Collective Bargaining Agreements as a Strategy to Employment Relationships in Manufacturing Companies, Uasin Gishu County, Kenya

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Abstract:
For induction and perpetuation of industrial objectivity employment relationship plays a very vital role. Peaceful industrial association can be made possible through well-mannered human relations. It is also very important for building outlooks and establishments. The main purpose is to check the effect of collective bargaining settlement on employee’s link for Kenya based manufacturing companies in Uasin Gishu County. It was a tension for underprivileged industrial associations’ configuration. These results were being reflected through strikes. This study uses descriptive research design. Among 8877 employees and 12 Human Resource managers as population this current study selected 2488 employees and 12 managers through simple random sampling method. Data collection was made by structured data collection tool. Descriptive and inferential stab were being discussed for result analysis. For testing hypothesis multiple liner regression has been adopted. Collective bargaining accord structures and employment association show a significant positive relationship. Finally, this research gives a strong suggestion to employ collective bargaining practices to trim down industrial divergence, finally leads to strikes.

Keywords: Collective bargaining agreements, employment relationships, manufacturing companies, employees

1. Introduction
Industrial dispute denotes to any difference among proprieters and workers, or between wage earner and wage earner. Industrial disagreements are associated with the occupation or non-employment relationships of engagement and surroundings of occupation of any individual (Akhaukwa, Maru & Byaruham, 2013). Grounds of industrial disputes can be alienated into monetary and non-monetary elements. Monetary reasons of industrial disagreements are remunerations, worker sacking and economizing, gratuity, occupied environments and hours of works and other reasons of disputes which includes medical, educational facilities and housing facilities (Altenburg, 2015). Remunerations has been the chief commercial motive instigating industrial disputes. Non-monetary grounds of industrial disagreements are non-acknowledgement of amalgamations, deprived governance, dogmatic leadership, fractional treatment by bosses, governmental atmosphere and nonappearance of complaint redressal formula just to mention but a few (Nzioki, 2013).

Due to the global trends in the market today, many manufacturing companies are faced with challenges brought about by changing technology, competition and cheap imports. Organizations have comprehended that the lone entity their opponents cannot commoditize or duplicate, was a distinctive workforce (Rehman, 2003). Faced with the challenge of differentiating themselves through a unique workforce, organizations have capitalized profoundly on their workforces (Rao & Narayana, 2015). This has supported them in attracting and retaining a motivated workforce that can help them convey on their customary intentions (Gomez-Mejia, Balkin & Cardy, 2011). However, strike, labour standoff, go-slow on work, labor prohibitions and lock-outs by workers in a custom diverse from that which is habitually done is the order of the day in majority of the manufacturing companies (Aluchio, 2014).

This is a symbol of industrial unrest which deciphers to a condition of imbalance in labour associations (Beardwell, Holden & Clayton, 2014). There has been a snowballing recourse to forays in all fragments of the country by workforces (Boyle, 2012). The strike fever was spreadable coupled by plenteous hassles and accumulative disputes. This left mainstream of the manufacturing companies differdent, defensive, and abstracted from the unresolved problems (Kariuki, 2015). The basic question and great challenge were how to avert the strikes that jeopardized the manufacturing companies and still offered workers with the chance to partake in the process of deciding the environments of their labor since it was acceptability socially (Yusuf, 2014). The new Constitution warranties the right to negotiate cooperatively, but it remained unclear whether this right could be appreciated by all workers.

Industrial relation is the association amid administration and workforces. It incorporates the protagonist of governing mechanism in determining the industrial disagrement. An official industrial relation is apprehensive of the systems, instructions and procedures used by amalgamations and proprietors to regulate the incentive for determination and other circumstances of occupation (Kreiger & Pearce, 2013). They defend the welfares of the workforces and their proprietors. This is accomplished by modifying the way in which proprietors treat their workforces. Collective bargaining
agreements structures asylums distributive, substantial, procedural and integrative bargaining structures (Ngari & Agusioma, 2017).

