

# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

## What Is the Mediating Role of Job Burnout in the Relationship between Emotional Intelligence and Job Performance in the Healthcare Sector?

**Efstathios Bakertzis**

Ph.D. Student, Department of Business Administration, University of Patras, Greece

**Dr. Barbara Myloni**

Assistant Professor, Department of Business Administration, University of Patras, Greece

### **Abstract:**

*Background-Aim:* The current financial situation in Greece has affected among others and the Public National Health System in various ways. The most important asset of healthcare organizations, employees have been experienced difficult working conditions. This paper sheds new light on the role that Job Burnout has on the relationship between Emotional Intelligence and Job Performance on Hospitals in Greece.

*Methods - Results:* A 54 item structured Likert 5- point scale questionnaire, conducted from 10/08/2017 to 20/10/2017, which consisted of Job Burnout, Emotional Intelligence and Job Performance, was carried out to investigate the relations between these variables. Questionnaires were distributed to 330 healthcare employees in the public hospitals in Greece, (doctors, nurses and administrative) and 269 were analyzed to measure each employee's level of Job Burnout, Emotional Intelligence and their effect to Job Performance, using Structural equation model (SEM). Our results suggest that Emotional Intelligence (0.681) and Job Burnout (-0.134) significantly affect Job Performance at 0.01 level. What's more, Emotional Intelligence (-0.386) significantly affects employees' Job Burnout level (0.001 level).

*Conclusion:* This study contributes to a deeper understanding of the importance that Job Burnout has on both Job Performance and Emotional Intelligence levels.

**Keywords:** Job performance, job burnout, emotional intelligence, healthcare, management

### **1. Introduction**

Due to the sustained economic recession, Greek hospitals in the public sector face substantial socio-economic issues. There have been taken drastic measurements to reduce the public healthcare costs, such as the reduction of the healthcare employees' salaries, cuts in public healthcare facilities and equipment, non-replacement of the retiring personnel and non-additional hiring. Additionally, the huge unemployment rate in Greece that is the highest among the Euro-zone countries, the increase of the poverty levels, the reduction in the employees' salaries from all working fields, and the increase in tax payments, emerge the demand for public healthcare treatment. Furthermore, the continuously increasing numbers of refugees and migrants, and the escape of qualified human resources abroad, burden the already negative situation. Combined all the above information it is evident that the public health sector face multiplied issues that are unable to meet some of its needs. The working conditions in the public healthcare sector become more and more demanding. The increase in public healthcare demand led to more workload for the already reduced personnel of Greek hospitals. Health care employees are more exposed to harmful trends such as Job Burnout, since there is constant interpersonal interaction with patients. Hospitals should implement specific organizational practices to improve their personnel's work attitudes so that they provide better customer services and quality products. The effective management of patients' emotions is significantly valued by the healthcare staff. Therefore, in healthcare, scholars have argued that Emotional Intelligence is considered as the primary factor accounting for high job performance of healthcare personnel.

The variable Emotional Intelligence is argued as the ability to effectively value own and others' feelings understand the meaning of them and regulate them towards a specific target. This new concept changed the way of dealing with emotions and social skills, and the positive results that come out in the workplace as well as in personal life. It is assumed that when people can identify, understand, express and manage their own feelings, they are also capable of modifying their own behavior as much as others'. Previous studies have shown the compelling positive relationship between Emotional Intelligence and Job performance and the success at work is associated with various emotional intelligence dimensions, which is empathy, optimism and conflict resolution (Zeidner et al., 2004). On the other hand, Job Burnout is a negative work attitude. Burnout derives from the accumulation of long-term stress and pressure. Researchers Shukla A. and T. Trivedi (2008) argue that burnout syndrome could quickly lead to alcoholism, abuse of harmful substances and in counterproductive behaviors such as anger, depression. Burnout negatively affects the physical and mental health of employees and their job performance (dissatisfaction, absenteeism, and effectiveness), due to emotional exhaustion, depersonalization or cynicism and sense of inefficiency - lack of personal achievements (K. Kounenou et al.,

2010). Thus, Job Burnout is negatively correlated with Job performance. Job performance is a set of behaviors that employees contribute either positively or negatively to the organizations' goals accomplishment. It shows how efficient is an employee in his work, the degree of responsibility he takes, the ability to handle emergency and unpredictable events, inducing creative solutions and his social relationships. Job performance is a hard-measurable term. We support that includes several behavioral dimensions. Whereas these dimensions may generalize across jobs, the accurate indicators can differ between job positions. Campbell (1998) defined job performance as the positive or negative behaviors or actions that affect significantly the organizational goals' attainment.

