Individual and Job-Based Determinants of Performance Appraisal: A Study on Banking Sector and Manufacturing Industries in Bangladesh

Rebeka Sultana Liza* Tahmina Ferdous* Ishrat Jahan*

Abstract

The study is aimed at investigating the use of Performance appraisal (PA) in some manufacturing enterprises and private banks in Bangladesh. Some hypotheses were developed on individual and job based determinants of PA usage. Based on the data set on individual employees, these hypotheses were tested in order to explore the impact of PA on pay and career prospects. The result indicates that PA is positively linked to an individual's willingness to take risks. PA constitutes one of the key responsibilities of the managers who like to improve efficiency of employees at work.

Keywords: Performance appraisal, Performance evaluation, BARS, MBO, Performance review, Checklist, Merit rating, Ranking, Pared comparison, Forced distribution.

Introduction

Performance appraisal (PA) system is one of the most important human resource practices and also a comprehensively discussed research topic. Bretz et al. (1992) as well as Levy and Williams (2004) for instance provide extensive reviews of the huge literature on appraisals. Recent contributions, for instance, analyze the consequences of PA on turnover intention, employee job satisfaction, and performance (Callahan et al. 2003, Poon 2004, Kuvaas 2006). But the relevant empirical studies usually examine a limited number of observations and analyze an existing system in one or only a few firms.

Surprisingly little research has been conducted about the determinants of formal performance appraisal system. In this regard, Murphy and Cleveland (1995, p. 36) point out that "there is very little empirical research on the links between environmental variables and appraisal". Our aim is to study individual as well as job characteristics determining the use of performance appraisal by a supervisor in Bangladeshi firms. Moreover, we seek to distinguish between different consequences of appraisal results.

Our research contains a large set of questions on individual characteristics of the respondents as well as on their jobs and employers; this offers a unique opportunity to investigate determinants, the general incidence of performance appraisal system and consequences of appraisal results in a representative survey of the Bangladeshi working population. We first derive hypotheses about several possible individual and job based determinants of the use of PA. We then test these hypotheses and examine the consequences of PA for employees.

_

^{*} Lecturers, Faculty of Business, ASA University of Bangladesh

Objectives of the study

The main objectives of the study are to:

- (i) examine the consequences of PA for employees of manufacturing and banking sector,
- (ii) identify the impact of performance appraisal on future promotion,
- (iii) identify the impact of performance appraisal on bonus payment.
- (iv) identify the individual characteristics and job based determinants of the use of PA.

Literature Review

Performance appraisal (PA) has been defined as any personal decision that affects the status of employee regarding retention, termination, promotion, demotion, transfer, salary increases or decreases admission into a training program. For this study, PA has been confined to the formal performance appraisal with the above definition. The study has examined the use of PA as an instrument of appraisal which could be related to the development of personnel.

The introduction of formal appraisal systems is often guided by multiple goals. Cleveland et al. (1989) for instance distinguish several categories of use: First, appraisals are used to make between-person decisions, for instance for promotions or termination decisions or salary administration. Second, PA may be used for within person decisions, to determine

Competency profiles and strengths and weaknesses for instance in order to give performance feedback and discover training needs. Furthermore, organizational aspects such as system maintenance (e.g. personnel planning) and documentation are other possible purposes of PA. A survey by Cleveland et al. (1989) shows that appraisals have the greatest impact on salary administration, performance feedback and identification of strengths and weaknesses. Given the different possible reasons to use appraisal systems, there are several individual and job based characteristics which should determine whether a person works in a job in which her or his performance is appraised in a systematic manner. Yong (1996) defines performance appraisal as "an evaluation and grading exercise undertaken by an organization on all its employees either periodically or annually, on the outcomes of performance based on the job content, job requirement and personal behavior in the position". Performance appraisal objectives can be classified in a number of ways. One of the best known classifications was produced by McGregor (1987) who grouped the objectives as below:-

- Administrative: Providing an orderly way of determining promotions, transfers and salary increases.
- **Informative**: Supplying data to management on the performance of subordinates and to the individuals their performance.
- **Motivational**: Creating a learning experience that motivates staff to develop themselves and improve their performance. Typically, modern performance appraisal techniques are employed to achieve several objectives that include:
 - (1) improvement in the communication between supervisor and subordinate through the use of feedback between them;
 - (2) identification of the scope for performance improvement and the means to

achieve this;

