Evaluation of Hospital Personnel: Comparison of Public and Private Sector

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Abstract

The long term success of an organization depends significantly on its ability to properly evaluate the performance of its employees. The purpose of this study was to apply the method of self-evaluation to private and public Greek hospital employees, compare results, and assess the value of the methodology. A self-administered questionnaire was developed, administered, and completed by 21 employees of a private hospital and 25 employees of a public hospital. Data were recorded and analyzed in EXCEL 2008. Results showed that private hospital personnel gave higher ratings in all categories suggesting a leniency in their evaluation process and differing significantly from the evaluation of their managers. Public hospital personnel gave more realistic ratings of their performance and work environment but lower than what is reported in state official reviews of the performance of public health sector employees. Self-assessment is a useful tool because it provides insight into the employee's perspective and understanding of the work environment. However, it is insufficient on its own because employees are not likely to exercise objective selfcriticism while their perceptions are often different from that of management. Hence, it is recommended that self-assessment is used in combination with a manager's or a third-party evaluation for optimum results.

Key words: Personnel evaluation, self-evaluation method, private and public health sector

Introduction

Employee evaluation is a valuable tool for the efficient organization and management of a healthcare institution, private or public, and a critical factor in the achievement of its goals. Employee performance affects an institution's "well-being" and is one of the most basic ingredients of long term success. The objectives of employee performance evaluation are two-fold: (a) to improve the performance of each employee and consequently to increase the success of his/her department in meeting the institution's strategic goals and (b) to identify opportunities for personal and professional growth. Successful employee management gives an organization a significant and powerful advantage over competition but for the health care system in particular it is the difference between life and death[1,2].

Successful hospital personnel evaluation leads to a more efficient, effective, and accountable institution. The importance of both improved efficiency and effectiveness in health care should be particularly emphasized. Specifically, an efficient process is one that is using the minimum number of inputs for a given output. An efficient health care facility is thus one that achieves the standard level of care with minimum combination of resources. Often the terms efficiency and productivity

are used interchangeably. Effectiveness refers to the outcomes of medical services. Effectiveness is a measure of the level of medical care provided. It is affected by efficiency but it can also influence efficiency.

Hence, nowadays, personnel evaluation is part of the strategic plan of an institution and is integrated in the organization and management procedures of every department and division. The implementation of a successful evaluation procedure, however, presents several challenges. There are several methods for personnel evaluation, each with its own strengths and weaknesses. A major element of any evaluation process is the evaluation form or questionnaire. The questionnaire often determines the success or failure of an evaluation procedure since it is through this form that data are collected and recorded in a systematic way. All statistical analysis and results are based on the questionnaire data. Hence, its accuracy and completeness define the evaluation outcome[3]. The evaluation form may be completed in a direct or indirect way, depending on the evaluation process methodology and the communication medium between the person conducting the evaluation and the person being evaluated.

This study's purpose was to use and assess the self-evaluation methodology in different departments of a private and a public hospital in Athens, Greece. The specific aims were: (a) evaluate the performance of employees of specific hospital divisions (same in both institutions), (b) evaluate the correlation between job description and qualifications of the employee, (c) compare public and private sectors in terms of procedure and outcomes, and (d) determine the value of the self-evaluation methodology.

Materials and Methods

Evaluation Methodology

The self-assessment or self-evaluation methodology was selected for the study because (a) it is a commonly used process and one that personnel of both institutions in this study were familiar with, (b) it evaluates different aspects of an employee's personality and behavior in the work environment including his/her performance, (c) it is relative easy to implement, (d) it does not require complicated evaluation tools, and (e) it has low cost.

The self-evaluation methodology requires a well-designed questionnaire that may include questions on performance and behavior, the responses to which may be open or closed, i.e., restricted or forced to the use of a specific rating scale[4].

Evaluation Form or Questionnaire

Questionnaires are widely used to collect information and are critical in the success of an evaluation process. A highly structured format is usually required in order to collect the same type of information from a large number of people in a consistent way. A structured format also allows quantitative and systematic analysis of the collected data. The quality and effectiveness of a questionnaire may be evaluated by two factors: (a) the number of people answering it (response rate) and (b) the accuracy and relevancy of the collected information. To achieve maximum effectiveness, one has to consider various parameters in the design of the questionnaire including: the type and number of evaluation parameters, the type and number of questions, the rating scale for the closed format questions, the language, the structure and aesthetic

appearance of the form, the simplicity in its completion, and the brevity of the answers.

A one-page questionnaire was developed for our study that is shown in Fig. 1. The aim of the study was used as title of the form to avoid any misinterpretations by the participants and all forms were in color for greater professional appearance and attractiveness. The questions were divided in two groups: open and closed format. There were 5 open format questions and 15 closed format questions. We selected to include more closed format questions because they are simple and quick to fill in, minimize discrimination in self-administered questionnaires as is our case, and allow a more systematic analysis and reporting of the data[4].

