

IMPACT OF INDUSTRIAL RELATIONS FOR BETTER QUALITY AND PRODUCTIVITY IN MANUFACTURING INDUSTRIES

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Abstract

The present paper deals the impact of industrial relations for better quality and productivity in manufacturing industries.

Key Words: Industries, Sampling, Quality.

In Manufacturing Industries, the success in Industrial Relations is the success of the organisational goal as for as quality and productivity are concerned.

The samples are drawn from the population of different levels of employees differing in their age profile, gender, educational qualification, working status etc., which is heterogeneous in nature. For this purpose, the population was divided in to various homogeneous strata and from these strata, random samples of employee respondents have to be taken. Hence the Stratified Random Sampling Method was used for this study by taking 500 as the sample size of respondents. Stratified sampling techniques are generally used when the population is heterogeneous, or dissimilar, where certain homogeneous, or similar, sub-populations can be isolated (strata). The sample size of 500 respondents is categorized as under:

Table1: No of Respondents in Different Types of Companies

Company Type	No. of Respondents
Government Companies	100
Public Sector Companies	150
Private Sector Companies	250
Total No. of Respondents	500

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The data collected has been tabulated and analysed to arrive at suitable inferences in this chapter. Statistical tools such as tabulation & diagrammatic/graphical presentation of the data collected, and analytical tools like ratios, percentages are used in this Study. Graphical representation of data has been carried out with the help of MS-EXCEL software. Since the Study has more than 50 variables to be covered, these are grouped in to several Factors and this has been achieved with the help of Factor Analysis using SPSS software. This software programme is extensively used to draw various bi-variate frequency distributions involving two variables & correlation coefficients between related variables. Hypothesis Testing is carried out by using Analysis of Variance procedures & Levene's Statistic. The study of the association between related attributes is analysed with the help of the Spearman's Correlation Coefficients.

To Identify and Analyse the Important Element of Success in IR.

The success of industrial relations in any organisation would depend on many factors. The Study has identified the following six factors along with the Industrial Relations as the factors that drive the industrial relations forward in the organisations.

1. Trade Unions and Associations
2. Labour Management
3. Production & Organisational Design
4. Job Design
5. Employee Development
6. External linkages

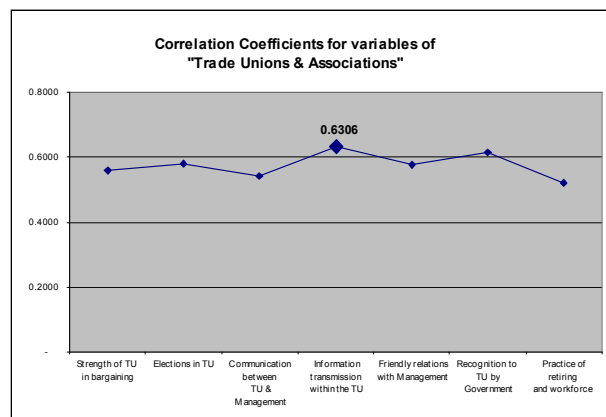
All these factors seem to be very important elements for the success of industrial relations. In order to achieve the above Objective, a detailed analysis of these factors has been carried out in the following paragraphs with the help of the correlation studies between the variables grouped in to several factors with the average rating score of industrial relations.

(1) The correlation between the parameters of Industrial Relations with Trade Unions & Associations is tabulated as below:

Table: Spearman's rank correlation coefficients for the variables of Factor 1 "Trade Unions & Associations"

Parameters of Industrial Relations	1.0000
Strength of TU in bargaining	0.5597
Elections in TU	0.5804
Communication between TU & Management	0.5408
Information transmission within the TU	0.6306
Friendly relations with Management	0.5767
Recognition to TU by Government	0.6153
Practice of retiring and workforce	0.5214

All these correlation coefficients are depicted in the following graph:



