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DETERMINANTS OF JOB SATISFACTION AND IT'S EFFECT ON EMPLOYEE SATISFACTION OF PUBLIC SECTOR EXECUTIVES: AN EMPIRICAL STUDY

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ABSTRACT
This study has been undertaken to examine the determinants of job satisfaction in terms of monetary and non-monetary rewards and the effect of job satisfaction on employee satisfaction in the case of Indian public sector executives. The study is primarily based on primary data collected from 50 sample executives using well structured questionnaire. The cross-sectional data of variables prepared for each of 50 respondents on the basis of five point response category of Likert type, two-tailed t-test has been used for testing the hypotheses implied in the hypothesized research model. Adjusted R^2 and F values computed and presented along with the results. The IBM SPSS 20 and Microsoft Excel 07 have been used for the data preparation and data analysis. The empirical results indicated that monetary and non-monetary rewards significantly affect the level of job satisfaction. This study also indicated that job satisfaction significantly affects employee satisfaction of the executives. It has been concluded that job satisfaction is an important antecedent of employee satisfaction. The limitations of the study also indicated.

Key words:
Public Sector Executives, Job Satisfaction, Employee Satisfaction, Antecedent

INTRODUCTION
Motivational rewards determine the level of satisfaction in the organizations. Generally rewards may be classified as either monetary or non-monetary. Monetary rewards refer to tangible objects, such as pay, bonuses promotions and formal recognitions, whilst non-monetary rewards are non-tangible and include praise and personal recognition. It has been argued that monetary as well as some non-monetary rewards can be considered extrinsic rewards [1]. Pay has direct link with efficacy of the employee [2]. Many researchers have examined the role of monetary factors in the name of organizational reward (extrinsic reward) like pay, bonuses and frinz benefits [3], [4], [5]. A group of researchers have observed that an employee productivity increased by an average of 30 percent after the introduction of individual monetary incentives, other types of rewards and interventions do not seem to have such a potential effect [6],[7]. Motivated employees are inclined to be more productive than non-motivated employees. If employee is motivated through various motivational activities then he/she do his/her work in a very impressive way and then the result will be good and the motivated employees will motivate other employees at the work place and all these may lead to job satisfaction. Thus motivation of employees is essential and motivated employees are an asset to an organization [8]. Impact of motivational activities on the overall achievement of CCL has already been examined and established [9]. Under the circumstances it is imperative to examine the role of motivational rewards in determining the job satisfaction and its subsequent effect if any. The present study is an attempt in this direction.

LITERATURE REVIEW
Job satisfaction and employee satisfaction appears to be the same. This may be because the employees are doing job in the organization. But conceptual they differ; one includesanother. It has been clarified by [10] which states "Job satisfaction as all the feelings that a given individual has about his/her job and its various aspects. Employee satisfaction is a comprehensive term that comprises job satisfaction of employees and their satisfaction overall with companies policies, company environment etc. Therefore, while conceptualizing the keywords and reviewing the literature, only those concepts and research works are included which have a direct link to the concept of job satisfaction and employee satisfaction.

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Job Satisfaction

Job satisfaction is one of the most interesting subjects in today's organizational world in general and organizational studies in the particular. Satisfaction refers to fulfilment of one's need, wants and desire [11]. [12] defined job satisfaction as any combination of psychological and physiological and environmental circumstances that causes a person truthfully to say I am satisfied with my job [12]. Job satisfaction has also been defined as the extent to which a worker is content with the rewardhe or she gets out of his or her job, particularly in terms of intrinsic motivation [13].

Many studies appeared dealing with the determinants of job satisfaction. A study [14] differentiated between motivators or intrinsic aspects of job and hygiene factors. Another study examined the inverse relationship between job satisfaction and absenteeism [15]. Positive relationship between leadership behavior, organizational culture and job satisfaction observed in [16]. Very recently, a response analysis made for job satisfaction of executives in a public organization indicated that the employee are very much satisfied with the kind of work they perform under the superiors who are very cooperative and encouraging. The employee are also satisfied with the working conditions, availability of necessary human and material items and training facilities required for doing their work well. On the whole the employees are satisfied with their jobs during the present time [17]. But no studies appeared explaining job satisfaction in terms of motivational activities / rewards except [18] which examined the role of motivation within job satisfaction.

