The study will also provide a theoretical explanation and empirical evidence about how employees' perceived HRM practices contribute to innovation and the specific HRM practices that contribute positively to desirable work-related attitudes and organizational innovation. This will form a basis for further research grounds in this matter. Thus, the research is expected to contribute to exploring the knowledge gaps and in understanding this concept deeply which will be accessible to organizations and human resource management researchers. Finally, the result will contribute to the creation of new knowledge findings that will support or reject the contradicting previous studies' findings.

3.6. The Research Model

The model presented in Figure 3.1 is developed to guide the researcher in assessing the proposed relationship between certain HRM practices and organizational innovation and the role of the mediating model of HR outcomes and innovative climate. The depicted conceptual framework shows the expected relationships among study variables and is divided as follows:

3.6.1. AMO-enhancing HRM Practices (Independent Variables)

Generally, it is assumed that HRM practices are the main mechanism organizations use to influence their employees' attitudes, skills, and behaviour to effectively perform work as required and hence organizations achieve their goals. In this way, we propose that there are certain HRM practices that influence employee performance outcome in the workplace and also contribute to organizational innovation. Given this consideration, our focus is to explore which HRM practices enhance job satisfaction, employee involvement and OCB so that innovative climate is achieved and how this process actually takes place. HRM practices which are ability-enhancing, motivation-enhancing and opportunity-enhancing HR practices are believed to contribute to creating an innovative work behaviour, innovative climate and innovation in

organizations. The AMO-enhancing HR bundles that we will consider are so-called "best HR practices" including recruiting and selection, training and development, performance-based reward, job design, teamwork, and communication. As shown in Figure 3.1, it is expected that these HRM practices impact the organizations' technological innovation through enhancing firstly, the overall level of employee attitudes and innovative climate in the organization.

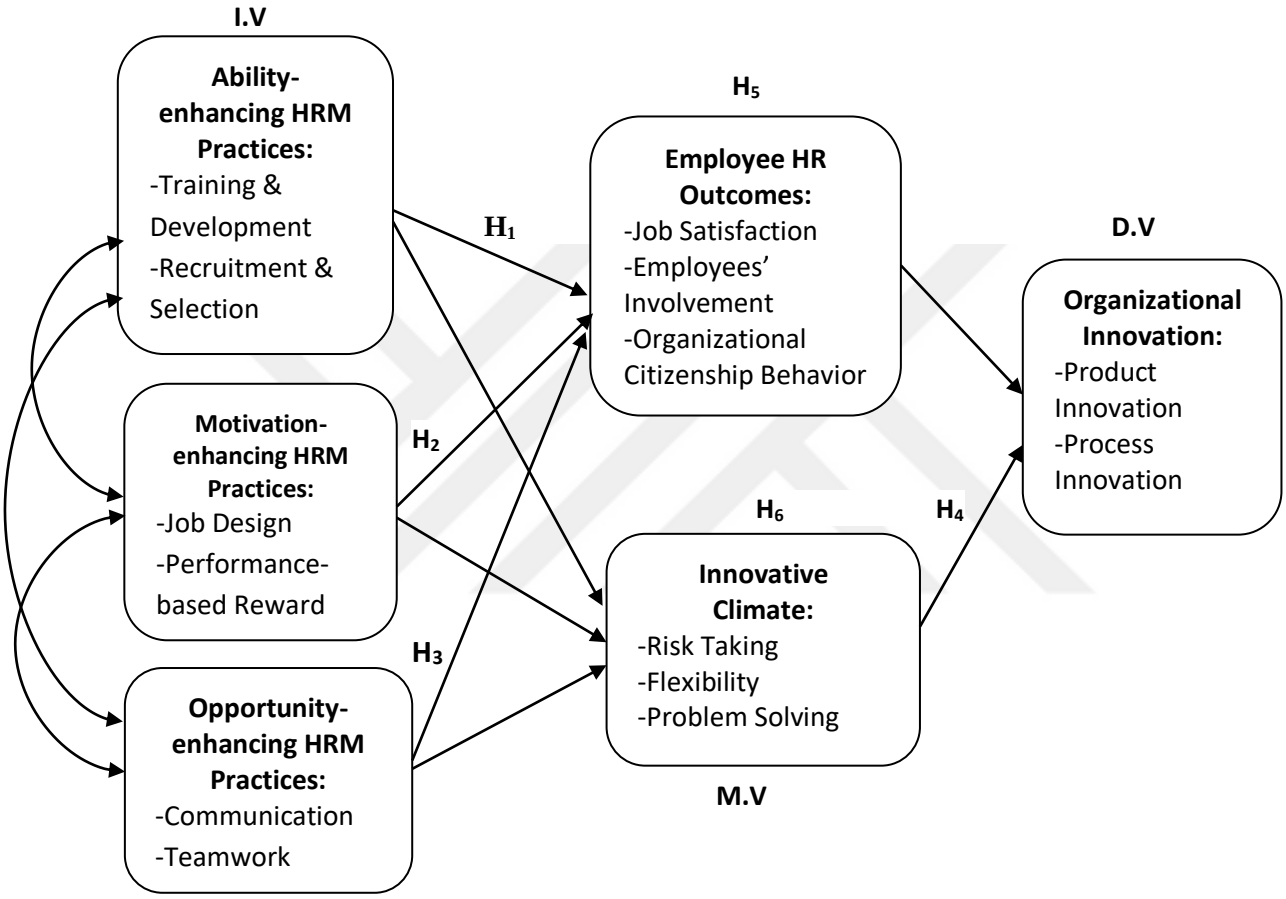


Figure 3.1: *The Research Model*

3.6.2. HR Outcomes (Mediating Variable)

Researchers have previously discussed the influence of HR practices on firm innovation, but the mechanism through which this effect takes place is complex and less investigated (Delery, 1998:289). As a result of this missing insight, some scholars investigated the role of intermediate models of HR outcomes in the HRM-performance link including social climate, employee commitment, loyalty and trust (e.g., Katou, 2008; Paauwe and Richardson, 1997; Paauwe and Richardson, 1997). Based on the context of these ambiguities, we propose that the HR outcomes of job satisfaction,

employee involvement and organizational citizenship behaviour (OCB) act as a mediator that explores how and why HR practices affect organizational innovation.

3.6.3. Innovative Climate: (Mediating Variable)

Many past studies revealed a missing link between HR practices and innovation, which is termed as a ”black box” that connects the relationship between HR practices and organizational innovation which was omitted in some past research (e.g. Laursen and Foss, 2003; Shipton, 2005). Although past studies proposed different propositions explaining how this relationship works, in this research, we assume that the “black box” phenomena in the relationship between HRM practices and organizational innovation can be explained by the innovative climate model which represents the value creation from HRM practices to firm performance. We assume that the relationship between HRM practices and organizational innovation is very weak according to past studies (Becker and Huselid, 2006) and such relationship is mediated by the existence of innovative climate (Sung, and Choi, 2014:398). Therefore, we proposed that adaptability change, creativity, risk-taking tolerance, and problem solving as an innovative climate model that favours the existence of the innovative atmosphere in the organization.

3.6.4. Organizational Innovation (Dependent Variable)

It is widely accepted that innovation is the key driver of today’s economic growth and development, and the key source of the innovation process is the knowledge, behaviour, and skills of the intellectual capital of the organization. This means that the important element for sustainable innovation is the human capital side of the equation. The importance of innovative climate for innovation is based on the assumption that employees acquire those skills required for innovation through interacting with others and through effective implementation of interrelated HRM practices. This is because innovation requires both creations, implementation of novel ideas and valuable business ideas (Anderson et al., 2014). For instance, Bauernschuster, et al., (2009 and Sung & Choi, 2014) reported in their paper the existence of a strong association between innovative work behaviour and organizational innovation. Based on this, we can argue that implementing ability-enhancing, motivation-enhancing and opportunity-enhancing HRM practices are the drivers of organizational innovation through creating a supportive working environment. Basically, mainly we focus on this research on

technological innovation. The technological innovation is further divided into product innovation and process innovation (Damanpour and Evan, 1984). Thus, our present study will deal with technological innovation with its two types (product and process innovation) as they are mostly the end product of effective HRM practices.

3.7. The Population of the Study

The population of the current study consists of all managers and employees of the Somali banks and Telecommunication firms operating in Somalia that meet the following criteria:

1. As the number of employees in a firm is considered as an indication of its size, only service firms with more than 100 employees were selected. The reason is due to the fact that small organizations hardly establish formalized HRM practices.
2. Only private telecom and bank firms operating in Somalia, which are formally registered in the appropriate ministries (e.g., communication and Finance) and meet the criteria set by these ministries are considered. This again ensures that there is a degree of population uniformity as it provides an important indicator of formally established institutions is covered.

These service sector firms are located in different geographical and political locations in Somalia under different regional administrations as shown in Table 3.2:

Table 3.2: *The Private Somali Telecom and Banking Firms*

Location	Firm	Number of Employees
South Central	Hormuud Telecom	3,908
	Nationlink	547
	Premier Bank	256
	IBS Bank	328
North-eastern Somalia (Puntland)	Golis Telecom	2,120
	Somtel Telecom	570
	Amal Bank	405
	Salaam Bank	251
North-western Somalia (Somaliland)	Dahabshil Bank	2,879
	Telesom Company	2,923
	Daru Salam Bank	287
	Total	**14,474**

The level of analysis of our study is the organizational level as we are interested in studying the aggregate perception of employees working in these firms. We included all the three levels of managers and employees in our population since HRM practices directly affect all managerial levels and employees at all levels and by collecting their opinion and experience will provide an opportunity to deeply understand how HRM practices contribute to better employee-driven innovation in the selected Somali service sector firms.

3.8. Sampling Design

As the objectivity concept in quantitative research requires, we adopted a probability sampling technique by ensuring that each element of our population gives none zero chance of inclusions (Cooper and Schindler 2008:374-384). According to Kelley (2003), only probability sampling provides the opportunity to generalize the results obtained from the sample to the population of interest.

According to Neuman (2007), when the population being surveyed is geographically and politically heterogeneous, a stratified sampling technique is used. In the case of this study, since the eleven participating private service sector firms are in different locations, the researcher divided them into subgroups and drew a representative sample from each of these subgroups (called strata). The process of dividing the population into subgroups is referred to as stratification. It is important that the strata should be mutually exclusive in a way that the overall surveyed population should be in only one stratum and no stratum is excluded. After dividing the population into subgroups, a random sampling technique was used to select the required sample from each stratum. This technique ensured that the drawn sample is proportionate to the population of each firm (Stehman, 1996).

The random stratification sampling technique is preferred in this study due to the following reasons:

1. It ensures that the elements drawn from each stratum are proportionate to the number of subjects in each stratum.
2. It ensures the reduction of sampling error by restricting the range of scores within the given stratum.
3. The target population in this study is geographically and politically heterogeneous as the firms are located in different parts of Somalia.

Determining a representative sample size is critically important to get reliable inference about the whole population. Using a sufficient sample size, that is obtained through statistical methods, enables the researcher to determine the least sample size that will provide sufficient data to answer the research questions. There are many different mathematical formulas available in determining the required sample size with a satisfactory precision depending on the sampling error allowed, the degree of confidence and the desired degree of representativeness of the sample. The most commonly used formula for estimating the sample size needed for the finite population (N) is the one developed by Krejcie & Morgan, (1970).

$$s = \frac{--x^2 NP(1-P)}{d^2(N-1) + x^2(1 - \mathrm{P})}$$

Where:

$\chi 2$= Table value for chi-square for 1 degree of freedom to the desired level of confidence;

N= population; in our case (14,747 approximated to 15,000).

P= population proportion (conventionally assumed to be 50 since this yields the maximum possible sample size);

d= desired margin of error or the degree of accuracy (.05); with confidence level of 95%.

Based on the calculations, sample size is estimated to be 375 (see APPENDIX 1).

After using the above formula, the sample size of the eleven participating firms is proportionately distributed as follows:

Table 3.3: *Population and the Sample Size of the Stratified Proportionate Sampling*

No.	Firm Name	Population	Proportion (%)	Responses
1	Hormuud Telecom	3,908	27	101
2	Nationlink Telecom	547	3.7	14
3	Premeir Bank	256	1.7	7
4	IBS Bank	328	2	8
5	Golis Telecom	2,120	14.6	55
6	Somtel Telecom	570	3.9	15
7	Amal Bank	405	2.7	10
8	Salaam Bank	251	1.7	7
9	Dahabshiil	2,879	19.8	75
10	Telesom Company	2,923	20	76
11	Daru Salam Bank	287	1.9	7
	Total	**14,474**	**100**	**375**

Source: The research author

3.9.Data Collection Instrument Development

The research instruments for this study were designed by the researcher based on a comprehensive literature review of HRM practices, HR outcomes, innovative climate and organizational innovation. Based on Norland's (1990) validity approach, the questionnaires were cross-checked by the research project jury consisting of three experts from the Graduate School of Social Science to ensure:

a. Whether the questionnaires are able to measure what it was designed to measure (validity)
b. The questionnaires are supported by the relevant existing literature (content validity)
c. The questionnaires are easy and understandable by the respondents (clarity)
d. The questionnaires are comprehensive enough to gather all the data needed to meet the research purpose

As per the inputs of the Anadolu University Graduate School of Social Sciences experts, the wording, sequence and the number of the questionnaires were modified accordingly. After conducting the pilot study the overall research questionnaire was reduced from 67 to 57 questions, which are intended to measure HRM practices, employee outcomes, innovative climate and how they determine organizational innovative outcomes. Questionnaires are divided into five parts. The first and second parts collect demographic data of respondents (e.g., gender, employment type, and position) and perception of employees towards HR practices (e.g., ability-enhancing, motivation-enhancing and opportunity-enhancing). The third and fourth parts measure HR employee outcomes (OCB, job satisfaction, and employee involvement) and innovative climate variables respectively. In addition, the last fifth part of the questionnaire is designed to measure the level of innovative (product and process) in the organizations. The details of each part are as follows:

3.9.1. Demographic Information

This part contains seven items measured on a nominal scale and it is designed to capture the general information of participants such as gender, age, position in the organization, number of years the participant is working in the organization, employment type and the level of education achieved. The biographical characteristics

of the respondents were collected, as it is important to establish an understanding ground on whether workplace-based behavioural differences exist among participants based on their demographic information. For instance, employees' level of education relates positively to their ability to contribute business performance as Brijlal, Naicker and Peters, (2013) have stated.

3.9.2. HRM Practices (Independent Variables)

This part contains 30 questions developed to measure respondents' opinion, perception, and attitude towards their organization's HR practices within the six areas of HR practices considered in this study. According to Prieto Perez-Santana (2014), organizations achieve a better result when complementary and reinforcing HR practices are used instead of individual practices. Therefore, in order to measure their impact on the organization's operations, we measured HR practices by dividing them into three components in reference to previous research recommendations (Lepak et al., 2006; Jiang et al., 2012a; Prieto & Perez-Santana, 2014). Each of the six HR practices was measured with five questions and through Likert scale that ranged from (1) "Strongly Agree" to (5) "Strongly Disagree". In order to measure the above-mentioned HR practices, we adopted the work of (Snell and Dean 1991; Prieto and Sperez-Santana, 2014) as they are standardized questionnaires that are validated in many previous studies. For instance, more than 1,300 citations of Snell and Dean's (1992) work have been reported (Abu Keir, 2016:150). The extensive use of this scale enhances the reliability of the instrument as many research papers linking HR practices to performance relied upon it (e.g., Huselid, 2013; Jiang and Lepak, 2013).

3.9.2.1. ***Ability-enhancing HR Practices:*** These practices are recruitment and selection and training and development practices. Each of these variables are measured with five items while their Chronbach alpha were 0.83 and 0.88 respectively, according to the work of (Jianwu et al., 2012:10). Whereas hiring and selection practices intend to measure whether an effective recruitment and selection methods are in place, training and development practices enhance employees' skills and abilities by filling knowledge gaps through training and development programs (Yound et al 1996; Preto and, Peruz-Santana, 2014).

3.9.2.2.***Motivation-enhancing HR Practice:*** These are job design and performance-based payment policies and are designed to enhance employees' intrinsic and extrinsic motivation (Preto and Peruz-Santana, 2014). They are measured with ten items with Cronbach alpha of 0.88 for job design and 0.82 for performance-based payment according to the work of (Jianwu et al., 2012:10).

3.9.2.3. ***Empowerment-enhancing HR Practices****:* These are communication and teamwork which are opportunity-oriented practices that empower employees to use their skills and motivation in the workplace. A ten-item scale with Cronbach alpha of 0.8 and 0.71 is used.

3.9.3. HR outcomes (Moderating Variables): This section deals with HRM outcomes and encompasses job satisfaction, employee involvement, and organizational citizenship behaviour. Respondents are requested to indicate by ticking their level of disagreement or agreement with each of the five items of measuring job satisfaction, employee involvement, and organizational citizenship behaviour.

3.9.3.1. ***Job Satisfaction:*** Job satisfaction construct was assessed using five items adapted from Spector (1997). The most widely used sub-dimensions of job satisfaction are satisfaction with pay supervision, co-workers and nature of work as Spector, (1997) argued. The overall coefficient alpha for this scale was 0.87, which is well above the minimum acceptable level.

3.9.3.2.***Employee Involvement:*** This construct measures the extent to which employees have considerable influence over the decision-making process and the degree of attachment an employee have towards their job and organization. Gisela et al., (2012:404) five-item scale was used to measure employee involvement construct with Cronbach's alpha reliability of 0.93.

3.9.3.3.***Organizational Citizenship Behaviour (OCB):*** A five-item scale adopted from Organ and Ryan, (1995) was used to evaluate the extent to which employees show extra role behaviour towards their job and organizational environment. The OCB indicators that we intend to measure are loyalty, obedience, and participation.

3.9.4. Innovative Climate (Mediating Variables): Innovative climate here is meant the degree of innovation support employees perceives and the shared perception of formal and informal policies, practices, and routines of the organization that affects both employees' attitudes and organizational innovation outcomes (Schneider, White, and Paul, 1998). We measured innovative climate variables by using "Support for innovation (climate)" scale of Malik and Wilson, (1995) which was previously developed by Siegal and Kaemmerer (1978). This scale has five questions with the alpha reliability of 0.87 according to Malik and Wilson's (1995:209) previous work.

3.9.5. Organizational Innovation (Dependent Variable): The definition of organizational innovation was given in the questionnaire paper according to West and Farr's (1990) definition to avoid the effect that different innovation definitions can have on participant's views. We focused to measure only one type of innovation that many authors argued to be the end product of effective HRM practices namely technology innovation. Furthermore, technology innovation has two dimensions; product and process innovation (Damanpour and Evan, 1984). Therefore, we measured innovation (product and process) by using a seven-item scale adopted by Anders et al., (2011:7). Participants are requested to indicate their responses to the items the extent to which each statement is applicable to their organization in the period of 2014-2016 through Likert Scale ranging from (1) "not at all" to (5) "to a very great extent". The seven-item scale is intended to capture the number of innovation(s) realized between 2014-2016, its radicalness, novelty and significance for attaining organizational goals. These indicators are considered a direct measure of innovation in the literature (see, for instance, Damanpour, 1991; West and Anderson, 1996; Anders et al., 2011).

3.10. Research Variables Operationalization

Research Variables Operationalization refers to the way constructs in this study are defined and measured. Table 3.4 describes the dimensions of each variable, how it is operationalized, the type of measurement scale used and the number of items:

Table 3.4: *Research Variables Operationalization*

Latent Construct	Variables	Operationalization (Indicators)	Scale Type	No. of Items
Demographic Variables	• HRM department • Gender • Age • Position in Organization • Work Experience • Employment type • Qualification	Respondents 'demographic characteristics are collected to determine whether they are a representative sample of the target population for generalization purposes and to gain a deeper understanding of their nature	Ordinal Nominal Open-ended	7
Independent Variables:	• Recruitment and Selection	• Defining the recruitment process • Recruitment planning • Attracting candidate • Selecting a candidate	Interval	5
AMO-enhancing HRM Practices	• Training and Development	• Training needs assessment • Setting training objectives • Delivering training • Evaluation and feedback	Interval	5
	• Job Design	• Skill variety • Task identity • Task significance • Autonomy • Feedback	Interval	5
	• Performance-based Pay	• Aligning employees and the organization's interest • Linking performance with payment • Providing basic benefits to employees	Interval	5
	• Teamwork	• Transferring expertise and tacit knowledge among employees • Cross-functional teams • Self-managed teams	Interval	5
	• Communication	• Establishing an effective communication channels (upward, downward, horizontal and diagonal) • Active participation and information sharing • Communicating the organization's objectives and strategies	Interval	5
	• Job Satisfaction	• Satisfaction with payment • Satisfaction with supervisors • Satisfaction with co-workers • Satisfaction with promotion	Interval	5

Table 3.4: *Research Variables Operationalization*

Continue

	• Employee Involvement	• Participation in decision making • Interaction • Influence • Autonomy and • Information sharing	Interval	5
Mediator (1): HR Outcomes	• Organizational Citizenship Behaviour (OCB)	• Empowerment • Participation • Obedience • Loyalty	Interval	5
Mediator (2): Innovative Climate	• Innovative Climate	• Risk-taking • Flexibility and Adaptability to change • Creativity • Problem-solving	Interval	5
Dependent Variables: Organizational Innovation	• Product/ Service Innovation • Process Innovation	• Number of innovation(s) in 2014-2016 • Radicalness • Novelty • Significance	Interval	7

Source:The research author

3.11. Data Collection Procedure

This study relies upon both secondary and primary data to determine the relationship between HRM practices and organizational innovation by considering the role of the mediating variables of HR outcomes and innovative climate. The secondary data were collected from relevant books and articles and it was summarized in the literature review chapter. The primary data was also collected using structural self-administered survey questionnaires (see APPENDIX 2).

