

IMPACT OF WORKING ENVIRONMENT ON JOB SATISFACTION: EVIDENCE FROM GREEK PUBLIC SECTOR

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Abstract

This study analyses the satisfaction of workers from their working environment during the current financial crisis in Greece. As a case study, work satisfaction is examined among employees of the Region of Epirus, Greece who, on a daily basis, serve the needs of a large geographical region. In order to achieve this, we conducted an empirical research in 2018 using the Minnesota Satisfaction Questionnaire (MSQ) model. From the findings of this research and in accordance with those of other international surveys, we conclude that satisfaction from endogenous factors (e.g. activity, independence, creativity etc.) is higher than exogenous (e.g. human relations, remuneration, colleagues, working conditions etc.). In addition, the study of satisfaction per group of employees indicates that the Director/Office Manager and the University Educational employees appear more satisfied when it comes to satisfaction deriving from endogenous factors and more dissatisfied as far as indicators of exogenous satisfaction is concerned.

Keywords: Labour relations, Working environment, Job satisfaction, Public sector, Greece, Minnesota Satisfaction Questionnaire

1. INTRODUCTION

Job satisfaction has been gaining attention from both researchers and managers, especially due to the contemporary proliferation of the idea recognizing the significance of people in terms of achieving competitive advantage and sustainability in organizations. According to Vroom (1964) Job Satisfaction is the essential component for employee motivation and encouragement towards better performance.

Clark (1997) argue that if employees are not satisfied with the task assigned to them, they are not certain about factors such as their rights, working conditions are unsafe, co-workers are not cooperative, supervisor is not giving them respect and they are not considered in the decision making process; resulting them to feel separate from the organization. This present study will focus on the satisfaction of workers from their working environment even during difficult economic periods, such as the current financial crisis. Many research papers have shown that there is a positive link between work environment and intrinsic aspect of the job satisfaction (Gazioglu and Tanselb, 2006; Skalli, et.al. 2008). Different factors within the working environment such as wages, working hours, autonomy given to employees, organizational structure and communication between employees and management may affect job satisfaction (Lane et.al., 2010).

In Greece, since 2010 and throughout the entire period of the application of programs of fiscal adjustment the work environment in the public sector underwent significant changes. The main changes include:

- salary reductions, by abolishing the so called “13th and 14th salary”, introduction of cuts and the abolition of certain benefits (Law 4093/2012)
- The increase in working hours from 37,7 to 40 hours weekly (article 41 of Law 3971/2011)
- reduction in force, due to retirement of a large part of the staff as well as the implementation of the restrictive rule of 1:5 ratio of recruitment to departures in the public sector (article 9 of Law 4057/2012)

Based on the above discussion, the purpose of this research is to investigate the job satisfaction among the employees of the Greek Public sector. As case study the Region of Epirus will be analysed, which caters the administrative needs of a large geographical region and whose employees comes into contact with the public as well as with other services at local, regional and national level. In particular, we investigate:

- The influence of the new work environment on employee’s job satisfaction in the Greek Public Sector (descriptive analysis)
- Wether and to which extent the sex, level of education and the position held by employees stand as determinants of job satisfaction in the Greek Public Sector (chi square analysis).

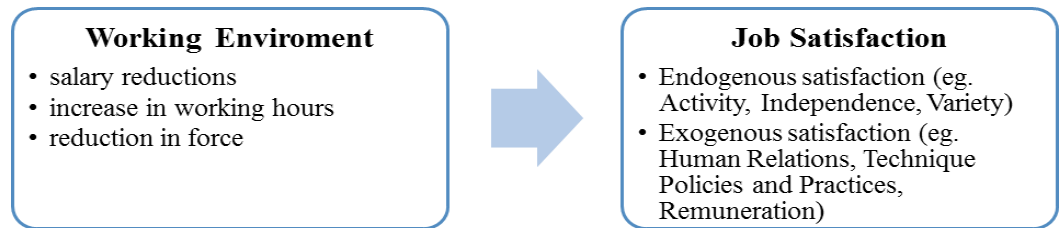


FIGURE 1 - CONCEPTUAL MODEL OF WORKING ENVIRONMENT AND JOB SATISFACTION

2. LITERATURE REVIEW

There has been research that has attempted to analyse the determinants that affect the job satisfaction of employees in the private and public sector. These researches also seek to determine ways and solutions for high performance, better work quality, sense of stability and at the same time, satisfaction at work. Below we list some of the most important regarding the public sector, both internationally and nationally. More specifically:

The international experience

Mihailov (2016) published a research regarding job satisfaction and the desire to change work among employees in Serbian public and private sector. It has been noticed that civil servants have higher external job satisfaction and lower desire to change jobs than their colleagues in the private sector, while at the same time they have lower endogenous satisfaction. Their satisfaction comes mainly from interpersonal relationships, work structure and information within the organization.

Kaiser (2014) studied the job satisfaction and motivation of civil servants in Germany. The sample consisted of 417 employees or 47.7% of civil servants of an average city in the North Rhine-Westphalia region. Satisfaction was moderate to high (M=6.7/10). The findings showed that endogenous factors such as work content and public contact positively affect satisfaction, while external factors such as lack of autonomy at work, difficulty in transferability of qualifications, and lack of an interview in evaluation have a negative impact.

In 2010 the study by Adroviceanu, et.al. using a large sample of 1114 Romanian civil servant, they studied their job satisfaction in such factors as satisfaction with top management, job satisfaction, career management policies, relationships with direct superiors, and the general work impression.

They found out that the overwhelming majority of respondents (90%) are happy with their work. In a very large percentage (> 69%), the respondents replied that they have a clear view of the strategic goals of the organization, their efforts contribute to achieving these goals, they are satisfied with the tasks they are undertaking, they feel like team members and appreciate the cooperative spirit between

the departments. A significant number of responses (> 40%) considered negative, the impact of remuneration, the lack of transparency in foreign transfers, the response of top leadership to their opinion and the lack of a link between pay and performance.

Jung, et.al. (2007) analyzed six categories of job satisfaction among civil servants in South Korea, such as salary, job security, work content, work environment, personal development, communication and human relations. They concluded that South Korean civil servants are less satisfied with salary and personal development and moderately satisfied with their work content, the environment and communication. On the other hand, they are pleased with the level of job security provided.

Rhodes et.al (2004) studied work satisfaction in 368 Primary and Secondary Education teachers in England. They found work satisfaction to be positively linked to factors such as relationships with colleagues, work towards common goals achievements, the possibility of exchanging experiences with colleagues and the climate of success at school.

On the other hand, factors that cause dissatisfaction at work, are the workload, the great burden of dealing with administrative issues, the difficulty of balancing personal and professional life and the society's view of the teachers.

In 2004, Steijn conducted a survey of 12,606 Dutch civil servants, studying the personal and occupational characteristics of employees, the organizational environment, staff management practices and overall satisfaction. The main conclusion was that the satisfaction of Dutch civil servants was not particularly high (M=3.56). In particular, he found that the influence of personal characteristics was practically low, while labor and organizational characteristics, found to be much more important.

It has been observed that staff management practices can affect job satisfaction positively, although, the researcher believes that influence is indirect through the positive influence of certain work and organizational characteristics.

Zembylas and Papanastasiou (2004) investigated the job satisfaction of 461 teachers in the schools of Cyprus. They found out that external factors such as salary, working conditions, labor relations, etc. significantly affect job satisfaction. Conversely, intrinsic factors in work have little effect on satisfaction.

Wright and Davis (2003) looked into the influence of the work environment on the job satisfaction of New York state employees using a sample of 267 workers. Research has shown that routine is a feature that negatively affects job satisfaction while task specificity and staff growth increase it.

When looking at the personal characteristics, only the level of education seems to have some influence which is actually negative. That means that as the level improves the satisfaction decreases. However, this influence is small compared to the previous three.

