

**INDUSTRIAL RELATIONS ENVIRONMENT, PARTICIPATORY  
MANAGEMENT AND COLLECTIVE BARGAINING  
PROCESS IN PUBLIC UNIVERSITIES  
IN KENYA**

**BY  
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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE AWARD OF THE DEGREE OF DOCTOR OF  
PHILOSOPHY IN HUMAN RESOURCE MANAGEMENT,  
SCHOOL OF BUSINESS AND ECONOMICS,  
MOI UNIVERSITY**

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## DECLARATION

### **Declaration by the Candidate:**

This research thesis is my original work and has not been presented for a degree in this or any other University. No part of this thesis may be reproduced without prior written permission of the author and/or Moi University.

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**DEDICATION**

This thesis is dedicated to members of my family for their continued support morally, spiritually and materially throughout my academic pursuits.

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## ABSTRACT

Industrial relations is a key ingredient to any effective organization worldwide given the enormous role it plays in enhancing democratic processes as evidenced by the emergence of trade unions for purposes of collective bargaining on employees' wages and other terms and conditions of service. Extant studies have shown that ineffective Collective Bargaining Process (CBP) leads to hostile industrial relations environment. Although scholars agree that Industrial Relations Environment (IRE) plays a critical part in enhancing CBP, there is still a scarcity of empirical evidence in industrial relations. While some studies have tested the relationship between IRE and CBP, the influence of participatory management has received little attention. This investigation looked at whether participatory management affects the way IRE and CBP interact at Kenyan public universities. The specific objectives of the study were: to determine the influence of human resource management (HRM) practices on collective bargaining process, to assess the influence of union-management relations on CBP in public universities, to determine the influence power of parties to CB on CBP, as well as the moderating effect of participatory management on the link between IRE and CBP. The study was anchored on Dunlop's Industrial Systems theory and complemented by Pluralist, Unitary, Radical, Stakeholders, Institutional, and Participatory Theories. The study used a cross-sectional survey, a sequential explanatory research design. The study utilized pragmatic paradigm and a mixed techniques methodology. The 1462 members and administrators of the Kenya Universities Staff Union who made up the study's target group included eight key informants—four from each university—and 1087 people from Moi University and 375 people from Masinde Muliro University of Science and Technology. Using the Yamane formula, a sample of 314 respondents was obtained. While qualitative information was gathered through an interview schedule with 8 key informants who had been specifically chosen, quantitative information was gathered using standardized questionnaires with items anchored on a 5-point Likert scale from respondents chosen at random from each stratum. It was decided to evaluate the data using both descriptive and inferential statistics. Inferential statistics were analysed using correlation, linear and hierarchical regression. The regression results indicated that HRM practices ( $\beta=0.388$ ,  $p<0.05$ ), union management relations ( $\beta=0.204$ ,  $p<0.05$ ) and power relations of parties to collective bargaining ( $\beta=0.228$ ,  $p<0.05$ ) have a positive and significant influence on collective bargaining process. Further, participatory management positively and significantly moderated the relationship between HRM practices and CBP ( $\beta=0.628$ ,  $p<0.05$ ) whereas it negatively and insignificantly moderated the relationship between union management relations and CBP ( $\beta=-0.996$ ,  $p>0.05$ ) and power relations of parties to collective bargaining and collective bargaining process ( $\beta=-0.205$ ,  $p>0.05$ ). The study concluded that HRM practices, union management relations, power relations of parties to collective bargaining influence CBP and that this effect is partly positively and significantly moderated by participatory management. The study lends credence to the idea that IRE affects CBP and that participative management must be taken into account for efficient CBP and harmonious IRE. The study suggests that in order for public universities to have an efficient collective bargaining process, they should implement participatory management techniques, support good union management relations, and use HRM approaches. In this study, 58% of the variation in CBP was explained by IRE and participatory management. This means that other factors not examined in this study should not be disregarded and should be taken into account in subsequent research for greater understanding and knowledge in Kenya and elsewhere.

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## ABBREVIATIONS AND ACRONYMS

<b>ALEC</b>	American Legislative Exchange Council
<b>ANOVA</b>	Analysis of Variance
<b>CB</b>	Collective Bargaining
<b>CBA</b>	Collective Bargaining Agreement
<b>CBP</b>	Collective Bargaining Process
<b>CFA</b>	Confirmatory Factor Analysis
<b>COTU</b>	Central Organization of Trade Unions, Kenya
<b>EFA</b>	Explanatory Factor Analysis
<b>EIPS</b>	Employee Involvement Practices
<b>FKE</b>	Federation of Kenya Employers
<b>GDP</b>	Gross Domestic Product
<b>HRP</b>	Human Resource Practices
<b>ILO</b>	International Labour Organization
<b>IMF</b>	International Monetary Fund
<b>IPUCCF</b>	Interpublic University Councils Consultative Forum
<b>IR</b>	Industrial Relations
<b>IRE</b>	Industrial Relations Environment
<b>ISO</b>	International Standards Organization
<b>IAU</b>	International Association of Universities
<b>KANU</b>	Kenya Africa National Union
<b>KMPDU</b>	Kenya Medical and Practitioners and Dentists Union
<b>KMO</b>	Kaiser-meyer-olkin
<b>KNUT</b>	Kenya National Union of Teachers
<b>K-S</b>	Kolmogorov-Smirnov
<b>KUDHEIHA</b>	Kenya Union of Domestic, Hotels, Education Institutions, Hospitals and Allied Workers
<b>KUPPET</b>	Kenya Union of Post Primary Education Teachers
<b>KUSU</b>	Kenya Universities Staff Union
<b>LSK</b>	Law Society of Kenya
<b>MMUST</b>	Masinde Muliro of Science and Technology
<b>NACOTU</b>	National Congress of Trade Unions of Kenya
<b>NACOSTI</b>	National Commission for Science, Technology and Innovation

<b>NCOSH</b>	National Council for Occupational Safety and Health
<b>NLRA</b>	National Labour Relations Act
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>PATCO</b>	Professional Air Traffic Controllers
<b>PCA</b>	Principal Component Analysis
<b>PHD</b>	Doctor of Philosophy
<b>PM</b>	Participatory Management
<b>PLC</b>	Public Limited Company
<b>PRP</b>	Power Relations of Parties to CBP
<b>Qual</b>	Qualitative
<b>Quan</b>	Quantitative
<b>SAPS</b>	Structural Adjustment Programmes
<b>SRC</b>	Salaries and Remuneration Commission
<b>SPSS</b>	Statistical Package for Social Sciences
<b>S-W</b>	Shapiro Wilk
<b>TUC-Ke</b>	Trade Union Congress of Kenya
<b>UASU</b>	University Academic Staff Union
<b>UMR</b>	Union Management Relations
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNTENSU</b>	Universities Nonteaching Staff Union
<b>USA</b>	United States of America
<b>VIF</b>	Value Inflation Factor



## OPERATIONAL DEFINITION OF TERMS

**Collective Bargaining:** Negotiation, administration and interpretation of a written agreement between two parties. (Silva, 1996)

**Collective Bargaining Process:** A process of decision making between parties representing employer and employee interests involving negotiation and continuous application of the agreed set of rules to govern the substantive and procedural terms of employment relationship. (Cole, 2002)

**Human Resource Management Practices:** Refers to the policies, rules and regulations established to govern the management of human resources at the workplace. (Armstrong and Taylor, 2014)

**Industrial Relations:** Refers to the employment relationship and its management, embracing the issues of management strategy, work organization and working practice, employee involvement and participation and state regulation of employment relations in addition to unions and collective bargaining. (Fashoyin, 2004; Pyman *et al*, 2010)

**Industrial Relations Environment:** Refers to the atmosphere, norms, attitudes and behaviours reflecting and underpinning how workers, unions and managers interact collectively with each other in the workplace, which in turn affect workplace outcomes. (Kersley *et al*, 2006; Pyman *et al*, 2010)

**Industrial relations systems:** Refers to a conceptual model developed by John Dunlop (1958) to guide the analysis of industrial relations in national economies. It contents that industrial relations system is a subsystem of the wider society that exists to resolve economic conflict. (Dunlop, 1993)

**Participatory Management:** This is a style of management in which decisions are taken with the participation of employees and the style allows managers to enter into a part of the group and make better collective bargaining decisions. (Daft, 2009)

**Parties to Collective Bargaining:** These are actors to collective bargaining that include employer or employers' organization, employee representatives and the state (sivarethina, 2010)

**Power relations of parties to collective bargaining:** Refers to ability of employer or the union to force or influence collective bargaining process. (Armstrong, 2006)

**Union management relations:** It refers to the interactions between the management of an organization and the employees represented by the union. (Peetz and frost, 2007)

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

The study's foundational difficulties are outlined in this chapter. They consist of the study's historical context, issue statement, goals, hypotheses, and research questions. Additionally, the study's motivation, importance, and scope are discussed.

#### **1.1 Background of the Study**

All over the world today, freedom of association has been recognized as a right that is cherished by all human beings. This right among its other benefits ensures that workers in organizations or countries can meet and seek to project and protect their rights and benefits as they relate to their employment (Pyman *et al.*, 2010). In this regard, workers and employers can freely relate to efficiently negotiate work relations. The right of workers to meet, harmonize and uniformly negotiate their basic rights and interests with their employer is universally referred to as collective bargaining (Laden, 2012). Sound collective bargaining practices ensure that employers and workers have an equal voice in negotiations and that the outcome of such negotiations will be fair and equitable.

In this 21<sup>st</sup> century democratic processes and institutions have come to be widely accepted not only in the government of countries but also wherever collective decision making is involved. A trade union negotiates labor contracts on behalf of its members with management or the employer through its leadership (Row, 2010). An association of workers called a trade union is created to bargain with employers through management (Worden, 2009). Trade unions are groups of employees who use collective bargaining to better their working circumstances and social positions. They are

organizations of workers established to enhance the status, pay, and working conditions of their members (Koumenta, 2011).

Trade unions bargain collectively on behalf of its members with their employers to determine terms of employment, including pay, benefits, and working conditions (American Federation of Labor and Congress of Industrial Organizations, 2016). Collective bargaining, according to Kochan (2012), is an arrangement between unions and employees' employers. Through collective bargaining, both parties may work out an equitable employment arrangement and avoid expensive labor conflicts. Additionally, neither party may renounce any legal responsibilities or rights through collective bargaining.

The concept that employees united via negotiated agreements create a power balance with employers is the foundation of collective bargaining. Collective bargaining agreements serve as a means of achieving the common goals of unionized workers and employers in relation to agreements on compensation, benefits, and working conditions (Marginson & Galetto, 2016). Representatives of management and labor unions are among the parties and counterparties in a labor negotiation (Marginson & Galetto, 2016).

Labor representatives and management of a company negotiate a set of factors known as a collective bargaining agreement (CBA) in order to provide a framework for controlling wages, benefits, and working conditions (Lichtenstein, 2013). A CBA is a fundamental component of all labor exchanges between unions and management that strives to offer competitive wages, pleasant working conditions, and legal protections in the event that agreed terms are breached, according to the International Labor Organization (2016).

Collective bargaining agreements serve as a foundation for decision-making between labor and management on contracts that give employment agreements for specific performance periods (Rolfsen, 2013). In unionized firms, general employment terms are negotiated through CBAs (King, 2013). With the use of these conceptual framework components, the researcher was able to investigate whether CBAs in private and public sector labor unions impeded or assisted managers in establishing performance accountability and high-performance working environments. In this respect, a collective bargaining agreement cannot contractually carry out actions that are prohibited by law.

According to some research, nations with well coordinated industrial relations typically have more successful collective bargaining processes than those with less developed industrial relations (Bendix, 2011). Effective collective bargaining processes require a positive work environment. The system of labor administration's key components, including industrial relations (IR), have been identified as being crucial to organizational success. Policies, laws, institutions, and programs implemented by the government and its agencies, as well as the general political, social, economic, technological, and cultural characteristics of each nation, all have an impact on these relationships and processes.

The interaction between the employer and employee in paid employment is emphasized in industrial relations. It also covers the type of compensation, inspiration, instruction, and punishment provided to the employee as well as how this process has an impact on the key organizations involved, including management, labor unions, and the government. Industrial relations, in a broader sense, refers to the

planning and management of complex interactions between employees, labor unions, and management in an industry (Nanda & Panda, 2013).

Contrarily, the term "industrial relations environment" describes the condition that results from interactions between diverse forces working both inside and outside of companies. Both academic and commercial circles have acknowledged the necessity to examine industrial relations in a wider framework. The existence of an industrial relations system in an organization has been linked to the absence of strikes, lockouts, indiscipline, individual and collective grievances, and restrictive practices; these, however, are the unfavorable indicators of an industrial relations environment. High productivity, efficiency, morale, commitment, constructive discipline, and an increased sense of belonging and identity with the organization's vision and values among the workforce should be seen as positive indicators of healthy relationships among the various internal stakeholders in the organization (Nanda & Panda, 2013).

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Trade unions discuss terms of employment, such as pay, benefits, and working conditions with their employers through the collective bargaining process (American Federation of Labor and Congress of Industrial Organizations (AFL& CIO), 2016). Collective bargaining, according to Kochan (2012), is an arrangement between unions and employees' employers. Most developed nations, including the United Kingdom, United States of America, Canada, Germany, Japan, Sweden, and others, use democratic decision-making to define both intra-group and inter-group interactions (Katz & Kochan, 2004). Contrary to politics, every nation has federal and state regulations in place that, to some extent, restrict the capacity to bargain (ILO, 2010).

The National Labor Relations Act is based in the United States on the following tenets: protection of the right to organize, necessity of majority employee support for union certification, exclusive representation of bargaining units, obligations to bargain in good faith with certified union representatives, and use of economic weapons such as strikes and lockouts to break deadlocks in negotiations. Collective bargaining agreements are used by labor unions in the US to establish a framework for working conditions, which will include output and productivity (Rolfson, 2013).

Trade unions seek collective bargaining agreements to safeguard and expand their members' rights to improved compensation and workplace safeguards, according to Zhavoronkov (2015). Additionally, collective bargaining offers a framework with a distinct job definition and standards for work performance. The effect of collective bargaining agreements on employee performance management was examined and researched by Gyesie (2017). It has been demonstrated that performance is impacted by collective bargaining.

The dilemma of an uncertain future is one that all labor unions in the US must deal with. The number of union members decreased from 35% in the 1960s to around 11% in 2015, according to the Bureau of Labor Statistics (2015). In unions, CBAs are primarily used to negotiate terms for workers' wages, benefits, and working conditions. The general issue was the lack of knowledge regarding whether CBAs, which serve as the foundation for a labor union legally, include negotiating criteria that are intended to support the sustainability of the union organization as well as represent the voice of the workforce.

Poor working conditions are substantially correlated with the desire for union representation, according to research by Bryson and Freman (2013) on employee views of working circumstances and the desire for worker representation in Britain and the US. A research on socioeconomic determinants and labor unrest in Bangladesh's ready-made clothing sector was done by Nazrul and Shaheen in 2014. The establishment of strategies to address the root causes of labor unrest was advised.

The majority of African presidents have kept close control over their public colleges (Oso, 2002). African presidents have historically appointed university top officers and served as chancellors. The university councils have been dominated by government representatives, who have also heavily influenced the budget. By restricting the ability of employees and university management to bargain collectively for terms and conditions of employment, these arrangements have violated not only academic freedom but also the state of labor relations in universities.

Every educational institution strives to have a competitive advantage, according to Naris & Ukpere (2010), in order to draw in more students and future workers. The way to do this is to have positive working relationships. Unions are expected to

support modes of participation and representation that enable the pursuit of employer and union goals. Recent research highlights the beneficial role played by unions in assisting in the resolution of workplace disputes (Wright, 2011).

According to Sommer (2014), the overall performance of the workforce would suffer when a group of employees voluntarily joins a labor union or other formal organizations and goes on strike. In 2013 Edinyang and Ubi did study on secondary school students' academics in Nigeria's Akwalbom State's Uyo Local Government Area. The results showed that the quality and quantity of students' learning behaviors are impacted by the disruption of academic programming caused by strike action.

According to Anyim, Ekwoaba, and Shonugal (2013), there are other elements that have a higher impact on industrial relations in Nigeria than the environmental ones. They list the following as contributing factors: "the structure of industry and its regional dispersion; the mindset of employers and trade union leaders; and the lax and ambiguous provisions of the Trade Unions Act." They claimed that these elements harm the national economy and inhibit both commercial and industrial productivity. In Jos International Breweries (JIB) PLC, Nigeria, Collins (2013) conducted research on labor unionism and its effects on organizational productivity. The results showed that using labor unions helps an organization resolve disputes and boost employee productivity.

A research of strikes and their consequences on educational administration in universities in Rivers State was undertaken by Amadi and Urho in 2016. The organization should establish improved pay, benefits, and other working conditions between labor and management government, it was advised. Mohamed (2014) did research on the role of trade unions in enhancing worker conditions: a case study of Tanzanian teachers. The



results showed that trade unions in Tanzania are having trouble as a result of improper handling of member claims, a lack of funding, and a lack of supporting documentation. Ismail (2013) investigated how trade unions could improve working conditions for employees in Cotwu and Tughe. According to the findings, employees have difficulties at work since their pay is insufficient, trade unions do not support them, and there are no formal contracts.

Industrial activities have been increasingly widespread in eastern Africa, especially in Kenya, Uganda, and Malawi, where pay inequities appear to be important areas of concern and where low wages and poor welfare are crucial factors in sparking industrial strikes. The necessity to institutionalize frequent and open communication channels between university administration, academic staff unions, and government is the most important part of functioning beyond industrial activities. The abundance of latent knowledge that would result from constant communication would be helpful in preventing disputes and driving constructive policy changes (Waswa & Katana, 2008).

Universities are regarded as centers of excellence that make significant contributions to national development all throughout the world. Therefore, the stability and training programs at institutions, as well as the general growth of the nation, might be negatively impacted by the absence of a favorable industrial relations environment. Following the implementation of collective bargaining, the stability of public institutions has received a lot of attention recently. There is a scarcity of research on the effects of the industrial relations climate on the collective bargaining process in Kenya's public institutions.

Additionally, there aren't many studies that have been published on the connection between the environment for industrial relations and the collective bargaining process in public universities, particularly in developing nations like Kenya. Investigating the

impact of IRE on CBP and the moderating impact of participatory management on the link between IRE and CBP is the primary goal of the study.

### **1.1.1 The Kenyan Context**

Despite often producing negligible or no outcomes, industrial activities give workers a valuable platform to voice their issues. Trade unions have always encouraged their members to participate in industrial actions to, among other things, push for better pay and working conditions. On the other side, members believe that using industrial action to resolve labor disputes (Adebimpe, Owolade and Adebimpe, 2010).

Ouma (2012), polled members of a few trade unions in the Kisumu County school sector on their opinions of using industrial action to settle labor problems. It was suggested that businesses use collective bargaining to take a more proactive approach to handling crisis circumstances. In order to prevent industrial actions, employers should engage in effective negotiation, consult with employees or their unions on matters affecting their welfare, and uphold collective bargaining agreements they have reached with the employees.

Odhong and Omolo (2014), concluded that collective bargaining serves as an essential route and framework for deciding employment terms and conditions in their study of factors impacting employee relations in Kenya's flower sector. A research on the perceived impact of trade unions on employee terms and conditions of employment and job security was done by Gichaba (2013) at Kisii University in Kenya. The results showed that a trade union has a considerable impact on employment terms and conditions, which in turn affects staff promotions, employee education and training, safety gear, equipment, and working conditions, as well as staff medical benefits.

With substantial early impact from the colonial rulers, Kenya's university education system dates back to the colonial era. In 1970, just one public university was established; however, as other institutions have since been added, the system has grown. There are now 31 public universities that are chartered and 6 public component colleges (Commission for University Education, 2017). Due to the academic staff's subpar terms and conditions of employment, UASU was established. The union's goals include bettering the welfare and working conditions for its members, creating a positive work environment, and preventing harassment and wrongful termination by employers. These are essential to ensuring the quality of higher education because incentives and motivation in a positive workplace environment foster accountability, initiative, creativity, and innovation. UASU must successfully communicate with both University Management and its public membership if it is to accomplish its goals (Lagat, 2012).

When employees in this group learned they weren't covered by either UASU or the Kenya Union of Domestic, Hotels, Education Institutions, Hospitals and Allied Workers (KUDHEIHA), they formed the University Non-teaching Staff Union. Since its official registration on December 29, 2004, UNTESU has expanded and presently has more than 10 chapters and branches nationwide. Since then, UNTESU has become Kenya Universities Staff Union (KUSU).

In Nairobi's cement manufacturing sector, Jepkorir (2014) performed study on the impact of labor unions on organizational productivity. The results showed a link between organizational efficiency and labor unions that was favorable. Marindan (2012) asserts, however, that companies' output suffers as a result of union strikes.

Industrial relations have a fundamentally pluralistic viewpoint since they encompass not only ties between employers and employees but also those between employers and labor unions as well as contacts with the State as a whole. The unitary view of HRM and the pluralist outlook of IR, which considers the possibility of conflict in the employment relationship owing to disparate interests, are some of the causes of conflicts between IR and HRM. Employees typically put down their tools when Industrial Relations in an organizational setting go wrong, which costs the firm a lot in terms of service delivery. It is necessary for Management and Employees to agree on a return-to-work formula, which, in most situations, may have a direct impact on HRM practices and HR regulations.

## **1.2 Statement of the Problem**

Public universities in Kenya have frequently experienced crisis of conflict and unrest. A specific incident of this occurred in 2017 when lecturers in public universities went on strike three times i.e. from 19<sup>th</sup> January to 19<sup>th</sup> March 2017 (Muchiri, 2017), 3<sup>rd</sup> to 18<sup>th</sup> July, 2017 (Majenga, 2017) and from 1<sup>st</sup> November to 9<sup>th</sup> December, 2017 (Odour, 2017). The cause of these strikes was the non-implementation of 2012 Collective Bargaining Agreement (CBA) between Universities Academic Staff Union (UASU) and University management. The crisis escalated when members of Kenya Universities Staff Union (KUSU) and Kenya Union of Domestic Hotels, Education Institutions, Hospitals and Allied Workers (KUDEIHA) joined the protest bringing learning in public universities, to a near standstill. In the process a lot of man hours were lost besides the damage caused to the university reputation. If this rising trend of turbulence is left unchecked university education will be adversely affected.

Most studies in this area have concentrated on issues such as efficacy of Collective Bargaining Process (CBP) as a strategy for enhancing IRE (Akhaukwa, 2017), effect

of trade unions on organizational productivity (Chepkorir, 2014), impact of trade unions on improving employees working conditions (Kofwu and Tuche, 2013) and trade union participation in improving employees conditions (Mohammed, 2014).

However, the studies cited above have failed to explore the influence of Industrial Relations Environment on CBP and the moderating effect of participatory management on the relationship between Industrial Relations Environment (IRE) on Collective Bargaining Process (CBP). The understanding of such factors is critical in creating the right environment for effective CBP in public universities. Thus, there is inadequate empirical evidence and literature on the influence of IRE on CBP in public universities in Kenya, thus presenting a knowledge gap that this study sought to fill.

Furthermore, the development of such literature is important since effective CBP cannot be realized without union participation and cooperation. Besides, information resulting from the study will be useful to policy makers, practitioners and public university management. In nurturing democratic principles in public universities that inform policy formulation and practice this will lead to effective CBP and reduction of conflict and unrest in public universities. The purpose of this study, therefore, was to investigate the influence of IRE on CBP and moderating effect of participatory management on the relationship between IRE and CBP.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

The study's major goal was to determine how the climate for labor relations affected collective bargaining in public universities in Kenya, specifically focusing on KUSU, and how participatory management affected that connection in a moderating manner.

### 1.3.2 Specific Objectives

The study sought to determine the following specific objectives:

- i. To determine the influence of HRM practices on collective bargaining process in public universities in Kenya
- ii. To assess the influence of union management relations on collective bargaining process in public universities in Kenya.
- iii. To determine the influence of power relation of parties to collective bargaining on collective bargaining process in public universities in Kenya
- iv.
  - a) To analyze the moderating effect of participatory management on the relationship between HRM practices and collective bargaining process in public university in Kenya.
  - b) To analyze the moderating effect of participatory management on the relationship between union management relations and collective bargaining process in public universities in Kenya.
  - c) To analyze the effect of participatory management on the relationship between power relations of parties to collective bargaining and collective bargaining process in public universities in Kenya.

### 1.4 Research Hypotheses

The following four null hypotheses were tested by the study:

- H<sub>01</sub>:** HRM practices have no significant relationship with collective bargaining process in public universities in Kenya.
- H<sub>02</sub>:** Union-management relations have no significant relationship with collective bargaining process in public universities in Kenya.

**H<sub>03</sub>:** Power relation of parties to collective bargaining has no significant relationship with collective bargaining process in public universities in Kenya.

**H<sub>04a</sub>:** Participatory management has no moderating effect on the relationship between HRM practices and collective bargaining process in public universities in Kenya.

**H<sub>04b</sub>:** Participatory management has no moderating effect on the relationship between Union-management relations and collective bargaining process in public universities in Kenya.

**H<sub>04c</sub>:** Participatory management has no moderating effect on the relationship between power relation of parties to collective bargaining and collective bargaining process in public universities in Kenya.

### **1.5 Research Questions**

- 1) What is the effect of human resource practices on collective bargaining process in public universities in Kenya?
- 2) What is the effect of union management relations on collective bargaining process in public universities in Kenya?
- 3) What is the effect of power relations of parties to CB on collective bargaining process in public universities in Kenya?

### **1.6 Significance of the Study**

The study has produced some significant findings that will help us better understand how the climate for labor relations affects the process of collective bargaining in public institutions. The study has produced informative data that will help public universities create policies on how the atmosphere of industrial relations affects the process of collective bargaining. Additionally, the study has helped close the theoretical gap that previously existed regarding the impact of the industrial relations environment on the collective bargaining process. The provision of a unifying

framework, intended to accommodate the convergence of the two literatures based on empirical analysis in the context of a university in a developing country, allowed for this to be accomplished.

The findings of this study will help policy makers and other practitioners understand the conditions required for an atmosphere conducive to industrial relations and the efficiency of the collective bargaining process. Additionally, by filling in the gaps left by earlier studies in the subject of industrial relations, it has contributed to ongoing study on the environment of industrial relations and the collective bargaining process.

This study will have a significant impact on understanding whether the success of university management depends on the HRM practices at the individual university and identifying research gaps for those who study human resource management practices and labor relations. The results of this study will be useful to trade unions in universities, particularly in helping them understand HRM practices and how they can be incorporated into negotiation strategies to better the working conditions for their members. Because HRM practices as an enabler of positive industrial relations for employers and employees is a concept that applies across the board in any organization and even in individual lives, this study is also likely to draw interest from the general public.

The results of this study will contribute to the body of knowledge about how the context of industrial relations can affect collective bargaining and how participatory management affects the relationship between IRE and CBP in public universities. These findings will be used to strengthen and improve the context of industrial relations and the collective bargaining process.



Up to the 20th century, the negotiation process between employees and their employer was successful (Bates 2000). A number of political, social, and economic developments in the 20th century, particularly in Kenya, had an impact on collective bargaining in a variety of ways. The country's environmental pressures did not spare the education sector, thus it also had its share of issues with the collective bargaining process. Intense labor disputes between employers and employees have affected public colleges, leading to significant staff turnover, collective job actions, and a flight of human capital.

The actual bargaining process takes 4-6 months, which is more time than is required. The purpose of collective bargaining is to advance industrial democracy, but the Kenyan system now in place has a number of issues, making it difficult to foster positive labor relations. Collective bargaining in Kenya has become a hotly contested topic in the 20th century as a result of these developments. The difficulties employees are having in negotiating with their employer, however, remain unresolved. This study will thus be crucial for determining which industrial relations contexts are favorable for successful collective bargaining.

By presenting an empirical analysis of how the two concepts are related, the study has contributed positively to the ongoing discussions on the impact of IRE on CBP by closing the gap between the two bodies of literature on IRE and CBP. There are currently few studies on IRE and CBP, especially in developing nations, in public universities. By examining the impact of IRE on CBP and the moderating impact of participatory management on the relationship between IRE and CBP in public universities in Kenya, this study sought to close this gap in the literature. In order to facilitate collective bargaining in Kenya's public universities, the study has improved

the practical understanding of KUSU officials, members, and university administrators.

### **1.7 Scope of the Study**

The objective of the study was to establish the effect of IRE on CBP and the moderating effect of participatory management on the relationship between Industrial relations environment and collective bargaining process in public universities in Kenya.

The study was conducted in two randomly selected public universities from the 31 public universities in the country, Moi University in Uasin Gishu County and Masinde Muliro University of Science and Technology in Kakamega County. The target population was 1462 members of Kenya Universities Staff Union (KUSU). The study focused on gathering primary data and secondary data from the ordinary members and selected officials and Registrars on the study variables. The list of KUSU members was obtained from the main Registries of the two universities and KUSU offices (2016). From the extant literature there was inadequate empirical data on KUSU regarding the area of the study as opposed to UASU which had a wide coverage of studies. The two universities had the necessary information since they had been affected by the recurring strikes in the industrial relations environment from 2011 to 2017.

The total sample was 314 obtained by using Yamane formula (1973) from the target population of 1462. The study utilized pragmatism philosophy, mixed methods approach and sequential explanatory research design to explain the causal effect between variables of interest in the study. The study was anchored on Dunlop's

Systems Theory of industrial relations and complemented by Pluralist, unitary, radical, institutional, stakeholders and participatory theories of industrial relations.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Overview**

This chapter reviews and criticizes literature related to this study under the following headings: concept of collective bargaining, concept of industrial relations environment, participatory management, theoretical perspectives of industrial relations, participatory theory, stakeholders theory, institutional theory, relationship between IRE constructs and collective bargaining process (HRM, UMR, and PRP to CB), moderations effect of participatory management, conceptual framework and summary. This chapter is significant because it highlights the findings of previous research that is closely connected to the one being conducted right now. It also connects the study to the wider, on going discussion on the subject in the literature, completing and expanding earlier studies (Cooper, 1984; Marshall & Roseman, 1999). It also offers a framework for contrasting the results of this study with other results.

#### **2.1 Concept of Collective Bargaining**

In their seminal work on labor, Beatrice and Sydney Webb (Muller-Jentsch, 2014), described collective bargaining as a means of setting working conditions and a means of advancing employees' rights and interests (Muller-Jentsch, 2014). Collective bargaining is a coherent model for how employees negotiate with their employers that draws ideas and theories from politics, economics, psychology, and sociology. It offered a foundation for comprehending how unions might create an employment contract for a predetermined performance time, just like any type of partnership (Freeman & Han, 2013). The collective bargaining agreement is a written contract that specifies pay, benefits, and other matters that call for arbitration or grievance

procedures (Compa, 2014). Employment contract negotiations are laborious and need a few conditions in order to be successful.

It is required that organizational management and unions participate in exchanges and brokering over the terms and conditions of employment during collective bargaining (Boniface & Rashmi, 2013). The employees are able to speak with one voice when addressing employment issues since there is a perceived equal playing field amongst the groups. Unions and management meet, negotiate, and consult during a process called collective bargaining, usually to discuss terms and conditions of employment. On each side, interests and viewpoints are decided jointly and portrayed as the issues that affect everyone (McKersie & Cutcher-Gershenfeld, 2009; Badoi, 2014). Conflicts during collective bargaining negotiations may have detrimental repercussions on the workplace, including performance problems, low morale, and decreased production (Ojo & Abolade, 2014).

Enterprise negotiating is growing more popular as collective bargaining becomes more fragmented (ILO, 2009). With several bargaining groups, negotiations seem to be excessively fragmented. For instance, teachers may negotiate with their School Development Committee for incentives. As a result, reaching agreements at many levels is challenging. Typically, the absence of negotiation at the sectoral and state levels in this situation is the fundamental issue (Mawomera and Lee, 2010). In the United States and Zimbabwe, the debate about submitting public authorities to collective bargaining agreements stretches back to the 1930s.

The United States president was reported by Chamberlin (2010) as saying that all government employees should understand that collective bargaining, as it is typically understood, cannot be imported into the public sector. When used for public personnel

management, it has some clear-cut restrictions that are impossible to overcome. Administrative authorities cannot completely represent or bind the employer in conversations with Government employee Organizations because of the very nature and aims of Government.

Innovation in products and services, which frequently results in changes in productive activities and the creation of new activities that replace the old ones in a partial and deceptive fashion, are some of the issues with the collective bargaining process in the public sector (Yuval 2011, Brewster and Connick, 2010) Lack of negotiation skills, bad faith negotiating, ineffective communication, (Brewster and Connick, 2010), fear of victimization (Mawonera and Lee, 2010 Edwards, 2013 Goldman, 2012).

It is possible for negotiations to continue on for an excessively long time (Mawonera and Lee 2010). This can sometimes result in a variety of collective bargaining issues, such as overlaps, confusion, disagreements, and hostility that can occasionally turn into wild cat strikes, lockouts, and slowdowns. Most countries permit employees to create unions, but forbid them from collectively negotiating on one or more rights or benefits, including wages, personnel rights, health insurance, or pension payments, as well as from going on strike against the government (Edwards, 2013 Goldman, 2012). Public employee unions are typically prohibited from collectively bargaining with regard to pay or other benefits and/or rights on the grounds that the general public, their employer, is not represented in such agreements by administrative officials who are unable to fully represent nor bind the voters to rules or procedures that may conflict with currently in effect laws and regulations. This suggests that although the law may exist, it may not be put into effect.

The country's negotiating process has also been impacted by the idea of industrial relations, which has caused problems to become sectoral, regional, national, or focused. Employer organizations and unions concur that collective bargaining needs to be rationalized, but they disagree on how to go about doing so (Chamberlin, 2010). Associations of workers known as trade unions exist primarily to represent the interests of its members to employers (Armstrong & Taylor, 2014). Trade unions are able to increase an organization's efficiency through effective negotiating. Additionally, trade unions can reduce an organization's production by forcing workers to take time off or participate in sabotage. Amah and Ahiauzu (2013) assert that unionized businesses are more productive than nonunionized businesses.

According to Cote (2013), unions can boost organizational productivity. Trade unions, however, can potentially lower organizational efficiency if they refuse to peacefully bargain for improved conditions. Additionally, trade unions frequently go on strike, which lowers organizational productivity (Cote, 2013). Trade unions deal with the control of relations between employees and employers, according to Gall and Fiorito (2016). An association of workers known as a trade union was created with the goal of gaining a variety of advantages (Podro, 2011).

### **2.1.1 Collective Bargaining Structure in Kenya**

The Wage Guidelines in Kenya (issued in 1973 and revised in 1994), the Constitution of Kenya (Republic of Kenya, 2010), and Section 44 of the Labour Institutions Act (2007) serve as the foundation for collective bargaining agreements (CBAs) and minimum wages (MWs) (5). Additionally, there are international legal instruments like the Minimum Wage Fixing Convention No. 131 of the International Labor Organization (ILO) (1970), Article 23 (3) of the Universal Declaration of Human

Rights of the United Nations (UN), and Goal 8 of the 2030 Global Sustainable Development Goals (SDGs) on employment and decent work as well as the achievement of high standards of living, high quality of life, and wellbeing under Aspiration 1 of the African Union Agenda 2063. In instance, Article 41 of Kenya's 2010 Constitution guarantees each employee fair labor practices, including just compensation and suitable working conditions. In a similar vein, Article 43 grants workers economic and social security (Republic of Kenya, 2010).

