

PERFORMANCE APPRAISAL SYSTEMS AND IMPLEMENTATIONS: A LITERATURE REVIEW AND RESEARCH AGENDA

Burcin Cetin Karabat

Sakarya University
burcin@sakarya.edu.tr

Suayyip Calis

Sakarya University
scalis@sakarya.edu.tr

Cagatay Karabat

TUBITAK BILGEM UEKAE
cagatay.karabat@tubitak.gov.tr

—Abstract —

In recent years, a number of works have been published on different aspects of performance appraisal. Some of these works make literature review on performance management and performance measurement (Garengo et al., 2005; Taticchi et al., 2010; Neely et al., 2005), whereas the others focus on empirical work (Marri et al., 2000; Cocca and Alberti, 2010). On the other hand, there is no work which reflects current trend on the understanding of the performance appraisal in the literature.

In this paper, we discuss the researchers and their works that shape current performance appraisal systems in the concept of historical development of the performance appraisal systems. Then, we make literature review for current state-of-the-art works in the performance appraisal systems. Therefore, we analyze 104 performance appraisal articles which are published in “Journal of Management” from 2000 to 2012 in our work. We classify the works with respect to its topic, publication year, sector, country and analysis techniques. Thus, we aim to determine current trends in the performance appraisal systems.

Key Words: *Performance Appraisal, Human Resource Management, Literature Review*

JEL Classification: M100

1. INTRODUCTION

Technological developments, international competition and changes in market demand for active and efficient usage of human resources. Since human resources mainly targets employees themselves, they should be used in an active and efficient manner in order to improve success of organizations. Criteria and level of the aforementioned success are determined by performance appraisal systems and implementations of the organization's management board.

Performance appraisal is a tool for measuring current performance level and future potential of employees. It is achieved by using pre-determined performance criteria and standards. Thus, it is one of the main management tools in order to improve performance of employees as well as organization itself.

There are number of works in the literature. Some of them make literature review on performance management and performance measurement (Garengo et al., 2005; Taticchi et al., 2010; Neely et al., 2005) whereas the others focus on empirical work (Marri et al., 2000; Cocca and Alberti, 2010). On the other hand, these works do not solely address performance appraisal which is the main element of performance management. In other words, there is no literature survey on performance appraisal. However, there is a need for a literature survey on performance appraisal in order to analyze and compare all the works up to now.

2. HISTORICAL DEVELOPMENT OF PERFORMANCE APPRAISAL AND STATE-OF-THE-AT WORKS IN THE LITERATURE

Since the beginning of 1900 the understanding of the performance appraisal include individuals personality, behavior, mental understanding of the features and capabilities. However, ongoing for many years (covers approximately a century) measure factors similar to each other, gave rise to problems. Therefore, this situation led to a change in the criteria for performance appraisal. Towards the

end of the 1950s the relationship between the performance of individuals and professional objectives established criteria on the behavior scales were developed in the 1960s. The 1970s to the present day exponents under the control of the evaluation systems of evaluation criteria developed for the multi-faceted (Carter,1994).

Murphy and Cleveland claim that the first formal performance appraisal process is known in America is performed by evaluating the soldiers recruited in 1813, although the first examples of organizations evaluate employee performance in a systematic and formal institutions providing public services in the United States is the beginning of the 1900s (Ataay,1990).

Patterson developed a method which was called Graphic Rating Scale to the general psychological community in 1922. This scale provided a metric on which to rate a trait or factor rather than making purely qualitative judgments. However, the difficulty of defining performance criteria was proved and the problem has plagued performance management ever since (Austin and Villanova, 1992). Following this, after World War I, many of the researchers, especially Bingham (1926), defined and measured performance for the purpose of validating methods of personnel selection.

According to Cascio (1991) the popular performance appraisal tools among the evaluators (i.e. interpersonal comparison and graphics evaluation) produce questionable results on the topics such as reliability, validity, and to detect differences on issues. On the other hand, Smith and Kendall were developed the “Behaviorally Anchored Rating Scales” which was the first tool to focus on behaviors in 1963. These scales, which are psychometrically adequate (reliable, valid, easy to use and can make the distinction), have been recognized as a method accepted by evaluators (Wiese and Buckley, 1998). In addition to that, Latham and Wexley (1981) have discussed problems in developing valid and reliable measures for the performance appraisal systems.