The stoppage in yield of growth and laidback macro-financial performance had drawn snowballing thoughtfulness to the U.S. organization of industrial associations and abundant methodologies for enlightening its performance (David, 2012). This remained the most important novel age of investigation at the organizational level with numerous worker involvement programs, new collective negotiating agreements structures, and deviations in other occupation practices that were designed to both improve industrial associations and executive usefulness (David, 2012). These pressures were correspondingly fabricating a fresh importance within management on applying tactical forecasting techniques to the industrial associations’ purpose as businesses and amalgamations start to identify the interdependence amongst extensive business policy decisions and industrial associations’ performance at the place of work level (David, 2012). Subsequently, industrial association’s specialists inside management and amalgamations were being called upon to disparagingly scrutinize their predominant practices and to evaluate substitute approaches that gratify administrative and wage earner objectives.

According to Grant (2012), Britain, France, Ireland and Italy were the countries in the Western Europe which eminent a high-pitched reduction of forays from previous records of increased number. The reduction of the forays was apprehended after the adoption of industrial associations in the nations that acknowledged the protagonist of the employees. In majority of the states, workforces were supporters of a particular trade unions and were involved in collective bargaining agreements based on their prerequisites. According to a study conducted by David (2012), in Chile however, there was increased labour unrest. This was endorsed by inflationary atmosphere enclosed by which collective bargaining had to take place. Labor turbulences were seen to be pretentious by the process of wage inflation and the existence of simultaneity between the incidence of forays and the wage development process.

The manufacturing industry are very prone to both inside and outside environmental shifts. So as to retain competitive advantage the manufacturing industry must accept change and be proactive in dealing with industrial relations (Rukumba, 2015). The manufacturing sector contains over 700 organizations and hired above 218,000 staff in 2015. Kenya frequently ships products to East Africa and COMESA regions. The manufacturing industry is a chief source of growth. The industry has high potential of growth and investment. Kenya has a big manufacturing industry that produces for both the local region and exports to the East African market. Subsidiaries to multi-national corporations mostly dominates the manufacturing sector. The future of manufacturing industry depend on how well these firms are able to handle employees’ issues in a turbulent environment.

Kenya’s manufacturing companies have highly been criticized for failing to recognize labor laws, hence unemployment and poor labor relations in the manufacturing firms. Additionally, manufacturing companies have been heavily criticized for exploitation of workers, paying them negligible wages and providing poor working conditions. The prevalent violations of labor and social rights have contributed to unpopular in several countries where the policies have been adopted (Chinguno, 2016). The kind of labor practices that exist in the manufacturing companies do not conform to the international industrial norms. It is mainly characterized by unclear labor contract, wage policies and salaries, education levels, training and development polices.

Kenya’s productivity is 30 percent lower than the industry norm, caused by low technical skills, lack of in-house training activities, and the absence of local training institutions. McCallum (2011) said that as long as many of the investors in the zones are multinational companies, they will be subject to more political awareness and pressure to pay at least the local minimum wages. Studies by McCallum (2011), Milberg & Amengual (2008) had found wages to often be higher and benefits to be better within zones than those in similar employment in the domestic economy. It is in this veneration in Mombasa EPZ in Kenya that the study sought to examine the relationship between labour practices and firm productivity in Zone.

Collective bargaining is fundamental to any industrial association’s scheme as it is a contrivance through which controlled elasticity is attained (Gomez-Mejia, Balkin, & Cardy, 2011). Enquiry studies exhibited that, wherever personnel had their affiliations and circumstances of employment dogged through collective negotiating structures and wherever the administration buoyed amalgamations, there existed a value-added industrial association’s atmosphere (Katz, Kochan & Gobeille, 2003). According to Kipngetich, (2015) numerous upsurges of industrial skirmishes between proprietors and personnel were meritoriously accomplished through combined negotiation and discussion with the wage earner assemblies.

