

AN EMPIRICAL INVESTIGATION OF Management-related Factors Contributing to Labour- Management Relationship in Manufacturing Firms in Sri Lanka

By

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Existing literature reveals a gap in the empirical knowledge in respect of factors that affect Labour-Management Relationship (LMR) at the firm level. The present study empirically evaluated four management-related factors that could have an effect on the LMR namely managerial assumptions about workers, managerial attitudes toward unions, Human Resource Management (HRM) competence of managers and role of Human Resource (HR) department. The study involved 223 managers who were selected randomly from 23 manufacturing firms in Sri Lanka. The results indicated that all the independent variables were positively and significantly correlated to the LMR. However, results of regressing the independent variables on the LMR showed that managerial assumptions about workers, managerial attitudes toward unions, and the HRM competence of managers are strong predictors of the LMR while the role of HR department is a weak predictor. On the whole, the independent variables accounted almost 50% of the variance in the LMR.

Introduction

Labour-Management Relationship (LMR) is an important factor that could contribute to manufacturing firms to gain the competitive edge in productivity and value addition in the face of sharply competitive trade, commerce and production in a

global environment of this new millennium. The LMR is one of the most important productivity promoting factors for public sector, private sector and small-scale industry as well (Suri, 1995). It contributes significantly to organizational effectiveness (Alam, 1992; Wagar, 1997; National Labor Management Association, USA, 1997; Wasilisin, 1998; Harris, 2000). The harmonious LMR is one important factor that has contributed significantly to industrial success in Japan (Shimada, 1991). It has been regarded as the sine qua non of national economic development in a competitive market (Singh, 1992; Miyai, 1995; Mills, 1998).

There are theoretical explanations or arguments (Davar, 1976; Akram, 1992; Mei-Hui, 1992; Rao & Narayana, 1992; William, 1992; Youg-Nam, 1992; Tripathi (1992); Armstrong, 1999) in respect of effects of managerial assumptions about workers, managerial attitudes toward unions, the HRM competence of managers and the role of HR department on LMR. It seems that there is a gap in the empirical knowledge available about the effects of managerial assumptions about workers, managerial attitudes toward unions, the HRM competence of managers and the role of HR department on the LMR in the organisational context from the perspective of managers. Human resources management researchers have, to date, conducted only a limited amount of research in the labor-management relations area and the field

represents a vast area for human resources research (Robert, 1987). Few studies (Buttner & Wolfgang, 1959; Silva, 1973; Pathirana, 1990; Rodrigo, 1994) have been reported on industrial relations in Sri Lanka (Opatha, 1998). But they are micro studies focused on general or legal issues with no direct link with this study. In specific the following research problems were addressed:

1. Do managerial assumptions about workers, managerial attitudes toward unions, the HRM competence of managers and the role of HR department affect or contribute to LMR in manufacturing sector?
2. How do these factors affect the LMR in the manufacturing sector?
3. To what extent do these factors affect the LMR?
4. What is the aggregate effect of these factors on the LMR in the manufacturing sector?

Although there are several terms associated with the LMR such as union-management relations, labour relations, employee relations and employment relations, for this study the term '**Labour-Management Relationship**' is used. The working definition of LMR is perceived degree of how well labour unions and managers in an organisation feel and behave towards each other.

Though there are various types of trade unions such as craft unions, industrial unions, professional associations etc. only labour unions (unions of workers) were considered for the study. Managers included top, middle and first line managers in the organisation. The above working definition of the LMR comprises two distinct aspects: feelings of labour unions and managers towards each other and behaviour of labour unions and managers towards each other. These aspects reflect the realities of the LMR, given that both aspects are required to examine the LMR. The first aspect is attitudinal in nature and the later is more behavioural.

Research Model

Managerial assumptions about workers refer to the beliefs and attitudes of managers about workers in general. These assumptions may be positive or

negative. Theory Y managers assume that people do not inherently dislike work, are intrinsically motivated, exert self-control, and seek responsibility (Gordon, 1999). Theory X managers assume vice versa. McGregor (1961, as in Gordon, 1999) argues that managers base their leadership style on their assumptions about workers. Managers with positive/Y-oriented assumptions will mostly follow a democratic leadership style that gives a greater degree of freedom and participation to subordinates (Hitt et al., 1979; Mamoria, 1991). The managers with positive assumptions will tend to have high confidence in workers and then tend to delegate sufficient authority to workers by allowing them to participate in decision making. Also the approach of motivation of workers followed by the Y-oriented managers are mostly positive through rewards (Singh, et al., 1992). Positive assumptions lead to more favourable LMR through higher co-operation and lesser number of grievances. Hence, these arguments lead to a hypothesis as follows:

Hypothesis 1: The more positive are the managerial assumptions about workers the more favourable is the perceived LMR.