Looking at the performance evaluation literature, there are a number of works and applications which address psychometric of the performance appraisal until the 1980s. In line with the psychometric emphasis, there has been a significant accumulation of literature on evaluation errors and formats. Since the 1980s, the

literature which is focused on measuring the performance evaluation has been left its place to cognitive approach pioneered by Landy and Farr (1980) (Levy and Williams,2004).

The main purpose of the cognitive approach is to use cognitive psychology or research on information and processing in understanding performance appraisal process and responding to questions in practice. The approach which creates transformation point in the field of performance evaluation was extended by Ilgen and Feldman (1983) and DeNisi et al. (1984).

In considering the development of performance appraisal, results of the implementation were used for taking the administrative decisions such as employment contract renewal, termination, upgrading and determining fees (DeVries et al.,1981).

The work in the literature show that the administrative decisions, which are taken in earlier periods (i.e. when the understanding of the Human Resource Management was not fully developed), are independent from the evaluations and even contradict the results of evaluation (Weise and Buckley, 1998). The performance appraisal has many direct and/or indirect links with the Human Resource Management tools. For instance, Fletcher and Williams (1985) has that Human Resource Management contains many insights into performance appraisal issues and linkages between performance appraisal and career development.

In this section of our study, we present the major research plays an important role in shaping the concept of performance appraisal are discussed. The next section is intended to illustrate the current trend of the performance evaluation.

3. A REVIEW OF PERFORMANCE APPRAISAL LITERATURE BETWEEN 2000 AND 2012

During the last 30 years, numerous works have been published that address different aspects of performance appraisal. Some of them make literature review on performance management and performance measurement (Garengo et al., 2005; Taticchi et al., 2010; Neely et al., 2005), whereas the others focus on empirical work (Marri et al., 2000; Cocca and Alberti, 2010). However, there is no

work which reflects current trend on the understanding of the performance appraisal.

In this work, the journals, which are published by Journal of Management in the database Sagepub between the years 2000-2012, were examined. The works, which contains "performance appraisal" in its title, summary or text content, were screened.

As a result, in this work, 104 journals (i.e. 65 of them are applied (empirical) and 39 of them are conceptual) were examined and classified according to the aforementioned criteria. Then, these journals are codified by author's name, year of publication, main and sub-themes, country where the research is carried out, sector, and analysis techniques applied. The codes are classified and then frequency and percentage distributions are calculated according to each of the criteria.

3.1. Research Findings

24 topic areas, which especially include Performance Appraisal, Human Resource Management (HRM) and Organizational Behavior in a detailed manner, are selected. The aim is to identify topic distribution among selected 104 journals. Hence, we can determine how many journals address these topics. Topic areas are compiled from various books written in the field of performance appraisal (Bernardin and Beatty,1984; Fletcher and Williams,1985; Anderson,1993; Barutcugil, 2002). The full texts of 104 journals, which are in the concept of this work, are examined in detail and these journals are classified with respect to 24 topic areas. The dependent variables and keywords of the journals are given priority when determining the topic areas of the journals.

Figure 1: The Annual Distribution of the Journals on Performance Appraisal

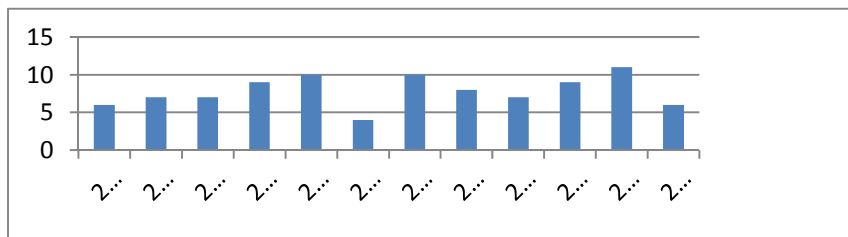


Figure 1 shows the distribution of the number of journals published between the years 2000-2012. The number of articles is not shown very large differences between the years examined. It can be stated that the performance appraisal topic is mostly addressed in 2002 (n = 11, 10.6%) in 2006 and 2009 (n = 10, 9.6%). It can be originated from the magazine's publication policy or the interest of the researchers.