Riggs and Beus (1993) studied the work satisfaction of teachers in eight US states. The findings were that work satisfaction was moving at moderate to high levels in indicators such as work incentives and hygiene conditions. The same conclusions came from Lacy and Sheehan (1997) in eight countries, including Australia, Germany, Hong Kong, Israel, Mexico, Sweden, the United Kingdom and the United States.

The Greek experience

Chatzopoulou et.al. (2015), investigated the satisfaction of workers in the Regional Unit of Grevena through a sample of 85 employees. The survey showed that both men and women considered the nature of work and working conditions as the satisfactory factors, while salaries seemed to be a less satisfactory factor irrespective of age, gender, education and hierarchy.

Regarding the level of education, the employees of compulsory and secondary education pay more attention to working conditions, while technological and university education, appreciate the nature of the work more.

Batiou and Valkanos (2013) investigated the job satisfaction of civil servants in Greece using a sample of 67 employees of the public services sector in Thessaloniki. The average level of work satisfaction was low ($M=3.39$). When looking at the exogenous factors, colleagues ($M=4.22$) and supervision ($M=4.81$) accounted for the highest score. On the other hand, the operational processes seemed to have the lowest rating ($M=2.56$) of the exogenous factor, which is attributable to the great bureaucracy and the number of laws and regulations governing the operation of the public sector. It has also been found that the only demographic factor with a significant impact on job satisfaction is age, in contrast to the level of education, that does not seem to affect it.

Hyz (2010) examines the job satisfaction to the banking sector in general and to the Greek in particular. The results of this research indicate that job satisfaction is not independent in all job facets and that satisfaction with one facet might lead to satisfaction with another. More specific, according to the survey results the job satisfaction is correlated with the efficiency, commitment, customer service.

Platsidou and Agalotis (2009) looked into the job satisfaction of 127 special education teachers and found their satisfaction to be considered relatively high in aspects of their work, such as satisfaction with the job itself, school management and the organization as a whole. The satisfaction regarding working

conditions was moderate, while the one concerning the prospects for promotion and remuneration was low.

Markovits et.al (2007) studied the relationship between the organizational commitment profile and the work satisfaction among workers in the Greek private and public sector. The sample consisted of 1,119 private and 476 civil servants and came from businesses, services and organizations in Northern Greece. Their research has focused on two aspects of satisfaction: exogenous satisfaction (such as salary, job security, staff policies, interpersonal relationships, etc.) and endogenous satisfaction (such as creativity, opportunities for personal development, sense of personal achievement etc).

They found that employees in the public sector had significantly more endogenous satisfaction than those in the private sector, with no significant difference in external satisfaction.

Demoussis, M. and Giannakopoulos (2007) found that Greek workers in the private sector were less satisfied than those in the public sector. Indeed, they found that the difference is significantly in favor of the public in all its aspects. Their analysis has shown that this can be explained by the different features of the workers and the internal characteristics of each sector. Although, they consider it worthwhile to investigate the possible connection of the greater public service satisfaction with the corruption phenomenon of the public sector.

Saiti (2007) explored the factors that affect job satisfaction in 1200 elementary school teachers in Greece. He/ She found out that the most important of them are grouped by category as follows: the role of the manager and the school environment, the probability of promotion and the work benefits, the educational administration and job rewards, remuneration, the overall organization of the school (such as clear educational goals and emotional support of teachers by the manager), the general satisfaction that teachers have from their work (eg factors such as feeling that their work is not important, etc.) and finally the cooperation between teachers (eg factors such as conflicts between teachers at school, etc.).

Koustelios (2001) explored the level of job satisfaction of 354 teachers in 40 Greek schools. The results showed that teachers were satisfied with their relationship with their superiors and working conditions. On the contrary, they were dissatisfied with the salary and promotion opportunities. In the same direction, Koustelios (2005), studying 437 physical education teachers in Greece, found that they were pleased with their own work and supervision, but were dissatisfied with their salary, promotion opportunities and working conditions.

Based on the above literature, the survey was conducted using the MSQ model. Analytically, the factors of job satisfaction are formed as follows (Table 1).