Managerial attitudes toward union refer to general ways managers in organisations think about labour unions operating in their organisations. Managerial attitudes towards unions affect the LMR (William, 1992; Armstrong, 1999). The negative attitudes of management to unions is a factor hindering the LMR (Yong-Nam, 1992). The presence of a union means that management can no longer choose to do merely what is its best interests (Harris, 2000). Unitary Theory held by Halford Reddish and others (as in Farnham and Pimlott, 1996) rejects industrial relations conflict between employers and workers being perceived trade unions and collective bargaining as anti-social and anti-managerial mechanisms. Managers who believe in unitary theory have pessimistic attitudes towards unions and tend to reject and oppose unions. This leads to conflicts and grievances and finally the unfavourable LMR.

Because good labour-management relations are built not only on economic power but also on trust, positive attitudes toward the union and its officials pay off in

the long run (Reed, 1996). Conflict and Pluralist Theory, which is based on two interrelated views of society and of industrial relations between the employers and the employees (Farnham & Pimlott, 1996) suggests that industrial conflict between managers and workers has to be considered as endemic feature of employment relationship and needs to be managed effectively. Pluralism-either hard pluralism that emphasises collective bargaining or soft pluralism that emphasises joint consultation-does not accept the political doctrine of sovereignty, i.e., there must be a final authority whose decisions are definitive and it accepts that there are no definitive decisions by final authorities but only continuous compromises (Clegg, 1975, as in Farnham & Pimlott, 1996). Managers who believe in this theory will likely have optimistic attitudes towards unions. Managers who have favourable or optimistic attitudes towards trade unions tend to accept the union as an institution and understand its need to exist (Beach, 1980), and then deal with the union co-operatively. Managers with optimistic attitudes treat the union as a partner of the same organisation and both can work collaboratively towards the effective functioning of the organisation. The optimistic attitudes towards unions will result in the favourable LMR. Thus, second hypothesis is:

Hypothesis 2: The more positive are the managerial attitudes toward unions the more favourable is the perceived LMR.

HRM Competence of managers was defined as the self-assessed degree of manager's knowledge, skills and abilities in respect of human resource management. As all managers, in spite of their fields of specialisation, have subordinates to be managed they have to deal with human resource management (HRM) matters (Yoder & Staudohar, 1982; Mondy & Noe, 1993; Werther & Davis, 1993; Boo, 1992). A good competence of managers in HRM is important to have good LMR (Hock & Tyabji, 1978; Weerasinghe, 1978). The high competence of managers in human resource management enables managers to make right and fair decisions regarding human resource planning, recruitment, selection, induction, training, performance appraisal, rewards administration, and employee and union relations.

Further the competence of human resource management will help create a better understanding among managers in respect of employee needs, unionism, collective bargaining and workers' participation (Weerasinghe, 1978). Fair and right decisions in respect of HRM matters will result in the favourable LMR provided that other factors remain constant. Lack of competence of managers in human resource management will result in unfair and incorrect HRM decisions that will lead towards an unfavourable LMR provided that other factors remain constant. Hence, the following hypothesis:

Hypothesis 3: HRM Competence of managers will be positively related to the perceived LMR.

Role of Human Resource Department (HRD) refers to the perceived degree to which managers are satisfied about the role of the human resource department. The HRD has to perform several specific roles such as advisory, audit, innovator, adapter, mediator and policy formulator roles (Hackett, 1991; Odiorne, 1987; Schuler, 1998). When the HRD performs its specific roles properly it provides right advice to all managers in respect of HRM matters, monitors human resource activities so that they are carried out fairly and consistently, develops innovative approaches to HRM problems and concerns, attempts to settle conflicts between workers/unions and managers and develops new acceptable policies for HRM issues. Thus, proper performance of the specific roles of the HRD enables line and other staff managers to make fair and accurate decisions relating to worker matters, which then leads to the favourable LMR.

Hypothesis 4: The role of the human resource department will be positively related to the perceived LMR.

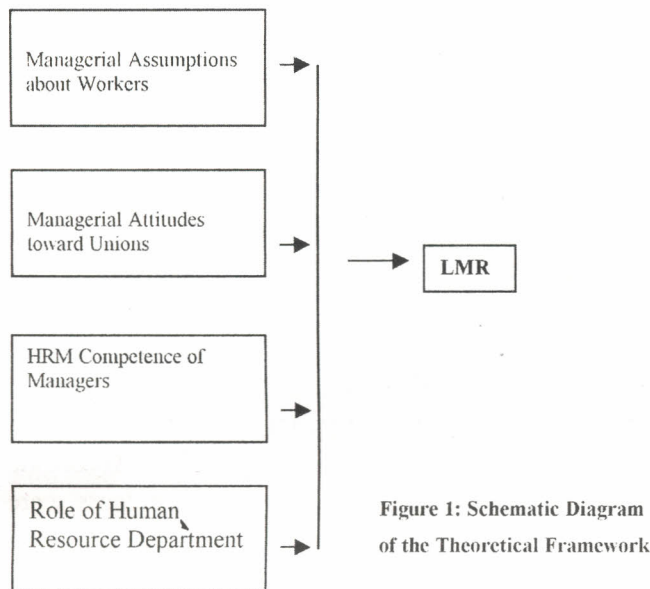
Combined influence of the above variables on the perceived LMR refers to simultaneous effect of the above four variables on LMR. Managerial assumptions about workers, managerial attitudes toward unions, HRM competence of managers and role of human resource department were hypothesised as independent variables that positively relate to the perceived LMR. Hence it is argued that these four variables together will have a significant effect on the perceived LMR. Based on this argument the fifth

hypothesis for the study is as follows:

Hypothesis 5: Managerial assumptions about workers, managerial attitudes toward unions, HRM competence of managers and role of human resource department together will significantly explain the variance in the perceived LMR.