Employee Satisfaction

Employee Satisfaction is described as a pleasurable or positive emotional state resulting from an employee's appraisal of his or her company environment or company experience [19]. Employee Satisfaction is defined as a degree to which a worker is happy with his/her job and working atmosphere [20]. According to [21] Employee Satisfaction may be described as how pleasant an employee is with his/her position of employment. It has, however, been viewed that employee satisfaction is now a days considered as a brand, here brand means a promise i.e. a promise to provide higher employee satisfaction than competitors [22].

Quite a few studies have undertaken the issue of the factors determining employee satisfaction such as [22], [23], [24], [25]. But no study has considered job satisfaction as determinant of employee satisfaction. Recently [26] has, however, identified'Job' as one of the six determinants of employee satisfaction. Thus, the review of literature indicated the lacuna of not giving due emphasis on the role of motivational incentives in determining job satisfaction and also the lack of studies determining the association of job satisfaction with employee satisfaction. The present study has been undertaken to fulfil these research gaps in organizational studies.

OBJECTIVES

The objective of this study is to examine empirically the determinants of job satisfaction in terms of monetary and non-monetary rewards and the effects of job satisfaction on employee satisfaction in the case of a public sector organization namely Central Coalfields Limited (CCL) located as Ranchi, the capital of Jharkhand State in India. The CCL is one of the subsidiaries of the Coal India Limited, the single largest coal producing company in the world.

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HYPOTHESIS AND STRUCTURAL RESPONSE MODELS

The hypothesized research model is presented in Figure – 1.

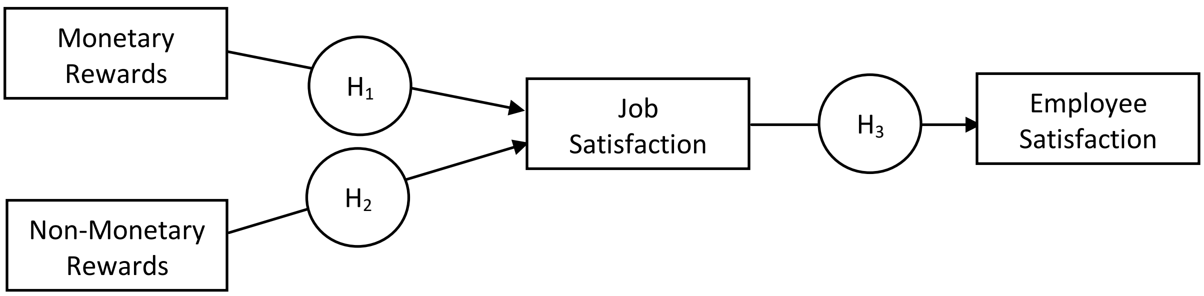

Figure – 1: Hypothesized Research Model

Figure 1 Shows the nature of association between individual motivational rewards (monetary and non-monetary rewards) and job satisfaction and also between job satisfaction and employee satisfaction. The arrow indicates that both monetary and non-monetary rewards affect job satisfaction and job satisfaction affects employee satisfaction. The hypothesis implied in the research model are as under.

Hypothesis 1 (H_1) : Monetary rewards significantly affects job satisfaction.
Hypothesis 2 (H_2) : Non-monetary rewards significantly affects job satisfaction.
Hypothesis 3 (H_3) : Job satisfaction significantly affects employee satisfaction.

$H_1$and H_2 explains the direct effect of monetary rewards on job satisfaction and H_3 explains the indirect effect of motivational rewards of employee satisfaction through job satisfaction; motivational rewards effect job satisfaction and job satisfaction effects employee satisfaction. For the purpose of testing these hypotheses the following structural response models have been formulated.

Structural Response Model I : $JS_i = a + bMR_i + u_i$
Structural Response Model II : $JS_i = a + bNMR_i + u_i$
Structural Response Model III : $ES_i = a + bJS_i + u_i$

Where,

JS_i = Value of job satisfaction variable of the ith respondent as per the sample respondent's perception measured by average summated scale (i=1,2,3……..n=50).
MR_i = Value of monetary rewards variable (i.e. pay and perks) of the ith respondent as per the sample respondent's perception measured by average summated scale (i=1,2,3……. n=50).
NMR_i = Value of Non-monetary rewards variable (combination of career & development, worklife & culture and welfare facilities) of the ith respondent as per the sample respondent's perception measured by average summated scale (i=1,2,3……..n=50).
ES_i = Value of employee satisfaction variable of the ith respondent as per sample respondent's perception measured by summated scale (i=1,2,3……..n=50).
a = Constant.
b = Regression Coefficients.
u_i = Usual random term.