TABLE 1 - CONCEPTUAL MODEL OF SATISFACTION'S FACTORS

	Satisfaction's factor	Description	Modell
Endogenous Satisfaction	Activity	the possibility of being busy at all times	Minnesota Satisfaction Questionnaire (MSQ) (short form, 1977)
	Independence	the opportunity to work alone	
	Variety	the opportunity to do different things from time to time	
	Social status	the opportunity to be a valuable member of the society	
	Ethical values	the ability to do things that are not against my conscience	
	Security	the stability at the workplace	
	Social Responsibility	the opportunity to do things for other people	
	Power	the opportunity to tell people what to do	
	Ability exploitation	the ability to do something that takes advantage of my abilities	
	Responsibility	the freedom to use my judgment	
	Creativity	the opportunity to test my own methods while working	
	Achievement	the sense of accomplishment I get from my job	
Exogenous Satisfaction	Supervision-Human Relations	the way supervisors handle the employees	Minnesota Satisfaction Questionnaire (MSQ) (short form, 1977)
	Supervision-Technique	the ability of the supervisor / manager to take decisions	
	Policies and Practices	the way in which the policies of the service are implemented	
	Remuneration	the pay and amount of work	
	Growth	the possibilities for promotion in this job	
	Recognition	the way of praising when a job is done well	
	Colleagues	the way of co-existence between colleagues	
Working conditions	the conditions of the workplace		

3. RESEARCH METHODOLOGY

Research Objective

The survey was conducted using the structured questionnaire method, which in the non-demographic part follows exactly the MSQ model (see Appendix). The data were collected by officials from the Region of Epirus, Greece working in all four regional units. It is recognized that this may prevent the generalization of findings, although the sample size is considered to mitigate this disadvantage. The sample includes officials from all administrative levels.

With 20 questions in the questionnaire, the size of the sample should be around 100. With a modest degree of responsiveness to the questionnaires, the target number of respondents was 150. This figure corresponds to about 30% of the employees in the Region of Epirus, Greece, where almost 500 people are working.

Collection and processing of data

The collection of data took place between September and November 2018. The sample consisted of administrative officers in the Region of Epirus, Greece working in all four regional units. An anonymous questionnaire was distributed to them. Employees were informed of the purpose of the questionnaire and participated voluntarily. Responses remain confidential and are used for research purposes only.

The questionnaires were collected about 10 days after their distribution. Their completion time was estimated at about 10 minutes. In total, 150 questionnaires were distributed, and 105 responses were collected. The answer to questions rate is 1:5 and is considered satisfactory. According to the study by Hinkin (1995), who studied sample sizes in organizational surveys, noticed that the ratio of questions to answers ranged from 1:4 to 1:10.

For the satisfaction assessment the MSQ questionnaire was used in its short format containing 20 questions (see Appendix). This includes two categories:

- Endogenous satisfaction (questions: 1, 2, 3, 4, 7, 8, 9, 10, 11, 15, 16, 20)
- Exogenous satisfaction (questions: 5, 6, 12, 13, 14, 17, 18, 19)

The answers to the questionnaire are weighted on a five-level scale as follows: 1=none, 2=scarcely, 3=fairly, 4 = much, 5=very much. Respondents are asked to assess the extent to which one of the proposed factors is applicable.

The analysis of the collected data was made descriptively by means of the statistical SPSS package.

Statistical accuracy of indicators

In order to check the consistency of satisfaction questions, Reliability Analysis was used to calculate the Cronbach Alpha coefficient. Due to the small number of tiered questions, the reliability analysis is performed in total for all categories and not for each one.

The data processing and results show that the Cronbach Alpha coefficient=0.908 confirms the reliability of the queries used. Consequently, the results of the statistical analysis below are considered safe.

4. RESULTS AND DISCUSSION

The data of our study consists of 105 employees, 58,10% of them are Male and the rest 41,90% are Female. Out of 105, 69,50% of them are employees and 30,50% are Directors or Office Managers. Finally, 72,40% belongs to educational group of High School or Elementary Education whereas remaining 27,60% are from group University Education (Table 1).

