

# Education as a Means to Implement Job Rotation in a Public Organization

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## Abstract

The present article presents a study aiming to inquire the *intra-business training as a means to implement Job Rotation (JR)*, in the Public Sector and specifically the OAAE organization. The focus to the public sector is given because it is the unique provider of some services (i.e. justice, security, social care etc.), and at the same time it is in a process of change inside the new European framework that is being created. The sample of the study is made of OAAE employees, 138 persons, of which 102 participated at least once in a JR program, while 36 never did so. From the findings, it was concluded that intra-business training provides to the employees knowledge and skills, which contribute not only to the improvement of provided services, but also to the modernization and updating of the organization. In this framework Job rotation provides to the trainee employees knowledge, skills and experience, while it is an important motivational factor. The study is a first step towards investigating the effective use of training tools in the Greek Public Sector from the point of Greek Bibliography in order to help improve training and skills of its human resources.

**Keywords:** *intra-business training; job rotation; motivation; public sector*

## 1. Introduction

Our era is marked by the catalytic presence of globalization and the blooming of scientific and technologic developments, where the *human factor* plays the most important role for the survival of organizations and businesses. *Adaptation* and *flexibility* are useful factors inside this frame, which, however, do not depend exclusively on technology but on the quality of human resources. Consequently, the acquisition of competent personnel, is an important *competitive advantage* in the market and it is achieved either via attracting high level executives or via training in the workplace itself (Xyrotiri-Koufidou, 1997).

Organized and proper education of human resources offers important advantages, such as improvement of productivity and work performance, development of personnel skills on an individual and team level and goal achievement for the organization or business. The cost of a training program should be considered as an *investment*, since it provides improvement of human resources, thus fulfilling the needs of an organization or business (Papalexandri & Bourandas, 2003; Hatzipanteli, 1999).

Specifically, *intra-business training via education*, is considered a *good practice* for human resources development inside an organization. According to relevant studies, in *Public Administration* it is considered necessary to adopt intra-business training, since it can contribute significantly to the quality of the provided services (Rammata, 2011).

One of the most basic methods of intra-business training, is *job rotation*, characterized by its effectiveness concerning training results. The reason for that is that it offers a variety of activities executed by an employee, since it provides the option to work in different positions, for a relatively small period (Papalexandri & Bourandas, 2003). Moreover, some researchers consider that it improves the employee's motivation, while on the other hand it deals with their potential fatigue and boredom, via the interest arising by swapping positions. Within the framework of Organizational Psychology, the motivation theory of Herzberg created the chance for wider use of this particular method (Vakola & Nikolaou, 2012; Campion et al., 1994; Ortega, 2001).

The present article examines the relation of intra-business training with *satisfaction* and *motivation* of the personnel through focusing on Job Rotation in the Greek Public Sector. The *importance* of this relation mainly concerns the reorganization and modernization of Public Administration in today's economic crisis, its adaptation to the new environment, its successful response to the ever increasing citizens' needs, as well as a change in culture concerning the human resources management (Argyriadis, 1998; Tahos, 1996; Rammata, 2011).

## 2. Bibliographic Review

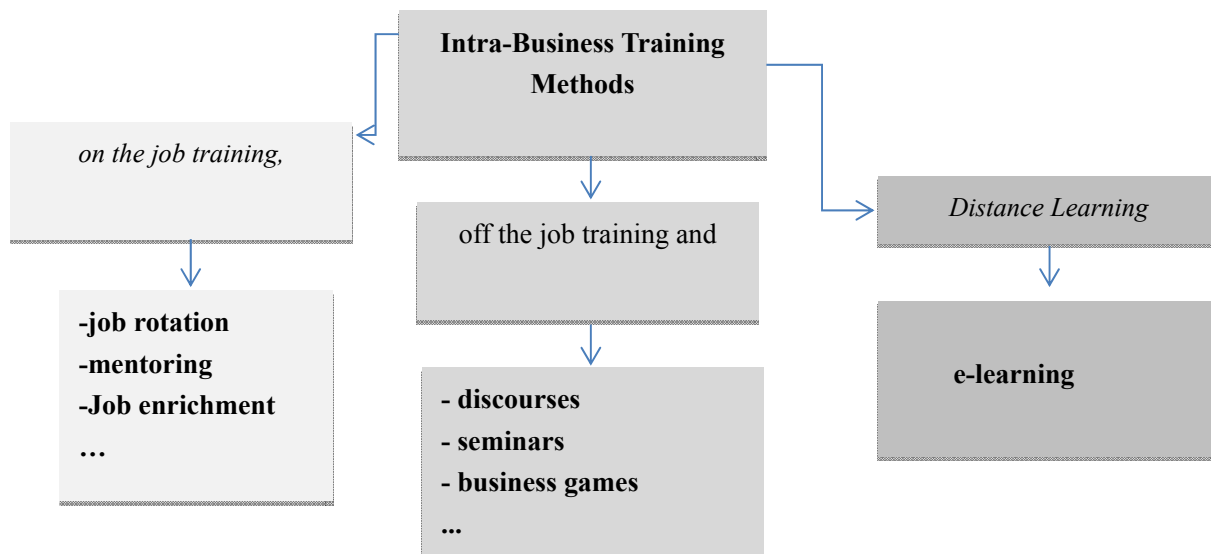
### 2.1 Intra-Business Training

*Intra-Business Training* is a *learning procedure* connected to the development of human resources of an organization or business. It mainly focuses on middle or superior executives, without excluding lower grades of employees (Papalexandri & Bourandas, 2003). It also aims to (Dimou, 2003):

- Improve work performance,
- Knowledge and skills acquisition adapted for every work role,
- Create better working relations,
- Resolve functional problems,
- And to deal with emergencies in the workplace.