Table 1: Distribution of the Journals with Respect to its Main Topics and Sub-topics

The distribution with respect to the topics	%	The distribution with respect to the topics	%
Performance Appraisal	57,3	Human Resource Management	13,3
1. Individual Performance	3,8	1. General HRM Issues	2,9
2. Team Performance	2,8	2. Personnel Selection	1,9
3. Firm Performance	9,6	3. Career Management	2,8
4. Performance Appraisal Process	3,8	4. Pay	3,8
5. Performance Appraisal Methods and Forms	4,8	5. Empowerment	1,9
6. High Performance Work Systems	9,6	Organizational Behavior	22,7
7. International Performance Appraisal	4,8	1. Organizational Life, Value and Climate	2,8
8. Organizational Citizenship Behavior	4,8	2. Leadership	2,8
9. Performance Appraisal Problems	8,6	3. Trust	3,8
10. Accountability	1,9	4. Organizational Justice	3,8
11. Discrimination	2,8	5. Leader-Member Exchange	2,8
Management	6,7	6. Employee Commitment	1,9
1. General Management Issues	6,7	7. Impression Management	4,8

The journals, which are addressed in Table 1, are classified according to their main and sub-topics with percentages. Over the last twelve years the first three issues which are worked in the field of performance evaluation are "Firm Performance" (9.6%), "High Performance Work Systems" (9.6%), and "Performance Appraisal Problems" (8.6% meter) respectively. An important part of the works on performance appraisal is addressed in the topic areas of the "Organizational Behavior" field (22.7%). Main reason for this is closely related to issues of organizational behavior and performance appraisal. In particular, recent studies shows that the interest on "Impression Management", "Trust" and

"Organizational Justice" is increased (Snape and Redman,2010; Schriesheim and Neider,2012).

When we examined the works according to the countries where it has been taken place, it is observed that 63% of the researchers did not give any information on the subject. Large parts of such works are the conceptual work. 6% of the examined journals indicated that the work was taken place in more than one country or in the city. Besides, as a result of work, we have identified that the application of 22 journals were carried out in USA. Furthermore, approximately 2% of the examined works stated that the work was taken place Taiwan and the same is true for Netherlands, Spain, England. In addition to that, approximately 1.5% of the examined works stated that the work was taken place Hong Kong and the same is true for China.

Many of the articles (57.7%) were not informed about the sectoral distribution. Multiple research sectors were included in 10.6% of slices. Mostly addressed sector is the education sector with 16.3%. In addition to that, 2.9% of works are performed in the service sector, 1.9% of works are performed in the energy sector and the same ration is valid for the another sectors like automotive, information technology, finance. Each of finance, food and health sectors are addressed in the 1% of works.

Sample size information given was not given in 41 journals in the concept of our work. Considering that 39 out of 41 examined journals are the literature review, the ratio of the journals that have not sample size information is very low. On the other hand, 22.1% of the journals have a sample size between 1-200, 19.2% of the journals have a sample size between 201-400, 9.6% of the journals have a sample size between 401-1000, and 9.6% of the journals have a sample size above 1000.

When we analyze the analytic approach used in the examined journals's methodology, we observe that 37.5% of the journals are not undergo analysis, 23% them apply only correlation analysis, 6% of them apply only ANOVA, 10% of them apply only regression, 10% of them apply only Hierarchical linear modeling, 4% of them apply only Chi-square analysis. In addition to that, 9.5% of them apply more than one analysis.

We analyze the journals according to the usage of hypothesis (i.e. they use hypothesis or not) and theoretical bases (i.e. clear or unclear). Thus, we identify that there are research hypothesis in all journals (62.5%) except literature reviews. When we analyze the theoretical part of the journals, we see that theoretical base of %10.6 of the journals are unclear.

Finally, we analyze the journals according to the data collection type and it can be stated that %51,9 of them are based on surveys, %38,5 of them are based on literature review, %5,8 of them are based on interviews, and %3.8 of them are based on secondary data.

4. CONCLUSION

In this work, the journals which are published in the Journal of Management in between 2000-2012 was included. Our work cover the journals published within twelve years period in one of the prestigious academic journal. Thus, it can shed light on the today's understanding of the performance appraisal.

