

**Mediating Role of Trade Unions in between Industrial Relations and
Successful Change: Validation of the Model through Structural Equation
Modeling**

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[Abstract]

Although several studies have suggested that constructive role of trade unions are crucial for successful change management, but the conceptual explanation and the factors that influence this relationship remains largely unexplored. To fill this gap, this study examines the mediating role of unions in the relationship between industrial relations(IR) and successful change (SC), using organizational-level data from a single site case study based on a survey of 516 employees from Rourkela Steel Plant (a unit of SAIL),Odisha. The validation of the model in this study explicates that role of trade unions during change mediates partially between IR and SC. One implication is that with constructive involvement of trade unions, the employees assist rather than resist change which facilitates successful change management. Also, IR has substantial impact on the success of the change initiatives warranting special attention.

Keywords: Industrial relations, Successful change, Role of unions, Rourkela Steel Plant, Mediation, Structural Equation Modeling.

I. Introduction

Todnem (2005) identified two areas of agreement in studies on change management. Firstly, that the pace of the change has never been greater than in the current business environment and secondly, that change triggered by internal and external factors comes in all shapes, forms and sizes and affect the organizations in all industries. Thus, we can say change is the only constant in today's hyper turbulent environment. Although, few would dispute the validity of this statement, studies that directly examine the conditions that lead to the successful organizational change and come up with implementable ideas and the magic formula to ensure the increase in the success rate of change initiatives, needs to be critically analyzed. The lack of systematic attention is especially surprising as unsuccessful implementation of strategic change can lead to catastrophic consequences and organizations which do not change will quickly become "corporate dinosaurs", headed for extinction because they no longer fit the current environment (Lawler and Galbraith, 1994) and, as a consequence, this may also lead to firm's death (Hofer and Schendel, 1978).

A variety of factors have been identified as important antecedents to the umbrella concept, including the role of unions (Iverson, 1996). Extant literature rightly indicates that employee acceptance of organizational change is increased by organizational commitment, a harmonious industrial relations (IR) climate, education, job motivation, job satisfaction, job security and positive affectivity, and is decreased by the union membership, role conflict, tenure and environmental opportunity (Iverson, 1996). Focusing on industrial relations, role of unions and successful change, this paper builds on the fact that organizational development efforts are often impeded by labour unions- particularly when the efforts infringe on what unions see as their prerogative of prescribing the rules and reward systems of workers. Also, the unilateral pursuit of organizational development efforts by management usually intensifies its win-lose relationship with the union. Hence, it is imperative that both

the company and unions must become involved in the change process, with management taking the first step (Myers, 1971).

II. Relevance and Scope of the Study

Cordial union-management relationships in partnership programmes are associated with high levels of trust, mutual commitment and good communication. These capacities require considerable effort, dedication and attitudinal changes in both parties. Also, researchers have established that employees are human beings with specific needs and interests. They should therefore be granted fair rewards, performance based promotion, opportunities to learn and innovate, recognition by peers and managers, attainment of new levels of responsibility and empowerment (SamGnanakkan, 2010) which are inherently essential ingredients of good IR. Therefore, Rourkela Steel Plant (RSP, a unit of SAIL) established in Odisha has been selected for the analytical study to draw a clear picture on relations between IR, role of unions and successful change management. Moreover, the study is highly relevant as 70% of the change programmes fails and this endeavour is a step towards identifying triggers for facilitative IR and unravelling the mediating role of unions in the success of change interventions. When the organizations are undergoing a process of transformation and marching towards turnaround on an innovative pathway marked with milestones, the top driven initiatives should overcome the employee resistance and enthruse them to build a profitable, harmonious and vibrant organization for which facilitate IR and managing the trade unions effectively are essential.

III. Case Overview and Case Selection

RSP, though an old plant, has continually endeavoured to modernize and expand its facilities. It has time and again re-invented itself and has gallantly faced the challenge associated with integrating the new units with old ones and synchronizing technologies of two different areas for the smooth running of the plant. In 1995, RSP went for modernization and by 1998 capitalization of all the modernized facilities, and equipments were completed which resulted in severe financial stress. The immediate gains that could have accrued after modernization, was overshadowed by various problems in the internal and external environment. In fact, the very survival of RSP was at stake.

The choice of RSP was made as the plant provided a perfect setting for the study. While the management focussed on the technical aspects and trying to cope with the complexities in the external environment, trade unions became very powerful in RSP. To make the matter worse, the only communication between employees and management was through the union which was often distorted. In fact, there was no system of alternative communication between management and the workers. Lack of effective communication led to the burgeoning grapevine. Also, the union was wielding power and authority that were proving to be detrimental to the organization. Union talked against modernization and was the only link to the workers. Management at that time was too weak to counter unions. So, unions blackmailed management to bend to their demands. Work stoppages had become a common phenomenon. Rumors and miscommunication were prevalent. Man-hour and production losses were at all time high and the morale of the RSP employees was low. It can be rightly said that the industrial relation was in tatters.

With HR interventions, robust communication practices, strict disciplinary actions against erring employees, head on confrontation with unions, participative management, involvement and empowerment of the employees, prompt grievance redressal; the industrial relations in RSP became harmonious (table 1). Today, management along with unions are working hand

in hand towards the prosperity of the plant. They are assisting rather than resisting modernization and expansion efforts.