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THE DATA AND METHODOLOGY

The Data

This study is primarily based on the primary data collected from a sample of 50 respondents i.e. executives (out of 328 executives) using well-structured questionnaire prepared for this purpose. The judgement sampling techniques – one of the non- parametric sampling - was considered appropriate and used for conducting the survey. It took about six weeks time during November-December, 2019. Published relevant articles, unpublished secondary data (available in the office of CCL Headquarters) and different websites related to the study have also been used.

The five point response category of Likert type [27] have been used in preparing the data. The responses are quantified by allocating the numerical value 1 for Strongly Disagree (SD) and 5 for Strongly Agree (SA) or 1 for Very Low (VL) and 5 for High Value (VH) as the case may be, for each of the question/statement considered. These Likert items (questions/statements) which happen to be inclusive are amalgamated or merged into one variable or scale which is composite in nature [28]. This type of pooled data is known as Likert scale or Summated scale. Summated scale is one of the latest scale techniques formulated in academic research. The summated scale, thus computed, has been transformed into average summated scale for each of the 50 respondents for all four variables and used for further statistical analysis.

Methodology

The structural response model estimated using Ordinary Least Squares method. The significance of regression coefficients tested using two-tailed t-test; F-test has been employed for testing the goodness of fit of the proposed response models. Adjusted R^2 values and F values computed and presented along with the results. The IBM SPSS 20 and Microsoft Excel 07 used for data preparation and data analysis.

EMPIRICAL RESULTS AND TEST OF HYPOTHESES

This section has two parts. First, presentation of descriptive statistics of variables including the Cronbach's alpha for testing the reliability and validity of scales. Second, presentation of regression results of different combinations of independent and dependent variables for measuring the significance of association.

Test of Reliability of scales

The basic statistics related to the variables/scales along with Cronbach's alpha computed and presented in Table–1.

Table 1: Descriptive Statistics

Scales	No. of items	Sample size	Mean	Std.Devi.	Cronbach's Alpha
Monetary Rewards	04	50	3.74	0.58	0.656
Non-Monetary Rewards	15	50	3.49	0.46	0.720
Job Satisfaction	06	50	3.73	0.58	0.819
Employee Satisfaction	49	50	3.56	0.46	0.957

Source: Computed from the survey data.

Table – 1 revealed that the values of Cronbach's alpha are more than the limit of reliability i.e. 0.60. This may be taken to indicate that all scales are acceptable and their reliability is ideal for further analysis. These results also

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indicate that all items of different scales are valid and suitable to measure the attitudes of employees towards motivational awards, job satisfaction and employee satisfaction.

Significance of Association and Test of Hypotheses

The results of the structural response models are presented in Table – 2 and the involved hypotheses are tested using appropriate test procedures.

Table 2: Regression results.

Items	Model – I Sep. Vari JS_i	Model – II Sep. Vari JS_i	Model – III Sep. Vari JS_i
Unstandardized Coefficient of Independent Variable			
MA_i	0.494 ** (0.127)	…	…
NMA_i	…	0.855** (0.134)	…
JS_i	…	…	0.671** (0.062)
Constant	1.884	0.745	1.054
R^2	0.240	0.460	0.710
Adjusted R^2	0.224	0.448	0.704
$F(v_1, v_2)$	15.159* (1,48)	40.817* (1,48)	117.455* (1,48)

Notes: Source compiled from detailed Regression Results (Appendix – I)

1 : Figures in parentheses below the regression coefficients are their respect standard errors.
** : Significant at 0.5 percent level of significance (two-tailed test).
* : Significant at 1.0 percent level of significance.

Results presented in Table – 2 sufficiently indicated the strong positive association between monetary awards & job satisfaction non-monetary awards& job satisfaction and job satisfaction & employee satisfaction as indicated by significant regression coefficients, satisfactory adjusted R^2values and highly significant F- values. The hypotheses-wise analysis are presented below.

Hypothesis 1 (H_1) : Monetary awards significantly affects Job satisfaction.

This hypothesis is tested by the results of Model – I in Table – 2. These results explain the nature and magnitude of relationship between monetary awards (pay & perks) and job satisfaction. The regression coefficient (0.494) is positive and statistically significant at 0.5 percent level of significance using two-tailed t-test[$P(t>2.660) = 0.005$]. The adjusted R^2 value (0.224) is quite high indicating 22.4 percent of variation in job satisfaction is explained by a single variable monetary awards. The F-value for degree of freedom $v_1 = 1$ and $v_2 = 48$ is very high (15.159) and highly significant at 1.0 percent level of significance [$P(F> 7.08) = 0.01$]. This indicates that the structural response model is quite good for statistical inferences i.e. establishing the goodness of fit of the model. Thus the primary

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cross-sectional data supports the hypothesis and therefore, the hypothesis 'Monetary Awards significantly affects job satisfaction' is accepted and established.