Meanwhile, methodologies followed in *intra-business training*, are distinguished in three basic categories (Fig. 1) (Papalexandri & Bourandas, 2003; Mouza-Lazaridi, 2013):

- *on the job training*,
- *off the job training and*
- *distance learning*.



**Figure 1.** Intra-Business Training Methods

*Intra-business Training* is part of the strategic plan of a business or organization regarding the management of its human resources. By the end of the 70s the need for *specialized training* began to emerge within in the framework of a business or organization (Camp et al., 1986; Rothwell & Kazanas, 1989; Torraco & Swanson, 1995; Fredericks & Stewart, 1996; Walton, 1999; Horwitz 1999; Hargreaves & Jarvis, 2000). It started as education and training in specific skills and was gradually transformed into a wider knowledge and skills field (Baldwin et al., 1997). As a consequence, each business or organization that used this change in order to acquire a competitive advantage, created

a *knowledge capital* including the following: (a) *basic skills*, (b) *advanced skills* (regarding the use of new technologies), (c) *understanding the client* (services) or *production system* (industry or artisans) and (d) *creativity* (Noe et al., 2009).

However, the majority of intra-business training programs primarily focus on basic and additionally on advanced skills. Some researchers believe that most work positions in North America and Europe would require *extensive use of knowledge* (>85%). This development presupposes that the employees have new skills, such as *knowledge exchange*, in combination with *creative use* thereof to transform, change, and create a product or service (Noe et al., 2009).

During the last decade an important number of enterprises have adopted this new training perspective, which is called *high aiming education*, connected in parallel with strategic enterprise objectives and aims. Those practices create a working environment characterized by encouragement for *continuous learning*. Moreover, they are a characteristic of enterprises that are considered as *learning organizations*.

Finally, the use of new technologies in the working environment promotes the intra-business education, since new and more complex requirements emerge for the training needs of employees. Today it is considered that the cost of lifelong education and training of a country's employees poses the limit of each corresponding level of development (Papalexandri & Bourandas, 2003; Hatzipanteli, 1998; Carnevale, 1990; Gephart et al., 1996; Rosow & Zager, 1988; Thornburg, 1994; Noe et al., 2009).

In view of the above, we examine the hypothesis whether there is some kind of correlation between the participation of employees in a training program (*Job Rotation*) and the satisfaction of their training needs:

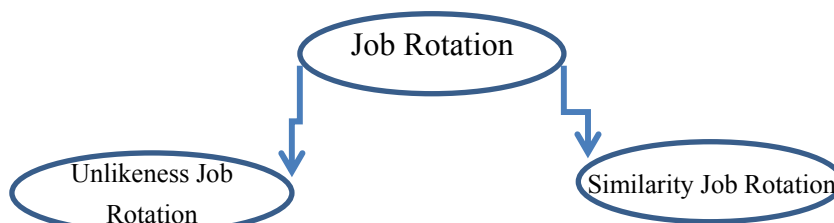
- *H1.0*: The employees' satisfaction through participating in the program "Job Rotation" is not affected by the needs of employees through rotating in different positions
- *H1.1*: The employees' satisfaction through participating to the program "Job Rotation" is affected by the needs of employees through rotating in different positions

## 2.2 Job Rotation

*Job Rotation* is a method of intra-business training and belongs in the category of on-the-job training. In this training method the employee is moving horizontally from department to department, taking up a position for a short period (3-5 months).

There are two basic techniques of job rotation commonly used in industry (Fig. 2) (Torrington, 1979):

- *Similarity of job*: It concerns temporary changes introduced into correlated jobs through job rotation. To this also contributes the technology applied usually by voluntary job rotation.
- *Lack of job similarity*: The working environment is different and the introduction of job rotation includes a change in job duties and content. This increases job satisfaction and adaptation of the staff, but there is small space for non-similarity or for the rotation not to be predetermined.



**Figure 2.** Job Rotation Techniques

The advantages by adopting *Job Rotation* in an enterprise are: (a) gaining of experience, (b) deeper understanding of the objectives and scope, and (c) better adaptation to the culture of an enterprise or organization (Jackson & Schuler, 2006). Quite often, many enterprises when recruiting new personnel rotate it in different positions before appointing them to the position for which they were was hired. This mainly applies to administrative specialization linked to promotion and taking of higher administrative positions or to the selection of job field according to their wishes (Mouza-Lazaridi, 2013; Papalexandri & Bourandas, 2003).

On the other hand, job rotation has no effect mainly when the working environment is prone to conflicts or when there is indifference or lack of commitment by the employees due to continuous transfers not properly designed.