Table 1: Impact of Industrial Unrest

YEAR	MAN-HOUR LOSS	PRODUCTION LOSS	VALUE OF PRODUCTION LOSS
1998-99	1539.5	750(T)- Crude Steel	Rs. 36.51 lakhs
1999-00	1353.5	1420(T)-Hot Metal 3350(T)-Sinter 1440(T)-Crude Steel 4130(T)-HR Coil	Rs.133.13 lakhs
2000-01	3922.0	7640(T)-Sinter	Rs. 30.36 Lakhs
2001-02	9569.65	2740(T)-Gross Coke 2362(T)-Sinter 2350(T)-Hot Metal 2170(T)-Crude Steel 7810(T)-Saleable Steel	Rs. 777.3 Lakhs
2002-03	11075.45	900(T)-Hot Metal 560(T)-Crude Steel 5273(T)-HR Coil Sinter (Sp-I)-1040(T) Sinter(Sp-Ii)-5890(T)	Rs.119.77 Lakhs
2003-04	NIL	NIL	NIL
2004-05	NIL	NIL	NIL
2005-06	NIL	NIL	NIL
2006-07	3311.1	4595(T) –Saleable Steel	Rs. 312.83 lakhs
2007-08	NIL	NIL	NIL
2008-09	NIL	NIL	NIL
2009-10	90608	8000(T) –HR coil	Not Available
2010-11	NIL	NIL	NIL
2011-12	NIL	NIL	NIL
2012-13	NIL	NIL	NIL

Source: IR Dept. RSP.

IV. Research Questions and Objectives

Whatever may be the reasons behind the transformation, the goal of change management remains – to better understand the organizational change process and change drivers, so that organizations can more effectively achieve successful organizational change. Therefore, by linking the three important aspects of organizational change- industrial relations, role of unions during change and success of change initiatives- scholars and practitioners can get an insight into successful organizational change initiatives. Hence, this endeavor provides an important step towards answering the following two pertinent research questions: “What are the triggers of facilitative IR?” and “Whether role of unions mediates between IR and SC?” Studies rightly posited and empirically attested that labor relations climate and organizational

culture are very much part of the social fabric of an organization, and their influence on attitudes toward change cannot be underestimated. In fact, the presence of a union should not be feared by managers who wish to innovate, and can in fact lead to constructive union involvement in the change process (Haddad, 1996), which is important for the successful change. Thus, focusing on IR and union issues, the objectives of the study are threefold:

- To identify the critical factors for peaceful industrial relations through factor analysis.
- To analyze how the identified factors affect industrial relations.
- To test the mediating role of unions between cordial industrial relations scenario and successful change.

V. Theory and Hypotheses

In unionized workplaces, facilitating industrial relations may tip the scale towards success or failure of the change initiatives. Hence, this growing body of research, especially warrants dissection under the magnifying glass as 70% of the change programmes fails (Kotter, 1996; Hammer and Champny, 1993; Higgs and Rowland, 2011). Fully realizing the importance of the role of the unions in the successful change management after organizational restructuring, a study by Johnstone et al., (2004) have rightly pointed out that better union-management relationships in partnership programmes continue to be associated with high levels of trust, mutual commitment and good communication, and the realization that the establishment of partnership does not automatically deliver mutual gains. These capacities require considerable effort, dedication, and attitudinal changes in both parties to achieve.

Thus, it can be rightly said that the very success of the industrial units in the 21st century depends on appropriate HR/IR interventions (Thornhill et. al., 2000). Therefore, this paper is an attempt to establish that facilitating an environment of empowerment and involvement, prompt grievance redressal, focus on people, organizational citizenship behaviour, persistent and prompt communications which are tools of harmonious IR relations aided by constructive role of unions will facilitate a successful change management. Building on the aforesaid issues in change management, a stage is set to derive the competing hypothesis.

Firstly, for peaceful IR during change, it is essential to align HR strategy with the business strategy. For achieving this, the use of four “P”s in launching a new beginning: explain the purpose, paint a picture of the outcome, lay out a step-by-step plan, and give each person a part to play. To start with, the research practitioners must understand that people need to understand the purpose and the logic behind any change for it to be a success (Bridges, 2003). Accordingly, the derived hypothesized statement is presented below:

H1a: Alignment of business and HR strategy has a significant impact on industrial relations climate.

Secondly, for facilitative IR, persistent, effective and transparent communication is a must as it contributes to successful change management. Huy (1999) argued that emotion at the individual level is critical in creating radical change (i.e., paradigm shifts) and it has to be communicated effectively to evoke change by appealing to followers’ emotional states to motivate personal adaptation. Similarly, Fox and Amichai-Hamburger (2001) argued that persuasion of employees to support organizational change is most successful through affective rather than cognitive communication. On the basis of the above discussion, the hypothetical statement can be derived as:

H1b: Employee communication system has a significant effect on prevailing industrial relations.

Theoretical argumentations rightly establish that feedback and suggestions are meant to tap the creative potential of the individual employees. It provides opportunity to individual and group of employees to identify problems, pick up solutions in creative ways, and implement the same for the success of the change initiatives and even the enthusiasm of the employees in participative change initiatives are discernible (Ford and Ford, 2009). Also, apart from feedback, suggestion systems are a legitimate management discipline for constructive IR, one which can have a tremendous influence on the attitudes and work performance of employees (Marx, 1995). Empirical studies also point out that suggestion systems play a pivotal role for organizations wishing to become more innovative (Buech et al., 2010). Thus, feedback and suggestion turn blamed into introspection and grievances into action for better employee relations. Based on above theoretical argumentation, it can be proposed as:

H1c: Employee feedback and suggestions have a positive impact on IR system.