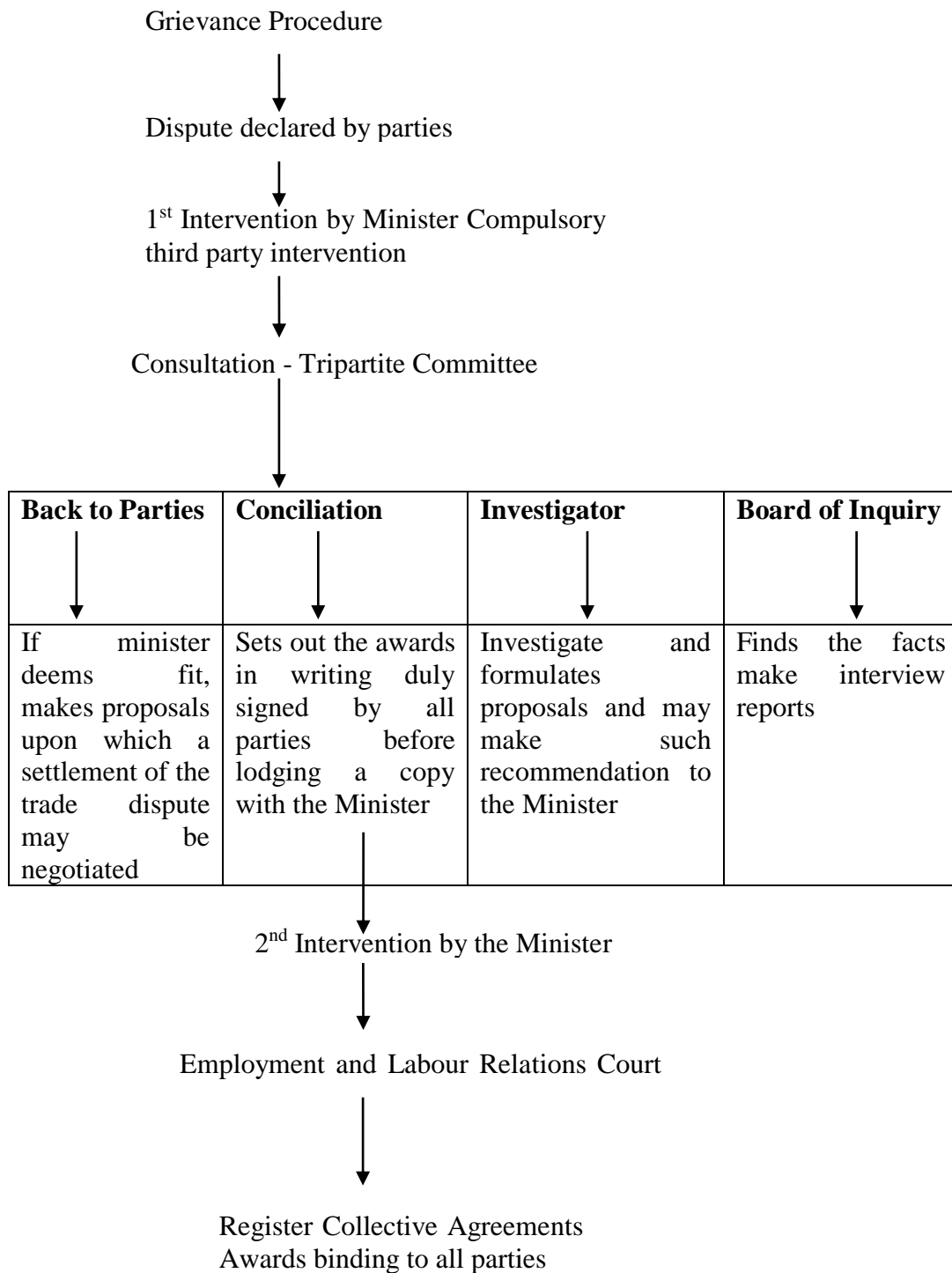
In Kenya, the Collective Bargaining Agreement (CBA) is a crucial industrial relations mechanism used to negotiate employment terms and conditions between companies and labor representatives. The Industrial Relations Charter, published in 1962 and updated in 1980, the Kenyan constitution, and the country's labor legislation all have provisions governing CBAs. The 2005 wage guidelines, which establish the CBA's duration as being subject to revision only once every 24 months, serve as the basis for the CBA negotiations. Notably, a CBA is only legally binding until it has been registered with the Employment and Labour Relations Court.

CBAs are negotiated at the sectoral or corporate level. The CBA is registered with the Employment and Labour Relations Court if the parties concur. If not, the Cabinet Secretary for Labor is notified, who then appoints a conciliator. If the efforts at reconciliation are successful, the CBA is completed; if not, it is sent to the Employment and Labour Relations Court for decision-making. Although collective bargaining is not expressly permitted by law, there are precursor requirements that must be met before parties may begin the negotiation process. The Labour Relations Act, No. 14 of 2007, contains such terms. The Labour Relations Act's section 54 stipulates that the trade union must possess constitutional jurisdiction, legal



recognition under the legislation, and be officially registered (Wage Indicator, 2018).

Figure 1.1 depicts the Kenyan public sector's collective bargaining framework.



**Figure 1.1: Collective Bargaining Structure in the Public Sector in Kenya.**  
Source: Labour Relations Act, 2007

The Labour Relations Act, 2007, Laws of Kenya, sections 2 and 54 (1), describe the procedure for recognizing a union. An agreement in writing between a trade union and an employer, a collection of employers, or an employers' organization that governs the trade union's recognition as the representative of the interests of unionisable employees employed by the employer or by members of the employers' organization is known as a recognition agreement.

The law and other institutions have a significant role in determining a nation's union membership, which includes both employed and unemployed employees. The Kenyan Employment and Labour Relations Court, whose status was elevated to that of the High Court by the Constitution of Kenya, 2010, is required by law to register Collective Bargaining Agreements (CBAs) between a trade union and a group of employers or employer organizations that establish the terms and conditions of employment for all unionisable employees.

The discussions for the CBA of 2013–15, which has since been extended to include the time up to 2016–17, have been postponed due to difficulties between the Salaries Review Commission and the Inter Public Universities Councils Consultative Forum (IPUCCF). It has been difficult for the unions to get the two organizations, IPUCCF and the Salaries and Remuneration Commission, to the negotiating table. The refusal of certain KUSU members to take part in union affairs is the second difficulty. Another difficulty is getting university negotiating committee members to the table for internal CBA negotiations because they routinely reschedule meetings, which delays negotiations. This frequently results in delays in the execution of agreements. Therefore, research is required to determine how the industrial relations environment (IRE) affects the collective bargaining process in Kenya's public universities as well

as to determine whether participatory management has a moderating effect on this relationship.

## **2.2 Concept of Industrial Relations Environment**

Since the first individual began working for someone else in exchange for payment from an employer, the phrase "industrial relations" has been used (Swanepoel et al., 2008). According to Pyman et al. (2010), the industrial relations climate, a term that has been used to explain behavior and attitudes in the workplace as well as interactions between unions, employees, and employers, is sometimes used to define the working environment and the contextual elements.

The level and quality of union-management interactions in an organization are thus reflected in the industrial relations environment. Therefore, the work environment and employment practices, or the management of people, can be viewed as functions of the industrial relations environment, which may then be related to organizational performance and company and employee outcomes (Boxall and Macky, 2009). Commitment to the union and the company is positively correlated with perceptions of the workplace environment. The fundamental tenet of industrial relations is that peace and production go hand in hand, hence it is essential to make an effort to lessen industrial conflict and promote peace.

The laws, procedures, and frameworks that govern the relationships between employers and employees, or their respective representatives, as well as with the State and its agencies, can be characterized as the subject of industrial relations. Industrial relations is the connection between employers and employees at a workplace, taking into consideration the subsequent response from directly impacted stakeholders, such

as the State (Mahabir & Wyatt, 2006). According to Akintade et al. (2000), the failure of workers to achieve their goals and objectives causes industrial conflicts.

Industrial relations, also known as labor relations or employee relations, refers to the system in which governments, employers, employees, and their representatives work together to establish the guidelines for the management of working relationships. Ivancevich (2010) defined labor relations as the ongoing partnership between a particular group of employees and management, which includes negotiating written agreements pertaining to wages, working hours, and other employment-related terms and conditions as well as interpreting and enforcing them throughout the duration of the relationship. Employee and labor relations primarily focus on avoiding and resolving issues between employees and their employers that arise from working relationships and may have an impact on workplace circumstances.

Employee relations reward workers for their contributions and aid in their professional development. Industrial relations is in charge of bargaining and managing collective bargaining agreements on behalf of the workers' union or unions. The goal is to end any labor or employment issues. According to Kersley et al. (2006), the workplace's atmosphere, norms, attitudes, and behaviors when employees, unions, and managers interact with one another have an impact on workplace outcomes.

The term "industrial relations environment" refers to the culture, values, attitudes, and practices that reflect and support how employees, unions, and management engage with one another in the workplace, which in turn influences workplace results (Kersley et al., 2006). According to Pyman et al. (2010), the industrial relations climate, a term that has been used to explain behavior and attitudes in the workplace

as well as interactions between unions, employees, and employers, is sometimes used to define the working environment and the contextual elements.

The level and quality of union-management interactions in an organization are thus reflected in the industrial relations environment. Therefore, the workplace environment may be characterized as a consequence of work practices (the organization of labor) and employment practices (the management of people), and it may therefore be connected to organizational performance-company and worker outcomes (Boxall and Macky, 2009).

According to certain research, loyalty to the employer and the union is positively correlated with favorable assessments of the climate for industrial relations. These studies have further demonstrated that in workplaces with more cordial union-management relations, favorable impressions of the industrial relations environment encourage commitment from both employers and employees due to cognitive consistency between the roles of employee and union member (Redman and Snape, 2006). In order to explain the relationship between high-performance work systems and organizational performance and effectiveness, the industrial relations environment has been identified as a key mediating factor (Kersley *et al.*, 2006).

Good perceptions of organizational prestige, positive attitudes toward supervisors, decreased absenteeism, turnover, and conflict, creativity, customer satisfaction, and service or product quality are further outcomes that have been linked to favorable labor relations climates (Lee, 2009). Human resource management methods, union management relationships, and power dynamics between parties to collective bargaining are included in the study's definition of the "industrial relations environment," which is covered in more detail in the following sections.

An industrial relationship structure involving the employer (or employer association) and the employee (or employee federations/the trade unions) is outlined in the Labour Institutions Act of 2007 as modified. The National Council for Occupational Safety and Health (NACOSH), Wages Councils including the General Wages Council and the Agricultural Wages Council, and other Alternative Dispute Resolution methods are only a few of the institutions of social interaction that are described in this framework.

The International Labour Organization's Convention No. 150 of 1978 on Labour Administration serves as the foundation for Kenya's industrial relations system. The Industrial Relations Charter (1984) and the Labour Relations Act domesticate this in Kenya (2007). The method allows for tripartite dialogue on matters affecting employees and employers between representatives of employees, employers, and the government. The combined industrial councils are anticipated to conduct the consultation. According to the scheme, these conversations would begin on the factory floor and work their way up to the national level.

Kenya also has several social dialogue institutes. These include the Labour and Employment Relations Court, National Council for Occupational Safety and Health, National Labor Board, and Wage Councils. These organizations' purpose is to advance social discussion and workplace peace (RoK, 2013). The federations of employers and unions engage in social discourse. About five trade unions in Kenya are associated with the Trade Union Congress of Kenya, whereas the majority of trade unions in Kenya are members of the Central Organization of Trade Unions- Kenya (COTU-K) (TUC-Ke). The Federation of Kenya Employers (FKE), on the other hand, speaks for employers in both the public and private sectors. In accordance with the

Labor Institutions Act's principles, the social partners collaborate while determining salaries (2007). The industrial relations system involves several stakeholders. Employers and their groups, workers and their unions, and the government are the primary parties.

Through laws, regulations, agreements, judicial rulings, executive and financial apparatus, and other means, the Central and State Governments shape, influence, and manage relations. Through being the largest employer and partially by regulating working conditions in the private sector, the government has taken on a greater role in labor relations. The Labour Institutions Act (2007) laws of Kenya established the Labour and Employment Relations court, whose major goal is to resolve trade disputes that have not been resolved between the employer and the employees. The Labour and Employment Relations has the authority to award money to the person or parties that have been wronged. The court of appeals will hear appeals against court judgments. The court considers the state of the national economy, the financial standing of the employer or employers, and the current Collective Bargaining Agreement (CBA) when making ruling.

### **2.3 Participatory Management**

According to Chenand Tjosvold (2006), participative management entails including workers in decision-making processes where they believe they have the chance to address issues and have a say in organizational choices. Participation has a positive overall effect on employee work performance and turnover rates. Managers must encourage staff to find innovative methods to improve organizational performance and job happiness in order to encourage employee involvement in the tough

workplace of today. The majority of studies concur that participative management is a good strategy since it has several advantages in the modern company environment.

According to Crane (2009), there is a considerable correlation between employee performance and participative management. Additionally, he discovered that participatory management had a moderating effect on worker performance through total quality management teams, team-based work structures with a variety of responsibilities, gain-sharing and profit-sharing plans, job enrichment or redesign initiatives, union-management, quality of work life committees, self-managing work teams, site-based management, power relation programs, and business process reengineering. The study also employed a smaller sample size than this study, which used a larger sample size.

Employees' active engagement, according to Mutai, Cheruiyot, and Kirui's (2015) research on employee participation mechanisms, results in commitment and work satisfaction. The study, however, did not explicitly demonstrate how collective bargaining will improve employee performance under participatory management. Oloo and Orwar (2016) found that increased performance is influenced by junior staff members' participation in decision-making in their tail markets. In his research, Muindi (2011) showed a substantial correlation between academic staff members' involvement in decision-making and work satisfaction at the University of Nairobi's School of Business. The study's conclusions, however, did not include all moderating factors of participatory management.

There is a vacuum in the research mentioned above because insufficient attention has been paid to examining how the climate for industrial relations affects collective bargaining with the moderating influence of participatory management. This raises



concerns about how the relationship between the environment for industrial relations and the collective bargaining process is moderated by participatory management.

## **2.4 Theoretical Perspectives of Industrial Relations**

In a broad sense, theory is first required as a tool for comprehending events and issues in the real world. To facilitate prediction is a second general purpose of theory (Fajana, 2006). Dunlop (1993) emphasizes the requirement for theory in order to interpret data. He continues by stating that an integrated theory has to be created in order to interpret, relate, and explain facts. According to Walker (1976), theory makes forecasting possible. According to Flanders (1965), theory is necessary to ask the right questions and research is necessary to offer the correct answers, provided that there is constant interaction between the two.

Different social theorists investigate the institutions, structures, and processes of industrial interactions using seven academic theories (Farmham and Primlott, 1998). Seven industrial theories relevant to the study's independent and dependent variables were used in this investigation. They are institutional theory, systems theory, participatory theory, pluralist theory, unitary theory, and radical theory. These ideas collectively comprise a theoretical framework that has been used to the study and analysis of labor relations.

### **2.4.1 Pluralist Theory**

According to the pluralist idea, an industrial organization is seen as a plural society with a variety of connected but distinct interests and aims that need to be kept in some sort of balance (Fox, 1966). According to Cave (1994), it entails a balance of power between two organized interests, enough trust in the partnership for each side to respect the other's legitimate and, on occasion, separate interests, and for both sides to

refrain from pushing their respective interests independently to the point where it becomes impossible to maintain the operation. According to Edwards (2002), in a pluralistic environment, the organization is seen as being composed of strong and diverse sub-groups, each with its own valid allegiances goals and leaders. The management and trade unions are in particular the two main sub-groups in the pluralistic approach. Therefore, management must acknowledge the presence of competing sources of leadership and connection (Armstrong, 2006).

According to Guest (1995), the practice of negotiating at the organizational or even plant level has strengthened the idea of pluralism. As a result, management would focus more on persuasion and coordination than on enforcing and controlling. In this situation, conflict is handled through collective bargaining, is not necessarily seen as a bad thing, and, if managed, could actually be used to spur evolution and positive change. Trade unions are also recognized as legitimate representatives of employees.

The pluralistic approach to employee relations implies that there must be some mechanism for resolving divergent interests, and this can be done through formal agreements if there are recognized staff groups or trade unions (Armstrong, 2006). According to the pluralistic viewpoint, management and labor unions are two strong and diverse subgroups that make up an organization. According to this perspective, managerial and employee disagreements on the sharing of profits are common and unavoidable conflicts of interest.

The Hobbesian theory of man as an egotistical person who would take advantage of every chance to rule his fellows is where pluralism derives its conceptual foundations (Bendix, 2001). It sees management and labor unions as two strong and opposing subgroups that make up the trade unions. As a result, it recognizes conflict as

unavoidable and manageable through a variety of institutional frameworks. According to this theory, since society is made up of a variety of people and social groups, each of which has its own social values and pursues its own self-interests and goals, it is necessary for those in charge of managing the workplace to take into account the conflicting values and interests that exist there. Only by doing this can organizations operate efficiently (Singh & Kumar, 2011). The pluralist school of industrial relations frequently uses a balancing paradigm as well. Instead of focusing on how one should dominate the other, Commons (1919) emphasizes the necessity for "the equilibrium of capital and labor".

As a result, management would focus more on persuasion and coordination than on enforcing and controlling. Trade unions are recognized as valid employee representatives, which is the central tenet of the pluralistic approach. Therefore, conflict should be resolved through collective bargaining. Conflict is not always viewed negatively and, with proper management, could actually be used to spur positive change and evolution. This implies that encouraging union recognition and giving union representatives room to exercise their representative duties are important.

The basic theoretical tenets of pluralist industrial relations, according to Budd et al. (2004), are that there is a conflict of interest in the employment relationship, labor markets are not perfectly competitive, and employees are human beings, not just commodities or factors of production. A key aspect of this pluralist industrial relations paradigm is to balance competing interests in the employment relationship.

According to Abbott (2006), pluralists differ from unitarists in that they begin with the presumption and values that conflict in the workplace is unavoidable because

business organizations are intricate social structures made up of various interest groups. Due to the inherent structure of the manufacturing system, management and employees are two such groups that are perceived as inevitably adhering to various ideals and goals. This frame of reference also makes the assumption that there will be several sources of power inside an organization and that there will always be a chance for conflict between them.

According to Abbott, the possibility of conflict encourages managers to look into creative ways to handle it in a way that will yield the best results by enabling organizations to handle labor relations issues on a collective basis. The legitimacy of employees' freedom to engage in collective bargaining is usually accepted by pluralists on the basis of these notions. Our idea is pertinent to this study because it acknowledges the fact that managerial and employee interests frequently diverge. Therefore, the purpose of industrial relations in public universities is to resolve disagreements between the administration of the institutions and the union, as represented by KUSU.

#### **2.4.2 Unitary Theory**

According to unitary theory, an organization may be thought of as a happy family that is an integrated and harmonious whole. The theory's fundamental premise is that management, employees, and all other organization members share the same aims, interests, and purposes and cooperate to achieve these goals (Edward, 2002). According to the ideology, unitarism adopts a paternalistic philosophy and requires devotion from every worker. As a result, trade unions are considered superfluous in settings where there is mutual collaboration and dispute is viewed as disruptive (Adewole et al., 2010).

According to Armstrong (2006), managements who regard their role as managing and controlling the workforce in order to accomplish economic and development goals frequently have a unitary vision. It extols the value of cooperation, wherein everyone works together toward a similar goal, pulls their fair share of the load, and joyfully accepts their position and performs their duties under the direction of the manager or supervisor.

The paternalistic attitude of unitarianism, which requires devotion from all employees, is described by McClelland (1963) as an organization of "avuncular pontification" on the part of industrial executives. Unitarianism is primarily managerial in its emphasis and implementation. Because loyalty between employees and organizations is seen as mutually exclusive in such a setting and there can never be two sides to an industry, trade unions are therefore seen as unnecessary. Conflict is seen as disruptive, the pathological outcome of agitators, interpersonal conflict, and a breakdown in communication.

Abbott (2006) asserts that unitarists begin with a set of presumptions and norms that argue that conflict at work is not a necessary part of relationships between managers and employees. The two may occasionally have conflict at work, but these incidents are seen to be outliers in a partnership that is predisposed to cooperation. According to Abbott, those who hold this viewpoint believe that managers and employees share a common interest in the survival of their organizations, making conflicts less likely to escalate to the point where the company becomes insolvent. Existing divisions are thought to be the consequence of personality problems, unethical hiring and promotion procedures, the deviance of dissidents, inadequate communication, or the

outcome of misunderstanding or mischief; in other words, as pathological (Edwards, 2002).

The unitary theory, according to Nick (2010), is the perspective that sees businesses as families or teams with shared goals between management and employees, where disagreement or conflict is viewed as aberrant conduct. While Farnham and Pimlott (1995) see unitarism as a workplace harmony brought about by cooperation between employees and bosses in the pursuit of shared objectives. Therefore, this viewpoint advises that conflict should be avoided wherever feasible and resolved as soon as it does.

According to John & Fellenz (2010), deviant individuals are the source of conflict and should be dealt with harshly since they jeopardize the group's general cohesion. Since everyone is said to have the same interests, managers with a unitary viewpoint want their staff to trust them to make the right choices, therefore there shouldn't be any contradiction between what's best for the business and what's best for the employees. Because of this comprehensive viewpoint of the workplace, everyone accepts management's right to manage and make decisions.

Inception, emphasis, and application of the unitary approach to industrial relations are all primarily managerially focused. It is true that many managers and employers connect with this theoretical viewpoint because it gives them confidence in their capacities as organizational decision-makers and legitimizes the acceptance of their authority by subordinate workers. This theory is pertinent to the current study since it is a common assumption in many companies that the interests of the institution and the employees are aligned. However, in real-world situations, these interests are in conflict, necessitating the

use of collective bargaining in labor relations to settle disputes over issues like terms and conditions of employment.

### **2.4.3 Radical Theory**

According to Edwards (2000), the radical approach emerged as a critique of pluralism because pluralists believed that institutional tinkering could achieve the goals of a reformist management while ignoring the fact that "disorder" went much deeper than a weakness of institutions. They also believed that reform could be in the interests of all, which ignored significant conflicts of interest between workers and managers. Conflict in employment relations or the Marxist view of industrial relations is founded in unequal power relations between classes in society. This theory of labor relations contrasts workplace relations with the history of capitalism, which is characterized by a fundamental division of interests between capital and labor (Budd *et al.*, 2004).

According to a radical viewpoint, the foundations of power and wealth disparities lie in the structure of the capitalist economic system. As a result, conflict is viewed as inevitable, and trade unions are workers' natural reaction to being exploited by capitalists. There may be times of acquiescence, but from a Marxist perspective, institutions of joint regulation would strengthen rather than weaken management's position because they are predicated on the continuation of the current system.

Conflict is therefore viewed as inevitable, and trade unions are a natural reaction of workers to their exploitation by capitalists, according to Adewole et al. (2010). Adams (1995) and Budd (2004) share this viewpoint and argue that since they provide an alternative method of resolving conflicts of interest, institutions like unions, legislation, and processes for bargaining and dispute resolution are significant subjects of investigation in industrial relations.

According to Abbott (2006), those viewing it from a radical viewpoint drew heavily on Karl Marx's theories, which claimed that class conflict was a constant feature of capitalist systems. The skewed poverty of workers, which is a result of income distribution disparities, leads them to identify their shared class interests and motivates them to unite against exploitation. When considering employee relations from a radical perspective, social conflict is seen as the inevitable result of capitalism, the product of a constant struggle between two social classes, whereas industrial conflict is seen as the manifestation of this struggle at work.

Rasmussen (2002) asserts that the radical strategy concentrates on fundamental social and class systems. These include the participants' attitudes, behaviors, and ideological stances on matters pertaining to the allocation of power in the workplace and in society at large. The restricted perspectives of the Unitary, Pluralism, and Radical frameworks make them ineffective when employed alone to study labor relations. For instance, they view industrial relations in terms of relationship between workers and management and their competing interest and leave other major players within the industry, for example the role of third party.

#### **2.4.4 The Systems Theory of Industrial Relations**

Dunlop's Systems Model (1958), which unifies the whole industrial relations system, provides support for this study. Application of the systems approach to Industrial Relations is given to Dunlop (IR). He envisioned IR as a system, namely as a component of society. An organization is seen as an open system that exists in an environment. Both the organization's surroundings and the environment itself have an impact on it (Singh, 2011).



A set of rules designed to control the actors at the workplace are considered to make up industrial relations in its operations. Employers, employees, and the state are the actors. The output of an IR system, according to Dunlop, is the generation of rules. All modes of payment, obligations, and expected performance are governed by rules. Additionally, they outline the obligations of both employers and employees, as well as how regulations are made and applied (Sivarethnamohan, 2010).

The input transformation and feedback process involves interaction between the three "actors." The state and its agencies dealing with workplace concerns are among the "actors," along with managers and their organizations, employees and their organizations, and workers. The actors work together as a team within a larger environmental setting, which both shapes and is shaped by them. The technical context of the workplace refers to the way work is structured and the technological status, including whether it is labor- or capital-intensive (Singh, 2011). Additionally, there is the transformation, which in the context of industrial relations refers to the processes of negotiation, conciliation, arbitration, law, and judgment that make up the Kenyan system of industrial relations.

There is also the market environment, or revenue, which includes product demand, market expansion, the number of rivals, and profit margin. These affect how the "actors" interact. The distribution of power among the "actors" is the power context. Additionally, dialogue and compromise must be the go-to methods for resolving conflicts. The state has a clear role as an arbiter in some matters in their interaction. One of the developing components of this idea is that employers, trade unions, and the government, who are all CBP players, act and behave and have attitudes that

influence IRE. The idea is considered applicable to this study in that IRE is moulded by participant conduct, and participant behavior affects the standard of CBP.

The idea of urgency and interaction is the basic tenet of general systems theory. Cole (2002) asserts that through collective bargaining, employers and workers may establish behaviour standards, which are crucial components of management-employee interactions. According to the systems theory of industrial relations, which this study has accepted, the collective bargaining process is influenced by the industrial relations environment. The industrial relations climate at an organization will have an impact on the participants in the collective bargaining process and the range of topics that may be bargained.

The researcher is aware of the limitations of the systems theory of industrial relations and chose to use it for this investigation. The power dynamics between management and the labor unions, as well as the role of the state, are not fully accounted for by the theory. Additionally, it falls short of accurately describing the individual's position in labor relations (Armstrong, 2006). Therefore, this study aimed to provide a theoretical contribution by emphasizing not only the roles of the three players, i.e., the employer, the unions, and the state, but also the impact of the industrial relations environment, scope, and power relations of the parties to collective bargaining.

Dunlop's Systems Theory is pertinent to this study since it takes into account and connects all the important factors that will be the subject of this investigation. The two main factors are the collective bargaining process and the climate for industrial relations. It explains how the two variables interact and how the environment of industrial relations affects the process of collective bargaining. Therefore, this study aimed to advance theory by highlighting not only the importance of the tripartite

relationship between unions, management, and the state, but also the impact of the industrial relations environment, human resource practices, union management, and power relations between parties to collective bargaining.

#### **2.4.5 Stakeholders Theory**

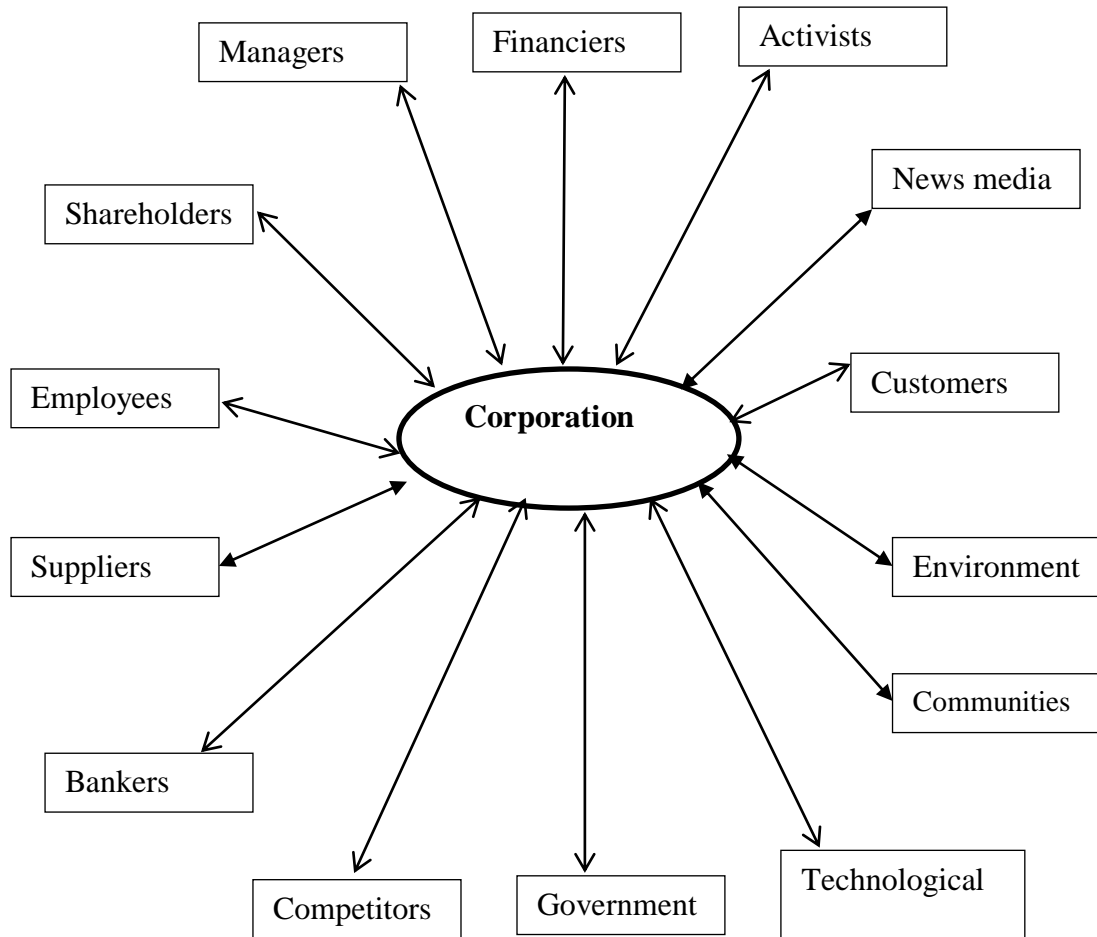
Richard Edward first proposed the stakeholder idea (1984). This theory of organizational management and business ethics is focused with assessing the numerous stakeholders that the firm is thought to be accountable to. Morals and values are the fundamental topics while operating a company. This notion holds that a corporation has a number of stakeholders for which it is accountable. As a result, its primary focus is on assessing the numerous parties that have a claim to the company. A company is made up of a variety of stakeholders, each of whom has different expectations of the company (Freeman, 1984).

This approach organizes the numerous stakeholders into groups with different interests, which the business must take into account while coming up with plans to include the interests. Any individual or group thought to have a genuine interest in a certain project or business is referred to as a stakeholder. A corporate stakeholder is a party that the firm as a whole may influence or that can be influenced by its decisions. Anybody with an interest in a subject is now included in the word. Those who favor meeting society's optional expectations are on one side of the debate. A business should strive to address or resolve social issues in addition to generating a profit and abiding by the law. Stakeholder theory is a popular method used to support this viewpoint.

Since neither of these stakeholders—employers nor employees—possess a predominance, it is anticipated that a point will come when the conflicting interests

will be balanced. This validates the right of any stakeholder to contest management's ability to run the organization within a controlled framework that manages these conflicting viewpoints and interests. Therefore, management's responsibility is to consider these conflicting opinions and interests and make an effort to resolve them. According to this idea, businesses should think about how their decisions will affect their stakeholders, including their employees, suppliers, consumers, and the broader public (Jensen, et al 2002). Supporters argue that by meeting stakeholders' requirements, firms secure their ongoing success. Johnson and Johnson is a well-known firm that demonstrates the stakeholder perspective. Customers, workers, management, communities, and investors are listed as the corporation's primary stakeholders in their creed (Seglin, 2000/2002).

Because it acknowledges the different stakeholders that exist in an organizational setting—in this example, the public institutions Moi University and Masinde Muliro University of Science and Technology—the stakeholder theory is pertinent to this study. These stakeholders include the KUSU-represented workers, rival companies, authorities, local communities, and the media, as shown in figure 2.1. Every group on this list participates and helps the organization succeed. In order to advance the interests of significant stakeholders in public universities, an appropriate industrial relations environment must be established. This highlights the applicability of the stakeholder theory to the current research; by involving all parties involved, the process of collective bargaining can be improved by a supportive and favorable industrial relations environment.



**Figure 2. 1: Stakeholders Theory**

**Source:** Stakeholder theory adopted and modified from international journal of applied institutional governance by Tony Ike Nwanji & Kerry E. Howell (2018).

#### **2.4.6 The Institutional Theory**

According to the institutional theory, institutions thrive when they are in line with the expectations of their surroundings. According to the institutional perspective, stakeholders must provide organizations legitimacy. When the general public believes that an institution has a genuine right to exist, it functions properly. According to the institutional view, organizations establish structures and procedures to appease outsiders, and these actions eventually come to be seen as rules within institutions.

Institutions take into account the processes through which structures, such as schemes; rules, norms, and routines, get established as authoritative standards for social conduct, according to Draft (2007). According to Jafee (2001), many parts of institutional theory describe how these features are produced, disseminated, adopted, and modified through time and space in order to strengthen collective bargaining processes. The theory investigates the norms, rules, and practices that emerge as authoritative standards for social conduct but does not provide instructions on how they should be chosen, created, and upheld in order to enhance performance and continue to be relevant in a changing environment.

According to the theory, elements must be produced, disseminated, adopted, and modified over the course of space and time before they can eventually deteriorate and become obsolete. It does not examine how to continue advancing collective bargaining by remaining useful and relevant in a changing world. The groups that make up an organization are viewed by institutional theory as independent institutions that must cooperate politically and socially and have established customs and methods for communicating with one another throughout time or with a past. The union, as a social institution, interacts with the administration of public universities to resolve conflicts of interest that develop in the industrial relations environment through collective bargaining, which is the foundation of its significance to this subject.

#### **2.4.7 Participation Theory**

The participation theory, also known as Theory X and Theory Y, developed by Douglas McGregor in 1957 is one of the most well-known neo-classical organizational ideas. Based on the involvement of employees, Douglas McGregor suggested two separate perspectives on human beings (Khanka, 2000). The opposing

viewpoint was designated as Theory X, and the favorable one as Theory Y. He observed how managers interacted with their staff and came to the conclusion that managers tended to shape their behaviors in accordance with these two presumptions (Robbins & Judge, 2009).

According to Theory X, managers think that in order to accomplish organizational objectives, individuals must be coerced into working since they fundamentally detest it. They make an effort to avoid taking on responsibilities and don't want to succeed. Individualism and job security take precedence over support for the accomplishments of the organization in their interest in it. On the other side, managers believe that workers perceive work as being as natural as a break or a game under Theory Y. Workers can develop their ability to accept and even seek out responsibility.

The underlying premise of Theory Y is that, given the chance, people may exercise self-determination over the projects and responsibilities they take on at work. Employees are capable of exercising self-control and self-direction. Anyone may acquire the ability to embrace responsibility and seek out originality. Decision-making is a skill that subordinates possess, and it is not always the exclusive domain of people in managerial roles (Bhatt & Qureshi, 2007). McGregor advocates that managers need to follow Theory Y assumptions (Khanka, 2000).

The approach urges managers to give their staff members the flexibility to decide crucial matters that affect them. Additionally, it is crucial that decision-makers speak with staff members before making crucial choices. Employees are inspired, which increases their long-term productivity and helps businesses execute at a high level. McGregor's theory Y contradicts Marx Weber's view of bureaucracy, which holds that employees have limited space for innovation because management or authority has

too much control over them. He urges a careful balancing of theory X and theory Y assumptions in the supervision of effective personnel.

According to the notion, managers should foster an environment where employers and employees work together. Xenikou and Simosi (2010) examined multiple instruments of organizational culture and found that those with positive organizational cultures had group norms that foster accomplishment, decision-making involvement, cooperation, social support, interpersonal relationships, and self-actualization. Lund (2003) adds that an organizational culture may support or undermine management's objectives for the company.

For instance, in a clan culture, members take great pleasure in interdependence and brotherhood rather than independence and individualism. According to Lewis et al. (2003), an effective organizational culture will result in increased performance. According to Lakomski (2001), a lack of dynamism in the workplace culture is one of the main reasons why employees resist change in organizations. As a result, this study makes the case that negotiations and representative involvement may improve the collective bargaining process through organizational culture.

#### **2.4.8 Conclusions and Summary of the Theories**

The various theories of industrial relations are being critically evaluated as a result of their divergent underlying assumptions. For example, despite its popularity, the pluralist analysis has come under fire for placing an excessive emphasis on consensus and integration, as well as a ready acceptance of the social and political status quo and a fundamental conservatism that presupposes an illusory balance of power between the various interest groups (Fox 1973; Goldthorpe, 1974). Additionally, it has a propensity to neglect the decision-making authority found outside of the collective



bargaining process. In this regard, radical theories draw attention to the fact that having power also refers to having the ability to stop issues from being the topic of talks. However, pluralism seems less value-driven than both unitary and Marxist theories, despite the fact that it does tend toward prescription by favoring ongoing conflict discussions based on compromise (Clegg, 1975).

The unitary viewpoints are attacked for their overly idealistic vision, their restricted application (for example, to non-union businesses), and their paternalistic, management-oriented approach, which presupposes a set of universally recognized values.

The neo-marxist and radical perspective poses a crucial intellectual challenge to unitarist and pluralist thinking by highlighting the nature of power and control in the workplace and society.