The following figure indicates the schematic diagram of the research model.

FIGURE 1: SCHEMATIC DIAGRAM



Method

Study Setting, Design and Sampling

It seems to be a fact that most of the time there are multiple factors that influence one another and the problem (LMR) in a chainlike fashion (Sekaran, 1992). Thus, the researchers were interested in explaining the effects of the four factors on the LMR, rather than establishing definite cause-effect relationships. Hence, the type of investigation of this study was correlational. As the data for this study was collected at a single point in time (Zikmund, 1997; Sekaran, 1999), the study was cross-sectional in time horizon. This was an appropriate strategy because the main focus of the study was explaining the four factors at the micro level, which contribute to LMR in the manufacturing sector.

The survey was carried out in 23 unionised manufacturing firms in Sri Lanka. Unit of analysis was at individual level: the manager. There were approximately 460 managers in all the 23 firms. A sample size of 230 managers, 10 from each firm was selected for the study. The sample size obtained for the study was appropriate according to the rules of thumb proposed by Roscoe (1975) (as in Sekaran, 1992) such as that sample sizes larger than 30 and less than 500 are appropriate and the sample size should be several times (preferably 10 times or more) as large as the number of variables in multivariate study (including multiple regression analyses). The questionnaires for managers (the language of which was English) were distributed among managers according to simple random sampling of the probability sampling design. It was possible to collect 223 questionnaires from the 23-manufacturing firms. 10 questionnaires were collected from each firm except two firms (7 from one firm and 6 from the other).

Measures

LMR: The perceived degree of LMR in a firm was operationalised into five dimensions i.e., disputes, understanding, co-operation, partnership (Beach, 1985; Tripathi, 1992; Pinto, 1995; Fret & Walsh, 1998) and grievances (Chandra, 1978; Steel, et al., 1992; Nkomo, et al., 1996; Bender & Sloane, 1998). 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 (Silva, 1978; Ivanovic, 1988; Tripathi, 1992); (2) Understanding: availability of collective agreement and number of violations of the collective agreement (Glueck, 1978; 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 (Hanami, 1981; Tripathi, 1991; Gani & Ahmad, 1995); (4) Partnership (Workers' participation): degree of encouraging to give suggestions and degree of allowing to participate in making decisions which affect workers (Jackson and Schuler, 2000); and (5) 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 21 questions items that tap the dimensions and elements of LMR was developed and 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 7 point Likert type scale of 'strongly agree, agree, slightly agree, neither agree nor disagree, slightly disagree, disagree, strongly disagree' (use of summated scales). Weightages or values of 7,6,5,4,3,2 and 1 were given to these responses taking the direction of the question items (whether they were negative or positive as far as LMR was concerned) into account. As the instrument developed to measure LMR has 21 questions it was regarded as a composite or index measure by applying the holistic approach (Steel, et al., 1992; Zikmund, 2000). Summing across the dimensional values created a composite measure of LMR.

Managerial assumptions about workers: This independent variable was measured through the use of the questionnaire developed by Burton (1990) by adopting and deriving items from D. Mc.Gregor, *The Human Side of Enterprise*, 1960. The instrument contains 20 statements and respondents were asked to indicate their degree of non-acceptance or acceptance on a 7-point scale. Two sample questions are (1) most workers do not like to work; and (2) to get work done, managers must control workers.

Managerial attitudes toward unions: The variable was measured by the use of an instrument developed by Bernardin and Russel (1993). The nature of attitudes

of the managers toward the unions was measured through the use of seventeen questions from which responses were elicited on a 7 point Likert scale, ranging from *strongly disagree* to *strongly agree*. Weightages of 1,2,3,4,5,6, and 7 were given to responses considering the direction of the question items. Two sample questions are (1) Sri Lanka's productivity would be higher if it were't for unions; and (2) Unions are corrupt.

Competence of managers in HRM: Competence of managers in HRM was measured on ten HRM performance dimensions (human resource planning, recruitment and selection, orientation, appraising job performance, rewarding, safety and health, managing discipline, grievance handling and union relations) using an instrument developed by the researchers by following the same structure of the instrument for measuring managerial performance developed by Mahoney et al. (1963, 1964). The structure of the instrument developed by Mahoney was used as the basis for developing the instrument of competence of managers in HRM because it had been adopted frequently in the performance evaluation literature (Brownell & McInnes, 1986; Yap, 1994). According to the measurement instrument, respondents were asked to rate the extent to which a manager believes he/she has knowledge and skills in carrying out a particular HRM function. Responses were elicited on a 7-point Likert-type scale in respect of each of the ten HRM functions, with '1' indicating least extent and '7' highest extent. Two sample questions of the instrument are (1) orientation: welcome and introduce the new employee to the unit/department, inform and discuss benefits, other related working conditions, physical facilities and the surrounding area, and introduce the employee to job duties and responsibilities; and (2) grievance handling: investigate and find the real cause or causes of the grievances, and settle promptly the grievances in an objective and professional manner.