The five open format questions regarded previous and current job descriptions and time of employment as well as education. One closed format question asked for the person's sex (binary response; male or female). The remaining 14 closed format questions regarded the person's performance at the current position and responses were rated in terms of frequency and degree of agreement on a scale of 1 to 4 as follows[5]:

- 1: Rarely/Disagree
- 2: Sometimes/Agree slightly
- 3: Often/Agree moderately
- 4: Always/Agree strongly

Finally, as shown in Fig. 1., the name and contact information (email) of the person conducting the study was included in the footer of the form for questions or concerns.

Evaluation Process

Two major health care Greek institutions were selected for the evaluation study. All participating employees were full time, tenured personnel as opposed to outside collaborators or temporary employees or interns and graduate students. The same three departments were selected for evaluation: Radiology, Nursing, and Administration. Only technologists participated from the Radiology departments. Personnel from all levels and training participated from the Nursing departments. Administrative assistants and registrar's office personnel participated from the Administration departments. Table 1 shows the distribution of personnel per department and institution. Participants had different job descriptions and assignments.

Table 1. Distribution of employees participating in the study per department and institution; the number in parentheses indicates percent participation relative to the total number of employees in each department.

	Department								
Institution	Radiology	Nursing	Administration						
Private	4 (19%)	10 (48%)	7 (33%)						
Public	5 (20%)	11 (44%)	9 (36%)						

Questionnaires were given to the director of each department, who distributed them to the employees. Each director was made aware of the study's aims and was

familiarized with the content of the questionnaire and the process to be followed for its completion ensuring the anonymity of the participants. Private hospital employees were required to complete the questionnaire within 24 hours from the time it was given to them. Public hospital employees were required to complete the questionnaire within a three day period. Times were determined by the department directors.

Results

Based on the questionnaire responses, study population descriptive statistics were derived. Table 2 shows the number of male and female participants in the study per department and institution. With the exception of the Radiology department, mostly female employees participated in the study. The distribution is representative of actual population characteristics of the Nursing and Administration departments in these hospitals.

Table 2. Distribution of male and female	participants per de	partment and institution.
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	Radi	ology	Nur	rsing	Administration			
Institution	Male	Female	Male	Female	Male	Female		
Private	2	2	1	9	2	5		
Public	3	2	0	11	1	8		

Table 3 lists the mean number of years the participants were employed at the current position per department and institution.

Table 3. Mean number of years at current position per department and institution

Institution	Mean Age of Participants (years)									
	Radiology	Nursing	Administration							
Private	8.0	6.0	6.0							
Public	18.6	7.3	6.1							

In the following paragraphs we will review in more detail the results of the evaluation per hospital.

A. Private Hospital

Twenty five questionnaires were given to the private hospital and were distributed to employees of the three aforementioned departments. As is also indicated earlier in Table 1, 21 of these forms (84%) were completed correctly, three (12%) were returned unfilled, and one (4%) was completed by an employee of a department other than the three participating in the study; the latter four forms were not included in the analysis. The large number of correctly completed evaluation forms is probably due to the active, voluntary participation of the employees, namely all department employees were informed of the study by their supervisor but evaluation forms were distributed only to those that expressed an interest to participate. The largest participation to the study was from the Nursing department with 10 employees (48% of total employees) followed by Administration (33%) and Radiology (19%).

The time of employment of the participants at the current position ranged from 4 months to 19 years with an average of 6 years and 5 months. Table 3 above listed the years of employment in more detail. Regarding their prior occupation, 6 of the 21

participating employees (29%) indicated that their previous position was relevant to the current one, 3 (14%) responded that their previous position was unrelated to the current one (14%), and 12 (57%) left this question blank.

The educational background of the private hospital employees per department is shown in Table 4. Overall, the majority of the participants had a 4-year Technical College education (12/21 or 57%), 7 (33%) had an associate degree (2 years post-high school technical education) and only 2 (10%) had a University degree (10%).