### 2.3 Job Satisfaction

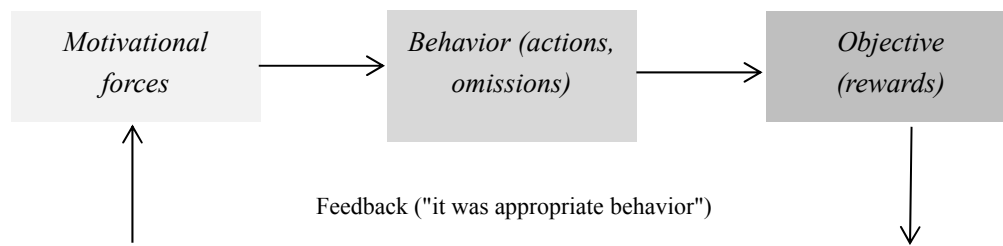
*Job Satisfaction* is a complex field surveyed from many aspects, such as that of *Psychology, Hyman Resources, Management, Sociology and Economics* (Zeytinoglu et al., 2007). According to bibliography, job satisfaction is connected with human attitude, *positive or negative*, adopted by each employee in his/her job (Baron & Kenny, 1986). Moreover, it is directly connected with job characteristics such as productivity, reduction of mistakes, number of absences and volition of the employee to leave the job etc. (Baron & Kenny, 1986; Maghradi, 1999). Furthermore, job satisfaction seems to be affected by remunerations or other benefits, fellow workers and the type of supervision exercised by the administration along with work environment, promotion potential and the content of the job proper (Dimopoulou et al, 2010). Price & Muller (1986) consider job satisfaction as the degree of liking one's job. Other researchers such as Spector (1997), Judge & Hulin (1993) and Judge & Watanabe (1993) claim that job satisfaction is connected with the personal welfare of each employee as well as with his/her personal satisfaction. However, according to prior bibliography, when properly adopted, the training method of Job Rotation seems to be positively connected with *job satisfaction* (Papalexandri & Bourandas, 2003; Hitiris, 2001).

Consequently, we examine the relation of job satisfaction with the employees' satisfaction through participating in a Job Rotation program as well as any possible influence it might receive from other demographic-social characteristics (gender, age, education, working position) by checking the following hypotheses:

- *H2.0*: Satisfaction from participating in the program "Job Rotation" is not affected by job satisfaction.
- *H2.1*: Satisfaction from participating in the program "Job Rotation" is affected by job satisfaction.
- *H3.0*: Satisfaction from participating in the program "Job Rotation" is not affected by demographic-social characteristics.
- *H3.1*: Satisfaction from participating in the program "Job Rotation" is affected by demographic-social characteristics.

### 2.4 Job Motivation

*Human behavior* is a complex *subject*, since it is greatly affected by many parameters such as *ambitions, education, experience, social environment, individual needs* etc. Human behavior is affected from satisfaction of *motivational forces*, that is *individual needs* (Fig. 3) (Hitiris, 2001). According to Robbins & Judge (2007), *Motivation* is a procedure explaining intensity, that is the direction and persistence of the efforts of an individual, towards achieving a clearly set objective. The intensity of the effort depends on the degree of effort made by an individual. The persistence of the effort is connected with the time an individual can keep on trying. Motivated employees usually make their effort for the period needed to achieve their objective (Vakola & Nikolaou, 2012).



**Figure 3.** Motivation Framework

According to bibliography, the exact nature of this composite relation between *needs - motivation - behavior* is not known and thus various *theories (motivation theories)* have been developed for further research. The majority of theories present problems in their application, however, they contain notions and explanations for the concept of motivation, therefore giving satisfactory answers in order for the management to make the enterprise more productive (Zavlanos, 1998).

One of the most popular *motivation theories* is that of *F. Herzberg* (1959). It derives from findings of a relevant empirical study on attitudes toward work. It is an extension of the *Maslow theory* concerning the classification of human needs and considers that human behavior is affected by the satisfaction of desirable needs (Hitiris, 2001; Zavlanos, 1998; Herzberg, 1968). It contains two basic motivational factors (Zavlanos, 1998):

- *Hygiene or maintenance factors* and
- *Motivators*.

The Herzberg theory has been criticized for its documentation. The criticism focuses on the difficulty to distinguish between the two factors (Hygiene, motivators), due to the fact that there are also individual factors, such as remuneration, which belong to both categories. Additionally, Hackman & Oldham (1976) claim that the separation of job characteristics into factors such as those of *motivators and hygiene*, is the result of the research method of Herzberg, while they end up concluding that the main phrasing of the theory should be considered *insecure*. In addition, another point of criticism concerns the total measurement of the lack of job satisfaction. Thus, Herzberg does not focus on job motivation but job satisfaction. Moreover, some researchers claim that the theory does not examine in detail *individual differences* between employees and executives. This could mean different motivators (Vakola & Nikolaou, 2012; Robbins & Judge, 2007; Zavlanos, 1998).

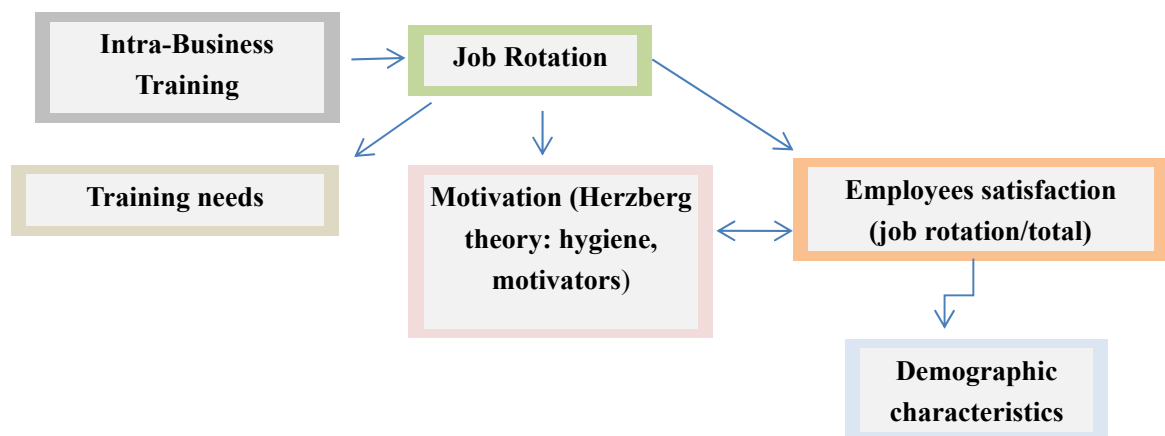
However, one of the most important influences of *Herzberg's theory* was *Job rotation*. He considers that the job content should be extended without increasing responsibility in order for the employees to feel more satisfied and as a consequence to increase their performance simultaneously avoiding job routine (Vakola & Nikolaou, 2012; Hitiris, 2001; Paul et al., 1969).