A recent research professes that the centre of empowerment is employee involvement, shared decision-making, redistributed authority and control, and increased organizational flexibility and adaptability, just the kinds of practices that have been demonstrated in the management literature (Hornstein, 2008; Louise, 2001) for peaceful industrial relations. At its core, the concept of empowerment has its roots in such substantive issues as intrinsic motivation, job design, participative decision making, social learning theory and self-management (Linden and Tewksbury, 1995). Axelrod (2001) writes that the cornerstone of any democratic process is the voice – the power to be heard and to influence outcomes. Thus, the existing management wisdom can also be extended to the phase of organizational change where facilitative industrial relations smoothen the change process. Hence, these arguments lay the foundation stone for the next proposition as:

H1d: Empowerment and involvement has a positive relationship with industrial relations.

The theoretical and the empirical literature on the people side of change management is quite extensive and portrays the fact that people constitute the most powerful force in successful change management, even when the organizational change is highly technology-centered (Thornhill et al., 2000; Beer, 1980; Brockner et al., 1994; Lind and Tyler, 1998). But, very few studies focus on the people-centeredness of initiatives in Indian context. Organizations have to understand that when change is on the horizon, a positive employee relations can be built by analyzing the skill gaps that will always be created by change, and moving rapidly to create targeted learning opportunities to close them in time to prevent a sense of organizational helplessness so that those impacted by the proposed change have a safety net of training and skills development available to them (Moran and Brightman, 2000). The organization should enhance employees' understanding of the processes and tools employed during organizational change so they comprehend both where and why change is necessary and should provide the employees with necessary skills to implement change ("Organizational Change: Managing Human Side", 1997). Thus, analyzing holistically, we can surmise from the extant literature that focus on the people side of change can contribute to a positive industrial relations, thereby aiding us to purport:

H1e: Focus on the human side of change is significantly related to IR.

Grievance procedures are a necessary and essential function of the industrial relations system (Dunlop, 1958). This machinery is a forum where employees can communicate complaints relating to various issues like working conditions, compensation or other benefits, welfare measures, etc. An organization, thus, establishes a grievance procedure to give an avenue to the employee to file his or her dissatisfactions. The establishment of the grievance procedure is in line with the principle of “due process” (Mante-Meija and Enid, 1991) which guarantees the application of procedural justice and ethical decision making in an organization. Besides the establishment of the grievance procedure resolves employee dissatisfaction fairly contributing to affirmative IR.

H1f: Prompt redressal of employee grievances has a positive relationship with IR.

Moreover, in order to ensure smooth industrial relations, organizations need employee cooperation, benevolence, self-sacrifice and at times extra effort. In this sense, organizational citizenship behaviour has attached more and more importance and is frequently used in studies to understand and interpret organizational behaviour (Hashim and Rashid, 2013). According to Barnard (1938); Katz and Kahn (1996) and Organ (1988), the effective functioning of an organization depends on employee efforts that extend beyond formal role requirements. Many studies have shown that studies that organizational citizenship behaviour is positively related to performance, one of the most sought after studies in the outcomes in organizational studies literature, at the individual, unit and organizational level of analysis (Ehrhart et al., 2006; Padsakoff et al., 2009). Hence, it can be hypothesized that there is a positive relation between organizational citizenship behaviour and IR.

H1g: Organizational citizenship behaviour has significant impact on IR.

IR is essentially pluralistic in outlook, in that it covers not only the relations between employer and employee (the individual relations) but also the relations between employers and unions and between them and the State (collective relations). IR climate had both a direct and indirect impact on the acceptance of organizational change. Researches show around 65 per cent of IR climate's total causal effect was direct, while 35 per cent was indirect via organizational commitment. The indirect impact supports the study of Deery et al., (1994) and Johnstone et al., (2004) who found that the more harmonious the IR climate, the greater the commitment of employees to the organizational change. As a harmonious IR climate reflects a high degree of co-operation, trust and communication between management and unions in solving common problems, the results indicate that a pleasant IR climate is a necessary precondition for successful organizational change. Accordingly, the derived hypothesized statement is presented below:

H2: There is a positive relationship between industrial relations and successful organizational change.