QUESTIONNAIRE OF STUDY ON HEALTH CARE PERSONNEL SELE	F-EVA	LUA	TION	V
Department & position title: Time in this position (months/years):				
Previous position title: Education:				
Graduate studies (type and degree):				
Sex: M F				
Respond to the following questions using: 1=Rarely/Disagree, 2=Sometimes/Agree slightly, 3=Often/Agree moderately, 4=Always/Agree strongly).	1	2	3	4
1. I am aware of and complete my job's assignments.	0	\circ	\circ	\circ
2. My background fits my job description.	\circ	\circ	\circ	\circ
3. I take initiatives and suggest solutions to problems.	\circ	\bigcirc	\bigcirc	\circ
4. I am receptive to suggestions and guidance from my supervisor.	\circ	\bigcirc	\bigcirc	\circ
5. I believe my workload is high.	\bigcirc	\bigcirc	\bigcirc	\circ
6. I participate in training programs on new concepts about my area of expertise.	\circ	0	\circ	0
7. I feel part of the organization and promote its mission.	\circ	\circ	\bigcirc	\circ
8. I can discuss my problems with my supervisor.	\bigcirc	\bigcirc	\bigcirc	\circ
$\boldsymbol{9.}$ There are opportunities for growth and advancement in the organization.	0	0	0	0
${f 10.}$ I am reliable and comply with the rules/regulations of the organization.	0	\circ	0	0
11. My opinion is heard and considered.	\bigcirc	\bigcirc	\bigcirc	\circ
12. I feel adequately and fairly compensated for time and expertise I bring into the organization.	0	0	0	0
13. My work and effort is recognized.	\bigcirc	\bigcirc	\bigcirc	\circ
14. I am satisfied with my job.	\circ	\circ	0	0
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Figure 1. Question naire for self-assessment of hospital employees.

Table 4.Educational	background	of	private	hospital	employees	participating	in	the	study	per
department.										

		Department										
Degree	Radiology	Nursing	Administration									
High school	0	0	0									
Associate (2 year)	0	7	0									
University (4 year)	0	0	2									
Technical (4 year)	4	3	5									
Graduate degree	0	1	1									

Table 5 summarizes the average rating of each of the 14 closed-type questions for the private hospital evaluation. The last column lists the average of all averages. All responses received relatively high scores, which led to the overall 3.5 average. The rating of 4 had the highest frequency of occurrence while the rating of 1 was given to none of the questions by any of the participants.

Table 5. Average rating of private hospital employees for closed-type questions of the questionnaire.

	Self-Evaluation Questions											Total			
	1	2	3	4	5	6	7	8	9	10	11	12	13		Average Rating
Average rating	3.9	3.8	3.5	3.8	3.3	3.6	3.6	3.5	3.9	3.0	3.2	3.1	3.5	3.9	3.5

B. Public Hospital

Sixty questionnaires were given to the public hospital and were distributed to the same three departments as those selected for the private hospital evaluation. As is also indicated earlier in Table 1, 25 of these forms (42%) were completed correctly and included in the analysis. Twenty three of the forms (38%) were returned unfilled, 2 (3%) were incorrectly completed, and 10 (17%) were completed by employees of departments other than the three participating in the study; all these evaluations were discarded from the analysis. The largest participation to the study was again from the Nursing department with 11 employees (44% of total employees) followed by Administration (9 employees or 36%) and Radiology (5 employees or 20%). The majority of participants was again women (84%) and the specific distribution was shown in Table 2 above.

The time of employment of the participants at the current position ranged from 1 month to 34 years with an average of 10 years and 8 months. Regarding their prior occupation, 7 of the 25 participating employees (28%) indicated that their previous position was relevant to the current one, 4 (16%) responded that their previous position was unrelated to the current one (14%), and 14 (56%) left this question blank. The educational background of the public hospital employees per department is shown in Table 6. Overall, the majority of the participants had a 4-year Technical College education (12/25 or 48%), 8 (32%) had an associate degree (2 years post-high school technical education), 4 (16%) had a high-school degree, and only 1 (4%) had a University degree. Three (12%) of the 25 participating employees had a graduate degree.

Table 6.	Educational	background	of	public	hospital	employees	participating	in	the	study	per
departmen	t.										

	Department									
Degree	Radiology	Nursing	Administration							
High school	0	0	4							
Associate (2 year)	1	5	2							
University (4 year)	0	1	0							
Technical (4 year)	4	5	3							
Graduate degree	0	1	2							

Table 7 summarizes the average rating of each of the 14 closed-type questions for the public hospital evaluation. The last column lists the average of all averages. The overall average in this case was lower, 3.1 instead of 3.5. The rating of 3 had the highest frequency of occurrence in the public employees' responses and the rating of 1 was encountered in several responses.

Table 7. Average rating of public hospital employees for closed-type questions of the questionnaire.

		Self-Evaluation Questions													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Average Rating
Average rating	3.6	3.5	3.3	3.8	3.4	2.3	2.9	3.1	2.8	3.8	2.9	2.2	2.5	2.6	3.1

Discussion and Conclusions

The comparison of the results between the two institutions led to the following observations that could provide an insight on the usefulness and effectiveness of the self-evaluation method as well as the differences between the private and public health care sectors. It should be noted that a large percentage of employees in both institutions did not respond to the question regarding their previous line of work. The reasons for this may be that these employees were previously unemployed or in a line of work that was completely irrelevant to their current position.