This data collection research tool was preferred due to the nature of responses required, the large sample size, and the high literacy of the respondents and the ability of this instrument to collect first-hand data at one point in time. The self-administered survey questionnaire is easy to manage and analyse while it is the most reliable and widely used data collection technique in social science researchers. It enables the researcher to design well the questionnaire in a more reliable manner that maximizes the validity and generalizability of responses.

The researcher is mainly concerned with views, opinions, perceptions, and attitudes of employees working at the Somali telecom and banking firms. Such information can be better collected through the use of survey questionnaire techniques. However, self-administered survey questionnaire normally raises common method bias concerns and

honesty of the respondents. This survey research method measures the study variables based on the subjective perception of the participants rather than relying on performance indicators of the surveyed organizations.

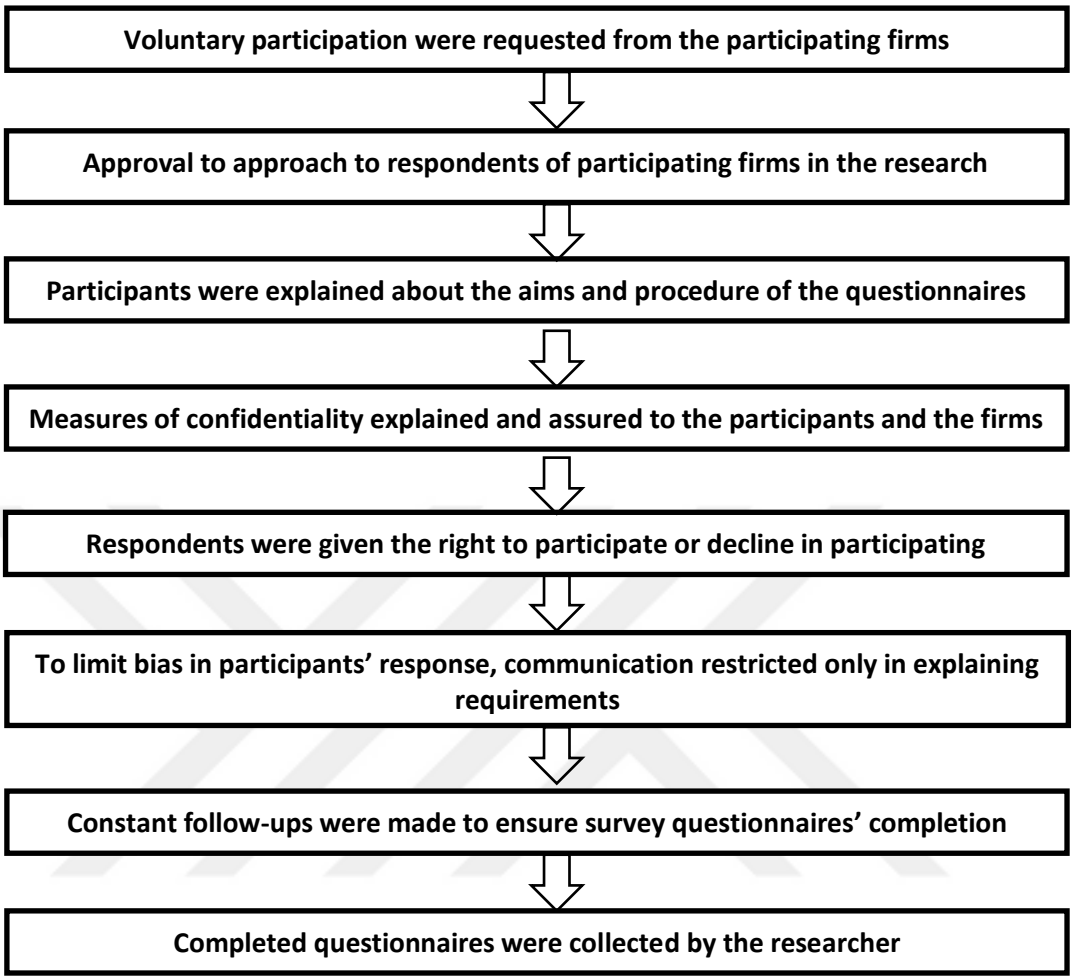
The researcher travelled to Somalia and met personally with the HR and top management of the eleven participating firms. The researcher visited 30 branches of the participating firms scattered in big cities such as *Mogadishu, Bossaso, Garowe, Galkaio, and Hargeysa*. The purpose of this travel was to collect the data in person by requesting firms' voluntary participation and to explain the academic importance of the study. Each of the participating firms' HR department or top management was visited at their office and more detail was given by explaining to them the nature of the study.

After receiving positive participation feedback from the firms, the questionnaires were delivered by the researcher or emailed to each element of the participating firms. Since we adopted a mixed method of collecting data (in person and online), some firms preferred to fill the questionnaires online. The questionnaires were collected after constant follow-ups of visiting, emailing and calling to find out whether questionnaires were received and completed by the appropriate respondents. Some respondents filled the questionnaires in the presence of the researcher, which allowed the researcher to explain any unclear points

In some cases where having access to participating firms was difficult; gatekeepers (contact persons) were used to distribute the survey questionnaires in their organizations. This increased access to the restricted firms and response rates as well. For formality reasons, we requested from the participating firms to officially issue a letter of declaration showing their participation in responding the research questionnaires, however, 7 out of the 11 participating firms accepted this request (see APPENDIX 3).

The diagram depicted below summarizes the steps followed in the process of primary data collection from the eleven participating firms:

Figure 3.2: *The Primary Data Collection Process Map*



Source: The research author

3.12. Data Analysis Method

To analyze the data collected, we adopted Structural Equation Modeling (SEM), which is one of the most common statistical data analysing techniques in quantitative social science researchers (Shu-jen and Cheng, 2011). The popularity of this method is due to its capacity to explain the complex relationships among different variables. Structural Equation Model (SEM) can be defined as a general statistical technique that seeks to represent a hypothesis about the means, variance, and covariance of the collected data. SEM is mostly used for hypothesized model building and testing. There are many types of SEM including path analysis, confirmatory factor analysis and structural regression models. SEM is chosen for this study because of its ability to construct a model using latent variables (variables not measured directly). Also, SEM allows the researcher to develop and test whether a relationship exists between the study variables in the model, the nature of such relationship and its strength.

We preferred SEM over other statistical techniques such as regression because using SEM the researcher can test complex multiple dependent variables, whereas regression controls other variables in the model. Regression was criticized for its perfect measurement assumption that may lead to incorrect conclusions in the data analysed, while SEM takes into account possible measurement errors in the observed variables and tries to minimize both systematic and random errors. While the SPSS 23 software is used for descriptive statistics, Structural Equation Modelling (SEM) of Confirmatory Factor and Path Analysis is utilized to validate the research variables using the Analysis of Moment Structure (AMOS) package for detailed data analysis.

SEM is a comprehensive multivariable technique that is suitable for measuring both observed variables (measured) and latent variables (unobserved). In order to test whether the model fits the data collected adequately, we conducted several tests (e.g., chi-square, comparative fit index, Root Mean Squared Error of Approximation (RMSEA). Schumacker and Lomax (2010), argued that although SEM is an effective technique for analysing complex relationships among variables, its effectiveness is affected by many factors. These factors include the relevance of the research hypothesis, providing adequate sample size, and the nature of measurement tools used. To utilize the effectiveness of this model and to prove or disprove our hypothesized assumptions, we reviewed AMO framework and determined whether its assumptions support the proposed model, adopted the relevant measurement instruments to measure the variables of our model, collected data and conduct preliminary data analysis to verify data validation.

3.13. Pilot Study: Validity and Reliability Test

Validity and reliability are the key indicators of the quality of data collected and result to be attained. Reliability means items in the scale are stable and constant over time if the measurement scale is used in similar situations and methodology while validity here means that participants' responses are accurate and provide a meaningful representation of facts which enables the researcher to reach valid conclusions from the whole sample population studied (Creswell, 2005). Therefore, both reliability and validity are essential in ensuring the research instrument's consistency and stability.

The main purpose of carrying out a pilot survey is to determine the accuracy of each item in a questionnaire, survey completion time and content validity. Through pilot

study, the appropriateness of the instrument such as the use of correct wording and layout can be improved. The pilot study also serves as a consultation tool with participants on clarity and comprehensibility of questionnaires, which should be improved as per participants' contribution and recommendation. To predetermine the validity and consistency of the developed measurement scales, we first adopted items that have been tested for reliability from previous studies with slight modifications to make more relevant to the purpose of the study and context. Second, we conducted a pilot study prior to collecting the main primary data. Therefore, we distributed 70 survey questionnaires to five telecom firms purposefully based on availability in which only 41 questionnaires were received as valid and usable. After analysing the collected data with Statistical Package for the Social Sciences (SPSS) 23, the result showed that the reliability coefficient obtained by the five-part scale was above the minimum acceptable threshold of 0.70 (Nunnally, 1978) except for organizational innovation subscale which scored 0.530. The overall reliability values of our scale were 0.916 while each subscale scored: HRM practices: (α=0.820), HR outcomes (α=0.730), innovative climate (α=0.810) and organizational innovation (α=0.530).

Although the obtained reliability and validity result was almost significant, the following has been implemented to further enhance each subscale's validity:

1. Content validity was done to determine whether each item of the instrument scale is consistency and relates to the main behavioural domains it is expected to measure. In order to validate the instrument scale, items were double checked and divided into sections based on the five parts of our scale (demographics independent, mediators and dependent variables).
2. In reference to participants' feedback, the structure and wording of the survey questionnaires were modified and simplified. For instance, instead of "how different has the innovation (product/service/process) been from other similar organizations?" we adopted: "how different has the innovation been from other similar organizations?".
3. Based on the Cronbach's Alpha table recommendations, the number of questions were reduced from 67 to 57 questions as respondents complained about the large number of questions. One question is removed from each sub-scale and only questions with negative correlations with other items were removed.

4. The number of responses received from the pilot study was quite little compared to the researcher's expectation as some telecom firms refused to participate in this study. Therefore, by consulting with the dissertation supervisor, the researcher decided to extend the target population and included the private banks operating in Somalia. Both telecom and banking firms are private and provide similar services in the service sector.
5. The confidentiality of participating organizations was a major issue that participants commented about since the data collected through survey questionnaires can be used by other competitors as these firms are operating in a very competitive market where there no effective legal regulatory bodies in place. Thus, in order to ensure confidentiality, the names of both participating firms and participants were omitted so that any information identifiable to any organization is not collected.

The above five steps improved clarity and consistency of our scale and the number of respondents are expected to be adequate while the new Alpha Coefficient was calculated again by disregarding the non-significant items as in the table below:

Table 3.5: *Validity and Reliability Test of the Study Variables*

Major Variables	**Number of Items**	**Cronbach's Alpha (α)**	**Reliability Remarks**
HRM practices	30	0.821	Very good
HR outcomes/employee outcomes	15	0.744	Very good
Innovative climate	5	0.810	Very good
Organizational innovation	7	0.810	Very good
Overall scale	57	0.921	Excellent

Source: The research author

Since the Cronbach's Alpha coefficients were within the acceptable range of 0.70 and even higher, the scale instrument of this study is therefore deemed to be adequate and the actual survey was ready to be collected.

3.14. Research Setting: Somali Service Sector

The term research setting here means the place where the primary data were collected. The context of this research is based on Somali service sector firms

specifically the private telecom and banks. The existing banking and telecom industry in Somalia strives to be a technology frontier and innovation-driven businesses. Despite the lack of political stability and regulatory body in the last two decades, Somalia's service industry has managed to keep going. The two main well-established service sectors in Somalia are telecommunications and financial institutions. Below is a brief summary of their background and establishment:

3.14.1. Telecommunications

This industry is considered as the most important sector in Somalia's economy, contributing to technological innovation, employment and economic growth as both (Wilson, 2016:52) and (Abdu & Ali, 2013:54) mentioned. Somalia is currently in the midst of a telecommunications boom driven by Somali private investors backed by experts from China, Korea and Europe, who have created a mass market with the cheapest calling rates in Africa. Private investors have put an estimation of $194 million into Somalia's telecommunications sector over the last ten years Istanbul Conference on Somalia, (2010). These telecom firms operate throughout the country-South central, Puntland and Somaliland regions. They provide a wide variety of services including GSM Mobile services, Internet service, and international roaming services. These telecommunication organizations bring new services to the market by enhancing their business performance, growth, and innovation strategies to outcompete their competitors. For instance, EVC Plus is a new business model (mobile money transfer service) which was unveiled by Hormuud Telecom; Somalia's biggest mobile service provider which pioneered the system of transferring money by mobile phone in East Africa. This new business model is also adopted by Golis and Telecom which are both owned by Hormuud (Abdu and Ali, 2013:54). As the telecom sector has experienced intensive competition among network companies in innovation, new technology and pricing, some of them were forced to disappear from the market in the past few years such as GALCOM, Somafone, and STC Mobile. The main five telephone companies that provide much of the service across the country are Hormuud, Golis, NationLink, Telesom, and Somtel. Every telecommunication company attempts to popularize its services, renew its products, and make innovations in order to become well known and dominate the major part of the market.

Although the Ministry of Posts and Telecom (MPT) oversees and monitors the communication sector in Somalia, yet there are no effective regulatory system or taxes, and no service obligations in place. The absence of regulation has also led to problems with frequency spectrum coordination and interconnection between networks. To address this, in the year of 2017 the Somali Federal Parliament passed the National Communications Law that aims at setting a legal and regulatory framework of the telecom sector. Also, the law is expected to facilitate the process of setting up telecoms regulatory authority according to the (Somali Communications Act, 2012).

3.14.2. Financial Institutions

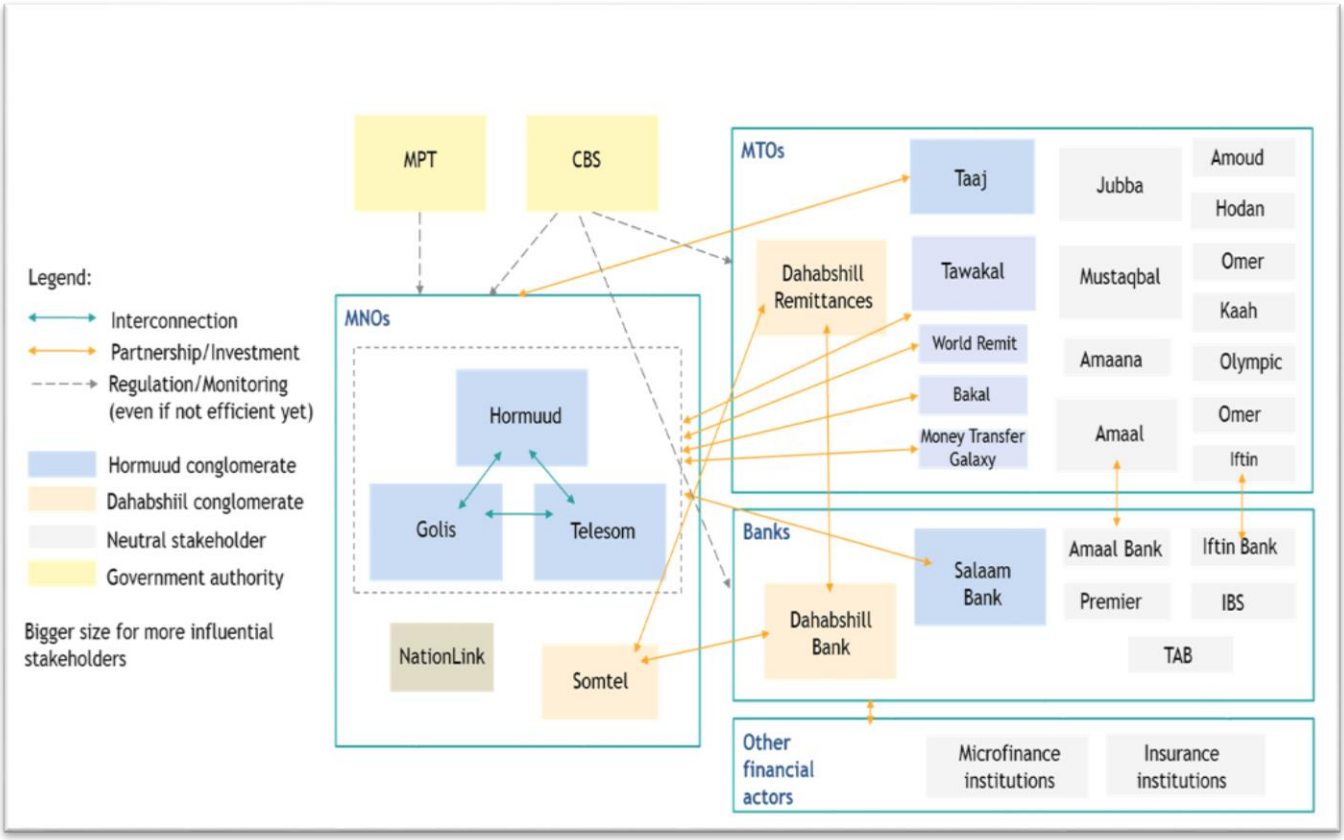
Before the civil war began in 1991, there was an effective financial institutional system in place comprising of the Central Bank of Somalia (CBS) and three commercial banks. All financial systems of the country collapsed in 1991 and depositors lost both their savings and confidence in all financial institutions since then (Ali and Aragie, 2012). The informal financial sector has filled up the gap during the absence of stability and provided some form of basic financial services such as money transfer services and trust-based loans. These privately owned money transfer institutions (*Hawaale system*) played an important role in facilitating international remittance and domestic financial transactions and handle up to $1.6 billion in remittance annually to the homeland (CIA world fact-book statistics, 2012).

The Money Transfer Operators (MTO) have arisen with the hope to fulfil this gap and deliver some of the basic banking services. As a result of this, the Money Transfer Companies established new privately owned financial institutions called Islamic Commercial Banks (Abdusalam, 2012). There are currently six registered privately owned commercial banks operating in Somalia. These are International Bank of Somalia, Salaam Bank, Premier Bank, Dahabshil International Bank, Amal Bank and Daru Salaam Bank. All of these banks evolved and owned by either from telecom firms or the MTO although these banks came into existence very recently, they are providing a wide range of financial services. These include Islamic investment models (*Murabaha, Musharaka, and Ijara*), asset financing (e.g., property, plant, and machinery) and different types of deposit accounts.

However, the Central Bank of Somalia (CBS) was re-opened by the Transitional Government on 2009 and started to assume its responsibilities, although it seems to be

inactive as there is a long way to go in regaining its power and overseeing monetary policies in the country (African Development Bank, 2010). The Central Bank has two primary objectives; regulating the country's economy and fostering a stable and competitive market-based financial system. There are currently two legislations in place within the legal system of Somalia that relates to the financial sector, namely the Central Bank of Somalia Act Law and the Financial Institutional Law 2011 (the Central Bank of Somalia Act, 2011). Diagram 3.3 explains the major players in the Somali telecom and banking industry, their partnerships and the regulatory body in this market.

Figure 3.3: *Major Competitors in the Somali Telecom and Banking Industry*



Source: WBG, (2017) Mobile Money in Somalia: Household Survey and Market Analysis

4. DATA ANALYSIS

4.1.Data Normality Test: Skewness and Kurtosis

The normality test ensures whether the data collected from respondents are normally distributed. It is the extent to which the distribution of data meets the requirements of normality (Hair et al., 2010:36). Normality test can be computed by either univariate normality or multivariate normality whereby the former examines how each item in the data set is distributed while the latter method aggregates different items to represent a common factor. Generally, if multivariate normality is achieved, it provides sufficient evidence that the univariate variables are also normally distributed.

To test whether our data is normally distributed, we conducted Skewness and Kurtosis normality tests that describe the shape of the data. Skewness evaluates the asymmetry of the data while Kurtosis measures the concentration of the data compared to the normal distribution. To determine whether the distribution of data violates the assumptions of data normality, the z-values of Skewness and Kurtosis should be calculated. The Skewness and Kurtosis values should be closer to zero as possible. However, in reality, data are often skewed and cathartic. A small departure from zero may not have an impact as long as these values are not too large compared to their Standard Errors (S.E). Skewness and Kurtosis are calculated by dividing their values by their S.E. The outcome is the z-value which should not exceed an absolute value of ±2. 58 for Skewness and up to 8.0 for the Kurtosis indicating an acceptable level of data normality according to Hair, (2010). Both Skewness and Kurtosis' values can take a negative or positive form and does not represent a problem as long as they are within the acceptable limit (Hair et al., 2010:73, Pallant, 2007:56). However, according to Morgan and Griego (1998:58), if the z-value is not larger than 5.5, the Skewness and Kurtosis are not significantly different from a normal distribution which provides substantial evidence showing that the data is normally distributed.