From those findings there appears that we should examine the satisfaction from participation in Job Rotation programs in relation with the Herzberg theory factors:

- *H4.0*: Satisfaction from participating in the program "Job Rotation" is not affected by hygiene factors.
- *H4.1*: Satisfaction from participating in the program "Job Rotation" is affected by hygiene factors.
- *H5.0*: Satisfaction from participating in the program "Job Rotation" is not affected by motivators.
- *H5.1*: Satisfaction from participating in the program "Job Rotation" is affected by motivators.

### 2.5 Conceptual Model

From the above analysis there emerges the *conceptual model* of the following figure:



**Figure 4.** Conceptual Model

### 3. Methodology

For the purpose of this research a *special questionnaire has been prepared*. The specific *research questionnaire* is structured as follows:

- *Preliminary questions*: They include inquisitive questions as to whether the employee under questioning has participated in a job rotation program. If YES, s/he asked about the reason of the method and his/her

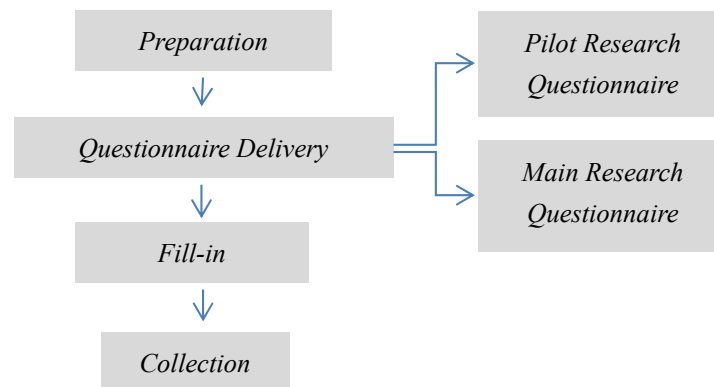
opinion of it, if NO, s/he is asked about his/her general opinion or attitude towards the method.

- *Training needs*: According to the bibliography they include questions related to the characteristics of training programs and evaluation criteria thereof (knowledge improvement, development of abilities/skills, changing of attitudes, etc.) (Mouza-Lazaridi, 2013; Xirotiri - Koufidou, 1997).
- *Employee satisfaction*: With a view to researching attitudes of the employee (positive, negative) it includes questions regarding his/her satisfaction for participating in the job rotation program, a future volition for new participation as well as *satisfaction* in working for OAEE (Baron & Kenny, 1986).
- *motivation*: The Herzberg model and specifically its two basic factors (motivators, hygiene) has been selected because it is a popular theory (with many applications) (Vakola & Nikolaou, 2012; Zavlanos, 2002).
- *Individual profile*: It includes questions of social - demographic features of the employees.

For the purpose of this research the selection of the sample was realized in the public *Social Insurance Organism of Freelance Professionals (OAEE)* with the help of the *snowball sampling method* belonging in the sampling methodology of non-probability. In such a sample, the sampling is realized based on the fact that each participant suggests another one who is suitable for the research (Kyriazopoulos & Samanta, 2011). The size of the sample surpassed 8% of the total of OAEE workers, since by increasing the sample the probability of participation of persons of the same network of people is reduced simultaneously increasing probabilities to find remote members of the population.

The research was done either via personal delivery or via Internet by e-mail. There was a pilot research for *testing the questionnaire & checking its validity (apparent)* (Fig. 5). In particular, the research includes the following:

- Sending emails to the employees and
- Personal delivery to their workplace (OAEE).