Earlier research in industrial associations, predominantly on worker commitment, had been conducted chiefly on a micro-perspective that had concentrated on particular function with petite acknowledgement of circumstantial locale such as manufacturing companies (Purell, & Ahlstrand, 2014). The prevailing prose was undistinguishable as to the up-to-date state of industrial relations in Kenyan manufacturing companies predominantly on the effects of collective bargaining agreement structures on industrial relations. The manifestation of dependable working system brings the compensatory damage that control destructively on the financial performance of the organization (Njenga, 2007). This fallout to significant reduction of employee productivity, increased labor conflicts, dissatisfaction and perception of unfairness in the organization (Yusof & Aspinwall, 2000). Investing in employees was key and it made them reasonably able and motivated to achieve managerial excellence. Benefits, learning and development and conducive work environment persuaded employees and made them give their maximum efforts towards assigned work (Vijayaratnam, Rajasekhar & Naik, 2015).

Industries which ignored the importance of industrial relations faced adversative effect on efficiency, production, accomplishment of their labor, malingering amid the labors whose consequences is tall degree of employment turn-over (Odhong, Were & Odhongo, 2014). There are poor industrial relations, because of absence of conviviality in manufacturing
Companies. This affects the employees and employer’s welfare which results to reduced productivity in different. Industrial relations had serious impacts on the national economic development due to less attention. It can bring the economy down and the country might not have manufactured product to export to foreign countries (Odhongo, Were & Odhongo, 2014). The management and union representatives must strive towards maintaining industrial peace if they are to achieve the organization objective (Nzuve, 2007).

Exhaustive industrial relation is imperative to safeguard industrial peace, intensify fabrication, and generate an atmosphere in which optimistic assertiveness and inspiration progress. Sound industrial relations thus augment operatives’ productivity and commitment (Wachira, 2010). The main issues involved in industrial relations include; complaints and their redressal, workforce involvement in administration, moral code and castigation, collective negotiating and mechanism aimed at clearing industrial disagreements (Nzuve, 2007). The leading protagonist of industrial relation is how to preclude strikes of the workforces without repudiating them the veracious to form and bargain cooperatively (Vijayaratnam, Rajasekhar & Naik, 2015). In spite of the existence of trade unions and human resource departments, collective bargaining as proposed by the new constitution is yet to be effective in the prevention of strikes.

With respect to the right to foray, an elongated dispute resolve procedure must be exhausted in advance to a legal foray (International Trade Union Confederation, 2011). Despite the existence of trade unions, the strikes in Kenya are increasing at an accumulative rate. Societies under collective bargaining have unremittingly marched out of parleys whose result supervened in copious working days lost during these strikes, strikes whose occurrence would have been averted had the industrial court intervened in time. Some nations eliminate the effects of disagreements in precise industrial segments. For example, France, Portugal and Belgium, public-sector forays remained omitted resulting in increased unreliability of the authorized data as a pointer of foray tendencies, given the growing significance of public segment disagreements.

A manufacturing company is any entity that engrosses in trade covering manufacture of goods aimed at use or sale by means of labour and mechanisms, tools, chemical and biotic dispensation or preparation. The term is utmost frequently functional to industrial manufacture, in which fresh resources are converted into completed possessions on a large scale (Sheaffer, Carmeli Steiner-Revivo & Zionit, 2009). In order to produce goods and services in manufacturing establishments it is necessity that essential as factors of production. The utmost precarious feature of manufacture is the human resource factor which need be treated with a lot of upkeep if the company is to achieve it intended purpose. Kenyan policy makers acknowledged the need of the manufacturing industry for long term economic growth. Indeed, the development goals for manufacturing as outlined by the Kenyan government in its Vision 2030 policy were very big and need huge investment targets eventually reaching targets more than 30% of GDP (Sheaffer, Carmeli, Steiner-Revivo & Zionit, 2015). The manufacturing industry are very prone to both inside and outside environmental shifts. So as to retain competitive advantage the manufacturing industry must accept change and be proactive in dealing with industrial relations (Rukumba, 2015).

