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## Article

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## **The effect of job satisfaction on employee commitment**

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## The Effect of Job Satisfaction on Employee Commitment

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### ABSTRACT

#### Purpose

This study examines the degree of employee satisfaction from the different factors that theoretically affect satisfaction. Moreover, the relationship between the factors of job satisfaction and organizational commitment on private employees is examined.

#### Design/methodology/approach

In order to achieve the objectives of this study, the survey was conducted using a structured questionnaire in January and March 2018. The final sample size consists of 439 private employees in Greece. The most frequent questioned industry is services, followed by trade and manufacturing at a smaller rate. The research instrument for content and construct validity was tested. Data were analyzed using ANOVA, Correlation and Regression analysis.

#### Findings

The results showed that the "Social Aspects of job", "Job Characteristics" and "Work Environment", are the most important factors positively affecting organizational commitment, while "Promotion" and "Rewards" are not significant factors.

#### Research limitations/implications

During survey some limitations were found to exist, the largest being the small sample size. Additionally, subjective measures of employee satisfaction were used instead of objective measures. However, this study shows that job satisfaction is inherently interwoven with organizational commitment. Since organizational commitment has a direct impact on employee retention, performance, and organizational behavior, it is essential to meet the required conditions for its existence

#### Originality/value

In the recent years of Greek economic crisis, very few private sector studies have addressed the satisfaction of employees and their commitment to the organization

#### Keywords:

Job Satisfaction, Organizational  
Commitment, Private  
Employees, Greek Organizations

Eastern Macedonia and Thrace Institute of Technology

### 1. Introduction

The modern business environment, being particularly dynamic, requires new techniques for achieving competitive advantage. In accordance with Zeygaridis and Stamatiadis (1997), the creation of an excellent climate of cooperation with employees is a precondition for reaching a business's final objectives. Therefore, the satisfaction of employees is considered an important factor in the success of the company, since the worker is perhaps the most important component. Businesses appreciating these factors and making proper use of their collected data may shape the economic and working conditions governing their operation, placing greater emphasis on relations with the employees (Terzidis and Tziwrtzakakis, 2004; Bontis et al., 2011). Many surveys have been conducted in the last decade for job satisfaction

in the Greek private sector, highlighting the relationship between satisfaction and organizational commitment. In fact, the creation of employment captive workers has proven to be the organization's most difficult task to achieve. The outcome of various surveys has shown that work engagement is positively associated with organizational results, such as the low rate of resignations, high organizational commitment, high financial and business organizational performance (Salanova et al., 2005; Steger et al., 2013; Saari and Judge, 2004). The Specific Objective of the Study is: Measurement of the effect of job satisfaction on organizational commitment.

### 2. Literature Review and Research Hypotheses

#### 2.1. The concept of job satisfaction

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Job satisfaction reflects the general attitude of employees towards the work, whether they are happy with their profession or their work (Porter et al., 1975; Locke and Henne, 1986; Spector, 1997). In particular, job satisfaction highlights the degree of identification of personality and the needs of the employee with the characteristics of the working environment (Wanous and Lawler, 1972; Holland, 1996), while connected to the mental health of workers, profitability and satisfaction (Spector, 1997). Also, job satisfaction has a positive impact on running a business, becoming a major factor in the emergence of well-functioning working conditions. At the same time, it plays an important role in gaining and maintaining competitive advantage under the appropriate leadership style (McGrath and MacMillan, 2000), as an increase in performance provides quality service and products, faster service and creates long-term partnerships, ensuring sustainability and development (Bontis et al., 2011). However, the negative or positive critical assessment is directly related to the mood and emotional situation in which the worker exists at a given time, the prevailing working conditions, as well as the requirements of the connection work and expectations (Bush and Middlewood, 2005).