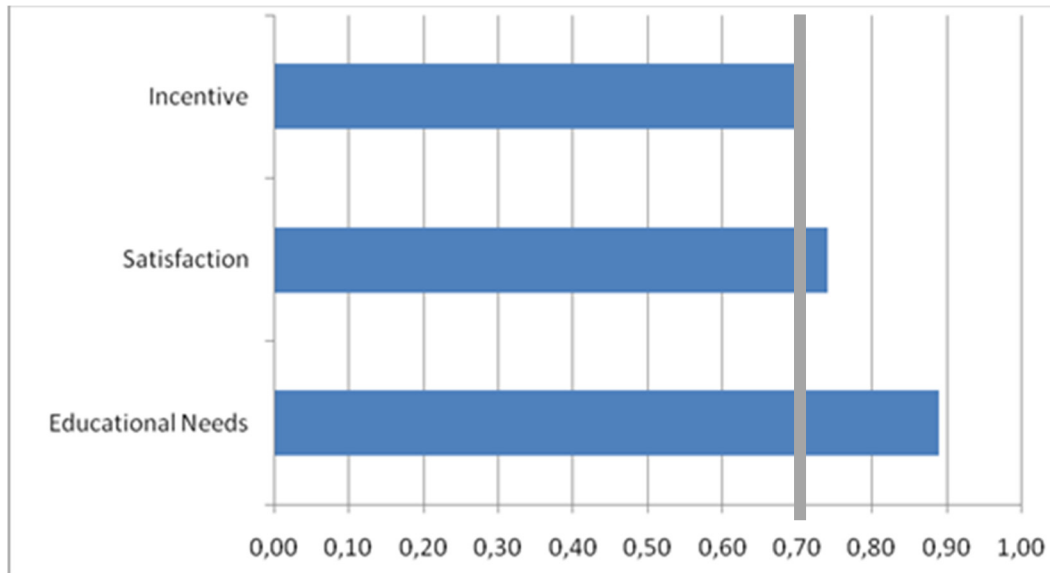
**Figure 5.** Pilot Research

### 3.1 Analysis

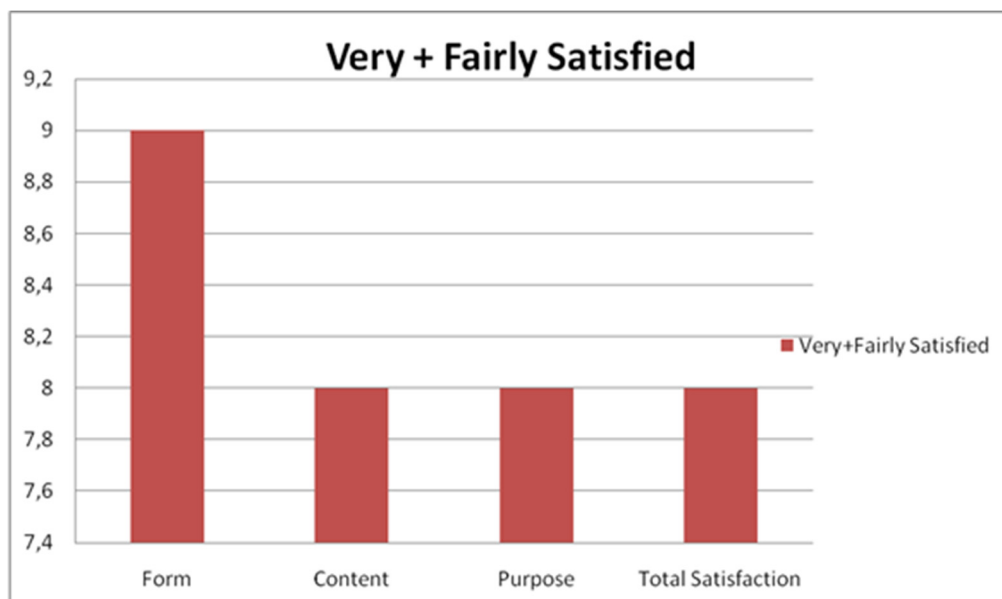
*Statistic techniques* used for the research aim at:

- *Reliability & Validity Analysis* where the most widely used method was utilized, the *Cronbach's alpha reliability test*, measuring internal stability which should be greater than 0.7 (Nova-Kaltsouni, 2006). The results for the research agents were  $>0.7$  (Fig. 6). Regarding validity, via the questionnaire of pilot research, the inquiry of *face validity* has been used. The research tool has *face validity* since all satisfaction factors (content, form, scope, and total satisfaction) are high in percentage (80%-90%) (Fig. 7). *Face validity* is a simple form of validity showing that a measuring tool seems that it evaluates the *notion (variable)* that it reports measuring (LoBiondo-Wood & Haber, 1992). Additionally, the main research questionnaire also has *partial predictive validity* since it confirms the connection of motivation and JR programs (Campion et al., 1994; Ortega, 2001), and of the *Herzberg theory* via *Job rotation* (Vakola & Nikolaou, 2012; Hitiris, 2001; Paul et al., 1969).

- *Descriptive (demographic) presentation of the sample* (use of tables & diagrams for class & quantity data, central tendency indices) in order to better present the research sample and understand its aspects.
- *Hypotheses checks* in order to express conclusions. A sample normality test has been realized for the proper selection of statistical methods (parametric or not). Specifically, due to the non-normality of variables, non parametric techniques have been used: on the one hand the *test Kruskal-Wallis* that corresponds to the parametric *one-way ANOVA test* (single direction variation analysis) concerning more than two independent samples and on the other the non parametric Spearman's rho correlation coefficient (two ordering variables). The  $X^2$  test has also been used to find whether there is a correlation between demographic characteristics and OAEE employees.



**Figure 6.** Reliability Analysis of Questionnaire Elements for the Main Research



**Figure 7.** Analysis of Questionnaire Elements for the Pilot Research

## 4. Findings

### 4.1 Demographic Data

The research sample is made of 138 persons, OAAE employees. From those, 102 answered positively concerning their participation in the Job Rotation program, while 36 answered negatively. The following tables display the departments of people questioned as well as their specialties:

**Table 1.** Sample Resources Analysis

s/n	Sample Department of Origin	JR programs participants	JR programs non participants
1	Procurements, Accommodation & Maintenance	✓	✓
2	Income	✓	✓
3	Salaries	✓	✓
4	Financial Department – Accounting	✓	✓
5	Provisions	✓	✓
6	Pensions	✓	✓
7	Insurance	✓	✓
8	IT	✓	✓
9	Secretariat	✓	
10	International Relations & Communication	✓	
11	Organization & Quality of Services	✓	
12	Materials warehouse	✓	
13	Expenses		✓
14	Personnel		✓

**Table 2.** Sample Specialties Analysis

s/n	Sample Department of Origin	JR programs participants	JR programs non participants
1	Maintenance Technicians	✓	✓
2	Secretaries	✓	✓
3	Economists	✓	
4	Administration-Financial	✓	✓
5	Administration Accounting	✓	✓
6	IT	✓	✓
7	Engineers		✓

