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## Professional Burnout and Job Satisfaction among Physical Education Teachers in Greece

N. Panagopoulos<sup>1</sup>, S. Anastasiou<sup>2\*</sup> and V. Goloni<sup>3</sup>

<sup>1</sup>2<sup>nd</sup> Primary School Lechenon, Patra, Greece.

<sup>2</sup>Technological Educational Institute of Central Greece, Thiva, Greece.

<sup>3</sup>Primary School Rioulou, Patra, Greece.

### Authors' contributions

*This work was carried out in collaboration between all authors. All authors read and approved the final manuscript.*

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### ABSTRACT

**Aims:** Nowadays, teachers in Greece are facing rapidly changing working conditions with increased workload and working hours, severe pay cuts and high taxation. The purpose of the present work was to evaluate burnout and job satisfaction among Physical Education teachers in Primary Public schools in Greece.

**Study Design:** A survey of Physical Education teachers (n =132) received a questionnaire and responded to the survey (n =105, 79.5% response).

**Place and Duration of Study:** This work was carried out in the region of West Greece, in Primary Education Schools during the school year 2012-2013.

**Methodology:** A Pearson Correlation (results analysed with SPSS) was used to investigate possible correlations between the examined parameters.

**Results:** The results indicate that teachers exhibited moderate levels of job satisfaction (64.66 ±8.09), high levels of emotional exhaustion (26.14±9.37), low depersonalization (1.69±0.79) and personal accomplishment (38.61±5.36). Job satisfaction was inversely related with burnout (-0.433, P<0.05) but not related with demographic parameters, such as age and gender. On the contrary, gender had a significant effect on the levels of emotional exhaustion (0.225, P=0.021) while family status had a significant effect on the personal accomplishment (0.272, P=0.004). Teachers were mostly satisfied with their working conditions, the work itself, their colleagues and mostly dissatisfied with working hours, salary issues and low prospects of professional development.

\*Corresponding author: E-mail: [anastasiou@yahoo.com](mailto:anastasiou@yahoo.com);

**Conclusion:** It is obvious that cut in salaries, decreased job security and deterioration of the working conditions had an impact on the previously established “heaven” of Public Servants in Greece. This information could be used by School Managers and the Greek Government for initiating correcting actions to reverse the trend exhibited in the present work.

*Keywords: Occupational stress; burnout; job satisfaction; teachers; Greece.*

## 1. INTRODUCTION

Public workers may exhibit a level of job satisfaction which stems from low levels of job stress and the relative secure salary and pay rise [1]. In the last few years unemployment in Greece reached unprecedented levels above 27%, one of the highest rate in the EU. Over the last few years the salaries of public servants were cut by at least 30% and at the same time, Greeks faced rising taxes and cost of living, increased working hours and job insecurity. As a result of the austerity measures and a major reconstruction of the public sector in Greece, teachers had to relocate after school closures, teachers' recruitment ceased, the number of seasonally employed teachers dropped while the size of classrooms rised. Under these conditions, public school teachers' job security may have been reduced.

Nowadays, quality management and service is a challenge modern organizations. To acheive this, organizations should employ strategies that promote healthy work conditions, preventing and protecting their employees from pressing problems like work-related stress [2].

Job satisfaction, stress and burnout are important human resource management aspects that modern organizations are faced with, forming an important aspect of human resources' well-being in all organizations.

Organizations which have goals to achieve, require happy, motivated and satisfied human resources [3,4,5] and is the task of the organizations to analyze the factors that influence their employees' motivation, job satisfaction and work performance [6].

Job satisfaction can be defined as an affective or emotional state response towards various aspects of an individual's work [7]. It may influence various work aspects within an organization such as efficiency, productivity, absenteeism, turnover rates and human resources' well-being [8].

Job stress has been pointed as a significant occupational hazard [9]. It can be described as the experience of negative feelings, such as frustration, worry and anxiety attributed to work related factors [10]. It includes physical, behavioural, emotional and intellectual effects at individual and organizational level. It is an issue of concern for in the present day as the consequences can be large for the employees and the organization. If an organisation's employees are under stress, factors such as productivity, job satisfaction, work performance and staff retention may also suffer, affecting employees' morale and commitment and adding further financial difficulties to organizations. If an organisation's employees are under stress, factors such as productivity, job satisfaction, work performance and staff retention may also suffer [11,12], affecting employees' morale and commitment and adding further financial difficulties to organizations. Causes of work stress include: being unhappy in your job, having a heavy workload, long work hours, poor management, working under dangerous

conditions, insecurity for advancement, fear of termination, etc. One of the psychological results of major stress is job burnout. In the last decade, the issue of *burnout* has also received considerable research attention stressing its negative consequences both at work and the personal - family life of people.