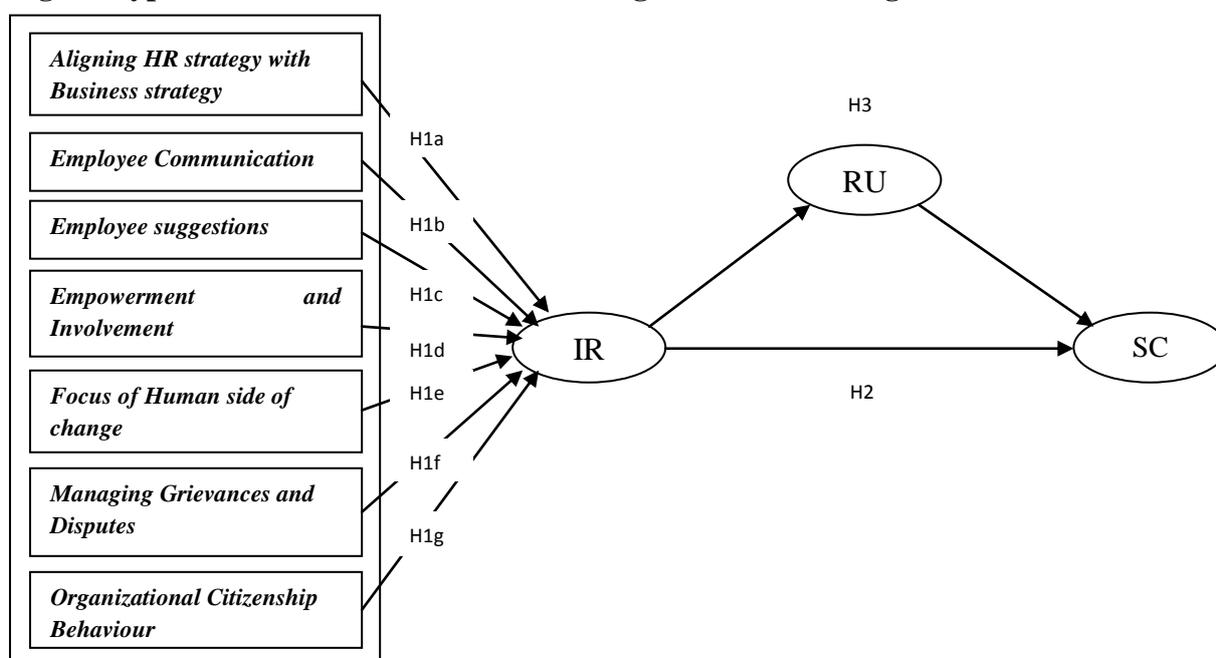
Strengthening our belief that labor relations climate and organizational culture are very much part of the social fabric of an organization, and their influence on attitudes toward change cannot be underestimated, it has been empirically tested and established that the presence of a union should not be feared by managers who wish to innovate, and can in fact lead to constructive union involvement in the change process (Haddad, 1996). Reinforcing the need for facilitating union has been yet another seminal research which stresses that employee acceptance of organizational change is increased by harmonious industrial relations (IR) climate (Iverson, 1996). Also, Fox (1974) maintained that unions play an important role in readjusting or balancing power in the workplace (Leigh, 1988) and constructive involvement

of unions goes a long way in reinforcing a climate of trust during the transition phase. Furthermore, a famous argument associated with the role of unions is that it provides a collective voice which makes for more effective communications and higher productivity (Freeman and Medoff, 1984) during a change. Furthermore, union voice can lead to improved employment relations through effective communication between management and employees and the resolution of employee grievances (Freeman and Medoff, 1984). Thus, it can be conjectured that the constructive role of unions is instrumental in creating a positive industrial relations and contributes to success of organizational change. Accordingly, the derived hypothesized statement is presented below:

H3: Constructive role of unions mediates between cordial industrial relations and successful organizational change.

The relationship proposed in the derived hypotheses 1 to 3 can be seen graphically in figure 1. This model depicts the crux of the research and points out some pivotal aspects of successful change management.

Fig. 1: Hypothesized Model for Successful Organizational Change



VI. Methodology

Methods and Data

This research is a single-site case study where an in-depth study of industrial relations and the role of unions during the change in the said Indian public sector undertaking (PSU) has been empirically analyzed with the help of primary data to verify the proposed hypotheses. The data collected was first analyzed with the help of SPSS 20.0 software. Thereafter, Amos 20 has been utilized to derive a model which holistically captures the essence of the research paper.

Research Setting

The selected case for this research is Rourkela Steel Plant (RSP), a unit of Steel Authority of India Limited (SAIL); the first integrated Steel Plant in the public sector in India, set up with

West German collaboration with an annual capacity of 2.0 million tonnes per year. Its product range comprises of HR coils and Plates, CR Sheet/Coils, Galvanized Sheets, Tin Plates, Coal Chemicals and Fertilizers. It also has a unique distinction of producing Silicon steel for the power sector, special plates for Army/Navy/Space and state of the art SW & ERW pipes for oil and gas sectors. Its turnover is more than 8000 crore INR and employs around 18000 employees.

Sampling and Data collection

For the survey, an attempt was made to adopt stratified random sampling method. Structured questionnaires were distributed in such a way that the reciprocal representation of the respondents from executives, non-executives, and union representatives could be sought. Care was taken that responses were taken from employees of all facilities and all levels covering the entire organization. The schedule was distributed to around 700 employees, out of which 516 complete responses were obtained, corresponding to a response rate of 74 % of the respondents.

All the variables were measured by participants responses to the questions on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The use of a structured questionnaire containing close ended questions as a tool to extract information keeping in minds the objectives and design of the study. The scales of measurement have been developed with utmost deliberation for the study drawing on the prior research works and have not been adapted directly. The specific measures along with Cronbach alpha values for the various measures are shown in a tabular form (table 8). Moreover, care has been taken that variables within a construct are all distinct, but collectively reflective of the overall construct.

Demographic profile

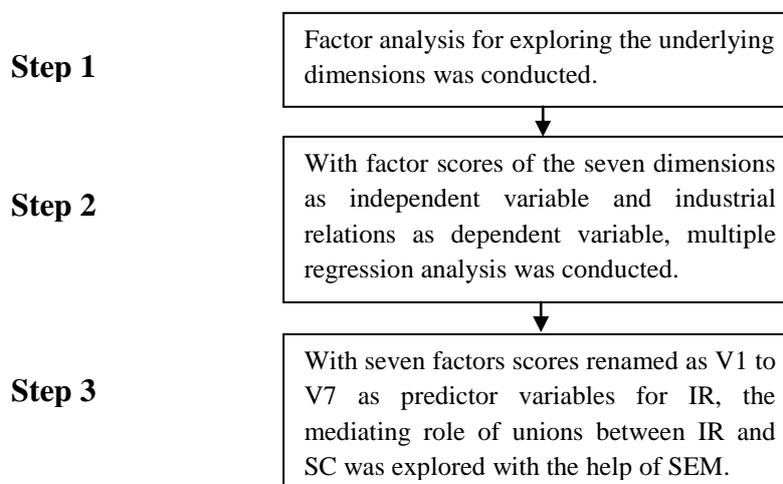
A glance at the demographic profile reveals that out of the total respondents, 482 (93.4%) were male and 34 (6.6%) were female. Proper care was taken that there was adequate representation of executives (28.7%) and non-Executives (71.3%) in the sample populace. The majority of the respondents were from 36-45 yrs (44%) age group followed by employees from 46-55yrs (26.2%) age bracket revealing the fact that the organization has a workforce which is aging. Also, just 2.3% respondents had been in the age group of 18-25 yrs showing the dearth of young blood in the organization. Another noteworthy aspect of the demographic profile is that most respondents had an experience of more than 20 yrs (34.7%) as reflected in table 2.