## **2.2. Factors influencing job satisfaction**

Over the years, a plethora of surveys investigated the factors influencing satisfaction of workers, the result of which categorize (a) internal and (b) external factors (Spector, 2000). Internal factors focus on the personality factors, including beliefs and values that shape the perception and the general attitude of life (Buitendach and Witte, 2005). Specifically, the worker's personality is one of the main factors in job satisfaction. The locus of control and negative affectivity as personality characteristics play a crucial role. Additionally, demographic features influence the level of job satisfaction and include gender, age and educational level. Satisfaction varies among men and women (Gonzalez et al., 2008; Hodson, 1989) and it is low in the early years of employment and steadily increases (Spector, 2000; Greenberg and Baron, 2000), while higher levels of job satisfaction exist for employees with a higher level of education (Anderson et al., 2001; Scott et al., 2005). External factors associated with both the nature of the work and other parameters. In particular, Hackman and Oldham (1974) developed the theory of characteristics of work affecting the attitude of workers. This theory refers to (i) skills variety, (ii) task identity, (iii) task significance, (iv) job feedback and (v) autonomy (Judge and Klinger, 2007; Spector, 2000; Saari and Judge, 2004). Subsequently, the theory of roles is an important factor (Homans, 1950; Katz and Kahn, 1966), according to which the required behavior of a worker in a defined role arises; indeed, the concepts of ambiguity and role conflict are variables here (Spector, 1997). Moreover the following parameters are the most popular and important factors influencing job satisfaction: (i) pay: a multitude of studies have highlighted the fee as one of the major factors in worker satisfaction, because it is a stimulating force for this (Robbins and Judge, 2011), (ii) working conditions: normal working conditions can positively impact on satisfaction of the workers against the adverse conditions

(Bacotic and Batic, 2013; Le et al., 2014), as they relate to the cleaning and shaping of the space (Locke, 1976), (iii) relations with co-workers: the camaraderie in combination with good interpersonal relationships of employees contribute to creating a positive and more productive work climate, favoring the employee's emotional state (Robbins and Judge, 2011) and (iv) promotion: promotion capabilities provide opportunities for personal growth, taking more responsibilities and social recognition, and is directly related to an increase in earnings (Locke, 1976).

## **2.3. The concept of organizational commitment**

Organizational commitment is considered one of the most important elements of each company, as is the power between the businesses internal and external environment that represents the extent to which the employee feels a part of the business. Additionally, as an extra element, the correlation between personal and organizational objectives and values is given by Ghorbanhosseini (2012). At the same time, organizational commitment is determined with regard to the psychological condition of the worker, in which is characterized the relationship of an employee with the company, leading to a strong belief in the values of the business, intention to pay significant effort for the achievement of objectives, as well as a desire for continued cooperation (Meyer and Allen, 1991; Liden et al., 2000; Mowday and Steers, 1979; Porter et al., 1974). Organizational commitment directly influences performance, as well as the development of organizational behavior (Meyer and Herscovitch, 2001; Iordanoglou, 2008; Bakola and Nicholaou, 2012).

## **2.4. Types of organizational commitment**

The complexity of organizational commitment led investigators to establish three dimensions (Meyer and Allen, 1997; Maslach and Leiter, 1997; Robbins and Judge 2011; Bakola and Nicholaou, 2012): (i) Affective Commitment: the positive emotion of the employee against the company and its objectives (Mowday and Steers, 1979; Meyer and Allen, 1991), which occurs through job satisfaction cooperation. In this way the development of strong emotional relationships between the employee and the company, is promoted, gaining long-term and stable relations of trust (McMahon, 2007), (ii) Continuance Commitment: represents the conscious choice of residence of the worker in the company, taking into account the potential cost involved with the disengagement (Meyer and Allen, 1991), (iii) Normative Commitment: social obligation of the employee to the company and is mainly based on ethical reasons and factors (McMahon, 2007).

From all the above-mentioned, the hypotheses defined are:

**H1:** There is a positive relationship among job characteristics and organizational commitment.

**H2:** There is a positive relationship among rewards and organizational commitment.

**H3:** There is a positive relationship among promotion and organizational commitment.

**H4:** There is a positive relationship among work environment and organizational commitment.

**H5:** There is a positive relationship among social aspects of job and organizational commitment.

### **3. Research Methodology**

#### **3.1. Sample and Data Collection**

In order to reach the objectives of this study, research was conducted during the months of January to March of 2018. A structured questionnaire was used as the research instrument. The study's target population was private Greek enterprise employees throughout Greece; 60% of them are men and 40% women. Particularly, 11% of

respondents are aged between 15-24, 35% between 25-29, 26% between 30-44, 21% between 45-64, while 7% are aged over 65. It is noteworthy that 54% of respondents are university graduates, 25% are secondary school graduates and 18% are postgraduate study graduates, while 2% are holders of doctoral and 1% are primary graduates. The majority of businesses (50%) in the returned questionnaires are services, 40% commerce and 10% industries. The final sample size is 439 enterprises, of which 22% are very small (<9 employees), 40% are small (10-49 employees), 28% are medium-sized (50-249 employees), while 10% are big-sized enterprises (over 250 employees). In employment, 74% are employees, 20% are supervisors and only 6% are managers.

#### **3.2. Instrument Development**

The dual meaning of job satisfaction was examined as the independent variable and is measured in two ways: either as a result of the factors that affect it, or as a total. The measurement of job satisfaction was undertaken either via an interview process or using questionnaires. For this reason, a variety of questionnaires have occasionally been developed, the most important of which are listed below: (i) Smith, Kendal and Hulin's (1969) Job Descriptive Index (JDI) consisting of five areas: work, salary, promotion possibilities, the head and the colleagues. The answers are of the form "Yes", "I'm not sure" and "No", and from the sum of the results of these dimensions, the total job satisfaction index is established (Spector, 1997; Candan, 2013; Vroom, 1964), (ii) Minnesota Satisfaction Questionnaire (MSQ) (Weiss, 2002) with two comprehensive editions of 100 items and a Summary of 20 items. Points of reference are the 20 dimensions: camaraderie, promotion, salary, relationship with supervisor, safety, achievements, recognition, responsibility, political organization, creativity, diversity, autonomy, authority, social prestige, capacity utilization, ethical values, social services, work conditions, technical support, activity (Candan, 2013; Spector, 1997). The range of responses range from "Very satisfied" to "Very dissatisfied" in a five-point scale (Zavlanos, 2002; Weiss, 2002), (iii) Job in General Scale (JIG) with 18 elements in the form of adjectives or short phrases with a possibility to reply "Yes", "no" or "not sure" (Smith et al., 1987). This is considered a particularly reliable method and sufficiently associated with other measurement scales of overall work satisfaction (Russell et al., 2004; Balzer et al., 1990).

For this study, the instrument's development was based on an extensive literature review and all the items which have been used in previous relevant studies were adopted. It consists of three parts with 38 items. The first part refers to general information about the enterprises and private employees, such as the type and size of business, gender, age, education. The second part evaluates job satisfaction of private employees and consists of twenty-two statements, which are adopted from Aspioti, 2013; Lapanaiti, 2012; Anyango, 2015; Men, 2010 and Mohamed, 2016. The intentions of job satisfaction are: "Job Characteristics", "Pay and Promotion", "Work Environment" and "Social Aspects of the job"; a five-point Likert scale was used for the 22 statements (1=Strongly Disagree through to 5=Strongly

Agree). The third and most important part consists of four statements, adopted from Zamora and Madariaga (2017) that refer to organizational commitment. A five-point Likert scale was again used for these statements (1=Strongly Disagree through to 5=Strongly Agree). The statements are: "I feel confident about the business", "I suggest my friends to work in the business that I work", "I'm willing to pay great effort to help the company succeed", "I feel proud when I tell others that I belong to the latter".

#### **3.3. Validity and Reliability of Research Instrument**

Several tests were performed to establish Content Validity, Construct Validity and Reliability of the research instrument. In particular, content validity addresses how well the items developed are a representative sample of all the items that might measure the construct of interest (Kimberlin and Winterstein, 2008). To ensure content validity primary a review of the literature on the subject of the study was made and secondly a pilot test in a panel of experts (professors and professionals) was conducted.