The education of the employees was similar in both institutions. The majority in both had a four-year degree from a Technical College and a large number of the Nursing Department employees had an associate degree. There were no employees with just a high-school degree in the private hospital. This may be explained by the selection practices of the private sector that usually sets higher and stricter hiring standards than the public sector. In addition, while almost all radiology technologists were graduates of 4-year technical colleges and almost all nursing staff had associate nursing degrees, there was an impressively large variation in the background of the administrative staff between the two hospitals. Most employees in the Administration Department of the private hospital had a bachelor's degree in management while employees of the corresponding department in the public hospital had either just high-school education or a degree in nursing. An attempt to find the causes for this was not successful because there were no public data available for job descriptions or hiring criteria in the public hospital. Finally, the small percentage of employees with a 4-year University degree or graduate studies was expected and is realistic because our study was conducted with employees relatively low in the hierarchy of the organization where a 4-year degree is not a requirement.

The block diagram in Figure 2 shows a histogram of the responses in the 14 closed-type questions. As mentioned earlier, the private hospital employees used more often the highest rating in their responses than the public hospital employees. This may be considered as higher leniency on behalf of the private hospital employees that does not fully agree with the situation described by department managers and directors. Responses of public hospital employees were slightly more realistic but still not in full agreement with management. The "embellished" image of the employee-employer relationship that emerges from the self-assessment approach does not allow for major conclusions on past or current employee performance. It could be used, however, in developing interventions to improve future performance. Specifically, despite its weaknesses, self-evaluation provides an insight into employees' perceptions and understanding of the work environment. Such knowledge could lead to changes in management and practices that could improve effectiveness and efficiency in the organization.

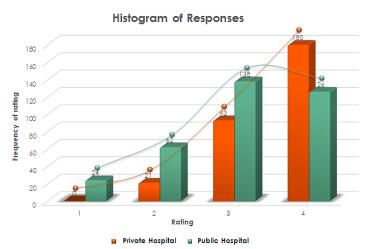


Figure 2.Histogram of responses of the private and public hospital employees to the 14 closed-type questions.

Private hospital employees gave the highest ratings to questions #1, 9, and 14 (Fig. 1). The average rating for these questions was 3.9. A high rating is reasonable in question #1 where the employee is asked whether his/her assignments are clear and completed as required. In contrast, a high rating was not expected for question #9 because, according to upper management, the vast majority of the employees of the private hospital will not have many opportunities to advance or be promoted. However, employees seem to have different expectations. A low rating was also not expected for question #10 where the employee was asked whether he/she is reliable and complies with the organization's rules and regulations. The reason is that because of past compliance problems, the directors of the private hospital decided to implement a stricter system for the employees to follow its rules and regulations. Yet, either the new system was equally ignored by the employees or they are not made aware of any problems.

Public hospital employees gave the highest rating to questions #4 and 10. The average rating for these questions was 3.8. This high rating for question #10 is in complete antithesis with the bleak situation described by other investigators on the organization and management of public hospitals, the problems of which are often attributed to the inadequate supervision and accountability of the employees, who often do not conform to hospital regulations. Furthermore, results do not seem to agree with state official reports that the majority of the employees in public hospitals (over 90%) show

performances rated as excellent while the remaining 10% shows good to very good performances[6]. If that was the case, the average rating of the responses should have been significantly higher from what we recorded. The discrepancy should be further investigated as it may be due to our small sample size or the specific departments selected for the study or differences in evaluation techniques.

Although our study sample is small to allow for definitive conclusions to be derived, results clearly indicated the following: (a) significant differences between private and public healthcare sector in terms of hiring practices and employee perception, (b) a discordance between management and employees suggesting that the two parties often do not perceive the same thing similarly or see "eye-to-eye", and (c) weaknesses in the self-assessment technique that usually presents "embellished" situations and biased responses that may have some value but only in combination with another performance assessment methodology.

References

- 1. Papagiannaki M.Th. (2009). Development of a system for the evaluation of health care sector personnel. Master's Thesis, Engineering School of Crete (in Greek).
- 2. *Health Care Benchmarking and Performance Evaluation*. International Series in Operations Research & Management Science Volume 120, 2008, pp. 3-14.
- 3. Luck DJ and Rubin RS (1987). *Marketing Research*. Prentice Hall PTR, ISBN-10: 0135578280
- 4. Leung WC (2001). How to design a questionnaire. Student BMJ, 9:187-189.
- 5. Friedman HH and Amoo T (1999). Rating the rating scales. *J Mark Management*, 9:114-123.
- 6. Papalexandri N and Mpourantas D (2005). Management of Human Resources. Ed. Mpenou G, Athens (in Greek).