- (3) identification of individual training and development needs;
- (4) identification of the potential of individuals for promotion, placement, etc.;
- (5) as the basis for remuneration and reward, on the basis of performance; and
- (6) as a powerful means of managerial control, through the setting of objectives and a review of success or failure in achieving these (Edmonstone, 1996; Longenecker, 1997). According to Steers and Black (1994), "performance appraisal is one of the most important and often one of the most mishandled aspects of management". It has also been said to be one of the most problematic components of human resource management and is viewed as either a futile bureaucratic exercise or, worse, a destructive influence on the employee-supervisor relationship (Coutts and Schneider, 2004).

Techniques of Performance Appraisal

The term performance appraisal has been called by many names, including performance review, performance evaluation, personnel rating, merit rating, employee appraisal or employee evaluation. A performance appraisal has been defined as any personnel decision that affects the status of employee regarding their (Henry T. Beam, March,1979) retention, termination, promotion, transfer, salary increase or decrease, or admission into a training program.

Behaviorally Anchored Rating Scales (BARS)

Used to describe a performance rating that focuses on specific behaviors or sets as indicators of effective or ineffective performance, rather than on broadly stated adjectives such as "average, above average, or below average". Other variations were:

- a. Behavioral observation scales
- b. Behavioral expectations scales
- c. Numerically anchored rating scales. (Santa Monica: Goodyear, 1980, p. 446).

Checklists

Used to define a set of adjectives or descriptive statements.

If the rater believes the employee possesses a trait listed, the rater checked the item; if not, the rater leaves the item blank. Rating score from the checklist equals the number of checks.

Critical Incident Technique

Used to describe a method of performance appraisal that makes lists of statements of very effective and very ineffective behavior of employees. The lists are combined into categories, which vary with the job. Once the categories have been developed and statements of effective and ineffective behavior have been provided, the evaluator prepares a log for each employee. During the evaluation period, the evaluator records examples of critical behaviors in each of the categories, and the log is used to evaluate the employee at the end of the evaluation period.

Forced Choice Method

This appraisal method has been developed to prevent evaluators from rating employees too high. Using this method, the evaluator has to select

from a set of descriptive statements, statements which applies to the employee concerned. The statements are weighed and summed to at, effectiveness index.

Forced Distribution

Used to describe an appraisal system similar to grading on a curve. The evaluator is asked to rate employees in some fixed distribution of categories. One way to do this is to type the name of each employee on a card and ask the evaluators to sort the cards into piles corresponding to rating.

Graphic Rating Scale

Used to define the oldest and most widely used performance appraisal method. The evaluators are given a graph and asked to rate the employees on each of the characteristics. The number of characteristics can vary from one to one-hundred. The rating can be a matrix of boxes for the evaluator to check off or a bar graph where the evaluator checks off a location relative to the evaluator's rating.

Management by Objectives (MBO)

It requires the supervisor and employee get together to set objectives in quantifiable terms. The appraisal method is worked to eliminate communication problems by the establishment of regular meetings, emphasizing results, and by being an ongoing process where new objectives are established and old objectives are modified as necessary in the light of changed conditions.

Paired Comparison

Used to describe an appraisal method for ranking employees. First, the names of the employees to be evaluated are placed on separate sheets in a predetermined order, so that each person is compared with all other employees to be evaluated. The evaluator then checks the person who is regarded as better of the two on the criterion for each comparison. Typically the criterion is the employee's over all ability to do the present job. The number of times a person is preferred is tallied, and the tally is developed as an index of the number of preferences compared to the number being evaluated.

Ranking

The term ranking is used to describe an alternative method of performance appraisal where the supervisor has been asked to order his or her employees in terms of performance from highest to lowest.

The appraisal system is often guided by multiple goals. Cleveland et al. (1989) for instance distinguish several categories of use: First, appraisals are used to make between-person decisions,

such as those related to for promotion or salary administration. Second, PA may be used for within person decisions, to determine competency profiles and strengths and weaknesses for instance in order to give performance feedback and discover training needs. A survey by Cleveland et al. (1989) shows that appraisals have the greatest impact on salary administration, performance feedback and identification of strengths and weaknesses. Given the different possible reasons to use PA, there are several individual and job based characteristics which should determine whether a person works in a job in which his/her performance is appraised in a systematic manner.