Role of human resource department: The perceived degree to which managers are satisfied about the role of the human resource department was operationalised into six dimensions based on the writings of Schuler, 1998; Gibb, 2000; and Kleiman, 2000 and they included advisory role, audit role,

innovator role, adapter role, mediator role and policy initiation and formulation role. Seven question items were used to measure the role of human resource department. The respondents were asked to indicate their degree of agreement or disagreement about the role according to a 7-point scale (1=strongly disagree, 7= strongly agree). Two sample items are (1) to what extent are you happy with the advice the HRD provides you about HR matters? ; and (2) to what extent are you happy with the mediator role by which the HRD acts to solve problems between workers and yourself or managers as an effective mediator?

Reliability and Validity of the Instruments

The reliability has two aspects, i.e, stability (ability to produce consistent results over time despite uncontrollable testing conditions or the state of the respondent) and consistency (homogeneity of the items in the instrument tapping the construct) (Sekaran, 1999). The test-retest was done for estimating external reliability (stability aspect) by using 15 managers from three manufacturing firms with a two-week time interval between the two administrations. The test-retest coefficients of the instruments measuring LMR, managerial assumptions about workers, managerial attitudes toward unions, HRM competence of managers and role of HR department were .962, .921, .941, .958 and .842 respectively suggesting that each instrument possesses a high test-retest reliability. The Cronbach's coefficient alpha was used to get the Interitem Consistency reliability (consistency aspect) (Walsh, 1995). Cronbach's alphas were .8374 for managerial assumptions about workers; .9179 for managerial attitudes toward unions; .8830 for HRM competence of managers and .7633 for role of HR department suggesting that each instrument's internal consistency was satisfactory.

For ensuring content validity of the instruments specially developed for this study, the procedure suggested by Murphy and Davidshofer (1998) was used. An attempt was made to give the conceptualisation and operationalisation of universe of interest of the variable based on literature. Also the instruments were developed with the careful judgements of the researchers being themselves in

the field of personnel management and industrial relations for many years. High internal consistency reliability is an indirect way of ensuring content validity (Walsh, 1995). All the instruments have a high degree of internal consistency reliability (alpha). These kinds of evidence support towards ensuring the content validity of the instruments developed to measure the variables.

In search of construct validity of the variables of the study a further attempt was made by using the process of construct validation proposed by Schmitt and Klimoski (1991). The correlation analysis supports the hypotheses formulated linking the relationship between the LMR and the independent variables. The acceptance of hypotheses linking the relationship between LMR and the independent variables suggests that instruments possess an adequate construct validity.

Results

An adequate examination was conducted to ascertain whether the linearity and the normality assumptions are met in order to use correlation and regression techniques. Visual methods such as scatterplots and the residual scatterplots and the test of linearity by using bivariate regression support the linearity assumption relating to the data of all the variables. Histograms of standardized residuals, normal probability plots, and application of the Central Limit Theorem provide sufficient evidence that data of the present study are approximately normally distributed. Non-existence of Multicollinearity is another important assumption to be met. The multicollinearity problem is a question of degree (Hise et al, 1983). Tolerance test was carried out for each independent variable as recommended by Norusis (1997). None of the tolerances for each of the independent variables is 1 or less than 0.1. The results of collinearity test suggest that data for independent variables are not significantly multicollinear.

The results of Pearson's Product Moment Correlation analysis used to test all the null hypothesis are presented in table 1. As the bivariate hypotheses are concerned with a positive relationship ($H_A > 0$) one-tailed test was used.

Table 1: Pearson Correlation Matrix for all the Variables

N o	Variables	1	2	3	4	5
1	LMR	1.0				
2	Managerial Assumptions about Workers	.618*	1.0			
3	Managerial Attitudes toward Unions	.642*	.390*	1.0		
4	HRM Competence of Managers	.631*	.340*	.470*	1.0	
5	Role of Human Resource Department	.577*	.374*	.582*	.358*	1.0

** p <= .001 n= 223.

As can be seen in table 1, all the four variables are correlated over .57. The correlation coefficients of all of the variables were significantly greater than zero, and therefore the null hypotheses proposed for these variables were rejected ($p < .01$) while accepting the hypotheses formulated (alternative). This means that the data support the hypothesised relationship (positive) between each of the variables and LMR. Table 2 shows that there were relationships among the independent variables. However, this does not create a significant impact on the regression analysis as the tolerance test indicated that the data for the independent variables are not significantly multicollinear.