Additionally, systems theory has undergone much revision, improvement, and change (Gennard and Judge, 2010). For instance, it is argued that the model's restricted scope leaves out the realities and systems governing the distribution of wealth and power in society. Its convenient unifying ideology-cum-status quo inclination (which assumes society as given) essentially accords the industrial relations system some functional role in the maintenance of stability but ignores a number of issues, including industrial relations change, the source of conflict, and the system's interrelationship with the 'outside' political, economic, and social scene. It is further stated that its structural emphasis results in a focus on rules or outputs rather than the real decision- or rule-making processes.

It is suggested that this model should take into account the significant role of business owners, who deserve inclusion as actors and in their contextual capacity. It also fails to explain key behavioral variables (i.e., why actors act the way they do). Wood (1978) also suggests making a difference between the (production) system that is guided by these norms and the (industrial relations) system that creates them.

However, there are numerous ways to interpret what is occurring and a wide range of viewpoints on what should be taking place. The fact that there isn't a single global theory that everyone agrees on must be regarded as an attractive aspect of a subject that lends itself readily to divergent viewpoints, ideas, and argument. Because it gave a unifying and functional role for industrial relations together with other pertinent, supportive though opposing theories, it is for the aforementioned reasons that this study was founded on systems theory of industrial relations.

## **2.5 Empirical Review of Literature**

### **2.5.1 Human Resource Management Practices and Collective Bargaining Process**

In contrast to the new Japanese management techniques acquainted with the shop floor, HRM as a new paradigm for industrial relations may also be understood as a critique of the previous Western management styles that were cut off from the shop floor (Gibney, 2009). Some view HRM as a new breed of "managerial progressivism" that uses "efficiency" as a means to "social peace, making each workman's interest the same as that of his employer's" in order to handle the "labor crisis" (Carson, 2011).

A more fundamental awareness is that human resources are an organization's most valuable asset and that developing a more thorough and cohesive approach to human resource management that inspires people is necessary (Armstrong, 2006). Guest (2002) builds a case for building the worker into the analysis of HRM by incorporating

worker attitude and behaviour in the study of the HRM –performance relationship and that certain HR practices are associated with higher work and life satisfaction. Practices in human resource management can be beneficial to a business.

According to Pyman et al. (2010), the industrial relations climate has been used to explain interactions between unions, employees, and employers and refers to the workplace environment and contextual factors. Since work practices and employment practices in the management of people are a function of industrial relations environment, it is possible that this environment is related to organizational performance and work outcomes. Higher education institutions are essential to the prosperity of a country's economy.

Only Font has studied the connection between organizational/economic success and HRM (2010). Firm performance is evaluated in relation to specific HRM practices, including hiring, training, performance evaluation, and monetary rewards. Firm performance is measured as the self-ranking relative to its competitors in terms of profitability, labor productivity, and product/service quality. In order to develop indicators of "best practices" (complementary practices among various policies), Font also takes into account a number of additional features that are grouped using factor analysis. These indicators in turn help to create significant clusters of firms.

Labadie (2005) hypothesized that the linkages between HRM practices and performance are influenced by the overall institutional framework of labor relations and particularly by the role played by Departments in relation to trade unions. The additional insights provided in Font (2010) also point in that direction while they further suggest that the structure of bargaining and its continuity in time have also a major incidence.

Universities are supposed to generate highly qualified graduates, and this is possible in an environment that is conducive to learning with few disruptions. Effective HR policies aimed at reducing employee unhappiness and employment conflicts and boosting employee satisfaction and commitment to the business are expected to make sure this is achieved. Recruitment and selection, training and development, participation, and reward were all listed as HR practices by Delaney & Hustled in 1996. In order to enhance performance, including higher employee productivity, product quality, and business flexibility, Lee & Lee (2007) listed training and development, teamwork, performance assessment; compensation/incentives, human resources planning, and employment security.

Across Africa, there have been more strikes by employees in the public and commercial sectors. In Malawi, Kenya, and Swaziland, about 10,000 academics and almost 280,000 teachers are on strike. Millions of students have been impacted by each of these strikes over salary disagreements (Kamau 2012). There is currently very little research on the topic of HRM practices and industrial conflicts. To close the knowledge gap, this study set out to determine how HRM practices affected the collective bargaining process in Kenya's public universities.

### **2.5.2 Union Management Relations and Collective Bargaining Process**

Any attempt to extrapolate high achievers is met with skepticism in workplaces where there is little trust between unions and management. In reality, it is well known that management used spies among union members to gather knowledge on how to effectively manage their staff (Kaufmann, 2013b). These three characters are seen as being exclusive to the field of labor relations and workers' rights, according to studies of industrial relations systems (Egelszanden et al., 2009).

According to Pyman et al. (2010), co-operative partnerships requires active participation and relationship maintenance from both sides, yet doing so necessitates major time and resource demands. Additionally, it calls for a coordinated effort from all three groups, including employers, unions, and workers. According to the report, companies should view their workers and union reps as helpful partners and should be more aware of how organizational members view the business' rules and procedures. According to Foster et al. (2009), employers are unlikely to participate in collective bargaining unless they are willing to communicate with employees or outside parties and unless the advantages of doing so are more generally acknowledged.

A nation's reliance on trade union strength is essential. One of the key components of the economy is the labor force. It should also be noted that safe and productive employment is a requirement for a country's successful economic growth. Additionally, trade unions facilitate the implementation of government policies. It will be more successful if an organization for employees participates in developing macroeconomic policies (Muskhelishvili, 2011). Additionally, trade unions may protect employees in a variety of ways, including through collective bargaining and labor regulations. A trade union's other responsibilities include maintaining harmonious labor relations and managing employees during strikes.

Since the 1960s and 1970s, labor union economic impact, membership, and influence have been steadily declining. The future viability of organizations may be impacted in the near future by the demise of labor unions (Domhoff, 2013; Lichtenstein, 2013). According to the Bureau of Labor and Statistics (2015), 11% of all American workers were union members at the end of 2014, down from 35% in the 1960s. Some of the causes of the decline are related to the state of the global economy and markets, the

development of technology, international migration, and other macroeconomic factors.

In the 1960s, more than 35% of the labor force was represented by unions, making them a key component of the American economy. Recent global socioeconomic changes, new Taft-Hartley legislation restrictions, rising public opposition to unions, and other factors have all led to the demise of unions during the past 50 years (Rau, 2012). After the industrial revolution, employers' exploitation of workers led to the rise of labor unions (Hipp & Givan, 2015; Levi, Melo, Weigast, & Zlotnick, 2015).

Workers were threatened with legal action and could have their employment terminated by their employers for joining a labor union in the 19th century, which led to strikes and collective action against employers by workers trying to fight against oppressive working conditions (Compa, 2014). Before achieving considerable legal success in the 1920s, unions struggled for constitutional safeguards for many years (Lichtenstein, 2013).

The National Labor Relations Act, which established constitutional rights for unions, was preceded by the Railway Labor Act (RLA) of 1926. (Compa, 2014). The National Labor Relations Act established legal rights for employees under collective agreements and protects workers against employer exploitation of pay, benefits, and working conditions (Estlund, 2015). (Estlund, 2015; Levi et al., 2015). Initial constitutional safeguards for labor unions came from the RLA, which was eventually reformed to become the (NLRA) in 1935. (Estlund, 2015). According to Estlund, the NLRA protected workers against employers in the event that they participated in a strike action or chose not to give their services due to a labor contract disagreement (2015). However, lately, labor unions' power has been dwindling (Bureau of Labor

and Statistics, 2015; Hipp & Givan, 2015). Legislative attacks on labor unions are mostly driven by labor deregulation attempts that have impacted unions since the 1980s (Hurd & Lee, 2014).

Right-wing politicians have worked together, through the American Legislative Exchange Council (ALEC), to reduce the influence of unions and put more pressure on states' rights to collective bargaining (Hurd & Lee, 2014). Additionally, the Supreme Court will decide whether unions have the right to charge agency fees to non-members, which is a significant source of income for most labor unions, especially considering that teacher union dues are at an average of \$1,000 annually while non-member dues are close to \$650 annually.

This could result in a sizable loss of revenue for large unions, as well as have an effect on the ability to motivate and recruit new members as well as the loss of current membership. Due to the mentioned economic and political changes that will influence unions, I researched how labor unions use CB. Labor unions in the United States employ collective bargaining agreements (CBAs) to impose a framework for working conditions that includes production and productivity (Rolfsen, 2013). CBAs cannot be effectively used to govern salaries, benefits, and working conditions to enhance performance and productivity when management and union interests are at conflict (Bennett, 2014).

Because of global economic trends and recommendations from the International Monetary Fund to member nations to implement more free market policies, the role of labor unions in society is changing (Nowak, 2015). Researchers have not looked at the connection between CBAs and their influence on developing high performance work practices, despite the fact that they have addressed the changing economic

landscape for labor unions (Nowak, 2015), the function of CBAs, and interest-based bargaining (Boniface & Rashmi, 2013). The effects of negotiated performance and standards in collective bargaining agreements on the sustainability of the organization were not uncovered by earlier researches (Aguinis, Gottfredson, & Joo, 2012; Rau, 2012).

Unions primarily negotiate CBAs to safeguard and advance their members' rights to better compensation and workplace protections. The frameworks provided by CBAs allow unions and their members to seek resolutions to issues ranging from the egregious to the minor. However, they did not examine the impact of CBAs on high performance. Posthuma, Campion, Malika, and Campion (2013) conducted a study on how unions may foster high performance. To implement high performance workplaces, human resources experts must collaborate with labor and management representatives; yet, even in nonunion businesses, there is a gap in how this is implemented (Kim & SungChoon, 2013).

It was crucial for me to comprehend how the collective bargaining agreement functions as the cornerstone of the employment relationship between unions and their employers despite the general decline in union density (Kochan, 2012). The importance of CBAs to unions was discussed in Kochan (2012) and Jordhus-Lier (2012), but they did not examine how it affects organizational effectiveness. There is a vacuum in the literature about how CBAs help or hinder management in developing high performance work practices as a result.

Despite divergent opinions regarding the philosophical development and foundation of unionism in organizations, cooperation between labor representatives and management is essential. There is a lot of evidence that suggests there are different



ways that union management can cooperate. These forms of cooperation included: (a) federal level management committees, such as those created under the Kennedy, Nixon, and Ford administrations; (b) industry-level, interindustry-level, geographical-level; (c) committees for workplace productivity; (d) workplace safety; (e) joint labor and management committees; and (h) committees to improve work-life balance (Chambers).

According to Zhou, Hong, and Liu (2013), management and union collaboration is essential for successful firm-level performance. It is crucial to look more into how labor and management interact. In a unionized setting, managers are ultimately in charge of handling the requirements of the CBA. Organizations exist to (1) foster an organizational framework where individuals can do meaningful work and (2) rally its employees under a mission statement, and lobby the government towards favorable legislation that sustains organizational sustainability (Chambers, 2013). The type of relationship between unions and management has a direct impact on organizational sustainability.

In contrast to workers in nonunionized businesses, Rosenfeld (2014) did find that union members did describe problematic interactions with management. According to study by Devinatz (2012), management and union collaboration is essential for long-term organizational viability. Collaboration between unions and management may take the shape of a framework that is mutually advantageous and based on clearly defined responsibilities for labor and management, which would solidify a two-class structure (Marginson & Galetto, 2016).

The organization has an environment that fosters transparency, respect, and trust thanks to the industrial democracy model described by Muller-Jentsch (2014) and

Kaufman (2013a), with both union and management working toward the same goal of sustainability for the organization and all of its stakeholders (Muller-Jentsch, 2014). On this premise, the research on how collective bargaining agreements impact performance standards in unionized firms was guided by the history of labor unions and how they came into being.

Since labor unions were at the center of this study, it was crucial to examine their historical development, factors contributing to their growth and fall, and contemporary trends in labor and trade union activity in light of the labor market of today. Previous research on labor unions conducted by Lucy (2014) and Martyn (2015) focused on internal dynamics and the function of leadership, but did not thoroughly examine how collective bargaining agreements affected the work process and the attainment of high performance. The quantitative and qualitative approaches utilized in Lucy (2014) and Martyn (2015)'s investigations, respectively, suggested a broad scope research technique depending on the particular phenomena under investigation.

Studies done in the past on unions, like Rivers' (2014) study, looked into the causes of falling union membership. Rivers compared the historical development of unions with the current political, economic, and social causes of the membership decline using research from a literature review. Similar exploration of the recent history of unions was found in Martyn's (2015) writing, which also connected it to the other ideas that served as the basis for the paper's main contention. The aforementioned research papers appear to have employed effective research methodologies for examining certain occurrences. Additionally, understanding the historical background of labor

unions was crucial to comprehending the current situation of the phenomenon under investigation (Lucy, 2014; Martyn, 2015; Rivers, 2014).

The evidence from the literature evaluation demonstrates that the scope of collective bargaining is broad and that parties have some influence therein. In a similar vein, certain topics that are debatable are required while others are not. According to the studies we evaluated, concerns about money are prioritized over concerns about the workplace. Therefore, the goal of this study is to determine how the climate for labor relations affects the process of collective bargaining in Kenya's public institutions.

### **2.5.3 Power Relation of Parties to Collective Bargaining and CBP**

In their 2012 paper, Lewin et al. presented three main objections to collective bargaining. According to Lewin et al., it would give public employees who are employed to provide services that are promised for the public benefit unnecessary authority. Second, collective bargaining has the potential to undermine democratic principles by giving public sector employees excessive coercive power over elected officials. The public who depends on the critical services provided by the particular agency where workers are striking could suffer if the threat of strikes is used to break the impasse in negotiations.

These earlier arguments seemed to imply that collective bargaining agreements were strong tools that, in the case of a negotiation deadlock, may be abused or negatively affect auxiliary stakeholders (Lewin et al., 2012). Due to these three concerns, several states have unique arbitration laws, especially for public safety agencies like the police and fire departments. When the Professional Air Traffic Controllers (PATCO) employees went on strike in 1981, President Reagan was motivated by the fact that Calvin Coolidge employed force and permanent staff to replace union members

during the Boston Police strike of 1919 (Walker, 2016). Unions have a number of options in the event of a deadlock during a collective bargaining process, including mediation and arbitration (Domhoff, 2013).

When compared to non-unionized firms, unions have the power to threaten strikes and remove their labor if management and union officials cannot reach a consensus or make general concessions (Muller- Jentsch, 2014). During labor talks, unions' main goal is to take advantage of any opportunity to raise pay, benefits, and working conditions (Freeman & Han, 2012; Lewin et al., 2012). The wages agreed in situations where the union has strong negotiating leverage over employers will be higher than market rates, with the employer at risk if the union goes on strike. Due to the negotiating position and power possessed by the unions or employers, negotiated contracts include considerable expenses (Gallaway & Robe, 2014).

When there is no collective bargaining agreement, unions may go on strike or businesses may exclude employees from the workplace (Scott, 2014). Organizational effectiveness may suffer if there is no collective bargaining agreement. Due to the NLRA's protections for labor unions' rights to organize and advance collective bargaining, unions may go on strike to pressure or nudge employers into negotiating more favorable terms. In the event that the expected output and current staff competencies are not in line, management may look for flexibility in the terms of the collective bargaining agreements in order to replace employees.

Industrial relations activism and scholarship place a strong emphasis on power analysis with the aim of ensuring that all employees receive equitable treatment (Van Buren III and Greenwood, 2011). By pointing out that management is only likely to see a union as a partner when it has actual workplace power, Pyman et al. (2010)

support the previous claim. Employers often have greater influence than unions since they control the resources, and their interactions with one another can range from cordial to hostile, according to Trif (2005). Employers' reluctance to give employees' groups the authority to negotiate on their behalf appears to be a major barrier to the growth of voluntary collective bargaining.

Employers have extensive power and authority to determine the terms of work because there are insufficient genuine threats to obtain and exercise voice in the employment relationship (Van Buren III and Greenwood, 2011). Lack of authority among low-wage employees is typical, say Freeman et al. (2007) and Frank (2005), for both workers in developed and developing nations. The process of collective bargaining involves a balance of power; to some extent, this imbalance between one employee's economic power, status, and security and that of management can be addressed by collective pressure so that agreements are a compromise resolution of power conflicts. Wherever there was a balance of power between the unions and management, a successful union was most likely to develop.

According to Abbott, Heery, and Williams (2012), strong union membership, frequent strike activity, and the scope of collective bargaining are frequently linked to strong union power. Negotiators will be able to structure the collective bargaining dialogue in a way that encourages teamwork or cooperation rather than division between the parties if they have the ability to recognize power imbalances and individuals' interests and values, according to Caverley et al. (2006) and Van Buren III and Greenwood (2011). We are unable to better understand industrial relations processes as a result of this neglect.

Saleemi (2007) asserts that in order to preserve healthy labor relations, employers must meet the workers' basic requirements for food, clothes, and housing. One essential component of the give-and-take and compromise between employers and employees is the financial incentives that come with the employment. These incentives include base pay and salaries, as well as a range of non-wage benefits like overtime pay, bonuses, insurance plans, stock ownership plans, and pension plans.

According to Helman (2012), a range of variables, such as institutional ones like the labor relations legal framework, might play a role in preventing potential "defection" from collective bargaining given the competing interests and views of its worth. Another element that would significantly impact collective bargaining is threat undercutting by "outsiders" who are not negotiation partners and hence not obligated by the agreement (OECD, 2003).

Economic considerations like tiny, labor-intensive businesses that worry about frequent, high-wage claims from powerful unions may feel a greater need to join negotiating clubs than large businesses do. On the other hand, under single-employer negotiating arrangements, small businesses may be less supportive to unions than bigger businesses. Additionally, some analysts have argued that the spread of flexible technologies and more intense global competition have put pressure on the effectiveness of current collective bargaining structures. However, the capacity of different bargaining systems to achieve the desired objectives varies.

A number of governments have imposed various limits on the conduct of collective bargaining in this sector, according to Helman (2012), who also makes the case that development in the public sector is crucial for the growth of this practice. An example of a demarcation in negotiating rights would be the kind of work and occupation (such

as the exclusion of police from bargaining) and the status of employment (e.g. exclusion of civil servants). Additionally, over the past few decades, trade unions have discovered that organizing workers in the public sector is simpler than doing so in the private sector. State-owned businesses are not included in the public sector, which is defined here to include public administration, education, health, social services, and other public activities like postal services and transportation.

The majority of the research under consideration appear to indicate that as the direction of the negotiation process is heavily influenced by the power relationships between the participants, collective bargaining depends on such relationships. The findings also demonstrate that employee relations and workplace performance are impacted by both positive and negative party power. Although studies have shown that the power relationships between the parties to a collective bargaining agreement are essential to the process, little is known about how much of an impact they have. Therefore, the purpose of this study is to close this knowledge gap by determining how the power relationships between the parties to a collective bargaining process affect those processes in Kenya's public universities.

## **2.6 Moderation Effect of Participatory Management**

Using a participatory management or leadership approach, decisions are made with employee input. Participatory management enables the administrators to become an active member of the group and make better judgments on collective bargaining. A type of leadership approach called participatory management aims to improve worker performance by giving them more responsibility. A system of interaction between an organization's personnel and its various levels of management is known as participatory management (Feldman, 2010).

In contrast to autonomous management, participatory management is a management approach that makes extensive use of collective decision-making. It is a common belief in participatory management that people function emotionally well; this form of management is sometimes referred to as democratic management (Dale, 2009). Organizational communication is significantly more effective and everyone produces more effective outcomes when everyone in the organization participates in the decision-making process.

Participatory management may be employed in this process as a technique to strengthen ties inside the company, look at employee incentives, and speed up the flow of information across the company (Anderson & McDaniel, as cited in Brenda, 2001). Employees often appreciate the need for autonomy and authority, and Poisat (2006) concurs that they choose a work that would include more responsibility and risk. The practice of including workers in choices that directly impact them on a daily basis with the goal of addressing a problem or improving the situation in regards to the chances that exist is described as participative management in a lot of literature (Al-Tarawneh, 2012).

Employees participate in the process of discovering and selecting options based on the values and preferences that are important to them, according to Harris (2009). Making decisions implies that there are different options to take into account, and in such a case management want to not only identify as many of these options as possible but also to select the one that has the highest likelihood of being accessible or effective and that best fits their goals, desires, lifestyle, values, and other factors.

According to Maltais (2013), recognizing and appreciating employee participation can help retain workers and promote higher levels of performance. Employees



unquestionably have an impact on the implementation of organizational strategies. From a managerial perspective, involving workers is a good method to make the most of human capital resources and eventually influence outcomes by utilizing the various technical skills of staff members across departments. Employee engagement is important for other important aspects of job quality, such as physical working conditions and work intensity, according to the fifth European Working Conditions Survey (2011).

Despite the fact that most developed nations practice employee involvement in decision-making, there is a negative attitude among workers in Africa and emerging nations who see labor as a barrier to promoting participatory management (Crane, 2009). Instead of the actual job, employees are more interested in the advantages and compensation they will receive from the business. Such behaviors can never result in productive engagement (Prisca, 2011).

Participatory decision-making is practiced in Nigeria, and the government has in the past promoted it through law. However, some management authors in Nigeria contend that it does not exist and, if it does, that it is not authentic. Standing Guy (2008) values appropriate actions to foster cooperation and consultation at the level of problems requiring employee engagement as well as on subjects of shared interest. Employee involvement boosts motivation, ownership, and dedication to the company, which helps to retain top talent and foster an atmosphere for managing change. Managers may assist rebuild employee trust and commitment and help raise employee motivation by encouraging staff initiative and even employee engagement in decision-making (Strategic Plan Lowa University) (2013).

The key human resource ideas that are focused on increasing employee performance practices are being adopted by American practitioners and experts, but the infusion is also progressively being felt in Kenyan businesses, notably (Kim & Wright, 2010). According to Chen and Tjosvold (2006), participatory management entails include employees in decision-making processes where they believe they have the chance to address issues and have a say in the collective bargaining process. Participatory management is authoritarian in many nations with hierarchical societies, like China, Germany, India, and Turkey, since top management makes all final decisions (Abdulai IA, 2014).

Employees in these environments feel at ease making decisions and accept that the boss makes the majority of the decisions. While in Sweden, regionalization and decentralization of participatory management authorities are achieved through delegation (Little, 2010). In order to close the information gap, this study set out to establish the moderating impact of participatory management on the link between the climate for labor relations and the procedure for collective bargaining in Kenya's public universities. Kenya is a developing nation.

An organization should develop and encourage a democratic work environment and get the work done by consultation, suggestion, and participation rather than by an autocratic, dictatorship-style forceful manner in order to improve industrial relations. It should also have a well-planned communication system so that any changes in the organization may be known to the employees (Verma, 2009). An established and effectively run system for the prompt and efficient resolution of employee grievances aids in enhancing workplace relations. The elements that affect labor relations at work include the fact that more and more managers prefer using employee involvement as a

tool in leadership to improve excellent individual connections (directly) over using employee groups like trade unions. \

According to Lee and Lee (2014), employing participatory management approaches in South Korean workplaces is favorably correlated with cordial ties between management and labor unions. On the other hand, some researchers have argued that employee involvement practices (EIPs) are nothing more than the outcomes of isomorphic adaptations to organizational environments that indications of participatory approaches can still be misleading, and that programs in action could be decoupled from their original purposes and serve local purposes.

Redesigning work organizations to promote greater horizontal information exchange and participative decision-making is one of the HRM's most crucial goals. Small group activities, quality circles, suggestions, works councils (nosahybihoe), and regular labor-management meetings, all of which fall under the category of Employee Involvement Practices (EIPs) or bottom-up participation-oriented HRM practices, were in fact found to be among the most widely used HRM practices in a review of empirical investigations of HRM published in South Korea between 2000 and 2010. (Lee and Lee 2010). EIPs have more complex effects on organized labor than low-road HRM techniques (like downsizing initiatives).

Armstrong & Taylor (2014) reviewed 70 research on goal-setting, decision-making involvement, and objective feedback and discovered that, when correctly implemented and supported, management by objectives programs had a nearly positive impact on productivity. Employee relations and performance are positively correlated in a number of economic sectors, according to research conducted by a number of academics. A research on the effect of employee relations on worker

performance in Pakistan's hospitality business was done in 2013 by Muhammad, Farrukh, and Naureen. A study on the effect of employer-employee relationships on business growth was done by Dumisani, Chux, Andre, and Joyce (2014).

A research of the restrictions on public sector bargaining in Canada was done by Joseph in 2015. The research looked at public sector negotiations in Canada during the time of consolidation (1998–2013). The study evaluated how these external factors affected relative bargaining power. The research looked at union membership, pay agreements, and strike action as key collective bargaining variables. The findings showed that throughout this time, public sector unions' relative negotiating power decreased. The analysis came to the conclusion that future collective bargaining in the public sector will continue to be severely curtailed.

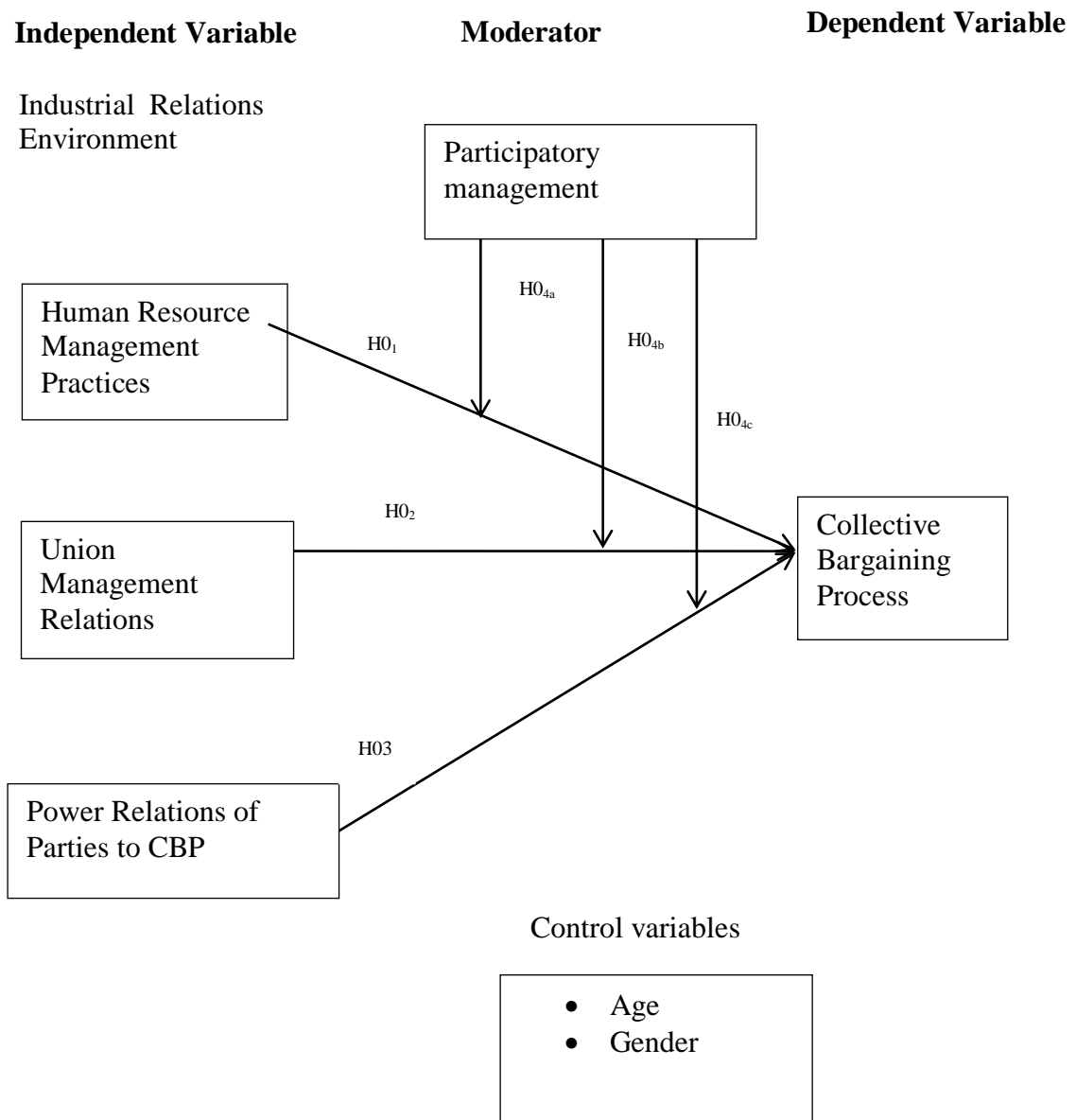
In order to ascertain the impact of the collective bargaining process on the atmosphere of industrial relations in Kenya's public universities, Akhaukwa, Maru, and Byaruhanga (2013) undertook a research. A stratified probability sample of 322 respondents who were questioned in 2012 at Kenya's three public institutions served as the foundation for the data analysis (Kenyatta University, Moi University and Masinde University of Science and Technology). To narrow down a huge number of variables for further in-depth research, exploratory factor analysis was done. To ascertain the impact of collective bargaining on labor relations, linear regression analysis was used. The outcome demonstrated that the industrial relations environment was significantly impacted by the collective bargaining process ( $r=0.495$ ,  $p>0.05$ ). It was suggested that in order to improve their relationship, the parties to collective bargaining should review their engagement tactics. Ngui (2016) did research on the connection between commercial banks' performance and employee

relations methods. This study set out to bridge the knowledge vacuum left by the earlier studies by highlighting the role of the industrial relations environment on the collective bargaining process and the moderating effect of participatory management.

## **2.7 Conceptual Framework**

A hypothesised model that identifies the ideas to be researched and the interactions between them serves as the conceptual foundation for this investigation (Gakure, 2010). The goal of the study was to examine the effects of three independent variables, namely HRM practices, union-management relations, and power relationships between parties to collective bargaining, on the dependent variable of the collective bargaining process and the independent variable of the industrial relations environment, as well as the moderating impact of participatory management on that relationship.

The collective bargaining process may be impacted by how human resource management practices are carried out and managed inside the firm. Similar to this, how management and unions interact with one another at work will impact the process of collective bargaining. The employer's and the union's relative strength during collective bargaining, or the power relations between the parties, can have an impact on the process. It should be underlined that the effectiveness of collective bargaining processes in companies, and notably at Kenya's public institutions, depends on a conducive industrial relations environment. Figure 2.3 shows the conceptual framework in diagram form.



**Figure 2.2: Conceptual Framework**

Source: Researcher, 2016

Human resource management techniques are those in place in a workplace that deal with managing people (workers) (Armstrong, 2006). Power relations refer to the balance of authority between employers and unions, with the government acting as a middleman. The term "union-management relationship" refers to the way in which the management and the union engage during the collective bargaining process, regardless of whether the negotiations are competitive or friendly, conducted in good

faith, and acknowledge each party's right to negotiate. It is challenging to discuss a favorable industrial relations climate for an efficient collective bargaining process in light of the current wave of industrial strikes in public colleges. This study examined the moderating effects of participatory management on the link between the industrial relations environment and the collective bargaining process.

## **2.8 Summary**

The literature and ideas pertaining to the impact of the industrial relations environment on the collective bargaining process have been reviewed in this chapter. It has looked at the theoretical framework and many facets of the conceptual framework of the study in addition to the literature on particular aims. These studies show that while there is a wealth of research on labor relations and collective bargaining. There aren't many research on how the environment for industrial relations affects collective bargaining and how participatory management affects the interaction between IRE and CBP at Kenya's public institutions. This indicates that not enough study has been done on the subject. It is this gap in knowledge that this study sought to fill by investigating the influence of industrial relations environment on collective bargaining process and the moderating effect of participatory management on the relationship between IRE and CBP involving KUSU in public universities in Kenya.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research design and methodology used to examine the effect of industrial relations environment on collective bargaining process in Kenya. The research paradigm, research approach, research design, and the study areas, are discussed. The target population and sample methods are discussed in the next section. The study's data gathering methods are covered in the third part, which is then followed by approaches for data presentation, analysis, and interpretation. Additionally, this chapter lists quality assurance procedures that were taken into account when the study was conducted, including unit of analysis, validity and reliability of the research tools, and ethical issues.

#### **3.2 Research Paradigm**

A collection of assumptions or ideas known as a research paradigm directs an investigation or study (Saunders et. al., 2009). Because it is more suited to directing data collection and analysis than the constructivism and positivism paradigms, the researcher chose the pragmatism paradigm for this specific study in order to demonstrate the rationale for utilizing a mixed-methods approach. Pragmatism is most suited to the use of mixed-methods research, according to researchers like Tashakkori and Teddlie (1998), Morgan (1998), Patton (2002), Biesta and Burbules (2003), Rallies and Rossman (2003), Marcy (2003), and Johnson and Onwuegbuzie (2004).

The pragmatist chooses to employ the whole range of qualitative and quantitative approaches because they feel that either quantitative or qualitative methods may be effective (Tashakkori & Teddlie, 2003). The research topics and the current stage of



the inductive-deductive research cycle will determine whether to apply the methodologies separately or combined. Pragmatists hold that the inductive-deductive research cycle may be used to conduct research on any issue at any time (Tashakkori & Teddlie, 2003). The pragmatic paradigm provides an opportunity for “multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis in the mixed-methods study” (Creswell, 2003, P.12).

The main points of contrasts between, pragmatism, positivism and constructivism are summarized in table 3.1 for clarity and reference and to concretise the adoption of pragmatism in the study.

**Table 3.1: Differences between Pragmatism, Quantitative/ Posivism, Qualitative/ Constructivism Methodologies**

<b>Dimensions of Contrast</b>	<b>Pragmatism</b>	<b>Positivism</b>	<b>Constructivism</b>
Methods	Both QUAL and QUAN; researcher answers questions using best methods	QUAN	QUAL
Logic	Both inductive and hypothetico-deductive	Hypothetico-deductive (originally inductive)	Inductive
Epistemology (researcher relationship)	Both objective and subjective points of view depending on stage of research cycle	Objective point of view (dualism)	Both objectivity and interaction with participants valued by researchers
Axiology (role of values)	Values important in interpreting results	Value-free inquiry	Value bound inquiry
Ontology (the nature of reality)	Diverse viewpoints regarding social realities; best explanations within personal value systems	Naïve realism (an objective, external reality that can be comprehended)	Ontological relativism-multiple, constructed realities
Possibility of causal linkages	Causal relations, but they are transitory and hard to identify, both internal validity and credibility important	Real causes temporary precedent to or simultaneous with effects	Impossible to distinguish causes from effects; credibility of descriptions important
Possibility of generalization	Ideographic statements emphasized; both external validity and transferability issues important	Nomothetic statements possible	Only ideographic statements possible transfer ability issue important

*Source: Adopted and modified from Tashakkori and Teddlie (2003)*

### **3.3 Research Approach**

When a researcher blends quantitative and qualitative research methodologies, methods, approaches, concepts, or language into a single study, this is referred to as mixed methods research (Johnson & Onwuegbuzie, 2006). The pragmatic paradigm is applied in mixed methods research from a philosophical standpoint. Its logic of inquiry makes use of induction (or pattern recognition), deduction (the testing of ideas and hypotheses), and abduction (finding and relying on the most compelling explanation among a group of possibilities to explain one's findings) (de Waal, 2005). By rejecting the temptation to establish principles as unquestionably true without consideration, proof, or input from others, mixed methods research also aims to justify the use of different methodologies in addressing research topics.

Using mixed methods methodology allowed the collection of data that answered the research questions (Brannen, 2008, Brannen 2005, Leedy and Ormrod, 2015, McEvoy and Richards, 2006) than would be possible using one type of data alone. This is because the methodology is inclusive, pluralistic, and complementary, and allows the researchers take an eclectic approach (Johnson and Onwuegbuzie, 2006) making it possible to collect multiple data using different strategies, approaches, and methods. The resulting combination of data is likely to result in complementary strengths and non-overlapping weaknesses (Brewer and Hunter, 1989) thus a major source of justification of collected data that will be superior compared to use of single method studies.

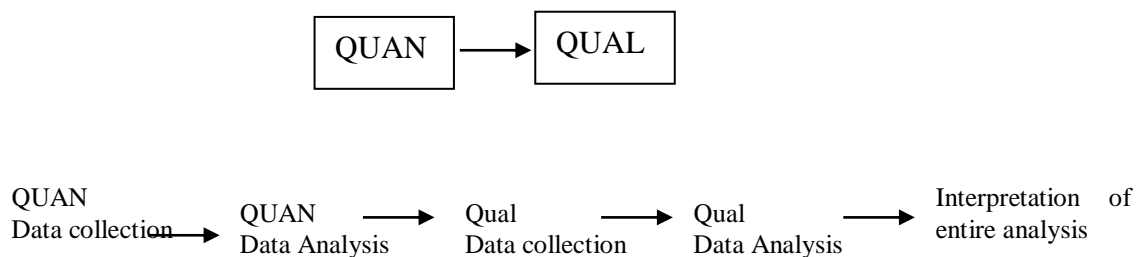
### **3.4 Research Design**

A research design is a logical thread that connects all the important components of the study so that meaning can be drawn from them (Kothari, 2004). Explanatory and

cross-sectional survey research designs were used in the study. The link between the climate for industrial relations and the collective bargaining process, as well as the moderating impact of participatory management on that relationship, were tested using the explanatory design.