It is important to mention that when using covariance-based statistical methods (e.g., AMOS), the presence of non-normality distribution in the form of Skewness does not pose much concern, whereas a small deviation from normality in form of Kurtosis may have a strong negative impact on covariance or variance (Byrne 2010). Thus, since the z-scores provided in Table 4.1 meets the minimum requirement of data normality,

we can conclude that all the twelve variables in this study did not indicate any serious deviation from normality and the data is deemed to be normally distributed.

Table 4.1: *Skewness and Kurtosis Test*

Variable	Skewness	*SE*	Kurtosis	*SE*	*z*-skewness	*z*-kurtosis
Recruitment & Selection	-0.436	0.126	-0,15	0.251	- 3.460	-0.598
Training & Development	-0.444	0.126	-0,326	0.251	- 3.524	-1.299
Performance-based Payment	-0.318	0.126	-0,439	0.251	- 2.524	-1.749
Job Design	-0.403	0.126	0,275	0.251	- 3.198	1.096
Team Work	-0.316	0.126	0,29	0.251	- 2.508	1.155
Communication	-0.449	0.126	-0,325	0.251	-3.563	- 1.295
Job Satisfaction	-0.417	0.126	-0,265	0.251	- 3.310	- 1.056
Employee Involvement	-0.432	0.126	0,001	0.251	-3.429	0.004
OCB	-0.455	0.126	0,343	0.251	-3.611	1.367
Innovative Climate	-0.563	0.126	0,089	0.251	-4.468	0.355
Organizational Innovation	-0.499	0.126	-0,069	0.251	-3.960	- 0.275

Source: The research author

4.2.Frequency Analysis

In the process of data validation, we excluded all missing values and the overall valid cases were 375 participants out of 500 questionnaires distributed, with a response rate of 75%. The specific demographics of participants are their gender, age, position in the organization, experience, employment type and their level of education. As described in Table 4.2, 85.3% of the overall 375 participants surveyed were Males while only 14.7% were Females. The ages of the respondents ranged between 18 to above 43 years while those aged between 25 to 30 years formed the largest age group representing 49.6% of the sample.

Generally, the survey participants were composed of all the workers, regardless of their position in the organizations from top managers to lower level employees. However, the majority of the respondents were senior managers and supervisors representing 29.1% (n=109) of the sample followed by first level employees 14.7% (n=55), engineers 18.9% (n=71) and customer representatives 12% (n=45). This means a good population of the participants were surprisingly senior managers, even though that was not the initial intention of the researcher. This has, however, enhanced the richness of the data since they have worked for a longer period of time and they are in a better position to provide more accurate information about the implemented HR practices and innovation activities of their respective organizations.

The largest group in terms of years of experience have been working for 2 to 4 years 39.7% (n=149), and the smallest group worked for 8-10 years 8.3% (n=31) showing that 279 respondents had working experience more than 2 years. 94.7% had full-time employment (n=355) while a very small number either had part-time (n=15) or temporary jobs (n=5). Finally, most of the employees surveyed had higher levels of education as 93% (n=352), who have either Bachelor's 60.3% (n=226) or Master's Degree 34.1% (n=126).

Table 4.2: *Demographic Characteristics of the Participants*

Demographic Variables	Frequency	Percent	Cumulative Percent
Gender:			
Female	55	14.7	14.7
Male	320	85.3	**100.0**
Total	**375**	**100.0**	
Age:			
Above 44 years	17	4.5	4.5
Between 18-24 years	49	13.1	17.6
Between 25-30 years	186	49.6	67.2
Between 31-36 years	93	24.8	92.0
Between 37-43 years	30	8.0	**100.0**
Total	**375**	**375**	
Position held:			
Accountant	8.3	8.3	8.3
Auditor	6	1.6	9.9
Customer Care	45	12.0	21.9
Engineer	71	18.9	40.8
Logistics Officer	5	1.3	42.1
Lower Level Emp	55	14.7	56.8
Branch Manager	109	29.1	85.9
Marketing Officer	32	8.5	94.4
Sales Officer	21	5.6	**100.0**
Total	**375**	**100.0**	
Experience (years of work):			
11 years or over	33	8.8	8.8
8-10 years	31	8.3	17.1
5-7 years	66	17.6	34.7
2-4 Years	149	39.7	74.4
1 year or less	96	25.6	**100.0**
Total	**375**	**100.0**	
Type of Employment:			
Part-time	15	4.0	4.0
Permanent full time	355	94.7	98.7
Temporal	5	1.3	**100.0**
Total	**375**	**100.0**	
Education:			
High School	2	.5	
Diploma	16	4.3	.5
Bachelor's degree	226	60.3	4.8
Master's degree	128	34.1	65.1
PhD degree	3	.8	99.2
Total	**375**	**100.0**	**100.0**

Source: The research author

4.3. Model Fit Statistics Used in the Current Study

Since there is no one single rule that can distinguish easily good from poor models, multiple fit indices should be consulted when evaluating the existence of the proposed relationships among measured and latent variables (Hooper, Couphlsn and Mullrn, 2008). The goodness of fit statistics adopted in this study intends to measure how likely the primary data collected fit the proposed model. Different types of fit indices exist in the literature and can be summarized into three main types: Absolute Fit Indices, Incremental Fit Measure and Parsimony Fit Indices (Hooper, Couphlsn and Mullrn 2008; Kline, 2011). Although there are many fit indices under these three categories, few of them were frequently reported in the literature. Table 4.3 summarizes the model fit statistics used in this study and their thresholds.

Table 4.3: *The Model Fit Indices Used in the Current Study*

	The Goodness of Fit Index	**Shorthand**	**Recommended Values**	**Source**
Absolute Goodness of Fit	Chi-Square	X2		
	Relative Chi-Square	X2 /DF	≤ 3.00	Gefen et al., (2000)
	The goodness of Fit Index	GFI	≥ 0.90	Hoyle (1995)
	Root Mean Square Error of Approximation	RMSEA	≤ 0.08	Browne & Cudeck (1993)
Incremental Fit Indices	Comparative Fit Index	CFI	≥ 0.90	Bogazzi & Yi (1988)
	Adjusted Goodness of Fit Index	AGFI	≥ 0.80	Chau & Hu (2001)
	Standardized Root Mean Square Residual	SRMR	≤ 0.05	Arbuckle 2005
	Normed fit index	NFI	≥ 0.90	Hair et al., (1988)
	Tucker-Lewis Index	TLI	≥ 0.90	Bogazzi & Yi (1998)
Parsimony Fit Indices	Closeness of fit	PCLOSE	≥ 0.05	Hu and Bentler (1999)
	Parsimony Normed Fit Index	PNFI	> 0.5	Hooper et al., (2008)

4.4. Confirmatory Factor Analysis

The Confirmatory Factor Analysis (CFA) measurement model was used to specify the relationship between observed variables to their respective latent constructs. We carried out CFA before testing our hypothesized model to ensure whether the measured variables of our study (scale items) are generated by the latent constructs (e.g., AMO-enhancing HR practices, HR outcome, innovative climate and organizational innovation).

The most common measure used in CFA is Maximum Likelihood (ML) as it provides a more reliable measure when the sample size is large (e.g., more than 150) (Anderson and Gerbing 1988; Hair, et al., 1998). According to Bagozzi and Yi (1988), factor loading of each item should be examined for statistical significance. To achieve adequate individual item reliability, factor loading should be equal or more than 0.50 and loadings less than that should be removed unless goodness of fit is achieved.

Before any analysis is carried out it is necessary to validate whether the model specified in the study fits well to the data collected. Model validity depends on two main issues: assessing construct validity and the Goodness of Fit (GoF) indices. Construct validity is the extent to which a research instrument provides an outcome based on the theories derived from each construct (John and Benet-Martinez, 2000). Thus, construct validity is established by examining convergent and discriminant validity. Convergent validity ensures whether the items load significantly under the factors they measure, while discriminant answers whether the constructs measure different dimensions. The second step of examining the model validity is the analysis of GoF indices. The Goodness of fit (GoF) statistics ensures whether data represent truly the underlying theory by measuring how the proposed theory is close to what it was proposed to measure (Hair et al., 2010).

4.4.1. Original CFA Measurement Model (1) of HRM Practices

The HRM practices in this study are comprised of three factors consisting of 30 items and each factor load into 10 items: Ability-enhancing HRM measuring recruitment and selection practices, Motivation-enhancing HRM corresponding to performance-based payment with job design and Opportunity-enhancing HRM measuring teamwork and communication practices. Figure 4.1 shows the output of the proposed CFA measurement model of the thirty original items. It is clear that not all the items have regression loadings greater than 0.50, which is the recommended minimum level that Standardized Factor Loadings (SFL) should meet (Hair et al., 2010). For instance, three items (*Recr_Selec_2, 3 & 7*) in the ability-enhancing HR factor have values of 0.34, 0.27 and 0.24 respectively. Another four items of *Per_BP_15 (0.47), Job_Dsgn_16 (0.33), Job_Dsgn_17 (0.38)* and *Job_Dsgn_18 (0.48)* measuring motivation-enhancing HRM practices construct have also resulted inferior factor loadings. On the other hand, three variables loading into the latent construct of

opportunity-enhancing HR practice revealed poor values *(TeamWork_21=0.38, TeamWork_22=0.44, and TeamWork_23=0.11*). The remaining 20 items demonstrated a significant standardized regression weight ranging from 0.48 to 0.70.

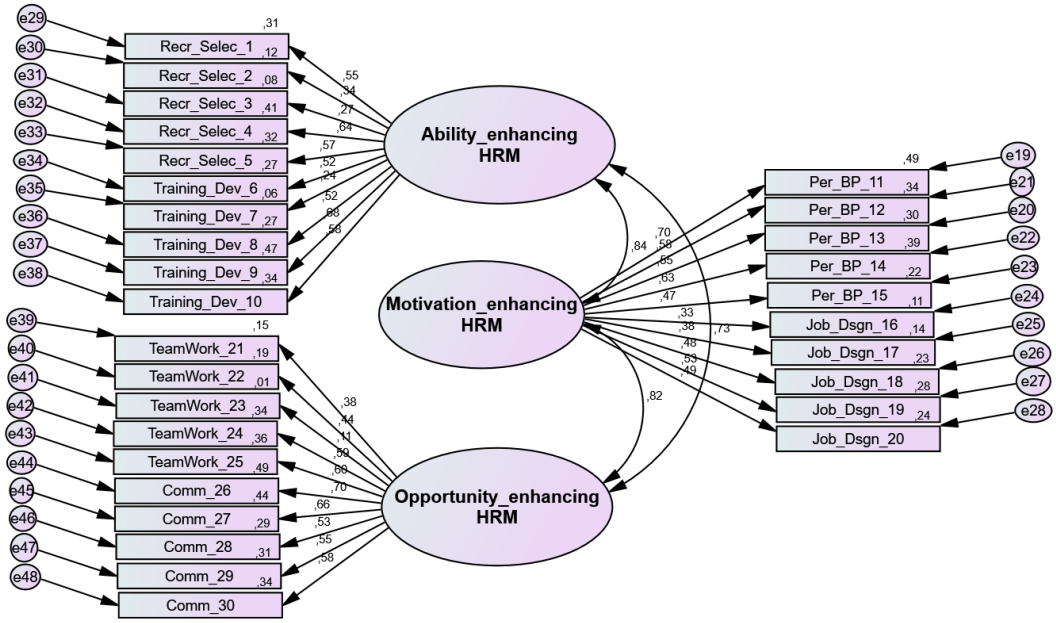


Figure 4.1: *The Original CFA Measurement Model (1) for the HRM Practices*

The global Goodness of Fit Indices (GoF) of model 1 shown in Table 4.4 provides mixed results, as some GoF statistics were equal or higher than the recommended cutoff. For example, the values of Relative Chi-Square (X2/DF=2.51<3), the Root Mean Square Error of Approximation (RMSEA=0.058<0.08), Parsimony Fit Indices (PNFI=0.672>0.5) and Average Goodness of Fit Index (AGFI=0.835>0.80), are all equal or greater than the required values and thus show goodness of fit. However, the rest of the GoF indices such as Standardized Root Mean Residual (SRMR=0.0599>0.05), Comparative Fit Index (CFI=0.825<0.90) Goodness of Fit Index (GFI=0.857<0.90), Normed Fit Index (NFI=0.727<0.90), Tucker-Lewis Index (TLI=0,811<0.90) and the closeness of fit (PCLOSE=0,006<0.050) indicated poor goodness of fit between the collected data and the hypothesized model which requires model improvement through Modification Indices (MI).

***Table 4.4**: The Goodness of Fit Indices for the Original HRM Practices Model (1)*

	The Goodness of Fit Indices	Recommended Values	Model Values	Model Fit Remarks
Absolute Fit Indices	Chi-square (*p*-value)	-	904.839 (0.000)	-
	DF	-	402	-
	CMIN(x2/*df*)	≤ 3.00	2.251	Excellent
	RMSEA	≥ 0.08	0.058	Excellent
Incremental Fit indices	CFI	≤ 0.90	0.825	Poor
	GFI	≥ 0.90	0.857	Poor
	AGFI	≥ 0.80	0.835	Excellent
	SRMR	≤ 0.05	0.0599	Poor
	NFI	≥ 0.90	0.727	Poor
	TLI	≥ 0.90	0.811	Poor
Parsimony Fit Indices	PCLOSE	≥ 0.05	0.006	Poor
	PNFI	> 0.5	0.672	Excellent

Source: The research author

4.4.2. Modified CFA Measurement Model (2) of HRM Practices

The original scale of HRM practices consisting of 30 items was reduced to 20 variables with strong regression loadings (>0.50) except one item (*Job_Dsgn_20=0.480*). Usually, when using SEM it is very rare to obtain a model fit without making modification Indices (MI), especially in complex models. For this reason, sometimes a modification is required to achieve a well-fitting model. MI provides critical information on how to improve the model by recommending changes that can be made to the model Bayrne, (2010). This information reflects the percentage of a possible change in the value of the chi-square if certain parameters are freely correlated. MI estimates the most likely relationships among the observed variables representing the potential change in the chi-square value and potential improvement that can be made to the model. According to Byrne (2010:104), the only Modification Indices that can improve a model is represented by error covariance. Therefore, the meaningful MI recommended by the AMOS output were establishing covariance between several residual errors *(e.g., e4<-->e5, e13<-->e19, e19<-->e28, e26<-->e27, e26<-->e30).*

As presented in Table 4.5, after carrying out the above-mentioned MI, the GoF statistics of the model has increased and the required level of the model fit to the data is achieved. First, the model yielded a chi-square value of 306.676 to 162 Degrees of Freedom and a significant P-value (p<0.001). This suggests that the model fit to the data is not entirely adequate. This means the p-value of 0.000 indicates, according to the

current data, the hypothesized relationship summarized in Figure 4.2 is unlikely an event that occurs less than one time in a thousand under a null hypothesis and it should be rejected. However, as mentioned earlier, the p-value is problematic and researchers argued that finding non-significant p-value (P>0.05; good fit) of the p-value is unrealistic in most SEM empirical researches (Bayrne 2010:93). Thus, the significance p-value of HRM practices model is not unexpected and therefore, other goodness of fit measures is evaluated further. The absolute model fit measure of CMIN/DF is one of the fit statistics designed to address the limitation of the p-value as Barbara, (2010:94) have argued. The current CMIN/DF value obtained is 1.893 which meets the threshold level of <3 indicating an excellent model fit of the three HRM practices factors.

The other absolute model fit measure of GFI=0.933 is greater than the standard of 0.90. According to Gefen & Straub (2000), GFI should be >0.90, thus, the GFI value of the Model 2 has improved from 0.857 to 0.933 and therefore it is accepted. AGFI=0.903 which is also greater than the minimum threshold of 0.80. Gefen and Straub, (2000) recommended that AGFI value should be >0.80 thus this fit statistic also shows that our data fits well the model. RMSEA=0.049 and it is <0.080 which is the recommended standard. Thus, since the obtained value of RMSEA is greater than the minimum required value, we can say that the absolute fit measure of this model is achieved. The two model fit statistics of CFI=0.933 and TLI=0.922 are both greater than the threshold of 0.90 indicating a good model fit. The computed values of CFI and TLI are above the minimum required level of acceptance of 0.90 and gives strong evidence that the model fits the data as hypothesized.

The Standardized Residual Mean Root (SRMR) which measures the level of variance between the model and the observed data indicated a higher level of fit (SRMR=0. 0470<0.05). Both PCLOSE with a value of 0.577 and Parsimony Normed Fit Index (PNFI) of 0.870 indicated the tested model is fit to the data. However, Normed Fit Index (NFI=0.870) showed poor model fit In order for this index to be accepted, its value should be higher than or equal to 0.90. To conclude, out of the 11 tested statistics, 9 proved that the data fit well the hypothesized model while only two indicated that the model fits the data poorly. The CFA output of the model is depicted in Figure 4.2 and Table 4.5 as follows:

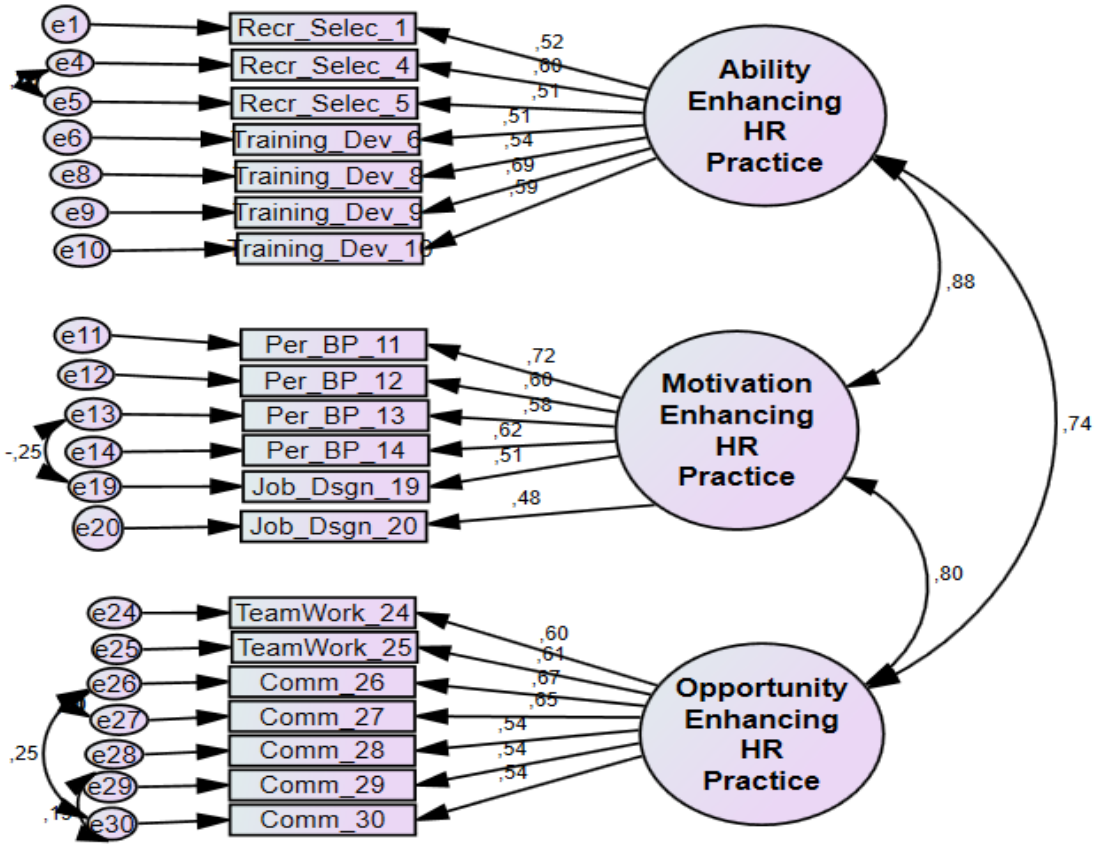


Figure 4.2: *The Modified CFA Measurement Model (2) for the HRM Practices*

Table 4.5: *The Goodness of Fit Indices of HRM Practices CFA Model (2)*

	The Goodness of Fit Indices	Recommended Values	Model 2 Values	Model 2 Fit Remarks
Absolute Fit Indices	CMIN(χ2) (*p* value)	-	306,676 (0.000)	-
	DF	-	162	-
	CMIN *(X2/DF)*	≤ 3.00	1.893	Excellent
	RMSEA	≤ 0.08	0.049	Excellent
Incremental Fit Indices	CFI	≤ 0.90	0.933	Excellent
	GFI	≥ 0.90	0.925	Excellent
	AGFI	≥ 0.80	0.903	Excellent
	SRMR	≤ 0.05	0.0470	Excellent
	NFI	≥ 0.90	0.870	Poor
	TLI	≥ 0.90	0.922	Excellent
Parsimony Fit Indices	PCLOSE	≥ 0.050		Excellent
	PNFI	> 0.5	0.742	Excellent

Source: The research author

4.4.3. Original CFA Measurement Model (1) of HR Outcomes

The HR outcomes scale measures employees' job satisfaction, involvement and organizational citizenship behaviour (OCB) with 15 variables. To test whether the data collected through this scale have similar characteristics with the conceptual model of the research, we analyzed its CFA. The output demonstrated that four items *(JS4=0.27,*

JS=0.49, Emp9=0.14, OCB12=0.11 and OCB13=0.52) out of the original 15 items have lower regression loadings as presented in Figure 4.3. It means that these four items cannot adequately measure their respective factors. Normally, variables with values lower than 0.50 need to be removed in order to improve the model, however, the regression value of *OCB13* was higher than 0.50 but also it was removed to achieve a higher level of model fit.