The Construct Validity test was the next step undertaken in the validation procedure, aimed at the harmony between a theoretical concept and a specific measurement process, evaluated with the three methods above (Cao and Dowlatshahi, 2005): (i) A test of unidimensionality, which gives evidence of a single latent construct (Flynn et al., 1990) using exploratory factor analysis (EFA). Principal Component Analysis was used for the extraction of the factors. The Varimax rotation method of the axis was adopted; this is one of the most popular methods of orthogonal rotation (Sharma, 1996; Hair et al., 1995). Bartlett's test of sphericity was performed to testing the appropriateness of the data for factor analysis. Moreover, Kaiser-Mayer-Olkin's (K.M.O) Measure of Sampling Adequacy (M.S.A) of was used; this is the most popular diagnostic measure and it estimates the extent to which some items belong to the same factor. K.M.O should be greater than 0,8 (Sharma, 1996) and for the determination of the number of the factors the criterion of Eigenvalue was used. Factors whose Eigenvalue exceeds one are selected. Finally, as far as the test of significance of items is concerned, the factor loadings were checked.

After running a factor analysis with the 22 items used to determine job satisfaction, a factor model was created with 5 distinctive factors. A second factor analysis

was performed for the 4 items of employee commitment. The subsequent results of factor analysis are presented in

tables 1 and 2. All the results are very satisfying as they cover the restrictions mentioned previously.

**Table 1.** Factor Analysis for 22 items of job satisfaction

Items	Loadings	Factors
I understand how my job contributes to the achievement of the strategic goals of the company.	0,720	Job Characteristics  Eigenvalue 1,640
Through my work, my personal ambitions are met.	0,594	
I use important skills and my ability to perform my work.	0,745	
The training provided me develop my skills and knowledge.	0,537	
My workload is satisfactory.	0,524	
I feel that my fee is fair for the work they offer.	0,855	Rewards  Eigenvalue 1,111
The benefits you derive are better than those offered by other companies.	0,667	
Additional economic benefits (bonus) are satisfactory.	0,678	
The training provided me a factor for advancement or increased financial reward me.	0,527	Promotion  Eigenvalue 1,540
There are significant chances for advancement in my work.	0,740	
There are equal opportunities for all employees.	0,778	
Those who carry out their work properly are more likely development.	0,812	
The company has a good workforce.	0,630	Work Environment  Eigenvalue 8,353
The business that I work is known as a good employer locally.	0,618	
I am satisfied from the natural environment of the company.	0,628	
Communication in the business that I work ranges to satisfactory levels.	0,657	
There are relationships among colleagues of different parts.	0,710	
There are relationships among colleagues of the same Department.	0,833	Social Aspects of job  Eigenvalue 1,219
The company assumes responsibility for the society.	0,686	
The company assumes responsibility for the environment.	0,634	
The company has strong future growth prospects.	0,630	
The company outperforms its competitors.	0,741	
<b>K.M.O</b> = 0,845 <b>Bartlett's test of sphericity</b> Approx. Chi-square 5452,832 df 231 Sig. 0,000 <b>Total Variance Explained</b> 69,669%		

**Table 2.** Factor Analysis for 4 items of Commitment

Items	Loadings	Factors
I can trust my organization.	0,705	Commitment  Eigenvalue 2,598
I suggest my friends to work at the same organization.	0,810	
I'm willing to make great efforts to help the organization to succeed.	0,836	
I feel proud when I tell others that I belong to this organization.	0,863	
<b>K.M.O</b> = 0,719 <b>Bartlett's test of sphericity</b> Approx. Chi-square 671,134 df 6 Sig. 0,000 <b>Total Variance Explained</b> 64,943%		

(ii) A test of discriminant validity: Discriminant validity copes with the concept that differing constructs should be dissimilar (Burns and Bush, 1995). An indicator of discriminant validity can be found if the correlation

coefficients between the pairs of the variables are less than the Cronbach's alpha (Churchill, 1979). The table below presents the findings from the test which is very satisfactory.

**Table 3.** Test for Discriminant Validity

	1	2	3	4	5	6
Job Characteristics	0,691 <sup>a</sup>					
Rewards	0,517	0,797 <sup>a</sup>				

Promotion	0,444	0,520	0,765 <sup>a</sup>			
Work Environment	0,488	0,570	0,562	0,880 <sup>a</sup>		
Social Aspects of job	0,480	0,472	0,511	0,673	0,788 <sup>a</sup>	
Commitment	0,508	0,466	0,430	0,577	0,642	0,805 <sup>a</sup>

<sup>a</sup>Cronbach's alpha index

(iii) A test of Convergent Validity: Convergent Validity is believed to be acceptable when all item loadings are more than 0,5 (Wixom and Watson, 2001) and the items for all construct load onto one factor with an eigenvalue greater than 1. Tables 1 and 2 show all items, that have load greater than 0,5 and the eigenvalue for all factors is greater than 1.