Table 2: Demographic Profile of Respondents

Characteristics	Contents	No. of Samples	Percentage
Gender	Male	482	93.4
	Female	34	6.6
Designation	Executive	148	28.7
	Non-Executive	368	71.3
Age	18-25 yrs	12	2.3
	26-35 yrs	77	14.9
	36-45 yrs	227	44.0
	46-55 yrs	135	26.2
	55-60 yrs	65	12.6
Experience	Below 5 yrs	25	4.8
	5-10 yrs	48	9.3
	Above 10 yrs		

VII. Analysis and Discussions

Data analysis involved the following three steps:



Factor analysis of responses was used for data reduction in order to identify correlations among variables in complex sets of data (Mitchelmore and Rowley, 2013) used to gauge the industrial relations. Cronbach alpha was found to be 0.904, which was well above the acceptable value of 0.70 for demonstrating internal consistency of the established scale (Nunnally, 1988). Kaiser-Meyer-Olkin (KMO>0.6) and Bartlett's test of sphericity ($p<0.05$) were used to test empirically whether the data were likely to factor well (Bikker and Thompson, 2006; Kaiser, 1974; Kline, 1994). In this study KMO measure was 0.888 indicating that the data was adequate for factor analysis. Also, Bartlett's test of sphericity (sig. = 0.000) indicated the significance of the study, thereby showing the validity and suitability of the responses collected (table 3). Therefore, the statistical test showed that the dimensions of instruments were likely to factor well and the questionnaire was multidimensional.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.888
Bartlett's Test of Sphericity	
Approx. Chi-Square	5619.810
d.f.	351
Sig.	0.000

The data gathered from the main survey were analyzed through principal components factor analysis followed by varimax rotation. It basically partitions the total variance of all original variables by finding the first linear combination of variables that accounts for the maximum variance. The communalities represent the total amount of variance an original variable shares with all other variables included in the analysis. The purpose of viewing communalities is to assess whether the variables meet acceptable levels of explanation. Out of 28 variables only 3 had communalities less than 0.50 indicating they didn't have sufficient explanation and hence were not considered for further analysis. Table 5 shows the information regarding the remaining 25 variables and their relative explanatory powers. From the table, it is possible to assess the importance of each component and extract the number of factors with eigenvalues greater than 1. The seven factors extracted captures 63.048% of the variance of the 25 items, which can be deemed sufficient in terms of explaining total variance (table 4). The seven extracted factors were named 'Aligning HR strategy with Business strategy', 'Employee Communication', 'Employee Suggestions', 'Empowerment and Involvement', 'Focus on the human side of change', 'Managing Grievances and Disputes', and 'Organizational Citizenship Behaviour' respectively.

Table 4: Factors Extracted through PCA

Components	Initial Eigen values			Extraction Sums of Squared			Rotation Sums of Squared		
				Loadings			Loadings		
	Total	% of	Cumulative	Total	% of	Cumulative	Total	% of	Cumulative
	Variance	%		Variance	%		Variance	%	
1	7.792	28.860	28.860	7.792	28.860	28.860	3.262	12.083	12.083
2	2.451	9.077	37.937	2.451	9.077	37.937	2.542	9.416	21.498
3	1.987	7.358	45.296	1.987	7.358	45.296	2.538	9.401	30.899
4	1.375	5.091	50.386	1.375	5.091	50.386	2.506	9.282	40.181
5	1.314	4.868	55.254	1.314	4.868	55.254	2.344	8.682	48.863
6	1.073	3.973	59.228	1.073	3.973	59.228	2.301	8.521	57.385
7	1.031	3.820	63.048	1.031	3.820	63.048	1.529	5.663	63.048

Next, varimax rotational method was employed to achieve simpler and theoretically more meaningful factor solutions. This orthogonal rotation tries to maximize the variance of each of the factors in such a way that the total amount of variance accounted for is redistributed over the seven extracted factors. Table 5 exhibits the factor loadings of the extracted factors after varimax rotation.

Table 5: Factor Loadings after Varimax Rotation and Communalities

<i>Loaded Items</i>	<i>Factor Loadings</i>							<i>Communalities</i>
	1	2	3	4	5	6	7	
<i>Factor 1: Aligning HR strategy with Business strategy</i>								
Proper assessment of the manpower requirement							.525	.504
Proper assessment of the skills needed to work with the changed environment.							.698	.590
Attracting and retaining top talents							.689	.558
<i>Factor 2: Employee Communication</i>								
Communicate to need for change to the employees			.830					.823
Communicate the strategies of the Change Programme			.804					.772
Communicate the financial implications of Change			.778					.744
<i>Factor 3: Employee suggestions</i>								
Employees feel encouraged to give feedback							.756	.688
Management encourages the employees to suggest their opinions.							.706	.564
A satisfactory system of recognition and rewards for creative and innovative suggestions.							.797	.699
<i>Factor 4: Empowerment and Involvement</i>								
Members are getting enough freedom to share their opinion.				.768				.653