Multivariate analysis evaluates the simultaneous effects of all the independent variables on the LMR. The fifth hypothesis of this study is concerned with the aggregate impact of the four variables on LMR. The results of regressing the four independent variables against the dependent variable-LMR are shown in table 2.

Table 2: Aggregate Impact of the Independent Variables on LMR

R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig. F
.712	.507	.498	8.8527	56.013	0.0005

The square of the multiple R is .507 indicating that the 50% of variance in LMR is explained by the four independent variables jointly. The F value is 56.013

that is significant at $p > .0005$ suggesting that the four independent variables have significantly explained 50 percent of the variance in LMR. Thus, the alternative hypothesis (H_{5A}) is supported by the data.

The strengths of influence that each of the independent variables had on the dependent variable, i.e., LMR, were determined by the use of multiple regression coefficients of the independent variables. The influence of each independent variable is shown in table 3.

Table 3 Influence of the Independent Variables on LMR

Variable	Std. Beta	t	Sig. t
Managerial Assumptions about Workers	.178 (.067)	2.05 6	.041
Managerial attitudes toward Unions	.323 (.086)	4.53 7	.000
HRM Competence of Managers	.177 (.181)	1.75 8	.032
Role of Human Resource Department	.136 (.180)	2.15 6	.080

(Standard Error in Parentheses)

As shown in the table, managerial attitudes toward unions had the strongest significant effect on the LMR with a standardized beta of 0.323. Managerial assumptions about workers and HRM competence of managers also had significant effects on the LMR with standardized betas of 0.178 and .177 respectively. However, the role of the human resource department had no significant effect on the LMR (the beta value of .136 at $P = .080$).

A stepwise regression was done in finding out the extent of contribution of each variable to R square value or the total explanatory power of the regression model. The results of stepwise regression (table 4) show that there were three predictor variables that could significantly contribute to the R square value.

Table 4: Stepwise Multiple Regression Analysis: Predictors of LMR

Variables	R ²	+R ²	Beta	Sig t
1. Managerial Attitudes toward Unions	0.41 3		.335	.0005
2. Managerial Assumptions about Workers	0.48 7	0.074	.261	.0005
3. HRM Competence of Managers	0.50 0	0.013	.195	.018

R Square: .500 Adjusted R Square: .493 F = 72.957 D.F. = 222
Sig. F = .0005

The results of the stepwise multiple regression analysis indicated that managerial attitudes toward unions had the highest beta value and contributed about 41% ($R^2 = .413$) to the variance in LMR. Managerial assumptions about workers and HRM competence of managers contributed about 7.4% (change in R square = 0.074) and 1.3%, respectively. The role of the human resource department was not found contributing to the total explanatory power suggesting that managerial attitudes toward unions, managerial assumptions about workers and HRM competence of managers explained about 50% of the variation in LMR.

Discussion

As hypothesized, it was found that the more positive the managerial assumptions about workers the more favourable would be the LMR. As the variable was found to be a significant predictor of the LMR, managerial assumptions about workers play a significant role in determining the LMR in the manufacturing firms in Sri Lanka. The findings are consistent with the classic theory X and theory Y proposed by McGregor. It means that theory Y-oriented assumptions of managers will have a significant positive effect on the LMR and theory Y-oriented assumptions of managers will have a negative effect on LMR. These findings imply that managers with theory Y-oriented assumptions will enable to have favourable LMR (while other factors remained unchanged) suggesting theory Y orientation be developed within managers in order to create good LMR. Descriptive analysis revealed that in general, assumptions of managers about workers in the manufacturing firms under study are neither theory X-oriented nor theory Y-oriented (mixed). It is

recommended that this mixed orientation of the managers should be changed through proper training in the way that managers become theory Y-oriented with a view to enhance LMR in Sri Lanka.

A positive and significant relationship was found between managerial attitudes toward unions and LMR. Also it was found that managerial attitudes toward unions was the strongest predictor of LMR. It was expected that managers who have positive attitudes about labour unions operating in their organizations tend to trust the union and deal with it favourably leading to good LMR provided that other factors remain constant. The findings empirically confirm the theoretical arguments given by Armstrong (1998), Tripathi (1992), Mei-Hui (1992). They explained that managerial attitudes to unions affect LMR significantly. Mei-Hui (1992) pointed out that tyrannical attitudes of management affect negatively LMR. It suggests that manufacturing firms should endeavour to inculcate positive attitudes within managers in respect of labour unions for the purpose of enhancing LMR. Relevant descriptive statistics reveal that majority of managers in the Sri Lankan manufacturing firms under study have slightly negative attitudes toward unions. Existence of slightly negative attitudes within majority of managers about unions is not a satisfactory state implying a serious need of changing or converting the current attitudes towards optimistic ones. Right understanding will result in generating positive attitudes within managers to certain extent. For the purpose of inculcating positive attitudes within managers about unions, all the managers are to be given an adequate understanding with regard to the workers' right to unionise, workers' motivations for joining the union and advantages of having trade unions within the firm through a proper training and development programme. Also, it should be noted in relation to the findings that the trade union officials must behave in the way that will help develop or strengthen positive attitudes within managers. In this context, the role of trade union is very important. If union officials are to play in bringing about positive attitudes within managers about unions and then more favourable LMR, they will have to follow several actions/strategies. These actions may be: (i) the union should be led by the workers themselves not by outside

political leaders; (ii) when dealing with management, co-operative approach rather than confrontative approach should be emphasized; (iii) union discipline-unions should prevent from continuous economic demands and traditional union actions (primarily strikes).