Hypothesis 2 (H_2) : Non-Monetary awards significantly affects Job satisfaction.

The results of Model – II in Table – 2 are used in testing this hypothesis. Model – II explains the relationship between non-monetary awards (i.e. combination of career & development, worklife & culture and welfare facilities) and job satisfaction. It is quite clear that the regression coefficient (0.855) is positive and highly significant at 0.5 percent level of significance. The adjusted R^2 value (0.448) is very high. The F-value (40.817) is also very high and highly significant at 1.0 percent level of significance. Thus the cross-sectional data supports the hypothesis 'Non-Monetary Awards significantly affects job satisfaction' and therefore accepted.

Hypothesis 3 (H_3) : Job satisfaction significantly affects Employee satisfaction.

This hypothesis is tested by the results of Model III in Table – 2. The results reveal that regression coefficient (0.671) is positive and highly significant at 0.5 percent level of significance. Adjusted R^2 value (0.704) is very high. F-Value at appropriate degree of freedom is 117.455 which is highly significant at 1.0 percent level of significance. Thus, the cross-sectional data supports the hypothesis 'Job satisfaction significantly affects Employee satisfaction' and therefore, the hypothesis is accepted and established.

CONCLUSION

The empirical study based on 50 executives of CCL indicated that the motivational awards provided by CCL to the executives as measured by monetary (pay & perks) and non-monetary awards (combination of career & development, worklife & culture and welfare facilities) significantly affects the level of job satisfaction in the organization. This study also indicated that the job satisfaction significantly affects employee satisfaction of executives. In other words monetary and non-monetary awards directly affect job satisfaction and these rewards also affect employee satisfaction indirectly through job satisfaction. This may be taken to indicate that job satisfaction is an important antecedent of employee satisfaction.

LIMITATIONS OF STUDY

This study is based on the sample size of only 50 respondents i.e. executives. Greater sample size could have produced more reliable results. The response analysis is based on respondent's responses which are subject to respondent's bias. The Likert scales used in structural response models are a direct measure of fairness, wherein the respondents might have experienced a conformatory bias in attempting 74 questions included in the questionnaire. This is a single method and a single respondent study, which as a limitations can be addressed in future researches as an extension of this methodology.

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APPENDIX

Appendix 1: Detailed Regression Results

MODEL-I

Model Summary

Model	R	R Square	Adjusted R Square	St. Error of the Estimate
	.490a	0.24	0.224	0.51403

a. Predictors: (Constant), M1

ANOVA (b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	4.005	01	4.005	15.159	.000a

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	Residual	12.683	48	0.264		
	Total	16.688	49			

b. Predictors :(Constant), M1
c. Dependent Variable: M7

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	St. Error	beta		
	Constant M1	1.884 0.494	0.48 0.127	 0.49	3.923 3.893	0 0

Coefficients (a)

a. Dependent Variable: M7

MODEL-II

Model Summary

Model	R	R Square	Adjusted R Square	St. Error of the Estimate
	.678a	0.46	0.448	0.43347

a. Predictors: (Constant), M5

ANOVA (b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	7.669	01	7.669	40.817	.000a
	Residual	9.019	48	0.188		
	Total	16.688	49			

a. Predictors:(Constant), M5
b. Dependent Variable: M7

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	St. Error	Beta	t	Sig.
	(Constant)	0.745	0.472		1.579	0.121
	M5	0.855	0.134	0.678	6.389	0

Coefficients (a)

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a. Dependent Variable :M7

MODEL-III

Model Summary

Model	R	R Square	Adjusted R Square	St. Error of the Estimate
	.843a	0.71	0.704	0.25303

a. Predictors: (Constant), M7

ANOVA (b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	7.520	01	7.520	117.455	.000 a
	Residual	3.073	48	0.064		
	Total	10.593	49			

a. Predictors:(Constant), M7
b. Dependent Variable: M8

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	St. Error	Beta	t	Sig.
	(Constant)	1.054	0.234		4.506	0
	M7	0.671	0.062	0.843	10.838	0

Coefficients (a)

a. Dependent Variable: M8

Notes :

M1 = Monetary Awards
M5 = Non- Monetary Awards
M7 = Job Satisfaction
M8 = Employee Satisfaction