**Table 4.** Reliability Analysis

Factors	Cronbach's alpha
Job Characteristics	0,691
Rewards	0,797
Promotion	0,765
Work Environment	0,880
Social Aspects of job	0,788
Commitment	0,805

#### 4. Data Analysis – Results

The means and standard deviations for all the factors used in the analysis are presented in table 5. According to the results, employees are more satisfied with “Job Characteristics”, “Work Environment” and “Social Aspects of Job”. On the other hand, they are less satisfied with “Promotion” and “Rewards”. Moreover, employees are very committed to their organization.

**Table 5.** Basic Measures

Factors	Mean	St. Deviation	Coefficient of Variation
Job Characteristics	4,00	0,501	12,52%
Rewards	3,41	0,903	26,48%
Promotion	3,33	0,850	25,52%
Work Environment	3,94	0,643	16,31%
Social Aspects of job	3,83	0,676	17,65%
Commitment	4,09	0,666	16,28%

The coefficient of variation shows that the extent of variability of the mean score is quite large. Thus, ANOVA is used to determine whether there are any statistically significant differences. In terms of gender, there is no difference in any factor. In any case Sig. F > 0.05. As to

**Table 7.** ANOVA, Education

Factors	F	Sig.
Job Characteristics	1,791	,113
Rewards	5,560	,000
Promotion	9,480	,000
Work Environment	2,911	,013

Finally, a reliability test, which measures the internal consistency, was performed. Internal consistency will be measured using Cronbach's alpha coefficient. Cronbach's *alpha* should be more than 0,7 so as to be characterized a reliable construct (Nunally, 1978). As shown in the table 4 all the indices are greater than 0,7 except from the index of job characteristics which is marginally accepted.

age of employees, there is a difference on “Rewards”, “Work Environment”, “Social Aspects of job” and “Commitment”.

**Table 6.** ANOVA, Age

Factors	F	Sig.
Job Characteristics	0,659	,621
Rewards	6,323	,000
Promotion	1,177	,320
Work Environment	2,428	,047
Social Aspects of job	5,163	,000
Commitment	7,661	,000

Specifically, more employees over 45 years of age are satisfied from “Rewards”, while less satisfied are those in the 30-44 years range. The “Work Environment” satisfies more the employees aged 15-24 and less those aged over 65 years, while “Social Aspects of job” shows more satisfied employees over 45 and less than 25-29 years. Finally, according to commitment, those employees aged above 45 are more committed in contrast to those in the 25-29 years range.

In addition, table 7 underlines the statistically significant differences between education level and all satisfaction factors except from “Job Characteristics”. From “Rewards” the most satisfied are the graduates of primary school, those who have master and doctoral and less, as are graduates of secondary school. “Promotion” and “Work Environment” show that postgraduates are the most satisfied employees in contrast with the graduates of primary and secondary school. The last factor of the “Social Aspects of job” positively affects more Ph.D. holders than secondary school graduates. The final result refers to Ph.D. holders and primary graduates as the most committed employees against university graduates.



Social Aspects of job	3,158	,008
Commitment	9,632	,000

A regression analysis was performed in order to examine the five hypotheses of our study. "Commitment" was used as the dependent variable, while "Job Characteristics", "Rewards", "Promotion", "Work Environment" and "Social Aspects of Job" were used as independent variables. The results indicate that the data are appropriate for regression analysis since the F- statistics is significant ( $F = 82,798$ ,  $\text{Sig.} F = 0,000 < 0,01$ ). Moreover, R-square with a value of 48,9% shows that about the half of the total variance of the dependent variable is explained by the five independent variables. The regression model was also tested for the autocorrelation and collinearity. The Durbin-Watson index of autocorrelation is  $2,079 \approx 2$ , which indicates that there is no problem of

autocorrelation in the model. The V.I.F. indexes of Collinearity are all smaller than 5 and thus none of the variables has problem of collinearity.