The HRM competence of managers was found to be significantly and positively related to the degree of LMR and also it was a strong predictor of the LMR. It is likely that there is a difference between managers who have a high competence in HRM and those who have a low competence in HRM from the point of enhancing LMR. The findings empirically support the arguments of Davar (1976), Boo (1992) and Armstrong (1998). They argued the importance of human resource management competence for managers in improving LMR. The findings suggest manufacturing firms be attempted to develop a high competence of HRM within managers in order to enhance LMR. A more cost-effective strategy to be followed by the firms is to hire managers who already possess a high competence in HRM (at least an adequate amount) irrespective of their field of interest and specialization.

Though the role of the human resource department was found to be positively and significantly related to LMR it was found to be an insignificant predictor. It is not confirmed that proper performance of the specific roles to be played by the human resource department enables line and other staff managers to make fair and accurate decisions relating to worker matters and then leads to favourable LMR. This finding seems rather surprising. Descriptive analysis revealed that in general, majority of managers in the manufacturing firms under study perceive the role being played by the current human resource departments as slightly low. Perhaps this is the reason that the current role played by human resource department does not play a significant role in shaping LMR currently. The finding might suggest to suspect the quality of personnel in the human resource department in manufacturing firms in Sri Lanka in general in the context of enhancing LMR.

From multivariate analysis out of the four factors, three factors namely managerial assumptions about

workers, managerial attitudes toward unions and HRM competence of managers were found to be explanatory factors having significant effects on LMR. The implication of the finding is that if manufacturing firms need to enhance LMR, managerial assumptions about workers, managerial attitudes toward unions, and HRM competence of managers are critical to be considered and any strategies to be taken to enhance LMR should focus on improving the quality levels of those factors/variables. Managerial attitudes toward unions were found as the strongest management-related predictor of LMR. It may be the reason that managers' attitudes to unions mostly determine the way/style of managers when accepting and dealing with unions. The implication of this finding is that managerial attitudes toward unions are the most critical factor to be manipulated by firms for enhancing LMR.

Conclusion

It was not possible for the four independent variables to account for 50 percent of the variation in LMR. In fact, other variables, which were not considered in this study, should be the variables that will account for the unexplained variance in the LMR. The researchers believe in that the important independent variables may be labour law, political atmosphere, role of the state (macro factors) and technological change at work, union satisfaction at work, union attitudes to management, union officials' competence, worker satisfaction, grievance handling system, worker performance evaluation, and discipline administration (micro factors). Future research studies are suggested to carry out to find out the effects of these factors on the LMR. In the context of researching the effects of these variables on the LMR, essentially future researchers will have to encounter serious difficulties in measuring the variables, as there are no measurement instruments currently developed.

This study was limited to investigate the effects of managerial assumptions about workers, managerial attitudes toward unions, the HRM competence of managers and the role of HR department on the LMR in the manufacturing firms, which are listed companies in Colombo Stock Exchange. Further investigations

in other types of firms and industries may provide additional insights into the findings of the study. Another important limitation is that this analysis was cross-sectional in nature. Additional research is suggested to be done longitudinally in order to assess the impact of the factors over time. Longitudinal studies that use both quantitative and qualitative techniques are required in order to understand changes in the four variables over time. Such studies could result in new explanatory variables. Also longitudinal studies would prove valuable in investigating the impact of strategies taken by management that are aimed at enhancing the degree of the LMR. It could be possible to assess the degree of the LMR both before and after implementation of the strategies.

The findings of this research study will be important both on the theoretical level and practical level. Almost it was possible to substantiate empirically the research model developed for this study. The model could be used as an explanatory model of the LMR that will be an original contribution to the knowledge in the field of HRM and Industrial Relations. From the perspective of the manufacturing firms' executives, these findings should assist in developing a set of managerial actions of a LMR strategy that can potentially assist the firm in the aggregate to enhance the degree of the LMR