In nursing literature, Van Rooy et al. (2004) support that emotional intelligence is a requirement for the efficient healthcare services in Hospitals, where intense interactions take place between patients and healthcare staff. The effective emotional management of others and self could be a defining factor for the improvement of the quality of healthcare services provided to patients. In the Healthcare sector Job Burnout is a common phenomenon, since there is an intense interpersonal interaction with negative oriented people (patients), the time pressure and the high level of responsibility that employees have towards patients. Prior studies show the high levels of Job burnout the employees face in the Healthcare Institutes (Cartwright et al. 2002, Hakanen & Schaufeli, 2012) that may lead to reduced quality of healthcare services, which affects patient satisfaction, resulting in poor hospital image. Particularly in the healthcare sector in Greece, where there is a lack of funding, intense interaction with patients frequently occur, coupled with the lack of employee training and organizational resources, it leads to increase and maintenance of stress with multiple consequences for employees, physically and mentally.

This research is significant, because the work environment in Hospitals in Greece has become extremely volatile and confronts the various socio-economic changes, the high workload and the reduced organizational support (lack of personnel and materials). Therefore, by broadening our knowledge to the importance of Emotional Intelligence and Job Burnout on the employees' Job Performance, in the Health sector in Greece, we could add important scientific data to the factors that influence the function of a public hospital in Greece. Also, we try to investigate the level of Emotional Intelligence's effect towards Job Burnout.

### 1.1. Hypotheses

- Hypothesis 1: Emotional Intelligence influences positively employees' Job Performance
- Hypothesis 2: Job Burnout influences negatively Job Performance
- Hypothesis 3: Emotional Intelligence affects the level of employees' Job Burnout
- Hypothesis 4: Job Burnout is a mediator between Emotional Intelligence and Job Performance.