The future of manufacturing industry depend on how well these firms are able to handle employees’ issues in a turbulent environment. However, manufacturing companies in Uasin Gishu County are marred by frequent job layoffs, low wages and unfavorable working conditions. Although manufacturing companies play a substantial role in a country’s Gross National Product (GNP) for export, the kind of labour Practices that exist in do not match global industrial norms. Labour Practices in manufacturing companies are characterized by massive industrial labour problems, characterized by low wages, long working hours, monotonous and dangerous work, industrial closures and abusive supervisory practices. This has resulted into high employee turnover, violence, strikes, and threats of social instability eventually leading to low productivity in the manufacturing companies.

Some of the challenges facing the manufacturing companies included augmented industrial strikes which had led deteriorating labour productivity, snowballing element labour price and low echelons of attractiveness (Odhong, Were & Omolo, 2014). Majority of the workers needed to express their displeasure with industrial associations through industrial unrest such as strikes or lockouts (Kumari, 2015). It was against this backdrop that the study was conducted to investigate influence of labour relations on tripartite employment relationships among manufacturing companies in Uasin Gishu County, Kenya.

2. Statement of Problem

Manufacturing companies in Uasin Gishu County have witnessed an increased spate of industrial strikes which has led to increase in the attendant man-days lost. For examples in 2016, the number of man-days lost due to industrial strikes nearly doubled from 14,860 man-days to 25,540 man-days in 2017 (Omolo, 2018). Besides, in 2017 the Ministry of Labour recorded 6 strikes in the manufacturing companies in Uasin Gishu County, which involved 773 employees and 30920 man-hours were lost. These statistics display an alarming situation of industrial dispute in the manufacturing companies. However due to underprivileged industrial associations often which climax to industrial unrest. The industrial unrest is often patented in form of slowdown, forays and lockouts which consequences to loss of production, loss of profit, and even closure of units.

Notwithstanding remarkable performance and contribution to nationwide frugality, the manufacturing companies in Kenya are still faced with lack of decent work conditions. Trade Union participation similarly lingered condensed, with membership at just 9% of the employees in manufacturing companies (Soylu & Singh, 2017). Augmented industrial strikes in the manufacturing companies had commanded a declining labour productivity, increasing unit labour cost and low levels of competitiveness (Odhong, Were & Omolo, 2014). Majority of the employees have also expressed their dissatisfaction with industrial associations through industrial unrest such as strikes and lockouts (Kumari, 2015).
3. Purpose of the Study
The purpose of the research was to check the impact of collective bargaining agreement on tripartite elements of an organization w.r.t manufacturing companies in Uasin Gishu County, Kenya.

4. Literature Review
For both employee and employer, collective bargaining is a strategy to ensure welfare. The utilitarian and bureaucratic terms of occupation affiliation can be approved by collective bargaining agreement structures through the uses of concession and unremitting submission. It occurred in between join up confederations and owner connotations. According to Akhaukwa, Maru & Byaruhanga (2013), the main purpose is to deal with agreements such that occupation related benefits can be achieved. Availability of discuss, readiness is essential for operative contribution (Fashoyin, 2014). This process also creates a framework reduce strikes, lock out and fighting such that main stakeholders can get benefits and peaceful environment. It is absolutely a two-way approach which is being jointly made and implemented. As per Cordova (2015), it is a procedure through which health of employment can be improved. As being a discussion forum, it affects the health of industrial relations by giving value to both the management and trade unions. As based on negotiation skills many things depend. An India based study had been done by Hoda & Rai (2015) to find the Labor Regulations and expansion of Manufacturing and Employment in India. Many factors are there in contemporary literature. Many associated problems like taxation also can be solved through this. To adapt changes occurring in the international market, this is also very useful. Many practices have been compared with Indian practices i.e. practices of developing and emerging countries conditions. Many factors like fixed term contracts, contract labour, trade unions and unemployment insurance, collective firing are being highlighted. Another Kenyan University based study had been conducted by Akhaukwa, Maru & Byaruhanga (2013) to discuss about the industrial associations’ environment. The result indicated that merger and administration did not help. Situation of three universities were very turmoil. In this scenario how collective bargaining help to improve atmosphere has been highlighted. Collective bargaining helps to improve the industrial transactions environment. Results indicate that poor industrial associations’ affect industrial relation. This study was conducted among public universities in Uasin Gishu County. According to Brown (2014), collective negotiating has many impacts outside wage and hours. It acts as a voice function which can influence labour associations. It looks for the proper salary, proper timing. Collective Bargaining procedure also helps performance appraisal. Aspects like aids, energy, errands and occupied circumstances can be deal with this. A Kenya based study had been conducted by Onguso, Guyo and Otieno (2016). The main focus was to investigate the impact of shared trading procedure on labour associations’. It revealed that operative collective negotiating procedure was being practiced there. It also provided suggestions that collective negotiating structures helps to recover against sudden problems. A revised version of enquiry also had been carried on manufacturing industry as findings on education industry cannot be generalized with manufacturing one.