Employees are involved in Decision making and Information Sharing.	.622	.618
Empowerment and involvement lead to the easy acceptance of the change process.	.721	.603
Empowerment of workers leads to effective distribution of power and increase in accountability.	.744	.610
Factor 5: Focus of Human side of change		
Human Resource is considered a vehicle for change	.749	.695
People are right-skilled for change	.591	.536
HR planning is done prior to change	.741	.659
Rewards are given for successful implementation of change.	.759	.640
Employees are imparted knowledge about processes and tools. (V58).	.546	.600
Factor 6: Managing Grievances and Disputes		
Management adopts open door policy for grievance management.	.710	.603
Supervisors are well trained to handle the day to day grievances.	.718	.618
Grievance committee is responsive and resolves grievances.	.678	.521
Management is always in favour of collaborative approach towards Industrial Dispute resolution.	.620	.779
Factor 7: Organizational Citizenship Behaviour		

Employees help co-workers with personal matter	.814	.546
Lends a compassionate ear when someone has a work problem.	.780	.674
Goes out of the way to give co-worker encouragement or express appreciation.	.802	.774

Thereafter regression analysis was carried out to examine the extent to which the seven extracted factors (saved as factor scores) affect the degree of industrial relations within the organization. All the seven factors were found to be significant predictors of the criterion variable (Industrial Relations). The R square value (table 6) indicated that about 60.5 % variance was accounted for by these seven predictor variables which was supported by $F=700.724$ ($p<.05$). The standard error of estimate (0.414) clearly indicated the reliable prediction of the model.

Table 6: R Square and Anova

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	.778	.605	.600	.414	111.206	.000

Notes: Predictors: (Constant), Aligning HR strategy with Business strategy, Employee Suggestions, Empowerment and Involvement, Focus of Human side of change, Managing Grievances and Disputes, Organizational Citizenship Behaviour.

The unstandardized coefficients indicate how much the dependent variable goes up, on average, given that the independent variable goes up by one unit. On examination of the standardized β coefficients (Table 7), it was found that the direction of the influence for all the predictors was positive. An examination of relative influence on the dependent variables indicated that Aligning HR strategy with Business strategy is having maximum influence followed by employee suggestions, empowerment and involvement, and others. The t-values were significant at 0.000 levels. Tolerance and VIF values of 1 confirmed the non-existence of multicollinearity in this study. Thus, on the basis of the results we could conclude that the predictors extracted were significant indicators of industrial relations. Hence, the analysis of the results established that hypotheses H1a to H1g were supported.

Table 7: The Regression Coefficients

Model	Unstandardized		Standardized	t	Sig.	Collinearity	
	Coefficients		Coefficients			Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3.057	.018		167.717	.000		
Aligning HR strategy with Business strategy	.394	.018	.602	21.578	.000	1.000	1.000
Employee Communication	.116	.018	.177	6.343	.000	1.000	1.000
Employee suggestions	.191	.018	.292	10.481	.000	1.000	1.000
1 Empowerment and Involvement	.146	.018	.223	8.016	.000	1.000	1.000
Focus of Human side of change	.136	.018	.208	7.477	.000	1.000	1.000
Managing Grievances and Disputes	.078	.018	.120	4.290	.000	1.000	1.000
Organizational Citizenship Behaviour	.090	.018	.137	4.920	.000	1.000	1.000

Further, structural equation modelling (SEM) was used to examine the mediating effect of RU between IR and SC in the hypothesized model. The advantage of SEM is that it offers simultaneous test of an entire system of variables in a hypothesized model and thus enables assessment of the extent to which the model is consistent with the data (Byrne, 1994). To assess the construct validity, we examined convergent validity, composite reliability and discriminant validity. All the 3 constructs were found to be valid. Also, in this study, we had adopted, Anderson and Gerbing's (1988) comprehensive two-step analytical strategy to test the hypothesized models depicted in the figure 1. According to this strategy, the measurement model was first confirmed using confirmatory factor analysis (CFA), and then SEM was performed based on the measurement model to estimate the fit of the hypothesized model to the data. To gauge the model fit, Chi-square (χ^2) values is reported as the index of absolute fit, which assesses the extent to which co-variances estimated in the model matches the co-variances in the measured variables (Kline, 1998). In addition, the baseline comparisons fit indices of NRI, RFI, IFI and CFI which compares the fit of the hypothesized model to the null or independence model must be 0.9 or more (Bentler, 1980; Bentler and Bonnet, 1980) and root mean square error of approximation (RMSEA) (Steiger, 1990) is used to gauge the model fit. To adjust for the measurement error when using a single indicator for a latent variable, we fixed the loading of the variable on its respective factor at one and fixed the measurement error term by the variance multiplied by one minus the reliability.

At the stage of structural model analysis, we assessed the hypothesized theoretical model and estimated its parameters. The direct and mediated effect of RU on SC confirmed mediation. To further strengthen our findings, we analyzed the standardized path parameters for its significance. Accessing direct and indirect effects of RU on SC further reinforced our results.

Baron and Kenny's (1986) technique is the most frequently used technique for testing the mediation hypothesis in both basic and applied psychological research (Preacher and Hayes, 2004). According to Baron and Kenny (1986), there is support for mediation if: (1)

independent variables relates to dependent variable; (2) independent variable relates to the mediating variable and (3) mediating variable relates to the dependent variable and the relationship of the independent variable with the dependent variable is reduced significantly (partial mediation) or remain no longer significant (full mediation) when controlled for mediators. The magnitude of the relationship between IR and SC is reduced from 0.45 to 0.32 but was found to be significant, confirming partial mediation. Thereafter, measurement model, structured equation model for partial mediation, path estimates and direct and indirect effect of IR on SC was assessed to arrive at the derived model.