The preference for the explanatory research design stems from its suitability for examining causal relationships between study variables (Saunders et al, 2009). Since the study used a mixed-methods approach, a sequential explanatory research design and a cross-sectional survey methodology were used, and data from KUSU members and administrators from the two public institutions that were chosen were gathered first.

During the study's interpretation phase, the quantitative data was given priority, and the two methodologies were combined. Figure 3.1 displays the steps in this research.



**Figure 3. 1: Sequential Explanatory Design**

**Source: Researcher, 2016**

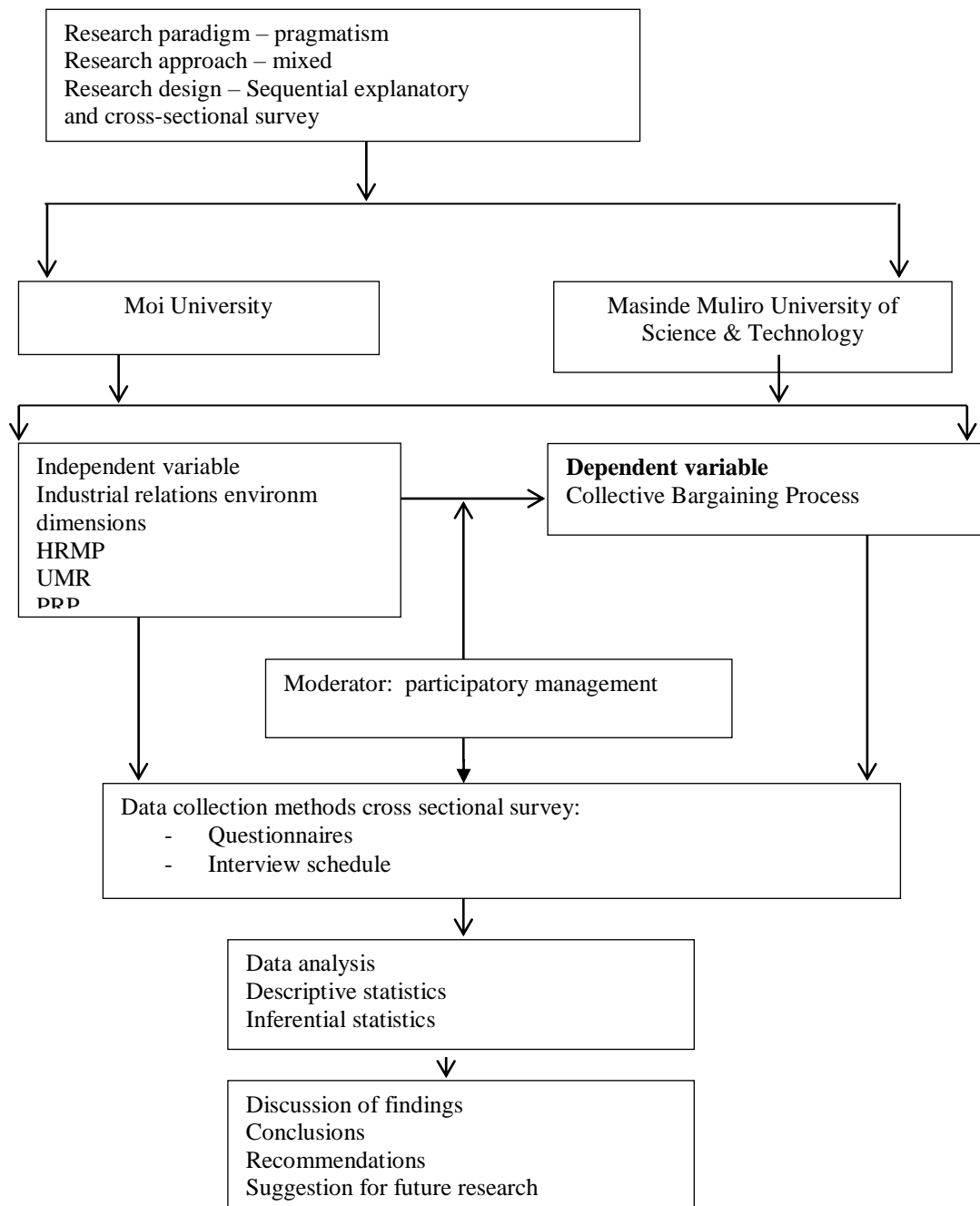
The goal of a sequential explanatory design is normally to utilize the qualitative findings to help explain and interpret the results of a study that focuses largely on quantitative data. One of this design's key advantages is how simple it is. It is simple to apply since the processes are divided into distinct, recognizable phases. This design element also makes reporting and describing simple. The amount of time required for data gathering with the two distinct stages is this design's biggest flaw. This is

particularly undesirable if the two stages get equal weight. This limitation did not apply to this study since the data were gathered in two phases: quantitative data were obtained first, then qualitative data.

Research was conducted at Moi University in Eldoret and Masinde Muliro University of Science and Technology in Kakamega to examine the link between the environment for industrial relations and the collective bargaining process as well as the moderating impact of participatory management. The research questions in this study guided the choice of a suitable methodology (Marshall, 1996). The mixed methods approach was considered to be the methodology that would result in attaining the study objectives while tackling the research problem utilizing the pragmatic paradigm (Khalid, 2012).

The rich insights that such mixed-methodologies approaches provide to the field of industrial relations research are why Becker and Gassmann (2006) recommend the use of quantitative and qualitative research methods together. Deductive hypothesis testing using large sample data is a major feature of social science research (Beven, 2007). He contends that this strategy might not be a good place to start for research in cases where theory is still in the pre-definitive stage. Because this study sought to first identify the factors that influence collective bargaining process that can be investigated through statistical analysis and second understand how these factors influence collective bargaining process, which is suitable for a qualitative data collection approach like interviews, the use of both quantitative and qualitative approaches were deemed appropriate. To capture the perspectives of KUSU administrators and university registrars from the two institutions, this study included a

mixed methods methodology. Figure 3.1 presents the research design flow diagram, which illustrates the whole research process from idea to completion.



**Figure 3. 2: Research Design Flow Diagram**

Source: Researcher, 2016

### **3.5 Study Area**

The study was carried out at Moi University and Masinde Muliro University of Science and Technology, two public universities in Kenya.

310 kilometers northwest of Nairobi, Kenya's capital city, in Eldoret-Kesses, Uasin Gishu County, is where you'll find Moi University. The Moi Institution Act of 1984, an act of Parliament, created the university as a second university in Kenya. Since that time, the University has grown astronomically, from its original one faculty in 1984 to its current total of 14 schools, nine Directorates, and two institutes. Over 52,000 people are now enrolled in educational programs leading to diplomas, undergraduate degrees, postgraduate degrees, master's degrees, and doctoral degrees in a variety of areas.

There are now five sites for the university: the Main Campus, the Coast Campus, the Moi University Annex Campus, the College of Health Sciences Campus, and the Nairobi Campus. The School of Law, the School of Tourism and Hospitality Management, and the School of Business and Economics are located on the Annex Campus, which is also home to the College of Health Sciences. Bomet and Alupe, two constituent schools of Moi University, are pleased to provide distinctive undergraduate and graduate programs, as well as two satellite campuses in Nairobi and Coast (Mombasa). The remaining schools are located on Main Campus. 1087 members of the KUSU, KUDHEA, and UASU are employed by the university on a permanent basis.

In Kakamega County, the Masinde Muliro University of Science and Technology (MMUST) is located along the Kakamega-Webuye route. It was promoted from Western University Institution of Science and Technology, a constituent college of

Moi University, and designated as the seventh university by an Act of Parliament, the MMUST Act 2007, in 2007. According to the MMUST Strategic Plan, 2019/2020–2022/2023, there are now around 5367 students enrolled throughout diploma, undergraduate, postgraduate diploma, master's, and doctorate of philosophy programs in a variety of subjects. 375 members of the KUSU, KUDHEA, and UASU are employed by the university on a permanent basis (See appendix IX).

### 3.6 Target Population

The study's target group included 1462 non-teaching personnel on permanent terms who were members of Kenya universities staff union (KUSU), of which 1087 were from Moi University and 375 were from Masinde Muliro University of Science and Technology They included Registrars in charge of administration and top officials of KUSU from the two universities.

**Table 3. 2: Target Population**

<b>Grade</b>	<b>Moi University Target population</b>	<b>Masinde Muliro University of Science and Technology Target Population</b>	
15	4	2	
14	23	3	
13	48	11	
12	113	18	
11	4	14	
10	69	43	
9	137	58	
8	94	75	
7	239	53	
6	105	67	
5	250	31	
<b>Total</b>	<b>1087</b>	<b>375</b>	<b>1462</b>

**Source: KUSU membership records, 2016**

### 3.7 Sample Frame

All KUSU employees on permanent contracts from Moi University and Masinde Muliro University of Science and Technology made up the sample frame for the study. According to both institutions' most recent staff lists for the month of March

2017, Moi University had 1087 employees and Masinde Muliro University of Science and Technology had 375, for a total of 1462 KUSU members (KUSU Membership Records, Moi and MMUST Universities, 2016).

### **3.8 Sampling Technique and Sample Size**

#### **3.8.1 Sampling Procedure**

Sampling is the practice of choosing a certain number of individuals to represent a specific community (Orodho, 2009). The two public institutions in Kenya, Moi University and Masinde Muliro University of Science and Technology, were chosen using a simple random sampling method utilizing the names of the 31 universities. This process, in accordance with Kombo and Tromp (2006), ensures that every member of the designated population has an equal and independent probability of being chosen as a sample member. Additionally, KUSU was chosen by simple random drawing from among the three university-based unions (UASU, KUSU, and KUDHEA).

Eight KUSU respondents and registrars from Moi University and Masinde Muliro University of Science and Technology were identified through the use of purposeful sampling. Purposive sampling is a sampling method that enables a researcher to utilize examples with the necessary data in relation to the study's objectives (Mugenda and Mugenda, 2003). This method was suitable since it only included instances that had the data necessary to meet the study's objectives. Additionally, this decreased prices, conserved energy, and time (Kombo et al., 2006).

After obtaining the sample using Yamane formula (1973), stratified sampling and simple random approach were used to select Kenya universities staff union members (KUSU) from Moi University and Masinde Muliro University of Science and



Technology and the category of KUSU members to be included in the sample. Stratified sampling technique is a technique that identifies subgroups in the population into separate homogenous subsets that share similar characteristics so as to ensure equitable representation of the population in the sample (Kombo et al. 2006).

The sample was stratified by designation to reflect the distribution of Kenya Universities Staff Union Members in the two public universities. To account for the differences in sub-group characteristics, stratification consequently attempts for proportionate representation. A sample frame was created using the list of several non-teaching staff classifications. A stratum was developed for each of the following categories: security officers, procurement officers, accounts assistants, secretaries, administrators, librarians, technicians, and clerical officers. The participants in the study were then chosen from each group using simple random sampling and personal NOS. This method made it possible to choose a sample from each stratum objectively. Simple random sampling, according to Oso et al. (2005), guarantees that each person in a population stratum has an equal and independent probability of being included in the sample.

### **3.8.2 Sample Size**

The sample included 314 non-teaching workers who responded. The method created by Taro Yamane (1973) was used to calculate the size of the research sample (table 3.3):

$$n = \frac{N}{1 + N(e)^2}$$

Where N = population size

n = Sample size, e = Margin error of the study set at ± 5%

Applying this formula the sample size is calculated as follows:

$$n = \frac{1462}{1 + 1462(0.05)^2} = 314 \text{ or } 21.5\% \text{ of the target population}$$

This sample size is distributed as shown in table 3.3. Kothari (2008) argues that a study sample of between 10% and 30% of the target population is adequate for a study.

**Table 3. 3: Sample Size Distribution by Grades and University**

Grade	Moi University		Masinde Muliro University of Science and Technology		Total Sample
	Target Population	Sample	Target Population	Sample	
15	4	1	2	1	2
14	23	5	3	1	6
13	48	10	11	2	12
12	113	24	18	4	28
11	4	1	14	3	4
10	69	15	43	9	24
9	137	29	58	13	42
8	94	20	75	16	36
7	239	51	53	11	62
6	105	23	67	14	37
5	250	54	31	7	61
<b>Total</b>	<b>1087</b>	<b>233</b>	<b>375</b>	<b>81</b>	<b>314</b>

**Source: KUSU membership records, 2016**

### 3.9 Research Instruments and Procedures

Data collection involved identifying types and sources of data, instrumentation and data collection procedures.

#### 3.9.1 Types and Sources of Data

As Kombo *et al.*, (2006) observe, there are two major sources of data used by researchers; primary and secondary sources. Primary data is the information gathered directly from respondents. Secondary data was gathered from records already in existence at the two institutions, such as union registries, while primary data was

obtained from the respondents, KUSU members from Moi University and Masinde Muliro University of Science and Technology.

### **3.9.2 Instrumentation**

Using a closed-ended questionnaire that the researcher created based on the study's goals, data for the study was gathered. A questionnaire is a list of items to which respondents are asked to reply, typically in writing (Kothari, 2012). According to Sekaran (2013), questionnaires are effective data collecting tools that let the researcher know what will be needed and how to quantify the variables of interest. Surveys are simple to administer and interpret. The use of questionnaires increases respondents' independence and accuracy of replies while also covering a broad population quickly and at a low cost to the researcher (Sekaran, 2013.) On a sampling crew, structured surveys were given out. The sampled population's primary data was gathered via questionnaires. Because it offers a more complete picture than any other study technique, the questionnaire was selected.

The questionnaires were created in accordance with the goals of the study. Two research assistants, one from each university, assisted the researcher in personally distributing the questionnaires to the respondents. The completed questionnaires were then collected right away for data analysis. The questionnaire is broken down into the following six sections: section A, respondents' biographical information; section B, human resource practices; section C, union-management relations; section D, the power relationships between the parties involved in collective bargaining; section E, participatory management; and section F, the process of collective bargaining.

Section A of the questionnaire included closed ended questions on the bio data of the respondents, academic qualifications and length of service, designation and grade

while sections B, C, D, E, and F contain questions based on the objectives of the study. On each question, the responders had to select one of the available options. The use of different measurements to evaluate the important components of the research questions is highlighted by Haward and Blum (2010). These multiple-choice questions provide each construct a more accurate total assessment (Bickman & Rog, 2009). (See appendix I). Additionally, a list of open-ended interview questions that addressed each of the study's goals was produced. The interviews were aimed at eliciting in-depth information on the influence of industrial relations environment on collective bargaining process from senior managers at Moi University and Masinde Muliro University of Science and Technology, who were not selected in the quantitative process.

### **3.10 Reliability and Validity of Research Instrument**

#### **3.10.1 Pilot Test**

Pre-testing was done to make sure the question items were accurate, relevant, and clear before the questionnaires were actually given to the participants. Basically seeks to ascertain the accuracy of research instruments with regard to the language, organization, and order of the questionnaire's items. 6.4% of the 314-person sample was used in this study to evaluate the research tool. This resulted in 20 responders, or 7.6% (260) of the KUSU members who took part in the pilot research at the University of Eldoret (KUSU Records UOE, 2016). According to Mugenda and Mugenda (2003), the sample size for a pilot research should be between 1 and 10% of the sample size anticipated for the larger parent study. The goal of the piloting process was to make the instruments more precise so that the respondents in the main and actual study would have no trouble answering the questions. As recommended by Dillman, Henry, Rado and Scarlett (2012) ran a pilot test to analyze the questionnaire

created in order to see whether there were any possible discrepancies, inaccuracies, or questions that needed explanation (2000). All of the variables' items were reported to be over the minimal reliability value of 0.7, which corresponds to an acceptable Cronbach's alpha grade (see table 3.4).

### **3.10.2 Reliability Results**

With SPSS version 22's assistance, this was calculated. To evaluate the internal consistency or homogeneity among the survey items, Cronbach's alpha coefficient was utilized. The union management relations coefficient had the greatest Cronbach's alpha (0.867), and the collective bargaining procedure had the lowest coefficient (0.825). According to Table 3.4 Cronbach's alpha for human resource practices was.853, for participative management it was.827, and for power relations between parties it was.827 (Table 3.4). The study's findings showed that, out of 50 statements used, the instruments' total Cronbach's Alpha coefficient was 0.952.

The Cronbach's alpha coefficient for each variable was over 0.7, as were the alpha coefficients for all the constructs taken together. The coefficients showed that all of the measurement scales that were utilized in the questionnaire's statements were reliable, with all of them meeting the necessary reliability threshold of over 0.7. (Hair et al., 2010). This suggests that the measuring items on the scales employed had a better level of internal consistency. This is explained by the fact that each of the utilized questionnaire items has been theorized or empirically tested.

**Table 3.4: Reliability Statistics of the Instruments**

	<b>Cronbach's Alpha</b>	<b>N of Items</b>
Human resource practices	.853	10
Union management relations	.867	10
Power relation of parties	.861	11
Participatory management	.827	11
Collective bargaining process	.825	8
<b>Overall</b>	<b>.952</b>	<b>50</b>

**Source: Survey data, 2016**

### **3.10.3 Validity of Research Instruments**

The degree to which conclusions drawn from numerical scores are reasonable, significant, and useful is known as validity. Depending on the goal, target audience, and environmental factor that are measured, the study's validity is determined (Britt, 2006). The most important criterion, according to Kothari (2011), is validity, which shows how closely an instrument matches its intended purpose. According to Cohen et al. (2007), the research instrument must demonstrate content validity by demonstrating that it fairly and completely covers the domain or items that it claims to cover.

20 workers participated in a pilot research to better understand some of the limitations that can arise during the actual investigation (Kombo & Tromp, 2006). In order to evaluate the content validity and face validity of the test, expert opinions, literature searches, and pre-testing of open-ended questions were employed. With the help of colleagues, the questionnaire's questions were rewritten after making the required adjustments. As a consequence, the tools, under the direction of the university supervisors, and the findings of the pilot research on open-ended questions assisted in enhancing the content validity.

### **3.10.4 Construct Validation using Explanatory Factor Analysis (EFA)**

According to Polit & Beck (2010), a questionnaire's validity is determined by how well it achieves its stated goals. The questionnaire has to effectively cover all facets of the topics under investigation. The two types of validity problems that are most commonly described in the literature are face validity and content validity (Parahoo, 2006). The questionnaire's face validity examines whether it measures the concept under investigation. This was determined by having friends use the test version of the instrument to see if the questions seemed to be pertinent, understandable, and unambiguous in accordance with Jones & Rattray's guidelines.

A content validity test verifies that there are sufficient pertinent questions that address every area of the topic under study and that no extraneous questions are posed (Parahoo, 2006). The content validity of new questions was assessed by a panel of professionals. The panel received the questionnaire to test the instrument and ensure that the questions adequately captured the concepts of IRE and CBP under study. This was done in accordance with the recommendations made by LoBiondo-Wood & Haber (2010). Construct validity is the extent to which conclusions about the theoretical constructs on which the operationalizations in the study were based may be drawn with reasonable justification. By obtaining the dimension of industrial relations and the CBP from previously published literature, construct validity in this study was ensured.

The degree to which two measurements of constructs that should be connected are really related is known as convergent validity. Validity that is convergent and discriminant According to Straub et al. (2004), the results of Confirmatory Factor Analysis (CFA) may be used to infer the two primary characteristics of construct

validity, convergent validity and discriminant validity. Factor analysis was used to come at this conclusion. The exploration of the underlying structure in the pattern of correlation between several variables is made possible by factor analysis. If there are many variables, research will be done to see whether there are fewer factors represented by these variables. The following standards were used: The Kaiser-Meyer-Olkin (KMO) test for sampling adequacy takes into account the total of partial correlations in proportion to the total of correlations. It ranges from 0 to 1, with a number closer to 1 being preferable. A minimum criterion of 0.5 has been set. In light of this, factor analysis may not be applicable if the value is less than 0.5.

The hypothesis that the correlation matrix is an identity matrix, which would suggest that the variables are unrelated and, as a result, inappropriate for structure discovery, is tested by Bartlett's test of sphericity. Small values of the significance level (less than 0.05) suggest that a factor analysis may not be applicable to the data. Communities stand for the variance that the variables share or experience often. Common variance is the only basis for factors derived via common factor analysis. Problems with the solution are deemed likely if the communality is greater than 1. Very low communalities, on the other hand, are an indication of unrelated variables in the set. Hair et al. (1998) said that results more than 0.6 are regarded as acceptable. The percentage of variance displays an overall percentage of variance that has been extracted in relation to various factors. A large cumulative percentage is proof that the parameters calculated have real-world application. In social research, such as this study, it is accepted that an explanation for a 60% variance is sufficient. By applying the Eigen larger than 1 criteria, it is ensured that only components with Eigen values more than 1 are retrieved.



According to Hair et al. (2006), factor analysis consists primarily of four steps. The first is the creation of the correlation matrix, which is the number in the communality column of the matrix's major diameter. Factor extraction, which refers to finding the primary factors that have influenced changes in the suggested variable, will come next. Common techniques like principal component analysis, maximum likelihood, principal axis factoring, and unweighted least squares, among others, can be used to do this. The factor loads for each item in the factor matrix illustrate the function or degree of correlation each question item has with that question in a particular dimension as a result of the selection and rotation of the factors that were used. The last phase is interpretation, when it was necessary to understand the factor analysis results.

### **3.11 Validity of the Research Instruments**

The amount to which a research tool measures what it was meant to assess is referred to as validity (Zikmund et al., 2010). The researcher discussed the questionnaire with the research specialists, including the supervisors, before distributing it to gather data in order to strengthen the validity of the constructs. In order to determine whether there was a relationship between the study variables, the Kaiser-Meyer-Olkin measures of sampling adequacy (KMO) and Bartlett's test of sphericity were also used. Bartlett's Test of Sphericity was used to gauge the validity of the instrument. In order to determine if the correlation matrix is adequate, the Bartlett's test of sphericity was utilized. This test examines the null hypothesis that the correlation matrix includes all diagonal elements as 1 and non-diagonal elements as 0. Kaiser- Meyer-Olkin was used to gauge the effectiveness of the sample, and a value of  $>.5$  and p-value  $>0.5$  were considered satisfactory.

### **3.11.1 Factor Analysis**

In this regard, factor analysis was used to aid in determining the precise number of components that measured each construct as viewed by the respondents. To identify components from each construct's scale, all variables underwent component factor analysis using varimax rotation. All of the items underwent principal component analysis and Varimax rotation, and as proposed by Hair et al., those with factor loadings less than 0.50 were discarded (2006).

The five unique variables were validated using varimax rotation. All items loading below 0.50 were removed, while those loading at or above 0.50 were kept based on the research of (Hair, Black, Anderson, & Tatham, 2006). (Daud, 2014). Each of the items' numerous underlying variable structure dimensions had been loaded completely. Factor analysis was utilized in this study to verify that the items in each variable loaded into the anticipated categories. The statement was calculated to establish a score after each variable's factor analysis, and then underwent inferential analysis.

### **3.11.2 Human Resource Management Practices Factor Analysis**

Two components with Eigen values larger than 1 were identified from the human resource management practices statements after factor analysis, and they collectively explained 57.307% of the variance, as shown in (Table 3.5). The KMO was 0.835, the Bartlett's Test of Sphericity was significant (p.05), and the chi square test was significant, according to human resource guidelines (1044.80). All 10 assertions were kept, calculated, and renamed Human resource management practices for future analysis. None of the statements describing Human resource management practices was removed.

**Table 3.5: Rotated factor matrix on measurement items for Human Resource Management Practices**

	<i>Component</i>	
	1	2
The university management meets with employees to discuss employee's development	.655	-.504
University employees are often given the opportunity to be part of a task group outside their core responsibilities	.679	
Management communication effectively with employees on issues relating to CBP	.668	
There is an environment of openness and trust in the university	.599	
Employees at the university are treated fairly and with respect during CBP	.548	
Management style practices in the university is such that it empowers employees to take responsibility for their own decision	.694	
The university has a clear staff development programme	.718	
The university management spends a good deal of time listening to employees' views on issues relating to CBP	.701	
The university management supports employee welfare programme	.718	
The university employees find meaning in their work	.600	
KMO	.835	
Approx. Chi-Square	1044.80	
Bartlett's Test of Sphericity (P<0.001) df=45		
Eigenvalues	4.359	1.371
% of Variance (57.307%)	43.593	13.714

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

**Source: Survey data, 2016**

### 3.11.3 Union Management Relations Factor Analysis

As indicated in Table 3.6, the results of the factor analysis on the union management relations construct revealed two components with eigen values greater than 1.0 and a total variance explained of 57.836%. While the Bartlett's Test of sphericity was significant (Chi-square 1121.12, p=0.001), the KMO measure of sampling adequacy of 0.851 indicated appropriate inter-correlation. All 10 statements were kept, calculated, and given the new label "union management relations" for future study. No statements were eliminated.

**Table 3. 6: Rotated factor matrix on measurement items for Union Management**

Relations	Component	
	1	2
There is good corporation between the union and university management	.654	
The university management and the union have mutual regards for each other	.708	
The university management and the union are always willing to confer with each other	.671	-.572
The university management is always willing to facilitate union operations	.672	
There is joint participation in decision making between union and the university management	.690	
The university management and the union resolve conflict and disputes	.688	
The university management attitude is favorable to the union	.679	
The university management and the union share information freely	.689	
The union has respect for university management as cooperative	.644	
The union has respect for university management	.667	
KMO	.851	
Approx. Chi-Square	1121.12	
Bartlett's Test of Sphericity (P<0.001) df=45		
Eigenvalues	4.577	1.207
% of Variance (57.836%)	45.768	12.069

Extraction Method: Principal Component Analysis.  
a. 2 components extracted.

**Source: Survey Data, 2016**

### 3.11.4 Power Relation of Party's Factor Analysis

As indicated in Table 3.7, the factor analysis findings for the power relation construct revealed two components with Eigen values greater than 1.0 and a total variance explained of 57.836%. While the Bartlett's Test of sphericity was substantial (Chi-square 1295.37, p=0.001), the KMO measure of sample adequacy of 0.845 indicated appropriate inter-correlation. Two statements were deleted and nine statements were retained computed and renamed power relation of parties to collective bargaining for further analysis.

**Table 3.7: Rotated Factor Matrix on Measurement Items for Power Relation of Parties**

	<i>Component</i>	
	1	2
The union has support of its members		.757
The union bargains as equal partner with the university management		.672
The university management always goes with the decision of the union	.658	
The union always goes with the decision of university management	.710	
The university management is always ready to lockout staff whenever there is a dispute	.747	
The government supports harmonious union management relations	.785	
KUSU always bargains more for its members	.660	
The university management recognizes the right of the union to organize and assemble	.525	
The university management has a negative attitude towards the union	.686	
KUSU rarely stage a successful strike	.700	
The government plays its role well in the tripartite industrial relations system	.803	
<hr/>		
KMO	.845	
Approx. Chi-Square	1295.3	
Bartlett's Test of Sphericity (P<0.001) df=55	7	
Eigenvalues		
% of Variance (57.836%)		1.474
	4.846	13.399
	44.054	

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

**Source: Survey Data, 2016**

### 3.11.5 Participatory Management Factor Analysis

As indicated in Table 3.8, the results of the factor analysis on the participative management construct revealed three components with Eigen values more than 1.0 and a total variance explained of 62.887%. While the Bartlett's Test of sphericity was substantial (Chi-square 1221.21, p=0.001), the KMO measure of sample adequacy of 0.747 indicated appropriate inter-correlation. For further study, all 11 statements were calculated, renamed participatory management, and no statements were eliminated.

**Table 3.8: Rotated Factor Matrix on Measurement Items for Participatory Management**

	<i>Component</i>		
	1	2	3
University makes decision that are based on every member idea	.644		
Union suggest ways the university in improving member job performance	.534		
University allows members to participate in solving university problems	.512		
University allows members to participate in university budget making	.749		
Active participation of the union members in University major decision making	.632		
Free flow of communication, sharing information and networking	.687		
All employees are involved in collective bargaining	.596		
There is a trade union representative in the organization	.668	.517	
Frequently discuss matters of work welfare with the trade union	.636	.566	
Visit trade union offices frequently for updates	.516		.600
Trade union representatives call us frequently in open discussion	.531		.646
KMO	.747		
Approx. Chi-Square	1221.2		
Bartlett's Test of Sphericity (P<0.001) df=55	1		
Eigenvalues			
% of Variance (62.887%)		1.539	1.231
	4.148	13.986	11.192
	37.708		

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

**Source: Survey Data, 2016**

### 3.11.6 Collective Bargaining Process

As indicated in Table 3.9, the factor analysis results on the collective bargaining process revealed two components with Eigen values greater than 1.0 and a total variance explained of 67.11%. While the Bartlett's Test of sphericity was significant (Chi-square 966.31, p=0.001), the KMO measure of sample adequacy of 0.809

indicated appropriate inter-correlation. The collective bargaining procedure was calculated, renamed, and all eight assertions were preserved for subsequent research.

**Table 3.9: Rotated Factor Matrix on Measurement Items for Collective Bargaining Process**

	<i>Component</i>	
	1	2
The fairness of the process	.716	
The willing of the management to negotiate	.739	
The time taken to reach an agreement	.709	
The level of concern for other party point of view	.681	
The willingness for both parties to give and take	.552	.537
The degree of feedback given to members	.664	.610
The degree of members participation	.660	.590
Implementing of agreed teams	.655	
KMO	.809	
Approx. Chi-Square	966.31	
Bartlett's Test of Sphericity (P<0.001) df=28	1	
Eigenvalues		1.734
% of Variance (67.110%)	3.635	21.676
	45.434	

Extraction Method: Principal Component Analysis.  
a. 2 components extracted.

**Source: Survey Data, 2016**

### 3.12 Data Collection Instruments

Data were gathered by the researcher utilizing questionnaires. The type of data to be gathered, the amount of time available, and the study's objectives all had a role in the questionnaire choice. According to Kinoti (1998), a questionnaire is used because it is a suitable method of data collection in a survey for a number of reasons: it can be used to achieve a large coverage of the population with little effort and personal expense; anonymity of the respondents filling the questionnaire may enhance honesty in their answers; it gives respondents time on questionnaires that require reflection before response to prevent hurried responses; and it ensures uniformity.

The consent of the respondents was requested prior to the collection of information. Additionally, respondents received assurances that the information they provided would be kept private. The researcher personally administered the questionnaires to the participants, assisted by two trained research assistants, after obtaining permission from the pertinent authorities, such as NACOSTI and the officials of the respective institutions. This gave the researcher the opportunity to clarify the study's objectives and allay any participants' concerns about how the data they submitted would be used.

In this study, questionnaires and an interview schedule were both employed as data gathering methods. Data pertaining to the study's goals were gathered using sets of questionnaires. The surveys had a closed-ended format. On closed-ended questions, a Likert scale of 1 to 5 was used, with 5 denoting strongly agree (SA), 4 denoting agreement (A), 3 denoting neutrality (N), 2 denoting disagreement (D), and 1 denoting severe disagreement (SD). The researcher was able to acquire more descriptive data using this strategy at a relatively low time, money, and effort cost. In addition, because it is a common research tool, it provided for consistency in the way that questions were given and permitted comparisons across respondents (Kothari, 2006). The Kenya Universities Staff Union (KUSU) of Moi University and Masinde Muliro of University Science and Technology (233 and 81, respectively) distributed 314 questionnaires to its union members. The questionnaire was broken down into seven major sections.

### **3.12.1 Control of Common Methods Bias**

The validity and conclusions concerning the association of the variables are threatened when the data gathering technique uses common procedures across measurements. By making sure the respondents' privacy was maintained by not



disclosing their identities, as was specified in the introduction letter in the instrument, the problem of common bias in this study was addressed at the instrument creation and data collecting. In an effort to make the scale items less ambiguous, the Questions were created to be brief, unambiguous, and precise. To make sure the survey items' construct validity, a pilot research was carried out. Selected KUSU members were also questioned as part of the study, which helped minimize respondents' self-reporting bias.

### **3.13 Measurement and Scaling Technique**

#### **3.13.1 Scaling**

A 5-point Likert scale was used in the survey to gauge how strongly respondents agreed or disagreed with each topic (Sekaran and Bougie, 2010). The strongly disagree to strongly agree range on the 5-point Likert scale. Likert scale is one-dimensional (Trochim, 2006), and it is frequently chosen because the ideas are simple to comprehend whether one has more or fewer of them; they are trustworthy; and they supply more information. The study of the relationship between the environment for industrial relations and the collective bargaining process, as well as the moderating impact of participatory management on the relationship between the IRE and CBP, was conducted at a few public universities using the measurement and scaling technique of the Likert scale.

The questionnaire is broken up into seven pieces, numbered A, B, C, D, E, and F. Section A asked questions about the respondents' personal information. Questions in Sections B, C, and D operationalized the independent variables of Section B's human resource practices, Section C's union management interactions, and Section D's power dynamics between the parties to collective bargaining. The operationalization of the

moderating variables, participatory management, and F collective bargaining procedure is done in Section E's questions. An overview of the relationships between the independent factors, the dependent variables, and the survey questionnaire is shown in Table 3.10.

### **3.13.2 Measurement of Variables**

The Likert scale predominates the questionnaire because it can be used in many different situations, including when the value sought cannot be asked or answered with certainty, when the value sought is an opinion, effect, or belief, or when the value sought is thought to be sensitive in nature and the respondents cannot answer it except if it is in large ranges, and because it is simple to evaluate using common techniques like stepwise regression analysis (Montgomery, Peak and Vining, 2001). In this study, the independent, moderating, and dependent variables were all measured using a 5-item Likert scale.

Since both the independent and dependent variables are from interval/ratio scales and each pair of variables is from an independent case or respondent the use of multiple regression model (3.14.6) was appropriate.

**Table 3. 10: Measurement of Variables**

	Observed variables	Operationalization in the survey questionnaire	Unit of measurement
<b>Independent variables</b>			
1. Human Resource Practices	10 items	Section B	Likert five-point scale
2. Union Management Relations	10 items	Section C	Likert five-point scale
3. Power Relations of Parties	11 items	Section D	Likert five-point scale
<b>Moderating variable</b>			
4. Participatory management	11 items	Section E	Likert five-point scale
<b>Dependent variables</b>			
5. collective bargaining process	8 items	Section F	Likert five-point scale

**Source: Researcher, 2016**

### 3.13.3 Dependent Variable

Eight questions that indicate features that show evidence of respondents' levels of satisfaction with the collective bargaining process in the two institutions under study were used to measure the collective bargaining process. These metrics were generated from the study's goals and the literature. As a result, the respondents who are KUSU members were questioned about their level of satisfaction with the CBP in relation to the following factors: the fairness of the process; management's willingness to negotiate; the time required to reach an agreement; the degree of concern for other parties' points of view; both parties' willingness to give and take; the amount of feedback provided to members; and the level of members' participation and implementation of agreed terms. The variable collective bargaining process was computed as an index using the mean of these items.

### **3.13.4 Independent Variable**

The independent variables included in the study are human resources management practices, union management relations and power relations of parties to collective bargaining derived from the literature and objectives of the study. The questionnaire was anchored on a five-point Likert scale and measured by averaging different items for the three constructs as presented below: Human resource management practices was measured as a mean of ten items based on the objectives of the study which asked the respondents the extent to which they agree or disagree to the following statements: the university management meets with employee to discuss employees' development plan; university employees are often given the opportunity to be part of a task group outside their core responsibilities; management communicates effectively with employees on issues relating to CBP; there is an environment of openness and trust in the university; employees at the university are treated fairly and with respect during CBP; management style practices in the university is such that it empowers employees to take responsibility for their own decisions; the university has a clear staff development programme; the university management spends a good deal of time listening to employees' views on issues relating to CBP, the university management supports employee welfare programmes; the university employees find meaning in their work.

Union management relations was measured as a mean of ten items in the questionnaire based on the literature and the objective of the study regarding the extent to which the respondents agree or disagree with the statements relating to union management relations in their institutions: There is good communication between the union and university administration; both parties have respect for one another; and both parties are always prepared to help the union run its affairs; The union and

university management jointly participate in decision-making; they settle disagreements and conflicts amicably; the university management has a positive attitude toward the union; they freely exchange information; the union sees the university management as cooperative; and the union respects the university management.

Based on the literature and the study's goals, the power relations of the parties to collective bargaining were measured as the average of eleven questions. The variable was measured by asking the respondents the extent to which they agree or disagree with the statements relating to power relations of parties to collective bargaining: the union has strong support of its members; the union bargains as equal partner with the university management; the university management always goes with the decision of the union; the union always goes with the decision of the university management; the university management is always ready to lockout staff whenever there is a dispute; the government supports harmonious union management relations; the government supports harmonious union relations; KUSU always bargains more for its members; the university management recognizes the right of the union to organize and assemble; the university management has a negative attitude towards the union; KUSU rarely stages a successful strike; the government plays its role well in the tripartite industrial relations system.