5. Research Design
An investigation strategy is an intended initiative that portrays a inclusive synopsis and crucial structures of the labor to be occurred in an investigation enquiry (Mugenda and Mugenda, 2003). It is mainly of descriptive research design. Due to large population study this design is appropriate over here. An economic strategy can be formulated by connecting both interview schedule and survey.

5.1. Area of Study
Research has been conducted for manufacturing companies in Uasin Gishu County. Uasin Gishu County’s climate stands between latitude 0.51430 North and longitude 35.2698° E. This company is an agro-based company which has Unga flour mill, Kenya Cooperative Creameries (KCC), Ken-Knit and Corn Processing Company (CPC), Rivatex, Ken knit, Raiply, Rupa, Pipeline, Baraka fertilizer, Brookside, Almasi Beverage companies, Dola millers limited.

5.2. Target Population
Before the actual occurrence of the research pure, concise clarification of the target population is needed. The description of target population must able to identify target correspondents of interest. 12 manufacturing industries have been targeted in Uasin Gishu County, where estimated employee population is 8877 and 12 is for Human Resource managers.

5.3. Sample Size and Sampling Design
According to Mugenda & Mugenda (2003), selection refers to preparation of elements from population, to epoch some information. 368 has been decided as personnel to carry out research. Both stratified and simple random sampling have beenemployed, which select 2488 workers and 12 Human resource managers. Two trained research assistants have been appointed to ensure data collection process.

6. Data Analysis
After data collection process is being completed, questionnaire has been duly validated. SPSS has been used to analyze data. Frequencies, percentages, means and standard deviations have been calculated to explain the data precisely. Content analysis has been done to analyze data of interview schedule. Multiple regression analysis has been done to find impact of collective bargaining structures on employee relations. ANOVA also has been used to test hypothesis. The equation of multiple regression is:

\[ Y = \beta_0 + \beta_1 X_1 + \varepsilon \]
Where:
X = the independent variables –
X1 = collective bargaining agreement structures
Y = the dependent variable (employment relationships)
ε = Error of margin
α =the value of the intercept.
β= the coefficient of the explanatory x variables, vector, gradient.

7. Findings of the study on Collective Bargaining Agreement Structures
Collective bargaining is a technique used for welfares of employer and employee. Concession and unremitting submission of approved customary rubrics have been used in collective bargaining agreement to oversee the utilitarian and bureaucratic terms of occupation affiliation. Questionnaire used to test the level of agreement with collective bargaining agreement structures of employees. A 5-point Likert scale ranging from; 5 = strongly agree to 1 = strongly disagree has been used as rating scale. The results were summarized in Table 1.

