



Performance Appraisal: Dimensions and Determinants

Ch.V.L.L.Kusuma Kumari

Head of the department , Department of business studies, Malla reddy engineering college for women , Maisammaguda, Secunderabad.

Abstract : The determinants of the dimensions that shape a formal system of performance appraisal are studied in relation to a sample of Spanish manufacturing establishments. In particular, the factors that influence the measures used to evaluate performance, the person who carries out such appraisal and its frequency are analysed. Our results show that the characteristics of the establishment exert a significant influence on the configuration of performance appraisal. Specifically, we find that the use of practices complementary to performance evaluation and the structural factors of the establishment are found to correlate closely with the dimensions of formal performance appraisal.

I. INTRODUCTION

Formal performance appraisal is a human resource management (HRM) practice that has attracted considerable attention from both practitioners and scholars (see Fletcher, 2001). The interest in the implementation of formal performance appraisal systems stems from the fact that such practice may accomplish a wide variety of functions. These functions may include the monitoring of employees, the communication of organisational values and objectives to workers, the evaluation of hiring and training strategies, and the validation of other HRM practices (see Baron and Kreps, 1999). In addition, the design of a performance appraisal system is complex due to the multiple dimensions involved and because of the various interests in evaluation outcomes among different agents. As a result, research on the issue is extensive and has focused on a broad range of aspects (see Levy and Williams, 2004).

One of the topics that has drawn the attention of researchers in the performance evaluation field is the influence of organisational context on the implementation of a formal system of performance appraisal (see Murphy and Cleveland, 1991). In particular, recent studies have examined the relationship between establishment features and the adoption of formal performance appraisal (see Brown and Heywood, 2005; Addison and Belfield, 2008; and Grund and Sliwka, 2009). However, empirical work on this issue is

still scarce, and much remains to be learned about how the decision to implement formal performance appraisal is taken by the employer. The aim here is to complement this empirical research and examine the influence that organisational features exert on the use of a formal system of performance appraisal, focusing on the different dimensions that characterise such a system.

In the main, existing studies on the implementation of formal performance appraisal have concentrated on the analysis of the determinants of the employer's decision to adopt a formal system of appraisal. Since formal performance evaluation is a multidimensional process and, consequently, its design may differ significantly among employers, we go a step further in the study of the practice at establishment level and analyse the factors that determine how a system of performance evaluation is implemented from a comprehensive perspective. According to Brown and Heywood (2005),

The paper is organised as follows. In the following section, a brief description of the dimensions of a performance appraisal system accounted for in this study is given. Then, an overview of the theoretical insights regarding the factors that may influence the use of performance appraisal as well as its different dimensions is provided. The next section describes the methodology used in our empirical analysis. Finally, the findings of the study are described and discussed, and our main conclusions presented.

II. DIMENSIONS OF A FORMAL SYSTEM OF PERFORMANCE APPRAISAL

Since our aim is to examine how establishment features influence the configuration of a formal system of performance appraisal, the main aspects of such a system are first described. In particular, we focus on three dimensions that should be taken into account when analysing performance appraisal at the establishment level: the type of measures used to rate performance, the person who carries out the appraisal, and the frequency with which the appraisal is conducted.

Measures of Performance

The performance of a worker can be evaluated using different criteria (see Wall et al., 2004). On the one hand, performance may be determined according to objective measures such as the number of pieces produced, the value of sales or the quality of output. These measures are directly observed both by the person who performs the evaluation and the person being evaluated (see Prendergast, 1999). As a consequence, the use of objective measures might simplify appraisal through a standardization of processes. Moreover, it could generate perceptions of equity since the parameters that are evaluated are fixed and well-known to employees. However, it is not always possible to rate worker performance according to an objective measure. Jobs often consist of the performance of a employs

Who Evaluates Performance

When designing a system of appraisal, the issue of who will perform the evaluation is a key concern. This person is frequently an employee's immediate superior (see Murphy and Cleveland, 1995), but a manager at a higher level may carry out this task as well. In organisations with a formal HRM framework, evaluation could be carried out by a person from the human resource management department (HRM department). In some contexts, subordinates, peers or even customers provide useful information on certain aspects of worker performance: subordinates are in a good position to observe leadership abilities; peers may be able to evaluate interpersonal relationships; and customers can assess the quality of service. Since appraisal is often aimed at rating various attributes of a worker's performance, evaluation from different sources is commonly required (see Bohlander and Snell, 2009). The immediate superior is the figure that most commonly monitors workers, but a better qualified supervisor may perform the appraisal when the evaluation process is complex or when specific appraisal needs emerge (see Murphy and Cleveland, 1995). For several reasons, the choice of the person carrying out the appraisal is crucial for organisational success. For example, supervisors need to be able to communicate the results of the appraisal to workers effectively, especially if the purpose of appraisal is to provide feedback to employees. In addition, the use of a formal system of performance appraisal is costly for the organisation, so identifying the adequate supervisor is important if the organisation wants to obtain returns from its investment in the implementation of the process. All in all, the quality and effectiveness of a system of appraisal depends largely on the skill of the person performing the assessment, so the choice of an appropriate supervisor should be a major concern for organisations implementing a formal system of evaluation (see Nurse, 2005)

