

Are Labour Relations and Leadership Styles Significantly Associated? An Empirical Study in Ten Manufacturing Firms in Sri Lanka

H.H.D.N.P.Opatha

Abstract

It was theoretically argued that Labour Relations (LR) and leadership styles of managers were associated. An empirical study was conducted to test whether the variable of leadership styles of managers was significantly associated with the variable of LR in manufacturing firms in Sri Lanka. The study was conducted in ten Sri Lankan manufacturing firms, which were listed unionised companies. The unit of analysis of this study were manager. The results indicated that leadership styles of managers and LR were not significantly associated suggesting that LR is independent of leadership styles of managers in the manufacturing firms studied in Sri Lanka.

Key words: Association, labour relations, leadership styles, chi-square test & Kruskal-Wallis test, manufacturing firm.

Abstrak

Ini adalah satu kajian empirikal bagi menguji sama ada wujud hubungan yang signifikan antara gaya pengurusan pengurus dan perhubungan pekerja di firma pembuatan di Sri Lanka. Kajian dilakukan ke atas sepuluh buah firma pembuatan yang mempunyai kesatuan sekerja. Unit analisis untuk kajian ini adalah pengurus. Hasil dapatan menunjukkan tidak wujud hubungan antara gaya pengurusan pengurus dan perhubungan pekerja. Ini menunjukkan perhubungan pekerja tidak bergantung kepada gaya pengurusan bagi firma pembuatan yang dikaji.

Kata kunci: Perhubungan, perhubungan pekerja, gaya pengurusan, ujian chi-square & ujian Kruskal-Wallis, firma pembuatan

Introduction

Labour Relations (LR) is one of the most important productivity promoting factors for public sector, private sector as well as small-scale industry (Suri, 1995). It is argued that LR is a major determinant of organizational effectiveness (Alam, 1992; Harris, 2000; National Labor Management Association, USA, 1997;Wagar, 1997; Wasilisin, 1998). In views of Mills, 1998; Miyai, 1995;

Labor Relations and Leadership Styles

Singh, 1992; LR is the *sine qua non* of economic development of a nation in a competitive market.

There are theoretical explanations or arguments (Davar, 1976; Mei-Hui, 1992; Tripathi, 1992; Youg-Nam, 1992) in respect of the association between LR and the variable of leadership styles of managers in organisations. It seems that there is a gap in the empirical knowledge available, in particular in Sri Lankan context, about testing the dependence of LR on leadership styles of managers. This paper focuses on addressing the following three research problems:

1. How do managers in the manufacturing firms being studied in Sri Lanka perceive the degree of LR?
2. What are the leadership styles of managers in the manufacturing firms being studied in Sri Lanka?
3. Does LR depend on leadership styles of managers in the manufacturing firms under study in Sri Lanka?

The objective of the paper is to investigate whether LR depends on leadership styles of managers to a significant extent in the manufacturing sector in Sri Lanka.

Research Framework

LR refers to managers' perceived degree of how well managers and labour unions in a firm feel and behave towards each other. Although there are several terms associated with LR such as union-management relations, labour-management relations, employee relations and employment relations, for this study the term 'Labour Relations' is used. Unions referred to only labour unions (unions of workers) while managers included top, middle and first line managers in the firm. The above working definition of LR comprises of two distinct aspects: feelings of labour unions and managers towards each other and behaviour of labour unions and managers towards each other. These aspects, the first aspect is attitudinal in nature and the later is more behavioural, reflect the realities of LR, given that both aspects are required to examine LR.

Leadership Styles of Managers refer to managers' perceived consistent behaviours that they tend to use while interacting with subordinates. Leadership is generally defined simply as influence, the act or process of influencing people so that they will strive willingly toward the achievement of group goals (Koontz and O'Donnell, 1976, p. 587). Leadership style is the term used to refer to the typical or consistent behaviour that a leader tends to use while interacting with subordinates (Hitt, Middlemist & Mathis, 1979, p. 270). Hellrigel and Slocum (1982, p. 540) wrote:

“Vroom and Yetton have identified five styles of leadership, ranging from highly autocratic to highly participative. The highly autocratic style is used when the manager has all the information needed to make a decision and simply announces it to the group. The group may accept the decision by virtue of the position the leader occupies (legitimate power), because the leader is an acknowledged expert (expert power) or because the leader is strongly admired by the group (referent power). In such conditions, it is not at all difficult for the leader to ‘sell’ his or her decision to subordinates. The participative style is used when it is needed to attain the group’s acceptance and information. It is the best means for permitting individuals to express their views”.