## 2. Methodology and Materials

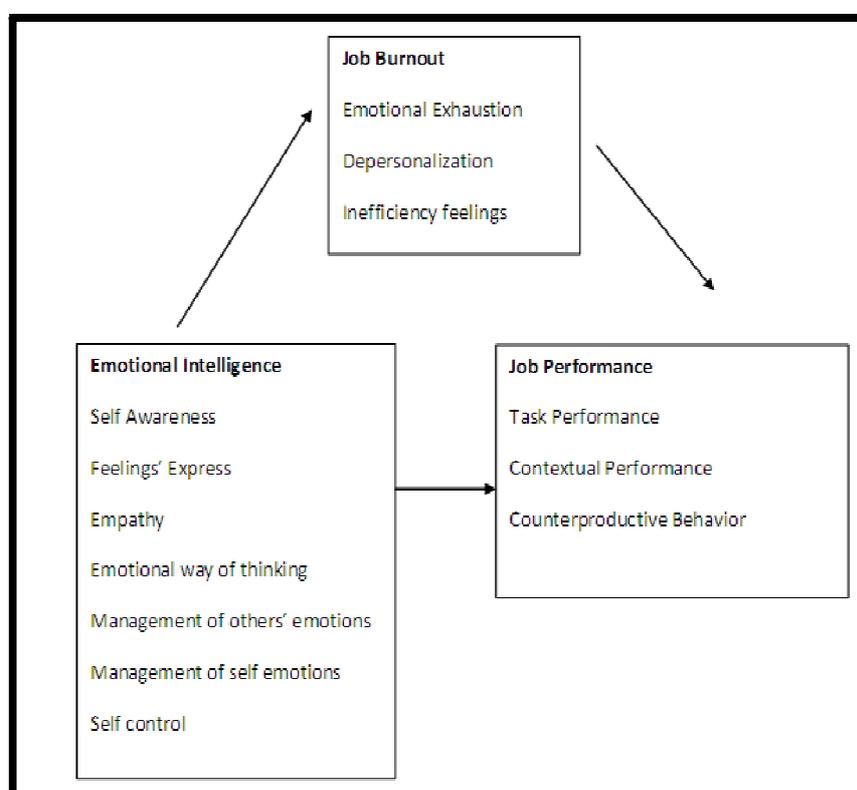


Figure 1: Research Model

## 2.1. Study Procedure

The survey was conducted from 10/08/2017 to 20/10/2017, ensuring anonymity of responses. The study was focused on employees working in the Public Healthcare sector in Greece, and included 7 Healthcare Institutions. Consideration was given to the size of the hospital, the area and in the category, it belongs to. Specifically, in the present study, hospitals covering all conditions were selected on the basis of the following criteria: Size. Hospitals of all grades were selected, large, medium sized by number of staff and beds. Area. Hospitals that are located in the central cities of Patras, Pyrgos and Athens were selected. As far as employees' qualifications are concerned, it has been decided to include everyone in this research, such as doctors, nurses, social employees and administrative staff.

### 2.1.1. Sample

A structured questionnaire consisting of three separates was reviewed by experts and no changes were recommended. The response format was a 5-point Likert type scale ranging from 'I strongly disagree' to 'I strongly agree'. A total of 269 hospital employees voluntarily completed a self-assessment 54 item questionnaire that had been distributed to 330 employees. This questionnaire included the factors of Emotional Intelligence, Job Burnout and Job Performance. The response rate was of 82%. Scholars provided a briefing on the research objectives as well as statements reassuring the confidentiality and anonymity of the results. It was given a 15 days period to complete the questionnaires.

## 2.3. Tools

### 2.3.1. Independent Variables

#### 2.3.1.1. Measurement of Emotional Intelligence

Emotional Intelligence was assessed by the self-report questionnaire Genos-EI (Gignac 2010) designed to measure the frequency with which a person displays emotionally intelligent behaviors in their working environment. The short version of Genos-EI consists of 14 items and examines 7 dimensions that are rated on a five-step Likert scale from 'almost never' to 'almost always.'

These dimensions are Emotional awareness, emotions express, emotional thinking, understanding others emotions, management of others emotions, management of self-emotions, self-control.

(I fail to keep calm in difficult situations at work., I am effective helping others feel positive at work.)

## 2.4. Measurement of Job Burnout

We used the Maslach Burnout Inventory (MBI-GS) General Survey, to measure the Burnout syndrome. The internal reliability of this tool is 0.90 for emotional exhaustion, 0.76 Depersonalization, and 0.76 for Personal accomplishment (Maslach et al., 1996). The questionnaire consists of 22 self-assessment statements, 9 for emotional exhaustion, 5 for depersonalization and 8 for inefficacy.

Emotional exhaustion means that people feel emotionally and physically exhausted and cannot offer anything to others. (I feel emotionally drained by my work.) Depersonalization means, the person presents a negative, cynical attitude towards others. (I feel tired when I get up in the morning & must face another day at work.)

A feeling of inefficacy means that the individual evaluates himself negatively, as he is dissatisfied with the results of his work. (I am easily able to understand what my patients feel.)

Respondents used a five-step Likert scale from 'almost never' to 'almost always' to rate the extent of emotional exhaustion and depersonalization (Maslach et al., 1996)

## 2.5. Dependent Variable

### 2.5.1. Measurement of Job Performance

We examined the level of Job Performance using the Questionnaire (IWPO) 1.0 edition that measures employee behaviors or actions that are relevant to the goals of the organization. It is a reliable tool with a high degree of validity (Koopmans et al 2011), consists of 18 questions, divided into three scales or dimensions of work performance that are grouped as follows:

Task Performance, 8 questions (I had always in my mind the task that I had to complete.) Contextual Performance, 6 questions (My contact with my colleagues helped me to complete my work tasks.) Counterproductive Work Behavior, 4 questions (I was causing problems in my work.)

We reversed the questions of Counterproductive behavior to measure the level of Job performance. The dimensions of the questionnaire have been examined and resulted in a high degree of consistency, task performance  $\alpha = 0.78$ , conceptual performance  $\alpha = 0.85$  and counterproductive behavior  $\alpha = 0.79$  (Koopmans L, et al 2014; Koopmans L, et al, 2011). All dimensions have a 5-point rating scale "rare" to "always" for the task and contextual performance, "never" to "often" for counterproductive work behavior).

