



International Journal of Engineering, Business and Enterprise Applications (IJEBA)

www.iasir.net

ASSESSING WORKER'S AND MANAGER'S PERCEPTION ON JUDGMENT ACCURACY IN PERFORMANCE APPRAISAL SYSTEM (PAS)

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Abstract: Performance appraisal beliefs focus on present performance and further goals; wrong feedback may also stresses employee participation in mutually setting goals with supervisor. For this purpose measuring the judgment accuracy of Performance Appraisal Tool in PAS is important. In this paper we have calculated the reasons in PAS of 2 topmost Mining Industries of Rajasthan. 4 variables are selected for measuring judgment accuracy. For this purpose the hypothesis was developed that the attributes/constructs configuring Performance appraisal of organization on the judgment accuracy of Performance Appraisal Tool of PAS dimension significantly influence the PAS, data of 121 managers and workers were been collected. To check the hypothesis multiple regression analysis ANOVA, Adjusted R Square and Co-linearity Statistics were used with SPSS-19 software to identify the important factors responsible for measuring judgment accuracy of Performance Appraisal Tool in current PAS. The analysis shows that the current PAS is well designed in which supervisors utilizing well standards for the purpose of judgment accuracy of Performance Appraisal Tool.

Key Words: Performance Appraisal System, judgment accuracy of performance Appraisal Tool, ANOVA, Adjusted R Square, Co-linearity Statistics

I. Introduction

Human beings are the most important resources of an organization. They have unlimited potential for growth & development. This resource produce an output greater than input. Therefore it is necessary for management to analyze the significance and the differences in their performances over a period of time so that employees having better abilities may be rewarded and the wrong placement of employees may be rectified through transfers. Performance appraisal (PA) is the process of obtaining analyzing and recording information about the relative worth of an employee. It is the systematic evaluation of the individual with respect to his or her performance on the job and his or her potential for development. It is a formal, structured system of measuring and evaluating an employee's job related behaviors and outcomes to discover how and why the employee's presently performing on the job and how the employee can perform more effectively in the future so that the employee, organization, and society all benefit.

PA includes all formal procedures used to evaluate personalities, their contribution and potential of group members in a working org. It is a continuous process to secure information necessary for making correct and objective decisions on employees (Dale Yoder, 1967). That is why the accuracy of judgment in the PAS is most important. It is always felt that Judgment accuracy is one of the most important factors to be lacking in the any

PA system. Therefore in the current study we have tried to measure the judgment accuracy in the PAS exists and PAS needed, and if there is any gap in the perception of the employees and managers.

II. Literature Review

Erdogan, et al.,(2001) revealed that Procedural justice is generally thought of as a one-dimensional construct. In this article, it is argued that in the performance appraisal context procedural justice can be conceptualized as two-dimensional: system procedural justice and rater procedural justice. Regression results from a study of one organization in Turkey support this distinction. Due process characteristics and employee characteristics were differentially related to two dimensions of procedural justice. Specifically, perceived validity of performance criteria, knowledge of performance criteria, and organizational level of employees were related to system procedural justice, whereas perceived performance feedback and fair hearing were each positively related to rater procedural justice[1].

Brown, et al., (2010) revealed that the Organizations create policies in an effort to reduce injustice, as well as address the needs and interests of organizational members. We argue that individuals can make fairness judgments related to organizational policies, which are independent from other dimensions of fairness (i.e. distributive, procedural, interpersonal, and informational justice). Results of a field study with 164 union members found that individuals make judgments about the fairness of policies that are distinct from other forms of justice. Policy justice also interacts with procedural justice to predict turnover intentions. However, this interaction was in the opposite direction from what we originally predicted. They discuss the implications of these findings for justice research and practice, as well as provide avenues for future research [2].

Levy, et al.,(2004) revealed that research in the last 10 years has broadened the traditional conceptualization of performance appraisal effectiveness to include and emphasize ratee reactions. The influence that the feedback environment or feedback culture has on performance appraisal outcomes is an especially recent focus that seems to have both theoretical and applied implications [3].