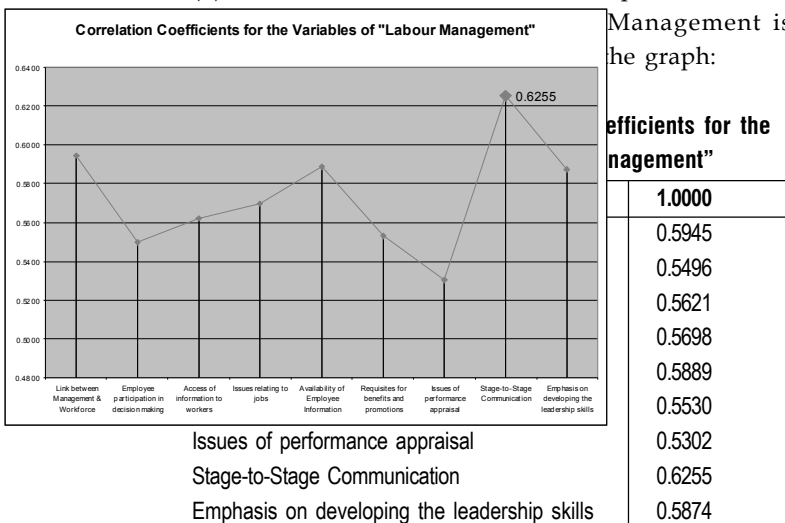
The first parameter of the Trade Unions & Associations is "Strength of Trade Unions in bargaining with the Management of their organisations". The correlation of this variable with the average rating score of the parameters of industrial relations is found to be 0.5597. This implies that the association between these two variables can be explained to an extent of 55.97 percent. The parameter "Elections in Trade Unions" has a positive correlation which is moderate also to an extent of 58.04 percent with the Industrial Relations. The parameter "Communication between the Unions & the Management" has a moderate degree of positive association with the industrial relations to an extent of 54.08 percent. There is a high degree of positive correlation of the parameter "Information transmission within the Unions" with the industrial relations and is found to be 63.06 percent. There is 57.67 percent of positive and moderate degree of association between the "Friendly Relations with Management" and the industrial relations. There is a high degree of positive correlation of 61.53 percent of "Recognition to Trade

Unions by Government” with the industrial relations. There is 52.14 percent of moderate and positive degree of correlation between “Practice of Retirements & Workforce Reduction by the Managements” and the Industrial Relations.

Inference: From the above analysis, the important element of success in Industrial Relations in the organisation by considering the factor “Trade Unions & Associations” is found to be *“Information Transmission within the Union and among the members of the Trade Unions & Associations”* with the correlation coefficient being highest at 0.6306. This shows the importance of the flow of information, whatever it may be, relating to the organisation & the employees, within the members of the Unions & Associations, which makes the path of success of industrial relations smoother in any organisation.

This also supports the fact that if there is a continuous stress on the importance of flow of information it enhances the degree of good industrial relations in the organisations.

(2) The correlation between the parameters of Management is the graph:



The findings of the above table and the graph are as follows:

The variable “Link between Management & Workforce” of the factor Labour Management has a moderate degree of positive correlation with the factor Industrial Relations and the correlation is found to be 0.5945. The correlation between “Employee Participation in Decision Making” and the factor Industrial Relations is found to be moderate and positive at 0.5496. There is 56.21 percent of moderate and positive association between “Access of Information to Workers” and the factor Industrial Relations. The variable “Issues relating to Jobs” has a moderate and positive degree of association to an extent of 56.98 percent with the Industrial Relations. There is 58.89 percent of moderate and positive degree of correlation between “Availability of Employee Information in the organisations” and the Industrial Relations. The association between “Requisites for benefits & promotions” and the Industrial Relations is 55.30 percent, which is positive and again moderate. The variable “Issues of performance appraisal” has a moderate and positive association with the Industrial Relations and this correlation is found to be 0.5302. The correlation between the variable “Stage-to-Stage Communication” has a high impact on the industrial relations with the correlation coefficient at 0.6255. There is also a moderate and positive degree of association between “Emphasis on developing the leadership skills” and the Industrial Relations and this correlation is found to be 0.5874.