Data analysis was carried out for this research was SPSS for the descriptive statistics and AMOS 21 software to analyze every hypothesis through structural equation modeling (SEM). P-values equal or lower than 0.05 were considered statistically significant.

In the current study, we selected the maximum likelihood parameter estimation over other estimation methods (weighted least squares, two-stage least squares, asymptotically distribution-free) because the data were normally distributed. The measurement model had three latent variables Work Engagement, Job Satisfaction and Job Performance. We calculated several indices to evaluate the fit of the model to the data. The overall fit of the model, with acceptable

values, was assessed using the Comparative Fit index (CFI,  $\geq 0.95 \geq 0.90$ ), the root mean square error of approximation (RMSEA,  $\leq 0.05 \leq 0.08$ ), the Normed Fit Index (NFI,  $\geq 0.90 \geq 0.85$ ), the goodness-of-fit index (GFI,  $\geq 0.90 \geq 0.85$ ), The adjusted goodness of fit index (AGFI,  $\geq 0.90 \geq 0.85$ ), root mean square residual (RMR,  $\leq 0.05 \leq 0.08$ ), the Tucker-Lewis Index (TLI,  $\geq 0.90 \geq 0.85$ ) the chi-square fit index divided by degrees of freedom (CMIN/DF, 0-2 to 2-3) Kline (2005).

Throughout the study, the measurement model was found to have a good fit with the following indices:  $\chi^2 / df = 2.0$ ,  $pvalue = .000$ ,  $RMSEA = 0.06$ ,  $RMR = 0.05$ ,  $GFI = 0.90$ ,  $CFI = 0.92$ ,  $NFI = 0.90$ . All the loadings of the indicators to their constructs were significant at 0.01 level suggesting high convergent validity. Reliability analysis was conducted for all the study variables in terms of Cronbach alpha which exceeded 0.7 for all cases. Composite reliabilities were regarded satisfactory for each construct as they were estimated more than 0.75.

### 3. Results

#### 3.1. Descriptive Statistics

The sample was composed of 269 employees working in the public health sector in Greece.

| Gender        | Frequency | %    |
|---------------|-----------|------|
| Men           | 54        | 20.1 |
| Women         | 215       | 79.9 |
| Age           | Frequency | %    |
| 18-30         | 22        | 8.2  |
| 30-40         | 76        | 28.3 |
| 40-50         | 130       | 48.3 |
| 50-60         | 38        | 14.1 |
| 60>           | 3         | 1.1  |
| Family Status | Frequency | %    |
| Married       | 177       | 65.8 |
| Single        | 92        | 34.2 |
| Education     | Frequency | %    |
| High          | 24        | 8.9  |
| Post High     | 47        | 17.5 |
| University    | 198       | 73.6 |
| Experience    | Frequency | %    |
| 1,0-5,0       | 35        | 13   |
| 6,0-10,0      | 54        | 20.1 |
| 11,0-15,0     | 36        | 13.3 |
| 16,0-20,0     | 36        | 13.3 |
| 21,0-25,0     | 61        | 22.7 |
| 26,0-30,0     | 33        | 13.1 |
| 31,0-35,0     | 12        | 4.4  |
| 36,0-40,0     | 2         | 0.8  |

Table 1: Demographics

The Table1 indicates that the sample comprises of 79.9% female and 20.1% male, which is evident that females prefer this job position. Furthermore, most of the employees had University degree 73.6%, a significant portion had post-high school degree 17.5%, and a small part had high school degree 8.9%, which shows that the healthcare employees have great academic skills. Concerning their family status, the majority of the respondents 65.8% were Married, and 34.2% were Single, which is evident that their family is a major factor for continuing this job. Also, most of the participants were classified as relative experienced because the majority of them had 21 to 25 years of experience. Lastly, the majority of the responding population falls within the age bracket of 30 to 50 years (76%) and the percentage in the first category (18-30, 8.2%) explains that there are opportunities for young graduates to be absorbed as members at early stage and grow to maturity.

