

ASSESSMENT OF EFFECTIVENESS OF PERFORMANCE APPRAISAL SYSTEM: SCALE DEVELOPMENT AND ITS USAGE

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***Keywords:** Performance appraisal, inherent potential, human resources, assessment procedure, effectiveness, gap, PAS, Steel& Mento , effectiveness scale, scale correlation.*

***Abstract:** Research studies, whether qualitative or quantitative, on performance appraisal system have been quite exhaustively conducted across the world for is inherent potential to activate the human resources in all type of organizations. However, assessment of the effectiveness of such system has been less explored using standard assessment procedures. This study addressed such gap while developing a scale to assess the effectiveness of the system and establishing the factorial structure and reliability of the scale. Besides, it also attempts to explore the association between the employees profile and the perceived effectiveness of the PAS on a sample of 240 from one of the oldest private engineering companies. Implications are drawn for the future use of the scale and also for further research in PAS.*

Background

Perhaps there is no other subsystem of HRM as a broader system of management of the people which has not received as much importance and attention as performance management system ever since the time, when people management function was called for in the business organizations. Secondly, of all the operative functions of HRM, there may not be one such sub-system, which was considered to be very controversial and resenting by all, name anybody associated with people management functions, other than the performance appraisal system. Why is it so? The simple answer always seems to be premature, adhoc and short-lived. There is a need for understanding the nuances of this sub system of HRM called performance appraisal system which takes away the sleepless nights of many people in the modern business. In the US and other western world, countless court

cases were filed, pending for hearing on the consequences of performance appraisal uniformly. Though the problem of such magnitude is not seen so far in Indian subcontinent, yet it has resulted in many HR functionaries losing their ground in their workplaces owing to the problems of such system of appraising the performance of people in the organizations, eventually calling for the wrath of the senior management (Steel & Mento, 1986, Armstrong,1992,, Battacharya,2002, Jashree, S and Sadri,1999).

Another trend in the direction of attempting to understanding what went wrong and what else to be done to turnaround this system of people management, a plethora of publications has been made incessantly across the management fraternity including the academics and the corporate bodies. Often these works are both armed-chair speculations are single case studies from

single companies and attempting understanding from such readings only result in bits and pieces of threads connecting to the reality. But, there seems to be a lack of approach to the study of overall effectiveness of the performance appraisal system and studies, if published are not consistent in their results (Greenberg, 1986, Carr, 1994, Armstrong, 1992). Thus, this study is intended to make an endeavour to fill some gap in this direction. Thus, the purpose of this study is two-fold in nature. Firstly, it attempts to develop a scale to assess the perceived effectiveness of performance appraisal system using a cross-sectional sample of managers, supervisors and the workers from a private engineering company. Secondly, it attempts to establish the dimensionality of the scale structure and the reliability of the scale. Thirdly, it attempts to analyze the perceived effectiveness scores in relation to some background variables of the participants of the study.

Method

Two hundred and forty respondents were randomly chosen from executives, worker and supervisor cadres, in a private engineering company (to whom anonymity was assured) existing in the twin cities of Hyderabad and Secunderabad since the last four decades specializing in manufacturing electrical equipment like compressors, components in electrical motors and other integral electrical components of automobile engines, have responded to a structured questionnaire administered to them. The questionnaire consisted of two parts. Part A included personal background information and Part B includes scales to assess effectiveness of performance appraisal system.

Development of PAS Effectiveness Scale : A twenty item scale to measure

effectiveness of the HRD focused performance appraisal system, specially designed for this study, was developed basing on the works of Rao (1990), Kilman (1984), Gubman (1984), Greenberg (1986), Carr (2005), and Armstrong (1992). Eighteen reliable items, which emerged from a pilot study when subjected to item analysis (not reported in this work for the sake of brevity), were administered to managers. These items were measured with five-point likert's response pattern (where strongly agree=5 and strongly disagree=1). Summation of all the scale item scores will result in a score range of 18 to 90, with the sum of score being 108 scores. An arithmetic mean of such score distribution results in 54. Thus, the norms of interpretation includes mean score of 54 means the PAS system is effective on an average. A less than or more than 54 scores explain PAS system being either less effective or more effective. The data were processed with statistical package called SPSS v15.