Measurement Model

Before examining specific relationships between variables in the research model, we examined the measurement model with confirmatory factor analysis. All three constructs in the study were verified as unique. As shown in the table 8, all measurement items showed statistically significant loadings. The Cronbach's alpha value of each measurement scale exceeded the minimum requirement of 0.70, indicating its internal consistency to the corresponding construct. The composite reliability of each measurement scale ranged between 0.85 and 0.93, ensuring its unidimensionality. Discriminant validity was also ensured since the average variance extracted (AVE) of all constructs were greater than corresponding inter-construct squared correlation estimates (table 9). The CFA analysis clearly indicated the superiority of the model ($\chi^2 = 239.218$, $df = 87$, $p < .05$, $NFI = .919$, $IFI = .947$, $TLI = .926$, $CFI = .947$, $RMSEA = .058$). In conclusion, results of CFA (Table 10), reliability estimates and measurement model analysis indicated that measures had sound psychometric properties.

Structural Models

Further, we examined the fit of the partial mediation model. The model had 87 degrees of freedom (135-48) and the chi-square goodness-of-fit statistics showed that the model fitted fairly well, χ^2 ($N = 516$, $df = 87$) = 239.218, $p < .05$. The baseline comparisons fit indices of NFI, RFI, IFI, TLI, and CFI exceeded 0.9. Table 10 shows the measures of goodness-of-fit of the partial-mediation model in which IR was allowed to make direct impact on SC beside the impact through mediators. It indicated an acceptable fit to the data.

Table 8: Scale Reliabilities and Properties of the Measurement Model

Construct and Indicators	Completely Standardized Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Industrial Relations		0.779	0.922	0.509
V1	0.57			
V2	0.82			
V3	0.87			
V4	0.67			
V5	0.66			
V6	0.68			
V7	0.67			
Role of Unions		0.827	0.892	0.569
V8	0.83			
V9	0.88			
V10	0.77			
V11	0.47			

Successful change		0.860	0.915	0.607
V12	0.70			
V13	0.79			
V14	0.85			
V15	0.77			

Table 9: Discriminant Validity

	IR	RU	SC
IR	(0.509)		
RU	0.467	(0.569)	
SC	0.353	0.208	(0.607)

Note: Diagonal elements signify AVE.

Table 10: Measures for goodness-of-fit of the models

Measures	Measurement model	Partial mediation model	Acceptable Level
Chi square and d.f.	$\chi^2 = 239.218$; df = 87; p < 0.05	$\chi^2 = 239.218$; df = 87; p < 0.05	
CMIN/d.f.	2.750	2.750	Value less than 5 represents good fit
CFI	.947	.947	Values close to .90 represent a good fit
TLI	.926	.926	Values close to .90 represent a good fit
PCFI	.786	.786	Value close to .95 is a good fit model and values above .75 is tolerable
RMSEA	.058	.058	Values should be less than .08 for model to be good fit or less than .1 for a moderate fit
Hoelter	237(.05) and 260(.01)	237 (.05) and 260(.01)	

Examination of the mediation effect

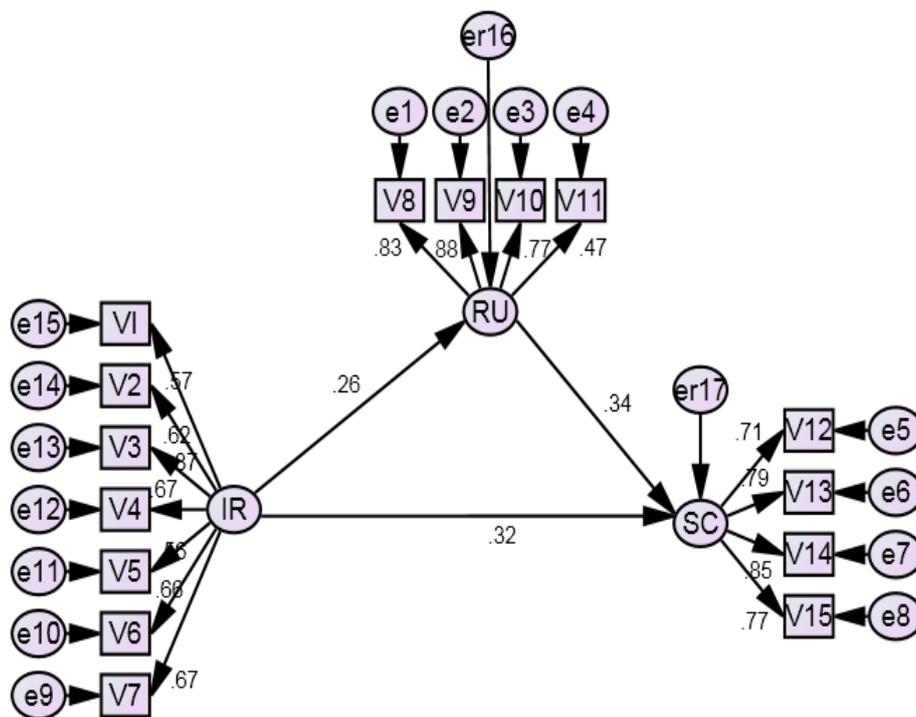
Table 11 on the path estimates between the constructs shows that they are all significant. Also, if we analyze the direct and indirect effects between IR and SC in the mediated model (table 12), we find that direct effect is substantial (0.323) while indirect effect though less (0.089) is significant, further validating partial mediation model. Figure 2 presents the overall structural model with path coefficients for mediating role of unions between IR and SC.