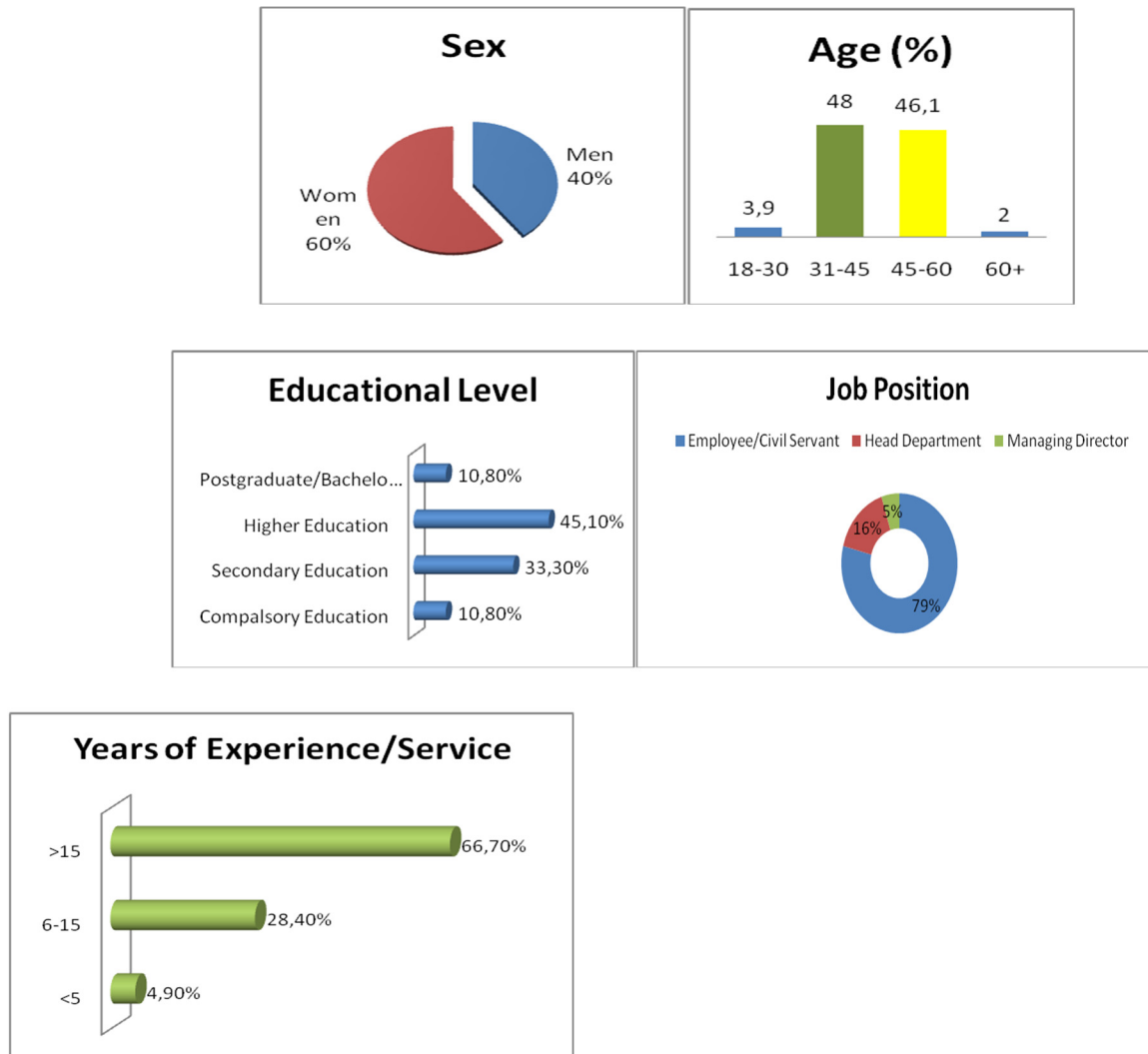
The large majority of the sample has attended Job Rotation programs due to work needs (89.2%) as displayed in the following table.



**Table 3.** Reasons for Attending a JR program

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid TRAINING	7	6,9	6,9	6,9
<b>WORK NEEDS</b>	<b>91</b>	<b>89,2</b>	<b>89,2</b>	<b>96,1</b>
OTHER	4	3,9	3,9	100,0
Total	102	100,0	100,0	

The next figure displays the basic demographic characteristics of the sample profile:



**Figure 8.** Research Sample Profile Analysis

Finally, we observe that the large majority of the sample agrees (from fully to simply) on the utility of Intra-Business Training in the public Sector (~89%) as displayed to the following table:

**Table 4.** Utility of Intra-Business Training in the Public Sector

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	2,0	2,0	2,0
	neutral	10	9,8	9,8	11,8
	<b>Agree</b>	<b>58</b>	<b>56,9</b>	<b>56,9</b>	<b>68,6</b>
	<b>Fully agree</b>	<b>32</b>	<b>31,4</b>	<b>31,4</b>	<b>100,0</b>
	Total	102	100,0	100,0	

#### 4.2 Training Needs

The research has found out (Table 5) that in the sample of the main research the practical value of a JR program is good (43.1%) to medium (33.3%), the provision of education of a JR program is good (41.2%) to medium (34.3%), the acquisition of knowledge/skills by a JR program is good (46.1%) to medium (22.5%), the effective use of time via a JR program is medium (40%) to good (30.4%), the keeping of interest via a JR program is good (40%) to medium (36.3%), the creation of attitudes/values via a JR program is good (42%) to medium (25.5%) and finally personal improvement via a JR program is good (55%) for an important percentage of the majority of OAEE employees.