Leadership is one of the most important factors affecting organisational success and it is a significant aspect of management. An autocratic leader makes decisions by him/herself, does not listen to subordinates, does not consider subordinates’ ideas and suggestions and engages in downward communication frequently. This behaviour most likely causes to create unhappiness within subordinates who resultantly may tend not to be supportive. As subordinates are members of the labour unions ultimate result is unfavourable LR. A participative leadership allows workers’ participation in decision-making and motivates subordinates frequently through positive measures (i.e., salary increments, praises, promotions, benefits etc.). Therefore, leadership styles of managers are perceived as an associated factor of LR. Thus, the hypothesis formulated for this paper is that Leadership styles of managers and LR are significantly associated.

Method

Study Setting, Design and Sampling

The researcher was interested in explaining whether LR depends on the leadership styles of managers, rather than establishing correlation or definite cause→effect relationship between the two variables. The type of investigation of this study was, therefore, neither correlational nor causal. Because the data for this study were collected at a single point in time the study was cross-sectional in time horizon (Sekaran, 1999; Zikmund, 1997). This was an appropriate strategy because the main focus of the study was testing whether LR and leadership styles of managers are associated with or not in the manufacturing firms under study. The survey was carried out in 10 unionised manufacturing firms in Sri Lanka. Unit of analysis was at individual level: the manager. There were approximately 205 managers in all the 10-firms. It was possible to collect 161 questionnaires from the managers of the 10-manufacturing firms giving a response rate of 78 per cent.

Measures

LR: The perceived degree of LR in a firm was operationalised into four dimensions i.e., disputes, understanding, co-operation (Beach, 1985; Fret & Walsh, 1998; Pinto, 1995; Tripathi, 1992) and grievances (Bender & Sloane, 1998; Steel, Tennings & Mento, 1992). Indicators/elements used to measure these dimensions with relevant sources from which they were adapted are: (1) Disputes: Number and duration of Strikes, Work-to-rule, Token strike, Overtime ban, Picketing, Go-slow and Running sore strike (Ivanovic, 1988; Silva, 1978; Tripathi, 1992); (2) Understanding: availability of collective agreement and number of violations of the collective agreement (Glueck, 1979; Ivanovic, 1988); (3) Co-operation: degree of understanding goals of each party, degree of communicating clearly the goals and degree of fairness of the goals to tap the element of recognising mutual goals, and degree of working together to achieve organizational goals/targets, degree of helping willingly, degree of feeling like to cooperate, degree of working collaboratively due to fear and degree of opposition to measure the element of working together (Gani & Ahmad, 1995; Hanami, 1981; Tripathi, 1992); and (4) Grievances: amount of grievances presented for settlement, amount of grievances settled and amount of grievances settled for grievant's satisfaction to measure the element of explicit grievances, and degree of suffering silently due to non-presented grievances to measure the element of implicit grievances.

An instrument containing 19 questions items that tap the dimensions and elements of LR was developed. Three sample statements are (1) During the last 3 years you had more than six strikes; (2) When the management asks for union's help, the union is ready to help willingly; and (3) Management has to work collaboratively with the union due to the fear of union. The responses to the questions were elicited on a 3-point scale of 'agree, neither agree nor disagree, disagree'. Weightages or values of 3,2 and 1 were given to these responses taking the direction of the question items (whether they were negative or positive as far as LR was concerned) into account. With respect to the 19 questions on operationalizing the degree of LR from the perception of managers, the following score values would be revealing:

19 x 3 =	57	Favourable response
19 x 2 =	38	Neutral response
19 x 1 =	19	Unfavourable response

The scores for any respondent would lie between 19 and 57. If the score happened to be between 19 and 31.6 it indicated an unfavourable perception to the degree of LR, a score between 33.7 and 44.2 would mean a mediocre perception. A score between 44.3 and 57 would be suggestive of a favourable perception of the degree of LR. The overall score represented the respondent's

position on the continuum of favourability-unfavourability towards the construct of LR.