Finally, table 8 presents the standardized coefficients Beta of the variables from which we can conclude that all Independent Variables positively effect on the dependent variable "Commitment". However, the impact of "Rewards" and "Promotion" is not significant as the  $\text{Sig.} t > 0,05$ . The "Social Aspects of job" (Beta = 0,396) variable affects more on the "Commitment", followed by "Job Characteristics" (Beta = 0,192) and "Work Environment" (Beta = 0,166). Table 9 presents the final decision about the five hypotheses.

**Table 8.** Regression Coefficients

Independent Variables	Beta	t	Sig.
Job Characteristics	,192	4,477	,000
Rewards	,081	1,773	,077
Promotion	,007	,152	,879
Work Environment	,166	3,193	,002
Social Aspects of job	,396	8,164	,000

**Table 9.** Hypotheses Testing Results

Hypotheses	Decision
<b>H1:</b> There is a positive relationship among job characteristics and organizational commitment	Accepted
<b>H2:</b> There is a positive relationship among rewards and organizational commitment.	Not supported
<b>H3:</b> There is a positive relationship among promotion and organizational commitment	Not supported
<b>H4:</b> There is a positive relationship among work environment and organizational commitment	Accepted
<b>H5:</b> There is a positive relationship among social aspects of job and organizational commitment	Accepted

## 5. Conclusions

The primary objective of this study was the investigation of the effect of employee job satisfaction on organizational commitment, in the private sector of Greece. As a result of the analyses, it is understood that job characteristics such as objectives, instructions, etc., are the most important factor in employee satisfaction, followed by work conditions and social aspects of the job. On the other side, employees are not so satisfied with payments and promotion opportunities. This can be explained by the economic crisis which has affected Greece since 2009 and is more evident in the private sector. However, the great sense of organizational commitment is remarkable.

Finally, this study proves the positive relationship of "Job Characteristics", "Work Environment" and "Social Aspects of job" with the "organizational commitment". The impact of "Rewards" and "Promotion" is not supported because of non-significance. This study focused on the general private sector, so future researchers may investigate the relationship between job satisfaction and organizational commitment in each business sector. The recording and recognition of employee proposals for being more satisfied is another future subject of research arising from this study.