**Table 5.** Training Needs Profile

	Poor (%)	Sufficient (%)	Medium (%)	Good (%)	Exceptional (%)
<b>Practical value of a JR program</b>	6,9	8,8	33,3	44,1	7,8
<b>Provision of education by a JR program</b>	11,8	8,8	34,3	41,2	3,9
<b>Acquisition of knowledge/skills by a JR program</b>	5,9	9,8	22,5	46,1	15,7
<b>Effective use of time in a JR program</b>	14,7	8,8	40,2	30,4	5,9
<b>Keeping of interest by a JR program</b>	3,9	6,9	36,3	40,2	12,7
<b>Creation of Attitudes/Values by a JR program</b>	9,8	15,7	25,5	42,2	6,9
<b>Personal improvement by a JR program</b>	7,8	5,9	20,6	54,9	10,8

#### 4.3 Intra-Business Training

Based on the normality test (*Kolmogorov-Smirnov test*) of two variables (*training needs index, employees satisfaction by the Job Rotation program*), we have had a *non-normal distribution*. By using the non-parametric test *Kruskal-Wallis* we have had the following results:

**Hypothesis Test Summary**

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of INDICATOR NEEDS is the same across categories of QUESTION 5	Independent-Samples Kruskai- Wallis Test	,000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05

**Figure 9.** Analysis of Results for the Index of Training Needs-Satisfaction by a JR Program

We can observe a rejection of the null hypothesis and, therefore, the employees satisfaction through participating in the program “Job Rotation” is affected by the needs of employees via rotating to different positions. By analyzing the tendency of average (median) we have found out that an increase in the degree of employee satisfaction correspondingly increases the average (median) of the training needs Index.

*4.4 Job Rotation*

A statistic analysis was realized with the  $X^2$  test to find out if there was a correlation between demographic characteristics of OAEE employees and the satisfaction of employees by participating in the Job Rotation program as displayed to the following table:

**Table 6.**  $X^2$  Calculation for Each Demographic Data

	Value	df	Sig.(2-sided)
<b>Gender</b>	,675	4	,954
<b>Age</b>	3,754	1	,053
<b>Education</b>	4,6	1	,031
<b>Work position</b>	,245	1	,621

It’s been found out that gender, age and work position does not influence the employees’ satisfaction regarding the Job Rotation program. On the contrary, education is affected by the employees’ satisfaction from the participation in the Job Rotation program.

*4.5 Job Satisfaction*

Based on the normality test (*Kolmogorov-Smirnov test*) of two variables (*total job satisfaction of employees, employees satisfaction from the Job Rotation program*), we have a *non-normal distribution*. By using the Spearman’s rho correlation coefficient (two ordering variables) we have the following results:

**Table 7.** Correlation Coefficient H2.0/2.1

		QUESTION 5	QUESTION 7
Spearman's rho	Correlation Coefficient	1,000	<b>,468**</b>
	QUESTION 5 Sig. (2-tailed)	.	<b>,000</b>
	N	102	<b>102</b>
	Correlation Coefficient	<b>,468**</b>	1,000
	QUESTION 7 Sig. (2-tailed)	<b>,000</b>	.
	N	<b>102</b>	102

\*\* . Correlation is significant at the 0.01 level (2-tailed).

What is observed is a positive correlation between two variables at a high level of statistic significance (<0.01) and thus the satisfaction of employees from participating in “Job Rotation” is positively influenced by job satisfaction.

4.6 Job Motivation

4.6.1 Motivators Index

Based on the normality test (*Kolmogorov-Smirnov test*) of two variables (*motivators index, employees satisfaction by the Job Rotation program*), we have a *non-normal distribution*. By using the non parametric test *Kruskal-Wallis* we have had the following results:

**Hypothesis Test Summary**

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of INDEX INCENTIVES is the same across categories of QUESTION 5	Independent-Samples Kruskai- Wallis Test	,001	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05

**Figure 10.** Analysis of Results for the Index of Motivators-Satisfaction by a JR Program

It’s been found out that satisfaction from participating in the program of “Job Rotation” is affected by the Motivators Index (motivation). By analyzing the tendency of average (median) we can observe that an increase in the degree of satisfaction correspondingly increases the average (median) of the Motivators Index.

4.6.2 Hygiene Factors

Based on the normality test (*Kolmogorov-Smirnov test*) of two variables (*hygiene factors, employees satisfaction by the Job Rotation program*), we have a *non-normal distribution*. By using the non parametric test *Kruskal-Wallis* we have had the following results:

**Hypothesis Test Summary**

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of HYGIENE FACTORS INDEX is the same across categories of QUESTION 5	Independent-Samples Kruskai- Wallis Test	,003	Reject the null hypothesis.

