

# Impact of Antecedents of Workers' Participation in Management on Effectiveness of Decision – Empirical Evidence from Steel Industry

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## Abstract

The main intention of this paper is to reveal the various antecedents of workers' participation in management. The authors applied exploratory research method to identify the certain independent variables such as commitment, instrumentality, ideology, general attitudes and organizational support of the study and crystalized the research problem. The impact each independent variable over effectiveness of decision in the steel industry is checked statistically. There are 888 samples drawn for this study and analyzed the data.

Keywords: - Workers' Participation in Management, Commitment, Instrumentality, Ideology, General Attitudes, Organizational Support, Steel Industry.

## I. INTRODUCTION

The main aim of the scheme of Workers Participation in Management is to help in increasing production and productivity and sharing the gains of productivity through more effective management and better industrial relations (Eilon, 2018). Towards this end, the Government of India has introduced a number of schemes since independence. In the year 1975 the Government formulated a scheme of workers' participation in industry at shop floor and plant level. The scheme was to be implemented in the first instance in enterprises in the manufacturing and mining industries, whether these were in the public, private or cooperative sector or departmentally run units irrespective of whether joint consultative machineries had been set up and were functioning in them. The scheme was applicable to such units as were employing 500 or more workers. The scheme provided for setting up of shop councils at the shop/departmental levels and joint councils at the enterprise levels (Cawler ,2016). Each council was to consist of an equal number of representatives of employers and workers. The employers' representatives were required to be nominated by the management from among the persons employed in the unit concerned and all representatives of workers were required to be from amongst the workers engaged in the shop or department concerned. The employer was expected to set up the council in consultation with the recognized union or various registered Trade Unions or workers as that would be appropriate in the local conditions (Heller et al., 2008).

The employer was to determine the number of members in each council, but he had to take the decision in consultation with the unions. Decisions were to be based on consensus, and not by

a process of voting, and a decision once taken was required to be implemented within one month. The shop councils were required to meet as frequently as necessary, and at least once in a month (Imaga E.U, 2014). Similarly, joint councils were required to be set up for each unit covered under the scheme. The chief executive of the unit was to be the chairman. The vice chairman was to be nominated by the worker members of the council. The joint council was to meet at least once in a quarter (Khattak et al., 2012).

Soon afterwards, in 1977, the Government of India introduced another scheme for participation. This scheme of workers' participation in management was meant for commercial and service organizations having large scale public dealings such as hospitals, post and telegraphs, railway stations/booking offices, government provident fund and pensions organization, road transportation, electricity boards, insurance, institutions like FCI, Central Warehousing Corporations, State Warehousing Corporations, Public Distribution System including Fair Price Shops, Super Bazaar, all financial institutions, educational institutions, air and inland water transport, ports and docks, handlooms and handicrafts export corporations, municipal services, milk distribution services, the irrigation system, tourist organizations, public hotels and restaurants, and establishments for public amusements, etc (Levine et al., 2017).

### **Review of Literature on Participatory Management:**

Heller (1981) states that participation is the most organizational problem of our time because individual members feeling of wellbeing and their self-realization are related to participation and its consequences. Kloeze, Molencamp and Reolof (1980) have suggested that participation needs to be explained in terms of degree and direction. The degree of participation in an organization explains the amount of involvement that each individual employee will have in both formulation and implementation. This will be partly determined by the way authority is delegated and also be determined by how influential the participation will be. In other words, whether the employees are truly allowed to be involved and are allowed to make decisions or whether they are merely allowed to have some input which is not fully incorporated in decision making (Pseudo-participation) depends largely on the spelt-out degree of participation in that organization. Elton (1985) describes participation as "a man's basic biological process".

The researcher Powell and Schlacter (1971) suggested that the principal reason for the lack of increase in productivity was that many of the workers were not ready to participate. According to them, the workers preferred the dependent relationship found in an authoritarian leadership style (Thornton, R.C, 2019). The researchers also pointed out that it takes time for people to become involved and that when they do the very nature of their involvement which they asserted as follows: "The increasing number of relationship and interest, the development of multiple objective and the possible loss of informal leadership are factors which tends to hamper improvement in productivity". The key to effective use of participation the researchers suggested, is the "manager" being able to find out the trade-off point between participation and moral on one hand, and productivity on the other hand which gives him the best overall result. Participation they asserted is one of the most misunderstood ideas that have emerged from the field of human relations. Waldman (1986) put forth that participation of employee is praised by some, condemned by others.