TABLE 1 - GENERAL CHARACTERISTICS OF THE SAMPLE

	Frequency	Percentage
Gender		
Male	61	58.10
Female	44	41.90
Position		
Directors/Office Managers	31	30.50
Employees	74	69.50
Educational Level		
High School/Elementary Education	29	27.60
University Education	76	72.40

Source: Data research

The results of the analysis are plotted by each category of satisfaction, both with respect to the averages of the answers and the number of respondents who rated each factor low (1 or 2 in the scale) or high (i.e. 4 or 5 in the scale), as regards both the endogenous satisfaction as well as the exogenous satisfaction. The same methodology is applied by Kaiser (2014), Batiou and Valkanos (2013). In order to determine the statistical significance per employees group we applied the chi square test (χ^2), which is the most appropriate method for our sample, more specifically:

Endogenous Satisfaction

As we can see from the results of our research and in accordance with the findings of Jung, et.al. (2007) the most endogenous work satisfaction that workers receive, is from security at work ($M=3.75$), which is guaranteed by the law of permanence in the Greek public administration. Negative responses are likely to refer to specific responsibilities held by the respondent and not related to the job itself. Also important for respondents is the feeling of social responsibility ($M=3.65$) by doing things for other people and being constantly active ($M=3.60$), as Kaiser (2014) concludes. Ethical values ($M=3.36$) lie high in the answers, as the overwhelming majority think that it is important not to work against our consciousness. However, it is important to find that 1 in 4 is forced to do things that are incompatible with their ethical

principles. Positive work satisfaction is affected when the employee performs work using his or her skills (M=3.27). However, a significant percentage (around 30%) considers that skills are lost and not exploited. Likewise, most respondents find satisfaction through the variety of their work (M=3.15). However, there is also a 35% of the respondents who are unhappy because of the monotony of their work, as shown by the Wright and Davis (2003) study.

In contrast, the majority of workers show dissatisfaction with their autonomy at their work (M=2.84), as shown by the Kaiser study (2014). Similarly, most respondents expressed dissatisfaction with the fact that they have limited creativity (M=2.93) at their work in the public sector and cannot use their judgment (M=2.96). Also, 1 in 3 respondents and in agreement with the study of Rhodes et.al (2004) are not satisfied through their work (M=2.98) and about 40% consider that the social position resulting from their work falls below of expectations (M=2.85). The descriptive measures of endogenous satisfaction's factors showed as detailed in Table 2 below.

TABLE 2 - ENDOGENOUS SATISFACTION'S FACTORS (HIGH/LOW EVALUATIONS AND AVERAGE RATE OF RESPONSES)

	None or scarcely	Much or very much	Average rate of responses
Activity	13,30%	48,50%	3,60
Independence	37,10%	19%	2,84
Variety	33,30%	36,20%	3,15
Social status	32,40%	19%	2,85
Ethical values	20,90%	38,10%	3,36
Security	13,30%	61,90%	3,75
Social Responsibility	16,20%	57,10%	3,65
Power	21,90%	28,60%	3,20
Ability exploitation	28,60%	36,20%	3,27
Responsibility	29,50%	22,90%	2,96
Creativity	31,40%	19%	2,93
Achievement	30,50%	30,50%	2,98

Source: Data research

The study of endogenous satisfaction per group of employees generally reveals that the most satisfied workers are Males, Director/Office Managers and those at University Education level (Table 3). With the aid of chi square analysis (X²), we find statistically significant differences in answers among pairs as follows:

TABLE 3 - ENDOGENOUS SATISFACTION'S FACTORS PER GROUP EMPLOYEES (HIGH/LOW EVALUATIONS)