Taggar, et al., (2006) assessed the consequences of performance feedback received from peers on a team member's subsequent ratings of others, and the mediating influence of interpersonal affect. Undergraduate participants ($N = 142$) working in 30 teams during a 7-week period were assigned collective bargaining and arbitration tasks. they found that a team member's prior positive or negative peer feedback resulted in increased leniency or severity, respectively, and increased restriction in range when these same members subsequently rated fellow team members. Inter rater agreement on ratings of peers at Time 3 was higher when raters received similar feedback (i.e., both received positive or negative feedback) from their peers at the Time 1. The mechanism through which feedback at Time 1 influenced rating biases at Time 3 was found to be interpersonal affect [4].

Curtis, et al., (2005) revealed that although performance appraisal research has been ongoing for more than 50 years, the focus has largely been on the rater and the rating instruments. This study seeks to answer a more recent call by researchers to focus on contextual variables surrounding the performance appraisal process by analyzing two such variables: appraisal purpose and rater accountability. Results indicate that holding raters accountable for the accuracy of their ratings, especially when ratings are for administrative purposes, may be an effective strategy for reducing leniency error. [5]

Gosselin, et al., (1997) have taken a diverse sample of 265 employees was surveyed for ratee preferences concerning seven performance management and appraisal issues. Research questions were formulated on appraisal source, feedback issues, and the performance management process. Results indicated that subjects most trusted their immediate supervisor as an accurate source for their appraisal and that they preferred having prior knowledge of their supervisor's expectations, receiving ongoing informal feedback throughout the appraisal period, and receiving formal appraisals at least twice a year. Subjects expressed preferences for developmentally oriented appraisals that were based mostly on the results of work. Preferences were not moderated by ratee experience or gender. Implications for human resource development professionals are discussed [6].

Schleicher et al., (2010) revealed that two experiments examined raters' reactions to a forced distribution rating system (FDRS), which, despite its popularity in organizations, has been largely ignored in the empirical research literature. Greater difficulty and less fairness were reported by raters when the FDRS was used for administrative purposes and when there was reduced variability in ratee performance. In addition, the FDRS was found to be more difficult and less fair than a more traditional rating scale format. Finally, difficulty and fairness reactions had significant implications for raters' confidence in their ability to provide feedback to the ratees and their self-efficacy for using the system going forward [7].

Facteau, Jeffrey D.; Craig, S. Bartholomew, (2001) analyzed whether a multisource performance appraisal instrument exhibited measurement invariance across different groups of raters. Multiple-groups confirmatory factor analysis as well as item response theory techniques were used to test for invariance of the rating instrument across self, peer, supervisor, and subordinate raters. The results of the factor analysis indicated that the rating instrument was invariant across these rater groups and suggest that the rating instrument could be regarded as invariant across the rater groups, thus supporting the practice of directly comparing their ratings [8].

Tziner, Aharon, Kevin R. Murphy,(1999) analyzed the attitudes of twenty-nine managers toward performance appraisal to predict differences in judgement ratings and measures of discrimination among ratees and performance dimensions. Raters who showed low levels of confidence in the appraisal system, high levels of discomfort, or high levels of instrumental commitment were more likely to provide ratings that were unusually high or that did not discriminate well among ratees and/or dimensions. [9].

Heneman, et al, (1987) reviewed the Models of performance-rating accuracy and combined into an integrative framework. Components of this framework included the rater, ratee, context, training, and rating format. This framework was used to review the empirical studies on performance-rating accuracy. They also discussed the implications of this review for performance-appraisal researchers and practitioners [10].

Sulsky, et al., (1988) examined methodological and theoretical issues related to accuracy measures used as criteria in performance-rating research. First, they argued that existing operational definitions of accuracy are not all based on a common accuracy definition; we report data that show generally weak relations among different accuracy operational definitions. Second, different methods of true score development are also examined, and both methodological and theoretical limitations are explored. Given the difficulty of obtaining true scores, criteria are discussed for examining the suitability of expert ratings as surrogate true score measures. Last, the usefulness of judgment accuracy measures in performance-rating research is examined to highlight situations in which judgment accuracy measures be desirable criterion measures in rating research [11].