Individual Characteristics in PA

First of all an employee's performance evaluation should be associated with age for several reasons. For instance, the probability of a promotion will be small near the retirement age and hence, between-person comparisons based on appraisals of performance are of smaller importance for the elderly. But also the results from performance appraisals should become less important for older employees for within person decisions such as the detection of training needs. Investments in training for older employees are not as beneficial as for younger employees. Hence, we expect that the performance of older employees is less likely assessed than that of younger employees. Risk-averse individuals try to avoid situations in which they are faced with income uncertainty. Since systematic performance appraisals are often a precondition for performance pay, we conclude that the willingness to take risks is positively associated with being in a job with systematic appraisals. Clear hypotheses with regard to sex are hard to derive. One may argue that women are less willing to take risk or have a lower expected tenure due to parental leaves, which may influence compensation and PA. These arguments bring us back to the tenure and risk attitude aspects. We do not expect direct effects of an employee's education on her or his performance rather an indirect effect. Better educated employees should work in different jobs and, as we will argue in the next subsection, the job status and hierarchical level should have an impact on the use of performance appraisals.

Firm and Job-based Characteristics in PA

It is clear that there should be a strong impact of firm size on the probability that an appraisal system is used for several reasons: In small owner-managed firms the employer knows most of his or her employees directly and observes their actual performance continuously even without systematic appraisals. But such direct monitoring is harder in larger firms. But, in larger firms it becomes more necessary to compare the performance of employees across departmental boundaries, which makes standardized methods to appraise performance more important. Furthermore, setting up a formal appraisal system causes fixed costs and, hence, the benefits of such systems are more likely to exceed the costs in larger firms. Moreover, large firms typically offer more formal training so that the presence of PA systems is more likely to determine specific training needs.

Arguments about the interrelation between the job status or hierarchical level and the use of PA are ambiguous. On the one hand, formal PA systems for untrained workers often seem unnecessary, for instance, as in those jobs simple instructions are often sufficient and monitoring work performance is straightforward. This should make carefully designed appraisal by the direct

superior more important. From this angle, the more complex a job, the more often we should observe systematic appraisals.

On the other hand, the performance of executives cannot be rated by a hierarchical superior (other than the board) simply because they are at the top of the hierarchy. Therefore, their salaries are more often directly tied to objective performance measures and typically no systematic appraisal process should be needed. We should observe that performance appraisals are used most frequently for employees in the middle of a hierarchy and less frequently for employees at the bottom or at the top. Related to issues of job complexity, the scope for performance appraisals should differ between industries. In industries such as agriculture or construction, jobs consist typically of more precisely defined tasks than for instance in financial services. Hierarchical superiors should, therefore, be more able to lead their employees by clearly defined assignments rather than more complex management-by-objectives (MBO). Hence, performance appraisals may be observed less frequently. The tenure at the current employer should also influence the probability that performance is appraised systematically. The competencies of employees with longer tenure will be better known to their employers. Hence, systematic appraisal is less necessary to learn about their strengths and weaknesses either for promotion or training purposes. That is why PA may be used for employment relationships of shorter expected duration as a substitute for deferred compensation or other long term incentive contracts (see Brown and Heywood 2005). When this effect dominates we should observe that performance appraisal is more frequent for individuals with shorter tenure.

Methodology of the Study

This article is divided into two parts. In its descriptive part the report has highlighted different topics related to performance appraisals. The secondary information was collected from different reports, articles and books of relevance. And in its final part, a questionnaire survey has been operated among 500 individuals to find out the impact of performance appraisal on future promotion and bonus system of employees in manufacturing and banking sector. For the purpose of the study, the willingness to take risk in the occupational career is measured on a 5-point scale from 1 (totally unwilling to take risks), 2 (Unwilling to take risk), 3 (Neutral), 4 (Willing to take risk) and 5 (Totally willing to take risk).