On the other hand, as shown in Table 4.6, the original model fit indices presented poor model fit. For instance, the tested model yielded a chi-square of 323,458 with 87 degrees of freedom and insignificant P-value of 0.000. The other fit indices (x^2=3.718>3, CFI=0.846<0.90, GFI=0.895<0.90, RMSEA=0.85>0.08, NFI=0.803<0.90, TLI=0.814<0.90 and SRMR=0.721>0.05) revealed that this model is not fitting well to the data except AGF=0,855I and PNF=0.665 which meets the minimum threshold of 0.80 and 0.50 respectively. Therefore, to improve the model, removing the items with weak regression loadings is deemed necessary.

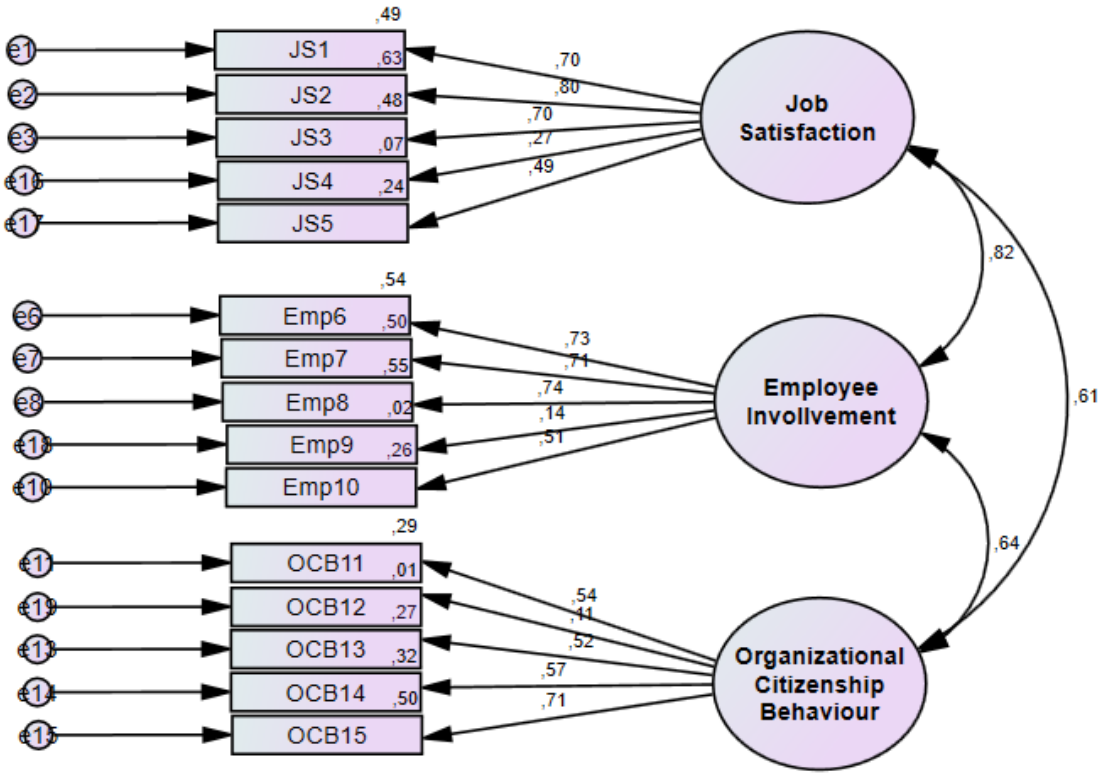


Figure 4.3: *The Original CFA Measurement Model (1) for the HR Outcomes*

After eliminating the 5 items causing model misfit and covering the error terms of *JS1* and *JS2*, the chi-square value decreased to 58.090 with DF of 31 and the P-value was significant at P=0.02. As shown in Table 4.6 all tested model fit indices

(X^2=1.874<3, RMSEA=0.048<0.08, CFI=0.977>0.90, GFI=0.970>0.90, AGFI=0.947>0.80, SMRM=0.0399<0.05, NFI=0.952>0.90, TLI=0.966>0.90, PCLOSE=0.531>0.05 and PNFI=0.656>0.5) resulted a remarkable improvement and thus an excellent model fit was achieved. Further, the remaining 10 items strongly loaded to their respective factors as presented in Figure 4.4.

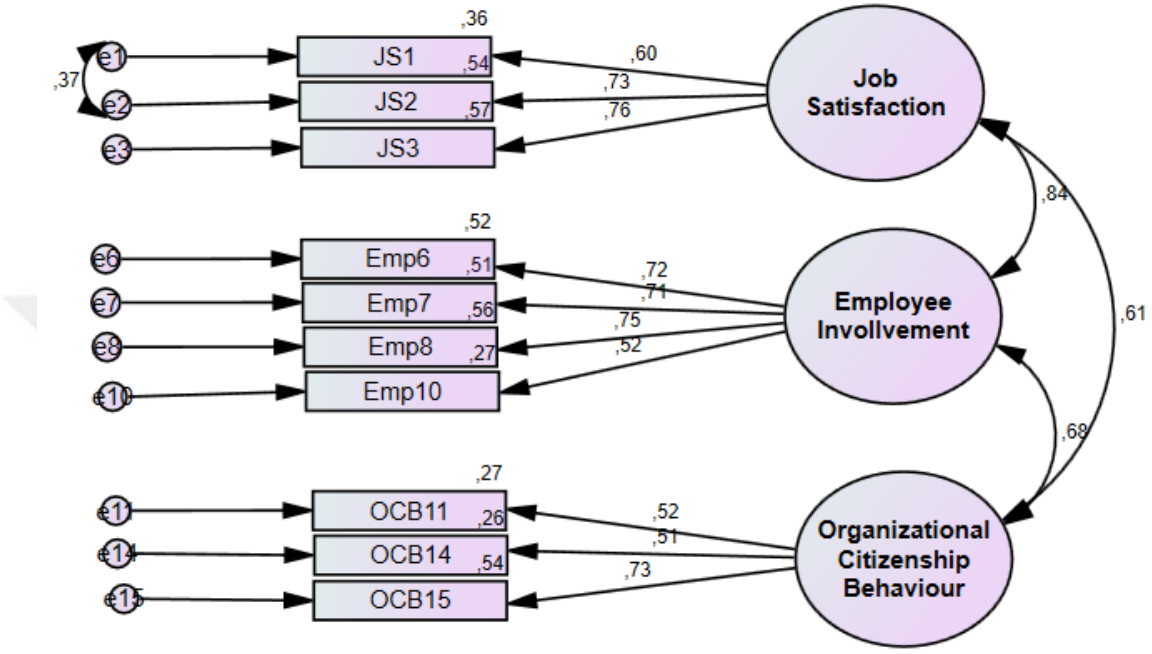


Figure 4.4: *The Modified CFA Measurement Model (2) for the HR Outcomes*

Table 4.6: *The Goodness of Fit Statistics of CFA Innovative Climate Model 1 & 2*

	The Goodness of Fit Indices	Recommended Values	Model 1 Values	Model 1 Fit Remarks	Model 2 Values	Model 2 Fit Remarks
	Chi-square (*p*-value)	-	323.458	-	58.090(0.002)	-
Absolute Fit Indices	*DF*	-	87	-	31	-
	CMIN *(X2/DF)*	≤ 3.00	3.718	Poor	1.874	Excellent
	RMSEA	≥ 0.08	0.085	Poor	0.048	Excellent
Incremental Fit Indices	CFI	≤ 0.90	0.846	Poor	0.977	Excellent
	GFI	≥ 0.90	0.895	Poor	0.970	Excellent
	AGFI	≥ 0.80	0.855	Excellent	0.947	Excellent
	SRMR	≤ 0.05	0.0721	Poor	0.0399	Excellent
	NFI	≥ 0.90	0.803	Poor	0.952	Excellent
	TLI	≥ 0.90	0.814	Poor	0.966	Excellent
Parsimony Fit Indices	PCLOSE	≥ 0.05	0.000	Poor	0.531	Excellent
	PNFI	> 0.5	0.665	Excellent	0.665	Excellent

Source: The research author

4.4.4. Innovative Climate CFA Measurement Model

Figure 4.5 shows the measurement model of the innovative climate scale, which has five items. The first output of the CFA presented in Table 4.7 reveals that the model

has two items with lower standardized regression loadings (*Inno_Clmte4=0.38 & Inno_Clmte5=0.29*) causing a poor model fit. The other three items are within an acceptable level of 0.50. In addition, the following GoF indices indicated that the model is not well-fitting to the data: X^2 (6.348), RMSEA (0.120), SRMR (0.543), TLI (0.868), PCLOSE (0.002) and PNFI (0.462). Whereas, the incremental fit indices of CFI (0.934), GFI (0.967), AGFI (0.901) and NFI (0.924) meets the recommended cut-off values.

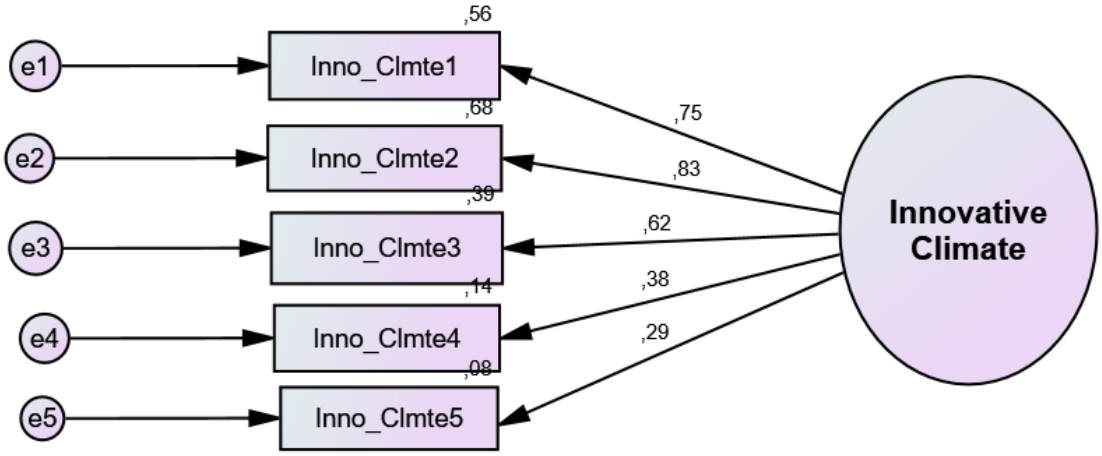


Figure 4.5: *The Original CFA Measurement Model (1) for Innovative Climate*

To improve the model fit of the innovative climate measurement scale, the item with the lowest regression loadings has been removed (*Inno_Clmte5=0.29)* and there was no suggestion of MI or errors to be covaried. As presented in Figure 4.6, the second run of the CFA achieved significant regression loadings without needing to eliminate *Inno_Clmte4* item as the model fit is achieved. Also, in the second model, all the GoF statistics demonstrated an excellent model fit except the PNFI as shown in Table 4.7.

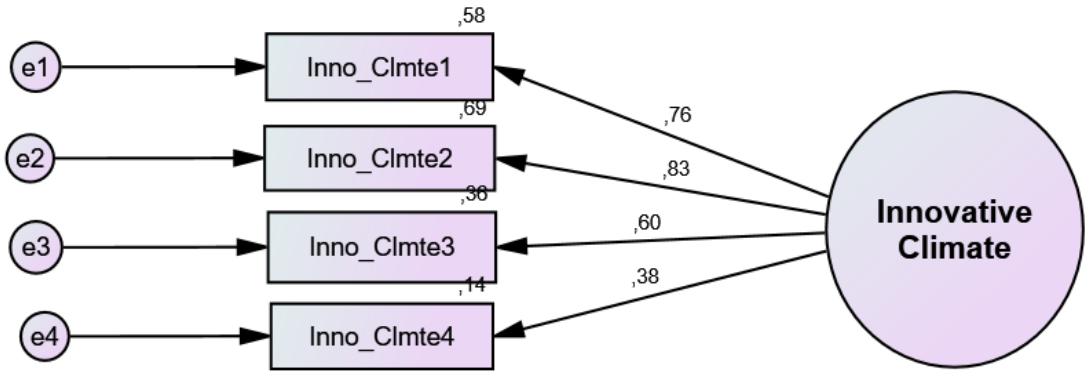


Figure 4.6: *The Modified CFA Measurement Model (2) of Innovative Climate*

Table 4.7: *The Goodness of Fit Indices of CFA Innovative Climate Model 1 & 2*

	The Goodness of Fit Indices	Recommended Values	Model 1 Values	Model 1 Fit Remarks	Model 2 Values	Model 2 Fit Remarks
	Chi-square (*p*-value)	-	31.740(.000)	-	2.288 (0.319)	-
Absolute Fit	*DF*	-	5	-	2	-
Indices	CMIN *(χ2/df)*	≤ 3.00	6.348	Poor	1.144	Excellent
	RMSEA	≥ 0.08	0.120	Poor	0.020	Excellent
	CFI	≤ 0.90	0.934	Excellent	0.999	Excellent
	GFI	≥ 0.90	0.967	Excellent	0.997	Excellent
	AGFI	≥ 0.80	0.901	Excellent	0.985	Excellent
Incremental	SRMR	≤ 0.05	0.0543	Poor	0.0137	Excellent
Fit indices	NFI	≥ 0.90	0.924	Excellent	0.994	Excellent
	TLI	≥ 0.90	0.868	Poor	0.998	Excellent
Parsimony	PCLOSE	≥ 0.05	0.002	Poor	0.596	Excellent
Fit Indices	PNFI	> 0.5	0.462	Poor	0.331	Poor

Source: The research author

4.4.5. Organizational Innovation CFA Measurement Model

The organizational innovation scale was used to measure the extent to which organizations produce innovative products and services by using seven items scale as indicated in Figure 4.7. The first CFA output indicated significant factor loadings, which range from 0.58 to 0.72. On the other hand, all the fit indices were performing well, according to the criteria adopted in this study.

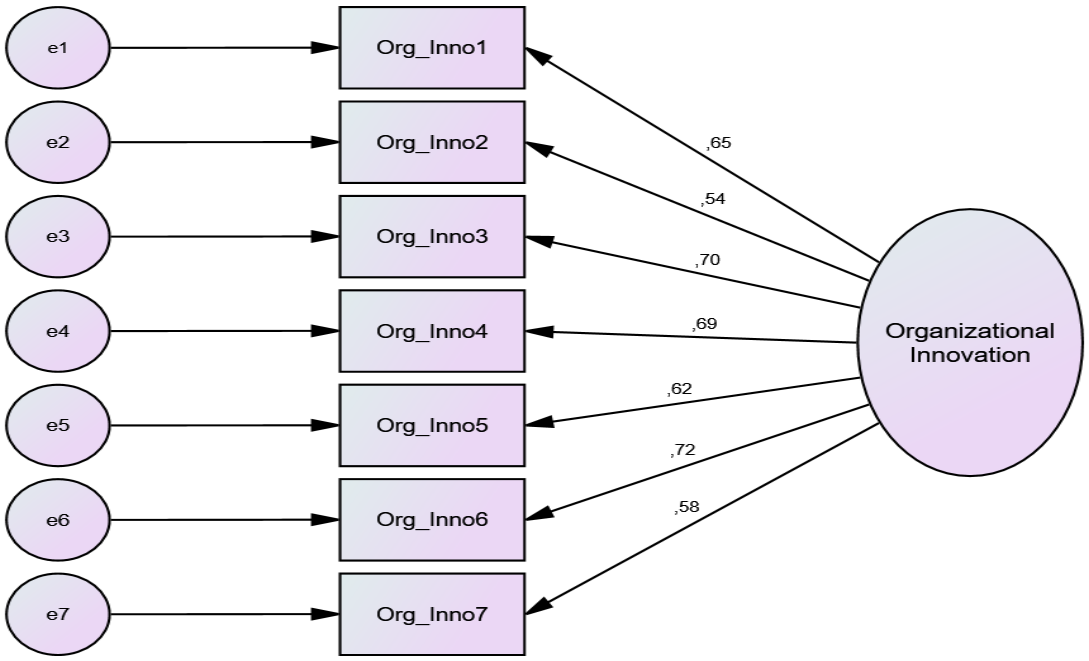


Figure 4.7: *The CFA measurement model of Organizational Innovation Construct*

Thus, there was no further investigation needed to improve the model. For instance, chi-square value was 25,949 with a non-significant p-value of 0.026 (good fit indicator) and Degree of Freedom of only 14. The X^2 yielded 1.854<3, RMSEA=0.048<0.08, CFI=0.984>0.90, GFI=0.97>0.90, AGFI=0.958>0.90, SRMR=0.030<0.05, NFI=0.967>0.90,TLI=0.976>0.90, PCLOSE=0.511>0.05 and PNFI=0.645>0.50. Therefore, the items in the scale can be considered fit to represent the model as given in Table 4.8.

Table 4.8: *The Goodness of Fit Indices of Organizational Innovation CFA Model*

	The Goodness of Fit Indices	Recommended Values	Model Fit Values	Model Fit Remarks
Absolute Fit Indices	Chi-square (*p*-value)	-	25.949(0.026)	-
	DF	-	14	-
	CMIN *(χ2/df)*	≤ 3.00	1.854	Excellent
	RMSEA	≤ 0.08	0.48	Excellent
Incremental Fit Indices	CFI	≥ 0.90	0.984	Excellent
	GFI	≥ 0.90	0.979	Excellent
	AGFI	≥ 0.80	0.958	Excellent
	SRMR	≤ 0.05	0.030	Excellent
	NFI	≥ 0.90	0.967	Excellent
	TLI	≥ 0.90	0.976	Excellent
Parsimony Fit Indices	PCLOSE	≥ 0.05	0.511	Excellent
	PNFI	> 0.5	0.645	Excellent

Source: The research author

4.5. Full Structural Equation Model Evaluation of the Study Variables

In the previous sections, CFA of each construct has been conducted separately and the goodness of model fit has been evaluated and achieved. The next step is to assess the reliability, validity and the overall model fit of the full Structural Equation Modelling measurement. The six latent factors of the measurement model were combined and its CFA diagram is shown in Figure 4.8. The overall measurement scale had 57 items measuring HRM practices (30 items), HR outcomes (15 items), innovative climate (5 items) and organizational innovation (7 items). However, as mentioned previously, not all the variables yielded standardized significant regression loadings and after removing all variables with weak loadings only 40 items were left. These items appeared to be significant and fall within the acceptable limit.

On the other hand, the goodness of fit statistics of the full SEM measurement model indicated an acceptable model fit. For instance, the result of X^2=1.664, RMSEA=0.042, SRMR 0.0479, CFI=0.913, TLI=0.906, AGFI=0.843, PCLOSE=0.999 and PNFI=0.746

all indicates values higher than or equal to the recommended limit. However, the results of NFI(0.810) and GFI(0.862) were lower than the required values of 0.90 but, due to the complexity of the model and the number of relationships involved, still, the model can be considered as a good model fit to the data (Bayrne, 2010). The R^2 value of the model representing the percentage of variance explained by the collective set of predictors demonstrated a highly acceptable level in predicting dependent factors (HR outcomes=83%, innovative climate=76% and organizational innovation=42%) as depicted in Figure 4.8.