Frequency of Appraisal

Another significant feature of performance appraisal is the frequency of assessment. The timing of appraisal should be carefully taken into consideration, since frequency could affect the results of the process. For example, Werner and Bolino (1997) state that a high rating frequency increases evaluation accuracy as well as its perceived fairness and worker satisfaction. The aim pursued of the performance assessment process may influence its timing (see Murphy and Cleveland, 1995). Hence, in many organisations performance appraisal is carried out annually, since the administrative decisions based on the appraisal results are taken yearly. This is the case of pay increases or employment promotions. In contrast, evaluations whose objective is to provide employees with feedback will be performed more often. There are also organisations in which the frequency of performance evaluation does not follow a fixed pattern. Moreover, the time-frame of performance evaluation depends on the tasks carried out by a worker and the nature of the job, since the type of work determines if the results are observed in the short, medium or long-term (see Baron and Kreps, 1999).

III. FACTORS THAT INFLUENCE THE CONFIGURATION OF PERFORMANCE APPRAISAL

Following Brown and Heywood (2005) and Addison and Belfield (2008), a number of variables that may contribute to explaining the configuration of performance appraisal systems are identified. These variables can be classified into four categories: workforce characteristics, level of job control, related human resource management practices and structural features of the establishment. In what follows, the variables included in each of these four groups are listed, as well as their expected influence on the adoption of a system of performance evaluation and the dimensions of the practice.

Workforce Characteristics

Brown and Heywood (2005) state that the expected tenure of the workforce may influence the probability of adopting a formal system of performance appraisal. In particular, the authors argue that the proportion of casual workers, women and long-tenured employees, as well as the turnover rate of the establishment, are related to the use of a formal system of evaluation. According to these authors, if performance appraisal is used as a tool for monitoring worker effort and set compensation, establishments with short-tenured employees are more likely to implement a formal system of performance evaluation. Moreover, establishments with short-tenured employees are more likely to use appraisal in order to assign workers to jobs and take dismissal or retention decisions. By contrast, Brown and Heywood (2005) point out that if the purpose of appraisal is to promote

worker identification with organisational objectives and develop human capital, a long-tenured workforce will have a positive influence on the adoption of performance appraisal.

Job Control

As Brown and Heywood (2005) point out, an establishment is more likely to implement a system of performance evaluation when workers have control over their work and, consequently, when they can alter their performance according to the results the appraisal yields. Moreover, in order to take full advantage of a system of performance evaluation, an establishment requires a considerable amount of supervisory force. It may also be the case that performance appraisal is implemented jointly with other forms of monitoring so that a high number of supervisors is needed (see Brown and Heywood, 2005). Building on these arguments, we predict that job autonomy and the number of

organization

HRM Practices

Certain HRM practices are implemented in conjunction with performance appraisal due to the existence of complementarities and a joint impact on the organisation's performance (see Huselid, 1995; Becker and Gerhart, 1996; Ichniowski et al., 1997). One such practice is the provision of training. According to Brown and Heywood (2005), monitoring worker performance may be desirable when training is provided, since employers could use performance appraisal as an instrument to determine training needs and evaluate training results. Another complementary practice considered in the literature is pay based on individual performance. One of the main purposes of an appraisal system is to measure worker performance, which in turn is essential to establishing an incentive system based on individual output. Consequently, the provision of training and pay for individual performance may be expected to exert a positive influence on the probability of adopting a formal performance appraisal system.

Structural Factors

Brown and Heywood (2005) point to the existence of a correlation between some structural factors and the use of performance appraisal. First, they predict a positive influence of establishment size due to both economies of scale and the difficulty of monitoring workers' effort in large organisations. Second, labour costs have also been identified as a potential positive influence in the use of a formal system of evaluation. The abovementioned authors also argue that this is due to the fact that "the scale economies are more likely to be overcome when labour cost is important for firms of the same size". In addition, they state that the presence of human resource

professionals may favour the use of performance appraisal, since it is related to the adoption of more sophisticated employment practices. Finally, they make reference to union influence as a circumstance that may cause difficulties when trying to implement a system of appraisal. Following these arguments, positive effects of establishment size, the proportion of labour costs in total production costs and the presence of a HRM department are to be expected in relation to the use of performance appraisal, and a negative effect of the influence exerted by trade unions at the establishment.