Results

Profile of Participants:

The average age was 34 years with average years of experience was nine years. Majority of the respondents were workers (55.0%), followed by a little over one third of them being supervisors (36.7%) and executives (20.0%). A majority of them is from production department (56.7%). A majority of them is male (66.7%). Nearly half of them have completed intermediate education (43.3%). The remaining of them have completed diploma in engineering (23.3%), graduation (28.3%), post graduation (5.0%). On an average, all have been promoted at least once in their present jobs.

Item-Scale Correlations: An item analysis was made to examine the item reliability. Item Analysis is used to

construct reliable measurement scales, to improve existing scales, and to evaluate the reliability of scales already in use. (Neuman, 2005). Item scale correlations were computed and reported in table 1. It is clear from the table that all the items yielded positive, strong and significant correlations coefficients.

Factor Analysis: It was assumed that the scale devised to measure effectiveness of PAS is unidimensional. For examining the factor structure and dimensionality of the scales factor analysis is an appropriate statistics (Abdi, 2007). Factor analysis was utilized to check the unidimensionality of the scale to assess effectiveness of PAS.

Thus, it was tested with principal axes factor analyses. Using varimax rotation,

four factors were extracted with Eigen values above 1.00. The first factor accounted for substantially more variance than did the other three factors. The Eigen values were 4.97, 1.43, 1.41, and 1.07. A scree test showed that the scale had one general factor and that the other three were trivial. The loadings of each item on this general factor are presented, along with item-scale correlation coefficients, in Table 1. The emergence of a single general factor, then, described the scale as unidimensional with a common core. Coefficient of Alpha is .8548, which reveals that scale is internally consistent and highly reliable for further use in research studies on performance appraisal systems in organizations.

TABLE I : ANALYSES OF SCALE ITEMS FOR MEASURING EFFECTIVE PAS

Sn	PAS Scale Items	Item-Scale R	Factor Loadings
1	PAS was designed to achieve sustainable levels of higher performance from managers	.603*	.60
2	PAS promotes development of managers to their full capacity and potential.	.558*	.54
3	PAS here creates open relations between top management and subordinate managers.	.666*	.66
4	PAS aims at achieving sustainable improvement in the performance of managers.	.712*	.74
5	It enables managers to develop their abilities and increase job satisfaction.	.628*	.61
6	It provides an opportunity for individual managers to express their aspirations / concerns about work.	.639*	.63
7	It provides basis for rewarding managers in relation to their contribution by financial/ non-financial terms.	.449*	.39
8	It enables executives to manage their own performance and development.	.756*	.77
9	Top management is not fully behind the scheme.	.612*	.63
10	Managers feel that the scheme is having a detrimental rather than a beneficial effect.	.721*	.73
11	PAS gives me the right goal and motive to achieve it and opens door to superior performance.	.540*	.51
12	PAS enables managers to achieve full potential to their own benefit and that of organization as a whole.	.504*	.50
13	PAS improves my motivation and morale.	.436*	.42
14	PAS encourages me to think of new ways of performing my job more efficient.	.618*	.63
15	PAS gives each appraisee an idea of what is expected of him the next year.	.521*	.55
16	PAS allows for the communication of company's goals to the work force.	.514*	.57
17	PAS is an opportunity to talk freely to my superiors about my further career.	.538*	.53
18	All in all, I am fully satisfied with the PAS.	.530*	.52