### **3.13.5 Moderating Variable**

The moderator was participatory management. The variable was measured as mean of eleven items derived from the literature and the objectives of the study, the questionnaire asked the respondents the extent to which they agree or disagree with the statements regarding participatory management: the university makes decisions that are based on every member's ideas; the union suggests ways to the university of

improving members' job performance; the university allows members to participate in solving university problems; university allows members to participate in university budget making; there is active participation of the union members in university major decision making; there is free flow of communication, sharing information and networking opportunities encouraging members to make suggestions; all employees are involved in collective bargaining; there is a trade union representative in the organization; I frequently discuss matters of work welfare with the trade union representative; I visit trade union offices frequently for updates; our trade union representative call us frequently in open discussions.

### **3.13.6 Control Variables**

The study controlled age and gender of the respondents for their potential influence on attitude and opinion of the respondents regarding collective bargaining process. Age was measured in years in 7 categories with 1=below 35 years, 2=between 35-40 years, 3=41-45 years, 4=40-50 years, 5=51-55years, 6=56-60 years, 7=above 60 years. Gender was measured in two categories male and female.

## **3.14 Data Processing and Analysis**

### **3.14.1 Data Screening**

In order to limit the number of questionnaire questions that were not valid and reliable with the constructs, factor analysis was first performed. To comprehend the variability and interdependence of the subscales produced from the factor analysis, descriptive statistics including mean, standard deviations, reliability coefficients, and inter-correlations were computed. The variables in the questionnaire were clustered into several components using a principal component factor analysis with varimax rotation. The factor analysis employed a minimum Eigen value of one (1) in order to regulate the number of components recovered. A factor was deemed negligible and

eliminated if its Eigen value was less than one. After that, variables with high loadings (correlations) for the same factors were grouped using varimax orthogonal rotation such that each factor was represented by a distinct cluster of variables. The factors created would be independent of one another and ensured by varimax rotation. It is a multivariate statistical technique, according to Thompson (2004), and has a variety of applications, three of which are briefly mentioned below. The first benefit of factor analysis is that it condenses a big number of variables into a manageable quantity (also referred to as factors). Second, it creates underlying dimensions between latent notions and measurable variables, enabling the development and improvement of theory. Thirdly, it offers proof of the self-reporting scales' construct validity.

### **3.14.2 Descriptive Statistics**

With the use of tables and textual explanations, descriptive analysis was used to characterize the demographic profile of the target respondents, as well as the central trends assessment of constructs, which included mean and standard deviation. Age, gender, employment history, educational background, designation, grade, and formal KUSU designation are all included in these demographic profiles.

### **3.14.3 Inferential Statistics**

The study utilized inferential statistics to analyze, interpret and draw conclusions on the hypotheses of the study. Pearson's product moments correlation was used to forecast the influence of the variables and examine the strength and direction of the correlations between them. The relationship between the independent variable industrial relations environment and the dependent variable CBP was examined using multiple regression to test the direct effects of independent variables on the dependent

variables, and the relationship was examined using hierarchical regression to test the moderating effect of the moderator (participatory management).

#### **3.14.4 Correlation Analysis**

In this research, Pearson correlation analysis was used to examine the linear association between the independent variables, moderator and the dependent variable. The purpose was to check the strength and direction of the correlation relationship and to prevent multicollinearity problem. The three independent variables, which were each evaluated using a five-item Likert scale, were correlated using the correlation analysis. The correlation coefficients show how strongly the variables are related to one another. If the p-value was lower than 0.05, a coefficient was deemed significant. All of the independent variables were significantly correlated, although there were no correlations of 0.90 or higher. Instead of using 0.90 as the criterion, (Bryman A. and Cramer D., 1997) and (Boon. and Arumugam, 2006) advise 0.80.

#### **3.14.5 Multiple Linear Regressions Model**

The coefficient of multiple determinations (R square) provides a measurement of how well a predictor of the equation of multiple linear regressions is likely to be, whereas the regression coefficient indicates the relative significance of the independent variables in the forecast of the dependent variable. As a result, the alternative theory should not be disproved. If not, the opposite.

The study tested the significance level of each independent variable against the dependent variable at 95% confidence level using ANOVA, Correlation and regression techniques. A 95% confidence level reflects a significance level of 0.05. The connection between CBP and the independent variables was examined using this



regression model. As seen below, the  $s$  in the equation stand for the estimated parameters, which are the individual independent variables' beta coefficients.

$$Y = \beta_0 + C + \beta_{1a}x_1 + \beta_{1b}x_2 + \beta_{1c}x_3 + \varepsilon \dots \dots \dots \text{Model 1}$$

Where:

$Y$  = collective bargaining process

$X_1 - X_3$  = Industrial relations environment dimensions (Human resource management practices, union management relations, power relations of parties to collective bargaining)

The parameter  $\beta_0$  is a constant while  $\beta_1$  to  $\beta_3$  are coefficients describing the functional relationship in the population

$C$  = are control variables (Age and gender).

The value of  $\beta_1$  identifies the change along the collective bargaining process scale expected for every unit changed in fixed values of industrial relations environment (represents the slope or degree of steepness).

The values of  $\beta_0$  identify and adjustment constant due to scale differences in measuring industrial relations environment (Human resource practices, union management relations, power relation of parties to collective bargaining). The intercept or place only axis through which the straight line passes. It is the value of  $Y$  when  $X=0$

$\Sigma$  (Epsilon) represents an error component for each individual. The portion of collective bargaining process score that cannot be accounted for by its systematic relationship with values of industrial relations environment dimensions (Human resource practices, union management relations and power relations of parties to collective bargaining)

#### **3.14.6 Hierarchical Regression Model for Testing Moderation Effect**

In line with the recommendations of Baron and Kenny (1986) and Aiken and West (1991) Hierarchical multiple regression analysis was used to test the moderating effect. The fourth hypothesis' three supporting hypotheses also aimed to determine the moderating impacts of participatory management on particular aspects of the industrial relations environment that affect collective bargaining. The link between the industrial relations environment aspects and the collective bargaining process, in other words, would be strengthened or weakened as a result of participatory management.

To determine the extent to which the moderator variable impacts the link between the various industrial relations environment characteristics and collective bargaining process, the hypotheses were evaluated using moderated regression analysis. Using regression analysis techniques described by Baron and Kenny (1986); Aiken and West (1991), the moderator effect was investigated (1991). The following models were used to evaluate the moderating impact of participatory management on certain aspects of the industrial relations environment and the collective bargaining process.

$Y = \beta_0 + C$ .....	Model 1
$Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$ .....	Model 2
$Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + M + \epsilon$ .....	Model 3
$Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_1 * M + M + \epsilon$ .....	Model 4
$Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_1 * M + \beta_5 X_2 * M + \epsilon$ .....	Model 5
$Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_1 * M + \beta_5 X_2 * M + \beta_6 X_3 * M + \epsilon$ .....	Model 6

Where:-

Y is dependent variable (collective bargaining process)

C is control variables (age and gender)

X<sub>1</sub> is independent variable # 1 (Human Resource Practices)

X<sub>2</sub> is independent variable # 2 (Union Management Relations)

X<sub>3</sub> is independent variable # 3 (Power Relations of Parties to Collective Bargaining)

M is moderating variable (participatory management)

$\beta_1$  is a coefficient describing a functional relationship in the population

*$\beta_0$  is a constant*

$\epsilon$  is Error term (unexplained variation due to other unmeasured factors).

### 3.14.7 Assumptions of Regression Model

While a regression model is used for estimate, regression analysis examines and explains the statistical relationship between variables (Guerard, 2013). (Baron & Kenny, 1986; Campbell & Campbell, 2008). A regression model was used to fit the data under specific presumptions. However, the outcomes might be inaccurate, prejudiced, and inconsistent if these presumptions are broken. This can lead to inaccurate conclusions and suggestions for more research. The following suppositions were evaluated: homoscedasticity, autocorrelation, linearity, and normality.

**Normality tests:** Normality assumes that the data are normally distributed {Hair, 2010}. The assumption is based on the shape of normal distribution and gives the researcher knowledge about what values to expect (Keith, 2006). Normality was checked through histograms of the standardized residuals (Stevens, 2009).

**Linearity:** The assumption of linearity is that the connection between the independent and dependent variables is linear. Thus, the degree to which the dependent variable changes as a result of a change in the predictor variables is understood as linearity (Hair et al., 2010). To prove linearity, residual plots that displayed the standardized residuals and the expected values were utilized.

**Homoscedasticity:** In homoscedasticity, the variance of the dependent variable is assumed to be constant throughout the ranges of the independent variables (Schutzenmeister et al., 2012; Osborne & Waters, 2002). By ensuring that the data used to test the hypotheses was normally distributed, the current study reduced the likelihood of deviating from this premise. The standardized residual Scatter plot was used to assess homoscedasticity. Variables were predicted to result in oval or elliptical Scatter plots in all of the cells, demonstrating that the assumption was not violated.

**Autocorrelation:** An indicator of the correlation between regression residuals, autocorrelation (Tabachnick, 2013). When time and distance are connected to the order in which instances are taken, the assumption of the independence of mistakes is broken. As a result, the Watson-Durbin test, which takes into account the order of cases, was used to test the independence of errors using the Durbin Watson statistic, which is regarded as a measure of error autocorrelation. The critical values of 1.5 and 2.5 were used to determine whether autocorrelation was present.

**Multicollinearity:** When two or more variables are highly linked, multicollinearity exists, which has an impact on how the model's regression parameters are estimated (Hair et al., 2009). Because of multicollinearity, it is difficult to understand the regression coefficients and the findings are inaccurate (Gujarati, 2003). (Palaniappan, 2017). According to earlier research, multicollinearity is a concern if the correlation between variables is  $>0.9$  (Hair et al., 2010) and the value of the VIF is  $>10$ . (Stevens, 2009). In this regard, the study employed the correlation matrices and VIF to examine the explanatory factors for multicollinearity.

### **3.15 Qualitative Data Analysis**

This method allowed for a deeper comprehension of the quantitative data. The qualitative information explained the opinions of KUSU officials and university administrators regarding how the context of industrial relations affects the process of collective bargaining. The quantitative component investigated possible hypothesized relationships between the two variables. The goal of this study was to get a thorough knowledge of how human resource management methods, union-management relationships, and power dynamics among parties to collective bargaining affect the process in Kenya's public institutions.

The content analysis method was used to examine the qualitative data. The technique of content analysis is employed to examine themes within a certain context. It was used to the analysis of information gathered from key informant interviews. These interviews were examined to identify recurrent terms, concepts, themes, or phrases. According to Babbie (2007) use of the technique calls for empathy for proper interpretation to be obtained.

The qualitative data was used to achieve the triangulation of the study and complement the quantitative data hence overcoming the weaknesses of each of the instrument and strengthening the findings of the study. The qualitative data analysis is presented in chapter four

### **3.16 Unit of Analysis**

The units of analysis for the study were the KUSU members who included officials and the general membership who are based at Moi University and Masinde Muliro university of Science and Technology chosen because they are knowledgeable and involved in collective bargaining issues. They are also stakeholders and possess the required information about industrial relations environment and hence for the study.

### **3.17 Ethical Considerations**

Since no one was coerced into participating in the study, ethical consideration was absolutely important when conducting the research (Roux, et al., 2005). Participants' personal information was kept as private and secret as feasible. Before collecting data, participants were informed of the study's goal. This made it possible for the respondents to decide for themselves whether or not to take part in the study. The researcher acted responsibly at all times and was alert, conscientious, and considerate of others' rights. Participants' replies were given anonymously since Mc millan and Schumacher (1997) emphasized that study information should stay private during the research period. In addition, the survey was carried out at the respondents' convenience to minimize interfering with their work schedules. For objectivity's sake, the researcher guaranteed respondents that their replies would remain anonymous. Finally, in order to avoid plagiarism of any kind, all works by other authors were correctly cited.

The Deputy Vice Chancellor Academic, Research, and Extension of Moi University, the Dean of the School of Human Resource Development, and other authorities were consulted for approval to conduct the research. Additionally, approval was requested from the county commissioners of Uasin Gishu and Kakamega counties as well as their respective directors of education. Additionally, approval from the National Commission for Science, Technology, and Innovation (NACOSTI) was requested in order to conduct research at Moi University and Masinde Muliro University of Science and Technology, two Kenyan universities (See appendix iii, iv, v, vi, vii and viii).

### **3.18 Summary**

This chapter has given a comprehensive account of the decisions that guided the methods and procedures of this study. It has opened with an exposition of the research paradigm, research design and their relevance to the study. A summary of the methodology of this research is shared as are the sampling, data collection, analysis and interpretation.

## CHAPTER FOUR

### DATA ANALYSIS AND DISCUSSION

#### 4.0 Introduction

Results of data analysis and hypothesis testing are presented in this chapter. A description of the respondents' demographic characteristics is provided in the first section. The descriptive analysis of the research variables and the findings of thematic analyses of the questionnaires are presented in the section that follows. The third component includes qualitative data analysis, interpretation as well as the outcomes of the hypothesis testing of the collective bargaining process and discussions of the findings.

#### 4.1 Response Rate

314 questionnaires were given out to the responders. 13 surveys were not returned, while 301 questionnaires were found. As a result, the response rate is 95.9%. Only 282 of the 301 questionnaires that were gathered proved to be relevant for further investigation. Due to an outlier issue, the remaining 19 surveys were not included in the study. This was the cause of the legitimate answer rate of 89.8%. Sekaran and Bougie (2010) claim that a response rate of 30% is considered to be adequate for surveys. Therefore, the 89.8% response rate in this study was sufficient for further investigation.

**Table 4.1: Response Rate of the Questionnaires**

<b>Response</b>	<b>Frequency/rate</b>	<b>%</b>
Number of distributed questionnaires	314	100
Returned questionnaires	301	95.9
Returned and usable questionnaires	282	89.8
Returned and excluded questionnaires	19	6.05
Questionnaires not returned	13	4.14
Response rate		95.9
Valid response rate		89.8

**Source: (Survey Data, 2016)**



## **4.2 Data Screening and Cleaning**

The process of data screening and cleaning often include examining the obtained data and correcting (or removing) any inaccuracies that may have a significant influence on the analysis of outcomes (Osborne, 2013). It frequently involves looking at missing numbers, finding significant mistakes, managing raw data for proper usage in analysis, and assessing normalcy and outliers (Tabachnick & Fidell, 2014). The study screened and cleaned field data using the method described above.

### **4.2.1 Examination of Missing Data**

The investigation started by locating and fixing any missing values in the dataset. It is widely advised that if a case has more than 50% of its data missing, researchers should consider removing it (Hair, 2010). These instances may have a significant influence on the other observations (Tabachnick & Fidell, 2014). In accordance with this recommendation, the study excluded the instances where there were more than 50% of missing values.

The study treated the cases with less than 50% of missing values after removing these cases. Listwise exclusion: completely removing the case from the analysis if any data are missing in that case; Pairwise exclusion: removing the case only when it is missing the data necessary for specific analysis; and Mean: calculating the mean value for the variables and applying it to the missing value are the three options that are frequently suggested for treating such missing values (Pallant, 2011). This study selected the pairwise exclusion method from among them due to its benefits. Among the benefits are that the option has fewer convergence issues, the factor loading estimates are largely biased-free, and the option is simple to use with any statistical program.

#### 4.2.2 Examination for Outliers

This study employed a multivariate analysis to look at multivariate outliers, which are outliers with extreme scores on two or more variables. This research did a multivariate test for outliers. This differs from a univariate outlier, which has a high score on just one variable (Kline 2010). Calculating the squared Mahalanobis distance (D2) for each example is a typical method for identifying multivariate outliers (Hair et al. 2010). This statistic calculates the difference, in standard deviation units, between the mean values for all the variables in the sample and a set of scores for one particular example. D2 evaluates the degree of the dissimilarity of each observation or case across a set of variables (in terms of its distance from the mean center of all observations). An outlying case will have a D2 value that sticks out noticeably from all the other D2 values (the greater D2 values in comparison to the other cases). Hair et al. (2010) recommended categorizing as an outlier any scenario where the D2 /df value in big samples (when the sample size is greater than 200) surpasses three or four. The dataset (310 cases by 66 metric variables) was examined for the presence of multivariate outliers using D2 as a measure of distance, and D2 /df was computed in accordance with Hair et al.'s (2010) recommendations. The top 10 farthest observations, as determined by D2 /df, are shown in Table 4.2.

**Table 4.2: Multivariate Outlier Test Results**

Case	D2	D2/df(df=116)	Case	D2	D2/df(df=116)
15	411.2	3.5	56	283.02	2.36
130	346.18	3	161	279.4	2.33
34	291.17	2.43	203	270.24	2.25
25	288.5	2.4	11	259.21	2.16
95	287.2	2.39	35	258	55

**Source: Survey Data, 2016**

The D2/df values of instances 15 and 130 are equal to or more than three, as indicated in Table 4.2, indicating that they are outlier cases. These two examples were thus excluded from further investigation. In conclusion, two instances were recognized as outliers by the analysis for the existence of multivariate outliers, and they were excluded from further investigation.

### 4.3 Respondents Demographic Profile

The respondents were asked to state their age, gender, experience, highest qualification, designation, grade and the university where they were working. The findings are presented in the following sub-sections. This sub-section presented issues that helped in ascertaining the moderating factors. It also presented aspects that aided in understanding the key issues covered in the objective(s).

#### 4.3.1 Age of the Respondents

The responses on the age of the respondents are presented in Table 4.3.

**Table 4.3: Age of the Respondents**

<b>Years</b>	<b>Frequency</b>	<b>Percentage</b>
Below 35 years	66	23.4
35-40 years	72	25.5
41-45 years	58	20.6
46-50 years	48	17.0
51-55 years	22	7.8
56-60 years	14	5
above 60 years	2	.7
<b>Total</b>	<b>282</b>	<b>100.0</b>

**Source: Survey Data, 2016**

As shown in Table 4.3, 25.5 % (f=72) of the respondents were aged 35-40 years while 23.4% (f=66) were below 35 years and 20.6% (f=58) were 41-45 years old, 17% (f=48) were 45-50 years another 7.8 % (f=22) were 51-55 years old whereas the

remaining were above 55, 5.7% (f=16) years. This shows that majority 69.1 % (f=196) of the respondents were 45years and below. This could be attributed to the fact that most of the employees of public universities are in their middle ages.

#### 4.3.2 Gender of the Respondents

The study sought to determine the gender of the respondents. The responses are presented in Table 4.4.

**Table 4.4: Gender of the Respondents**

<b>Gender</b>	<b>Frequency</b>	<b>%</b>
Male	136	48.2
Female	146	51.8
<b>Total</b>	<b>282</b>	<b>100.0</b>

**Source:** Survey Data, 2016

It should be noted that 51.8% (f=146) of the respondents were female while 48.2 % (f=136) were male. This indicates that the respondents were almost distributed equally in the study although women were slightly more than men. The results mean that the views of both men and women were well represented in the study which is a good indication of gender balance in public universities.

#### 4.3.3 Number of Years Working in Public Universities

The respondents were also asked to state the number of years they have worked in public universities under study. The responses are presented in Table 4.5.

**Table 4.5: Number of Years Working in Public Universities**

<b>Length of working in public universities</b>	<b>Frequency</b>	<b>%</b>
Below 7 years	83	29.4
7-10 years	84	29.8
Above 10 years	115	40.8
<b>Total</b>	<b>282</b>	<b>100.0</b>

**Source:** Survey Data, 2016

Table 4.5 shows that 40.8 % (f=115) of the respondents had been working in public universities for more than 10 years while 29.8 % (f=84) had been working for 7-10 years. Another 29.4 % (f=83) had been working for below 7 years. This implies that majority of the respondents 70.6% (f=199) had worked in the university for over 7 years. This also implied that the respondents were experienced in the affairs of the universities and hence gave relevant responses.

#### 4.3.4 Length of Stay in the Current University

It was also necessary for this study to determine the number of years the respondents had been working in the current university. The results are as shown in Table 4.6.

**Table 4.6: Length of Stay in the Current University**

<b>Length of working in the current university</b>	<b>Frequency</b>	<b>%</b>
Less than 5 years	54	19.1
5-10 years	108	38.3
Above 10 years	120	42.6
<b>Total</b>	<b>282</b>	<b>100.0</b>

**Source: Survey Data, 2016**

As shown in Table 4.6, 42.6% (f=120) of the respondents had been working in the current university for a period of more than 10 years whereas 38.3% (f=108) had been working for 5-10 years and 19.1% (f=54) had worked in their university for a period of less than 5 years. This implied that majority of the respondents 42.6% (f=120) had worked in their university for more than ten years giving them adequate experience in industrial relations.

#### 4.3.5 Academic Qualification

The respondents were also asked to state their highest qualification. Table 4.7 shows their responses.

**Table 4.71: Academic Qualification**

<b>You Highest Academic Qualification</b>	<b>Frequency</b>	<b>%</b>
Certificate	20	7.1
Diploma	57	20.2
Bachelor's Degree	130	46.0
Post Graduate Diploma	9	3.2
Masters	59	20.9
PhD	7	2.5
<b>Total</b>	<b>282</b>	<b>100.0</b>

**Source: Survey Data, 2016**

The findings presented in Table 4.7 shows that 46.0 % (f=130) were degree holders while 20.9 % (f=59) were holders of Master's Degree. There were 20.2 % (f=57) of the respondents who were diploma holders and 7.1 % (f=20) were certificate holders. Only 3.2 % (f= 9) were post graduate diploma holders and 2.5 % (f= 7) were PHD holders. The results indicate that majority of the respondents in the study had Bachelor's Degree. This means that they were able to understand and respond appropriately to the questions in the questionnaire.

#### **4.3.6 Designation in the University**

Table 4.8 shows responses on the designation of the respondents at the university.

**Table 4.8: Designation in the University**

<b>Your designation in the university</b>	<b>Frequency</b>	<b>%</b>
Security officer	64	22.6
Senior purchasing assistant	54	19.1
Procurement officer	29	10.3
Account assistant	29	10.3
Secretary	33	11.7
Clerical officer	6	2.1
Administrator	33	11.7
Librarian	23	8.2
Technician	11	3.9
<b>Total</b>	<b>282</b>	<b>100.0</b>

**Source: Survey Data, 2016**

It is believed that 22.6 % (f=64) were security officers, 19.1% (f= 54) were senior purchasing assistants and an equal proportion of 10.3 % (f=29) were procurement officers and account assistants respectively. Another 11.7 % (f=33) were secretaries and 11.7% (f=33) were administrators respectively. However, 8.2% (f=23) were librarians and 3.9 % (f=11) were technicians. Only 2.1% (f=6) were clerical officers in the universities where the study was done. The results indicated that majority of respondents were security officers 22.6% (f=64) and senior purchasing assistants 19.1% (f=54). The findings further indicated that technicians, librarians and clerical officers were the minority in the study. This could be attributed to the fact that these officers were close to university management hence they could have deliberately shied away for fear of being accused of revealing confidential information.

#### 4.3.7 Grade of the Respondents

The responses on the grade of the respondents are presented in Table 4.9.

**Table 4.9: Grade of the Respondents**

<b>Please indicate your grade</b>	<b>Frequency</b>	<b>%</b>
5-6	70	24.8
7-8	64	22.7
9-10	58	20.6
11-12	50	17.7
13-15	40	14.2
<b>Total</b>	<b>282</b>	<b>100.0</b>

**Source: Survey Data, 2016**

It should be noted that 24.8 % (f=70) of the respondents were in grade 5-6, while 22.7% (f=64) were in grade 7-8. Another 20.6 % (f=58) were in grade 9-10 and 17.7% (f=50) were in grade 11-12. The remaining 14.2% (f=40) were in grade 13-15. This implies that majority of the respondents were in grade 5-8, 47.5% (134). This

was attributed to the fact that majority of the KUSU employees are found within grade 5 and 6.

#### 4.3.8 University

Data was collected from two universities, Moi University (Main, Eldoret Town and Kitale Campuses) and Masinde Muliro University of Science and Technology where by 28.4% (f=80) of the respondents were from Masinde Muliro University of Science and Technology and 71.6% (f=202) were from Moi University. The results indicated that majority of the respondents were from Moi University as shown in Table 4.10

**Table 4.10: University**

<b>University</b>	<b>Frequency</b>	<b>%</b>
Moi University Main and Town Campuses	191	67.7
Moi University Kitale Campus	11	3.9
Masinde Muliro University of Science and Technology	80	28.1
<b>Total</b>	<b>282</b>	<b>100.0</b>

**Source: Survey Data, 2016**

#### 4.4 Descriptive Statistics for the Variables

The first objective of the study was to determine the influence of HRM practices on collective process in public universities in Kenya. The findings are presented below:

##### 4.4.1 Descriptive Statistics for Human Resource Management Practices

Descriptive Statistics for human resource management practices were elicited on a 5-point likert scale. Analysis of the response mean scores were conducted on the continuous scale where <1.5 represented strongly disagree; with 1.5-2.5 disagree; while 2.5-3.5 was given undecided; with 3.5- 4.5 being agree and finally >4.5 represented strongly agree. The study sought to identify respondent's awareness on Human resource management practices. A total of 10 statements were used to



determine the Human resource management practices in public universities and their responses were elicited on a 5-point likert scale, shown in table 4.11.

The results showed that KUSU members in public universities in Kenya mostly agreed that the university management met with employees to discuss employees development (M= 3.94, SD= (0.97). This is beneficial to the university as it would encourage effective communication and employee commitment in public universities. Besides, employees are in a position to consider themselves as valuable assets to the university as they have room to air their views and suggestions on CBP.

Similarly, the results showed that employees of public universities in Kenya are given opportunity to be part of a task group outside their core responsibilities (M=3.60, SD=1.23). This could imply that participation of KUSU members in task group outside their core responsibilities stimulated obtaining of information essential to collective bargaining in public universities in Kenya.

Furthermore, the results showed that management communicates effectively with employees on issues relating to CBP (M=3.79, SD=1.07). This suggests that KUSU members considered themselves as part of a team which collectively made collective decisions on collective bargaining.

The results further showed that KUSU members agreed that there is an environment of openness and trust in the university (M=3.70, SD=1.05). Thus, at the CBP meetings, there were open dialogues that were instrumental to acceptance or rejection of other parties' views. The results further showed that KUSU members were treated fairly and with respect during CBP (M=3.57, SD= 1.19). This is important to enable peaceful and meaningful CBP. It was also found that management practices at the

public university is such that it empowers employees to take responsibility for their own decisions ( $M= 3.62, SD=1.20$ ). This could imply that KUSU members are held responsible for any actions they take like engaging in an illegal strike.

The study further showed that most KUSU members agree that the university has a clear staff development programme ( $M=3.33, SD=1.25$ ). This could imply a high level of commitment of KUSU members to the university. What is more, the university management spends a good deal of time listening to employees on issues relating to CBP ( $M=3.68, SD=1.10$ ). This means that employees feel that their views on CBP issues are valued and hence they may be encouraged to participate actively in CBP. As concerns university management supporting KUSU members welfare programme, majority of the respondents agreed ( $M=4.00, SD= 1.15$ ). This is beneficial to KUSU members as they are likely to push through agenda on welfare matters of their members. Finally, the study showed that most KUSU members agreed that they found meaning in their work ( $M=3.46, SD=1.33$ ). This could imply that KUSU members found satisfaction in their work which promotes CBP.

The results further showed the overall mean was ( $M=3.67$ ). This meant that most respondents agreed that human resource management practices contributed positively towards collective bargaining process. The results showed that the highest meanscore of 4.00 was from the statement "*The University management supports employee welfare programs*". This suggested that KUSU members' freedom to share ideas and thoughts was key to collective bargaining process. However, the lowest meanscore of 3.33 was from the statement "*The University has a clear staff development programme*". Hence there is need for university management to improve on staff development programme.

The results also indicated that the standard deviation ranged from 0.97 to 1.33 with an overall standard deviation (SD=0.76). These values showed the dispersion in the distribution. Thus, the statements of the variables depicted an estimate to a normal distribution. Further, the values of the skewness and kurtosis as displayed in table 4.11 are within the conventional values such that for skewness is <3 and kurtosis <10 (Kline, 2005). This indicated a normal distribution of the responses with respect to human resource management practices in public universities in Kenya which indicate a non-violation of normality assumption (Joanes & Gill, 1998).

**Table 4.11: Descriptive Statistics for Human resource management practices**

	<i>Mean</i>	<i>Std. Deviation</i>	<i>Skewness</i>	<i>Kurtosis</i>
The university management meets with employees to discuss employee's development	3.94	0.97	-1.12	1.32
University employees are often given the opportunity to be part of a task group outside their core responsibilities	3.60	1.23	-0.62	-0.57
Management communication effectively with employees on issues relating to CBP	3.79	1.07	-0.74	-0.02
There is an environment of openness and trust in the university	3.70	1.05	-0.73	0.19
Employees at the university are treated fairly and with respect during CBP	3.57	1.19	-0.80	-0.23
Management style practices in the university is such that it empowers employees to take responsibility for their own decision	3.62	1.20	-0.57	-0.31
The university has a clear staff development programme	3.33	1.25	-0.40	-0.89
The university management spends a good deal of time listening to employees' views on issues relating to CBP	3.68	1.10	-0.68	-0.29
The university management supports employee welfare programme	4.00	1.15	-1.17	0.67
The university employees find meaning in their work	3.46	1.33	-0.41	-0.99
<b>Mean</b>	<b>3.67</b>	<b>0.76</b>	<b>-0.61</b>	<b>0.23</b>

**Source: Survey data, 2016**

## **4.5 Qualitative Data Analysis**

### **4.5.1 Effect of HRM Practices on CBP in Public Universities**

#### **a) HRM Policy**

Majority of the respondents interviewed reported that the university had HRM policies. The HRM policies aim at providing guidelines on managerial and operational policies to management and employees in order for their university to achieve their goals and objectives and as such remain relevant and competitive. In this context the universities need to attract and retain qualified and experienced staff who will be able to undertake their duties effectively and efficiently with the aim of producing much needed human capital for attainment of the national goals and aspirations as embodied in vision 2030. This will also position the universities at competitive stage at both national and global levels.

#### **b) i) Working Hours**

The policies in both universities are specific that the working hours are eight hours per day. The eight-hour working day follows Kenya's Employment Act 2007. A violation of this provision could occasion industrial unrest and hence affect the industrial relations environment which would negatively affect the work place environment.

#### **b) ii) Promotions**

The interviews revealed that promotions in the universities are based on availability of vacancies and are done according to the scheme of service provided for staff. This is to avoid situations where promotions could be done haphazardly and thereby raise complains that could jeopardize industrial relations environment.

**b) iii) Demotions**

Most of the respondents were not very clear on the HRM policy provision on demotions. Some said there was no policy while others were non-specific and the majority did not respond. Only one respondent said that the demotion policy is based on the CBA. This implies that there is no clear demotion policy and requires that such policy be formulated for effective Human Resource Management since Demotion is an aspect of effective HR management.

**b) iv) Transfers**

Regarding transfers, majority of the respondents returned no response while others said it was not very effective. This indicates that the basis of transfers in the two universities is not clear to most of the staff. There is therefore need for the universities to disseminate more information on this aspect of the HR policy so as to avoid unnecessary complains from staff whenever they are transferred from one department or station to another. Lack of clear policy on transfer will result in haphazard transfers which can demotivate staff and lead to low productivity.

**b) v) Salary, Deductions and Allowances**

Most of the respondents interviewed on this aspect of the policy indicated that allowances are granted as per the CBA. A few of the respondents were not sure. This reveals that information on salaries/deductions and allowances are not clear to some staff. Hence, it could create misunderstanding between staff and the university management leading to poor industrial relations environment. This implies that the policy on salary increase/deductions should be made more explicit to the advantage of both management and employees.

**c) Recognition of Employees Union**

Nearly all the respondents reported that the universities recognize employee's union. Recognition of employees' unions is provided for in the Labour Relations Act (2007) and failure to do so would jeopardize the industrial relations climate in the universities. The fact that the universities have recognized staff unions is an indicator of the universities authority to create harmonious industrial relations climate which is conducive to collective bargaining process.

**d) Relationship Between Management and Unions**

Half of the respondents indicated that the relationship between the management and the unions was cordial while others said the relationship was not sound while the rest said the relationship was mutual and enshrined in the employment Act. This indicates that there is need to improve the working relationship between the unions and the management for smooth collective bargaining process such as timely negotiations and implementation of collective bargaining agreement, which is not the case at the moment.

**e) Areas of Major Grievances**

It was indicated by most of the respondents that major areas of grievances between the management and the union were in rank order as follows: financial matters especially payroll remittances, victimization, aspects of internal CBA, treatment of union officials and disciplinary cases. A few of the respondents indicated that there was no problem. In view of these responses it is clear that there are challenges at the two universities regarding finance, discipline handling and CBA negotiation which negatively affects the process of collective bargaining.

**f) Major Issues dealt with under Grievance Procedure**

Major issues reported by the respondents as being the main subject of grievances procedure were: victimization of employees even though the employment law is very clear on how disciplinary matters should be dealt with. Other issues included: disciplinary procedures being more punitive than corrective, payroll deductions, delays in negotiations, delays in signing of CBA due to financial constraints and intimidation of union officials.

**g) How Major issues in the Grievance Procedure are Ironed Out.**

The respondents revealed that the issues subjected to grievance procedure were ironed out through the following methods: collective bargaining, mediation and arbitration. A few of the respondents were not clear how grievances were ironed out in their universities. This implies that there is need to disseminate information regarding grievance procedure so that employees are made aware of them.

**h) How HRM Policy Differs from Guidelines of Employees Union**

Responding to how HRM policy differs from guidelines of Employees Unions Policy and guidelines, most of the interviewees reported no response possibly indicating a lack of information on the issue. A few respondents indicated that the salaries structures set out in the HR policy differ from what the employees have set out in their own policy. This indicates a need for negotiation and harmonization of the two policies especially as regards salary expectation. The harmonization will lead to a conducive industrial relations environment and hence high productivity will be realized.

### **i) Whether HRM Practices Hinder CBP in Institutions**

Responding to whether HRM practices hinder collective bargaining processes in the institutions majority of the respondents indicated that HRM practices do not hinder collective bargaining processes but instead complement it. This indicates that HRM policies are essential for effective collective bargaining in that they provide certainty as to what is to be done during collective bargaining process.

### **4.5.2 Descriptive Statistics for Union Management Relations**

The second objective of the study was to assess the influence of union management relations on collective bargaining process in public universities in Kenya. The findings are presented below:

Descriptive Statistics for union management relations were elicited on a 5-point likert scale. Analysis of the response mean scores was conducted on the continuous scale <1.5 represents strongly disagree; with 1.5-2.5 disagree; while 2.5-3.5 given undecided; with 3.5- 4.5 being agree and finally >4.5 represented strongly agree. The study sought to identify respondent's awareness on union management relations in public universities using 10 statements and their responses elicited on a 5-point likert scale, shown in table 4.12.

The results showed that KUSU members in public universities mostly agree that there is good cooperation between the union and management (M=3.90, SD=1.10). This could imply existence of harmonious working relations between the union and the university management which is beneficial to CBP.

Similarly, university management and the union have mutual regard for each other (M=3.99, SD=1.16). This implied that CBP proceeded in a mostly peaceful



atmosphere which facilitated collective bargaining process. Equally it was evident that the university management and union were always willing to confer with each other ( $M=4.05$ ,  $SD=0.98$ ). This was beneficial to facilitating active participation in CBP.

Furthermore, the management was always willing to facilitate union operations ( $M=3.46$ ,  $SD=1.20$ ). This implies that union activities are supported by management which promotes good relations between management and the union. The results further showed that there was joint participation in decision making between the union and the university management ( $M=3.28$ ,  $SD=1.28$ ). This showed that university management and union cooperated to reach mutual decisions and this promoted CBP.

Additionally, the university management and the union satisfactorily resolved conflicts and disputes ( $M=3.58$   $SD=1.19$ ). This implied that most of the conflicts and disputes which came to CBP were mutually resolved. Similarly, the university management attitude was largely favourable towards the union ( $M=3.93$ ,  $SD=1.06$ ). This was beneficial in promoting cooperation between the union and management during CBP.

Furthermore, the university management and the union freely shared information ( $M=3.57$ ,  $SD=1.20$ ) this could imply that there was effective communication between the union and management on matters of mutual benefit in CBP. Similarly, the union perceived the university management as cooperative ( $M=3.63$   $SD=1.16$ ). This showed that there was cooperation between the union and the university management, a factor that facilitated effective collective bargaining process.