Table 11: Testing for mediation in Hypothesized Model

Standardized parameter estimates	Partial mediation model
IR->RU	0.263*
RU->SC	0.339*
IR->SC	0.323*

Table 12: Accessing Direct and Indirect Effects in Mediated Models

Effect of IR->SC	Partial Mediation Model
Total Effects	0.412
Direct effects	0.323
Indirect Effects	0.089

Figure 2: Structured Equation Modelling with Mediation Results

From above discussions, it can rightly be established that all three hypothesis (H1a to H1g, H2 and H3) are supported.

VIII. Managerial Implication

This study has important implications which can benefit both the organization and leaders undertaking change.

- During organizational change, it has been witnessed that the organization hesitates to empower and involve the employees because of inherent fear that it will lead to erosion of the authority of executives. But, this double-edged sword when handled deftly would lead to ownership of change and people will assist rather than resist change.
- Communication channels are opaque leading to distances in the hearts of people because of which the critical mass for change doesn't emerge. On the other hand it has been empirically established time and again by various researchers that persistent communication by transformational leaders leads to absorption of core purpose, mission,

ethics, values, corporate behavior and the urgency of change into the system. It's a potent tool that sets the direction of change and aligns HR strategy with business strategy.

- Unresolved grievances and industrial disputes breed resistance to change. Hence, to turn grievances into suggestions and blaming into introspection, an organization must institute an effective mechanism for grievance Redressal and mechanisms to avoid industrial disputes during the change so that discontented workers can climb aboard the change vehicle.
- The role of IR during the transition has always been underestimated. So, to ensure successful change management, employers has to work towards alignment of HR strategy with the business strategy during change. One important lesson may be that organizations can script their own people centric initiatives towards galvanizing employees to achieve their change objectives.
- In the South Asian context, change management starts with a discussion in the boardrooms and is coaxed down the employees even in the organizations of repute. Hence, efforts must be made to provide a platform for participative involvement and harnessing contributory suggestions from the employees before the final decision for change is made. In fact, in yet to mature economies like India, a concoction to empower people, harness their creativity, and involve them in organized teams based on the innovative endeavors can help organizations to gain new grounds with hope for a glorious future.
- Feedback and suggestions are mere formalities in many organizations. But if employees and unions, participation is sought in organizational development efforts and they are encouraged to represent their side of hindrances, beliefs and thoughts regarding the change through well designed feedback and suggestion mechanism, resistance will decrease and acceptability will increase.
- Unions have been found to have a very powerful grip over the collective thinking of the workers in general in many organizations. In few organizations it has also been found that it can tilt the scale towards failure or success during transition. Therefore, steps must be taken to ensure cordial IR scenario so that it plays a constructive role during change.
- Competition is moving people away from each other. But, if organizational citizenship behavior is developed in organizations, industrial relations will automatically improve.

IX. Limitations and Future Direction

The contribution of the present study should be regarded in the light of several limitations that may constrain our conclusions. As with any case study, the goal here was not to provide statistically generalizable conclusions, but rather to expand and generalize theories (Yin, 1994). Also, the results are based on the single-site case study based on a survey conducted in Rourkela Steel Plant. Thus, the findings may not be generalized for the private organizations as the said company has to function within the framework of the policies of the government which has a controlling stake. This study, in fact, suggests that it is important for the future research to move beyond the technological detailing towards recognizing the need to facilitate a positive industrial relations and ensuring constructive union involvement. Again, a more holistic approach for successful change management is warranted instead of limiting the

approach to few variables and hypotheses. There is also a scope for multilevel investigation in which relation between IR and SCM can be examined for moderating effects.

X. Conclusion

The phenomenon that sets the context of research is highly relevant as the change management in the era of continual transformation has become the order of the day. Throughout this paper, emphasis has been on establishing facilitative industrial environment and positive union-management relations for piloting transformational change in an organization. It has been argued and validated empirically that organization which looks beyond machines and strategically focus on people by galvanizing them towards achieving organizational goals steers a successful change. These organizations with well planned, directed and measured HR/IR interventions and alignment of HR strategy with business strategy propels people to enjoy working together, exhibit the 'will to win', gear them to give their best to take the organization forward and work towards the fulfillment of change objectives. Thus, the finding of this study supports the argumentation and shows a way that a positive IR through a focus on people, empowerment, grievance redressal, citizenship behaviour, feedback and suggestions and tireless communication create a synergistic whole which complements an organizational change. It also validates that if unions are involved in the change process, it can help manage employee's perception, aspirations and collective thoughts and bring about cohesiveness in the organization, leading to successful change management.

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Annexure 1: Latent Construct and Measured Variables used for SEM

Latent Constructs	Measured Variables
Industrial Relations (IR)	Alignment of HR strategy with Business strategy (V1) Employee Communication (V2) Employee suggestions (V3) Empowerment and Involvement (V4) Focus on Human side of change(V5) Managing Grievances and Disputes(V6) Organizational Citizenship Behaviour(V7)
Role of Unions (RU)	Cordial Union-Management relationship (V8) Participative style of decision making (V9) Cooperative hand towards the management (V10) Discussion of policies and decisions with management(V11)
Successful Change Management (SC)	Improved organizational effectiveness(V12) Increased productivity(V13) Competitive edge(V14) Increased efficiency(V15)