*Burnout* refers to the physical stress and the mental draining of employees' personal and emotional resources in their attempt to keep up with a highly demanding work environment [9]. There are three main components that comprise the burnout syndrome; *emotional exhaustion (EE)*, feelings of cynicism and detachment from the job (*depersonalization - DP*) and a sense of ineffectiveness and *lack of personal (reduced) accomplishment/inefficiency - PA* [13]. The emotional *exhaustion* component refers to feelings of being overextended and psychological fatigue which is characterized by the lack of energy. *Depersonalization* refers to a negative response to various aspects of the job while *inefficiency/reduced efficacy* refers to feelings of incompetence and lack of achievement and work productivity [9]. Burned out employees are characterized by high levels of exhaustion and negative attitudes toward their work and has been associated with absenteeism, work turnover, low morale and low job satisfaction [9,14,15].

Similarly to all workplaces, work motivation and job satisfaction are also important factors for the success of the objectives of the educational establishments internationally [16]. Teacher motivation and job satisfaction are inextricably linked as one influences the other [17]. Teacher job satisfaction has been connected to important human resources management issues such as; teacher attrition rates, satisfaction with school administration, loyalty to the organization, school improvement, productivity and efficiency [18,19].

In addition, *stress* experienced by teachers and the the importance of *burnout* in the educational context is a subject of intense interest in recent years since it may negatively affect the quality of teaching and work performance and influence in turn pupils' achievements [20,21,22]. Research carried out in several countries, indicate that job stress, job satisfaction of teacher may vary according to age, sex, experience, culture, personality, working conditions and school management initiatives [3,4,6,23-27].

Teacher burnout has been described as a syndrome resulting from prolonged teacher stress, characterised by emotional, physical and attitudinal exhaustion [10]. Work conditions like poor career structure and low wages, are among the main factors that contribute to teacher job dissatisfaction and the intention to leave the teaching profession [27]. Teachers who no longer have positive feelings about their students and feel drained are experiencing the second component of teacher burnout, i.e. depersonalisation. Finally, the third aspect of educators' burnout is a feeling of low personal accomplishment from their job, an aspect particularly crucial for teachers [28].

It widely acknowledged that a vital aspect for effective educational systems is the existence of high quality, motivated and satisfied teachers [29]. A number of incentives such as: attractive teacher salaries, the potential for earning additional allowances and good working conditions (like the number of working hours and the number of pupils per class) constitute some of the main reasons that have been accounted for attracting people into the teaching profession [30].

The last years though, almost all European countries applied the same policies in relation to teachers' salaries, mainly a salary freeze or salary cut for public employees due to the effect of the international economic downturn and the pressure on the public finances.

A recent European Commission report has pointed out that the Spanish, Portuguese, Slovenian and Greek teachers have been worst affected by these budget restrictions [31].

More particularly, in Greece the recently introduced legislation initiated a new system for calculating salaries for all public sector employees and the abolishment of the majority of bonuses and leave allowances (Christmas and Easter). As a result, teachers' basic pay in Greece over the last years was cut by 30%.

## 2. METHODS

The present work presents the results of a research carried out on Physical Education teachers in Primary Schools in Patras Municipality, Greece's third largest urban area and the regional capital of Western Greece.

The research aimed at investigating the levels of burnout and job satisfaction of Physical Education teachers.

Their degree of burnout and job satisfaction was measured, its differentiation regarding demographic and personal parameters and factors was investigated as well as the effect of professional satisfaction on professional exhaustion.

Finally, the parameters that satisfy / stress educators at their working environment were defined and their effect on the participants' work performance due to salary reductions was investigated.

The sample of this study comprised of Physical Education teachers from Primary Education state schools in the Municipality of Patras. The sample accounted for the 79,5% of the total number of Primary Physical Education teachers in that region (Total number=132) during the period the study was conducted (Spring 2013).

A total of 132 anonymous printed questionnaires were distributed to the schools and 105 were returned, giving a response rate 79.5%.

The questionnaire of the present study included general questions related to the respondents' demographic and personal factors such as: gender, age, marital status, teaching experience (Table 1).