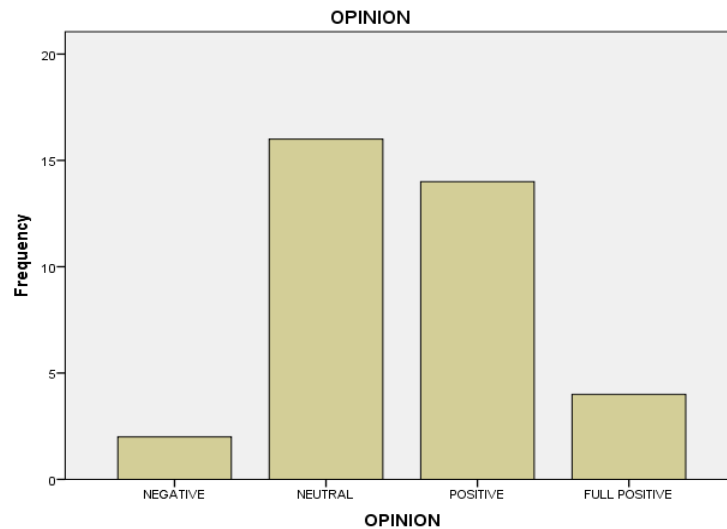
Asymptotic significances are displayed. The significance level is ,05

**Figure 11.** Analysis of Results for the Hygiene Factors-Satisfaction by a JR Program.

It’s been found out that satisfaction from participating in the program of “Job Rotation” is affected by the Hygiene factors Index (motivation). By analyzing the tendency of average (median) we can observe that an increase in the degree of satisfaction leads to an according approximate increase in the average (median) of the Hygiene factors Index.

4.6.3 Non-participants of a JR program

The next diagram displays the distribution of answers in relation to the opinion on the Job Rotation program as an educational means by non-participants of such a program:



**Figure 12.** Opinion on Job Rotation by Non-Participants (36 persons)

The results show that the majority has a positive opinion on Job Rotation as an educational means in a percentage near 50% (majority).

## 5. Discussion

According to bibliography, intra-business training is a useful procedure. This is also confirmed by the majority of the sample participating in the Job Rotation program (Camp et al., 1986; Rothwell and Kazanas, 1989; Torraco & Swanson, 1995; Fredericks & Stewart, 1996; Walton, 1999; Horwitz 1999; Hargreaves & Jarvis, 2000). Moreover, the employees of the research claimed that while their participation in a JR program does not equal an effective use of time, it provides education, skills & abilities and contributes to the creation of attitudes/values. In parallel, it has a practical value since it aims at personal improvement thus confirming relevant studies (Papalexandri & Bourandas, 2003; Xirotiri - Koufidou, 1997; Hatzipanteli, 1999). Additionally, the persons questioned hold that potential participation in a Job Rotation program is due to *work needs*, which suggests the absence of *planning on training & learning needs* as should be the case for the planning of each educational procedure according to bibliography (Harris & De Simone, 1994; Patrick, 1992).

Regarding *Motivation*, employee satisfaction through participating in the “Job Rotation” program is affected by hygiene factors and motivators, thus showing the positive confirmation of one of the most important influences of the *Herzberg theory*, *Job rotation* which claimed that work should be extended in order for the employees to feel more satisfied and consequently to be more motivated towards improving their performance yet remaining at the same level of responsibility and procedure, thus simultaneously avoiding work routine (Vakola & Nikolaou, 2012; Hitiris, 2001; Paul et al., 1969). In addition, job rotation is connected with motivation in general, as mentioned by some researchers (Campion et al., 1994; Ortega, 2001). Besides, after checking demographic-social factors, only the factor of Education seems to affect employees’ satisfaction within a Job Rotation Program.

Finally, satisfaction of employees through participation in the Job Rotation program is positively affected by their needs within job rotation, because training needs arise when we find a *training gap* existing between current and desirable status (Armstrong, 2000; Papalexandri & Bourantas, 2003). What is more, employees’ satisfaction through participation in the Job Rotation program is positively affected by job satisfaction, a fact demonstrating that potential adoption of the Job Rotation method might be connected to *job satisfaction* (Dimopoulou et al, 2010).

To conclude, we must stress out that half the non-participants in Job Rotation programs have a *positive view* while a large percentage has a neutral view. A negative view is shown by a small percentage.

## 6. Conclusions

The creation of executives nowadays presupposes proper and systematic training. Intra-business training, in particular, equips the employees with knowledge and skills which contribute not only to the improvement of the services provided, but also to the modernization and updating of the organism. In this framework, Job rotation provides the trainees-employees with knowledge, skills and abilities which contribute to their good preparation, before formally taking up their work position.

This article presents a research on employees of the public sector. It has attempted to evaluate their satisfaction through participation in the Job Rotation (JR) program, the educational needs covered, their satisfaction from their jobs and other motivation factors that may exist. Consequently, it seems that participation in a JR program functions as a motivator towards achieving better results and higher efficiency for the business or organization.

The research has shown that adoption of Job Rotation programs is a useful tool for motivating employees, on condition that it is done in an organized way to cover training and work needs. So, consideration of relative studies on behalf of organizations of the Public Administration will help towards adoption of proper strategies & tactics by their administrations when they decide to resort to organized JR programs as training tools.

Equally, the legal framework for the mobility of employees should be reexamined in order to be connected with the adoption of the JR method. In this effort, the participants should include not only the competent ministry but also public administration institutes and universities which are concerned with education and development of human resources. In parallel, priority should be given to acquainting the public sector personnel with the value and utility of JR programs.

Finally, what is of great importance for the Greek Public Administration is the obligatory adoption of intra-business training models by all institutions thereof, which will strengthen their effectiveness and efficacy if they function in an organized way.

In Greece's difficult socio-economic conditions of today as a result of austerity measures, this research emerges as a useful and original effort for the improvement of Greek public administration and work efficiency of public servants. Last but not least, this research is meant to be an initial inquiry into the utility of Job Rotation with the help of a questionnaire (quantity approach) and it is suggested that research should expand by means of quality methods (interviews) in order to investigate other suitability factors concerning Job Rotation.

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