#### 3.2. Correlation Analysis

We run a correlation analysis to investigate the relationships between Emotional Intelligence, Job Burnout and Job Performance. The relationships between the examined variables and the mean and standard deviation values are shown in

| Variables              | Mean   | SD     | Job Performance | Emotional Intelligence | Job Burnout |
|------------------------|--------|--------|-----------------|------------------------|-------------|
| Job Performance        | 3,5747 | ,47090 | -               |                        |             |
| Emotional Intelligence | 3,7219 | ,45720 | ,382**          | -                      |             |
| Job Burnout            | 2,3138 | ,57860 | -,438**         | -,364**                | -           |

Table 2: Correlations Analysis

\*\* Correlation Is Significant at the 0.01 Level (2-Tailed)

From the results we identify that, general average of Job Performance is calculated as  $X = 3.57$ , general average of Emotional Intelligence is calculated as  $X = 3.72$ , general average of Job Burnout is calculated as  $X = 2.31$ . According to Table 2, there is a significant positive relationship between Emotional Intelligence and Job Performance ( $r = 0.382$ ,  $pvalue=0.001$ ). There is a negative relationship between Emotional Intelligence and Job Burnout ( $r = -0.364$ ,  $pvalue=0.001$ ), and Job Burnout and Job Performance ( $r = -0.438$ ,  $pvalue=0.001$ ).

### 3.3. Mediation Effect

We used the Baron and Kenny (1986) method to analyze the mediation effect. According to them, there are certain conditions that need to be met, so that the mediation effect can be estimated. In the first condition, the independent variable (Emotional Intelligence) should have a significant effect on the dependent variable (Job Performance). Next, in the second condition, the independent variable (Emotional Intelligence) should have a significant effect on the mediator variable (Job Burnout). In the third condition, the mediator (Job Burnout) should have a significant effect on the dependent variable (Job Performance). In the fourth condition, effects of both independent (Emotional Intelligence) and the mediator (Job Burnout) variables on a dependent variable (Job Performance) are calculated. In such case, the mediation effect may be considered only when the effect of the independent variable on the dependent variable becomes meaningless (Full medium) or decreases (partial medium).

### 3.4. Mediation Test with Structural Equation Modeling

According to Baron and Kenny (1986) methods mentioned above, we estimated the overall effect of Emotional Intelligence to Job Performance. Our aim was to find a significant effect between these two variables. From the test we observed that Emotional Intelligence has a significant effect on Job Performance (standardized  $\beta = 0.71$ ,  $pvalue=,000$ ). Thus, our first hypothesis was confirmed.

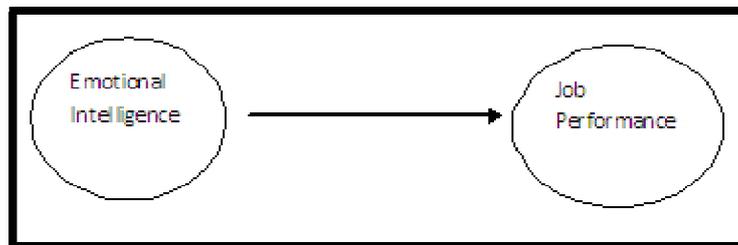


Figure 2: Mediation Tests with Structural Equation Modeling Model 1

The results of SEM analysis show that the goodness of fit indexes of the model is in acceptable limits ( $\chi^2 /df =1.5$ ,  $pvalue=000$ ,  $RMSEA=0.03$ ,  $RMR= 0.02$ ,  $GFI= 0.98$ ,  $CFI= 0.98$ ,  $NFI= 0.93$ ). The standardized beta ( $\beta$ ), standard error and  $pvalue$  of the path from Emotional Intelligence to Job Performance are shown in Table 3.

| Path                                     | Standard Beta | Standard error | p    |
|--|---------------|----------------|------|
| Emotional Intelligence → Job Performance | 0.73          | ,11            | ,000 |

Table 3: Path Coefficients Model1

Next, we run the Model2 according to Baron and Kenny (1986), to examine the relationships between Emotional Intelligence, Job Burnout and Job Performance. In this model Emotional Intelligence is the independent variable, Job Burnout the mediator variable and Job performance the dependent variable. The results of SEM analysis show that the goodness of fit indexes of the model is in acceptable limits ( $\chi^2 /df =1.5$ ,  $pvalue=.000$ ,  $RMSEA=0.04$ ,  $RMR= 0.03$ ,  $GFI= 0.96$ ,  $CFI= 0.96$ ,  $NFI= 0.90$ ).