According to our findings, the journals which address the education sector in USA give direction to the literature of the performance appraisal. In addition to that, a large proportion of the examined journals use hypothesis as well as their theoretical bases are clear. Besides, there are a number of works on the topics which are directly related to the performance appraisal i.e. "Firm Performance", "High Performance Work Systems" and "Performance Appraisal Problems". It is concluded that the works on performance appraisal and impression management will be increased in the near future.

In this work, we analyze the literature on performance appraisal and propose a future research agenda. The proposed work targets researchers working in the field of performance appraisal and it will be useful when determining future research direction of performance appraisal.

REFERENCES

Anderson, G. C. (1993). *Managing Performance Appraisal Systems*, Oxford: Blackwell.

Ataay, İ.D. (1990). *İşdeğerleme ve Başarı Değerleme Yöntemleri*, İstanbul: İşletme Fakültesi.

Austin, J. T. and Villanova, P. (1992). "The Criterion Problem: 1917-1992", *Journal of Applied Psychology*, Vol.77, pp.836-874.

Barutcugil, I. (2002). *Performans Yonetimi*, İstanbul: Kariyer.

Bernardin, H.J. and Beatty, R.W. (1984). *Performance Appraisal: Assessing Human Behavior At Work*, Boston: Kent.

Bingham, W.V. (1926). "Measures of Occupational Success", *Harvard Business Review*, Vol:5, pp.1-10.

Carter, C.C. (1994). *Human Resources Management and Total Quality Imperative*, USA:Amacom.

Cocca, P. and Alberti M. (2010), "A Framework to Assess Performance Measurement Systems in SMEs", *International Journal of Productivity and Performance Management*, Vol. 59, No. 2, pp. 186-200.

DeNisi, A.S., Cafferty,T., and Meglino, B. (1984). "A Cognitive View of The Performance Appraisal Process: A Model and Research Propositions", *Organizational Behavior and Human Performance*, Vol:33, pp. 360-396.

DeVries, D.L., Morrison, A.M., Shullman, S.L. and Gerlach, M.L. (1981). *Performance Appraisal On The Line*, NC: Center for Creative Leadership.

Feldman, J. M. (1981). "Beyond Attribution Theory: Cognitive Processes in Performance Appraisal", *Journal of Applied Psychology*, Vol:66, pp.127-148.

Fletcher, C.A. and Williams, R. (1985). *Performance Appraisal and Career Development*, London: Hutchinson.

Garengo, P., Biazzo, S. and Bititci, U.S. (2005). "Performance Measurement Systems in SMEs: a Review For a Research Agenda", *International Journal of Management Reviews*, Vol. 7, No. 1, pp. 25-47.

Ilgen, D.R., Barnes-Farrell, J.L. and McKellin, D.B. (1993), "Performance Appraisal Process Research in the 1980s: What has it Contributed to Appraisals in Use?", *Organizational Behavior and Human Decision Processes*, Vol. 54, pp. 321-68.

Levy, P.E. and Williams, J.R. (2004). "The Social Context of Performance Appraisal: A Review and Framework for the Future", *Journal of Management*, Vol. 30, No. 6, pp. 881-905.

Marri, H.B., Gunasekaran, A. and Grieve, R.J. (2000), "Performance Measurements in the Implementation of CIM in Small and Medium Enterprises: an Empirical Analysis", *International Journal of Production Research*, Vol. 38, No. 17, pp. 4403-4411.

Neely, A.(2005). "The Evolution of Performance Measurement Research: Development in the Last Decade and a Research Agenda for the Next", *International Journal of Operations & Production Management*, Vol. 25, No. 12, pp. 1264-77.

Schriesheim, C.A. and Neider, L.L. (2012). Perspectives on Justice and Trust in Organizations, Information Age.

Snape, E. and Redman, T. (2010). "HRM Practices, Organizational Citizenship Behaviour, and Performance: A Multi-Level Analysis", *Journal of Management Studies*, Vol. 47, No. 7, pp. 1219-1247.

Taticchi, P., Tonelli F. and Cagnazzo L.(2010). "Performance Measurement and Management: a Literature Review and a Research Agenda", *Measuring Business Excellence*, Vol. 14 No. 1 pp. 4-18.

Wiese, D.S. and Buckley, M.R. (1998). "The Evolution of the Performance Appraisal Process", *Journal of Management History*, Vol. 4, pp. 233-249.