Data Analysis

We investigate various types of employees, who are between the ages of 20 to 60 year. The sample includes information on 500 individuals taken from banking and manufacturing sector of some particular area. Job based characteristics are job status, firm size and industry. For the convenience of the data collection, we select the area of Mohammadpur, Mirpur and Tejgaon. Possible individual determinants include sex, age, tenure, years of schooling and risk attitude. There are 5 job status categories, which include untrained worker, trained worker, qualified professional, and highly qualified professional and managerial position categories, which differ with regard to responsibility and task authority. Firm size is measured in three categories defined by the number of employees.

Table 1: Descriptive Statistics of Variables (n=500)

Variables	Mean/ Share	Standard deviation
Sex	0.461	0.499
Age	42.19	10.08
Years of Schooling	12.45	2.58
Employee's risk attitude	3.90	2.48
Tenure (in years)	11.20	9.68
Region(Dhaka, ParticularlyMohammadur, Mirpur and Tejgaon.)	0.239	0.426
Job Status		
Untrained worker	0.031	0.175
Trained worker	0.152	0.359
Qualified professional	0.280	0.449
Highly qualified professional	0.154	0.361
Managerial position	0.018	0.132
Firm size		
100-199 employees	0.100	0.300
200-499 employees	0.231	0.422
500-999 employees	0.239	0.427
Industry:		
Manufacturing	0.284	0451
Banking sector(Private)	0.336	0.473

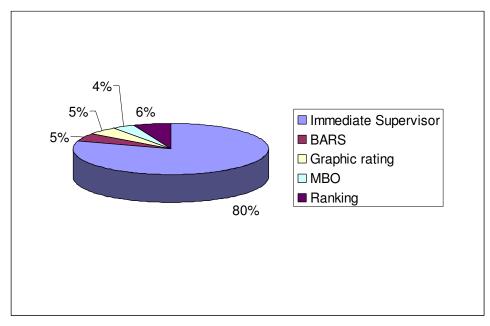


Chart-1 Performance Appraisal techniques

Findings

We give an overview of the relevance of PA for different subgroups of employees by_reporting shares of persons, whose performance is assessed.

As Figure 1 shows the share of employees with PA is increasing in their willingness to take career related risks. This confirms the risk incentive trade-off predicted by many theories. Formal PA systems exist for only 7 percent of employees in small firms with less than five employees, whereas the performance is assessed for more than half of employees in firms with more than 999 workers. The fraction of individuals with PA also differs considerably across industries and job status categories.

This mean age, tenure and schooling of employees whose performance is assessed do not seem to differ dramatically to those without PA (see Table 2).

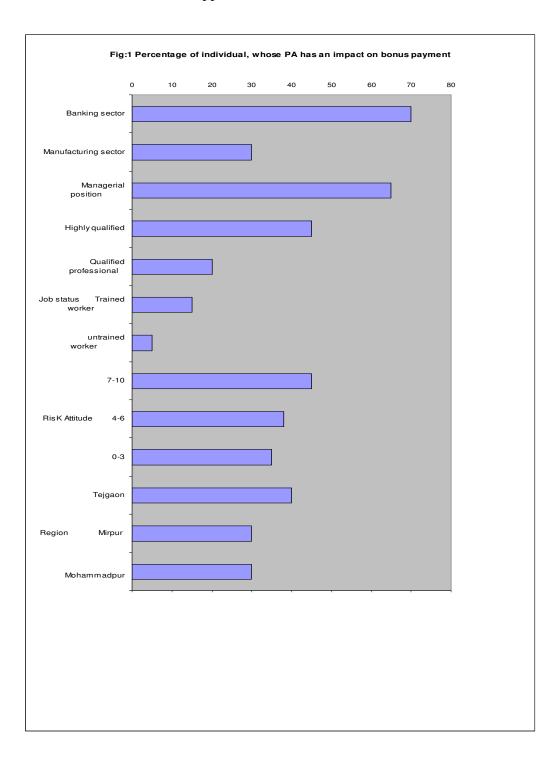
Table 2: Descriptive statistics of age, tenure and schooling