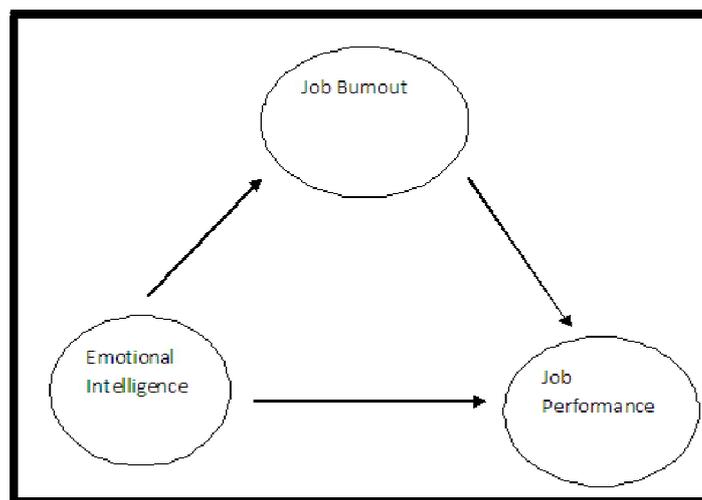


Figure 3: Mediation Tests with Structural Equation Modeling Model1

| Path                                     | Standard Beta | Standard Error | P    |
|--|---------------|----------------|------|
| Emotional Intelligence → Job Performance | 0.60          | 0.11           | ,000 |
| Emotional Intelligence → Job Burnout     | -0.30         | 0.12           | ,007 |
| Job Burnout → Job Performance            | -0.13         | 0.04           | ,007 |

Table 4; Path Coefficients

From the test we observed that Emotional Intelligence has a significant negative effect on Job Burnout (standardized  $\beta = -0.30$ ,  $pvalue=,007$ ). So, the second condition (Baron and Kenny (1986), and our second hypothesis are confirmed. Additionally, we found that Job Burnout has a significant negative effect on Job Performance (standardized  $\beta = -0.13$ ,  $pvalue=,007$ ). So, the third condition is confirmed (Baron and Kenny (1986), and our third hypothesis. Involving the variable of Job Burnout in the model, the effect of Emotional Intelligence (standardized  $\beta = 0.60$ ,  $pvalue=,000$ ) on Job Performance has remained meaningful, but decreased significantly, so that Job Burnout is considered as a partial mediating variable. Therefore, the fourth condition (Baron and Kenny (1986), and our fourth hypothesis have been met. That means that Job Burnout is a significant mediator variable between Emotional Intelligence and Job Performance.

#### 4. Discussion

This specific research attempted to clarify the level and relationship between Job Performance, Emotional Intelligence and Job Burnout in the Public Health sector in Greece. Our findings indicate that employees in the healthcare sector have significant levels of emotional intelligence. We estimated an average of 3.7 to a maximum of 5. In the health sector, the employees' soft and social skills are considered very important for the provision of quality healthcare service, and for the effective management of the negative emotions. Additionally, we found that the examined personnel indicate moderate levels of job burnout, with an average of 2.3 out of a maximum of 5. Job Burnout is characterized by physical and psychological exhaustion with multiple consequences, such as discomfort, lack of sleep and headaches. These consequences cause negative attitudes to work, such as frequent disagreements with colleagues, poor quality of service to patients, and low job performance.