Profile and Perceived PAS Effectiveness

Results with regard to the perceived effectiveness of performance appraisal system according to the profile of the respondents have been presented in table 2. As regards the effectiveness of PAS according to the job category of the respondents, executives (mean=47.80) and the supervisors (mean=47.18) of the similar view with regard to the effectiveness of PAS. However, the workers perceived effectiveness of PAS very less. Surprisingly, what is evident from all these three means scores is that all the respondents perceived the PAS less effective which is evident from the norms of interpretation stated earlier in this study. The f value also suggests such variation in their mean scores is statistically significant. Such variations could also be due to certain reasons like workers being incomplete in their understanding of the process and the methodology followed in arriving at the outcomes of appraisal. Therefore, they might find it suspicious. Besides, PAS will guarantee material benefits to all. Therefore, only those who get such benefits might perceive it better and those who are denied may perceive it not better. However, such statement is not so in case of executives and the supervisors who are relatively qualified and can attempt to understand the design considerations in the PAS.

It is interesting to note from the table that respondents in production as well as administrative departments are of the same opinion that the performance appraisal system is less effective. Thus, the f value also supports such invariance in their mean scores.

A similar trend could be observed in case of gender of the respondents from their mean scores and the f value computed. That is, all the respondents either male or

female are of the same view of perceiving PAS as less effective in their company.

Some significant variations could be observed in perceived effectiveness mean scores according to the educational background of the respondents. Diploma holders perceived PAS little more effective than their counterparts like graduates (mean=45.88), post graduates (mean=46.33) and those who completed intermediate (mean=43.73). The f value also supports such significant variation in their mean scores. Those who are with engineering backgrounds like diploma holders and the post graduates, perceived PAS to be little more effective than others. This may be because of this nature of work and also trade that might help them to interpret their PA scores. Hence the variation in their perceptions.

Implications and Conclusion

This scale could be used to diagnose the effectiveness and evaluation of the effectiveness of performance appraisal systems in various companies especially those which employ engineering work systems.

Importantly, it enables to explore what ails the systems and its components. There are seven components of the system that were traced to which developing the scale to assess the effectiveness of the system. Therefore, each of the components of the system could also be examined using this scale. Second aspect of the use of this scale is it could be adopted for its replication and generalizability in various organizations to explore the consistency of its factor structure. Thirdly, the same could be used to make inter-organisational and intra-organisational comparisons of the perceptions of wider constituents of the work system ranging from public, private to the nonprofits, besides the executives,

workers and the supervisory staff in modern organizations.

Table 2 : Perceived Effectiveness of PAS according to Some Background Variables

Sno	Profile of Responden	Mean	S.D	F value	P=
	Job Category				
1	Executi	47.8	6.2	(d.f=2,23 7.54)	.00
2	Worke	43.8	6.6		
3	Superviso	47.	7.4		
	Department Type				
1	Production Departme	45J	7.:	(d.f=1,23 .9)	.34
2	Administrati	45.8			
	<u>Departme</u>				
	Gender				
1	<i>Ma</i>	45.2	7.8	(d.f=1,23 .1)	.74
2	Fema	45.6	5.5		
	Education				
1	Intermedia	43.7	6.8	(d.f=3,23 4.08)	.00
2	Diplom	47.6	5.5		
3	Graduat	45.8	8.		
4	Post gradua	46.3	7.2		

Lastly, various outcomes of PAS could also be correlated with the scale score with its usage. The outcome decisions like reward management, consequence management, counselling sessions, feedback sessions, training programmes and so on. With all these implications this scale is assumed to be a promising one for diagnosing the ailing aspects of PAS system and the very system itself.

To some extent this study also attempted to explore the effects of certain personal background variables like job category, gender, type of departments and educational backgrounds on the perceived effectiveness. The results are interesting. In other words, with regard to job category and level of education, the respondents significantly varied in their perceptions about their performance appraisal system. Therefore, this scale could be used to discover the effects of

personal background variables on the effectiveness of performance appraisal system.

In conclusion, this study presented an attempt at the development of a scale which could help in assessing the effectiveness of the performance appraisal system in modern organizations. Its factorial structure was found to be stable and unidimensional. The overall scale was found to be highly reliable and ready to use in various business contexts where technology forms the centrality of work systems employed by them.

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