Finally, the union had respect for university management ( $M= 3.78$ ,  $SD= 1.14$ ). This implied that the state of respect between union and management was moderate. Hence, there was need to improve this relationship for CBP to proceed smoothly.

In a nutshell, the results in table 4.12 showed an overall mean of 3.72. Therefore, majority of the respondents agreed that union management relations were key to the success of collective bargaining process in public universities in Kenya. Additionally, the highest mean score of 4.05 was from the statement "*The university management and the union are always willing to confer with each other*". This suggested that public universities emphasized good working relationship between the university management and the union through free communication. On the other hand the lower meanscore of 3.28 was in relation to the statement that "There is joint participation in decision making between the union and university management". This suggested that more efforts were needed to be focused on improving the level of cooperation between the university management and the union. Conceivably, more efforts should also be dedicated to regular meetings between the two parties in order to enhance collective bargaining process.

Similarly, the results depicted that standard deviation ranges from 0.98 to 1.28 with an overall SD of 0.78. This explained the dispersion in the distribution of data. Hence, the statement in this variable indicated an approximation of a normal distribution. Furthermore, the values for both skewness and kurtosis for union management relations were generated and presented in table 4.12. Evidently, the results indicated that the values of skewness are within the conventional value of  $<3$  whereas the values for kurtosis are less than the recommended value of  $<10$  (Kline, 2011). Consequently, it suggests that the responses with respect to the union management

relations as an explanatory variable in the study followed a normal distribution, thus, these results connote that there is non-violation of normality assumption (Groeneveld & Meeden, 1984).

**Table 4. 22: Descriptive Statistics for Union Management Relations**

	<i>Mean</i>	<i>Std. Deviation</i>	<i>Skewness</i>	<i>Kurtosis</i>
There is good cooperation between the union and university management	3.90	1.10	-1.18	0.85
The university management and the union have mutual regard for each other	3.99	1.16	-1.18	0.62
The university management and the union are always willing to confer with each other	4.05	0.98	-1.19	1.50
The university management is always willing to facilitate union operations	3.46	1.20	-0.68	-0.44
There is joint participation in decision making between union and the university management	3.28	1.28	-0.39	-0.85
The university management and the union resolve conflict and disputes	3.58	1.19	-0.76	-0.30
The university management attitude is favourable to the union	3.93	1.06	-0.91	0.22
The university management and the union share information freely	3.57	1.20	-0.67	-0.33
The union has respect for university management as cooperative	3.63	1.16	-0.62	-0.44
The union has respect for university management	3.78	1.14	-1.05	0.45
<b>Mean</b>	<b>3.72</b>	<b>0.78</b>	<b>-0.65</b>	<b>0.13</b>

Source: Survey data, 2016

#### 4.5.3 Effect of Union Management Relations on Collective Bargaining Process

##### a) i) How Unions Manage their Operations in Terms of Communication among Union Leaders

Regarding how unions manage their operations through communication with union leaders, majority of the respondents were unable to respond; others indicated that communication was through social media and officials while others said the communication was rare. This indicates that unions need to improve communication with their leaders in order to improve their operations.

**a) ii) How Unions Manage their Operations in Terms of Communications among Union Members**

Asked to state how unions manage their operations in terms of communication with their members the respondents indicated that the communication was done through consultative meetings and memoranda while others said the communication was not effective. A few of them indicated no response. These results reveal a lack of clear communication between the unions and their members. Since CBP is a dynamic process and regulates employees' terms and conditions of service as well as facilitating dispute resolution communication among union members is very important as this will enhance accountability and collaboration amongst union members and their leaders.

**a) iii) How Unions Manage their Operations in Terms of Communications between Union Leaders and Management of the Institutions**

Majority of the respondents indicated communication was done through memos. This reveals that communication between the union leaders and management is not very clear and tends to avoid face to face communication. This result may be indicative of difficulties in communication between the union leaders and management of the institution which signals a negative industrial relations climate.

**b) Cases of Breakdown of Communication between Unions and Management**

Majority of the respondents reported that there were cases of breakdown of communication between management and the unions. This breakdown took the form of strike notice, issues dealing with the staff welfare and rights of employees and communication regarding disciplinary matters and a lack of comprehensive agenda

for any meeting between the two. This implies that when there is breakdown in communication little progress can be made in CBP.

**c) Autonomy of Union Leaders from the Management**

Regarding the degree of autonomy of union leaders from the management, majority of the respondents reported that union leaders were not really autonomous from the management. In most cases they met during urgent issues pertaining to CBAs. However, others indicated that union officials were autonomous. Autonomy for union leaders is important if they have to offer effective representation of their members. Responsible autonomy needs to be encouraged among union leaders for effective CBP.

**d) Decisions Made between Management and Union Leaders**

On decisions that management has had to make with the union leaders, majority of the respondents indicated that such decisions are rare and that in most cases management makes the decisions. One respondent remarked that; *“when the union and the management of the university bargain in good faith they usually come up with CBA that is acceptable to both sides”*.

**e) Whether Union Management Influence the Process of CBP**

Majority of the respondents indicated that union management relations influence the process of CB. The ways in which this happen were several like arrangement for workshops, conflicts resolution, win-win situation and leaders approaches to issues of concern. This therefore implies that there is need to enhance union management relations for effective CBP.

#### **4.5.4 Descriptive Statistics for Power Relation of Parties to CB**

The third objective of the study was to determine the influence of power relations of parties to collective bargaining on collective bargaining process in public universities in Kenya. The findings are presented below:

Descriptive Statistics for power relation of parties were elicited on a 5-point likert scale. Analysis of the response mean scores was conducted on the continuous scale <1.5 represents strongly disagree; with 1.5-2.5 disagree; while 2.5-3.5 given undecided; with 3.5- 4.5 being agree and finally >4.5 represented strongly agree. The study sought to identify respondent's awareness on power relation of parties in public universities using 11 statements and their responses elicited on a 5-point likert scale, shown in table 4.13.

It is evident from the results that the union had support of its members ( $M=3.76$ ,  $SD=1.05$ ). This implied that the union enjoys support of the members during collective bargaining process.

Similarly, the results moderately indicate that the union bargained as an equal partner with the university management ( $M=3.67$ ,  $SD=1.30$ ). This showed that the management has an upper hand during CBP negotiations. Equally the results showed that university management moderately goes with the decision of the union ( $M=3.55$ ,  $SD=1.17$ ). This could imply that the university management moderately supports the decisions of the union.

Furthermore, the results indicated that the union always went with the decision of the university management ( $M=3.87$ ,  $SD=1.05$ ). This showed that the union nearly always supported the decision of the management. Additionally, the university management is always ready to lock out staff whenever there is a dispute ( $M=3.99$ ,

SD=1.08). This shows that the university management would mostly lock out the KUSU members whenever there is a dispute.

Similarly, the government supports harmonious union management relations (M=3.81, SD= 1.17). The results implied that the government mostly supported harmonious union management relations. Furthermore, KUSU always bargained more for its members (M=3.81, SD=1.08). This indicates that KUSU moderately bargained more for its members.

Additionally, the university management moderately recognized the right of the union to organize and assemble (M= 3.24, SD=1.43). This indicates that the university management moderately recognizes the right of the union to organize and assemble. Similarly, the university management has a negative attitude towards the union in power relations (M=4.34, SD=0.83). This indicates that university management mostly has a negative attitude towards the union.

Additionally, KUSU rarely staged a successful strike (M=3.84, SD=1.04). This could imply that strikes staged by KUSU were mostly unsuccessful. This enhanced the ability to negotiate successfully with the university management. Finally, the government played its role well in the tripartite industrial relations system (M=3.47, SD=1.24). This implied that the government mostly plays its role well in matters of tripartite industrial relations system which is beneficial in promoting CBP, particularly during resolution of disputes between management and unions when the government initiated the process of conciliation, mediation and, if need be, arbitration.

The results in table 4.13 also reported an overall mean of 3.76. This denoted that the majority of the respondents in the study mostly agreed that power relations of parties to collective bargaining process are more likely to influence collective bargaining

process. The highest meanscore of 4.34 was related to the statement that “The university management has negative attitude towards the union”. This indicated that on certain occasions during collective bargaining process the union weilds more power than the university management. Conversely, the lower meanscore of 3.24came from the item “The university management recognized the right of the union to organize and assemble”. This meant that more efforts should be directed towards improving the relationship between the university management and the union so that the university management could accept the union as an equal partner during collective bargaining process.

Finally, the results reported standard deviations of the statements relating to power relations of parties to collective bargaining process ranging from 0.83 to 1.30 with an overall standard deviation value of all the eleven items at 0.74. These values explained the dispersion in the distribution of the data hence, all the items of the power relations of parties to CBP as a variable depicted a normal distribution. It is also noted that the values of skewness and kurtosis to all the statements in the variable together with the overall value are within the conventional value of  $<3$  for skweness and  $<10$  for kurtosis (Kline, 2011). This suggests that there was a normal distribution of the responses with respect to power relations to parties to CBP in public universities in Kenya. Thus, the results indicated that there was no violation of the normality assumption (Groeneveld & Meeden, 1984).



**Table 4.13: Descriptive Statistics for Power Relation of Parties to CB**

	<i>Mean</i>	<i>Std.Dev</i>	<i>Skewness</i>	<i>Kurtosis</i>
The union has support of its members	3.76	1.05	-0.80	0.28
the union bargains as equal partner with the university management	3.67	1.30	-0.68	-0.59
The university management always goes with the decision of the union	3.55	1.17	-0.53	-0.50
The union always goes with the decision of university management	3.87	1.05	-0.92	0.34
The university management is always ready to lockout staff whenever there is a dispute	3.99	1.08	-1.20	1.03
The government supports harmonious union management relations	3.81	1.17	-0.90	-0.01
KUSU always bargains more for its members	3.81	1.08	-0.88	0.31
The university management recognizes the right of the union to organize and assemble	3.24	1.43	-0.22	-1.30
The university management has a negative attitude towards the union	4.34	0.83	-1.72	4.00
KUSU rarely stage a successful strike	3.84	1.04	-0.97	0.62
The government plays its role well in the tripartite industrial relations system	3.47	1.24	-0.59	-0.63
<b>Mean</b>	<b>3.76</b>	<b>0.74</b>	<b>-0.80</b>	<b>0.28</b>

**Source: Survey data, 2016**

#### **4.5.5 Effect of Power Relations of Parties to Collective Bargaining on Collective Bargaining Process**

##### **a) Centrality of Power in the Institutions**

Power is the ability of a party to influence the outcome of a process, in this case collective bargaining process between the unions and management of universities.

Power is central to collective bargaining in that it determines the outcome of the bargaining process. The respondents interviewed indicated that power in collective bargaining between the union and university management was in the hands of the university council and that in the universities power is centrally held and exercised.

This is corroborated by one respondent who commended “*Power in universities rests with the university authority*”. This power is also hierarchical and collective. This

explains the challenges which face CBP in initiating CBA process including calling for meetings which are at times unattended or not taken seriously by university management.

#### **b) Management Styles of Universities and Employees Unions**

The management styles of the universities were reported by the respondents as mostly democratic somehow authoritarian and quite personalized at the centre. As regards the management style of the union it was reported they were democratic, coercive and sometimes relied on threats. One of the respondents remarked “*During CBA negotiations the management wishes prevail over the unions*”. Employees rights and privileges are infringed upon and work-related welfare issues are not adequately addressed”. This means that the management style requires improvement to make them participative to achieve amicable decisions and harmonious industrial relations environment.

#### **c) Participation of Union Leaders in Management**

The respondents reported that union leaders were not included in most management meetings. A few indicated that they were included at some senate and council meetings. This indicates that union participation in top level management of the institutions were not regarded as significant matters. Hence unions played a little role in policy making. As remarked by one interviewee who stated that “*unions are only included in meetings where disciplinary matters are discussed and in the CB process*”. This indicates that union leader’s participation in management and meetings is inadequate and needs to be enhanced for effective CBP.

**d) Whether One of the Parties have Exercised Immensed Power over the other Party**

The respondents reported that cases where one party has exercised immense power over the other are common. In most cases management interests prevail during collective bargaining process. This affects union negotiation with management resulting in postponement of CBA processes as well as infringement upon workers welfare issues and leads to stand offs, strikes and go-slows and other negative aspects of the CBP and hence unconducive industrial relations environment.

**e) Ways of enhancing CB Process among members of Kenya Universities Staff Union (KUSU) in Kenya**

The respondents suggested ways of improving CBP among members of universities staff union as follows: adoption of the use of technology whereby meetings can be held online to save on time; involving all stakeholders at the institutional and the national level and addressing all issues of employees' rights and privileges; attitude change by management who should abandon occasional hard line stances and facilitating union officials to attend collective bargaining seminars and workshops. This implies that members are adequately informed on what needs to be done to improve industrial relations environment in public universities and thereby promote effective collective bargaining process.

**4.5.6 Descriptive Statistics for Participatory Management**

The fourth objective of the study was to analyze the moderating effect of participatory management on the relationship between IRE constructs and collective bargaining process in public universities in Kenya. The findings are presented below:

Descriptive Statistics for participatory management were elicited on a 5-point likert scale. Analysis of the response mean scores was conducted on the continuous scale <1.5 represents strongly disagree; with 1.5-2.5 disagree; while 2.5-3.5 given undecided; with 3.5- 4.5 being agree and finally >4.5 represented strongly agree. The study sought to identify respondents' awareness on participatory management in public universities using 11 statements and their responses elicited on a 5-point likert scale, shown in table 4.14.

The results signified that the university mostly made decisions that are based on every member's ideas (M=4.05, SD=0.85). The implication of this was that the university's willingness to incorporate KUSU member's ideas in decision making was quite strong. Similarly, the results denote that union suggests ways to the university in improving members job performance (M=3.80, SD=0.89). This means that the union's suggestions for improving KUSU member's job performance are taken in by the management.

Equally, the university allows KUSU members to participate in solving university problems (M=3.86, SD=1.00). This participation was important in garnering KUSU members' ideas in problem solving at the university. It was also reported that the university allowed KUSU members to participate in university budget making (M=3.98, SD=0.90). This participation was significant as it allowed the KUSU members to understand the goals of the university and also to contribute ideas towards improving financial management. Based on the results KUSU members actively participate in university major decision making (M=3.92, SD=1.00). This is beneficial to collective bargaining process as the union members feel their voice matters.

Furthermore, it was seen from the results that there was a high free flow of communication, sharing information and networking between KUSU members and the university management ( $M=4.05$ ,  $SD=0.86$ ). The results indicated that effective communication was upto the expected standards as poor communication could stifle effective collective bargaining process. Additionally, all employees were actively involved in collective bargaining ( $M=3.85$ ,  $SD=1.02$ ). The implication of this is that employees are well involved in collective bargaining process.

Equally, there was a trade union representative in the organization ( $M=4.04$ ,  $SD=0.88$ ). This implied that nearly all areas of the university were represented by the union official, a factor that enhanced the union's strength in collective bargaining process. Based on the results KUSU members frequently discussed matters of work welfare with their trade union representative ( $M=4.07$ ,  $SD=0.86$ ). This denoted that union members shared industrial relations issues with their union representatives. This is important in promoting effective collective bargaining process.

It was further reported that KUSU members visited trade union offices frequently for updates ( $M=3.56$ ,  $SD=1.16$ ). The implication of this was that not all KUSU members visit union offices for updates and hence they could be uninformed about developments in collective bargaining process. Finally, trade union representatives call on their members frequently in open discussion ( $M=3.66$ ,  $SD=0.96$ ). This could mean that trade union leaders make efforts to inform their members on developments in matters of collective bargaining process.

In summary, the results indicated that the overall mean for all the statements in respect to participatory management was 3.90. This suggested that the respondents mostly agreed that participatory management was a vital part of successful collective

bargaining in public universities. It made employees feel involved in the management of the institution and hence decision making in matters that affect like collective bargaining process. The higher mean score of 4.07 indicated that participatory management was important in public universities. However, the lower mean of 3.56 denoted that the respondents moderately perceived participatory management as vital to collective bargaining process.

Equally, the standard deviations for all the statements on participatory management ranged between 1.162 and 0.85 with an overall standard deviation value of 0.57 as shown in table 4.14, hence, showed greater dispersion of the responses around the mean. The values for skewness and kurtosis for all the statements with regard to participatory management were within the acceptable value of  $<3$  for skewness and value of  $<10$  for kurtosis (Kline, 2010) and (Groeneveld & Meeden, 1984) respectively with overall skewness value of -0.62 and kurtosis of 1.34. Therefore, the results indicate that there is a normal distribution of the responses in respect to participatory management in public universities in Kenya.

**Table 4.143: Descriptive Statistics for Participatory Management**

	<i>Mean</i>	<i>Std. Deviation</i>	<i>Skewness</i>	<i>Kurtosis</i>
University makes decision that are based on every member idea	4.05	0.85	-1.37	2.76
Union suggest ways the university in improving member job performance	3.80	0.89	-0.92	1.26
University allows members to participate in solving university problems	3.86	1.00	-0.83	0.30
University allows members to participate in university budget making	3.98	0.90	-1.30	2.39
Active participation of the union members in University major decision making	3.92	1.00	-1.31	1.69
Free flow of communication, sharing information and networking	4.05	0.86	-1.16	1.96
All employees are involved in collective bargaining	3.85	1.02	-1.30	1.63
There is a trade union representative in the organization	4.04	0.88	-1.33	2.48
Frequently discuss matters of work welfare with the trade union	4.07	0.86	-1.23	2.38
Visit trade union offices frequently for updates	3.56	1.16	-0.54	-0.49
Trade union representatives call us frequently in open discussion	3.66	0.96	-0.68	0.11
<b>Mean</b>	3.90	0.57	-0.62	0.96

**Source: Survey data, 2016**

#### **4.5.7 Descriptive Statistics for Collective bargaining process**

Descriptive Statistics for collective bargaining process were elicited on a 5-point likert scale. Analysis of the response mean scores was conducted on the continuous scale <1.5 represents strongly disagree; with 1.5-2.5 disagree; while 2.5-3.5 given undecided; with 3.5- 4.5 being agree and finally >4.5 represented strongly agree. The study sought to identify respondent's awareness on collective bargaining process in public universities using 8 statements and their responses elicited on a 5-point likert scale, shown in table 4.15.

Based on the results fairness of the process was highly rated ( $M=3.76$ ,  $SD= 1.05$ ). This denotes that KUSU members perceived fairness of the process as conducive to effective collective bargaining. Similarly, willingness of the management to negotiate was well perceived by KUSU members as being key to collective bargaining process ( $M=3.67$ ,  $SD= 1.30$ ). The implication of this was that KUSU members were of the view that management is always willing to negotiate terms and conditions of employment with the union. This could be an indication of confidence by union members in the collective bargaining process.

Equally, time taken to reach agreement was perceived as satisfactory ( $M=3.52$   $SD=1.13$ ). The results denoted that time taken to reach agreement was satisfactory to the members which moderately indicated union's confidence in the collective bargaining process. Based on the results the level of concern for the other parties point of view was high ( $M=3.84$ ,  $SD=0.95$ ). This signified that there was a high level of agreement among the bargaining parties regarding concern for the other party's point of view. Therefore, it showed that the management and the union seriously consider the points raised by each other and this speeds up the process of reaching agreement in collective bargaining process.

Regarding willingness for both parties to give and take the results indicated a moderate response ( $M=3.60$ ,  $SD=1.23$ ). This could be an indication that the parties to collective bargaining process are not strongly willing to compromise in order to reach agreements. It was also reported that the degree of feedback given to members was moderate ( $M=3.31$ ,  $SD=1.19$ ). This implied that feedback between the members and the union officials may not be so frequent. Additionally, the degree of members participation was moderate ( $M=3.20$ ,  $SD=1.21$ ). The implication of these results is



that the union does not adequately incorporate the views of the members in the collective bargaining process.

Finally, implementation of agreed terms was rated moderately ( $M=3.39$ ,  $SD=1.10$ ). This signified that the speed with which the agreed terms were implemented by the university management was satisfactory to KUSU members.

In general, collective bargaining process had an aggregate mean of 3.54 indicating that the respondents agreed on most of the items on collective bargaining process while the standard deviation was within the range of 1.30 and 0.95. This showed a wide spread of the responses around the mean. The highest mean score of 3.84 indicated that the universities emphasized the importance of collective bargaining process as a way of ensuring healthy industrial relations in public universities in terms of encouraging the degree of members' participation. On the other hand, the lower mean score of 3.20 suggested that the universities should focus on improving collective bargaining process especially with regard to the time taken to reach an agreement and implementation of the same.

Further more, the value of skewness and kurtosis for all the statements with regard to collective bargaining process in public universities indicated that skewness and kurtosis were within the acceptable values of  $<3$  for skewness and  $<10$  for kurtosis ((Kline, 2010) and (Groeneveld & Meeden, 1984) respectively. This shows that the responses with respect to collective bargaining in the study followed a normal distribution.

**Table 4. 154: Descriptive Statistics for Collective Bargaining Process**

	<i>Mean</i>	<i>Std. Deviation</i>	<i>Skewness</i>	<i>Kurtosis</i>
The fairness of the process	3.76	1.05	-0.80	0.28
The willing of the management to negotiate	3.67	1.30	-0.68	-0.59
The time taken to reach an agreement	3.52	1.13	-0.56	-0.42
The level of concern for other party point of view	3.84	0.95	-0.87	0.86
The willingness for both parties to give and take	3.60	1.23	-0.68	-0.47
The degree of feedback given to members	3.31	1.19	-0.34	-0.76
The degree of members participation	3.20	1.21	-0.25	-0.80
Implementation of agreed terms	3.39	1.10	-0.46	-0.47
<b>Mean</b>	<b>3.54</b>	<b>0.77</b>	<b>-0.42</b>	<b>-0.20</b>

**Source: Survey data, 2016**

#### 4.8 Correlation Analysis

A Pearson product-moment correlation coefficient was computed to assess the relationship between industrial relations environment and collective bargaining process in public universities in Kenya. The correlation results are summarized in table 4.16. From the study there was a positive correlation between HRM practices and collective bargaining process (( $r=0.723$ ,  $p=0.000$ ). This implies that HRM practices positively and significantly correlates with collective bargaining process in public universities in Kenya.

There was a positive correlation between union management relations and collective bargaining process (( $r=0.690$ ,  $p=0.000$ ). This implies that union management relations positively and significantly influence the collective bargaining process in public universities in Kenya.

There was a positive correlation between power relation of parties and collective bargaining process (( $r=0.684$ ,  $p=0.000$ ). This implies that power relation of parties positively and significantly influences the collective bargaining process in public universities in Kenya.

There was a positive correlation between participatory management and collective bargaining process (( $r=0.424$ ,  $p=0.000$ ). This implies that participatory management positively and significantly influences the collective bargaining process in public universities in Kenya.

**Table 4. 165: Correlation Analysis**

		<i>CB</i>	<i>HRMP</i>	<i>UMR</i>	<i>PRP</i>	<i>PM</i>
CB	Pearson Correlation	1	.723**	.690**	.684**	.424**
	Sig. (2-tailed)		.000	.000	.000	.000
HRP	Pearson Correlation	.723**	1	.815**	.793**	.409**
	Sig. (2-tailed)	.000		.000	.000	.000
UMR	Pearson Correlation	.690**	.815**	1	.793**	.429**
	Sig. (2-tailed)	.000	.000		.000	.000
PRP	Pearson Correlation	.684**	.793**	.793**	1	.434**
	Sig. (2-tailed)	.000	.000	.000		.000
PM	Pearson Correlation	.424**	.409**	.429**	.434**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

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

b. Listwise N=282

**Source: Survey data, 2016**

**Key**

CB – Collective bargaining process

HRMP – Human resource management practices

UMR – Union Management relations

PRP – Power relations of parties to CB

PM – Participatory management

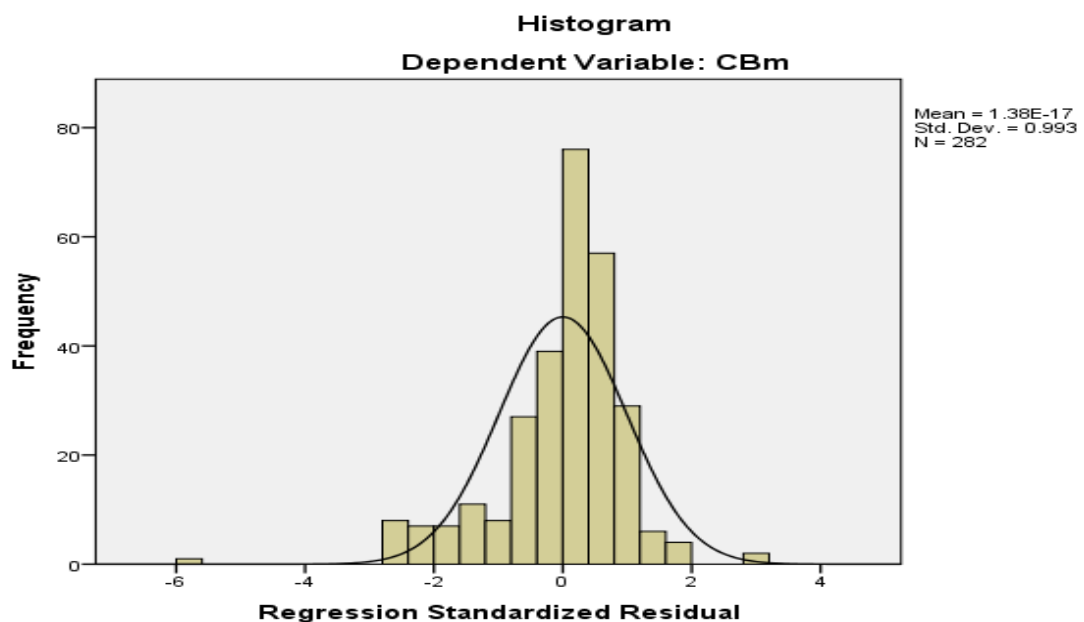
**4.9 Test of Regression Assumptions**

In order to test the multiple regression assumptions, the concept statements for the collective bargaining process, participative management, and industrial relations environment were all favorably written, coded, and put into SPSS (version 22). In

order to test the multiple regression assumptions of normality, linearity, homoscedasticity, autocorrelation, and multicollinearity, data for these variables were reviewed.

#### 4.9.1 Test of normality

The assumption provides the researcher with information about what values to anticipate and is based on the normal distribution's shape (Keith, 2006). The histograms of the standardized residuals (Stevens, 2009), which are shown in Figure 4.1, were used to further verify the normality of the data. Through visual examination of data plots, the researcher verified this supposition (Osborne & Waters, 2002).



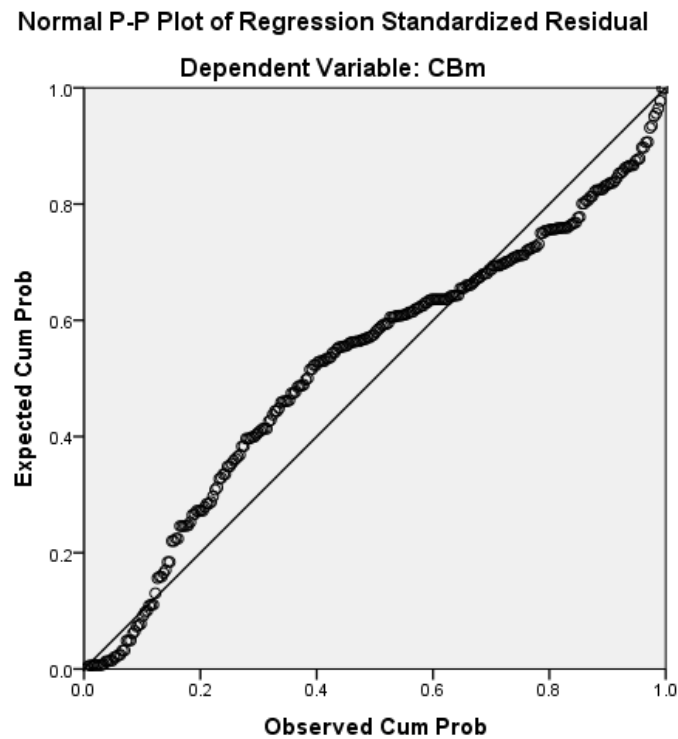
**Figure 4. 1: Normality**

**Source: Survey data, 2016**

#### 4.9.2 Test of Linearity

The idea of linearity is that two variables have a straight-line connection with one another (Tabachnick & Fidell, 2013). Since regression requires that the linearity assumption be met, testing for linearity was thought to be required. Statistical

software programs were used to thoroughly examine the residual plots and scatter plots, which revealed linear vs. curved connections (Keith, 2006; Osborne & Waters, 2002). Figure 4.2 illustrates how residual plots with the standardized residuals and anticipated values were utilized to establish linearity.

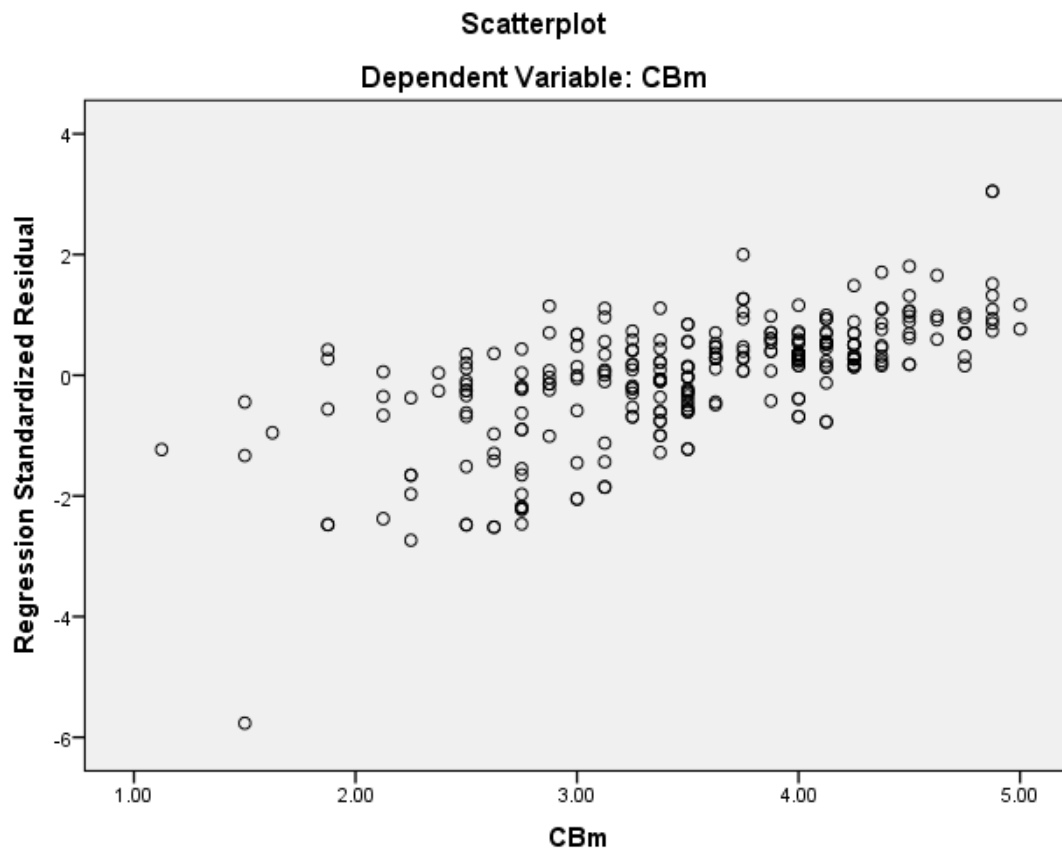


**Figure 4.2: Linearity**

**Source: Survey data, 2016**

#### **4.9.3 Test of Homoscedasticity**

According to Tabachnick and Fidell (2013), homoscedasticity presupposes uniform variability in scores for the dependent variable in relation to the independent factors and is applicable to multiple regressions. By employing the standardized residual scatter plot, homoscedasticity was assessed (Figure 4.3). Variables were predicted to result in oval or elliptical scatter plots in order for this assumption to be true. Results shown in Figure 4.3 show that there was no violation of the homoscedasticity requirement, with oval scatter plots present in every cell.



**Figure 4. 3: Homoscedasticity**

**Source: Survey data, 2016**

#### **4.9.4 Test of Autocorrelation**

The correlation between regression residuals is measured by autocorrelation (Tabachnick and Fidell, 2013). When elements like time and distance are connected to the sequence in which examples are taken, the assumption of independence of mistakes is occasionally broken. Therefore, the Durbin-Watson statistic, which is regarded as a measure of autocorrelation of mistakes when the order of instances is taken into account, was used to evaluate the independence of errors (Tabachnick & Fidell, 2013).

The crucial values of  $1.5 < d < 2.5$  were utilized in this test to look for the existence of autocorrelation. Therefore, it was determined that a Durbin-Watson statistic that fell

between the two crucial levels indicated that the multiple linear regression data lacked first order linear auto-correlation. Results shown in Table 4.17 show that there was no auto-correlation in the multiple linear regression data since the Durbin-Watson statistic,  $d=1.664$ , was between the two crucial levels.

**Table 4.17: Autocorrelation**

<b>Model Summary</b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.759 <sup>a</sup>	.576	.570	.50576	1.664

a. Predictors: (Constant), PM, HRP, PRP, UMR

b. Dependent Variable: CBP

#### 4.9.5 Test of Multicollinearity

When independent variables or predictors have a high degree of correlation with one another, multicollinearity results (Vatcheva, Lee, McCormick, & Rahbar) (2016). Because of the potential for overlapping information, it may not be practicable to assume that the interpretation of the regression coefficient is ascribed to one variable while maintaining other variables constant in the presence of multicollinearity. The Variance Inflation Factor (VIF), a measure of the increase in variance of an estimated regression coefficient when there is correlation among the variables (Tabachnick & Fidell, 2013), was used in SPSS to check for multicollinearity. As stated in Table 4.18, the general guideline is that a VIF value should be fewer than ten and tolerance should be larger than 0.2 (Keith, 2006; Shieh, 2010). The results demonstrate that multicollinearity was not a problem in the current study because all of the VIF values were below the threshold values of 10 and the tolerance values were more than 0.2.

**Table 4.18: Collinearity Diagnostics**

<b>Coefficients<sup>a</sup></b>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	HRMP	.276	3.620
	UMR	.274	3.645
	PRP	.301	3.319
	PM	.791	1.265

a. Dependent Variable: CBP

Source: Survey data, 2016

#### 4.10 Multiple Regression Analysis

Multiple regression analysis was used to analyze the relationship between a single dependent variable and several predictor variables (Hair *et al.*, 2010). The regression coefficient summary was then used to explain the nature of the relationship between the dependent and independent variables. The coefficient of determination (R square) was used as a measure of the explanatory power, to show how the independent variable explains the dependent variable. Adjusted R square was used as a measure of explanatory power of the independent variable in exclusion of the dependent variable. The regression coefficient summary was used to explain the nature of the relationship between the independent variables, moderator and the dependent variable. The researcher used multiple regression analysis to test the first four null hypotheses.

##### 4.10.1 Model Summary

According to Table 4.19's summary of the multiple regression model's coefficient of determination (R squared), which is .576, the industrial relations environment may account for 57.6% of the variation in the collective bargaining process. The adjusted R square of .570 shows that, when the constant variable is excluded, the overall industrial relations environment accounts for 57% of the variation in the collective



bargaining process. Other elements that were not considered in the model can account for the remaining percentage.

**Table 4.196: Model Summary**

Model	R	Adjusted R Square	Std. Error of Estimate	Change Statistics						
				R Square Change	F Change	df1	df2	Sig. Change	F	
1	.759 <sup>a</sup>	.576	.570	.50576	.576	94.050	4	277	.000	

a. Predictors: (Constant), PM, HRP, PRP, UMR

**Source: Survey data, 2016**

#### 4.10.2 Analysis of Variance

To determine if the model could considerably better match the outcome than using the mean, the analysis of variance was utilized as indicated in (Table 4.20). The collective bargaining process at Kenya's public universities is significantly influenced by the industrial relations environment, according to the regression model using that environment as a predictor ( $F=94.05$ ,  $p$  value =0.000).

**Table 4.207: Analysis of Variance**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	96.229	4	24.057	94.050	.000 <sup>b</sup>
	Residual	70.854	277	.256		
	Total	167.083	281			

a. Dependent Variable: CBP

b. Predictors: (Constant), PM, HRP, PRP, UMR

#### 4.11 Results of Hypothesis Testing (Direct Effect)

The hypotheses of the study were tested using multiple regression and the moderation effect was tested using hierarchical multiple regression. The rejection or acceptance point of the hypothesis was determined at P-value of less or greater than 0.05.