*The level of burnout* was measured using an modified Greek version of the Maslach Burnout Inventory (MBI) for teachers developed for Greek Teachers of Physical Education as modified and used in previous research works in Greece [32,33]. This survey would therefore produce results which may be compared with previous published research results for Greek teachers. This burnout inventory was used to measure the three components of burnout syndrome: *Emotional exhaustion*, *Depersonalisation*, *Personal accomplishment*.

The respondents identify how often they feel professional burnout at a six-point Likert-type rating scale ranging from "never" to "every day". This scale has been employed in a large number of Greek and international studies that have investigated the professional burnout of different occupations such as: civil servants, doctors and teachers [34]. For both emotional accomplishment and depersonalisation, higher mean scores correspond to higher degrees of burnout. In contrast, lower mean scores for personal accomplishment correspond to higher degrees of burnout [35].

Finally, the issue of Job Satisfaction was measured with the use of the *Job Satisfaction Scale* [20]. The respondents were asked to indicate on a seven - point response scale (from *Extremely Dissatisfied* to *Extremely Satisfied*) the extent to which they are satisfied/dissatisfied with each of the 15 given statements. The *Job Satisfaction Scale* has been used in studies with a wide range of professions such as: employees working in shop floor manufacturing posts, primary healthcare, the service sector, construction work and education [36,37,38].

Data collected were analyzed using the Statistical Package for the Social Sciences (SPSS).

### 3. RESULTS AND DISCUSSION

The demographic data of the participants are presented in Table 1. The sample included 61% male and 39% female teachers, while the majority (74,1%) of the teachers who participated in the research were between 41-50 years of age.

**Table 1. Biographical details of the sample**

Variable		N	%
Gender	Male	64	61
	Female	42	39
	Total	105	100
Age	20-30	1	1
	31-40	25	23,8
	41-50	74	74,1
	Over 50	4	3,8
	Total	105	100
Marital Status	Single	17	16,2
	Married	83	79
	Divorced	5	4,8
	Total	105	100
Level of Education	Undergraduate Degree	99	94,2
	Postgraduate Degree	5	4,8
	Doctoral	1	1
	Total	105	100
Teaching Experience	1-5 years	1	1,0
	6-10	18	17,1
	11-15	47	44,8
	16-20	26	24,8
	Over 21	13	12,4
	Total	105	100,0

The majority of the teachers were dissatisfied with their salary, their prospects for promotion and job security. Teachers appeared mostly satisfied with their freedom to choose a method to work, their immediate supervisor and their colleagues (Table 2).

**Table 2. Level of job satisfaction of secondary school teachers of physical education in Greece**

Satisfaction from	N	Average	SD	Max	Min
1. Work Conditions	105	4.25	1.45	1	7
2. Freedom to choose my own method of working	105	5.48	1.31	2	7
3. Colleagues	105	5.32	1.41	1	7
4. Recognition I get for good work	105	4.54	1.61	1	7
5. Immediate supervisor/boss	105	5.38	1.51	1	7
6. Amount of responsibility I am given	105	4.93	1.41	2	7
7. Salary	105	1.59	0.80	1	5
8. Opportunity to use my abilities	105	4.36	1.57	1	7
9. Industrial Relations: Employees – Senior Management	105	4.46	1.44	1	7
10. Promotion Prospects	105	2.89	1.58	1	7
11. Way the organisation is managed	105	3.84	1.49	1	7
12. Attention paid to suggestions I make	105	4.22	1.72	1	7
13. Work hours	105	4.39	1.51	1	7
14. Amount of variety in my work	105	4.54	1.49	1	7
15. Job Security	105	3.46	1.93	1	7
Total average score of job satisfaction	105	64.66	±8.01	48	79

The answers on the questions for Burnout Indicators (Table 3) revealed that teachers scored high in the questions for *emotional exhaustion* (26.14±9.37), low in *depersonalization* (1.69±0.79) and low for *personal accomplishment* (38.61±5.36). Job satisfaction was inversely related with burnout (-0.433,  $P=0.01$ ) but not related with demographic parameters, such as age and gender. On the contrary, gender had a significant effect on the levels of emotional exhaustion (0.225,  $P=0.021$ ) while family status had a significant effect on the personal accomplishment (0.272,  $P=0.004$ ).

**Table 3. Burnout indicators (average score ± standard deviation) of secondary school teachers of physical education in Greece**

Burnout indicators	Mean score	Cronbach alpha
Level of Emotional Exhaustion	26.14 (±9.37)	0.90
Level of Depersonalisation	1.69 (±0.656)	0.79
Level of Personal Accomplishment (PA)	38.61 (±5.36)	0.71

The statistical analysis of the data (Pearsons Correlation) indicates a significant correlation between job satisfaction and the three dimensions of work burnout (Table 4).