According to the results there is a positive relationship between Emotional Intelligence and Job Performance, and Emotional Intelligence influence significantly positively the level of Job Performance. The results of this study are in high alignment with prior studies which have found that emotional intelligence is the key factor for the employees' creativity, their performance level, regardless the working climate (Castro F. et al (2012). Further to this, it is similar to the argument of Goleman (1998) that the characteristics of emotional intelligence, effective communication emotional and social skills, positively affect on employees' job performance. Moreover, we support the results from a study on nurses in public hospitals (McQueen A. 2003), which suggest that emotional intelligence is crucial in shaping effective human relationships and producing quality healthcare services. Also, it is similar to the study of Wagner et al. (2002), who showed that that the emotional intelligence had an immediate positive relationship with patient satisfaction. Similar results came from the research by Rego et al. (2007), where 120 nurses from seven public hospitals in Portugal took part in the study and confirmed the positive relationship of emotional intelligence and positive attitudes towards patients. According to the results we found negative relationship between Job Burnout and Job Performance, and Job Burnout influences significantly negative the level of Job Performance. Studies show the high levels of Job burnout the employees face in the Health Institute (Cartwright et al. 2002, Hakonen & Schaufeli, 2012). Our results are in line with prior studies which have shown that Burnout on someone's career may include high tendency to resign, frequent absences, and job dissatisfaction (Van Tonder & Williams, 2009). Furthermore, the study confirms that job burnout is responsible for the occurrence of

counterproductive behaviors, such as high levels of absenteeism, increased work accidents and lack of productivity that can lead to a low quality of service (Michie and Williams, 2003). Healthcare employees who show signs of Job burnout are frustrated and dissatisfied with both their work and their personal lives. This leads to absences from work, addiction to alcohol, smoking and coffee, social, family and economic problems, low morale, accidents at work and frequent changes of work (Demerouti et al., 2001, Leiter et al., 2007). Also, job burnout is responsible for the poor quality of healthcare services and the appearance of serious medical errors (Shanafelt et al., 2010).

In the current study we found negative relationship between Job Burnout and Emotional Intelligence, and Emotional Intelligence influence significantly negative the level of Job Burnout. This study confirms prior findings that Emotional Intelligence indeed reduces the levels of Job Burnout, due to his high level of emotional control that prevent the emotional explosions, and his ability to provide creative solutions, and his tendency to positive work behaviors and altruistic actions. Similar results have found that emotional intelligence is an important factor in determining low levels of job stress (Weng et al.2011, Lee H.2017 ). Likewise, according to Gorgens G.& Tamari B.(2012), they investigated the level of emotional intelligence in healthcare professionals (112 among four hospitals) and how it affects the burnout level. They found that the emotional intelligence had a significant negative relationship to job burnout, that is the higher the emotional intelligence, the lower the level of job burnout and stress.

Another result of this study is that Job Burnout does not play a full mediating role in the relationship between Emotional Intelligence and Job Performance in the healthcare sector. Most of the prior studies haven't investigated the mediating role of Burnout. Prior studies have focused mainly to Job Performance level and productivity (Michie and Williams, 2003, Shanafelt et al., 2010). Or they have focused on satisfaction and other consequences of this phenomenon (Van Tonder & Williams, 2009, Demerouti et al., 2001). Therefore, the lack of any studies on the relationship between the two variables is considered as a significant step to add new scientific data. Our findings of the mediation role of Job Burnout conducted to test the relationship between Emotional Intelligence and Job Performance made clear the strong position that Emotional Intelligence has in the public healthcare sector in Greece.

The results of this study suggest that healthcare employees have high emotional abilities and skills, which contributes to the adoption of emotional intelligent behaviors in their workplace, higher communication and creativity and efficient handling with Job Stress and Burnout Syndrome. Emotional intelligence is positively related to Job Performance and negatively related to Job Burnout. We support prior studies that Emotional Intelligence is responsible for the development of positive work behaviors and the provision of quality healthcare service. Emotional intelligent employees are characterized by optimism, efficient emotional management and effective social skills, which allow them to develop positive and efficient relationships with their colleagues and their patients.