Employee /factors	Male		Female		X ²	Director / Office Manager		Employee		X ²	University Educational		High School /Elementary Educational		X ²
	None or scarcely	Much or very much	None or scarcely	Much or very much		None or scarcely	Much or very much	None or scarcely	Much or very much		None or scarcely	Much or very much	None or scarcely	Much or very much	
Activity	10,2 %	54,6 %	15,3 %	44,1 %	7,982**	12,2 %	55,3 %	14,6 %	44,3%	6,987***	9,5 %	53,1 %	18,3 %	41,3 %	8,248***
Independence	34,5 %	21,3 %	38,9 %	19,8 %	3,459	32,2 %	24,8 %	36,9 %	19,4%	4,589	36,3 %	18%	37,5 %	19,2 %	2,745
Variety	31,6 %	37,7 %	36,2 %	34,5 %	2,783	29,9 %	36,3 %	33,4 %	27,3%	3,541	26,2 %	39,6 %	32,9 %	35,8 %	4,593
Social status	27,5 %	24,2 %	33%	20,3 %	2,789	20,3 %	28,1 %	35,9 %	17,3%	9,922**	22,5 %	29,6 %	33,5 %	18,1 %	9,243**
Ethical values	21,2 %	38,5 %	20,1 %	37,9 %	3,788	22,6 %	37,3 %	22,1 %	38,7%	2,985	19,6 %	41,2 %	22,5 %	38%	5,421
Security	12,5 %	62,3 %	13%	61,1 %	2,698	10,8 %	65,1 %	13,9 %	61,6%	3,654	11,5 %	58,9 %	13,1 %	62,2 %	3,599
Social Responsibility	13,7 %	62,5 %	17,2 %	56,4 %	8,543*	11,9 %	64,9 %	14,4 %	61,8%	2,748	15,8 %	55,9 %	17,4 %	58,9 %	4,598
Power	15,2 %	35,3 %	22,4 %	26,3 %	9,986*	14,6 %	37,6 %	27,6 %	24,1%	6,922*	17,4 %	37,8 %	23,8 %	27,8 %	10,643*
Ability exploitation	26,1 %	39,3 %	29,8 %	35,2 %	4,521	23,9 %	42,7 %	33,6 %	31,9%	5,879***	20,8 %	44,6 %	31,4 %	34,7 %	7,856**
Responsibility	28,6 %	24,6 %	31,2 %	21,6 %	4,241	27,9 %	28,6 %	31,7 %	21,8%	4,583	25,3 %	27,9 %	30,2 %	24,3 %	3,215
Creativity	29,3 %	21%	33,5 %	18,2 %	5,985	16,3 %	28,6 %	34,2 %	19,8%	6,922**	30,2 %	20,1 %	32,5 %	20,9 %	2,125
Achievement	30%	31,2 %	31,2 %	30,1 %	3,784	21,1 %	38,2 %	32,7 %	27,5%	10,251***	28,4 %	31,6 %	30,1 %	29,6 %	2,896

***, ** and * indicate statistical significance at levels 10, 5 and 1%, respectively

Males appear to be more satisfied than Females as regards Activity (at level of statistical significance $p < 5\%$), Social Responsibility (at level of statistical significance $p < 1\%$) and Power (at level of statistical significance $p < 1\%$), a fact that could be attributed to Males more intense desire to pursue a career. Director/Office Managers appear more satisfied by their Social status (at level of statistical significance $p < 10\%$), Power (at level of statistical significance $p < 5\%$), and Ability exploitation (at level of statistical significance $p < 10\%$), Creativity (at level of statistical significance $p < 5\%$) and Achievement (at level of statistical significance $p < 10\%$), a fact obviously related to the increased competences and the position of higher responsibilities held by Director/Office Managers compared to Employees. Finally, those at University Education level are more satisfied as regards Activity (at level of statistical significance $p < 10\%$), Social status (at level of statistical significance $p < 5\%$), and Power (at level of statistical significance $p < 1\%$) and Ability exploitation (at level of statistical significance $p < 10\%$), a fact that may be attributed to the fact that employees at a University Education level have increased qualifications compared to those at High School/Elementary level.

Exogenous satisfaction

From the analysis about exogenous job satisfaction and according to the research by Chatzopoulou et al., 2015, Adroviceanu et al., 2010, Platsidou and Agaliotis, 2009, Jung, et al., 2007, Koustelios, 2005; Koustelios, 2001; we found that, employees' dissatisfaction with their remuneration is strong ($M=2.04$), as well as their potential for growth ($M=2.38$), which is probably attributed to the obsolete promotional system prevailing in the Greek government. Similarly, respondents appear dissatisfied with the recognition of their work ($M=2,65$) and the policies and practices of their service ($M=2,46$), contrary to the findings of Adroviceanu et al. (2010). Finally, 4 out of 10 workers consider their working conditions to be unsatisfactory, as concluded by Koustelios (2005).