REFERENCES

1. Akram, M. 1992, Country Paper: Pakistan (1), *Labour-Management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, pp.169-174.
2. Alam, S. F. 1992, Country Paper: India (2), *Labour-management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, pp.175-180.
3. Armstrong, M. 1998, *A Handbook of Personnel Management Practice*, Kogan Page Ltd, London.
4. Armstrong, M. 1999, *A Handbook of Human Resource Management Practice*, Kogan Page Ltd, London.
5. Arnold, W. 1978, *Labor - Management Relations in Public Enterprises*, ILO & Friedrich - Ebert - Stiftung, Bangkok.
6. Beach, D.S. 1985, *The Management of People at Work*, Macmillan Publishing Company, New York.
7. Bender, K.A. & Sloane, P.J. 1998, 'Job Satisfaction, Trade unions, And Exit-Voice Revisited', *Industrial and Labor Relations Review*, vol.51, no.2, pp. 222-239.
8. Bernardin, H. J. & Russell, J.E.A. 1993, *Human Resource Management: An Experiential Approach*, McGraw-Hill, Inc, New York.
9. Boo, T.P. 1992, Country Paper: Singapore (1), *Labour-Management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, pp. 188-193.
10. Brownell, P. & McInnes, M. 1986, 'Budgetary Participation, Motivation and Managerial Performance', *The Accounting Review*, October; p.4.
11. Burton, G. 1990, *Exercises in Management*, Houghton Mifflin Company, Boston.
12. Buttner, J. & Wolfgang, H. 1959, *Report to the Government of Ceylon on Labor Relations*, ILO, Geneva.
13. Davar, R. S. 1976, *Personnel Management and Industrial Relations in India*, Vikas Publishing House, Delhi.
14. Farnham, D. & Pimlott, J. 1996, *Understanding Industrial Relations*, CASSELL, London.
15. ———— 1997. Forward Thinking, *The Newsletter of the National Labor Management Association-USA*, Spring Issue.
16. Fretz, G. E & Walsh, D. E. 1998, 'Aggression, Peaceful Co-existence, Mutual Cooperation – it's up to us', *Public Personnel Management*, vol.27, pp. 69 – 76.
17. Gani, A. & Ahamad, R. 1995, 'Correlates of Quality of Work Life: An Analytical Study', *Indian Journal of Industrial Relations*, vol.31, pp. 8-17.
18. Gibb, S. 2000, 'Evaluating HRM effectiveness: the stereotype connection', *Employee Relations*, vol.22, no.1, pp. 1-11.
19. Glueck, W.F. 1979, *Foundations of Personnel*, Business Publications Inc, Texas.
20. Gordon, J.R. 1999, *Organizational Behavior: A Diagnostic Approach*, Prentice Hall International, Inc, New Jersey.
21. Hackett, P. 1994, *Personnel: The Department at Work*, Institute of Personnel Management, London.

22. **Hanami, T.** 1981, *Labor Relations in Japan Today*, Kodansha International Ltd, Tokyo.
23. **Harris, M.** 2000, *Human Resource Management: A Practical Approach*, The Dryden Press, Fort Worth.
24. **Hise, R.T., Gable, M., Kelly, J.P. & McDonald, J.B.** 1983, 'Factors Affecting the Performance of Individual Chain Store Units: An Empirical Analysis', *Journal of Retailing*, vol. 59, no. 2, pp. 22-39.
25. **Hitt, M.A., Middlemist, R.D. & Mathis, R.L.** 1979, *Effective Management*, West Publishing Co, New York.
26. **Hock, C. & Tyabji, A.** 1978, 'Labour-Management Relations in Public Enterprises: The Case of Singapore', *Labour-Management Relation in Public Enterprises*, Friedrich-Ebert-Stiftung and ILO, Bangkok.
27. **Ivanovic, A.** 1988, *Dictionary of Personnel Management*, Peter Colling Publishing Ltd, London.
28. **Jackson, U.E. & Schuler, R.S.** 2000, *Managing Human Resources: A Partnership Perspective*, South-Western College Publishing, Cincinnati.
29. **Kleiman, L.S.** 2000, *Human Resource Management: A Managerial Tool for Competitive Advantage*, South-Western College Publishing, Cincinnati.
30. **Mahoney, T.A., Jerdee, T.H. & Carroll, S.J.** 1963, *Development of Managerial Performance: A Research Approach*, South-Western, Cincinnati.
31. **Mamoria, C. B.** 1991, *Personnel Management*. Bombay: Himalaya Publishing House.
32. **Mei-Hui, C.** 1992, Country Paper: Republic of China (1), *Labour-Management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, pp. 101-104.
33. **Mills, D. Q.** 1994, *Labor Management Relations*, McGRAW - Hill Book Company, New York.
34. **Miyai J.** 1995, *Productivity Movement in Japan and Role of JRC-SED*, Round Table Conference Paper, Colombo.
35. **Mondy, R. W. & Noe, R. M.** 1993, *Human Resource Management*, 5 ed, ALLYN & BACON, Boston.
36. **Murphy, H.R. & Davidshofer, C.O.** 1998, *Psychological Testing: Principles and applications*, Prentice Hall, New Jersey.
37. **Nkomo, S.M., Fottler, M.D. & McAfee, R.B.** 1996, *Applications in Human Resource Management*, South-Western College Publishing, Ohio, Cincinnati.
38. **Norusis, M.J.** 1997, *SPSS 7.5 Guide to Data Analysis*, Prentice Hall, New Jersey.
39. **Odiorne, G.S.** 1987, Evaluating the Human Resources Program, In *Handbook of Human resources Administration*, eds J.J. Famularo, McGraw-Hill Book Company, New York, pp.9-1 to 9-8.
40. **Opatha, H.H.D.N.P.** 1998, 'Labour-Management Relations and Worker Satisfaction: An Empirical Study of Seven Manufacturing Firms in Sri Lanka', *Proceedings of the First Annual Research Sessions*, University of Sri Jayewardenepura, Sri Lanka, pp.127-145.
41. **Pathirana, G. S.** 1990, Labor and Industrial relations in Sri Lanka Plantation Sector, *research paper for M.A.*
42. **Pinto, J.L.** 1995, 'The Roles of Management and Trade Unions in Bringing about A Positive Work Culture', *Indian Journal of Industrial Relations*, vol. 31, no. 1, pp. 31-35.
43. **Rao, P. S. & Narayana, N.** 1992, 'Labor Management Cooperation in Indian Railways', *Indian Journal of Industrial Relations*, vol. 28, pp. 40 - 51.
44. **Reed, T. F.** 1996, 'Advice to a New Manager in a Unionized or Double-Breasted Company', in *Human Resources Management*, eds G.R. Ferris, & M.R. Buckley, Prentice-Hall, Inc, New Jersey, pp.386-393.
45. **Robert, P.J.** 1987, 'Constructing Human Resources Research Programs', In *Handbook of Human Resources administration*, eds J.J. Famularo, McGraw-Hill, New York, pp. 80-20 to 80-23.
46. **Rodrigo, C.** 1994, 'Structural Reform and The Labor Market, 1972 - 1992: Sri Lanka Case Study', *Social Dimensions of Economic Reforms in Asia*, vol.10, pp. 250 - 270.
47. **Schmitt, W. W. & Klimoski, R.** 1991, *Research Methods in Human Resources Management*, South - Western Publishing Company, Ohio.
48. **Schuler, R.S.** 1998, 'Human Resource Management', In *The IEBM Handbook of Human Resource Management*, eds M. Poole, & M. Warner, International Thomson Publishing, London, pp.122-142.