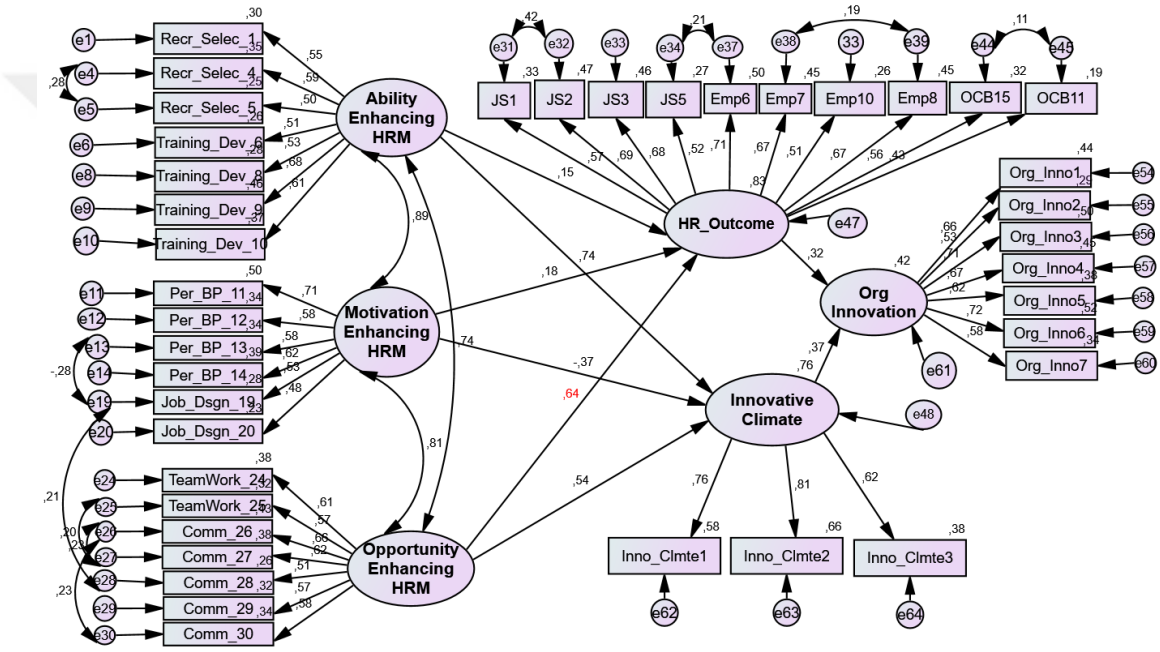


Figure 4.8: *The SEM Measurement Model of the Adopted Scales*

Table 4.9: *The Goodness of Fit Statistics of SEM of the Study Variables*

	The Goodness of Fit Indices	Recommended Values	Model Output	Remarks
	CMIN (X2) (*p*-value)	-	119.358 (0.000)	-
	DF	-	719	-
Absolute Fit	CMIN *(χ2/df)*	≤ 3.00	1.664	Excellent
Indices	RMSEA	≤ 0.08	0.042	Excellent
	CFI	≤ 0.90	0.913	Excellent
	GFI	≥ 0.90	0.862	Poor
	AGFI	≥ 0.80	0.843	Excellent
	SRMR	≤ 0.05	0.0479	Excellent
Incremental Fit	NFI	≥ 0.90	0.810	Poor
Indices	TLI	≥ 0.90	0.906	Excellent
	PCLOSE	≥ 0 .050		Excellent
Parsimony Fit Indices	PNFI	> 0.5	0.746	Excellent

Source: The research author

4.5.1. Reliability and Validity Analysis of the Full Structural Equation Model

The constructs of the research instrument's internal reliability were measured through Cronbach's Alpha suggesting that all the six factors achieved an Alpha score above the threshold value of 7.00 as shown in Table 4.10. On the other hand, composite reliability (C.R) which is used to measure the level of consistency of latent constructs was calculated. All the constructs obtained a CR value greater than the threshold of 0.70 as shown in Table 4.10. In addition, convergent validity measures the extent to which two variables predicting different factors are highly correlated. This value is obtained by computing the Average Variance Extracted (AVE) for all constructs and its values should not be less than 0.50 in order to achieve valid convergent validity. Both composite and Average Variance Extracted are used to measure the convergent validity of the data. However, four of the latent constructs showed low AVE ranging from 0.32 to 0.42 due to the high correlations among independent factors and larger measurement error value while only innovative climate construct had a significant AVE value of 0.54.

Bogazzi and Yi (2012), suggested focusing more on CR as a measure of reliability rather than the Average Variance Extracted (AVE). Also, Fornell and Larcker (1981:46), stated that the convergent validity of a construct is still acceptable, even though more than half (50%) of the variance is due to an error. The Standardized factor loadings of all the variables considered in this study were significant at $P<0.001$ level ranging from 0.435 to 0.812 as shown in Table 4.10. Therefore, we can conclude that the full measurement model has been accepted since the alpha coefficient, the Standardized Regression Weight (SRW), the Goodness of Fit Indices and measurement model validity indicated a significant good model fit with the limitation of low AVE. The validity and reliability analysis conducted is summarized in Table 4.10.

Table 4.10: *Standardized Regression Weights and Model Validity Analysis*

Construct	Observed Variable	SRW	AVE	CR	Alpha
Ability-enhancing HR Practices	Recr_Selec_1	0.551***			
	Recr_Selec_4	0.588***			
	Recr_Selec_5	0.496***			
	Training_Dev_6	0.509***			
	Training_Dev_8	0.527***			
	Training_Dev_9	0.675***			
	Training_Dev_10	0.606***	**0.32**	**0.77**	**0.78**
Motivation-enhancing HR Practices	Per_BP_11	0.711***			
	Per_BP_12	0.584***			
	Per_BP_13	0.58***			
	Per_BP_14	0.621***			
	Job_Dsgn_19	0.528***			
	Job_Dsgn_20	0.477***	**0.35**	**0.76**	**0.75**
Opportunity-enhancing HR Practices	TeamWork_24	0.612***			
	TeamWork_25	0.569***			
	Comm_26	0.656***			
	Comm_27	0.619***			
	Comm_28	0.51***			
	Comm_29	0.565***			
	Comm_30	0.582***	**0.35**	**0.79**	**0.81**
Innovative Climate	Inno_Clmte1	0.765***			
	Inno_Clmte2	0.812***			
	Inno_Clmte3	0.617***	**0.54**	**0.78**	**0.77**
HR Outcomes	JS1	0.57***			
	JS2	0.686***			
	JS3	0.678***			
	JS5	0.515***			
	Emp6	0.706***			
	Emp7	0.67***			
	Emp8	0.667***			
	Emp10	0.508***			
	OCB11	0.435***			
	OCB15	0.563***	**0.37**	**0.85**	**0.850**
Organizational Innovation	Org_Inno1	0.66***			
	Org_Inno2	0.535***			
	Org_Inno3	0.708***			
	Org_Inno4	0.674***			
	Org_Inno5	0.616***			
	Org_Inno6	0.723***			
	Org_Inno7	0.585***	**0.42**	**0.83**	**0.83**

Note: ***= Significant at P<0.001; SRW=Standardized Regression Weights; AVE=Average Variance Extracted; CR= Composite Reliability; Alpha= Cranach's Alpha.

Source: The research author

4.6. Common Method Bias Analysis

Common Method Bias (CMB) is defined as the level of likely biases in a data set due to external influences beyond the limitations of the measurement scale used. Normally, common method bias occurs when data is collected from a single source, social desirability, fear and loyalty. The presence of common method bias impacts the

results of the analysis by increasing or decreasing responses that at the end may mislead the outcome of the research. A study affected by common method bias is one in which only one factor can explain most of the variance. Therefore, it is important to test whether our data are free from common method bias before any further analysis is carried out by Podsakoff et al., (2012). To do this, we conducted two tests. The first one is Harman's Single Factor Test and the second one is the Common Latent Factor.

In the first test, we ran the CFA analysis in which all the variables are allowed to load into one factor. According to Podsakoff (2003), the variance explained by the unrelated single factor should not be more than 50%. According to the SPSS output, only 25% of the total variance is explained by that single factor which proves that there is no common method bias in the data. The model fit indices of this test also indicated a very poor model fit compared to the model when all variables load into their respective latent factors as shown in the brackets. The CFA outcome of the two tests was X^2 =2942 (1.664), RMSEA=0.072 (0.042), CFI=0.722 (0.913), SRMR=0.0842 (0.0479), NFI=0.634 (0.810), TLI=0.707 (0.906), and PCLOSE=0.000 (0.999). The result of the one-factor test indicates that the model fits the data very poorly, it means that assuming that all the variables in our data can be explained by one factor is very weak proving that there is no common method bias observed.

Since Harman's one Factor test may have limitations, the existence of common method bias was also checked by using the Common Latent Factor (CLF) method. The CLF test is done by adding a new latent factor to the CFA model and allowing all the variables to load into it by constraining the variance of the common factor to 1. This test is similar to the Harman Single Factor method where all observed variables are related to a single factor; however, the model's latent factors and their relationships are kept as they are in the common latent factor method. The common variance is examined by comparing and subtracting the standardized regression weights of the model with a common latent factor and the method without it. In order to see whether the data set does not suffer from the common method bias issues, the difference between these two observations should be less than 0.20 (Benjamin et al., 2013:630). As presented in Table 4.11, the difference between the two standardized regression loadings meets the threshold of 0.20 and we can conclude that the data is free from CMB problem.

***Table 4.11**: Harman's One Factor Test Summary*

No	Observed Variables	SRW without CLF (A)	SRW with CLF (B)	Difference (A-B)
1	Org_Inno2	0.535	0.431	0.104
2	Org_Inno3	0.708	0.61	0.098
3	Org_Inno4	0.674	0.614	0.06
4	Org_Inno5	0.616	0.504	0.112
5	Org_Inno6	0.723	0.651	0.072
6	Org_Inno7	0.585	0.472	0.113
7	Org_Inno1	0.66	0.56	0.1
8	Emp6	0.706	0.591	0.115
9	Emp7	0.67	0.524	0.146
10	Inno_Clmte2	0.812	0.704	0.108
11	Inno_Clmte3	0.617	0.461	0.156
12	Inno_Clmte1	0.765	0.668	0.097
13	Recr_Selec_1	0.551	0.4	0.151
14	Recr_Selec_4	0.588	0.493	0.095
15	Recr_Selec_5	0.496	0.349	0.147
16	Training_Dev_6	0.509	0.357	0.152
17	Training_Dev_8	0.527	0.374	0.153
18	Training_Dev_9	0.675	0.598	0.077
19	Per_BP_11	0.711	0.676	0.035
20	Per_BP_12	0.584	0.509	0.075
21	Per_BP_13	0.58	0.474	0.106
22	Per_BP_14	0.621	0.526	0.095
23	Job_Dsgn_19	0.528	0.369	0.159
24	TeamWork_24	0.612	0.468	0.144
25	TeamWork_25	0.569	0.408	0.161
26	Comm_28	0.51	0.414	0.096
27	Comm_30	0.582	0.498	0.084
28	Training_Dev_10	0.606	0.475	0.131
29	Comm_26	0.656	0.536	0.12
30	Comm_29	0.565	0.407	0.158
31	Comm_27	0.619	0.472	0.147
32	JS5	0.515	0.327	0.188
33	JS3	0.678	0.641	0.037
34	JS2	0.686	0.62	0.066
35	JS1	0.57	0.485	0.085
36	Emp10	0.508	0.353	0.155
37	Job_Dsgn_20	0.477	0.334	0.143
38	Emp8	0.667	0.615	0.052
39	OCB15	0.563	0.364	0.199
40	OCB11	0.435	0.238	0.197

Note: SRW is Standardized Regression Weights and CLF is a Common Latent Factor

Source: The research author

4.7. Correlation Matrices

The correlation among the study variables was computed to determine the extent to which they are correlated. Before any analysis is carried out it is important to ensure whether possible correlations exist among variables. For this purpose, we assessed the relationship between the exogenous variables, mediators and endogenous variables. All

the variables showed a significant positive correlation between them as depicted in Table 4.12.

Table 4.12: *Means, Standard Deviation and Correlations (N=375)*

Constructs	Mean	SD	1	2	3	4	5
Ability-enhancing HR Practices	5.01	1.06					
Motivation-enhancing HR Practices	3.28	0.88	.644**				
Opportunity-enhancing HR Practices	5.39	1.26	.546**	.604**			
HR Outcomes	1.22	0.28	.600**	.665**	.687		
Innovative Climate	2.11	0.58	.419**	.539**	.597	.655**	
Organizational Innovation	4.8	1.18	.618**	.478**	.459	.516**	.499**

Note: **=Significant at 0.00
Source: The research author

4.8. Structural Equation Model (SEM) and Hypotheses Testing

According to Kaplan (2008), SEM can be used for the measurement and validation of a model. In the previous sections, we tested the CFA measurement model of all variables of the study to figure out the extent to which the model fits the data. Several validity measurements were considered, which indicated that the proposed model for the study adequately fits the data. However, achieving a good model fit is not an end itself, but it is a means to carry out a reliable test on the nature of the proposed relationship and to report the findings for decision making. This is because the measurement model does not predict the nature or the type of relationship among variables. SEM measuring the magnitude of relationships among variables and testing the proposed hypothesis will be the next stage of our analysis.

According to Hair et al., (2010), there are three types of modelling strategies that a researcher can follow when testing a hypothesized model. These are a confirmatory strategy, competing for strategy and model development strategy. Each of these approaches has different implications and steps. For instance, the confirmatory approach is the simplest strategy, as the name implies, the confirmation method is done by specifying a unique set of relationships and applying SEM to assess the suitability of the model. In other words, to find out the extent to which the model fits the data. Second, the strategy of model competing involves the estimation of several alternative models by comparing against a general model. In the end, the evaluation of all the models would produce the best possible model that can represent the collected data. This strategy yields a new model that is much stronger than a single model test. The third one is the model development strategy that starts with framing the model based on

theoretical assumptions. In order to improve the model, certain changes may be made through Modification Indices (MI) techniques based on reasonable judgment of the researcher and supported by a theoretical framework. Then, the re-specified model is re-tested to see whether it fits well the hypothesized model. A model development strategy will be used in this study. In order to test the six proposed hypotheses, different types of SEM will be evaluated. Since it is essential to achieve a good model fit before testing the hypothesized model, the Goodness of Fit Indices of each of the six SEM models were assessed first.

4.9. Direct Hypotheses Test

4.9.1. Hypothesis One: Ability-enhancing HRM Contributes to HR Outcomes

The first hypothesis (H_1) developed in this study establish a positive direct relationship between ability-enhancing HRM practices (recruitment & selection and training & development) and HR outcomes (job satisfaction, employee involvement and OCB).

This hypothesis was tested using Structural Equation Model (SEM) through establishing a direct relationship between the factors of ability-enhancing HR practices and HR outcomes. The Path analysis result presented in Figure 4.8 shows that the relationship between ability-enhancing HR practices and HR outcomes is strong and positive ($\beta=0.754;P<0.01$). The Beta value means that whenever employees' knowledge, skills and abilities increase by 1%, their job satisfaction, involvement and OCB increases by 75% holding other factors constant. The adjusted R square of the model suggested that 57% of the HR outcomes is explained by the ability-enhancing HRM. The regression coefficient of the model also showed a significant Critical Ratio of (C.R=6.982). A C.R is arrived by dividing the regression weight estimates over its Standard Error (S.E) and only a C.R above an absolute value of 1.96 is considered to be significant. The Goodness of Fit Indices of the hypothesized model also indicated that the model fits the data well as shown in Figure 4.9. Thus, hypothesis one (H_1) is supported.

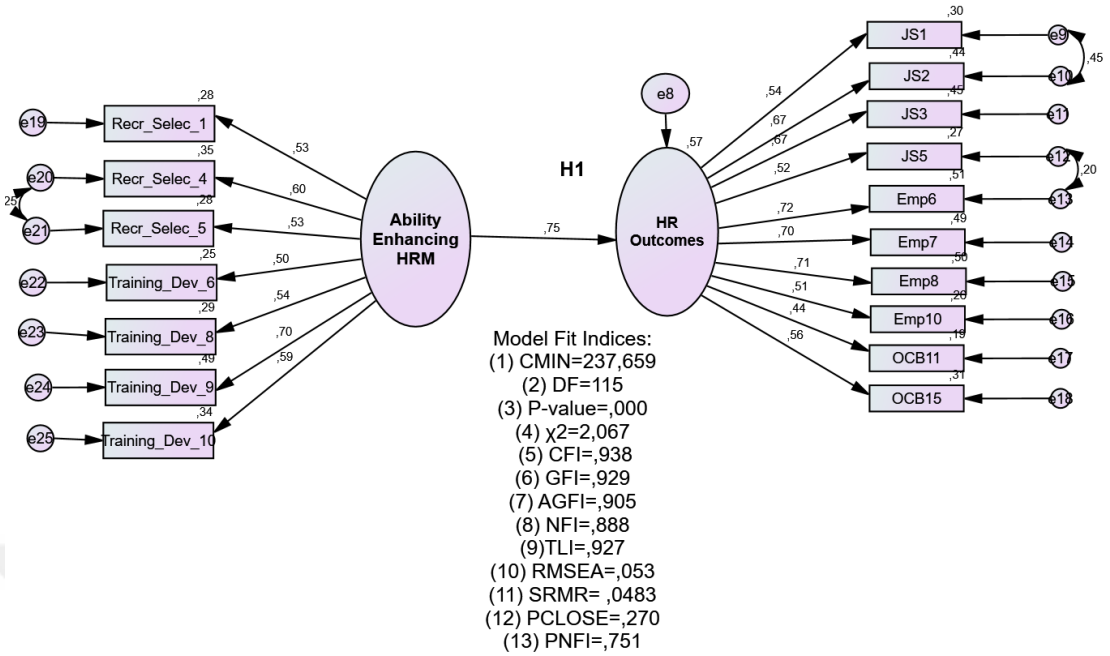


Figure 4.9: *The SEM Model and the Goodness of Fit Indices for Hypothesis (1)*

Therefore, according to the CFA analysis in Figure 4.9, ability-enhancing HR practices positively contribute to HR outcomes. This implies that adopting skill-oriented HR policies such as an effective recruitment and training system are the ones that impact positively employees' job satisfaction, their active participation in organizations' decision making and show a positive constructive behaviour at the workplace. The result shows that providing employees with skill development schemes increases employees' job satisfaction their active participation and encourages them to perform beyond their specified obligations.

4.9.2. Hypothesis Two: Motivation-enhancing HRM Impacts HR Outcomes

The second hypothesis (H_2) claims that motivation-enhancing HR practices (e.g., performance-based payment and Job design) have a direct positive effect on HR outcomes (job satisfaction, employee involvement and OCB).

In order to test this hypothesis, a direct relationship between the two factors of motivation-enhancing HR practices and HR outcomes was established by utilizing the SEM model as shown in Figure 4.10. The observed variables of motivation-enhancing HRM were allowed to relate to those of HR outcomes. The result indicates that motivation-enhancing HRM has a significant positive effect on HR outcomes (β=0.810; P<0.001). The Critical Ratio (C.R=10.211) indicates a significant relationship as its

value is higher than the minimum threshold of ±1.96. Since the standardized direct effect of motivation-enhancing HRM on HR outcomes is 0.810 due to the direct positive effect, when motivation-enhancing HRM goes up by 1 standard deviation, HR Outcomes goes up by 0.810 standard deviations see (Kline, 1998:52). Also, the model attained good fit statistics as presented in Figure 4.10. The R2 of the model is 66%. Therefore, hypothesis two (H_2) is supported. This implies that in the context of Somali Service Firms, providing intrinsic and extrinsic rewards fully contribute to employees' job satisfaction encourages active participation in problem solving and helps them develop a sense of belongingness in the organization.

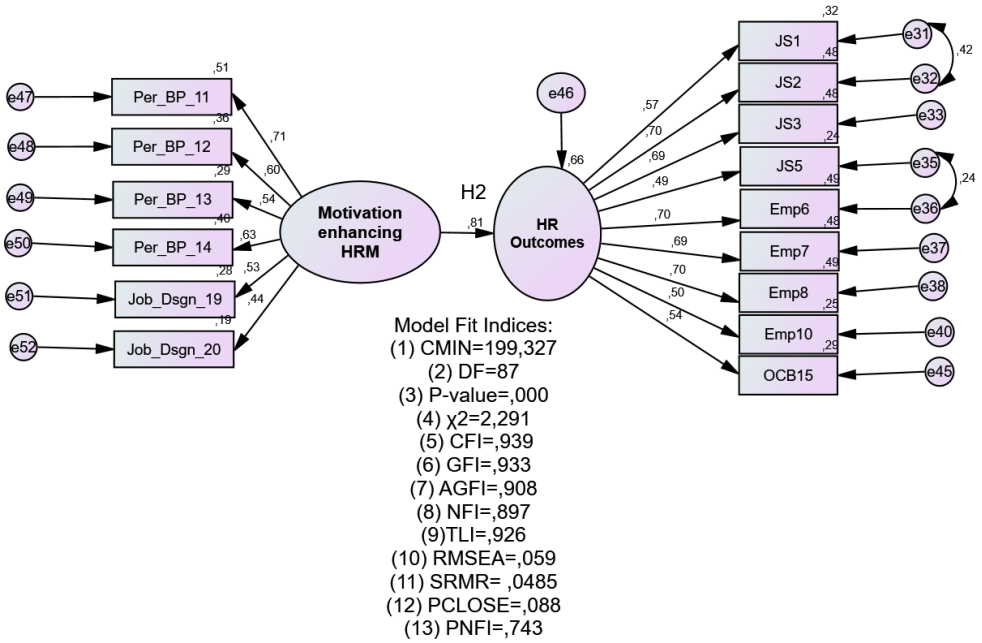


***Figure 4.10**: The SEM Model and the Goodness of Fit Indices for Hypothesis (2)*

4.9.3. Hypothesis Three: Opportunity-enhancing HRM Affects HR Outcomes

The third hypothesis (H_3) that we intend to test is based on the argument that there is a direct positive relationship between opportunity-enhancing HRM (teamwork and communication) and HR outcomes (job satisfaction, employee involvement and organizational citizenship behaviour).

This hypothesis was tested by establishing a direct relationship between opportunity-enhancing HRM and HR outcomes as presented in Figure 4.11. The Standardized Regression Weight and the C.R obtained supported the existence of a

significant direct positive relationship between the two factors (β=0.846, P<0.001, C.R=9.460). The percentage variance in the HR outcomes explained by the opportunity-enhancing HRM is 72%. Also, hypothesis three (H_3) is also validated through the Goodness of Model Fit Indices yielding a good model fit as depicted in Figure 4.11. Therefore, hypothesis three (H_3) is highly supported.

Thus, the result of this hypothesis implies that Somali Service Sector employees perceive that using an empowerment-enhancing HRM such as self-managed teams and effective communication channels impacts positively their job satisfaction, desire to participate in problem-solving and enhances favourable OCB.