| Statement                                                                 | SD | D  | U  | A  | SA | Mean | S. Dev. |
|--------------------------------------------------------------------------|----|----|----|----|----|------|--------|
| 1 Our company follows procedural agreement structures which define the bargaining units' scope, procedures and facilities to be provided to trade unions. | F  |     |    |    |    |      |        |
|                                                                           |    | 95 | 316| 196| 837| 812  | 3.92   | 1.11   |
|                                                                           | %  | 4.2| 14.0| 8.7| 37.1| 36.0 |        |
| 2 The procedural agreement defines the procedure to be followed while resolving group and individual disputes | F  |     |    |    |    |      |        |
|                                                                           |    | 219| 232| 126| 830| 851  | 3.83   | 1.10   |
|                                                                           | %  | 9.7| 10.3| 5.6| 36.8| 37.7 |        |
| 3 Our company's employee handbook rule book has procedural agreements clearly spelt out. |    | 111| 246| 273| 726| 900  | 3.91   | 1.34   |
|                                                                           | %  | 4.9| 10.9| 12.1| 32.2| 39.9 |        |
| 4 Our company follow Substantial agreement to define our basic salaries, bonus, holiday entitlement and hour of work | F  |     |    |    |    |      |        |
|                                                                           |    | 316| 203| 190| 821| 726  | 3.64   | 1.38   |
|                                                                           | %  | 14.0| 9.0 | 8.4| 36.4| 32.2 |        |
| 5 Our trade union often employs Distributive agreement while negotiating for our salaries | F  |     |    |    |    |      |        |
|                                                                           |    | 568| 196| 169| 688| 564  | 3.12   | 1.57   |
|                                                                           | %  | 25.2| 8.7 | 7.5| 30.5| 28.1 |        |
| 6 When our trade union engages in distributive bargaining strategy, we always get a higher bid | F  |     |    |    |    |      |        |
|                                                                           |    | 681| 316| 156| 654| 449  | 3.04   | 1.66   |
|                                                                           | %  | 30.2| 14.0| 6.9| 29.0| 19.9 |        |
| 7 Our company often employs integrative bargaining agreement in which both the employer and employees have a win-to-win agreement | F  |     |    |    |    |      |        |
|                                                                           |    | 681| 90 | 156| 429| 900  | 3.34   | 1.62   |
|                                                                           | %  | 30.2| 4.0 | 6.9| 19.0| 39.9 |        |

Table 1: Descriptive Results of Collective Bargaining Agreement Structures
Source: Survey Data, 2019

The collective bargaining procedure affect the structures and employment connection for manufacturing companies in Uasin Gishu County. This research aims to check if proper procedural agreement structures have been decided by the manufacturing companies or not. With mean value 3.92 and 1.11 as standard deviation (s.d) value, the manufacturing companies defines scope, processes, facilities. Mean value 3.89 and 1.102 as standard deviation value provides the definition of whether defined agreements follow resolving group and individual conflicts. Maximum respondents indicate about positive association between agreement and employment relationship with mean as 3.81 and s.d as 1.34. it has been revealed that Uasin Gishu County places importance on employment relationships along with their incentives. Discussions are having been made about basic salaries, bonus, holiday entitlement and hour of work. Mean value 3.64 and 1.379 as standard deviation value, employees indicate that companies adhered considerable agreements while defining their basic salaries, holiday entitlement and hour of work. This proves that majority of employees believed about the initiatives of companies to give proper salary and other basic working criteria.
Taking about trade union initiative in case of negotiation power in the area of salary, working conditions, security and safety, Mean=3.27 and S. Dev. =1.57 indicates majority are satisfied with it. Mean=3.04 and S. Dev=1.66 clearly indicates that employees are not sure about whether trade unions employed distributive bargaining strategy which had gained employees higher bid. To answer the question that whether employers and employee have win-win situation, Mean=3.11 and S. Dev=1.62 value indicates that integrative bargaining structures helps to achieve good employer-employee relationship.

So, it can be concluded that collective bargaining agreement are very helpful for promoting positive employment relationships between the employers, employees and the government. It also helps in improving health and safety standards. Various government agencies like KEBS, NEMA are there to ensure safety standards but very less companies are there to ensure safety for manufacturing companies.

This research indicates that a positive and significant relationship present between collective bargaining structures and tripartite employment relationships. Finally, for some employees, no significant impact has been there by tripartite employment relationship on employee relationship with s.d 1.32, which cannot be negligible.