**Summary of the Literature:**

Variable	Definition	Sources
Commitment	<p>It is defined as a measure of the extent to which an individual accepts or identifies with the goals and values of his/her organization, such that he/she:</p> <p>a) feels a sense of pride in belonging to the organization;</p> <p>b) willingly does routine tasks of organization; and</p> <p>c) readily engages in activities above and beyond those that are normally expected from a worker.</p>	<p>Bolton et al., 2007; Fullagar et al., 2004; Sverke and Kuruvilla, 1995; Kelloway, Catano &amp; Southwell, 1992</p>
Instrumentality	<p>It is defined as a conscious psychological activity of assessing the amount of possible gains - both intrinsic as well as extrinsic, that organizations can realize for its workers.</p>	<p>Gamage and Hewagama, 2012;</p> <p>Gordon, Barling and Tetrick, 1995; Newton and Shore, 1992;</p> <p>Chacko, 1985</p>
Ideology	<p>It is defined as a connected set of beliefs and values held by an identifiable social group, which gives its members a sense of solidarity, as well as helps them cope with employer exploitation.</p>	<p>Sinclair &amp; Tetrick, 1995;</p> <p>Klandermans 1989; Guest and Dewe 1988</p>
General Attitudes	<p>It is defined as enduring propensities of an individual's feelings and thoughts towards participation or non-participation in organization related activities.</p>	<p>Chan et al., 2006; Deshpande &amp; Fiorito, 1989; Huszczo, 1983;</p> <p>Gordon et al., 1980</p>
Organizational Support	<p>It is defined as members' global beliefs concerning the extent to which the organization values their contributions and cares about their well-being.</p>	<p>Gibney et al., 2012; Tetrick et al., 2007; Fuller &amp; Hester, 2001</p>

## II. Research Methodology

### Research Gap:

There is abundant literature available over the individual factors which effect the workers participation in management. Specific studies on antecedents of workers participation revealed their impact over the workers participation. Some other studies emphasized over the impact of workers participation on effectiveness

of decision in the organizations. Though there are studies on all the proposed variables of the study, there is no a study which reveals about the impact of antecedents of workers participation in management over effectiveness of decision through the workers participation in management. Furthermore, the earlier studies revealed the concerned variables impact over the dependent variables in the different contexts. It is required to understand the phenomenon in the Indian context with specific to Indian steel industry.

### Formulation of Hypotheses

As the study is in exploratory in nature, it is required to frame the hypotheses of this study in the form of null. Hence, the researcher framed the hypotheses in full form as mentioned below:

H1<sub>0</sub>: Commitment will not have significant effect over Workers' Participation.

H2<sub>0</sub>: Instrumentality will not have significant effect over Workers' Participation.

H3<sub>0</sub>: Ideology will not have significant effect over Workers' Participation.

H4<sub>0</sub>: General Attitudes will not have significant effect over Workers' Participation.

H5<sub>0</sub>: Organizational Support will not have significant effect over Workers' Participation.

H6<sub>0</sub>: Workers' Participation will not have significant effect over Effectiveness of Decision.

H7<sub>0</sub>: Antecedents of WPM will not have significant effect over Effectiveness of Decision.

## III. Data Analysis and Interpretation

### Data Analysis:

#### Testing the mediation effect of commitment on effectiveness of decision through workers' participation in management:

According to Hayes (2016) mediation analysis, the model predicted that the path a, path b and path c' is found to be significant as their p-values are less than 0.05. Further, it is also noted that the direct effect of the model (0.261) is less than the total effect (0.580). Hence, we

conclude that, there is a partial mediation is evidenced in the model. In order to determine the size and significance of the mediation effect in the proposed model, we have to consider the indirect effect results in the model. The indirect effect of the model is found to be significant. The regression coefficient is 0.3185 and the standard error is 0.0277. The bootstrapping results of the model also yielded the positive results as it's lower control limit is 0.2678 and the upper control limit is 0.3776. As there is no existence of zero in between these two control limits we can validate the results.

#### **Testing the mediation effect of Instrumentality on effectiveness of decision through workers' participation in management:**

According to Hayes (2016) mediation analysis, the model predicted that the path a, path b and path c' is found to be significant as their p-values are less than 0.05. Further, it is also noted that the direct effect of the model (0.434) is less than the total effect (0.853). Hence, we conclude that, there is a partial mediation is evidenced in the model. In order to determine the size and significance of the mediation effect in the proposed model, we have to consider the indirect effect results in the model. The indirect effect of the model is found to be significant. The regression coefficient is 0.434 and the standard error is 0.491. The bootstrapping results of the model also yielded the positive results as it's lower control limit is 0.3465 and the upper control limit is 0.5370. As there is no existence of zero in between these two control limits we can validate the results.

#### **Testing the mediation effect of ideology on effectiveness of decision through workers' participation in management:**

According to Hayes (2016) mediation analysis, the model predicted that the path a, path b and path c' is found to be significant as their p-values are less than 0.05. Further, it is also noted that the direct effect of the model (0.421) is less than the total effect (0.600). Hence, we conclude that, there is a partial mediation is evidenced in the model. In order to determine the size and significance of the mediation effect in the proposed model, we have to consider the indirect effect results in the model. The indirect effect of the model is found to be significant. The regression coefficient is 0.375 and the standard error is 0.037. The bootstrapping results of the model also yielded the positive results as it's lower control limit is 0.3050 and the upper control limit is 0.4510. As there is no existence of zero in between these two control limits we can validate the results.