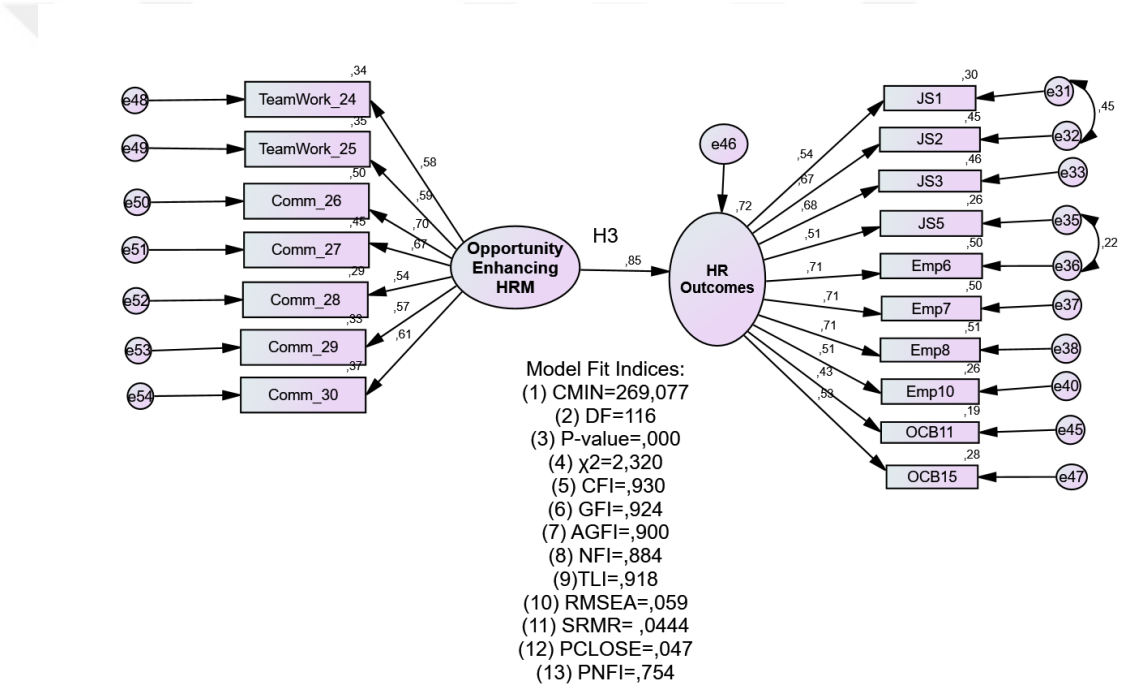


Figure 4.11: *The SEM Model and the Goodness of Fit Indices for Hypothesis (3)*

4.9.4. Hypothesis Four: Innovative Climate Impacts Organizational Innovation

The last direct hypothesis of our model proposes that an innovative climate affects organizational innovation positively. We tested this hypothesis by regressing innovative climate and organizational innovation factors in the SEM path analysis as presented in the Figure 4.12. According to the standardized regression weight result, support for innovative climate has a significant direct positive relationship with organizational innovation (β=0.612;P<0.001; C.R=7.844). On the other hand, 37% of the variation in

organizational innovation is explained by the innovative climate factor. Also, the goodness of fit indices of the model indicated an adequate model fit as shown in Figure 4.12. Therefore, hypothesis four (H_4)) is supported.

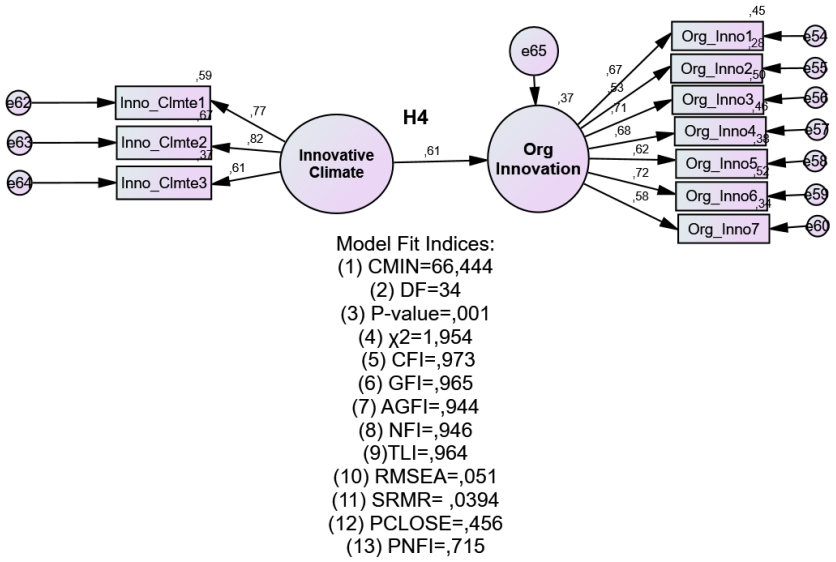


Figure 4.12: *The SEM Model and the Goodness of Fit Indices for Hypothesis (4)*

As the research hypothesis predicted, when the employees of the 11 surveyed firms perceive the existence of supportive HR policies that enhances their skills, motivation and empowerment; they develop a positive behaviour that promotes innovation. Therefore, we found sufficient evidence that supports the characteristics of innovative climate such as risk-taking, searching for new ideas and adaptability to change predicts the actual level of innovation in the organization.

Thus, the four direct hypothesis (H_4) which is tested in Structural Equation Model path analysis were highly supported as Table 4.13 summarizes:

Table 4.13: *Summary of Path Analysis and the Four Direct Hypotheses Test*

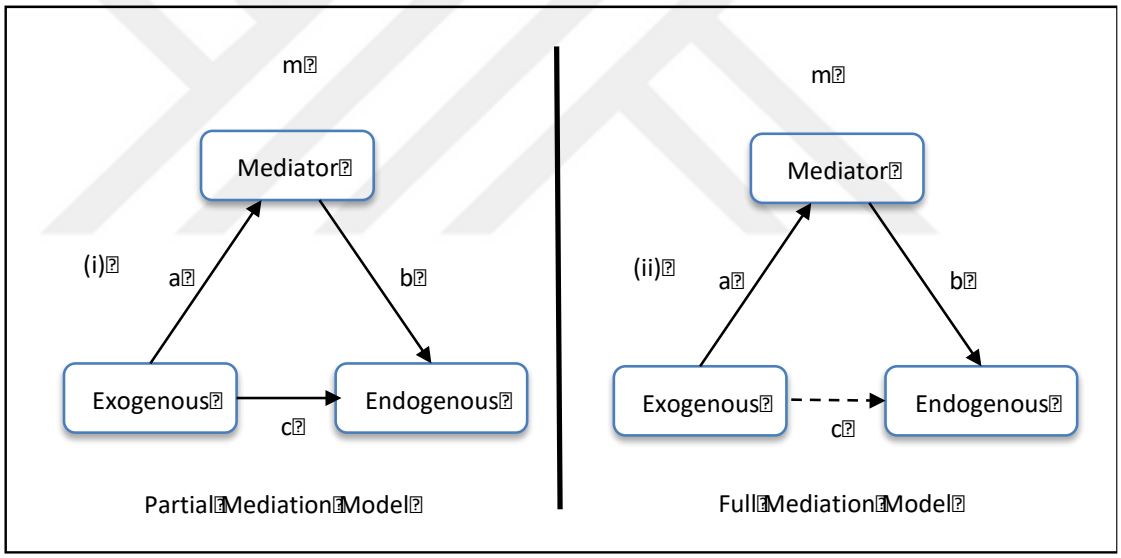
Direct Effect Hypothesis	**Hypothesis No**	**Stand. Coef.**	**Significance**	**Conclusion**
Ability-Enhancing-HRM-->HR Outcome	H_1	0.754	***	Supported
Motivation-Enhancing-HRM-->HR Outcome	H_2	0.818	***	Supported
Opportunity-Enhancing-HRM-->HR Outcome	H_3	0.846	***	Supported
Innovative-Climate-->Organizational Innovation	H_4	0.612	***	Supported

Note: ***= Significant at P<0.0
Source: The research author

4.10. Mediation Hypotheses Test

We utilized the mediation regression procedure suggested by Baron and Kenny, (1986) to test the two hypothesized mediating factors of HR outcomes and innovative climate. The two authors recommended four conditions that must be met when investigating whether a partial or a full mediation effect exists. (1) A significant relationship must exist between the exogenous and the potential mediator. (2) The proposed mediator and the endogenous variable must have a significant relationship. (3) The exogenous variable should have an association with the endogenous variable. (4) Partial mediation occurs if the direct relationship between the exogenous and the endogenous variables is significant statistically whereas a full mediation is realized when their relationship is insignificant. This process is depicted in the Figure below:

Figure 4.13: *Mediation Analysis Process of Baron and Kenny (1986)*



Normally, when conducting a mediation analysis, it is necessary to apply a bootstrapping test, which evaluates whether the associations among factors are statistically significant through the use of two-tailed test (Hayes, 2013:11). Bootstrapping is a re-sampling technique in which multiple sub-samples of the same sample size of the original data are drawn to investigate empirically the variability of the parameter estimates and fit indices (Byrne, 2010). We performed a bootstrapping test and generated a sample size of 500 for the existing data set. The algorithm automatically computes the mean and Standard Error (SE) for all the data sets and determines adequate sampling distribution. Through this process, a statistical

confidence interval of 95% and the standardized direct and mediating effect between factors are calculated. The researcher then evaluates the bootstrapping results and compares the values obtained from the mediation model against the estimated variables to decide whether mediation exists and its level of significance.

4.10.1. Hypothesis Five: HR Outcomes Mediation Test

The fifth hypothesis (H_5) states that HR outcomes (job satisfaction, employee involvement, and organizational citizenship behaviour) mediate the relationship between AMO-enhancing HRM practices and organizational innovation (product and process innovation).

To test the proposed mediation effect, we evaluated SEM through a bootstrapped confidence interval of 95% with a generated sample size of 500 (Bollen and Stine, 1990) and considering the mediation procedure of Baron and Kenny, (1986) mentioned above. The first condition of the mediation process was met by establishing a direct path among the independent variables (ability, motivation and opportunity-enhancing HRM) and HR outcomes (the mediator). The result provided that motivation (β=0.360;P<0.05;two-tailed test) an opportunity to participate (β=0.463;P<.001;two-tailed test) have a significant positive effect on HR outcomes, whereas ability-enhancing HRM has a non-significant impact on HR outcomes (β=0.130;P=0.382; two-tailed test). Thus, only motivation and opportunity-enhancing HRM fulfilled the first condition of mediation. In contrast, ability-enhancing HRM has failed to have a significant effect on HR outcomes.

To achieve the second mediation condition, the total mediation effect of HR outcomes of the relationship between the AMO-enhancing HR practices and organizational innovation is calculated by multiplying the product of their path coefficients to that of the HR outcomes. (e.g., 0.130*0.242=0.031; 0.36*0.242=0.087;0.463*0.242=0.112). The result showed that the total mediating effect of HR outcomes in the relationship between ability-enhancing HRM (β=0.031;P=0.231;two-tailed); motivation-enhancing HRM (β=0.087;P=0.92; two-tailed); opportunity-enhancing HRM (β=0.112;P=0.124;two-tailed) and organizational innovation is non-significant. To justify the third mediation requirement, a direct association between the three independent variables (ability, motivation and opportunity) and the dependent variables (organizational innovation) has been

established. The result of model three presented that ability (β=0.22;P=0.924), motivation (β=0.299;P=0.185) and the opportunity to participate (β=0.100;P=0.435) have all non-significant positive relationship with organizational innovation.

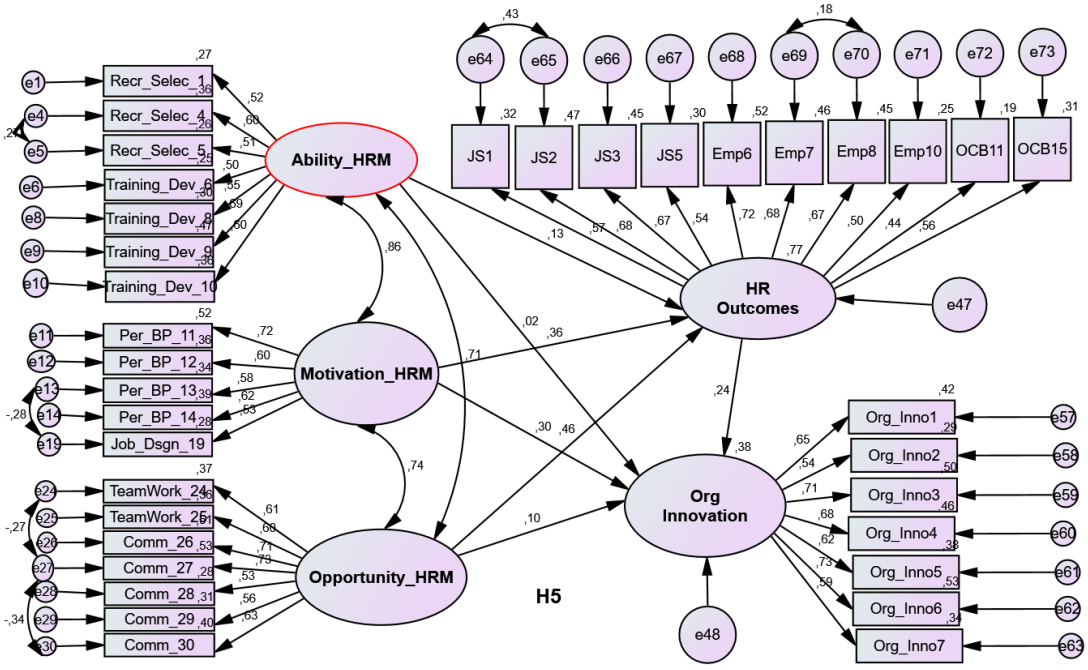


Figure 4.14: *The SEM Model and Path Analysis for Hypothesis (5)*

Table 4.14: *The Goodness of Fit Indices of the HR Outcomes Mediation Model*

Model Fit Indices	Chi-square	DF	P-value	χ2	CFI	GFI	AGFI	TLI	NFI	SRMR	RMSEA	PCLOSE	PNFI
Result	983.393	578	0.000	1.701	0.914	0.871	0.851	0.907	0.816	0.0486	0.043	0.992	0.749

Therefore, since the total mediation effect of HR outcomes in the relationship between AMO-enhancing HR practices and organizational innovation is not significant statistically, it is concluded that HR outcomes does not mediate the relationship between AMO-enhancing HRM and organizational innovation. This means that no empirical evidence was found which supports that HR outcomes mediate the relationship between AMO-enhancing HRM and organizational innovation and thus, hypothesis five (H_5) was rejected. The above Figure 4.14 and Table 4.14 explain the SEM analysis and model statistics of hypothesis five.

4.10.2. Hypothesis Six: Innovative Climate Mediation Test

The last sixth hypothesis (H_6) proposes that innovative climate mediates the relationship between AMO-enhancing HRM practices and organizational innovation. To test empirically whether this hypothesis is supported in Somalia service firms' context, we ran path analysis following the procedure of mediation as this hypothesis is a mediation-based effect. The first model of the path analysis result indicated a significant association between ability (β=0.752;P<0.001, two-tailed test) and opportunity-enhancing HRM (β=0.429;P<0.001;two-tailed test) with innovative climate, whereas motivation-enhancing HRM has a negative non-significant association with innovative climate (β=-0287; P=0.213; two-tailed test). In the second model, the total mediating effect of innovative climate in the relationship between AMO-enhancing HRM and organizational innovation was calculated by multiplying the product of AMO-enhancing HRM to that of organizational innovation (e.g., 0.752*0.520=0.391; -0.287*0.520=-0.149; 0.421*0.520=0.223). The Structural Equation Model path analysis indicated that the total mediating effect of innovative climate in the relationship between ability-enhancing HRM (β=0.391;P=0.005;two-tailed), and opportunity-enhancing HRM (β=0.223;P=0.005 two-tailed) is significant. On the other hand, the total mediating effect of innovative climate in the relationship between motivation-enhancing HRM and organizational innovation was found to be negative and insignificant (β=-0.149;P=0.213 two-tailed).

The third and fourth mediation condition was met by establishing a direct path among AMO-enhancing HRM and organizational innovation and it was found that ability (β=-0.428; P=0.197; two-tailed test) and opportunity to participate (β=0.003; P=0.893; two-tailed) both have a non-significant direct effect on organizational innovation. However, motivation-enhancing HRM (β=0.611;P<0.05; two-tailed test) appeared to have a significant direct association with organizational innovation.

Therefore, innovative climate mediates the relationship between ability and opportunity-enhancing HRM and organizational innovation only. Also, it was confirmed that an innovative climate does not mediate the relationship between motivation-enhancing HRM and organizational innovation because the total indirect impact of innovative climate on organizational innovation is insignificant at β=-0.149. Thus, hypothesis six (H_6) is partially supported and it implies that the underlying

mechanism through which AMO-enhancing HRM contributes to innovation is partially explained by the existence of a perceived innovative climate of flexibility to change, risk-taking and problem-solving culture. The SEM path analysis of hypothesis Six (H_6) is presented in Figure 4.15 and Table 4.15 as follows:

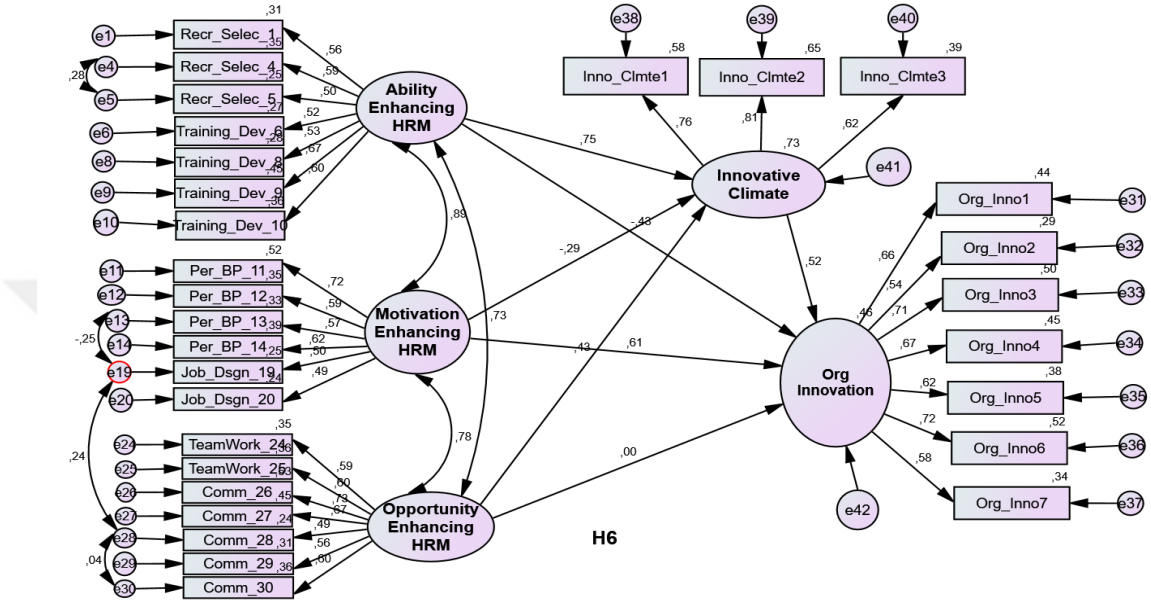


Figure 4.15: *The SEM Model and Path Analysis for Hypothesis (6)*

Table 4.15: *The Goodness of Fit Statistics of Innovative Climate Mediation Test*

Model Fit Indices	Chi-square	DF	P-value	$\chi 2$	CFI	GFI	AGFI	TLI	NFI	SRMR	RMSEA	PCLOSE	PNFI
Result	666.000	391	0.000	1.703	0.926	0.895	0.876	0.918	0.840	0.0458	0.043	0.975	0.755

To conclude, the path analysis mediation test confirmed that HR outcomes does not mediate the relationship between AMO-enhancing HRM and organizational innovation. However, the Bootstrapping test indicated that innovative climate partially mediate the relationship between AMO-enhancing HRM and organizational innovation. The models of mediation process are presented in Table 4.16.

Table 4.16: *HR Outcomes and Innovative Climate Mediation Model Test*

Mediating Effect Hypotheses	No	Model 1 IV->MV Standardized Coef. (β)	Model 2 D*M Standardized Coef.(β)	Model 3 IV->DV Standardized Coef.(β)	Model 4 Mediation Conclusion
Ability->HR outcomes-> Org.Innovation	H_5	0.130(NS)	0.031(NS)	0.22(NS)	Rejected
Motivation->HR outcomes-> Org.Innovation	H_5	0.360*	0.087(NS)	0.299(NS)	Rejected
Opportunity->HR outcomes-> Org.Innovation	H_5	0.463***	0.112(NS)	0.100(NS)	Rejected
Ability->Innovative Climate-> Org.Innovation	H_6	0.752 ***	0.39*	-0.428 (NS)	Full mediation
Motivation-> Innovative Climate-> Org.Innovation	H_6	-0.287(NS)	0.149(NS)	0.611*	Rejected
Opportunity-> Innovative Climate ->Org.Innovation	H_6	0.421***	0.223*	0.03(NS)	Full mediation

Note***=P<0.001; *=P<0.05; NS="not significant"

RESEARCH FINDINGS AND DISCUSSION

This study has developed and tested a new conceptual framework model that explains how and why bundles of HRM practices contribute positively to organizational innovation in the context of the Somali banking and telecom firms. On this basis, six main hypotheses were tested separately using Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) techniques as presented in Figure 4.17.