7.1. Linear Regression analysis

This technique helps to find best straight-line relationship between dependent (y) and independent variables (x). After relationship is being estimated, statistical relationship needs to be found between the independent and dependent variable. Here employment relationship is the dependent variables and collective bargaining structures are set of independent variables.

7.2. Tests for Regression Analysis Assumptions

The study tested the regression analysis assumptions. The following assumptions were tested; linearity using scatterplots, the goodness of fit was used to test the Normality was tested using the Kolmogorov-Smirnov test, no multicollinearity was tested using the correlation matrix and homoscedasticity was tested suing a scatter plot of residuals versus predicted values was used to check for.

| Kolmogorov-Smirnov* | Statistic | df | Sig. |
|---------------------|-----------|----|------|
| Collective bargaining agreement structures | 0.253 | 2256 | 0.000 |
| Employment relationship | 0.086 | 2256 | 0.000 |

Table 2: Kolmogorov-Smirnov Test (K-S) of Normality Results
a. Lilliefors Significance Correction=0.05 level of significance

From the Table 2 above, the test on normality from the table revealed that the data was significant at a test of 0.05. The findings revealed that the data used in this study was normally distributed and hence can be subjected to other statistical tests of significance used to test the relationship between independent and dependent variables that require normally distributed data. This is because the significance values of all the variables were below 0.05 confidence level.

7.3. Linearity Test

The linearity assumption was tested using scatterplots. To test that the errors between observed and predicted values (that is the residuals of the regression) are normally distributed a Q-Q Plot was used. The results were as shown in the Figure 1.
The study results on the test of normality graphically revealed that the data points stray from the line indicating linear distribution, the data are normally distributed. This shows that from the normal Q-Q plot above, the data is normally distributed.

7.4. Multicollinearity Test

Multicollinearity assumption accurately estimates the relationship between dependent and independent variables; it tests if the relationships are linear in nature. High multicollinearity of the regression analysis under-estimate the true relationship between the study variables. To determine the multicollinearity Pearson Product Moment Correlation was computed (Saunders, 2009). To ascertain that there was no multicollinearity in the data Correlation matrix was computed. The finding was presented in Table 3

| Variables                        | 1     | 2       | 3       | 4       | 5       |
|----------------------------------|-------|---------|---------|---------|---------|
| Employment relationship          | 1     |         |         |         |         |
| Collective bargaining agreement structures | 0.633 | 1       |         |         |         |

Table 3: Multicollinearity Test Results

From the results, it can be seen that correlations on collective bargaining agreement and were all significant. Correlations between collective bargaining agreement structures, \( r = 0.633 \), all which were below 0.80 recommended measurement indicated that there was low multicollinearity between the independent variable and the dependent variable. The multicollinearity assumption was therefore satisfied. This implies that collective bargaining structures under study jointly had no multicollinearity that could under-estimate the true relationship between the study variables.

7.5. Homoscedasticity Test Assumption

Homoscedasticity means that the variance of errors is similar across all levels of the independent variables. This was checked by use of a scatterplot of residuals versus predicted values of collective bargaining agreement structures and employment relationships. The assumption of homoscedasticity refers to equal variance of errors across all levels of the independent variables (Osborne & Waters, 2002). This means that researchers assume that errors are spread out consistently between the variables (Keith, 2006). This is evident when the variance around the regression line is the same for all values of the predictor variable. When heteroscedasticity is marked it can lead to distortion of the findings and weaken the overall analysis and statistical power of the analysis (Osborne & Waters, 2002). The results as shown Figure 2 below. From Figure 2 the results showed that homogeneity of variances was supported.