TABLE 4 - EXOGENOUS OF SATISFACTION'S FACTORS (HIGH/LOW EVALUATIONS AND AVERAGE RATE OF RESPONSES)

	None or scarcely	Much or very much	Average rate of responses
Supervision-Human Relations	27,60%	28,60%	3,14
Supervision-Technique	22,90%	23,20%	3,22
Policies and Practices	50,50%	11,40%	2,46
Remuneration	64,80%	1,90%	2,04
Growth	52,40%	5,70%	2,38
Recognition	39,00%	9,50%	2,65
Colleagues	22,90%	32,40%	3,22
Working conditions	36,20%	15,20%	2,79

On the contrary, the majority of respondents are pleased with the cooperation with their colleagues (M=3,22), as in the studies of Batiou and Valkanos, 2013; Adrovicéanu, et.al. In regard to the supervisory factor, as expressed both by the way in which the employees are handled (M=3,14), as well as the superior's ability to make decisions (M=3.22), the views of the respondents are shared. Exogenous satisfaction gave the following descriptive measures, as detailed in Table 4.

TABLE 5 - EXOGENOUS SATISFACTION'S FACTORS PER GROUP EMPLOYEES (HIGH/LOW EVALUATIONS)

Employee /factors	Male		Female		X ²	Director / Office Manager		Employee		X ²	University Educational		High School / Elementary Educational		X ²
	Non e or scarcely	Muc h or very muc h	Non e or scarcely	Muc h or very muc h		Non e or scarcely	Muc h or very muc h	Non e or scarcely	Muc h or very muc h		Non e or scarcely	Muc h or very muc h	Non e or scarcely	Muc h or very muc h	
Supervision- Human	25,3 %	32,1 %	27,9 %	27,5 %	4,213	19,8 %	37,4 %	28,7 %	24,4 %	6,922**	26,7 %	27,9 %	24,9 %	32,7 %	10,643*
Supervision- Technique	22,6 %	24,3 %	24,1 %	20,9 %	3,985	24,3 %	21,8 %	22,6 %	23,8 %	7,521	22,4 %	24,3 %	21,7 %	25,2 %	3,562
Policies and Practices	48,2 %	16,2 %	52%	10,6 %	5,821 952	41,9 %	20,2 %	53,2 %	12,9 %	9,568*	52,4 %	9,8 %	50,1 %	11,2 %	6,652
Remuneration	65,3 %	1,5%	64,1 %	2,6%	6,235	66,3 %	1,8%	69,1 %	1,1%	5,421	68,9 %	1,0 %	55,7 %	3,4%	9,521*
Growth	55,2 %	4,40 %	50,1 %	6,5%	5,412	49,2 %	6,70 %	59,9 %	1,25 %	8,541***	58,8 %	4,5 %	49%	6,2%	7,521**
Recognition	38,5 %	10,3 %	41,1 %	8,7%	7,582	33,5 %	18,7 %	37,5 %	12,7 %	6,521	46,3 %	7,4 %	34,7 %	13,8 %	9,845*
Colleagues	19,8 %	35,8 %	24,2 %	29,6 %	6,584	23,7 %	34,9 %	22,7 %	34,7 %	4,523	20,9 %	33,2 %	23,8 %	31,9 %	5,521
Working conditions	33,8 %	17,9 %	38,2 %	14,6 %	3,568	37,6 %	16,7 %	31,4 %	16,7 %	4,896	38,2 %	14,3 %	33,8 %	19,6 %	6,410