## 5. References

- i. Baron R, Kenny D (1986). The moderator mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations. *J. Personality Soc. Psychol.* 51(6):1173-1182.
- ii. Campbell, J. P. (1990). «Modeling the performance prediction problem in industrial and organizational psychology» In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (pp. 687-732). Palo Alto, CA: Consulting Psychologists Press, Inc.;
- iii. Cartwright et al. 2002 Hospice in Assisted Living: Promoting Good Quality Care at the end of Life *Gerontologist*. 2009 Aug; 49(4): 508-516.
- iv. CastroF., J. Gomes, F. C. de Sousa, Do Intelligent Leaders Make a Difference? The Effect of a Leader's Emotional Intelligence on Followers' Creativity, Creativity and Innovation Management, 10 May 2012
- v. Demerouti E., Bakker A.B., Nachreiner F. & Schaufeli W.B. (2000) A model of burnout and life satisfaction among nurses. *Journal of Advanced Nursing* 32, 454-464.
- vi. Demerouti E., Bakker A.B., Janssen P.P.M. & Schaufeli W.B. (2001a) Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work, Environment & Health* 27, 279-286.
- vii. Gignac 2010 EI Training and Sales Performance During a Corporate Merger
- viii. Gignac 2010 The Genos Emotional Intelligence Inventory: A Measure Designed Specifically for Workplace
- ix. Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
- x. Gorgens-Ekermans G., Tamari B. (2012). Emotional Intelligence as a moderator in the stress, burnout relationship. A questionnaire study on nurses. *Journal of Clinical Nursing*.
- xi. Hakonen, J. Bakker, A.B. & Schaufeli, W.B. (2006), "Burnout and work engagement among teachers," *Journal of School Psychology*, 43, 495-513
- xii. Kline RB (2005). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- xiii. Kounenou K., G Koumoundourou, E Makri-Botsari, Greek school career Counselors competencies and burnout syndrome, *Procedia-Social and Behavioral Sciences* 2 (2), 1890-1895, 2010
- xiv. Koopmans L, Bernards CM, Hildebrandt VH, Schaufeli WB, De Vet HCW, Van der Beek AJ. Conceptual frameworks of individual work performance: A systematic review. *Journal of Occupational and Environmental Medicine* 2011;53(8):856-66.
- xv. Leiter M., Maslach Chr. Nurse turnover: the mediating role of burnout, *Journal of Nursing Management*, 20 April 2009
- xvi. Lee H. (2017). How Emotional Intelligence relates to Job Satisfaction and Job Burnout in public service jobs. *International review of Administrative Sciences*.
- xvii. Michie και Williams, 2003 Reducing work-related psychological ill health and sickness absence: a systematic literature review November 2, 2017 - Published by group.bmj.com

- xviii. Maslach, C. Schaufeli, W.B. & Leiter, M.P. (2001), "Job burnout," in Fiske, S.T. Schacter, S.T. & Zahn-Waxler, C. (Eds.), *Annual Review of Psychology*, 52, 397-422
- xix. Maslach, C. Leiter, M.P. & Schaufeli, W.B. (2009) "Measuring burnout," in Cooper, C. L. & Cartwright, S. (Eds.), *The Oxford handbook of organizational well-being*, Oxford: Oxford University Press, 86-108
- xx. McQueen, A. C. H. (2004). Emotional intelligence in nursing work. *Journal of Advanced Nursing*, 47(1): 101-108.
- xxi. Rego et al (2007), *NURSES' EMOTIONAL INTELLIGENCE AND CARING BEHAVIOURS: AN EMPIRICAL STUDY\** Documentos de Trabalho em Gestão Working Papers in Management Área Científica de Gestão G/nº 1/2007
- xxii. Shanafelt TD, Balch CM, Bechamps G, et al. Burnout and medical errors among American surgeons. *Ann Surg*. 2010;251(6):995-1000
- xxiii. Shukla A. and T. Trivedi, "Burnout in Indian Teachers", *Asia Pacific Education Review*, Vol. 9, No.3, pp. 320-334, 2008
- xxiv. Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional intelligence: A Meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, 65,
- xxv. Van Tonder & Williams, 2001, Exploring the origins of burnout among secondary educators *Journal of Human Resource Management*
- xxvi. Weng H. et al (2011). Association between Emotional Intelligence and doctor Burnout, Job Satisfaction and patient Satisfaction. *Medical Education* 835-842.
- xxvii. Wagner J., Christiane Hoppmann, Nilam Ram,4 and Denis Gerstorf (2002), Self-Esteem is Relatively Stable Late in Life: The Role of Resources in the Health, Self-Regulation, and Social Domains *Dev Psychol*. 2015 Jan; 51(1): 136-149.
- xxviii. Zeidner, Matthews and Roberts, 2001, Psychological assessment of emotional intelligence: A review of self-report and performance-based testing. *International Journal of Organizational Assessment*, 11, 2