Inference: The above analysis brings forth the important element of success in Industrial Relations in the organisation by considering the factor Labour management” as the *“Stage-to-Stage Communication within the Organisations at all levels”* with the

correlation coefficient being highest at 0.6255. This shows the importance of the flow of information, whatever it may be, relating to the organisation & the employees, without of any distinction between the stages that makes the success of industrial relations imperative for any organisation. It means that if there is a continuous stress on the importance of Communication channels within the organisation, it improves the degree of good industrial relations.

(3) The correlation between the Industrial Relations with the variables of Production & Organisational Design is depicted in the following table:

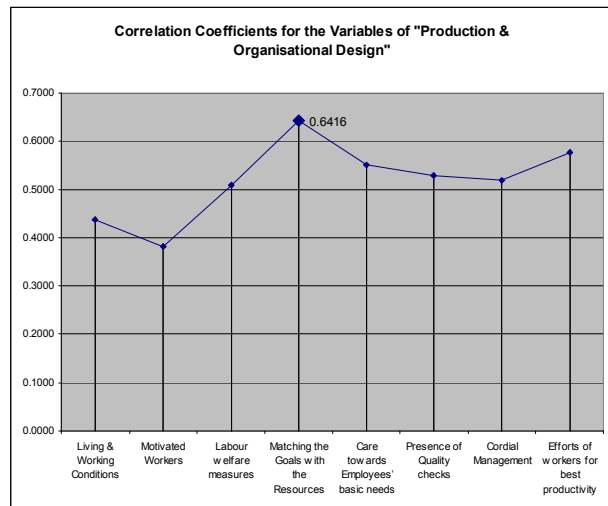
Table: Spearman's Rank Correlation Coefficients for the Variables of Factor 3 "Production & Organisational Design"

Parameters of Industrial Relations	1.0000
Living & Working Conditions	0.4368
Motivated Workers	0.3812
Labour welfare measures	0.5090
Matching the Goals with the Resources	0.6416
Care towards Employees' basic needs	0.5511
Presence of Quality checks	0.5296
Cordial Management	0.5188
Efforts of workers for best productivity	0.5758

From the above table, it is found that among the variables of the "Production & Organisation Design", the "Matching the Goals of the Organisation with the Resources within" has a high degree of positive correlation with the Industrial Relations & found to be 0.6416. This has been identified as the element of success in Industrial Relations so far as "Production & Organisational Design" factor is considered. Next below this value is the value of correlation at 0.5758 which pertains to the moderate and positive correlation between "Efforts of Workers for best productivity" and the Industrial Relations. The correlation between "Living & Working Conditions" and Industrial Relations is 0.4368 which is low in degree and is positive. The correlation between "Motivated Workers" and the Industrial Relations is also found to be low and positive at 0.3812. The variable "Labour Welfare Measures" has an average degree of positive correlation at 0.5090 with Industrial Relations. The association between "Care towards the basic needs of the Employees" and the Industrial Relations is 0.5511 which is just above the average (moderate) degree of correlation and is positive. The variable "Presence of Quality Checks" has a moderate

degree of positive correlation with the Industrial Relations at 0.5296. The correlation between the "Cordial Management" and the Industrial Relations is found to be just above the average & is positive at 0.5188. All these values of correlation coefficients are presented in the graph as follows:

Inference: The correlation coefficients for all the variables of "Production & Organisational Design" are positive indicating that if the efforts on these



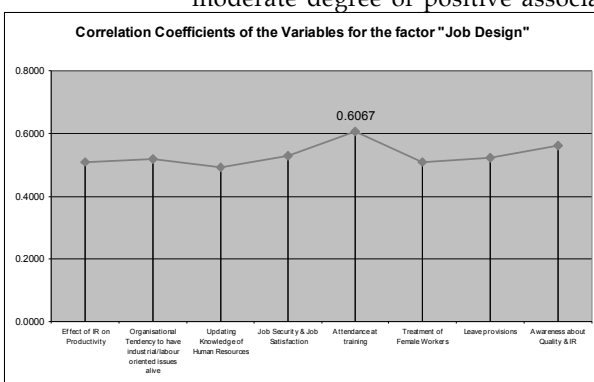
variables are increased, the effect on the Industrial Relations will be positive. Among these variables, "Matching the Goals of the Organisation with the Resources within" has a high degree of positive correlation with the Industrial Relations & found to be 0.6416. Therefore, this has been identified as the element of success in Industrial Relations so far as "Production & Organisational Design" factor is considered. This shows the importance of matching the goals of the organisation with the available resources to gain momentum in the industrial relations.