Data and Variable Description

The data was gathered through personal interviews with managers in Spanish manufacturing plants with fifty or more employees, and represents a unique source of information regarding a range of HRM practices in Spanish firms. Information was collected at plant level, as this is the unit at which decisions related to the implementation of the relevant practices are taken. Furthermore, knowledge of the issues included in the questionnaire is expected to be greater at plant level and, as a consequence, the data obtained should be more reliable.

The process of development of the database was as follows. Once the objectives and scope of our study were defined, and in order to properly design the questionnaire, we carried out a thorough examination of the literature related to the purpose of the project. In light of the information gathered, a first draft of the questionnaire was drawn up jointly by the members of the research group and the firm in charge of the fieldwork. The questionnaire was pre-tested in nine plants and then modified in several ways to come up with the final version.

Estimation Procedure

Our empirical analysis involved studying the determinants of the dimensions of a formal system of performance appraisal for production workers. The first step is to estimate the determinants of the use of performance appraisal at firms in which at least 50 per cent of production workers are covered by the practice. This model will also be used as a selection equation in the regressions concerning the different dimensions of appraisal. Second, the factors that influence the measures used to evaluate performance are examined. At this point, a potential sample selection bias, known as incidental truncation, emerges (see Heckman, 1979). The incidental truncation is due to the fact that only data on the dependent variable (i.e. the measures of performance) for establishments in which a formal evaluation system exists is available (see Wooldridge, 2003). Consequently, this is taken into account in the estimation of the equations of interest using the sample selection equation mentioned above Tables.

TABLE 1. Variable Definition and Descriptive Statistics

Variable	Definition	Mean	Standard Deviation
Dimensions of a formal system of performance appraisal			
Performance Appraisal	1 if any formal system of performance appraisal is used for at least 50 per cent of production workers; 0 otherwise.	0.371	0.483
Measures	1 if appraisal is based on both objective and subjective criteria; 2 if appraisal is based only on objective criteria; 3 if appraisal is based only on subjective criteria	2.481	0.626
Immediate Superior	1 if the process of appraisal is carried out by an immediate superior; 0 otherwise.	0.528	0.500
Another Line Manager	1 if the process of appraisal is carried out by another line manager; 0 otherwise	0.354	0.479
Person From HRM Department	1 if the process of appraisal is carried out by a person from the HRM department; 0 otherwise	0.280	0.450
Frequency	1 if appraisal is carried out biennially; 2 if appraisal is carried out annually; 3 if appraisal is carried out biannually; 4 if appraisal is carried out quarterly or with a higher frequency;.	1.788	0.952
Explanatory factors			
Percent Casuals	Percentage of production workers that are casual workers.	14.014	16.264
Percent Female	Percentage of production workers that are female.	22.465	25.715
Percent Over 50	Percentage of production workers that are over 50 years old.	17.025	16.989
Turnover	Percentage of production workers that stopped working in the establishment in the last year.	9.967	13.417
Autonomy	Degree of autonomy of production workers over their work.	4.609	2.099
Supervisors Per Worker	Average number of supervisors per production worker.	0.093	0.090
Individual Pay For Performance	1 if pay based on individual performance is used for production workers; 0 otherwise.	0.348	0.477
Training	Percentage of production workers that received off-the-job training in the last year.	37.825	35.834
HRM Department	1 if there is a department at the establishment or firm that deals with HRM issues; 0 otherwise.	0.712	0.453
Labour Costs	Percentage of labour costs over total production costs.	31.673	17.220
Size	Number of workers at the establishment (logarithm).	4.780	0.787
Union Influence	Employer's perception of union influence over production workers: 1 if very low influence; 2 if low influence; 3 if medium influence; 4 if high influence; 5 if very high influence.	2.910	1.151
Industrial Sector	12 manufacturing categories included		

TABLE 2. Determinants of the Use of a Formal System of Performance Appraisal

Variable	Use of a Formal Performance Appraisal System	Turnover	Autonomy	Supervisors Per Worker	Individual Pay For Performance Training	HRM Department	Size
Constant	-1.750*** (0.429)	0.167 (0.417)	0.034 (0.026)	-0.867 (0.650)	0.461*** (0.109)	0.074 (0.130)	0.186** (0.075)
Percent Casuals	-0.573 (0.393)				0.357** (0.155)		
Percent Female	0.015 (0.230)						
Percent Over 50	-0.262 (0.319)						

Union Influence	-0.045 (0.049)
Labour Costs	0.184 (0.311)
Industry Controls	Yes
Chi-squared	51.44***
Log likelihood	-403.36
Number of observations	646