A multiple linear regression analysis was performed to test the direct effects. The joint prediction of all independent variables as shown in table 4.21 below was statistically significant ( $f=121.271$ ,  $p<0.05$ ). The combined prediction of industrial relations environment dimensions accounted for approximately 56.7% of the total variation in collective bargaining process ( $R^2 = 0.567$ , Adjusted  $R^2 = 0.570$ ). Based on the collinearity statistics, the VIF values were less than 10 and the tolerance values were all above 0.2 indicating that multicollinearity was not a problem in the study.

**H<sub>01</sub>: HRM practices have no significant relationship on collective bargaining process in public universities in Kenya.**

**Hypothesis 1(H<sub>01</sub>)** stated that HRM practices have no significant relationship on collective bargaining process in public universities in Kenya. The findings showed that HRM practices had coefficients of estimate which was significant basing on  $\beta_1 = 0.388$  ( $p\text{-value} = 0.000$  which is less than  $\alpha = 0.05$ ). Thus, the alternative was accepted and the null hypothesis was rejected, leading to the conclusion that HRM practices have a positive and significant impact on the collective bargaining process. According to this, the collective bargaining process might grow by up to 0.388 units for every unit increase in HRM practices. The t-test value of 5.098 demonstrated that the effect of HRM practices was greater than 5 times the effect attributable to the mistake.

**H<sub>02</sub>: Union-management relations have no significant influence on collective bargaining process in public universities in Kenya.**

**Hypothesis 2(H<sub>02</sub>)** stated that union management relations have no significant relationship on collective bargaining process in public universities in Kenya. Findings showed that UMR had coefficients of estimate which was significant basing on  $\beta_2 =$

0.204, p-value = 0.005 which is less than  $\alpha = 0.000$  hence it was concluded that UMR had a positive and significant effect on collective bargaining process and the null hypothesis was therefore rejected and the alternative accepted. This suggested that there was up to 0.204 unit increase in collective bargaining for each unit increase in UMR. The effect of UMR was more than 2 times the effect attributed to the error, this was indicated by the t-test value = 2.736.

**H<sub>03</sub>: Power relation of parties to collective bargaining has no significant influence on collective bargaining process in public universities in Kenya.**

Hypothesis 3 (H<sub>03</sub>) stated that power relation of parties to collective bargaining has no significant relationship on collective bargaining process in public universities in Kenya. Findings showed that power relation of parties had coefficients of estimate which was significant basing on  $\beta_3 = 0.228$  (p-value = 0.000 which is less than  $\alpha = 0.05$  hence the null hypothesis was rejected and the alternative hypothesis accepted. It was therefore concluded that power relations of parties to CB has a positive and significant effect on collective bargaining process. This suggested that there was up to 0.228 unit increase in collective bargaining for each unit increase in PRP. The effect of PRP was more than 3 times the effect attributed to the error, this was indicated by the t-test value = 3.062.

#### 4.12 Regression Results for Direct Effects

**Table 4.21: Regression Results for Direct Effects**

	Unstandardize d Coefficients	Standardize d Coefficient s			Collinearity Statistics	
	B	B	t	Sig.	Toleran ce	VIF
(Constant)	.497 (.164)		3.032	0.03		
<b>Control Variables</b>						
Age	.022 (.032)	0.042	.691	.490	.975	1.026
Gender	.136 (.093)	0.038	.621	.535	.975	1.026
<b>Independent Variables</b>						
HRP	.388* (.076)	0.382	5.098	.000	0.277	3.612
UMR	.204* (.074)	0.205	2.736	.007	0.278	3.600
PRP	.228* (.074)	0.218	3.062	.002	0.307	3.257
<b>Model summary</b>						
<i>R</i>	.753a					
<i>R</i> <sup>2</sup>	0.567					
<i>Adjusted R</i> <sup>2</sup>	0.562					
<i>Std. Error Estimate</i>	0.510					
<i>R Square Change</i>	0.567					
<i>F Change</i>	121.71					
<i>Sig. F Change</i>	.000					
Dependent Variable: Collective Bargaining						

\*  $p < 0.05$

VIF = value inflation factor, HRP = Human Resource Practices, UMR = Union Management Relations, PRP=Power Relation of Parties

**Source: Survey Data, 2016**

#### **4.13 Moderating effect of Participatory Management on the Relationship between IRE Dimensions and CBP**

At order to determine how participatory management affected the link between the elements of the industrial relations environment and the collective bargaining process in Kenya's public universities, a hierarchical multiple regression analysis was used. The first model represented the respondents' age and gender as control variables, whereas model 2 represented the respondents' age and gender as independent variables related to the industrial relations environment. The moderator of Model 3 was participatory management. The interaction impact between the industrial relations environment aspects and participatory management was represented by models 4, 5, and 6. (Table 4.22).

Multiple hierarchical regression models were used in this section's stepwise analysis to assess the fourth hypothesis. The link between the elements of the industrial relations environment and the collective bargaining process was examined using moderated multiple regression analysis to quantify the interaction effect and assess the moderating impact of participatory management. In Kenyan public universities, the interactions between human resource management practices, union management relations, and power relationships between parties to collective bargaining and the collective bargaining process were examined to see if participatory management could moderate these relationships.

The study adopted the advice from Baron and Kenny (1986) and Aiken and West (1991) to standardize all of the predictor variables in order to minimize the multicollinearity issue that could occur when a moderator variable is computed as a product of predictor variables. Interacted variables were transformed to Z scores with

a mean of zero and a standard deviation of one to prevent the possibility of multicollinearity that results from multiplying two existing variables to generate a new variable. Therefore, by regressing the standardized variables collectively, the interaction variables were produced.

Step 1 introduced the control variable; step 2 introduced the three independent variables; they were Human resource management practices, Union management relations, and Power relation of parties to CB, and they were entered with the following hypotheses: Human resource management practices has no effect on collective bargaining process in public universities in Kenya, Union management relations has no effect on collective bargaining process in public universities in Kenya. Step 3 involved adding the moderator variable of participatory management to the model.

The following introduced and described step 4, step 5, and step 6 interactions of participative management and the three variables of industrial relation environment dimensions. First, it was proposed that the link between human resource management methods and the collective bargaining process at Kenyan public institutions would not be moderated by participatory management (sub-hypothesis HO4a). Second, it was proposed that the link between union management relations and the collective bargaining process in Kenya's public institutions would not be moderated by participatory management (sub-hypothesis HO4b). The link between the power relations of the parties and the collective bargaining process was anticipated not to be moderated by participatory management in Kenya's public universities. (sub-hypothesis HO4c).

#### **4.13.1 Model Summary on Interactions between Participatory Management on relationship between IRE Dimensions and CBP**

Hierarchical regression model summary results on participatory management interaction with industrial relation environment dimensions and collective bargaining process in public universities in Kenya indicated that the three independent variables explained 56.7% ( $R^2 = 0.567$ ) of the variance in collective bargaining process in public universities in Kenya and were statistically significant as shown in model 2 as shown in Table 4.22. However, the control variable only explained 0.3% of the collective bargaining process ( $R^2=0.003$ )

The goal of the study was to ascertain how the collective bargaining process at Kenya's public universities was impacted by the industrial relations environment aspects. It was anticipated that a university would accomplish a successful collective bargaining process and remain competitive if it decided to apply industrial relation environment characteristics of Human resource practices, Union management interactions, and Power relation of parties. Regression analysis revealed, as depicted in Model 2, that the collective bargaining process had a significant positive relationship with human resource management practices, union management relations, and power relationships between parties. Model 3 demonstrates that the three independent variables significantly explained 56.7% ( $R^2 = 0.567$ ) of the variance in the collective bargaining process in Kenya's public universities..

The moderator, participatory management explained only 57.6% ( $R^2 = 0.576$ ) of the variance in collective bargaining process thus contributing an additional  $R^2$  of 0.009 (0.9%) which was significant as shown in model 3. Model summary interaction results shows that model 4 interaction of Human resource management practices and Participatory management (HRP\*PM) explained 58.3% ( $R^2 = 0.583$ ) of the variance in

collective bargaining process in public universities in Kenya which resulted in  $R^2$  change of 0.007 (0.7%) which was significant as shown in model 4.

In addition, interaction of Union management relations and participatory management (UMR\*PM) explained 58.5% ( $R^2 = 0.585$ ) of the variance in collective bargaining process in public universities in Kenya. This contributed  $R^2$  change of 0.002 (0.02%) which was not significant as shown in model 5. The interaction of Power relation of parties to CB and participatory management (PRP\*PM) explained 58.5% ( $R^2 = 0.585$ ) of the variance in collective bargaining process in public universities in Kenya. This contributed  $R^2$  of 0.000 (0%) which was not significant as shown in model 6.

#### **4.13.2 ANOVA on Interactions between Participatory Management on the relationship between IRE Dimensions and CBP**

As described in Table 4.22, the results suggested by models 2, 3, 4, 5, and 6 demonstrated strong model fit as demonstrated by an overall test of significance with a p value of 0.000 ( 0.05 level of significance). To put it another way, the independent variables, moderator, and the three interactions all served as statistically significant predictors of the Kenyan public universities' collective bargaining process. Models 2 through 6 might accurately and appropriately forecast the collective bargaining process at Kenya's public universities by combining participatory management with the interactions of the three independent variables. To measure the validity of the model, F-statistics were used. In model 1, F-statistics ( $F = .373$ , p-value  $>0.05$ ) show that there was no significant relationship between control variables age and gender on collective bargaining process in public universities in Kenya. In model 2, F-statistics ( $F = 72.298$ , p-value  $< 0.05$ ). This shows that there is a significant relationship between



Human resource management practices, Union management relations, Power relation of parties and collective bargaining process in public universities in Kenya.

When participatory management was added into the analysis, the resulting model (Model 3) was statistically significant ( $F= 62.276$ ,  $p\text{-value} < 0.05$ ) suggesting that participatory management is a significant predictor of collective bargaining process in public universities in Kenya. Finally, when the product terms were introduced into the analysis (Model 4), the F-statistics ( $F = 54.64$ ,  $p\text{-value} < 0.001$ ), (Model 5), the F-statistics ( $F = 48.128$ ,  $p\text{-value} < 0.001$ ), (Model 6), the F-statistics ( $F = 42.648$ ,  $p\text{-value} < 0.001$ ) the model was statistically significant suggesting that independent variables (Human resource management practices, Union management relations and Power relation of parties to CB), participatory management and moderated variables were significant predictors of collective bargaining process in public universities in Kenya ( see table 4.22.)

#### **4.13.3 Coefficients of Interactions between Participatory Management on the relationship between IRE Dimensions and CBP- Indirect effects**

The  $\beta$  coefficients for industrial relation environment dimensions as independent variable, participatory management and collective bargaining process were generated from the model, in order to test the hypotheses of the study. The t-test was used as a measure to establish the interaction effect of participatory management on the relationship between industrial relation environment dimensions and collective bargaining process in public universities in Kenya (See appendix X).

In model 1 the regression coefficients for control variables and collective bargaining process in public universities in Kenya indicated that age ( $\beta = 0.028$ ,  $t = .691$ ,  $P > 0.05$ ) and gender ( $\beta = 0.075$ ,  $t = .621$ ,  $P > 0.05$ ) were not statistically significant. In

model 2 the regression coefficients for industrial relation environment dimensions and collective bargaining process in public universities in Kenya indicated that Human resource practices ( $\beta_1 = 0.384, t = 5.09, P < 0.05$ ) and Power relation of parties to CB ( $\beta_2 = 0.203, t = 2.688, P < 0.05$ ) and Union management relations ( $\beta_3 = 0.218, t = 3.05, P < 0.05$ ) were statistically significant as shown in Table 4.22. This study therefore met the criteria of introducing a moderator, since moderator variable was considered to exist when the relationship between a predictor variable and the dependent variable was strong.

In model 3 it was possible to accurately assess the true impact of participatory management on collective bargaining process in public universities in Kenya. The hierarchical regression results indicated that participatory management ( $\beta_4 = .107, t = 2.42, P < 0.05$ ), was positive and statistically significant predictor of collective bargaining process in public universities in Kenya. This indicated that participatory management at this stage was a moderator as it influenced collective bargaining process in public universities in Kenya.

The regression coefficients of interaction between Human resource management practices and participatory management on collective bargaining process in public universities in Kenya ( $\beta_{4a} = .628, t = 2.08, P < 0.05$ ). The interaction was significant in the full model. Hypothesis  $H_{04a}$  stated that participatory management does not moderate the relationship between Human resource management practices and collective bargaining process in public universities in Kenya. The results led to rejection of hypothesis  $H_{04a}$ . This confirmed that participatory management moderates the relationship between Human resource management practices and collective bargaining process in public universities in Kenya.

The regression coefficients of interaction between Union management relations and participatory management on collective bargaining process in public universities in Kenya ( $\beta_{4b} = -0.996$ ,  $t = -1.28$ ,  $P > 0.05$ ). The interaction was not significant in the full model. Hypothesis  $H_{04b}$  stated that participatory management does not moderate the relationship between Union management relations and collective bargaining process in public universities in Kenya. The results led to acceptance of the hypothesis  $H_{04b}$ . This confirmed that participatory management does not moderate the relationship between Union management relations and collective bargaining process in public universities in Kenya.

The regression coefficients of interaction between Power relation of parties and participatory management on collective bargaining process in public universities in Kenya ( $\beta_{4c} = -0.205$ ,  $t = -0.305$ ,  $P > 0.05$ ). The interaction was not significant in the full model. Hypothesis  $H_{04c}$  stated that participatory management does not moderate the relationship between Power relation of parties to CB and collective bargaining process in public universities in Kenya. The results led to acceptance to reject of hypothesis  $H_{04c}$ . This confirmed that participatory management does not moderate the relationship between Power relation of parties to CB and collective bargaining process in public universities in Kenya.

Table 4.22 shows that Human resource management practices had the most significant positive contribution to collective bargaining process in public universities in Kenya ( $\beta = 0.384$ ). This was followed by power relation of parties to CB ( $\beta = 0.218$ ) and finally Union management relations ( $\beta = 0.203$ ) with positive relationships with collective bargaining process in public universities in Kenya. When participatory management was introduced into the analysis, there was a significant positive

relationship between participatory management and collective bargaining process in public universities in Kenya ( $\beta = 0.107$ ). The introduction of participatory management reduced the strength of the relationship between Human resource management practices, Union management relations and Power relation of parties to CB and collective bargaining process in public universities in Kenya.

When the interactions were introduced into the analysis, the resulting model (Model 4) showed a positive and significant relationship between Human resource management practices and collective bargaining process in public universities in Kenya. However, when the moderator was added to the Union management relations as well as Power relations of parties to CB, it indicated negative and insignificant relationship with collective bargaining process in public universities in Kenya. This suggested that participatory management had significant moderating effect on the relationship between Human resource management practices and collective bargaining process in public universities in Kenya. However, it antagonized the relationship between union management relations as well as Power relations of parties to CB and collective bargaining process in public universities in Kenya (See Appendix X).

**Table 4.228: Regression Coefficients of Interactions between Participatory Management on the relationship between IRE Dimensions and CBP –Indirect effects**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Constant)	-.192 (.238)	.001 (.158)	-.033 (.157)	-.031 (.156)	-.032 (.156)	-.033 (.156)
<b>Control Variables</b>						
Age	.028 (.041)	.007 (.027)	.007 (.027)	.006 (.027)	.006 (.027)	.006 (.027)
Gender	.075 (.121)	-.014 (.080)	.008 (.080)	.009 (.080)	.011 (.080)	.011 (.080)
<b>Independent Variables</b>						
Human Resource Management Practices		.384* (.076)	.374 * (.075)	-.071 (.227)	-.701 (.541)	-.742 (.558)
Union Management Relations		.203* (.075)	.184 * (.075)	.169 * (.075)	.876 (.556)	.781 (.638)
Power Relations of Parties moderate		.218* (.071)	.194 * (.072)	.212 * (.072)	.209* (.072)	-.351 (.471)
Participatory Management			.107* (.044)	-.185 (.147)	-.145 (.151)	-.137 (.153)
<b>Interactions Effects</b>						
Human Resource Management Practices*Participatory Management				.628* (.302)	1.518* (.756)	1.575* (.781)
Union Management Relations*Participatory Management					-.996 (.777)	-.860 (.896)
Power Relations of Parties to CB*Participatory Management						-.205 (.672)
<b>Model Summary</b>						
<i>R</i>	.052	.753	.759	.763	.765	.765
<i>R</i> <sup>2</sup>	.003	.567	.576	.583	.585	.585
<i>Adjusted R</i> <sup>2</sup>	-.004	.559	.567	.572	.573	.572
<i>Std. Error of Estimate</i>	1.002	0.664	0.658	0.654	0.653	0.655
<i>R</i> <sup>2</sup> change	.003	.564	.009	.007	.002	.000
<i>F</i> change	.373	119.93	5.836	4.316	1.644	.093
<i>Sig. F</i> change	.689	.000	.016	.039	.201	.760
<b>ANOVA</b>						
<i>F</i>	.373	72.298	62.276	54.64	48.128	42.648
<i>Sig.</i>	.689	.000	.000	.000	.000	.000

Dependent Variable: Collective Bargaining Process

*N* = 282, \* = *P* < 0.05

Source: Survey Data, 2016

#### 4.14 Summary of Hypotheses Testing

Table 4.23 presents the summary of test of hypotheses by comparing using the 5% level significant ( $P < 0.05$ ). From the findings the null hypotheses  $H_{01}$ ,  $H_{02}$ ,  $H_{03}$ ,  $H_{04a}$ , were rejected and hypotheses  $H_{04b}$  and  $H_{04c}$  were accepted. Hypothesis **H<sub>01</sub>** stated that HRM practices have no significant influence on collective bargaining process in public universities in Kenya ( $\beta_1 = 0.388$  and  $p < 0.05$ ). Since the  $p$  value was less than 0.05 the null hypothesis (**H<sub>01</sub>**) was rejected and the alternative accepted. This indicates that human resource management practices had a positive and significant influence on collective bargaining process in public universities in Kenya.

Hypothesis **H<sub>02</sub>** stated that union-management relations have no significant influence on collective bargaining process in public universities in Kenya ( $\beta_1 = 0.204$ ,  $p < 0.05$ ). The null hypothesis (**H<sub>02</sub>**) was rejected and the alternative accepted. This indicates that union-management relations had a positive and significant influence on collective bargaining process in public universities in Kenya.

Hypothesis **H<sub>03</sub>** stated that power relation of parties to CB collective bargaining has no significant influence on collective bargaining process in public universities in Kenya ( $\beta_1 = 0.228$  and  $p < 0.05$ ). The null hypothesis (**H<sub>03</sub>**) was therefore rejected and the alternative accepted. This indicates that power relation of parties to CB had a positive and significant influence on collective bargaining process in public universities in Kenya.

Hypothesis **H<sub>04a</sub>** stated that participatory management does not moderate the relationship between Human resource management practices and collective bargaining process in public universities in Kenya ( $\beta_{4a} = 0.628$  and  $p < 0.05$ ). The results led to rejection of hypothesis **H<sub>04a</sub>** and the alternative accepted. This confirmed that

participatory management positively and significantly moderates the relationship between Human resource management practices and collective bargaining process in public universities in Kenya.

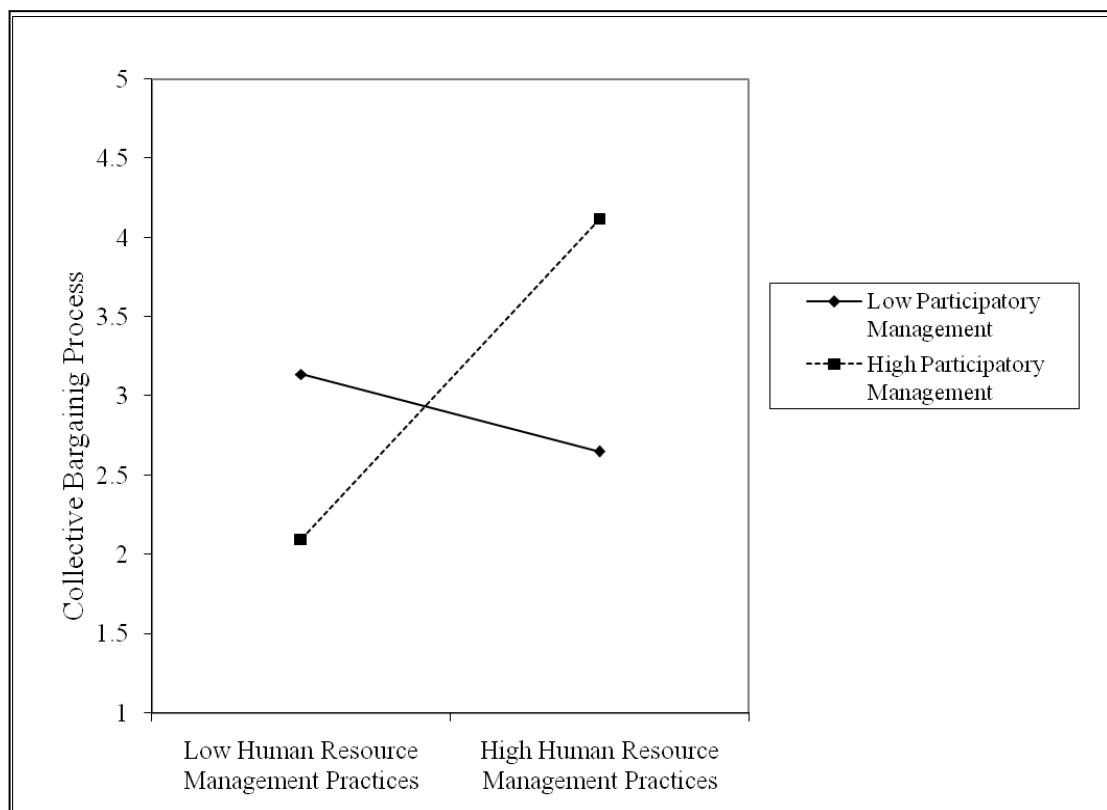
Hypothesis **H<sub>04b</sub>** stated that participatory management does not moderate the relationship between Union management relations and collective bargaining process in public universities in Kenya ( $\beta_{4b} = -0.996$  and  $p > 0.05$ ). The results led to acceptance of hypothesis **H<sub>04b</sub>**. This confirmed that participatory management negatively and insignificantly moderates the relationship between Union management relations and collective bargaining process in public universities in Kenya.

Hypothesis **H<sub>04c</sub>** stated that participatory management does not moderate the relationship between Power relation of parties to CB and collective bargaining process in public universities in Kenya ( $\beta_{4c} = -0.205$  and  $p > 0.05$ ). The results led to acceptance of hypothesis **H<sub>04c</sub>**. This confirmed that participatory management negatively and insignificantly moderates the relationship between Power relation of parties and collective bargaining process in public universities in Kenya.

#### **4.15: Moderation Effect of Participatory Management Using Mod Graph**

Plotting them on a graph is the best approach to understand the type of interaction effect present in a regression model (Jose, 2008; Aiken and West, 1991). Mod graphs make it easier to understand the complicated nature of the model's interactions. To give a logical understanding of the effects of participatory management, the current study used Mod graphs (Fig. 4.4). So, at low and high levels of participative management, the relevance of the regression coefficient of human resource management techniques was evaluated.

The slopes in figure 4.4 show that at high levels of participatory management, Human Resource management Practices has a strong effect on collective bargaining process, while at low levels of participatory management, Human resources management practices have a lower effect on collective bargaining process in public universities in Kenya. Hence with proper human resource management practice policies and sufficient involvement of unions and management in negotiations, collective bargaining process will be enhanced and effective.



**Figure 4.4: Modigraph of Participatory Management on the link between Human Resource Management Practices and Collective Bargaining Process**  
**Source: Survey Data, (2016)**



**Table 4. 23: Summary of Test of Hypotheses Results**

<b>Hypothesis</b>	<b>Beta</b>	<b><i>p</i> Values</b>	<b>– Decision</b>
<b>Hypothesis Ho1:</b> HRM practices have no significant influence on collective bargaining process in public universities in Kenya	$\beta_1 = 0.388$	.000	Reject
<b>Hypothesis Ho2:</b> Union-management relations have no significant influence on collective bargaining process in public universities in Kenya.	$\beta_2 = 0.204$	.014	Reject
<b>Hypothesis Ho3:</b> Power relation of parties to collective bargaining has no significant influence on collective bargaining process in public universities in Kenya.	$\beta_3 = 0.228$	.007	Reject
<b>Hypothesis Ho4a:</b> Participatory management has no significant moderating effect on the relationship between HRM practices and collective bargaining process in public universities in Kenya.	$\beta_{4a} = 0.628$	.039	Reject
<b>Hypothesis Ho4b:</b> participatory management does not significantly moderate the relationship between UMR and collective bargaining process	$\beta_{4b} = -0.996$	0.201	Accept
<b>Hypothesis Ho4c:</b> participatory management does not significantly moderate the relationship between PRP and collective bargaining process.	$\beta_{4c} = -205$	0.760	Accept

\* $p < 0.05$

Source: Source: Survey Data, 2016

#### 4.16 Discussion of the Findings

The objective of the study was to test the moderating effect of participatory management on the relationship between IRE dimensions (HRPM, UM & PR to CB), and CBP and to determine the influence of HRM practices, union management relations and power relations of parties to collective bargaining on collective

bargaining process in public universities in Kenya. This section therefore provides a discussion of the results based on the hypotheses tested and whether they are supported or not by the key informant interviews findings and literature and theories.

#### **4.16.1 Relationship between HRM Practices and Collective Bargaining Process**

The study hypothesized that HRM practices has no significant relationship with collective bargaining process in public universities. However, the results indicated a positive and significant correlation between human resource management practices and collective bargaining process ( $r=0.723$ ,  $p < 0.01$ ). This result is confirmed by the regression results which showed that human resource management practices had a positive and significant effect on collective bargaining process ( $\beta=0.388$ ,  $p < 0.05$ ). The findings support the hypothesis that human resource management practices has a significant relationship with collective bargaining process in public universities in Kenya. With human resource practices at the forefront, the best possible outcome is obtained during the collective bargaining process.

Interviews conducted on key informants in both universities revealed that the universities had Human Resource Management Policies. These policies provide guidelines on managerial and operational decision making to facilitate achievement of university goals and objectives. Specifically the policies cover such areas as working hours, promotions and demotions, transfers, grievance handling among others.

The findings are in line with that of Carson (2011) who concluded that HRM practices brings about social harmony by ensuring that each workman's interest is the same as that of the employers. Besides, discussions in Machin and Wood (2005) together with Godard, (2009) affirmed that workers are capable of voicing their concerns without the need of third party mediations mainly due to merit and performance related pay

and communication methods. Human resource management practices are not any different since the university management directly communicates with the employees without the need of intermediaries when it comes to issues such as employees' development plans and their views on the collective bargaining process. Evidently, not much has been done with respect to the link between human resource management practices and collective bargaining process. As such, the study has offered sufficient insights as a point of reference for similar studies in the sphere of collective bargaining process.

#### **4.16.2 Relationship between Union Management Relations and Collective Bargaining Process**

The study hypothesized that union management relations has no significant relationship with collective bargaining process in public universities in Kenya. However, the results indicated a positive and significant correlation between union management relations and collective bargaining process ( $r=0.690$ ,  $p<0.01$ ). This result is confirmed by the regression results which showed that union management relations had a positive and significant effect on collective bargaining process ( $\beta=0.204$ ,  $p<0.05$ ). The findings support the hypothesis that union management relations have a significant relationship with collective bargaining process in public universities in Kenya.

Key informants in the interview reported that union leaders have their own lines of communication while management also have their own. But when it comes to decision making, management normally prevails over unions. Furthermore, union leaders in reality do not have autonomy of their own as they are normally influenced by university management. On many occasions cases of breakdown in communication

have been reported in which case the union leaders resort to use of threats such as threat of strike.

Pyman et al. (2010) consistently discovered that co-operative partnerships demand active participation and relationship maintenance from both sides. Additionally, the author acknowledged that efforts are needed from all stakeholders, including companies, unions, and employees. Peetz and Fronst (2007) elaborated that mutual recognition and the development of trust between the parties are essential elements of cooperative relationships in order to further support the findings. The study's findings are in line with those of Rehman (2003), who claimed that it is crucial for both management and the union to negotiate a fair settlement between employees and employers. Armstrong (2011) found that future interactions between parties are more likely to be amicable if the parties in issue are equally eager to reach a win-win arrangement. This finding is consistent with the outcomes. Notably, the union-management connection is crucial to the process of collective bargaining. Despite the paucity of evidence on the relationship between union management relations and the collective bargaining process, it is obvious that the study's findings are consistent with that of the body of existing literature. The study has so provided significant understandings about the significance of cordial connections between management and union in the process of collective bargaining.

#### **4.16.3 Relationship between Power Relations of Parties to Collective Bargaining and Collective Bargaining Process**

The study hypothesized that power relations of parties to collective bargaining has no significant relationship with collective bargaining process in public universities. However, the results indicated a positive and significant correlation between power

relations of parties to collective bargaining and collective bargaining process ( $r=0.684$ ,  $p<0.01$ ). This result is confirmed by the regression results which showed that power relations of parties to collective bargaining had a positive and significant effect on collective bargaining process ( $\beta=0.228$ ,  $p<0.05$ ). The findings support the hypothesis that power relations of parties to collective bargaining has a significant relationship with collective bargaining process in public universities in Kenya. This is notwithstanding the fact that; the union always goes with the decision of the university management. In such an instance, employees benefit only if the university management has their best interests at heart.

As regards power relations of parties to collective bargaining, key informants in the interview revealed that most power normally rests with the universities. Management power style consists of a mixture of democratic and authoritarian style but lean more towards authoritarian style. Unions it was reported, normally use democratic style. It was further revealed that unions are normally excluded from management meetings except when disciplinary matters regarding one of their members are to be discussed.

Cognate to the above assertions, Trif (2005) noted that employers have generally more power than unions. Furthermore, more often than not, employers are unwilling to delegate power to employers' associations to negotiate on their behalf and this is detrimental to the development of voluntary collective bargaining. Consistently, Singh and Dannin (2002) found that employees who lack power cannot bargain as an equal party with the employer. Similarly, Freeman *et al.* (2007) elucidated that lack of power by low-wage workers is common both for workers in industrialized countries and developing countries. The results are also in tandem with findings by Cole (2003)

which established that collective bargaining is only possible when workers' and employers' organizations are equally strong and are aware of their rights and duties.

#### **4.16.4 Moderation effect of Participatory Management on the Relationship between Industrial Relations Dimensions and CBP**

The study hypothesized that participatory management has no moderation effect on the relationship between HRM practices and collective bargaining process in public universities. However, the results in table 4.23 model 4 showed that participatory management positively and significantly moderated the relationship between human resource management practices and collective bargaining process ( $\beta=0.628$ ,  $p<0.05$ ).

The results suggest that participatory management brings on board all parties involved in the collective bargaining process hence they are able to voice their specific concerns. In so doing there is a positive effect on the collective bargaining process since governments or organizations can make decisions which may enhance the power of trade unions when they implement human resource management practices such as increasing salary beyond the expectation of the unions while involving them.

Similarly the results in Table 4.23 revealed that participatory management negatively and insignificantly moderated the relationship between union management relations and collective bargaining process ( $\beta=-0.996$   $p>0.05$ ). The implication is that participatory management reduces the union management relations which in turn negatively influence the collective bargaining process.

The results in table 4.23 also indicates that participatory management negatively and insignificantly moderates the relationship between power relations of parties to collective bargaining and collective bargaining process ( $\beta=-0.205$ ,  $p>0.05$ ). The results imply that the relationship between power relations of parties and collective

bargaining process is weakened by participatory management in that the parties involved in the collective bargaining process will tend to increase their rivalry when they engage each other in the collective bargaining process. This means that participatory management will antagonize the collective bargaining process hence reducing success in the negotiations. This is because each member will play a part in the negotiations with divergent opinions and views and this raises rivalry during the collective bargaining process and this rivalry will enhance conflict during the negotiation and hence affecting the collective bargaining negatively.

In conformity with the results, Al-Tarawneh, (2012) posited that participatory management ensures that employees are involved in making decisions that touch on their day-to-day activities for the purpose of solving a problem or attaining better results with the opportunities that exist. This situation will not always be smooth since the parties will strive for their positions which will enhance antagonism during the negotiations and may delay negotiations and reaching agreements during the CBP.

#### **4.17 Summary**

This chapter presented analyses, presentation and discussion of findings from data collected in the field. The data collected was both quantitative and qualitative. Interpretations were also made in order to arrive at conclusions of the findings. The findings in this chapter have informed the conclusions and recommendations made in chapter five.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

The findings and recommendations based on the results studied are summarized in this chapter. The chapter concludes with recommendations for additional investigations that are seen to be crucial for the continuation of this study. Recommendations are provided based on the results.

#### 5.1 Summary of Findings

The main goal of this study was to determine how the environment for industrial relations affected collective bargaining and how participatory management influenced the link between IRE and CBP at Kenya's public universities. The study also deduced from the research hypotheses that the collective bargaining process at Kenya's public universities is not significantly influenced by HRM practices, union management relationships, or power dynamics among parties to the negotiations. Additionally, it was concluded that the link between the climate for labor relations and the collective bargaining process in Kenya's public institutions is unaffected by participatory management.

According to the study's findings, the bulk of the staff members at the public universities that were specifically targeted are middle-aged and have an average tenure of over seven years. The majority of the study's workers had a bachelor's degree, and both genders were quite well represented. Additionally, in the research, the bulk of the staff members were security officers, with technologists, librarians, and clerical staff making up the minority.



The majority of respondents, according to the results of the survey on human resource management practices, agreed that university administration should meet with employees to talk about their growth aspirations. Additionally, personnel were always offered the chance to join a task group that was unrelated to their primary duties. Additionally, management understands the importance of workers in attaining the objectives of the institution and engages in good communication with employees on matters pertaining to the collective bargaining process. In a similar vein, management gives staff members the freedom to make their own judgments. Apart from that, the university fosters an atmosphere of openness and trust. Also, the institutions had a clear staff development program. In addition, the management spends a great deal of time listening to employees' views on issues relating to collective bargaining progress. For the employees, majority of them confirmed that they find meaning in their work.

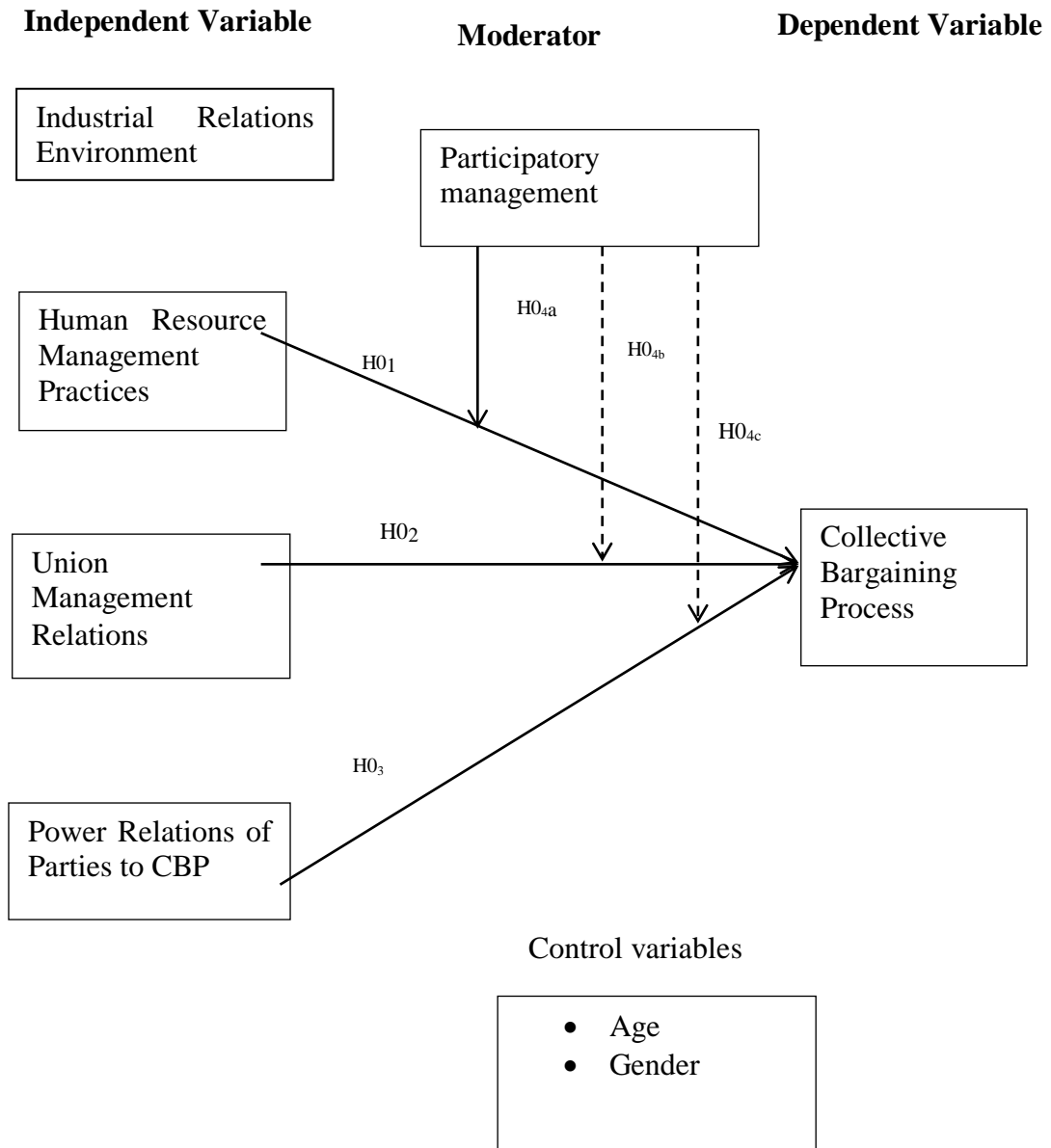
The study's findings regarding union-management ties showed that there was collaboration between the two. Additionally, both the management and the union had respect for one another and were prepared to talk to one another. A cooperative participation between management and the union is also present. Additionally, problems and disagreements were amicably settled between the union and university administration. Additionally, the management of the institution has a positive approach toward the union. Additionally, communication between the union and university administration is open. The union also thought the management was friendly.