(4) The correlation coefficients have been found for the variables of the factor "Job Design" with the Industrial Relations and are tabulated as under:

The findings of the table are as follows:

Parameters of Industrial Relations	1.0000
Effect of IR on Productivity	0.5099
Organisational Tendency to have industrial/labour oriented issues alive	0.5191
Updating Knowledge of Human Resources	0.4918
Job Security & Job Satisfaction	0.5308
Attendance at training	0.6067
Treatment of Female Workers	0.5096
Leave provisions	0.5233
Awareness about Quality & IR	0.5606

From among the correlation coefficients listed in the above table, the value 0.6067 is the highest for the variable “Attendance at Training” and the Industrial Relations. This is a moderate degree of positive correlation. The correlation between the “Effect of IR on Productivity” and the Industrial Relations is 0.5099; between Organisation Tendency to have industrial/labour oriented issues alive and the Industrial Relations is 0.5191; between the Updating Knowledge of Human Resources in the Organisations and the Industrial Relations is 0.4918. There is a moderate degree of positive association between the



following graph:

Inference: From the above analysis, the important element of success in Industrial Relations in the organisation by considering the factor “Trade Unions & Associations” is found to be “**Attendance at Training**” with the correlation coefficient being highest at 0.6067. This shows the importance of the regular attendance of the workers/employees/staff in the Trainings, Workshops, and Seminars & Conferences etc. Regular attendance at the trainings etc. will definitely yield positive results in the organisation because of the improved working knowledge levels of workers. When working knowledge increases, it is bound to have positive impact on the relations with the staff & managerial side in the organisations. This improves the Industrial Relations within the organisations significantly.

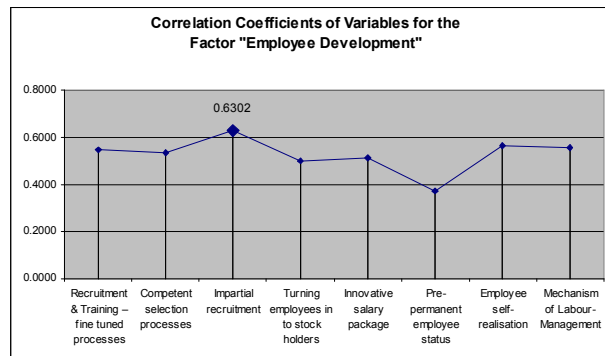
(5) The correlation coefficients have been found for the variables of the factor “Employee Development” with the Industrial Relations and are tabulated as under:

Parameters of Industrial Production	1.0000
Recruitment & Training – fine tuned processes	0.5469
Competent selection processes	0.5350
Impartial recruitment	0.6302
Turning employees in to stock holders	0.4985
Innovative salary package	0.5138
Pre-permanent employee status	0.3715
Employee self-realisation	0.5636
Mechanism of Labour-Management	0.5547

The findings of the above table of correlation coefficients are as follows:

It is seen that there is a high degree of positive correlation to an extent of 0.6302 for the variable “Impartial Recruitment” of the factor Employee Development with the Industrial Relations. The correlation between the “fine tuned processes of recruitment & training” and the Industrial Relations is 0.5469 that is moderate and positive. There is a moderate & positive degree of association between Competent Selection Processes relating to Employee Development and Industrial Relations which is found to be 0.5350. The correlation coefficients between “turning employees in to stock holders of the organisation” & the Industrial Relations is 0.4985; that between “Innovative Salary Package” & Industrial

Relations is 0.5138; that between “Employee Self Realisation” & Industrial Relations is 0.5636; and that between “Mechanism of Labour-Management” & Industrial relations is 0.5547. All these correlations are moderate and positive. There is a low degree of positive correlation between “Pre-permanent employee status” & Industrial Relations and this is 0.3715. All these coefficients are plotted in the following graph for pictorial presentation:



Inference: From the findings, it is concluded that the important element of success in Industrial Relations with regard to Employee Development is “*Impartial Recruitment*” within the organisations with its correlation being high among all the other coefficients within the group. This stresses the need for impartial recruitments & interviews, transparency in recruitment systems, emphasis on skills & qualifications/experience of the candidates at the time of recruitment etc., to improve the atmosphere of Industrial relations in the organisations. It is evident from the results that if the recruitment processes are more impartial & transparent, it results in the smoother industrial relations within the organisation.