*** p<0.01, ** p<0.05, * p<0.10

Note: Standard errors are reported

TABLE 3. Determinants of the Measures Used to Evaluate Performance

Variable	Formal Performance Appraisal is Based on Objective Criteria	Formal Performance Appraisal is Based on Subjective Criteria
Constant	1.392 (0.934)	0.129 (1.425)
Percent Casuals	1.917* (0.999)	2.002 (1.389)
Percent Female	0.000 (0.492)	1.054* (0.632)
Percent Over 50	0.486 (0.747)	0.277 (1.114)
Turnover	-0.981 (1.176)	-0.881 (1.722)
Autonomy	-0.133** (0.062)	-0.105 (0.087)
Supervisors Per Worker	-5.953*** (2.247)	-1.727 (3.050)
Individual Pay For Performance	-0.075 (0.243)	-0.038 (0.349)
Training	-0.507 (0.341)	-0.360 (0.480)
HRM Department	-0.393 (0.320)	-0.226 (0.442)
Size	-0.103 (0.182)	-0.200 (0.278)
Union Influence	0.036 (0.113)	-0.081 (0.162)
Labour Costs	0.835 (0.711)	0.684 (0.960)

Chi-squared	24.94
Log likelihood	-211.093
Number of observations	248

*** p<0.01, ** p<0.05, * p<0.1

Notes: The reference category is “Formal Performance Appraisal is Based on both Objective and Subjective Criteria” Standard errors are reported in parentheses

TABLE 4. Determinants of the Person Who Carries Out

Formal Performance Appraisal. Probit Regressions			
Variable	Immediate Superior	Another Line Manager	Person from HRM Department
Constant	-2.329*** (0.460)	1.832*** (0.446)	1.683*** (0.427)
Percent Casuals	-0.478 (0.503)	0.652 (0.483)	-0.094 (0.448)
Percent Female	0.056 (0.224)	0.207 (0.221)	0.022 (0.222)
Percent Over 50	-0.461 (0.366)	0.591* (0.351)	0.362 (0.342)
Turnover	-1.075* (0.629)	0.446 (0.532)	0.538 (0.520)
Autonomy	0.049 (0.031)	-0.029 (0.030)	-0.010 (0.028)
Supervisors Per Worker	-0.728 (0.890)	1.222 (0.838)	0.201 (0.821)
Individual Pay For Performance	0.238** (0.120)	-0.330*** (0.115)	-0.306*** (0.116)
Training	0.222 (0.168)	0.024 (0.165)	-0.311** (0.118)
HRM Department	-0.001 (0.151)	-0.077 (0.146)	0.133 (0.145)
Size	0.279*** (0.087)	-0.267*** (0.088)	-0.216*** (0.082)
Union Influence	0.010 (0.055)	0.044 (0.053)	0.018 (0.051)
Labour Costs	0.006 (0.347)	-0.118 (0.340)	-0.227 (0.342)
Chi-squared	32.63***	33.36***	25.96**
Log likelihood of observations	-561.29 245	-553.25 245	-531.08 245

*** p<0.01, ** p<0.05, * p<0.10

Note: Standard errors are reported in parentheses

IV. CONCLUSIONS

We have drawn upon the work of Brown and Heywood (2005) and Addison and Belfield (2008) in this study to analyse the implementation of performance appraisal systems in the Spanish manufacturing industry. In contrast with these previous studies, our work is not limited to the analysis of the relationship between establishment characteristics and the use of performance evaluation. Our main focus was to examine how establishment features correlate with the dimensions that shape a formal performance appraisal system. The idea that underlies this analysis is that the attributes of an organisation influence not only the decision to adopt a system of performance appraisal but also its particular configuration.

REFERENCES

- [1] Addison, John T. and Clive R. Belfield. 2008. "The Determinants of Performance Appraisal Systems: A Note (Do Brown and Heywood's Results for Australia Hold Up for Britain)." *British Journal of Industrial Relations* 46(3), 521-31.
- [2] Baker, George, Robert Gibbons and Kevin J. Murphy. 1994. "Subject Performance Measures in Optimal Incentive Contracts." *Quarterly Journal of Economics* 109(4): 1125-56.
- [3] Baron, James N. and David M. Kreps. 1999. *Strategic Human Resources. Frameworks for General Managers*. New York: John Wiley & Sons, Inc.
- [4] Bayo-Moriones, Alberto and Jose E. Galdon-Sanchez. 2010. "Performance Appraisal, Business Strategy and Firm's Results." Manuscript.
- [5] Becker, Brian and Barry Gerhart. 1996. "The Impact of Human Resource Management on Organizational Performance: Progress and Prospects." *Academy of Management Journal* 39(4): 779-801.
- [6] Bohlander, George and Scott Snell. 2009. *Managing Human Resources*. South Western: Thompson. Boswell, Wendy R. and John W. Boudreau. 2002. "Separating the Developmental and Evaluative Performance Appraisal Uses." *Journal of Business and Psychology* 16(3): 391-412.