III. Data Collection and Analysis

On the basis of extensive Performance appraisal dimensions which were taken from review of literature, have been used to measure the Judgment accuracy in Current Performance appraisal System. By taking 4 items spread among judgment dimensions which included in the current study for workers and managers. For this purpose the data were collected from the 121 workers and managers of two mining companies i.e., RSMML and Vedanta limited on Five point Likert Scale (1 for highly disagree and 5 for highly agree) data has being taken to measure judgment accuracy in the Current performance appraisal system in terms of their perception. The detailed variable correspond to each parameters have been enlisted in Table 1.

Table 1: Variables

PARAMETERS OF ANALYSIS	VARIABLE NUMBERS	VARIABLE DESCRIPTIONS
Judgment accuracy	VAR 00001	The PA process results in a clear and unbiased appraisal.
	VAR 00002	The PA process results in better communication between me and my supervisor.
	VAR 00003	The best Employee receives the highest evaluation scores.
	VAR 00004	The PA is well designed and leads to better performance and work quality.

Hypothesis: For the purpose of current study the following hypothesis were developed:

H₁: The attributes/constructs configuring Performance appraisal of organization on the Judgment Accuracy of PAS dimension significantly influence the PAS.

To analyze the hypothesis and to check out whether any of the variables are describing the judgment accuracy in Current PAS or not, the Multivariate Regression Analysis of Judgment accuracy of Performance Appraisal (PA) Tools were performed. The result of this test is summarized under table 2 to 7.

Table 2: Descriptive Statistics & Correlations Among The Variable

		Mean	Std. Deviation	N	Current PA system	VAR0 0001	VAR0 0002	VAR0 0003	VAR0 0004
Pearson Correlation	Current PAS	3.1240	.89972	121	1.000				
	VAR00001	2.8926	.99835	121	.340	1.000			
	VAR00002	3.0248	.94395	121	.173	.357	1.000		
	VAR00003	2.8347	.91603	121	.288	.700	.381	1.000	
	VAR00004	2.9421	.98571	121	.412	.654	.530	.737	1.000

Table 2 shows the descriptive statistics of the sample selected for the current study and table 3 shows correlations of dependent and independent variables and among the variables reflects Judgment accuracy of current performance appraisal Tool.

Table 3: Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	VAR0004		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Current PA system

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.412 ^a	.170	.163	.82317	.170	24.357	1	119	.000

Predictors: (Constant), VAR00004

Table 5: ANOVA^d

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.505	1	16.505	24.357	.000 ^a
	Residual	80.636	119	.678		
	Total	97.140	120			

a. Predictors: (Constant), VAR00004

b. Dependent Variable: Current PA system

Table 6: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Co-linearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.017	.236		8.531	.000					
	VAR00004	.376	.076	.412	4.935	.000	.412	.412	.412	1.000	1.000

a. Dependent Variable: Current PA system

IV. Findings

Assessing Overall Model Fit: Table 4 shows that the final Regression model with only 1 independent variable (VAR00004) explains almost 16.3% of the variance of current PAS. Also, the standard errors of the estimate has been reduced to .82317, which means that at 95% level, the margin of errors for any predicted value of Current PAS can be calculated as ± 1.61 ($1.96 \times .82317$). The Estimated Coefficient of the one regression coefficients, plus the constraints is significant at 0.05 levels.

Impact of Multicollinearity: Table 6 shows that impact of Multicollinearity on selected variable is substantial. The same have the tolerance value 1.000, indicating that no identifiable variance is accounted for by the other variables in the equation.

ANOVA analysis: Table 5 shows ANOVA analysis which provides the statistical test for overall model fit in terms of F Ratio. The total sum of squares (97.140) is the squared error that would accrue if the mean of Current PAS has been used to predict the dependent variable. Using the values of VAR00004 this errors can be reduced by 17% (16.505/97.140). This reduction is deemed statistically significant with the F ratio of 24.357 and significance at level of 0.000.

V. Conclusion

With the above analysis it can be conclude that only one variable i.e., VAR00004 (The PA is well designed and leads to better performance and work quality), explains the Judgment Accuracy of Performance appraisal System (PAS). Which means that the performance appraisal used by both the leading mining companies which has included in the sample has been verified by the workers and managers of their respective companies and the system is having a good judgment accuracy in terms of their appraisal. It is because of long relation and understanding of the workers, managers and their raters.

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