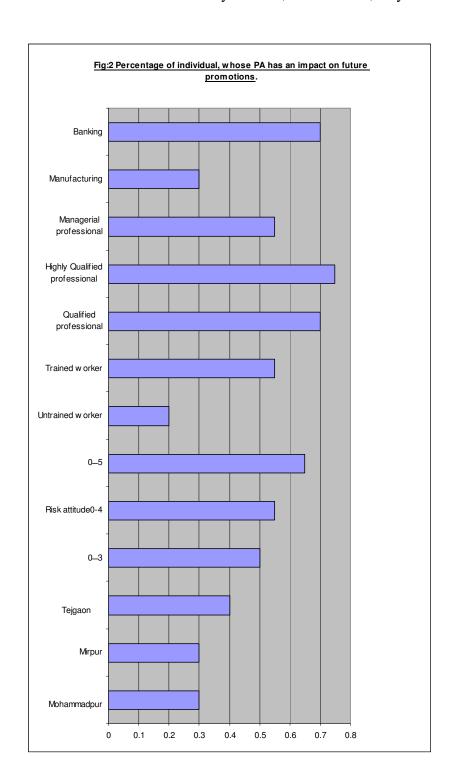
Variable	Mean (With PA)	Mean (Without PA)
Age	41.8	42.3
Tenure	12.3	10.7
Years of Schooling	12.9	12.2

3.4 Impact of Performance Appraisals on Bonuses and Future Promotions

As stated above, appraisals can be implemented for several reasons. Possible consequences include direct monetary rewards such as monthly or yearly bonus payments as well as indirect career prospects in the form of an increased probability of future promotions after a favorable appraisal. Hence, we will examine these aspects by analyzing the relevance of PA on bonuses and future promotions and its individual and job based influencing factors.

Of those individuals whose performance is appraised systematically **30** percent reported an impact on bonus payments and **55** percent on future promotions. First, we investigated the impact of PA on bonus payments.





As indicated in Figure 2, the impact on bonus payment is more relevant for managerial and highly qualified employees and less relevant for untrained workers.

There are substantial industry effects: more than 40% of all employees, whose performance is appraised in banking sector, receive bonus payments contingent on these appraisals. But less than 20% get systematic evaluations by a supervisor in manufacturing services.

The impact on future promotions is depicted in Figure 3. In contrast to the low impact of PA on bonuses for manufacturing sector, promotion prospects are highly affected by PA for this group.

The impact of performance appraisals on future promotions decreases with age, while the impact on bonus payments is not affected by age. The probability of being promoted will decrease close to the retirement age but bonus payments can still be an effective incentive instrument for old employees.

The performance appraisal results become more and more important for future promotions in the larger firms. On the other hand, the promotion possibilities in smaller firms without a pronounced hierarchical structure is less important. In small owner-managed firm the employer knows most of his or her employees directly and do not need to rely on formal appraisals for promotion decisions. Hence, smaller firms use performance appraisals less frequently than larger firms. But given that they do so, they make a similar use of these appraisals as a basis for bonus payments.

Conclusions and Recommendations

This study offers an empirical examination of individual and job based determinants of performance appraisal usage. We have shown that both individual (sex, age, risk attitude) and job based (position, industry, firm size) aspects matter. Performance appraisals are used for different purposes. Appraisals are used for promotion decisions especially for banking services, younger employees and in large firms. In about 30% of those jobs in which performance appraisals are used bonus decisions are based on such appraisals. Bonuses are paid more frequently to trained and highly-qualified employees in particular.

The following recommendations have been proposed by the researcher to improve the current performance appraisal used by the company and the need for an employee career development program.

- 1. The manager should identify the employee's development objective and then put together a plan that outlined specific goals and deadlines on how the employee could broaden the employee's skills and increase his responsibility in the employees chosen direction.
- 2. Managers should have vast knowledge about multiple performance criteria, customized appraisal forms etc, if they want to conduct effective performance appraisal for their staff.
- 3. The organization should run a controlled study to obtain objective data to prove their assumption that the use of a performance appraisal made their employees more effective. The study should also be able to determine how much more effective the use of the performance appraisals made their employees so that the costs and benefits could be compared.