49. **Sekaran, U.** 1992, *Research Methods for Business, A Skill Building Approach*, John Wiley & Sons, Inc., New York.
50. **Sekaran, U.** 1999, *Research Methods for Business, A Skill Building Approach*, 3 edition., New York: John Wiley & Sons, Inc.
51. **Shimada, H.** 1991, 'Japan's Postwar Industrial Growth and Labor-Management Relations', In *Readings in Labor Economics and Labor Relations*, eds L.G. Reynolds, S.H. Masters, & C.H. Moser, 5edition, Prentice Hall, New Jersey.
52. **Silva, W. P. N.** 1973, *The Legal Framework of Industrial Relations in Ceylon*, H. W. Cave & Company, Colombo.
53. **Silva, W.P.N.** 1978, *Industrial Conflict*, Lake House Publisher, Colombo.
54. **Singh, B. P., Chabra, T. N. & Taneja, P. L.** 1992, *Personnel Management & Industrial Relations*, Dhanapat Rai & Sons, Delhi.
55. **Singh, R.** 1992, Country Paper: India (1), *Labour-Management Cooperation: a Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, pp.135-140.
56. **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*, vol. 17, pp. 24 - 43.
57. **Suri G.K.** 1995, *Productivity, Its Concept, Parameters and Contemporary Concerns*, Round Table Conference Paper, Colombo.
58. **Tripathi, P. C.** 1992, *Personnel Management and Industrial Relations*, Chand Sons, New Delhi.
59. **Wagar, T. H.** 1997, 'The Labor Management relationship and Organization Outcomes', *Journal of Industrial Relations*, vol. 52, pp. 430 - 447.
60. **Walsh, W.B.** 1995, *Tests and Assessment*, 3edition, Prentice hall, New Jersey.
61. **Wasilisin, A. M.** 1998, 'Approaching YZK Federal Labor - Management Relations', *Public Manager*, vol. 27, pp. 25 - 28.
62. **Weerasinghe, D. P. A.** 1978, Labor – Management Relations in Public Enterprises in Sri Lanka, *Proceedings of the Seminar on Labor – Management Relations in Public Enterprises in Asia*, pp. 321 – 376.
63. **Werther, B. W. & Davis, K** 1994, *Human Resources and Personnel Management*, 4edition, McGraw- Hill Book Company, New York.
64. **William, M. W.** 1992, Country paper (1), *Labour-Management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, pp. 124-128.
65. **Yap, T.H.** 1994, 'Assessing The Effectiveness of Using Explicit Weights in Performance Evaluation Studies: Some Further Evidence', *Malaysian Management Review*, Vol. 29,no. 2, pp. 53-60.
66. **Yoder, D. & Staudohar, P. D.** 1982, *Personnel Management and Industrial Relations*, 7edition, Prentice-Hill. Inc, Englewood Cliffs.
67. **Yong-Nam, C.** 1992, Country Paper: The Republic of Korea, *Labour-management Cooperation: A Key to Productivity Promotion*, Asian Productivity Organization, Tokyo, pp.157-159.
68. **Zikmund, W.G.** 2000, *Business Research Methods*, 6 edition, Harcourt Brace College Publishers, Fort Worth.