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## References

- Anderson, N., Ones, D. S., Sinangil, H. K. and Viswesvaran, C., 2001, *Handbook of industrial, work and organizational psychology: Organizational psychology*, Volume 2, Sage Publications, London.
- Anyango, A. C., 2015, "Effects of leadership styles on employee performance at Bank of Africa", *The Open University of Tanzania*, pp. 1-79.
- Aspioti, B., 2013, *Labor relations and job satisfaction: The case of OTE*, Diploma thesis, MBA, University of Patras.
- Bacotic, D. and Batic, T., 2013, "Relationship between Working Conditions and Job Satisfaction: The Case of Croatian Shipbuilding Company", *International Journal of Business and Social Science*, 4, 2, pp. 206-213.
- Bakola, M. and Nicholaou, I., 2012, *Organizational Psychology and Behavior*, Rosili Publishing.
- Balzer, W. K., Smith, P. C., Kravitch, D. A., Lovell, S. E., Paul, K. B., Reilly, B. A. and Reilly, C. E., 1990, *User's manual for the Job Descriptive Index (JDI) and the Job in General (JIG) scales*, Bowling Green, OH: Bowling Green State University.
- Bontis, N., Richards, D. and Serenko, A., 2011, "Improving service delivery: Investigating the role of information sharing, job characteristics, and employee satisfaction", *Learning Organization*, 18, 3, pp. 239-250.
- Buitendach J. H. and De Witte, H., 2005, "Job insecurity, extrinsic and intrinsic job satisfaction and affective organizational commitment of maintenance workers in a parastatal", *South African Journal of Business Management*, 36, 2, pp. 27-37.
- Burns, A. C. and Bush, R. F., 1995, *Marketing research*, Prentice-Hall, New York.
- Bush, T. and Middlewood, D., 2005, *Leading and Managing people in education*, Sage Publications, London.
- Candan, H., 2013, "A research towards determination of job satisfaction level of public employee: karaman governorship sample", *Journal of human Resource Management*, 1, 2, pp. 29-38.
- Cao, R. Q. and Dowlatshahi, S., (2005), "The Impact of Alignment between Virtual Enterprise and Information Technology on Business Performance in an Agile Manufacturing Environment", *Journal of Operations Management*, 23, 5, pp. 531-550.
- Churchill, G.A., 1979, "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, 16, pp. 64-73.
- Flynn, B., Sakakibara, S., Schroeder, R., Bates, K. and Flynn, E., 1990, "Empirical research methods in operations management", *Journal of Operations Management*, 9, 2, pp. 250-285.
- Ghorbanhosseini, M., 2012, "Analysis of team working on organizational commitment in Safa Industrial Group in Iran", *International Journal of Engineering and Science*, 1, 3, pp. 22-25.
- Gonzalez, S., Chapman, D., Lacivita, L., Harris, S. and House, G., 2008, "A study of the relationship between job satisfaction, age, degree major, and formal educational levels of employees working in human resources". Available at [www.scribd.com/document/342154595](http://www.scribd.com/document/342154595).
- Greenberg, J. and Baron, A. R., 2008, *Behavior in Organizations: Understanding and managing the human side of work*, Prentice Hall.
- Hair, J., Anderson, R., Tatham, R. and Black, W., 1995, *Multivariate data analysis with readings*, 4<sup>th</sup> ed., Prentice-Hall International, London.
- Hodson, R., 1989, "Gender differences in job satisfaction: why aren't women more dissatisfied?", *The Sociological Quarterly*, 30, 3, pp. 385-399.
- Homans, G. C., 1950, *The human group*, Harcourt, Brace and World, New York.
- Holland, J. L., 1996, "Exploring careers with a typology: What we have learned and some new directions", *American Psychologist*, 51, 4, pp. 397-406.
- Iordanoglou, D., 2008, *Human Resources Management in Modern Organizations: New Trends and Practices*, Kritiki Publications.
- Judge, T. A. and Klinger, R., 2007, *Job Satisfaction: Subjective Well-Being at Work. The Science of Subjective Well-Being*, Guilford Publications, New York.
- Katz, D. and Kahn, R. L., 1966, *The social psychology of organizations*, Wiley, New York.
- Kimberlin, L. C. and Winterstein, G. A., 2008, "Validity and reliability of measurement instruments used in research", *American Journal of Health-System Pharmacy*, 65, pp. 2276-2284.
- Lapanaiti, A., 2012, *Job satisfaction of the academic staff. An empirical investigation at the University of Patras*, Diploma thesis, University of Patras.
- Le, K., Donnellan, M. B. and Conger, R., 2014, "Personality Development at Work: Workplace Conditions, Personality Changes, and the Correspondence Principle", *Journal of Personality*, 82, 1, pp. 44-56.
- Liden R. C., Wayne S. J. and Sparrowe R. T., 2000, "An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships and work outcomes", *Journal of Applied Psychology*, 85, 3, pp. 407-416.
- Locke, E. A., 1976, "The nature and causes of job satisfaction", *Handbook of industrial and organizational psychology*, pp. 1297-1349.
- Locke, E. A. and Henne, D., 1986, "Work motivation theories", *International Review of Industrial and Organisational Psychology*, edited by C. L. Cooper and I. Roberston, pp. 1-35.
- Maslach, C. and Leiter, M. P., 1997, *The truth about burnout: How organizations cause personal stress and what to do about it*, CA: Jossey-Bass, San Francisco.
- McGrath, G. R. and MacMillan, I. C., 2000, *Entrepreneurial Mindset: Strategies for continuously creating opportunity in an age of uncertainty*, Harvard Business School Press Books.
- McMahon, B., 2007, *Organizational commitment, relationship commitment and their association with attachment style and locus of control*. USA: Georgia Institute of Technology.
- Men, L. R., 2010, "Measuring the Impact of Leadership Style and Employee Empowerment on Perceived