(6) The correlation coefficients have been found for the variables of the factor “External Linkages” with the Industrial Relations and are tabulated & are shown in the graph as under:

Parameters of Industrial Relations	1.0000
Workforce Outsourcing/hiring	0.5628
Legal status of the firm	0.4535
Government Policies	0.5580
Investment on Plant & Machinery	0.5256

The findings of the above table and the graph are as follows:

There is a moderate degree of positive correlation between the variable “Workforce Outsourcing/Hiring” of the Factor “External Linkages” and the Industrial Relations and is found to be 0.5628. This is very closely followed by another external variable “Government Policies” whose correlation is found to be 0.5580 with the Industrial Relations which is again moderate and positive. Other two variables viz., “Legal Status of the firm” and “Investment on Plant & Machinery” are positively correlated but to an average extent with the Industrial Relations. The coefficients are found to be 0.4535 and 0.5256 respectively.

Inference: From the analysis, it is concluded that there are two variables viz., “Workforce Outsourcing/Hiring” & “Government Policies” of the factor “External Linkages” which are identified as important elements of success of the Industrial Relations within the organisations. Outsourcing being the Mantra today of any business organisation, it is not surprising to see that more the efforts on outsourcing more will be the success rate of the Industrial Relations in the organisations. Very effective Government Policies on the Industries also have a direct impact on the Industrial Relations in the organisations.

From the identified elements of success of Industrial Relations of the various factors, it is found that the variable “**Matching the Goals with the Resources in the Organisation**” of the factor “**Production & Organisational Design**” has the maximum amount of correlation with the parameters of Industrial Relations & hence this is identified as a **very**

important element of success of the Industrial Relations within the organisations.

Matching the goals with the resources in the organisation is the process of choosing and implementing a structural configurations for an organisation with design to contingent upon several factors like size of the firm, operational parameters, information technology, its environment, the strategic planning for both survival and growth. The matching the goals is the combination of resources, technology, knowledge to enhance quality and productivity in an organisation, with organisational ancillaries like plant and machinery, procedures designing and systems with disseminate information for translating into knowledge.

From the study and the analysis carried out on to identify and analyse the important element of success in Industrial relations mainly focusing on the six factors studied above, it is found that the Matching the Goals with the Resources in the Organisation” of the factor “Production & Organisational Design is a very important element of success of the Industrial Relations within the organisations.

The workplace situations or the organisational design should much look into the factors like the need for achievements like drive to excel, to achieve relations to a set of standards and to strive to succeed. It is also essential to match the goals and resources i.e. both the men and material to desire the competence, close interpersonal relationships and the organisational goals to find the better solutions for the industrial issues. This also includes mainly on the designing of the organisational and production factors, which includes mechanisation, automation and rationalisation including computerization.

The other element in the organisational design in the updation of the skills of both men and materials by motivation, trainings and better industrial relations in the manufacturing industries. The factors like job

designing, organisational designing, work scheduling and motivation, which are the major tools which, impacts the quality and the performance of the employees in the manufacturing industries. As it is found, it is not only the organisational goal, which is more vital and met in the study, but also it is the job satisfaction and the specialisation of the job, which creates the better industrial relations in the organisation.

Therefore, the organisation, which matches the goals with its resources, would increase the worker's satisfaction, challenge and competence among the employees to enhance task identity, task significance and skill variety which, derives job enrichment, motivational level of the employees with better self-evaluation of their work.

Conclusion

Therefore, for a long term relations, peace and co-ordination in any organisation and especially in the Manufacturing Industries, the success in Industrial Relations is the success of the organisational goal as for as quality and productivity are concerned

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