Leadership Styles of Managers: The variable of leadership styles was measured through the use of the scale of five leadership styles identified by Victor H Vroom, *Organizational Dynamics*, spring 1973, as in Hellrigal and Slocum, 1982, p. 540. These five leadership styles are shown in Exhibit 1.

Exhibit 1
Five Leadership Styles

Leadership styles	
<ul style="list-style-type: none"> • You solve the problem or make the decision yourself using information available to you at that time. 	Low (Autocratic) 1
<ul style="list-style-type: none"> • You obtain the necessary information from your subordinate(s), and then decide on the solution to the problem yourself. You may or may not tell your subordinates what the problem is in getting the information from them. The role played by your subordinates in making the decision is clearly one of providing the necessary information to you, rather than generating or evaluating alternative solutions. 	2
<ul style="list-style-type: none"> • You share the problem with relevant subordinates individually, getting their ideas and suggestions without bringing them together as a group. Then you make the decision that may or may not reflect your subordinates' influence. 	3
<ul style="list-style-type: none"> • You share the problem with your subordinates as a group, collectively obtaining their ideas and suggestions. Then you make the decision that may or may not reflect your subordinates' influence. 	4
<ul style="list-style-type: none"> • You share a problem with your subordinates as a group. Together you generate and evaluate alternatives and attempt to reach agreement (consensus) on a solution. Your role is much like that of chairman. You do not try to influence the group to adopt "your" solution, and you are willing to accept and implement any solution that has the support of the entire group. 	5 High (Participative)

Source: Vroom W H (1973) As in Hellrigal and Slocum (1982) p.540

Reliability and Validity

According to Kothari (1995) validity represents the extent to which an instrument measures what it is supposed to measure. A careful attempt was made by the researcher in constructing the two instruments to consider what the phenomena were being studied, what the research objectives were, what the hypothesis formulated was and what the indicators which had been devised for the two variables were. Consequently the instruments provided an adequate coverage of the phenomenon of LR and the variable of leadership styles of managers. This ensured content validity of the two instruments.

A measuring instrument is reliable if it provides consistent results (Kothari, 1995; Tuckman, 1972;). In order to test the reliability of the two instruments the test-retest method was used. With test-retest, reliability is obtained by administering the same people on two different occasions (Bernardin and Russell, 1993; Kothari, 1995; Tuckman, 1972). A two-week time interval between the two administrations was chosen to minimise the memory effects and the likelihood of true rating changes. Test-retest data were collected from 15 managers. Convenient sampling was used to select managerial respondents for the pre-testing. The test-retest co-efficients were 0.91 and 0.92 for LR and leadership styles respectively. It suggested that the instruments possessed adequate degrees of reliability. For testing the interitem consistency reliability of the instrument developed to measure LR the Cronbach's coefficient alpha was used. The Cronbach's alpha was .83 suggesting a good interitem reliability. This was not applied for the instrument used to measure leadership styles, as it had no several items.

Techniques of Data Analysis

Because data of the variable of LR were considered categorical and the level of measurement of the variable of leadership styles of managers was nominal, Chi-square test as a non-parametric test was used to test the hypothesis. There was no need of exploring the data for normality, linearity and lack of multicollinearity as the Chi-square test was a non-parametric test.

Results

How the managers have responded in the categories of the variable of LR is shown in *Table 1*. This frequency table indicates that the degree of LR from the perception of more than a half of managers (58.39 per cent) in the ten manufacturing firms selected for the study is mediocre. Only 2.48 per cent of managers indicated that LR is unfavourable. The cumulative percentage nudge

over 50 per cent and the category of the variable of LR corresponding to this are bolded in the table.

Table 1
Frequency Distribution of LR

Degree of LR	Number	Percentage	Cumulative Percentage
Unfavourable	04	2.48	2.43
Mediocre	94	58.39	60.87
Favourable	63	39.13	100.00
Total	161	100.00	

Accordingly, median is in the mediocre category. Calculated median is 37. Using the scales continuum developed to measure degree of LR from the perception of managers, calculated median is in the mediocre scale. Interquartile range is 9, which is a low figure suggesting that the median is adequate to summarise the distribution. Therefore, the finding suggests that the LR from the perception of managers of the ten manufacturing firms selected for the study is neither favourable nor unfavourable i.e., indifferent.