References

- Bretz, R. D.; G. T. Milkovich; W. Read (1992): The Current State of Performance Appraisal Research and Practice: Concerns, Directions, and Implications. Journal of Management (18), 312-352.
- Levy, P. E.; J. R. Williams (2004): The Social Context of Performance Appraisal: A Review and Framework for the Future. Journal of Management (30), 881-905.
- Callahan, J. S.; A. L. Brownlee; M. D. Brtek; H. L. Tosi (2003): Examining the Unique
- Effects of Multiple Motivational Sources on Task Performance. Journal of Applied Social Psychology (33), 2515-2535.
- Poon, J. M. L. (2004): Effects of Performance Appraisal Politics on Job Satisfaction and Turnover Intention. Personnel Review (33), 322-334.
- Kuvaas, B. (2006): Performance Appraisal Satisfaction and Employee Outcomes: Mediating and Moderating Roles of Work Motivation. International Journal of Human Resource Management (17), 504-522.
- Murphy, K. R. and Cleveland, J. N. (1995): Understanding Performance Appraisal. Thousand Oaks: Sage.
- Henry T. Beam, "Bringing MBO Back to Basics", Supervisory Management,
- March 1979, P. 19.1212
- Andrew D. Szilagyi, Jr. and Marc J. Wallace Jr., Organizational Behavior and Performance, (Santa Monica: Goodyear, 1980), p. 446.9
- William F. Glueck, Personnel: A Diagnostic; Approach, 3rd. ed., (Piano: Business Publications, Inc., (1982)p. 385.
- Henry T. Beam, "Bringing MBO Back to Basics", Supervisory Management, March 1979, P. 19.12
- (Glueck, Personnel, p. 392.Latham and Reiley, Increasing Productivity, quoted in Glueck, Personnel, p. 368.)
- Cleveland, J. N.; K. R. Murphy; R. E. Williams (1989): Multiple Uses of Performance Appraisal: Prevalence and Correlates. Journal of Applied Psychology (74), 130-135.
- Brown, M.; J. S. Heywood (2005): Performance Appraisal Systems: Determinants and Change. British Journal of Industrial Relations (43), 659-679.
- Holmström, B. and Milgrom, P. (1991): Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership and Job Design. Journal of Law, Economics and Organization (7), 24-52.
- Kerr, S. (1975): On the Folly of Rewarding A, While Hoping for B. Academy of Management Journal, 18(4): 769-783.
- Murphy, K. J. (1999): Executive Compensation. In: Ashenfelter, O. and Card, D. (eds.), Handbook of Labor Economics, Vol. 3, North Holland.
- Murphy, K. J. and Oyer, P. (2003): Discretion in Executive Incentive Contracts. Working Paper. Stanford University.
- Niederle, Muriel, and Lise Vesterlund (2007): Do Women Shy away from Competition? Do Men Compete too Much? Quarterly Journal of Economics.

Appendix: Questionnaire

I. Sex: Male Female

II. Age group: 20-30 years old 31-40 years old

41-50 years old 51-60 years old

61 years and above.

III. Years of Schooling: Less than 5 years 6-10 years

11-15 year's 16-20 years

21 years and above.

IV. Employee's risk attitude:

Variables	1	2	3	4	5
	Totally	Unwilling to	Neutral	Willing	Totally
	unwilling to	take risk		to take	willing to
	take risk			risk	take risk
a. Intention to take risk with PA					
b. Intention to take risk without PA					

V. Tenure (in years): Less than 1 year 2-4 years 5-7 years 8-10 years

11 years and above.

VI. Job status: Untrained worker

Trained worker Qualified professional Highly qualified professional

Managerial position.

VII. Firm size (Based on number of employees):

100-199 employees 200-499 employees 500-999 employees.

VIII. Types of Industry: Manufacturing

Banking sector (Private).

IX. Techniques of Performance appraisal:

Following five techniques as identified by the personal interviews, contribute the most effective techniques for evaluating the performance of employees.

SL	Techniques:
1	Immediate Supervisor
2	Behavioral Anchored Rating Scales
3	Graphic Rating
4	Check list
5	Ranking

Table 1: Marks obtained by each technique with their Percentage (%).

Techniques	Total Marks Obtained	Highest Marks that could be Allocated (5 Marks as Highest X 500 Questionnaire)	%
Immediate Supervisor	2000	2500	80%
Behavioral Anchored Rating Scales	125	2500	5%
Graphic Rating	125	2500	5%
Check list	100	2500	4%
Ranking	150	2500	6%

From Table 1, it is evident that about 80 percent of these persons report that performance is evaluated regularly by a superior as part of an agreed procedure.