- Organizational Reputation", *Institute for Public Relations*, pp. 1-59.
- Meyer, J. P. and Allen, N. J., 1991, "A three component conceptualization of organizational commitment", *Human Resource Management Review*, pp. 61-89.
- Meyer, J. P. and Allen, N. J., 1997, *Commitment in the Workplace: Theory, Research and Application*, Thousand Oaks, CA, Sage.
- Meyer, J. P. and Herscovitch, L., 2001, "Commitment in the Workplace: Towards a General Model", *Human Resource Management Review*, 11, pp. 299-326.
- Mohamed, L. M., 2016, "Assessing the effects of transformational leadership: A study on Egyptian hotel employees", *Journal of Hospitality and Tourism Management* 27, pp. 49-59.
- Mowday, R. and Steers, R., 1979, "The measurement of organizational commitment", *Journal of vocational behavior*, 14, pp. 224-247.
- Nunnally, J. C., 1978, *Psychometric Theory*, 2<sup>nd</sup> ed., McGraw-Hall, New York.
- Porter, L. W., Steers, R. M., Mowday, R. T. and Boulian, V. P., 1974, "Organizational Commitment, Job Satisfaction, and Turnover among Psychiatric Technicians", *Journal of Applied Psychology*, 59, pp. 603-609.
- Porter, L. W., Lawler, E. E. and Hackman, J. R., 1975, *Behavior in organizations*, McGraw-Hill, New York.
- Robbins, P., S. and Judge, A. T., 2011, *Organizational Behavior: Basic Concepts and Modern Approaches*, Kritiki Publications, Athens.
- Russell, S. S., Spitzmuller, C., Lin, L. F., Stanton, J. M., Smith, P. C. and Ironson, G. H., 2004, "Shorter can also be better: The abridged job in general scale", *Educational and Psychological Measurement*, 64, 5, pp. 878.
- Saari, L. M. and Judge, T. A. 2004, "Employee attitudes and job satisfaction", *Human Resource Management*, 43, pp. 395-407.
- Salanova, M., Agut, S. and Peiro, J. M., 2005, "Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate," *Journal of Applied Psychology*, 90, pp. 1217-1227.
- Scott, M., Sworzel, K. and Taylor, W., 2005, "The relationships between selected demographic factors and the level of job satisfaction of extension agents" *Journal of Southern Agricultural Education Research*, 55, 1, pp. 102-115.
- Sharma, S., 1996, *Applied Multivariate Techniques*, Willey, New York.
- Spector, E. P., 1997, *Job Satisfaction: Application, Assessment, Causes, and Consequences*, Sage Publications, London.
- Steger, F. M., Littman-Ovadia, H., Miller, M., Menger, L. and Rothmann, S., (2013), "Engaging in work even when it is meaningless: positive affective disposition and meaningful work interact in relation to work-engagement", *Journal of Career Assessment*, 21, 2, pp. 26-29.
- Terzidis, K. and Tziwrtzakakis, K., 2004, *Human Resource Management: Personnel Management*, 1<sup>st</sup> Edition, Rosili Publishing, Athens.
- Vroom, H. V., 1964, *Work and Motivation*, John Wiley and Sons Inc, New York.
- Wanous, J. P. and Lawler, E. E., 1972, "Measurement and meaning of job satisfaction", *Journal of Applied Psychology*, 56, 2, pp. 95-105.
- Weiss, H. M., 2002, "Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences", *Human Resource Management Review*, 12, pp. 173-194.
- Wixom, B. H. and Watson, H. J., 2001, "An empirical investigation of the factors affecting data warehousing", *MIS Quarterly*, 25, 1, pp. 17-41.
- Zamora, J. F. and Madariaga, J. G., 2017; "Does opinion leadership influence service evaluation and loyalty intentions? Evidence from an arts services provider", *Journal of Retailing and Consumer Services*, 39, pp. 114-122.
- Zavlanos, M., 2002, *Organizational Behavior*, Stamoulis Publications, Athens.
- Zeygaridis, S. and Stamatiadis, G., 1997, *Personnel Management and Supervision*, Interbooks Publishing, Athens.