Table 2
Frequency Distribution of Leadership Styles

Leadership Style	Number	Percentage
Highly Autocratic	08	4.97
Autocratic	12	7.45
Mixed	37	22.98
Participative	54	33.54
Highly Participative	50	31.06
	161	100.00

Frequency distribution of leadership styles of managers in the ten manufacturing firms is presented in *Table 2*. The data in the table shows that only eight managers had an autocratic leadership style and majority of managers (54 managers) had participative style. As the single most common response is 'participative', 'Participative' is the mode. The variation ratio (symbolised as V) is taken to show how typical the mode is (dispersion). As 66.46 per cent of managers are not in the modal category, V is 0.66. This percentage can be

Labor Relations and Leadership Styles

regarded as a high figure. Consequently the mode reflects overall distribution poorly. However, 31.06 per cent of managers are highly participative in leadership style. Thus, generally (taking 'high participative' and 'participative' together) it is possible to determine that leadership styles of managers in the ten manufacturing firms are participative.

Table 3
Chi-Square Test Result

Dependence	Chi-Square	Degrees of Freedom	Critical/Table Value (at 0.05)
LR and Leadership Styles of Managers	3.2243	4	9.49

The result of Chi-Square analysis used to test the null hypothesis is presented in *Table 3*. It shows that the value of Chi-Square for 4 degrees of freedom at 0.05 level of significance is 9.49. As the calculated value of Chi-Square is lesser than its table value at 0.05 level, the null hypothesis does hold good meaning that the two variables are not associated. Therefore the null hypothesis is not rejected while the alternative hypothesis (H_1) is rejected.

Table 4
Kruskal – Wallis Test

Level	Nobs	Median	Ave. Rank	Z Value
1	8	68.50	83.4	0.15
2	12	67.00	71.1	0.76
3	37	69.00	76.8	0.62
4	54	70.00	88.3	1.41
5	50	68.00	78.2	0.51
Overall 161				
H = 2.35		d. f. = 4	P = 0.672	
H = 2.36		d. f. = 4	P = 0.670 (adj. for ties)	

A Kruskal – Wallis test at 5% level of significance was conducted to test the result of X^2 further. *Table 4* gives the results of the Kruskal-Wallis test. The test statistic is H for this Kruskal-Wallis test. H is 2.36. The table value of Chi-Square for 4 degrees of freedom is 9.49. The H value calculated is lower than

the concerned table value of Chi – Square. This suggests that there is no statistical evidence to reject the null hypothesis and accept the formulated hypothesis (H_1). Therefore, leadership styles and LR are not significantly associated.

Discussion

Findings derived from univariate analysis of the data were that LR in the ten manufacturing firms is neither favourable nor unfavourable; and that majority of managers in the ten manufacturing firms follow a participative leadership style. Quite interestingly and surprisingly, no significant association was found between leadership styles of managers and LR. In other words the result of the study infers that whatever the type of leadership style managers follow it does not shape the degree of LR in manufacturing firms under study. This may be because of that measurement of leadership style is not sufficient. The construct of leadership style could have been measured according to an instrument whose level of measurement was interval Or managers may not have responded for the variable of leadership styles genuinely. Or it may be that managers have leadership styles, which have nothing to do with LR genuinely as found in this study. It is suggested to replicate this study by using a different reliable and valid instrument to measure leadership style in order to investigate whether the finding of this study is confirmed.

Conclusion

First and second research questions of the paper were addressed through the use of descriptive analysis and, it revealed that majority of managers perceived the degree of LR in the ten manufacturing firms as moderate (neither favourable nor unfavourable); and that the leadership style followed by majority of managers in the ten manufacturing firms was participative. Bivariate analysis revealed that LR in the manufacturing firms studied was independent of leadership styles of managers. In other words LR does not depend on leadership styles of managers. As the variable of leadership styles was not significantly associated with LR a firm that wishes to enhance LR has to concentrate on other variables, which are significantly associated with LR. An important implication of the finding is that there is a need to look at other factors to enhance LR. Worker grievance handling, worker discipline administration, worker welfare administration, worker health and safety administration and managing collective agreements may be some important factors to be manipulated to make LR better.