#### **Testing the mediation effect of general attitudes on effectiveness of decision through workers' participation in management:**

According to Hayes (2016) mediation analysis, the model predicted that the path a, path b and path c' is found to be significant as their p-values are less than 0.05. Further, it is also noted that the direct effect of the model (0.146) is less than the total effect (0.358). Hence, we conclude that, there is a partial mediation is evidenced in the model. In order to determine the size and significance of the mediation effect in the proposed model, we have to consider the indirect effect results in the model. The indirect effect of the model is found to be significant. The regression coefficient is 0.211 and the standard error is 0.030. The bootstrapping results of the model also yielded the positive results as it's lower control limit is 0.1556 and the upper control limit is 0.2741. As there is no existence of zero in between these two control limits we can validate the results.

### Testing the mediation effect of organizational support on effectiveness of decision through workers' participation in management:

According to Hayes (2016) mediation analysis, the model predicted that the path a, path b and path c' is found to be significant as their p-values are less than 0.05. Further, it is also noted that the direct effect of the model (0.324) is less than the total effect (0.637). Hence, we conclude that, there is a partial mediation is evidenced in the model. In order to determine the size and significance of the mediation effect in the proposed model, we have to consider the indirect effect results in the model. The indirect effect of the model is found to be significant. The regression coefficient is 0.312 and the standard error is 0.030. The bootstrapping results of the model also yielded the positive results as it's lower control limit is 0.2574 and the upper control limit is 0.3750. As there is no existence of zero in between these two control limits we can validate the results.

**Table – 4.23: Mediation Results Summary based on Hayes (2016) Mediation Analysis**

Independent Variable (X)	Mediator (M)	Dependent Variable (Y)	Step 1 X->M a=Coeff of X a; SE (a); p;	Step 2 M-> Y b=Coeff of M b; SE (b ); p	Step 3 Total Effect X->Y c=Coeff of X c; SE (c ); p	Step 4 Direct Effect X, M -> Y Coeff of X c', SE(c'); p	Indirect Effect Coeff*; (SE)**; p
Commitment	Workers' participation in management	Effectiveness of decision	0.481, 0.026,0.000	0.661, 0.039, 0.000	0.580, 0.034, 0.000	0.580, 0.034,0.000	0.318, 0.027, 0.000
Instrumentality			0.749,0.030, 0.000	0.580, 0.043, 0.000	0.853, 0.041, 0.000	0.434, 0.049, 0.000	0.434, 0.491, 0.000
Ideology			0.520,0.033, 0.000	0.721, 0.037, 0.000	0.600, 0.044, 0.000	0.224, 0.421, 0.000	0.375,0.037 1,0.000
General Attitudes			0.272,0.034, 0.000	0.778, 0.034, 0.000	0.358, 0.044, 0.000	0.146, 0.036, 0.000	0.211,0.030, 0.000
Organizational support			0.462,0.031, 0.000	0.676, 0.036, 0.000	0.637, 0.040, 0.000	0.324, 0.037, 0.000	0.312, 0.030, 0.000

## IV. CONCLUSION

Based on the statistic results, it is proved that all proposed antecedents of workers participation in management (commitment, instrumentality, ideology, general attitudes, organizational support) are considered to be valid and significant with respect to the mediating impact of workers participation in management over the effectiveness of decision in the steel industry.

The unit level participation appears same in both Vizag and Rourkela steel plants, because the independent sample t-test revealed that the workers participation in unit level is same. This phenomenon clearly indicates that the conditions regarding the unit level participation is considered to be same. The workers participation in management with reference to joint councils' participation is found to be not same in Vizag and Rourkela plants. The statistic results of independent sample t-test proved that the workers opinion towards the workers participation in joint councils is not same. The workers participation in management with reference to board level participation is found to be not same in Vizag and Rourkela plants. The statistic results of independent sample t-test proved that the workers opinion towards the workers participation in board level is not same.

The variable commitment has shown the positive impact over workers participation in management. The statistic results disclosed that the  $R^2$  value is found to be 28.4 which a moderate impact over the dependent variable. The variable instrumentality has shown the positive impact over workers participation in management. The statistic results disclosed that the  $R^2$  value is found to be 42.2 which a high impact over the dependent variable. The variable ideology has shown the positive impact over workers participation in management. The statistic results disclosed that the  $R^2$  value is found to be 21.8 which a moderate impact over the dependent variable.

The variable general attitudes have shown the positive impact over workers participation in management. The statistic results disclosed that the  $R^2$  value is found to be 6.9 which a low impact over the dependent variable. The variable organizational support has shown the positive impact over workers participation in management. The statistic results disclosed that the  $R^2$  value is found to be 19.9 which a moderate impact over the dependent variable. The variable workers participation has shown the positive impact over effectiveness of decision. The statistic results disclosed that the  $R^2$  value is found to be 40.2 which a moderate impact over the dependent variable. When together all the proposed independent variables are regressed over the dependent variable i.e effectiveness of decision, the results elicited that the factors such as instrumentality, organizational support, commitment and general attitudes found to be significant. The variable ideology is found to be insignificant.

However, together all the independent variables shown much impact over effectiveness of decision. The statistic results revealed that the variable instrumentality alone shown the impact of 33 percent. When it is associated with organizational support, the impact is raised to 38.8 percent. The conglomeration of three variables namely instrumentality, organizational support and commitment recorded the impact of 40.2 percent and when joined with general attitudes it reached to 40.5 percent.

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