![Figure 2: Homoscedasticity of the Independent Variables Test Results](image)

7.6. Linear Regression Analysis

Linear Regression analysis for collective bargaining structures and employment relationship in manufacturing companies in Uasin Gishu County in Kenya was done. This also aided in coming up with the coefficients of the study model as well as R square of the study. The results are as shown in Table 4 and Table 5

| Model Summary                  |      |        |        |                      |        |        |
|--------------------------------|------|--------|--------|----------------------|--------|--------|
| Model                          | 1    | 0.930a | 0.865  | 0.863                | 0.17102| 8.827  |
| R                              | 0.930a |
| R²                             | 0.865 |
| Adjusted R²                    | 0.863 |
| Std. Error of the Estimate     | 0.17102|
| F                              | 8.827 |
| Sig.                           | 0.000 |

Table 4: Overall Regression Model Summary Results

a. Predictors: (Constant), Collective Bargaining Agreement Structures  

b. Dependent Variable: Employment Relationship

In Table 4the findings further established that the linear relationship between employment relations and predictor variable; collective bargaining agreement structures were positive and significant. This indicates that Collective
bargaining structures has significant positive relationship with the employment relationship in manufacturing companies. Value of the coefficient of determination (r²) was 0.865, means 86.5% of the variations in the tripartite employment relationship can be explained by the collective bargaining agreements and the remaining 13.5% of the variations in tripartite employment relationship was explained by other factors not captured in the model.

### Table 5: Overall Regression Model Goodness of Fit Results

| Model       | Sum of Squares | df  | Mean Square | F      | Sig  |
|-------------|----------------|-----|-------------|--------|------|
| Regression  | 73.046         | 37  | 18.261      | 233.184| .000 |
| Residual    | 13.157         | 2218| .078        |        |      |
| Total       | 86.202         | 2256|             |        |      |

*a. Dependent Variable: Employment relationship
b. Predictors: (Constant), collective bargaining agreement structures*

From Table 5 the F test provides an overall test of significance of the fitted regression model. The F value indicates that all the variables in the equation are important hence the overall regression is significant. The F-statistics produced (F = 233.184) was significant at p=0.000 thus confirming the fitness of the model and therefore, there is statistically significant relationship between collective bargaining agreement structures and employment relationship.

### Table 6: Overall Regression Coefficients of Tripartite Employment Relations and Labour Relations Management

| Coefficienta | Model       | Unstandardized Coefficients | Standardized Coefficients | t     | Sig  |
|--------------|-------------|-----------------------------|---------------------------|-------|------|
|              | B           | Std. Error                  | Beta                      |       |      |
| 1            | (Constant)  | 0.36                        | 0.118                     | 3.05  | 0.003|
| Collective   | 0.324       | 0.047                       | 0.488                     | 6.944 | 0    |
| bargaining   |             |                             |                           |       |      |
| agreement    |             |                             |                           |       |      |
| structures   |             |                             |                           |       |      |

*a. Dependent Variable: Employment Relationship*

From the results on Table 6 above it is indicated that the independent variable that is collective bargaining agreement structures, had a statistically significant relationship with employment relationships. This means that all the postulated null hypothesis is not supported. Thus, collective bargaining agreement structures p=0.00 is a predictor variable for employment relationship in manufacturing companies in Uasin Gishu County.

Table 1.7 above shows the regression coefficients of the independent variable collective bargaining agreement structures, is statistically significant in explaining tripartite employment relationship in manufacturing companies in Uasin Gishu County, Kenya. Thus, the regression equation becomes:

\[ Y = 0.36 + 0.488X_1 + 0.118 \]

Where:
- Y = employment relationship, dependent variable
- α = constant
- \( X_1 \) = collective bargaining agreement structures

This study is concurrent with the study of Brown (2014), who established that collective bargaining had delivered a defensive determination that guaranteed acceptable earnings and occupied circumstances. The study highlighted collective bargaining scheme determined the rapport and circumstances of occupation and enabled enhanced worker dealings in administrations. The findings also supported Onguso, Guyo and Otieno (2016) study which recognized that there was a positive and significant relationship between collective bargaining agreement and employment relationship of teachers in TSC. The study highlighted that collective bargaining between trade unions and the employers had helped to reduce strikes among the employees and had promoted positive employment relationships. The findings supported Akhaukwa, Maru & Byaruhanga (2013) study on the consequence of collective negotiating practice on industrial associations’ atmosphere in public universities in Kenya. The study established that collective bargaining agreement in the universities had a positive effect on industrial relations.

### 8. References

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