Occupational stress and job satisfaction are affected by several intrinsic and extrinsic factors. In addition to work conditions and organisational factors [39,40], teachers' stress and job satisfaction vary with personality traits, age, gender and work experience [41,42]. This Paper presents the current situation regarding the consequences of salary cuts in Public Sector in Greece with data from Physical Education Teachers. Before the financial crisis,

Physical Education Teachers in Greece exhibited high levels of job satisfaction and low levels of work related stress. After the recently introduced measures regarding job salary cuts and changes in work conditions in Greece, we thought measured the current levels of job satisfaction and stress of Physical Education Teachers in Greece.

**Table 4. Correlations of job satisfaction burnout parameters of physical education teachers in Greece (n=105)**

	1	2	3	4
1. Job satisfaction	1			
2. Emotional Exhaustion	-0.343**	1		
3. Personal Accomplishment	0.279**	-0.303**	1	
4. Depersonalization	- 0.323**	0.619**	-0.379**	1

*Significant correlation is indicated with asterisks, \*\* Correlation is significant (P = .01) Pearson Correlation, 2-tailed)*

The data presented in the present work indicate that the austerity policies had an effect on Physical Education Teachers who now exhibit reduced levels of job satisfaction and increased levels of depersonalisation.

The results indicate that the Physical Education teachers who participated in the study, were mostly satisfied with their working conditions, the work itself and their colleagues and mostly dissatisfied with working hours, salary issues and the low prospects of professional development. Similar results had also been reported in the past, for example the limited prospects for promotion, the central control of any teachers' selection procedure as well as the selection methods used for hiring teachers for administrative positions in public schools in Greece [43].

The recently introduced changes in the working conditions in Greece may have had an impact on some parameters of teachers' job satisfaction and stress. For example, the teachers in our study scored low in terms of their satisfaction regarding job security and salary issues. This contradicts the historically established Public Sector's job security in Greece, including public school teachers [44].

Nowadays, the bankrupted Greek Government is not viewed as a safe employee in Greece, where for decades public servants enjoyed job security but received low salaries compared to other European countries or to the private sector in Greece. In fact, after the recently introduced changes in the Greek Public Schools, teachers have seen schools' closures with the simultaneous increase of the number of students in each class and the rapid reductions in their salaries by more than 30% within the last two years. These changes can lead to increased job stress [45].

The results of our study also indicate some alarming issues for the burnout levels of the teachers who participated in the current work.

In the past, when compared to other European countries, Greek teachers exhibited higher levels of job satisfaction and lower levels of burnout [46,47].

More specifically, Physical Education Teachers, when compared to the general education teachers in Greece, exhibited high levels of job satisfaction and low levels of burnout [48]. There is some evidence to suggest that together with the other Public Sector servants,

Greek teachers are currently insecure for both their job and income. This can be seen by comparing past data with the data presented in the present work and other research papers carried out after the financial crisis in Greece [21,33].

The results of the present work confirm that teachers had high levels of emotional exhaustion, low levels of personal accomplishment and low levels of depersonalization. The degree of teachers' professional exhaustion and satisfaction does not vary significantly with relation to demographic and personal factors. Statistically, gender seemed to have a significant effect on their emotional exhaustion while family status on their personal accomplishment.

In conclusion, both job satisfaction and burnout levels are away from an optimal level regarding Physical Education teachers in Greece. This is an important parameter that requires urgent attention by the Greek government.

Job satisfaction is a significant parameter of work performance. Low levels of job satisfaction may result in reduced efficiency, absenteeism, turnover rates and workers' well-being in general [8]. In schools, job satisfaction when coupled with motivation, can increase the success of the objectives of the educational establishments [16]. Teacher motivation and job satisfaction are inextricably linked as one influence the other [17].

An effective human resources policy would be required to deal with the current trends of dropping levels of job satisfaction and increased levels of burnout in Greek Teachers in Public Schools.

As it has been documented in several sectors of employment and management, a proactive human resources policy would be far more efficient than a reactive response. Teachers can not be blamed for any mismanagement of public funds in Greece. Salary cuts may have a short term benefit for balancing the financial books of a bankrupted state but in the long term this may be a very costly choice.