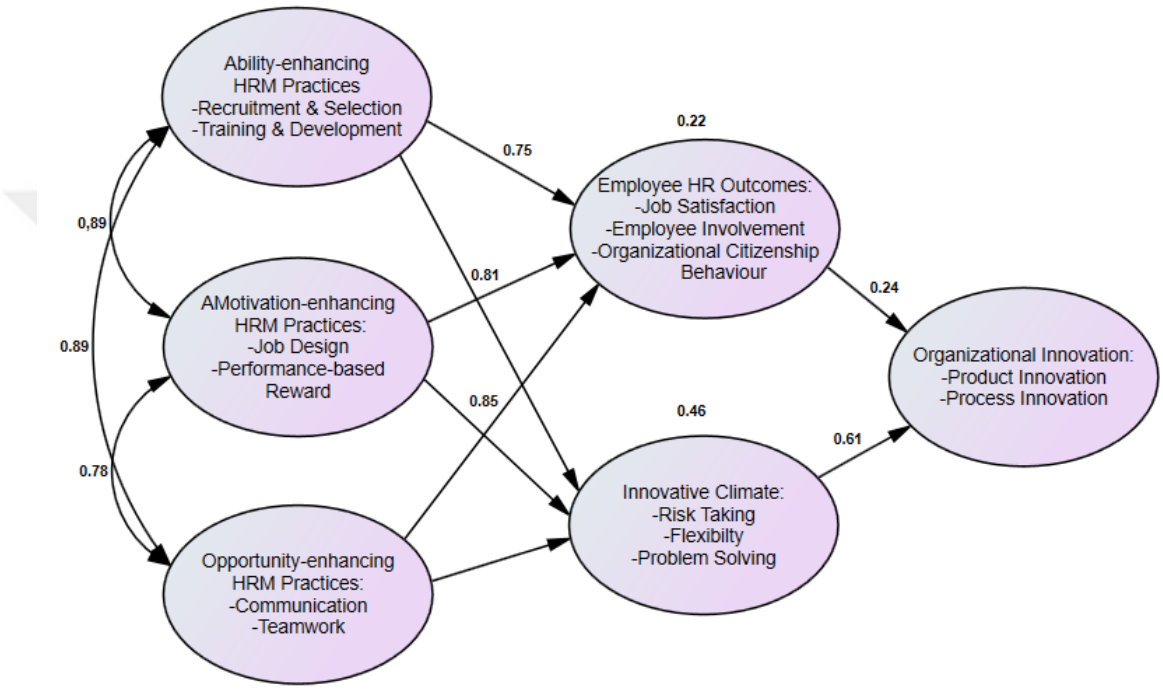


Figure 4.16: *The Research Model Representing the Values of the Tested Six Hypothesis*

According to the analysis of the primary data collected the tested hypotheses, the researcher discovered several key significant findings that will be discussed in detail as follows:

According to the conducted CFA analysis, the first hypothesis (ability-enhancing HR practices positively contributes to HR outcomes) provided statistically significant positive regression loadings. This means, in the context of the surveyed firms, adopting skill-oriented HR policies such as an effective recruitment and selection practices and training system, significantly fosters employees' job satisfaction, their active participation in organizations' decision making and create a positive constructive behaviour in the workplace.

Previous research results from different cultures suggested that HRM practices are predictors of employees' positive attitudes and behaviours in the workplace. For instance, Ahmed and Gould-Williams (2014), had obtained very similar result whereby they investigated the mediating effect of person-organization fit in the relationship between High performance work systems(HPWS) and HR outcomes. Moreover, Stefano and Camuffo (2018), surveyed 6,000 employees from six European countries and concluded that ability-enhancing HRM practices contribute to different types of behaviour-oriented employee performance such as job satisfaction, employee commitment and OCB. Employees who feel that they are fairly recruited and trained more likely demonstrate citizenship behaviour by showing commitment and trust towards both their supervisors and company goals in the context of the study. The above research findings are in line with the argument made by Dyer and Reeves, (1995) relating the fact that HR practices have a strong direct impact on employees' outcomes and less insignificant impact on organization's financial outcomes due to the increased distance between these outcomes to HRM practices. In addition, By drawing from 168 firms in China, Bo and Morris, (2013) reported that High performance work systems (HPWS) positively influence HR outcomes (β=0.540;P=0.01).

According to the second supported hypothesis, motivation-enhancing HR practices positively contribute to HR outcomes. In other words, performance-based payment and job design practices foster employees' job satisfaction, their involvement and OCB. These findings imply that in the context of Somali service firms, providing intrinsic and extrinsic rewards fully contribute to employees' job satisfaction, encourage active participation in problem-solving and help them develop OCB characteristics. This finding is consistent with the work of Kaya, Koc and Topcu (2008), who explored the influence of certain HR systems and organization innovative climate on job satisfaction of 49 Turkish banks. In another research, Bock and Kim (2002), pay for performance was found to motivate employees in demonstrating OCB characteristics due to the personal value alignment employees feel towards organizations. Similar studies argued that motivation-enhancing HR practices may guide employees to develop a high degree of psychological self-efficacy that lead to better HR outcomes (Dery and Shaw, 2001; Becker and Huselid, 1998; Chen and Wu, 2016). According to Jiang and Lepak (2012),

HR practices including motivation-oriented were found to be positively related to different types of human capital outcomes.

In the context of the surveyed firms, the more employees feel that they are fairly rewarded compared to their peers, the more they show positive work attitude including motivation and involvement in decision making. This argument is supported by the expectancy theory of Vroom that posits employees show desirable work attitude based on the level of rewards they expect to receive. For instance, employees' satisfaction increases when the actual reward is equal to or higher than the perceived reward. Similar findings from Arab-African countries support our findings. In reference to Mansour, Gara and Gaha, (2014) study that addresses the potential mediating role of human capital in the relationship between High performance work systems (HPWS) and perceived performance, merit-based pay and flexible job design were found to yield both superior employee and firm performance.

In third supported hypothesis, we found strong evidence that states opportunity-enhancing HR practices affect HR outcomes positively. Thus, it can be interpreted that the Somali service sector employees perceive that empowerment-enhancing HR practices such as self-managed teams and effective communication practices impacts positively their job satisfaction, desire to participate in problem-solving and enhances favorable OCB.

These findings provided evidence to the assumption that assumes empowerment-oriented HR practices of teamwork and communication creates opportunities for human capital, which in turn may lead to enhanced organizational performance (Bo and Morris, (2013). This result is also consistent with the work of Kaya et al., (2008). They found that HR practices including teamwork and feedback on performance have a positive influence on job satisfaction of employees. In addition, Jiang et al., (2012a) indicated that opportunity-enhancing HR practices empower and motivate employees in using their skills effectively in achieving organizational goals. This is because employees who are empowered through information sharing and autonomy are more likely to feel higher job satisfaction, higher engagement and willingness to stay committed in the long-run.

As our SEM regression analysis has shown, that opportunity-enhancing HR practices that we considered in this study (e.g., autonomous teamwork and employees' communication) have a direct impact on how employees perform. For instance, any positive perception regarding these practices encourages workers to show positive discretionary attitudes towards organizational goals and enables them to fully utilize their potential. Thus, our findings reaffirm the importance of employee-oriented outcomes that were regarded as important practices in shaping the attitude and behaviour of employees by some scholars (Guest, 1997; Purcell and Kinnie, 2007).

Furthermore, the fourth supported hypothesis indicates that the existence of an innovative climate in organizations predicts higher levels of organizational innovation in the case of employees surveyed. Several previous research findings supported the notion that the dimensions of innovative climate (e.g., autonomy, knowledge sharing and risk-taking) strengthens innovation (e.g., Amabile et al., 1996, Nijhof et al., 2002, West and Anderson, 1996). The more employees feel strong organizational support, the more their motivation to innovative increases. The positive experience that employees feel at the workplace towards the perceived HR practices creates an innovative work behaviour that leads to innovation and creativity. This argument is supported by the notion of social exchange theory that argues the existence of an innovative climate strengthens employees' perceptions that innovative work behaviour is valued and supported by the organization which encourages them to repay in the form of creativity and innovation (Bos-Nehles and Veenendaal, 2017). This is because firms that tolerate failure and risk-taking face low uncertainty that motivates employees to undertake challenging tasks and creative activities that transforms knowledge into new or improved products or work processes (Anderson and West, 1998). Also, this finding is similar to a prior research finding suggesting that product and process innovation was higher in organizations with positively perceived innovative climate (Tidd and Bessant, 2009; Amabile *et al.* 1996).

The fifth hypothesis of this study predicted that HR outcomes mediate the relationship between AMO-enhancing HR practices and organizational innovation in the case of the surveyed Somali firms. However, the result of the conducted structural equation measurement model showed the opposite. Through following mediation process recommended by Baron and Kenny (1986)**,** the relationship between HR

outcomes and organizational innovation was found to be non-significant and therefore, hypothesis five is fully rejected.

According to much of the previous research evidence, the more employees are given the opportunity to participate, skills to perform and motivation to go the "extra mile", the better they contribute to different types of organizational performance including innovation in this case (Jiang et al., 2013). However, in the context of Somalia, such assumption is not always true. As the result of this hypothesis formulated, in the context of Somalia, even if employees have positive perception towards the implemented HR practices, show obedience, loyalty, participative behaviour at workplace and satisfaction with different dimensions of work-related issues, such individualistic discretionary behaviour does not help them contribute to organizational innovation. The outcome of this analysis implies that employees with KSA (knowledge, skills, and ability), motivation and given opportunity to participate tend to develop an individual level of employee performance (as the first four hypotheses indicated) but, that does not necessarily increase their innovative performance at the organizational level. These interesting findings can be interpreted in three main ways:

a) The first probable explanation is that employees' innovative performance does not only depend on their ability to perform, motivation and the degree of the opportunity given but also there are other critical factors involved. To give an example, given the complexity of the innovation process, workers' innovation performance depends on the degree of knowledge sharing among coworkers and the existence of an innovative climate that supports innovation. Such context-related factors that create a climate of cooperation and supportive environment may influence employees more than their individualistic discretionary behaviours as innovation is too complex to be achieved by individual employees, according to the argument made by (Beltrán-Martín and Bou-Llusar, (2018). In addition, Jimenez-Jimenez and Sanz-Valle (2008), identified that innovation is not only affected by AMO-enhancing HR practices but also some other external and internal factors are involved. The internal factors that determine innovation include the innovative capacity of organizations, organizational design, leadership style and culture of the firm.

This is because organizational practices that promote a positive culture and inclusive climate are more favourable to improve innovation than individual HR outcomes.

b) Similar to our findings, several researchers previously reported that the relationship between HR outcomes and organizational performance is either negative or weak. For instance, Vroom (1964), conducted a meta-analysis involving twenty studies conducted between 1949 and 1963 investigating the relationship between job satisfaction and performance concluded that such a relationship is weak but positive (β=0.14). While another meta-analysis of Petty and his colleagues attempted to advance Vroom's findings by analyzing 35 studies with a sample size of 3,140 respondents conducted between 1967 and 1982. Their conclusions supported the findings of Vroom that the relationship between job satisfaction and performance is weak (β=0.23). On the other hand, Graef and Muchinsky (1985), investigated the relationship between job satisfaction and organizational performance by conducting a meta-analysis covering 70 studies published in 74 articles with a total sample size of 12,192 respondents. This study concluded that the true correlation between job satisfaction and different forms of organizational performance is weak after the sample size error and unreliable measurement errors were adjusted (β=0.17). A recent work of Mehtap and Sudak (2015), investigated the nature of the relationship between the four dimensions of OCB, leadership style and innovation by utilizing survey data collected from 1,041 employees in 237 firms operating in Turkey's service sector. According to the hierarchical regression analysis, no direct association between OCB and innovation was found. We also found similar empirical outcome from East-African context. Evans et al., (2015) investigated whether HR outcomes of commitment, competence and empowerment mediate the relationship between HRM practices and firm performance (e.g., productivity, profitability and sales growth rate). By utilizing data collected from 60 firms listed on the Nairobi Securities Exchange, the authors found no sufficient evidence that indicates that HR outcomes mediate the relationship between HRM practices and firm performance. These research findings rejected the long-standing perceived positive relationship between certain HR outcomes (job satisfaction and OCB) and performance. In other

words, the correlation between employees' positive attitudes and their performance is questionable and so far the existence of contradicting evidence must be admitted.

c) The third possible interpretation of the above mentioned finding relates to the culture and environmental context of the participants. Normally, it is assumed that each country has a set of unique, deeply held values that are reflected in the ways employees interact, behave and think towards workplace-related values. Thus, the ways HR practices are implemented and perceived and the expected HR outcomes may differ from one country to another according to the HR contingent approach. Based on this argument, the behaviour and cultural values of the employees working at Somali telecom and banking firms can be understood through the lens of Hofstede's cultural dimensions. Generally, East-African countries, including Somalia tend to have a high power distance attitudes and the less powerful members of the society are expected to admit the fact that power is not distributed equally. These societies are also considered to act in a collective manner rather than compete individually where employees conform to group norms in exchange of loyalty (Hofstede 2010). High masculinity and fewer feminine values are very common as expected whereby the main motivating factors of employees from these countries are not the desirable HR outcomes (satisfaction, empowerment and OCB) but a collective achievement and recognition based on seniority and gender. Some scholars argued that employees transfer their already existing cultural values into their organizations shaping their work-related attitudes which at the end influences their preferred HRM practices and due to this, the expected outcomes may differ. The way HR systems are designed, implemented and perceived is influenced by the kind of dominant culture in that particular society. For example, a collective society will prefer to recruit employees based on relations and loyalty rather than on merit basis, prefer informal, unstructured training methods and compensate employees based on team performance rather than individual performance compared to Anglo-American countries (individualistic culture).

The last sixth hypothesis tested in this study predicts that innovative climate (risk-taking, flexibility and problem solving) mediates the relationship between AMO-enhancing HR practices and organizational innovation (product and service). The conducted mediation analysis showed that only ability and opportunity-enhancing HR practices fully mediate this relationship, whereas motivation-enhancing HR practices do not mediate this relationship. This finding is similar to a prior research finding that suggested that organizational innovation was higher in organizations with positive perceived innovative climate (Tidd and Bessant, 2009; Amabile *et al*, 1996).

Supportive evidence confirms that an innovative climate partially mediates the relationship between certain HR practices and innovation (Gelade and Ivery, 2003). Designing an effective recruitment system, proper training programs, forming teams and information sharing will not only enhance employees' individual ability and opportunity to participate, but also it contributes to building a supportive innovative climate at the organizational level which as a result affects innovation positively (Evans and Davis, 2005). Our findings, therefore, are similar to those of (Bos-Niles and Veenendaal, 2017) who conducted an empirical research paper that explored the effect of perceived HR practices on innovative work behaviour and innovative climate using data collected from 463 employees of four Dutch manufacturing firms. The result of the regression analysis revealed that innovative climate mediates this relationship and that employees' positive perception of HR practices (e.g., information sharing, training and supportive supervision) relates to their innovative work behaviour.

However, similar to our finding, employees' perception of the compensation system reduces their innovative work behaviour, according to (Bos-Niles and Veenendaal, 2017). The empirical result of the work conducted by Barros (2012) showed that performance-based monetary rewards do not encourage employees to increase their innovation performance. To explain logically, employees may perceive that organizations are using extrinsic rewards as a "stick" and controlling tool which at the end constrains their self-directed creativity and innovation according to (Amabile 1998:79).

Cultural differences may also play a significant role in the ways employees perceives performance-based rewards. For example, group-based extrinsic rewards can have a strong positive effect on employees' creativity and innovation in collective

cultures and less impact when such monetary rewards are based on an individual's performance (Eisenberg, 1999). Based on this argument, since the surveyed Somali employees tend to embrace collectivism, any individual-based motivational rewards may not increase their performance. On the other hand, it is a common assumption that autonomy and flexible job design enhances employees the freedom to undertake challenging work and contributes to their creativity and innovation. However, based on our findings and some recent findings, increased autonomy may undermine employees' collective efforts to contribute to organizational performance goals, including innovation (De Clercq et al., 2015; Eisenberger and Aselage, 2009).

CONCLUSION AND RECOMMENDATIONS

The present research focused on discovering the underlying mechanism through which HRM practices affect organizational innovation. In addition, the researcher hypothesized that job satisfaction, employee involvement, OCB and innovative climate as mediating factors that explain how and why HRM practices contribute to innovation by considering AMO framework. A conceptual framework model consisting of AMO-enhancing HR practices, HR outcomes, innovative climate and innovation was developed. For this purpose, six hypotheses were developed and tested against the nature of this relationship.

Before collecting the research data, the researcher collected preliminary pilot data to validate the consistency and relevance of the developed measurement instrument. The participants of the study questionnaires were randomly selected from employees working at the surveyed telecom and banking firms, regardless of their age, gender, experience, education and position at the organization through cross-sectional scale questionnaires measured on a five-point Likert scale. A series of Confirmatory Factor Analysis (CFA) was carried out to ensure whether the items of each construct fit well with the collected data. Data normality and common method bias tests were also applied to ensure whether the data collected are normally distributed and are free from data collection-related biases.

The main findings of the study can be summarized as follows:

- Ability-enhancing HR practices such as training and development, recruitment and selection positively contribute to different types of employees' HR outcomes, including job satisfaction, employee participation in decision-making and OCB.
- Motivation-enhancing HR practices of pay for performance and job design fully contributes to employees' HR outcomes (job satisfaction, OCB and employee involvement).
- Empowerment-enhancing HR practices of forming autonomous teamwork and establishing an effective communication channels have a direct positive effect in contributing to employees' job satisfaction, OCB and employee involvement in decision making.

- HR outcomes (job satisfaction, OCB and employees' involvement in decision making) do not mediate the positive relationship between HRM practices and organizational innovation.
- The innovative climate of flexibility to change, problem-solving and risk-taking tolerance only mediates the relationship between ability-enhancing and empowerment-enhancing HR practices on one hand, and organizational innovation on the other hand.
- An innovative climate does not mediate the relationship between pay for performance and flexible job design HR practices and organizational innovation;
- An innovative climate significantly contributes to organizational innovation.

Based on the above-mentioned findings, this empirical research has answered many previous research questions in this field and contributed to the findings of past studies in different ways. We tested the role of a mediating model empirically using the well-known Structural Equation Modelling techniques.

Generally, it is agreed that one of the immediate outcomes of HR systems is to obtain a desirable employee performance in the form of innovative work behaviour which has a direct effect on organizational performance. The analysis of Structural Equation Model (SEM) indicated significant evidence showing that the three AMO-enhancing HR practices considered in this study impact employees' skills, motivation and opportunities to contribute positively to different degrees. A significant correlation between HR practices and HR outcomes was established showing that HR practices significantly relate to employees' performance. This means that the HR practices of training and development, recruitment and selection, payment for performance, job design, teamwork and communication were found to be associated with increased positive attitudes and behaviour of employees. We found sufficient evidence that indicates implementing bundles of HR practices is not only important but also the way employees perceive them is what contributes to desirable work-related behaviours.

These findings provided significant evidence that assumes implementing this HR practice leverages employees' skills, motivation and empowerment as they are important for any organization that aims to innovate better than its competitors. In the future, only firms providing the highest value-added practices may succeed and much of such value-added competencies come from the type of the implemented HR policies and the talent

of the workforce. Therefore, all six AMO-enhancing HR practices are important pre-requisite for satisfied employees who show commitment to the values of their organizations as Damanpour and Evan (1984), argued. Highly satisfied, well-motivated and loyal employees are the immediate outcomes of positively perceived HR practices and are essential for organizations' success and survival. Therefore, in the context of the study findings, designing and implementing the AMO-enhancing HR systems are critical as employees will flourish only when they are supported by giving the concern for and dedication to developing their know-how, motivation and empowerment. Even though attracting and retaining talented employees is one of the challenges faced by organizations, designing an effective recruitment system remains one of the key contributors to the positive workplace and productive attitudes of employees.

On the other hand, some past studies reported that HR outcomes act like the "black box" that mediate the relationship between HR practices and innovation (e.g, Jiang and Lepak, 2012:1453). On the contrary, we found no evidence that supports the existence of this mediation effect. Instead, we discovered that HR outcomes do not directly add value to innovation, but rather, we found that providing an innovative and supportive environment is what fosters higher levels of innovation. Therefore, in the context of surveyed Somali service firms, innovation is achieved when organizations provide an innovative climate that supports creativity, risk-taking and flexibility to new ways of doing things rather than when employees show individualistic positive work attitudes (e.g., job satisfaction, involvement and OCB).

Also, regarding whether AMO-enhancing HR practices facilitate an innovative climate, we found that only ability and opportunity-enhancing HR bundles improve an innovative climate, whereas motivation-enhancing HR practices are negatively related to an innovative climate. This result implies that organizations interested in creating an innovative culture that promotes creativity should give much attention to enriching employees' skills, knowledge, empowerment and participation in decision-making more than motivating through performance-based rewards. This can be increased by establishing an effective staffing system that attracts qualified employees, providing training activities, supporting teamwork at the workplace and putting in place communication channels that facilitates employee empowerment and the flow of information. Based on this finding, HR managers should avoid providing individually

based extrinsic rewards (e.g., performance-based payment) in the context of Somali collectivist culture as it is negatively related to innovation (Beltrán-Martín and Bou-Llusar, (2018).