- Alam, S. F. (1992) Country Paper: India (2), *Labour-management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, pp.175-180.
- Beach, D.S. (1985) *The Management of People at Work*, New York, Macmillan Publishing Company.
- Bender, K.A. and Sloane, P.J. (1998) Job Satisfaction, Trade unions, And Exit-Voice Revisited, *Industrial and Labor Relations Review*, 51 (2), 222-239.
- Bernardin, H. J. & Russell, J.E.A. (1993) *Human Resource Management: An Experiential Approach*, New York, McGraw-Hill, Inc.
- Davar, R. S. (1976) *Personnel Management and Industrial Relations in India*, Delhi, Vikas Publishing House.
- 1997. Forward Thinking, *The Newsletter of the National Labor Management Association-USA*, Spring Issue.
- Fretz, G. E & Walsh, D. E. (1998) Aggression, Peaceful Co-existence, Mutual Cooperation – it's up to us, *Public Personnel Management*, 27, 69 – 76.
- Gani, A. & Ahamad, R. (1995) Correlates of Quality of Work Life: An Analytical Study, *Indian Journal of Industrial Relations*, 31, 8-17.
- Glueck, W.F. (1979) *Foundations of Personnel*, Business Publications Inc, Texas.
- Hanami, T. (1981) *Labor Relations in Japan Today*, Kodansha International Ltd, Tokyo.
- Harris, M. (2000) *Human Resource Management: A Practical Approach*, Fort Worth, The Dryden Press.
- Hellriegel D. & Slocum J. W. (1982) *Management*, 3rd ed., Reading, Addison Wesley Publishing Company.
- Hitt M A, Middlemist R. D. & Mathis R. L. (1979) *Effective Management*, New York, West Publishing Co..
- Ivanovic, A. (1988) *Dictionary of Personnel Management*, London, Peter Colling Publishing Ltd.
- Koontz H. & O'Donnell C. (1976), *Management* 6th ed., New York, McGraw – Hill Ltd.
- Mei-Hui, C. (1992) Country Paper: Republic of China (1), *Labour-Management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, 101-104.
- Mills, D. Q. (1994) *Labor Management Relations*, New York, McGRAW – Hill Book Company.
- Miyai J. (1995) *Productivity Movement in Japan and Role of JRC-SED*, Round Table Conference Paper, Colombo.
- Pinto, J.L. (1995) The Roles of Management and Trade Unions in Bringing about A Positive Work Culture, *Indian Journal of Industrial Relations*, 31 (1), 31-35.

- Rao, P. S. & Narayana, N. (1992) Labor Management Cooperation in Indian Railways, *Indian Journal of Industrial Relations*, 28, 40–51.
- Sekaran, U. (1999) *Research Methods for Business, A Skill Building Approach*, 3 edition., New York: John Wiley & Sons, Inc.
- Silva, W.P.N. (1978) *Industrial Conflict*, Colombo, Lake House Publisher.
- Singh, B. P., Chabra, T. N. & Taneja, P. L. (1992) *Personnel Management & Industrial Relations*, Delhi, Dhanapat Rai & Sons.
- Singh, R. (1992) Country Paper: India (1), *Labour-Management Cooperation: a Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, 135-140.
- Steel, R. P., Tennings, K. R., Mento, A. J. & Hendria, W. K. (1992) Effects of Perceived Decision – Making Influence on Labor Relations and Organizational Outcomes, *Group and Organization Management*, 17, 24–43.
- Suri G.K. (1995) *Productivity, Its Concept, Parameters and Contemporary Concerns*, Round Table Conference Paper, Colombo.
- Tripathi, P. C. (1992) *Personnel Management and Industrial Relations*, New Delhi, Chand Sons.
- Tuckman B. W. (1972), *Conducting Educational Research*, New York, Marcourt Jovanovich. Inc.
- Wagar, T. H. (1997) The Labor Management relationship and Organization Outcomes, *Journal of Industrial Relations*, 52, 430–447.
- Wasilisin, A. M. (1998) Approaching YZK Federal Labor – Management Relations', *Public Manager*, 27, 25–28.
- William, M. W. (1992) Country paper (1), *Labour-Management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, 124-128.
- Yong-Nam, C. (1992) Country Paper: The Republic of Korea, *Labour-management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, 157-159.
- Zikmund, W.G. (2000) *Business Research Methods*, 6 edition, Fort Worth, Harcourt Brace College Publishers.

Dr. H.H.D.N.P.Opatha is a senior lecturer at the Department of Human Resource Management, University of Sri Jayewardenepura, Sri Lanka