Teachers are the most significant resource in schools and a vital factor in raising education standards. Improving the efficiency and equity at schools depends to a large extent on ensuring that teachers are highly skilled, motivated and well resourced to perform at their best [29].

Occupational stress can exist in several sectors including the staff at schools, colleges and universities [49,50] and is frequently attributed to a negative workplace environment including workload and inadequate resources [33,50].

In the past, Physical Education teachers exhibited lower levels of job stress compared to teachers of other subjects and this has been partially explained by the reduced contribution of stressors such as students' limited motivation and overcrowded classrooms [33,51].

Proactive Human resource initiatives such as the *ABBA* method (which includes four steps: Assessment of Valid Shareholders; Business brought to the Table; Brainstorming; Action) can be used to manage teachers' stress and lead to teachers' empowerment for handling stressors [52] This *ABBA* method "enables" the worker to go through a potentially stressful job parameter and "carries" the worker to a "safe" working environment enabling further action to improve the implementation of improved Human resources management practices.



#### **4. CONCLUSION**

It is obvious that cut in salaries, decreased job security and deterioration of the working conditions had an impact on the previously established “heaven” of Public Servants in Greece. The results indicate that immediate action is required to avoid further reduction in the job satisfaction and burnout of physical education teachers in Greece. This information could be used by School Managers and the Greek Government for initiating correcting actions to reverse the trend exhibited in the present work.

Effective prevention of job burnout is through a combination of organizational change in supporting a healthier work environment, stress management training and assistance for the employees [53,54].

Job satisfaction may be enhanced with support and rewards to the teachers. In the present work teachers complained about their salaries and workload. Unfortunately, under the current financial problems of Greece teachers are faced with increased workload and severe paycuts. This is the opposite of what is required to reduce teachers' burnout and increase job satisfaction.

#### **COMPETING INTERESTS**

The authors declare that no competing interests exist. The opinions expressed in this article represent those of the authors only.

#### **REFERENCES**

1. Macklin DS, Smith LA, Dollard MF. Public and private sector work stress: Workers compensation, levels of distress and job satisfaction, and the demand-control-support model. *Australian Journal of Psychology*. 2006;58(3):130-143.
2. Grau-Alberola E, Gil-Monte PR, a-Jueas JA, Figueiredo-Ferraz H. Incidence of burnout in Spanish nursing professionals: A longitudinal study. *International Journal Nursing Studies*. 2010;47;1013-1020.
3. Papakostantinou G, Anastasiou S. *Principles of Human Resource Management*. Athens, Gutenberg; 2013 (in Greek).
4. Oshagbemi T. Correlates of pay satisfaction in higher education. *International Journal of educational management*. 2000;14(1):31-39.
5. Bush T, Middlewood D. *Leading and Managing People in Education*. London: Sage; 2006.
6. Anastasiou S, Papakostantinou G. Factors affecting job satisfaction, stress and work performance of Secondary Education teachers in Epirus, NW Greece. *International J of Management in Education*. 2014;8(1):37-53.
7. Ellickson MC, Logsdon K. Determinants of job satisfaction of municipal government employees. *Public Personnel Management*. 2001;31(3):343-358.
8. Maghradi A. Assessing the effect of job satisfaction on managers. *Int Journal of Vaule-Based Management*. 1999;12(1):1-12.
9. Maslach C, Schaufeli WB, Leiter MP. Job Burnout. *Annual Review of Psychology*. 2001;52:397-422.
10. Kyriacou C. Teacher stress: Directions for future research. *Educational Review*. 2001;53:28-35.
11. Tehrani N, Ayling L. *Work-related stress*. London: CIPD Stress at work; 2009.