The findings on power relation of parties to collective bargaining established that majority of the respondents were of the opinion that the union does not enjoy strong

support from its members. There was, however, doubt if the union bargains as an equal partner with the university management. Despite this, according to majority of the respondents, the union always goes with the decision of the university management. Also, the university management is always ready to lock out staff whenever there is a dispute. The challenge is that the government does not support harmonious union management relations. Furthermore, majority of the respondents disagreed that KUSU always bargains more for its members. Besides, KUSU rarely stages successful strike though the government plays its role well in the tripartite industrial relations system.

Finally, findings on participatory management revealed that each member's ideas are of value to the organization thus they feel they have a say in decision making. However, the respondents do not feel the unions' presence especially with matters to do with improving members' job performance. Similarly, there are gaps in terms of members' involvement in budget making. Further, it is only on rare occasions that the university allows members of KUSU to participate in solving university problems. Further, in few instances the respondents are involved in major decision making. In certain cases, the flow of information is not as it should be as well as the networking opportunities that encourage members to make suggestions. In addition, it could be that not all of the employees are involved in collective bargaining. Likewise, there are gaps in terms of visitations to trade union offices. In the same vein, the respondents are rarely called by their union representative in open discussions. However, the members have an individual who can channel their issues to the trade union.

### 5.2 Revised Conceptual Framework



P<0.05

**Figure 5.1: Revised Conceptual Framework**

Source: Researcher, 2016

- > Significant Relationship
- - - - -> Non-significant Relationship

### **5.3 Conclusions of the Study**

Evidence from the study indicates that a positive and significant link exists between human resource management practices and collective bargaining process in public universities in Kenya. The reason for this is that, the university management is actively involved in the affairs of its employees. Particularly, the management meets with the employees to discuss on their development plans. Other than that, employees have the opportunity to gain expertise outside their core responsibility since the management ensures that they are part of task groups outside their areas of specialization. Besides, on issues relating to the collective bargaining process, employees' views are the central themes in these engagements which further facilitates openness and trust in the universities. In a nutshell, there are concerted efforts towards the overall development of the human resource management in public universities in Kenya as stipulated in the current CBAs between unions and university management and by extension university councils.

Also, the union management relations are a critical factor in the collective bargaining process. Without doubt, the union management relations positively and significantly influence collective bargaining process in public universities in Kenya. This is indicative of the fact that, the union and management have the willingness to consult and negotiate for the benefit of both parties. In actual fact, both parties are interdependent of each other thus under conditions of mutual trust, joint participation and free exchange of information, the union and management understand each other better. In such a case, conflicts and disputes are resolved amicably resulting in mutual gains in the collective bargaining process. Consequently, for a win-win agreement between the union and management, the relationship between both parties needs to be strengthened.

There are a number of challenges with reference to power relations of parties to CB. It is evident that the union that is meant to represent employees does not receive much support from its members. This could be because the union always goes with the decision of the management. The bargaining power of the employees is further worsened since the staff are in most cases locked out when there is a dispute. With the above put into consideration, it can be concluded that the unions are weak since they lack support from their members and they rarely stage successful strikes. This is in accordance with Abbott; Heery; and Williams (2012) who posited that union power is often associated with high levels of membership and the frequency of strike activity. Despite this, power relations of parties to CB exhibited a positive effect on the collective bargaining process. The results mean that if the inconsistencies in power relations of parties to CB are addressed, significant success is likely to be realized in the collective bargaining process in the two public universities and by extension other public universities in Kenya.

Participatory management considerably and favorably modifies the interaction between HRM practices and the collective bargaining process. This suggests that since the conflictual behaviors associated with union practices are positively impacted when human resource management practices are implemented in universities, the negotiating power of the unions tends to increase. This is because organizations will provide sufficient compensation, welfare and other necessities to employees without the instigation of the unions. This will then increase union power since they have nothing to bargain for hence rendering them irrelevant in some cases. This then means unions in the era of Human resource management practices have to seek for new strategies for survival, relevance and existence.

The moderated regression results indicate that participatory management moderates the relationship between industrial relations environment and collective bargaining process, for example it negatively and insignificantly moderates the relationship between union management relations and collective bargaining process which implies that participatory management antagonizes the relationship between UMR and CBP since it brings interaction, communication and sharing of views and opinions which antagonizes the process of collective bargaining process.

The relationship between power relations of parties to collective bargaining and collective bargaining process is negatively and insignificantly moderated by participatory management since it encourages rivalry in negotiation and sharing of views during collective bargaining process, it reduces power relations of parties as rivalry and controversies tend to increase leading to difficulty in the negotiations and reaching agreements during the CBP.

It can therefore be concluded that participatory management moderates the relationship between industrial relations environment and collective bargaining process except that it antagonizes the relationship between UMR, PRP and CBP. Organizations will therefore, need to take note of this by balancing the involvement of employees in CBP so as to evolve effective collective bargaining process and hence come up with an harmonious and conducive industrial relations environment in the work place which will enhance efficiency, effectiveness and productivity.

#### **5.4 Contribution of the Study to Theory and Knowledge**

The study contributes to our understanding of how the environment for labor relations and the collective bargaining process in Kenya's public universities interact. The study

backs up the theories that the collective bargaining process is influenced by HRMP, union management, and parties' power relationships.

It also supports the proposition that participatory management influences the relationship between human resource management practices and collective bargaining ( $\beta_0 = 0.628$ ) implying that it has significant effect which also implies that it enhances collective bargaining process in Public Universities (see fig 4.4)

Finally, the study advances our understanding of the background of industrial relations in Africa, notably in Kenyan institutions. The literature study shows that emerging countries, particularly those on the African continent, have made little intellectual contributions on industrial relations (Payman et.al., 2010, Wood 2008 and Budhwar, 2003).

The study will therefore encourage additional research on the collective bargaining process and industrial relations environments from the developing world, adding new knowledge to the existing literature.

## **5.5 Recommendations of the Study**

This section points out the implications of the study for theory, practical implication, policy, limitations and suggestions for future research.

### **5.5.1 Theoretical Implications**

The study confirmed Dunlop's Systems Theory (1958 & 1973) and Douglas McGregor's Theory (1958) but negated Unitary Theory (Nick, 2010). First by introducing systems theory perspective the research presents an important justification for the significant effect of IRE dimensions on CBP in public universities. The tenets

of the systems theory were that an organization is an open system which influences its environment and also gets influenced by the environment (Singh, 2011).

The IR in its operations is regarded as comprising certain actors and a body of rules created to govern the actors at the workplace. The actors include managers and their organizations, the workers and their organizations, and the state and its agencies. The other contexts are the technical, market context and the power context. Hence, discussions and bargaining must be the preferred way to resolve disputes and conflicts among the actors. In support of this theory, the results of this study showed that IRE influences collective bargaining process. The study therefore contributed to theory by highlighting not only the role of tripartite relationship of trade unions management and the state but also the influence of IRE constructs i.e. HRMP, UMR and PRP on CBP in public universities in Kenya. The study results also support Magregor's theory Y (1958) which encourages participation of workers in decision making through quality circles, joint consultation and teamwork. This motivates the workers by encouraging collective bargaining process as a means of resolving industrial relations disputes.

Second, the Unitary Theory of IR was partially negated and partially supported by this study. The unitary theory perspective of IR assumes that the interests of the institution and those of the workers are congruent (Edward, 2002). Trade unions are, therefore, deemed as unnecessary in an organization (Adewole et al 2010). The assumption was contradicted in this study when the introduction of participatory management as a moderator was introduced in the relationship between UMR and PRP to CBP and CBP and the results were non-significant for UMR and PRP to CBP at  $P=0.201$  and  $P=0.76$  respectively. However, the moderation effect of PM on the relationship



between HRMP and CBP was significant at  $P=0.039$ . This shows that the unitary theory of IR was not wholly supported by the results of the study.

### **5.5.2 Practical Implications**

The study had practical implications. First, the people involved in CBP must embrace trust as a cardinal principle in CBP. Lack of trust which is caused by poor communication, non-implementation of CBAs and lack of respect for each party breeds frustration leading to industrial disputes.

Moreover, the study revealed that parties to CBP must be skilled in CBP, rules of procedure in negotiations and knowledgeable in IR matters. Lack of these important qualities result in break down in negotiations or delayed conclusion of CBAs. This study therefore, recommends that public universities should conduct continuous capacity building of participants in CBP in order to improve resolution of industrial disputes.

### **5.5.3 Policy Implications**

The study has produced several policy implications. First, by studying HRMP, Union Management Relations (UMR) and PRP to CBP in public universities in Kenya, useful insights have emerged for policy-makers. The policy areas include UMR and power relations of parties to collective bargaining process.

Descriptive statistics showed that there was a positive relationship between UMR and collective bargaining process in public universities (mean 0.379). However, the introduction of participative management as a moderator in the relationship between power relations of parties to collective bargaining process and collective bargaining process produced a negative and insignificant results ( $\beta = -0.996$ ,  $P=0.201$ ). This outcome suggested that participatory management negated the relationship between

union management relations and collective bargaining process. The results of interviews with KUSU members reinforced this outcome by suggesting that there were cases of breakdown in communication between union and management in public universities leading to, among others, delayed conclusion of CBAs, strike notices and delayed implementation of CBAs. The current policy regarding union management relations is stipulated in the recognition agreement between KUSU and university management which requires the two parties to negotiate as equal partners, in good faith and in atmosphere of trust. Hence, the study recommends that the two parties should implement the terms of the agreement fully as a way of improving the effectiveness of collective bargaining process in public universities.

Similarly, the results of power relations of parties to CBP and collective bargaining process produced positive results as far as descriptive statistics were concerned (mean 3.76) however, when participatory management was introduced as a moderator in the relationship between power relations of parties to collective bargaining and collective bargaining process the moderation results were negative and insignificant ( $\beta=-0.205$ ,  $P=0.760$ ). This result indicated that participatory management did not support the relationship between power relations to parties to collective bargaining and collective bargaining process.

The study therefore recommends that university management should be conducting meetings online in order to ensure full attendance, both university management and union leaders should change their attitude towards each other so that they can be able to negotiate in a positive atmosphere. Finally, the university should facilitate union leaders to attend collective bargaining seminars and workshops in order to change their attitudes, improve their skills and knowledge during collective bargaining process.

Public universities should create conducive environments for effective CBP by employing experts in CBP. The trade unions should also ensure that they hire experts in various fields like economics and law in order to enhance their negotiation abilities. The study results also suggest that public university management need to adopt participatory management approach and welcome conflict as a natural occurrence in union management relations. They need to learn to deal with union officials as equal partners in IR matters.

#### **5.5.4 Limitations of the Study**

Despite making significant contributions to the development of industrial relations theory and providing empirical evidence, this study remains limited in the following ways: First, the study was conducted using a sample of KUSU members from two public universities, Moi University in Uasin Gishu County and Masinde Muliro University of Science and Technology in Kakamega County, Kenya. Therefore, the study is limited to KUSU. However, the study addressed IRE and CBP issues which also affect other unions (UASU and KUDHEIHA) in public universities. Extending its findings to other public universities and private universities may be possible. The study serves to demonstrate that industrial relations environment does affect collective bargaining process.

Second, is that much of the data was collected using a self-reporting questionnaire. While this is an effective and efficient way of collecting data, it may not be free from respondents' bias. However, simple random sampling technique which was employed enabled every respondent to have an equal chance in the study.

Third, the study should have been conducted in all the 31 public universities, and their constituent colleges and satellite campuses in Kenya. Furthermore the study would

have covered the trade unions (KUSU) in all public universities. However, the findings of the study are valid and can be generalized to the field of industrial relations and work environment both empirically and theoretically since the data collected was rigorously analyzed and interpreted using appropriate descriptive and inferential research processes.

### **5.5.5 Suggestions for Future Research**

Based on the above stated limitations the study suggests future research on the following areas:

First, just three aspects of the industrial relations environment were studied: human resource management practices, union management interactions, and power dynamics between parties to collective bargaining. It was impossible to research every aspect that affects the outcome of collective bargaining. According to the results, the direct influence of the industrial relations environment accounts for 57% of the variability in the dependent variable, while the indirect effect of the collective bargaining process accounts for 58%. Therefore, it is clear that additional elements are at play and contribute to additional outcomes when it comes to the question of how the climate for industrial relations affects collective bargaining in Kenya's public institutions. There is therefore need to do further research on the factors not included in this study such as technology, political and economic for additional knowledge.

Second, the study was a cross-sectional survey that mostly depended on quantitative data. The respondents were expected to choose among clear alternatives on the instrument's items, although some replies required recalling the past, which can be challenging because certain aspects are dynamic in nature. This suggests that a longitudinal research would be more advantageous since it would give a better view

of the factors that determine the collective bargaining process at Kenya's public institutions.

Thirdly, future researchers may examine the same constructs of industrial relations environment, the independent variable and participatory management which is the moderating variable and collective bargaining process, the dependent variable using other analysis approaches such as Structural Equation Modeling (SEM) and PATH analysis for comparative purpose and additional knowledge.

Fourthly, this study used pragmatic paradigm and mixed approach. Other researchers could carry out a similar research using positivism and constructivism paradigms for comparative purposes and additional knowledge.

Fifthly, the study's conclusions are based on an analysis of how the environment for industrial relations affected the collective bargaining process at two Kenyan public universities. To broaden the scope of knowledge and theory in Kenya and beyond, future research should focus on the entire education sector as well as other areas in Kenya.

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## APPENDICES

### Appendix I: Questionnaire For KUSU Members

I am a PhD student in the school of Human Resource Development. I am carrying out research entitled **Industrial Relations Environment, Participatory Management and Collective Bargaining Process in Public Universities in Kenya**. I am requesting you to respond to the following questionnaire and return to the undersigned. The information provided is for academic purposes only and will be treated with utmost confidentiality. Please do not write your name anywhere in the questionnaire for objectivity.

Thank you for your cooperation and support.

Luka Yano Kuto

SHR/PHDH/08/14

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#### Instructions

Please fill in the needed information in the spaces provided or tick ( ✓ ) in the box that best describes the given instruction.

#### Section A: Personal Details

1. Your age in years  
 Below 35years                       35-40 years                       41-45 years   
 46-50years                       51-55 years                       56-60 years   
 Above 60 years
2. Your gender?  
 Male                       Female
3. For how long have you worked in public universities?  
 Below 7 years                       7-10 years                       Above 10 years
4. For how long have you been working in this university?  
 Less than 5 years                       5-10 years                       Above 10 years
5. Your highest academic qualification  
 Certificate                       Diploma                       Diploma  Degree   
 Postgraduate
6. Your                      designation                      in                      the                      university  
 .....
7. Please indicate your grade .....
8. Indicate your official designation in KUSU (if any).....

## Section B: Human Resource Practices and Collective Bargaining Process

Please state how much you agree or disagree with the following statements regarding human resource practices and collective bargaining process by ticking (✓) the appropriate box.

### Key

SD= strongly disagree D= disagree N=neutral A=agree SA= strongly agree

Item	SD	D	N	A	SA
The university management meets with employees to discuss employee's development plan.					
University employees are often given the opportunity to be part of a task group outside their core responsibilities.					
Management communicates effectively with employees on issues relating to CBP					
There is an environment of openness and trust in the university.					
Employees at the university are treated fairly and with respect during CBP					
Management style practices in the university is such that it empowers employees' to take responsibility for their own decisions					
The university has a clear staff development programme.					
The university management spends a good deal of time listening to employees' views on issues relating to CBP					
The university management supports employee welfare programmes					
The university employees find meaning in their work					

### Section C: Union-Management Relations and Collective Bargaining Process

Please indicate the degree to which you agree or disagree with the following statements by ticking (√) in the appropriate box

- How would you describe the following statements relating to industrial relations in your institution? (Check one)

#### Key

SD= strongly disagree D= disagree N=neutral A=Agree SA= strongly agree

Item	SD	D	N	A	SA
There is good corporation between the union and university management					
The university management and the union have mutual regard for each other					
The university management and the union are always willing to confer with each other					
The university management is always willing to facilitate union operations					
There is joint participation in decision making between union and the university management					
The university management and the union resolve conflict and disputes amicably					
The university management attitude is favourable to the union					
The university management and the union share information freely					
The union perceives the university management as cooperative					
The union has respect for university management					

### Section D: Power Relation of Parties to Collective Bargaining and Collective Bargaining Process

Please state how much you agree or disagree with the following statements regarding power relations of parties to collective bargaining and collective bargaining process by ticking (√) the appropriate box.

#### Key

SD= strongly disagree D= disagree N=neutral A=Agree SA= strongly agree

Item	SD	D	N	A	SA
The union has strong support of its members					
The union bargains as equal partner with the university management					
The university management always goes with the decision of the union					
The union always goes with the decision of the university management					
The university management is always ready to lockout staff whenever there is a dispute					
The government supports harmonious union management relations					
KUSU always bargains more for its members					
The university management recognizes the right of the union to organize and assemble					
The university management has a negative attitude towards the union					
KUSU rarely stages a successful strike					
The government plays its role well in the tripartite industrial relations system					

## SECTION E- PARTICIPATORY MANAGEMENT

Please state how much you agree or disagree with the following statements regarding participatory management in your institution by ticking (√) the appropriate box.

### Key

SD= strongly disagree D= disagree N=neutral A=Agree SA= strongly agree

	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
The university makes decisions that are based on every members' ideas					
The union suggests ways to the university of improving member job performance					
The university allows members to participate in solving university problems					
The university allows members to participate in university budget making					
There is active participation of the union members in university major decision making					
There is free flow of communication, sharing information and networking opportunities encouraging members to make suggestions					
All employees are involved in collective bargaining					
There is a trade union representative in the organization					
I frequently discuss matters of work welfare with the trade union representative.					
I visit trade union offices frequently for updates					
Our trade union representative call us frequently in open discussions					

### Section F- Collective Bargaining Process

How satisfied are you with each aspect of collective bargaining process in this institution as listed in the following statements? (Check one)

#### Key

VD= Very dissatisfied D= Dissatisfied N=Neutral S=Satisfied VS= Very Satisfied

ITEM	VD	D	N	S	VS
The fairness of the process					
The willingness of the management to negotiate					
The time taken to reach an agreement					
The level of concern for other party's point of view					
The willingness for both parties to give and take					
The degree of feedback given to members					
The degree of members participation					
Implementation of agreed terms					

*Thank you for your cooperation and esteemed assistance.*

**Source: Survey data, 2016**

## Appendix II: Interview Schedule For KUSU Officials and University Registrars

I am a PhD student in the school of Human Resource Development. I am carrying out research entitled **Industrial Relations Environment, Participatory Management and Collective Bargaining Process in Public Universities in Kenya**. I am requesting you to respond to the following items and return to the undersigned. The information provided is for academic purposes only and will be treated with utmost confidentiality. Please do not write your name anywhere in the questionnaire for objectivity.

Thank you for your cooperation and support.

### SECTION B: Effect of HRM practices on Collective bargaining process in public universities in Kenya.

9a) Does the university have an established HRM Policy.....

b) How does the policy address the following issues?

i) Work hours.....

ii) Promotions.....

iii) Demotions.....

iv) Transfers.....

v) Salary increments/Deductions .....

vi) Other employees' entitlements (Sick leaves, maternity/paternity leaves, offs, Allowances.....

c) Does the HRM policy recognize the existence of employees' union in your institution?

d) If yes in (b) above how do you describe the relationship between the institutions' relationship with employees' union (Briefly describe) .....

e) In which areas have the management had a major grievance with the employees' union.....

f) Briefly highlight major issues in identified areas in question (e above)

#### NB-You can tick more than 1

h) In what ways does the institutions' HRM policy differ from guidelines of Employees' unions policy and guidelines (if any).....

.....  
 .....  
 i) In your view, do HRM practices hinder collective bargaining processes in your institution? .....  
 if yes, how---(briefly explain) .....

**SECTION C: The effect of union management relations on Collective Bargaining Process**

10a) Give a brief description of how unions manage their operations in terms of:  
 i) Communication among union leaders.....  
 ii) Communication among union members.....  
 iii) Communication between union leaders and management of the institution.....

b) Are there cases of breakdown of communication between these parties? If yes, what are the main issues in which the parties have had serious communication breakdown.....

c) Are union leadership autonomous from the management? .....

d) Are there decisions that management have had to make with the union leaders.....

e) If yes in (d) above, what necessitated these decisions?.....

f) In your view does union management relations influence the process of CB, if yes how? (briefly explain)

.....  
 .....



**SECTION D: The effect of power relation of parties to Collective bargaining on Collective bargaining process**

11a) Explain the centrality of power in relation to your institution.....

.....

.....

b) How would you describe the management style of?

i) Your institution.....

ii) Employees' union.....

c) Are union leaders included in the institution's management meetings? If yes, up to what level of management?.....

.....

d) Are there cases where one of the parties have exercised immense power over the other party? If so, how did this impact on CB process?.....

.....

.....

b) Suggest ways of enhancing CB process among members of Kenya Universities Staff Union (KUSU) in Kenya.....

.....

.....


**Source: Survey data, 2016**

### Appendix III: Nacosti Research Permit

**THIS IS TO CERTIFY THAT:**  
**MR. LUKA YANO KUTO**  
**of MOI UNIVERSITY, 3382-30100**  
**ELDORET, has been permitted to conduct**  
**research in Kakamega , Uasin-Gishu**  
**Counties**  
**on the topic: INFLUENCE OF**  
**INDUSTRIAL RELATIONS ENVIRONMENT**  
**ON COLLECTIVE BARGAINING PROCESS**  
**IN SELECTED PUBLIC UNIVERSITIES IN**  
**KENYA.**  
**for the period ending:**  
**24th October,2017.**

*Health*  
**Applicant's**  
**Signature**


**Permit No : NACOSTI/P/16/90621/14187**  
**Date Of Issue : 27th October,2016**  
**Fee Received :ksh 2000**




*Signature*  
**Director General**  
**National Commission for Science,**  
**Technology & Innovation**

**CONDITIONS**

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officer will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one (1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

  
**REPUBLIC OF KENYA**

  
**National Commission for Science,**  
**Technology and Innovation**

**RESEACH CLEARANCE**  
**PERMIT**

**Serial No.A 11468**

**CONDITIONS: see back page**

NACOSTI, (2017)

## Appendix IV: Research Authorisation - NACOSTI



### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,  
2241349, 3310571, 2219420  
Fax: +254-20-318245, 318249  
Email: dg@nacosti.go.ke  
Website: www.nacosti.go.ke  
when replying please quote

9<sup>th</sup> Floor, Utalii House  
Uhuru Highway  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref. No.

Date:

NACOSTI/P/16/90621/14187

27<sup>th</sup> October, 2016

Luka Yano Kuto  
Moi University  
P.O. Box 3900-30100  
ELDORET.

#### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Influence of industrial relations environment on collective bargaining process in selected public universities in Kenya,”* I am pleased to inform you that you have been authorized to undertake research in **Kakamega and Uasin Gishu Counties** for the period ending **24<sup>th</sup> October, 2017**.

You are advised to report to **the County Commissioners and the County Directors of Education, Kakamega and Uasin Gishu Counties** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

  
BONIFACE WANYAMA  
FOR: DIRECTOR-GENERAL/CEO

  
COUNTY COMMISSIONER  
UASIN GISHU COUNTY

Copy to:

The County Commissioner  
Kakamega County.

The County Director of Education  
Kakamega County.

## Appendix V: Letter From Moi University



**MOI UNIVERSITY**  
**SCHOOL OF HUMAN RESOURCE DEVELOPMENT**  
**DEAN'S OFFICE**

P.O. Box 3900  
 ELDORET  
 KENYA.

Tel./Fax 254-053-43153/43620 Ext.434

REF: MU/SHRD/PG/77

30<sup>th</sup> September, 2016

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

**RE: KUTO LUKA YANO KOMEN - SHRD/Ph.DH/08/14**

This is to confirm that the above named is a Ph.D student in the Department of Development Studies, School of Human Resource Development undertaking Ph.D course in Human Resource Management.

He has successfully finished his coursework, submitted his thesis proposal for examination entitled "*Influence of Industrial Relations Environment on Collective Bargaining Process in Selected Public Universities in Kenya*" and he has been cleared to proceed to the field for data collection.

Any assistance accorded to him will be highly appreciated.

Yours faithfully,

**DR. RUTH J. TUBEY**  
**DEAN, SCHOOL OF HUMAN RESOURCE DEVELOPMENT**

/mc

## Appendix VI: Permission to Carry out Research, Moi University



### MOI UNIVERSITY

OFFICE OF THE DEPUTY VICE CHANCELLOR  
ACADEMICS, RESEARCH AND EXTENSION

Tel: (053) 43355  
(053) 43620  
Fax: (053) 43412  
Email: [dvc\\_are@mu.ac.ke](mailto:dvc_are@mu.ac.ke) or [dvcresearchmu@gmail.com](mailto:dvcresearchmu@gmail.com)

P.O. Box 3900  
Eldoret - 30100  
Kenya

**REF: MU/DVC/REP/27B**

**8<sup>TH</sup> NOVEMBER, 2016**

TO WHOM IT MAY CONCERN

**RE: PERMISSION TO CARRY OUT RESEARCH – KUTO LUKA YANO KOMEN**

The above subject matter refers.

Mr. Komen who is a Ph.D student in Moi University has applied for authority to conduct research within Moi University. We would be grateful if he is permitted to conduct his research on "*Influence of Industrial Relations Environment on Collective Bargaining Process in Selected Public Universities in Kenya.*"

By a copy of this letter authority is hereby granted to him to conduct the research.

After the completion of the research, a complete report both on hard and soft copy will be handed over to the office of Deputy Vice-Chancellor, Academics, Research & Extension.

Any assistance accorded to him will be highly appreciated.

Thank you.

Yours faithfully,

  
**PROF. I.N. KEMENGI, Ph.D**  
**DEPUTY VICE-CHANCELLOR**  
**(ACADEMICS, RESEARCH & EXTENSION)**

*SKM/Sm*



(ISO 9001: 2008 Certified Institution)

**Appendix VII: Research Authorization****MINISTRY OF EDUCATION SCIENCE & TECHNOLOGY**

Telephone: 056 - 30411  
 FAX : 056 - 31307  
 E-mail : wespropde@yahoo.com  
 When replying please quote.



COUNTY DIRECTOR OF EDUCATION  
 KAKAMEGA COUNTY  
 P. O. BOX 137 - 50100  
 KAKAMEGA

**STATE DEPARTMENT OF EDUCATION****REF:WP/GA/29/17/VOL.III/****15<sup>th</sup> December, 2016**

Luka Yano Kuto  
 Moi University  
 P. O. Box 3900 – 30100  
**ELDORET**

**RE: RESEARCH AUTHORIZATION**

The above has been granted permission by National Council for Science & Technology vide letter Ref. NACOSTI/P/16/90621/14187 dated 27<sup>th</sup> October, 2016 to carry out research on **"Influence of industrial relations environment on collective bargaining process in selected public universities, Kakamega and Uasin Gishu Counties in Kenya,"** for a period ending, 24<sup>th</sup> October, 2017.

Please accord him any necessary assistance he may require.

**OKWEMBA O. V**  
 COUNTY DIRECTOR OF EDUCATION  
**KAKAMEGA COUNTY**

## Appendix VIII: Research Authorization



REPUBLIC OF KENYA  
**MINISTRY OF EDUCATION**  
 (State Department for Basic Education)

Telegrams: "EDUCATION", Eldoret  
 Telephone: **053-2063342** or **2031421/2**  
 Mobile : **0719 12 72 12/0732 260 280**  
 Email: [cdeuasingishucounty@yahoo.com](mailto:cdeuasingishucounty@yahoo.com)  
 : [cdeuasingishucounty@gmail.com](mailto:cdeuasingishucounty@gmail.com)

When replying please quote:

Office of The County Director of Education,  
 Uasin Gishu County,  
 P.O. Box 9843-30100,  
**ELDORET.**

Ref: No. MOE/UGC/TRN/9/VOL.2/248

Date: 8<sup>TH</sup> November, 2016

Luka Yano Kuto  
 Moi University  
 P.O Box 3900-30100  
**ELDORET**

**RE: RESEARCH AUTHORIZATION**

This office has received your letter requesting for an authority to allow you carry out a research on "*Influence of Industrial relations environment on collective bargaining process in selected public universities in Kenya,*" within Uasin Gishu County.

We wish to inform you that the request has been granted for a period ending **24<sup>th</sup> October 2017**, the authorities concerned are therefore requested to give you maximum support.

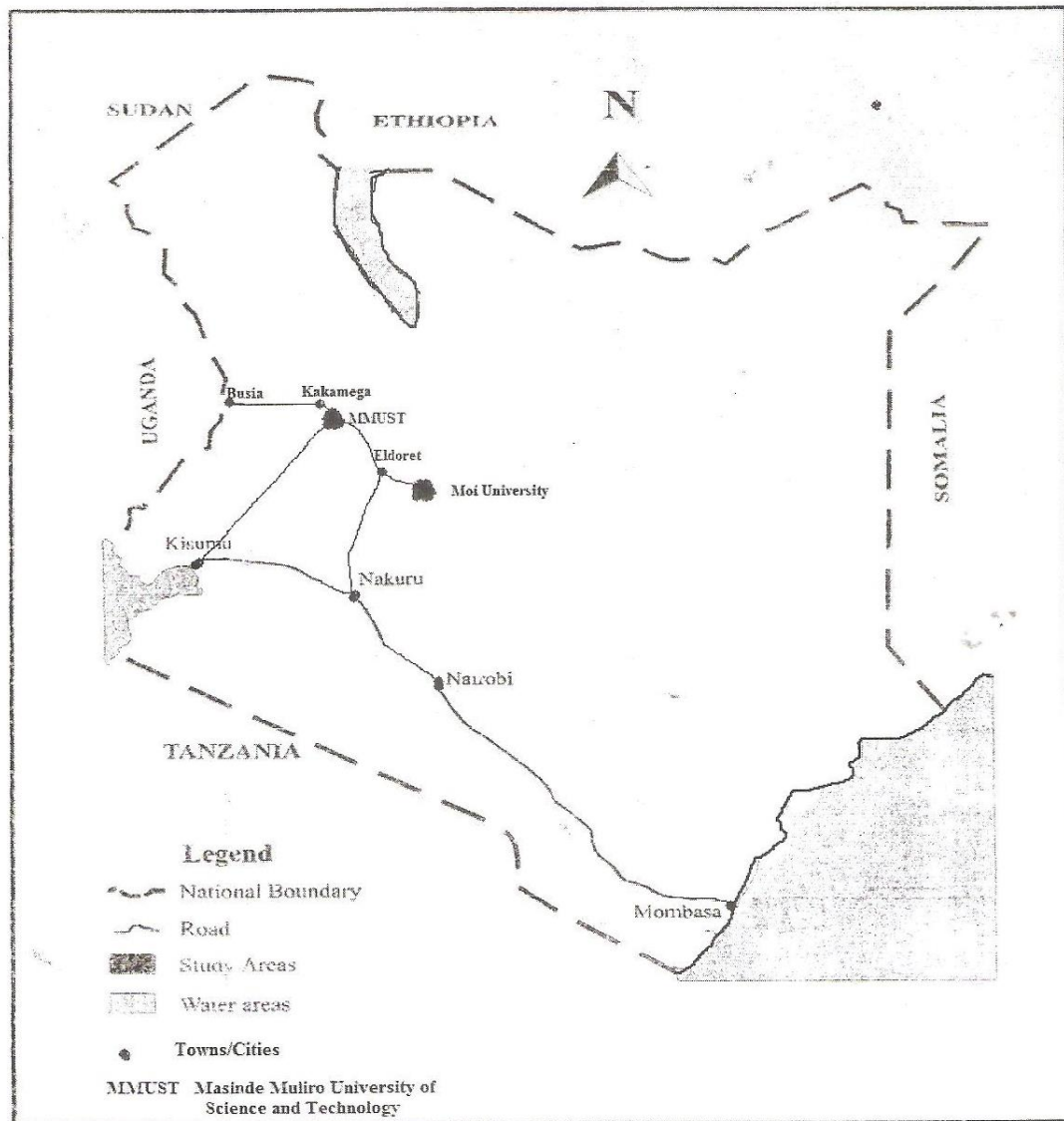
We take this opportunity to wish you well during this research.

S.K Kemei  
 For: COUNTY DIRECTOR OF EDUCATION  
**UASIN GISHU**

SK/sc



### Appendix IX: A Map of Study Areas in Kenya



**Location of the study areas in Kenya**

**Source : GIS, Moi University**



**Appendix X: Regression Coefficients of Interactions Between Participatory Management on Relationship Between IRE Dimensions And CBP**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.192	.238		-.808	.420
	Age	.028	.041	.042	.691	.490
	Gender	.075	.121	.038	.621	.535
2	(Constant)	.001	.158		.007	.994
	Age	.007	.027	.011	.275	.783
	Gender	-.014	.080	-.007	-.180	.858
	Zscore(HRP)	.384	.076	.384	5.091	.000
	Zscore(UMR)	.203	.075	.203	2.688	.008
	Zscore(PRP)	.218	.071	.218	3.053	.002
3	(Constant)	-.033	.157		-.207	.836
	Age	.007	.027	.011	.264	.792
	Gender	.008	.080	.004	.105	.916
	Zscore(HRP)	.374	.075	.374	4.993	.000
	Zscore(UMR)	.184	.075	.184	2.446	.015
	Zscore(PRP)	.194	.072	.194	2.712	.007
	Zscore(PM)	.107	.044	.107	2.416	.016
4	(Constant)	-.031	.156		-.199	.842
	Age	.006	.027	.009	.239	.811
	Gender	.009	.080	.004	.111	.912
	Zscore(HRP)	-.071	.227	-.071	-.314	.754
	Zscore(UMR)	.169	.075	.169	2.256	.025
	Zscore(PRP)	.212	.072	.212	2.952	.003
	Zscore(PM)	-.185	.147	-.185	-1.253	.211
	Zscore: HRP*PM	.628	.302	.628	2.077	.039
5	(Constant)	-.032	.156		-.204	.838
	Age	.006	.027	.008	.209	.835
	Gender	.011	.080	.005	.136	.892
	Zscore(HRP)	-.701	.541	-.701	-1.296	.196
	Zscore(UMR)	.876	.556	.876	1.575	.116
	Zscore(PRP)	.209	.072	.209	2.917	.004
	Zscore(PM)	-.145	.151	-.145	-.961	.337
	Zscore: HRP*PM	1.516	.756	1.516	2.006	.046
	Zscore: UMR*PM	-.996	.777	-.996	-1.282	.201
6	(Constant)	-.033	.156		-.212	.833
	Age	.006	.027	.009	.227	.820
	Gender	.011	.080	.005	.134	.894

Zscore(HRP)	-.742	.558	-.742	-1.329	.185
Zscore(UMR)	.781	.638	.781	1.223	.222
Zscore(PRP)	.351	.471	.351	.746	.457
Zscore(PM)	-.137	.153	-.137	-.895	.371
Zscore: HRP*PM	1.575	.781	1.575	2.016	.045
Zscore: UMR*PM	-.860	.896	-.860	-.960	.338
Zscore: PRP*PM	-.205	.672	-.205	-.305	.760

a. Dependent Variable: Zscore (CBm)

**Source: Survey data, 2016**