***, ** and * indicate statistical significance at levels 10, 5 and 1%, respectively

Source: Data research

Contrary to endogenous satisfaction, studying the exogenous satisfaction factors per group of employees results are ambiguous. We observe that in most indicators the workers appear not satisfied (Table 5). More specifically with the aid of chi square analysis(χ^2), we find statistically important differences among pairs, as follows: Director/Office Managers appear more dissatisfied than those working in Supervision-Human Relations (at level of statistic significance $p < 5\%$), compared to those working in Policies and Practices (at level of statistical significance $p < 1\%$), and to those working in Growth (at level of statistical significance of $< 10\%$) a fact that can possibly be attributed to the increased expectations related to their work of those in this category as compared to Employees.. Those at University Education level are more dissatisfied as regards Remuneration (at level of statistic significance $p < 5\%$), Recognition (at level of statistic significance $p < 1\%$) and Ability exploitation (at level of statistical significance $p < 1\%$), a finding possibly connected to the fact that those at University Education level and Director /Office Managers have greater expectations compared to those at High School/Elementary Education level. No statistically significant results were obtained for the group Male and Female.

Overall, the individual responses to endogenous and exogenous satisfaction reveal that the endogenous satisfaction of creativity, skill development, personal achievement, security, etc., is higher than the external one, ie the factors such as the remuneration, development, working conditions, supervision, etc., which in a large part is probably due to the deep economic and social crisis Greece has experienced over the past 10 years (Table 6).

TABLE 6 - AVERAGE AND VARIATION OF SATISFACTION BY CATEGORY

Satisfaction	Average	SD
Endogenous	3,215	0,752
Exogenous	2,654	0,884

Source: Data research

5. CONCLUSIONS

In this study we have analyzed the satisfaction of workers from their working environment even during difficult economic periods, such as the current financial crisis. As a case study, work satisfaction is examined among employees of the Region of Epirus who, on a daily basis, serve the needs of a large geographical region and come into contact with the public as well as with other services at local, regional and national level. In order to achieve this, we conducted an empirical research in 2017 using the structured questionnaire method in accordance with the Minnesota Satisfaction Questionnaire

(MSQ) model. Data from 105 district employees were collected and processed descriptively through SPSS.

From the findings of this research and in accordance with those of other international surveys (Mihailov, 2016; Kaiser, 2014; Batiou and Valkanos, 2013; Steijn, 2004; Lacy and Sheehan, 1997; Riggs and Beus, 1993), we conclude that workers are generally satisfied, at level that can be classified as medium to high. In addition, we note that satisfaction from endogenous factors (e.g. activity, independence, creativity, security, social status etc.) is higher than exogenous (e.g. human relations, remuneration, colleagues, working conditions etc.).

Following the study of endogenous satisfaction per group of employees we ascertain that males, Director/Office managers and those at a university education level are most satisfied at work.

On the other hand, by studying the exogenous factors of satisfaction per group of employees, we observe that those least satisfied are the Director/Office Manager and those at University Educational level.

We generally noticed that the Greek public sector needs to become more operational, efficient, decentralized and able to work in a flexible and efficient way, responding to internal and external changes. Ensuring the benefits of public administration will make it more effective and more efficient for citizens, contributing decisively to ending the economic and social crisis that has been rampaging Greece for about 10 years already.

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Appendix: Research Questionnaire

A. General characteristics

Gender:
Education Level:
Position:

B. Endogenous and exogenous job's satisfaction questions

	None	Scarcely	Fairly	Much	Very much
1.the possibility of being busy at all times					
2. the opportunity to work alone					
3. the opportunity to do different things from time to time					
4. the opportunity to be a valuable member of the society					
5. the ability to do things that are not against my conscience					
6. the stability at the workplace					
7. the opportunity to do things for other people					
8. the opportunity to tell people what to do					
9. the ability to do something that takes advantage of my abilities					
10. the freedom to use my judgment					
11. the opportunity to test my own methods while working					
12. the sense of accomplishment I get from my job					
13. the way supervisors handle the employees					
14. the ability of the supervisor / manager to take decisions					
15. the way in which the policies of the service are implemented					
16. the pay and amount of work					
17. the possibilities for promotion in this job					
18. the way of praising when a job is done well					
19. the way of co-existence between colleagues					
20. the conditions of the workplace					