As per the discussions above, the very specific recommendations to the Somali telecom and banking firms regarding the outcome of this empirical work is summarized as follows:

- The Somali Telecom and banking firms must ensure adopting and implementing ability-enhancing HR practices (recruitment, selection, training and development) as they contribute to job satisfaction, OCB and employee involvement which leads to an innovative climate that promotes innovation. Putting in place an effective recruitment system that selects potential employees based on their skills and then providing training opportunities foster their productive work-related attitudes (job satisfaction, OCB, involvement and innovative climate) and organizational innovation.
- The two service sector firms must review the way motivation-enhancing HR practices (job design and pay for performance) are designed and implemented. Flexible job design and performance-based payment contribute to neither innovative climate nor organizational innovation. However, these two practices motivate employees in the short-run as they increase employees' job satisfaction and OCB.
- The study participant firms must implement an opportunity-enhancing HR practice (communication and teamwork) as they are essential factors that strengthen the empowerment and participation of employees in the decision-making process. These practices are also important for discretionary positive attitudes and organizational innovation.
- The researcher recommends that the Somali telecom and banking firms must provide an atmosphere that supports creativity, flexibility to change and risk-taking tolerance at an organizational level as they are highly critical in promoting product and process innovation. These organizations must put their focus on creating an innovative climate that supports formal and informal policies, practices, and routines of the organization as they affect both employees' attitudes

and organizational innovation outcomes. These work-related attitudes were found to feed and drive innovation.

The researcher examined and uncovered the "black box" phenomena by extending our understanding further on how and why HRM practices affect innovation through considering the assumptions of AMO (ability, motivation, and opportunity) framework in the context of the eleven Somali service firms surveyed. The mechanism through which HR practices and its outcomes increase firm performance have been given much consideration recently (e.g., Amabile *et al, 1*996, Galbraith 1984; Martell and Carroll 1995; Foss and Laursen, 2002). However, according to the literature reviewed the "black box" phenomena that explain the role of employees' attitudes and behavior in the relationship between HRM and firm performance was undeveloped and empirically less tested in the non-Western perspectives based on arguments of some scholars (e.g., Laursen and Foss 2003). The main contribution of this study is based on answering whether the HR practices influence both individual and organizational outcomes which enhance the overall performance. In this regard, we tackled the recommendations raised by a group of scholars in making further empirical research into the HRM-performance linkages and related HR outcomes in the service sector and in none-Western cultures. The current study empirically investigated and analyzed whether certain HRM practices encourages innovation in the Somali service sector.

The theoretical contribution of this study is based on the proposed HR outcomes and innovative climate model that explains how AMO-enhancing HR practices may contribute to innovation. To the best knowledge of the researcher, this research constitutes the first published study of its kind in the Somali context which is expected to guide Human Resource (HR) professionals in creating and implementing effective HRM policies to positively influence the employees' innovative work behaviour that fosters organizational innovation.

This study also contributes to the current research debates on the issues of HRM-firm performance linkages. Thus, the researcher highlights the context of the study and further implications that needs consideration as follows:

1) The researcher suggests further research that uses both qualitative and quantitative research designs that reduces our method's shortcomings. This will extend our understanding of whether HR outcomes and support for an

innovative climate model mediate the relationship between AMO-enhancing HR practices and different types of organizational performance including innovation.

2) Since our study is a cross-sectional in nature, cause and effect relationship between HRM/innovation linkages were not being conducted. Thus, we suggest future research that uses a longitudinal research design to study the variables of this study more extensively.
3) Our study was based on the banking and telecom industry in Somalia, which may not be generalized to other sectors. In order to improve the generalizability of our findings in the African context, other researchers could duplicate it by focusing on other African countries in the broader sense and specifically in East-African region in both private and public organizations. The outcome of such research may strengthen the conclusions made by this study.
4) This study investigated the mediating effect of HR outcomes in the relationship between HRM practices and organizational innovation. Surprisingly, we found no empirical evidence that suggests HR outcomes mediate this relationship in the context of the Somali telecom and banking firms surveyed. However, both previous research findings and theoretical evidence indicated that the relationship between HRM practices and firm performance is influenced by employee HR outcomes (Boxall and Purcell, 2003; Jiang et al., 2013:1453). Thus, future studies should re-examine these findings further in other contexts.
5) The size of a firm and its number of years in operation affects its innovative capabilities. Basically, mature organizations are expected to have developed accumulated experience in understanding what methods works best by learning from the past and do not suffer from liability of newness compared to newly formed organizations. However, in this study, we did not control their effects on innovation. Future empirical studies are encouraged to investigate whether larger firms enjoy superior performance compared to smaller ones and whether the age of firms supports their innovation.
6) Since this study focuses on the Somali context and studied relatively limited HRM practices that relate to innovation, other HRM practices may also be

important in contributing to employee's HR outcomes and the creation of innovative supportive climate. We recommend conducting further empirical research that includes more HRM practices and other organizational innovation-related attributes to identify whether certain HR practices are appropriate in particular national cultures and to reduplicate data on different types of industry or group of employees.

7) The relationship between HRM practices and innovation may be explained by other mediating factors that we did not consider in this study. For instance, innovative work behaviour, creativity and empowerment may promote higher organizational innovation. We call for further research that extends our understanding of whether these organizational attributes mediate the relationship between HRM practices and organizational innovation.

To conclude, we considered the relationship between certain HR practices, employees' outcomes, an innovative climate and organizational innovation. This study was based on the arguments made by (Arthur, 1994; MacDuffie, 1995; Huselid, 1995) who admitted the existence of mediating variables that explains how HRM practices contribute to organizational performance. The current study highlighted the importance of adopting bundles of HR practices so that the benefits of synergy are achieved. However, HR practices and HR outcomes may yield the expected individual and organizational outcomes only when the critical factors of context, culture and strategy are taken into consideration. What drives process and product innovation is not merely the level of motivation, individual employees may have, but the collective perception of support that employees feel at the organizational level in the case of Somali telecom and banking firms.

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APPENDICES

APPENDIX 1

Sample Calculation Table (Krejcie and Morgan, 1970)

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

APPENDIX 2

The Research Survey Questionnaires

A Ph.D. Research on Human Resource Management Practices and Organizational Innovation: Anadolu University, Turkey.

Dear participant,

You are kindly requested to assist in this study which aims to determine employees' perception towards existing Human Resource Management Policies in Private Service Sector Organizations and its effect on their innovative work behaviour and organizational innovation. The findings of the study are expected to help human resource and top managers in building a better Human Resource Management Practices that understands your needs and promotes innovation at the workplace. The final outcome of this study will be shared with your organization. Please take a couple of minutes to fill out this questionnaire. The sincerity of your answers is very critical in depicting the real conditions. This survey questionnaire does not collect any personal information identifiable to your organization. Responses to this survey will be kept confidential and will not be disclosed to anyone.

This survey can be filled by all the levels of managers and employees in Private Service Sector Organizations (e.g., Telecommunication and Banking).

Thank you in advance for taking time to complete this survey. Should you wish to contact us, you may reach us by the below E-mails:

Sincerely,

Prof. Dr. Cemil ULUKAN
Open education Faculty
Anadolu University, Turkey
culukan@anadolu.edu.tr

Awil MOHAMUD
PhD. Candidate
Management & Organization Department
Graduate School of Social Science
Anadolu University, Turkey
amnegal22@anadolu.edu.tr

✓ **PART ONE: General Information**

❖ Please answer the following question:

1. Your gender? Female ☐ Male ☐

2. Your age? _____

3. Your position in the organization? _____

4. Number of years you have been working in this organization_____

5. Your type of employment:

Permanent full time: ☐ Part-time: ☐ Temporal: ☐

6. Your latest level of education:

- High school: ☐
- Diploma: ☐
- Bachelor degree: ☐
- Master's degree: ☐
- Ph.D. degree: ☐

✓ PART TWO: Human Resource Management Practices Questionnaires

The following statements are intended to collect Human Resource Management Practices in place in your organization. Please read each one and indicate by ticking the appropriate boxes to what extent you agree or disagree with each statement:	**1 Strongly Disagree**	**2 Disagree**	**3 Partly Agree**	**4 Agree**	**5 Strongly Agree**
1. In our organization, job analysis is conducted prior recruitment and selection process					
2. Our organization discloses information to applicants regarding the steps and criteria of the selection process					
3. **<u>Favouritism</u> (the practice of employing one person over the expense of another) is practiced in all recruitment and selection process in the organization (negative)**					
4. All appointments in this organization are based on merit (the best person for the job is selected)					
5. When recruiting new employees, selection tests and interviews are conducted by trained and impartial people					
6. In our organization, employees have been trained in a variety of jobs or skills (cross-trained) and/or routinely perform more than one job					
7. **I do not have the required skills and abilities to do my work effectively (negative)**					
8. Our employees have received training in generic skills (e.g., problem-solving and communication skills)					
9. Our organization promotes employees' personal and professional growth					
10. Our organization encourages learning and application of knowledge at the workplace					
11. **Our organization rewards employees who make an extra effort**					
12. There is a strong link between how well our employees perform their job and the likelihood of receiving a raise (e.g., salary and appraisal ratings)					
13. This organization provides a clear explanation of the salary payment policy and how it is to be implemented					
14. Our organization offers payment benefits which are similar or better than other organizations in our market					
15. Our organization provides basic benefits (e.g., healthcare, transportation assistance, etc.)					

Continue...	1 Strongly Disagree	2 Disagree	3 Partly Agree	4 Agree	5 Strongly Agree
16. My Job involves a wide variety of tasks					
17. Employees are given job rotation opportunities					
18. Employees in this organization have broadly been assigned to jobs requiring a variety of skills					
19. Employees are empowered to make decisions					
20. Employees have a high degree of job security					
21. Team goals are formulated by teams themselves					
22. Jobs are designed in a manner that facilitates working in groups/ teams					
23. **Self-managed teams are not widely used (negative)**					
24. Jobs here give employees the chance to use personal initiative in carrying out their work					
25. Our organization supports cross-functional teamwork for learning through collaboration					
26. Company goals, strategies and objectives are clearly communicated to employees					
27. The channels for employees' communication with top management are effective in our organization					
28. Employees are provided with the relevant financial performance information of the organization					
29. In our organization, knowledge is shared with colleagues and units					
30. The future direction of the company is clearly communicated to employees					

✓ PART THREE: Human Resource Employees' Outcomes Questionnaires

The following statements are aimed to assess employees' outcomes of the implemented HR practices. Please read each one and indicate by ticking the appropriate box to what extent you agree or disagree with each statement:	**1 Strongly Disagree**	**2 Disagree**	**3 Partly Agree**	**4 Agree**	**5 Strongly Agree**
1. I feel I am being paid a fair amount of salary for the work I do					
2. I am satisfied with the benefits I receive in the organization					
3. When I do a good job, I receive the recognition for it that I deserve to receive					
4. I sometimes feel my job is meaningless (negative)					
5. My supervisor is fair to me					
6. In our organization, there is an environment of understanding and confidence between managers and employees					
7. The organization I work for appreciates the work I do and the results I achieve (e.g., in oral compliments, in articles in corporate bulletins, etc.)					
8. Our organization encourages employees' participation in decision- making and problem-solving					
9. Management does not involve employees when decisions that affect them are made (negative)					
10. Employee participation is encouraged by a wide range of issues					
I am willing to represent the organization favourably to outsiders					
11. Normally I do not work beyond what is required (negative)					
12. I share ideas for new products and services and tell others					
13. I am willing to assist colleagues to solve work-related problems volunteerly					
14. I feel a strong sense of belonging to this organization					

✓ **PART FOUR: Organizational Innovative Climate Questionnaires**

The following statements measure the kind of innovative climate existing in the organization. Please read each one and indicate by ticking the appropriate boxes to what extent you agree or disagree with each statement:	**1** **Strongly Disagree**	**2** **Disagree**	**3** **Partly Agree**	**4** **Agree**	**5** **Strongly Agree**
1. This organization is always moving toward the development of new answers					
2. This organization can be described as flexible and continually adapting to change					
3. People in this organization are always searching for fresh, new ways of looking at problems					
4. Creativity is not encouraged in this organization (negative)					
5. This organization seems to place a high value on taking risks, even if there are occasional mistakes					

✓ PART FIVE: Organizational Innovation Questionnaires

Innovation definition: simply product and process innovations are defined as follows:

a) Product innovation: is the introduction of goods and services that is new or significantly improved. This includes significant improvements in technical specifications, components and materials, software in the product, user-friendliness, or other functional characteristics. Product innovations can utilize new knowledge or technologies or can be based on new uses or combinations of existing knowledge or technologies.

b) Process innovation: a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software. Process innovation is intended to decrease unit production or delivery costs, to increase quality, or to produce or deliver new or significantly improved products/services.

The following questions are intended to measure the level of organizational innovation performance in your organization between 2014 and 2016. Please read each question and indicate by ticking the appropriate boxes to what extent it is applicable to your organization:	**1 Not at all**	**2 To a small extent**	**3 To a moderate extent**	**4 To a great extent**	**5 To a very great extent**
1. To what extent your organization introduced and utilized innovation in the period of 2014-2016?					
2. To what extent you have (as an employee) contributed to organizations' innovation in the period of 2014-2016?					
3. To what extent you are satisfied with your organization's innovation performance in between 2014-2016?					
4. To what extent has this innovation changed how things used to be in the organization?					
5. How different has the innovation been from other similar organizations?					
6. To what degree this innovation contributed to improving the organization's ability to attain goals?					
7. In general, to what extent innovation is important for your organization in order to achieve its goals?					

End of questionnaires

Thank you for time and contribution

Appendix 3

Official Confirmation Letters from Survey Participating Firms

Maka Almukaramaha Street

Dahabshil Bank Interational

Hodan District

Mogadishu

Dahabshil Bank
International
Islamic banking you can trust

To whom it may cercern

17th Sept 2018

Dear Sir/Madam

Asalamu Alaikum Warahmatulah

It is our pleasure to share with you that the Our employees here at Dahabshil Bank International had filled up questionares from Awil Mohamud Nor Egal. The questioniares were basically concerned in conducting a survey on Human Resources Management practices and innovation.

The team expressed their respective views on the matter and submitted the document back to the distributor.

Any enquiries referring the matter, feel free to reach us at the contacts below.

We are looking forward to your cooperation in the matter.

Thank you

Regards

Abdirahman Ahmed Mudey

Branch Manager

DAHABSHIL BANK INTERNATIONAL MOGADISHU

Makka Al-Mukaramah Street, Dahabshil Building, Dahabshi Bank International,
Waberi, Mogadishu, Somalia. Tell: 237200 or 237201; Website:
www.dahabshilbank.com

Salaam Bank بنك سلام

Marketing-office

Date: 28/03/2018

To whom it may concern.

We are glad to confirm that Mr. Awil Mohamud Noor Egal who is PhD candidate from Anadolu University has surveyed our employees at bank's Headquarter in Puntland. Employees and management team participated in responding to Mr. Awil's survey questionnaires titled determining the relationship between human resource management practices and Organizational innovation: the case of Somalia

Thanks.

Abubakar Mohamed Omar

Marketing Manager

NATIONLINK telecom
People's Connection

Human Resource Development

NationLink Building, Mogadishu – Somalia.Tel. +252 5 934340 / Fax. +252 5 933004 / Mob. +252 69 9459789 email. nlthrm@gmail.com

To: Anadolu University

Date: March 15, 2018.

Subject: Mr. Awil Mohamud Noor Egal

With reference to Mr Awil Mohamud who has conducted a research titled "Determining the relationship between human resources management practices and Organizational innovation: the case of Somalia" has successfully completed. During his stay with **NationLink Telecom – Somalia**, he has met with Human Resource Department Officials and other employees.

Our employees participated to complete the survey questions in an open and professional way.

We thank to all participated the completion of this survey and also Mr. Awil Mohamud who was mastering the task.

NationLink Telecom – Somalia is one of the leading telecommunication companies in Somalia and has one network system throughout the country.

Best regards,

Abdinasir Abdullahi H. Ali
Human Resource Director
NationLink Telecom - Somalia.

Amal Bank بنك الأمل
Your Future , Our Mission
Contact Us
+2525 843100
info@amalbankso.so
amalbankso.so

Letter of Confirmation

Survey Questionnaire Participation

As Amal Bank we acknowledge that our employees have participated in answering survey questionnaire distributed by Mr. Awil Mohamud regarding Human Resources Management Practices, Innovative Climate and Employee innovation.

We look forward in receiving the result of the research

Human Resources Manager

Abdirahman Mohamed Abshir

.....

Garoowe Puntland Amal Bank

10-05-

GOLIS TELECOM SOMALIA

Golis Tower, Biyo kulule Road,Bosaso Puntland –Somalia.

Ref: HRD/011/2018

Date: 9th/04/2018

TO WHOM IT MAY CONCERN

Subject: Confirmation Letter

Golis Telecom Somalia confirms that our staff and departmental management participated in filling Mr. Awil Mohamud Noor's PhD research project survey questioners.

Best Regards

V. Director Human Resources
Osman Abshir Nor

GOLIS TELECOM SOMALIA
HUMAN RESOURCES DEPARTMENT
H/Q BOSASO,SOMALIA

Tell: +252 5 822001

Fax: +252 5 822002

Website: www.golistelecom.com

E-mail: info@golis.net / gtcxog@gmail.com

Somtel Puntland.

Service – Openness – Modernization, Trust– Efficiency – Leadership.Puntland Headquarter-Bosaso- Somalia.

Date: 29-Mar-2018

To whom it may concern

Dear Sir/Madam

Somtel Telecommunication Company was established in may 2009 in Somalia. With the widest coverage by any telecom company in the region, Somtel's network coverage and branches can be found in every region in Somalia. It quickly rose to be one of East Africa's leading telecommunication companies with its outstanding services which include latest technology in Mobile Data, money transferring service (E-Dahab), International roaming and so many other services.

We hereby to certify that we helped Awil Mohamud Noor Egal, PhD. Candidate for his survey questionnaires.

Fahad Jama Omar

HR Admin

SOMTEL PUNTLAND somtel Tel: 0660000044 HUMAN RESOURCE OFFICER

Office of Human Resource- Tel: +252660000008, Email: fahad.jama@somtelnetwork.net

premier bank

25th July 2018

To whom it may concern,

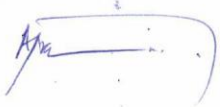
Premier Bank would like to confirm that our employees participated the survey questionnaires distributed by Mr. Awil Mohamud Noor for his Ph.D. research titled: "Determining the Relationship between Human Resources Management Practices and Organizational Innovations": The case of Somali Service Sector. The survey was distributed between 15-20 March 2018.

Should you have any question or need more clarifications, please contact.

Best Regards,

Abdirahman Mohamed Anas

Head of Finance



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Appendix 4

CURRICULUM VITAE (CV)

PERSONAL INFORMATION

Awil Mohamud Noor Egal

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WORK EXPERIENCE

2013–2014	**Internal Auditor** Transitional Puntland Electoral Commission (TPEC), Garowe (Puntland, Somalia)
2012–2013	**Finance Assistant (Casheir)** Save the Children International Somalia (SCI), Garowe (Somalia)
2012–2013	**Part Time lecturer** Puntland State University and East Africa University, Garowe (Somalia) **Courses Taught:** ▪ Cross-cultural management ▪ Business Statistics ▪ Economics
2011–2012	**ADMIN/HR officer** GRANULE FOR TRADING, Khartoum (Sudan)
2009	**Al Baraka and Faisal Islamic Banks** Al Baraka and Faisal Islamic Banks, Khartoum (Sudan)

EDUCATION AND TRAINING

23/09/2013–08/07/2019	**Doctor of Philosophy (PhD) Degree in Management and Organization.**Thesis title: " Determining the Relationship between Human Resource Management Practices and Organizational Innovation: "The case of Somali Service Industry" Graduate Institute of Social Science at Anadolu University, Eskisehir (Turkey)
11/01/2011–09/08/2012	**Master of Business Administration (MBA).** Dissertation title: "Managing Workforce Diversity at Workplace" Sudan International University, Khartoum (Sudan)

21/12/2006–31/12/2010	**Bachelor's degree (B.Sc.).** Dissertation title: "Financial Analysis and Decision Making: The Case of Sudanese French Bank" University of Juba School of Management Sciences, Khartoum (Sudan)
2017–2017	**Young African Leaders Initiative (YALI) Program Participation Certificate** YALI East Africa Kenyatta University, Nairobi (Kenya)
2017–2017	**Participation Certificate** Case-Study Alliance Turkey, Eskisehir (Turkey) Attended the Case Teaching Workshop
2016–2017	**Certificate in Social Transformation & Change** Arizona State University (Online Course)
2016	**Diploma in Business Strategy (Online course)** University of Virginia, Virginia (USA)
2016	**Certificate in Strengthening Public Sector Service** YALI Network online course
2016	**Diploma in Workforce Collaboration and Development** YALI Network online course
2016	**Certificate in Creating and Maintaining Social Enterprises** YALI Network online course
2005	**Diploma in Computerised Accounting** Dreams Tower College, Khartoum (Sudan)

2011–2019 **Articles Written:**

- Determining the role of Human Resource Management Practices in Organizational Innovation: The Case of Somali Banking and Telecom Firms
- "Managing seat-hogging Practices in the twenty-first century academic libraries: the case study of Anadolu university library"
- "Financial Analysis and Decision Making: A case study of the Sudanese French Bank (SFB)"
- "AMO-enhancing HRM Practices & Organizational Innovation: Telecom & Banking Firms in Somalia as an Example'
- "Cash Management and Control System in the Bank of Khartoum"
- The New Public Sector Reforms: Are they "fit" for all?.