12. Wheatley T. Taking the strain: A survey of managers and workplace stress. London: Institute of Management; 2000.
13. Motgomery C, Rupp A. A Meta-analysis of exploring the diverse causes and effects of Stress in Teachers. Canadian Journal of Education. 2005;28(3):458-486.
14. Hellesøy O, Grønhaug K, Kvitastein O. Burnout: Conceptual issues and empirical findings from a new research setting. Scandinavian Journal of Management. 2000;16:233-247.
15. Schaufeli W, Leiter M, Maslach S. Burnout: 35 years of research and practice. Career Development International. 2008;14(3):204-220.
16. Saiti A. The Development and Reform of School Administration in Greece. Educational Management Administration and Leadership. 2009;37(3):378-403.
17. Karavas E. How satisfied are Greek EFL Teachers with their work? Investigating the Motivation and Job Satisfaction Levels of Greek EFL Teachers. Porta Linguarum. 2010;14:59-78.
18. Ma X, MacMillan RB. Influences of workplace conditions on teachers' job satisfaction. Journal of Educational Research. 1999;93(1):39-47.
19. Buchmann C, Hannum E. Education and stratification in developing countries: A review of theories and research. Annual Review of Sociology. 2001;27:77-102.
20. Blandford S, Grundy W. Developing a culture for positive behaviour management. Emotional and behave Difficulties. 2000;19(1):21-32.
21. Antoniou A, Ploumpi A, Ntalla M. Occupational Stress and Professional Burnout in Teachers of Primary and Secondary Education: The Role of Coping Strategies. Psychology. 2013;4:349-355.
22. Stewart C. Avoid Teacher Burnout: Ways for Early Childhood Educators to Minimize Job-Related Stress. 2008. Accessed 30.01.2013.  
Available: <http://suite101.com/article/avoid-teacher-burnout-a42564>.
23. Oi-Ling S. Occupational stress among school teachers: A review of research findings relevant to policy formation. Education Journal. 1995;23:105-124.
24. Hudek-Knežević J, Kalebić Maglica B, Krapić N. Personality, organizational stress, and attitudes toward work as prospective predictors of professional burnout in hospital nurses. Croatian Medical Journal. 2011;52:538-549.
25. Tatalović Vorkapić S, Mustapić J. Internal and external factors in professional burnout of substance abuse counsellors in Croatia. Annali dell' Istituto Superiore di Sanita. 2012;48(2):187-195.
26. Tatalović Vorkapić S, Lončarić D. Posreduje li profesionalno sagorijevanje učinke osobina ličnosti na zadovoljstvo životom odgajatelja predškolske djece? Does professional burnout mediate the effects of personality traits on life satisfaction among preschool teachers? Psihologijske Teme. 2013;22(3):431-455.
27. Kyriacou C, Sutcliffe J. Teacher stress and satisfaction. Educational Research. 1979;21(2):89-96.
28. Rentzou K. Prevalence of Burnout Syndrome of Greek Childcare workers and kindergarden Teachers. Education. 2013;3-13.
29. OECD. Teachers Matter Education and Training Policy. Attracting, Developing and Retaining effective teachers. Paris: OECD Publishing; 2005.
30. Eurydice Report. Teachers and school heads Salaries and allowances in europe 2012/2013. Eurydice: Luxembourg; 2013.
31. Murray N. Teachers' pay among the worst hit by cutbacks. IRISH EXAMINER. 2012;1-2.
32. Vasilopoulos S. Work Burnout and its relationship to Primary School Teachers' social stress (in Greek). Hellenic Journal of Psychology. 2012;9:18-44.

33. Tsigilis N, Zournatzi E, Koustelios A. Burnout among Physical Education Teachers in Primary and Secondary Schools. *International Journal of Humanities and Social Science*. 2011;1(7):53-58.
34. Kantas A. The occupational burnout syndrome of teachers and health profession employees". *Psychology (Psichologia in Greek)*. 1996;3(3):1-85.
35. Warr P, Cook J, Wall T. Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*. 1979;52(2):129-148.
36. Sutherland VJ, Cooper CL. Job stress, satisfaction and mental health among general practitioners before and after introduction of new contract. *BMJ*. 1992;304:1545-1548.
37. Epitropaki O, Martin R. From ideal to real: A longitudinal study of the role of implicit leadership theories on leader-member exchanges and employee outcomes. *Journal of Applied Psychology*. 2005;90:659-676.
38. Cooper C, Kelly M. Occupational stress in head teachers: A national UK study. *British Journal of Educational Psychology*. 1993;63:130-143.
39. Cohen A, Schwartz H. An empirical examination among Canadian teachers of determinants of the need for employees' assistance programs. *Psychological Reports*. 2002;90:1221-1238.
40. Buka M, Bilgic R. Public and private schoolteachers' differences in terms of job attitudes in Albania. *International Journal of Psychology*. 2010;45(3):232-239.
41. Demirtaş Z. Teacher's job satisfaction levels. *Social and Behavioral Sciences*. 2010;9:1069-1073.
42. Simic Sasic S, Sorić I. Do personal characteristics of teachers contribute to the type of interaction they have with their students? *Drustvena Istrazivanja*. 2010;19(6):973-994.
43. Anastasiou S, Papakonstantinou G. Elements of gender-related variability in the selection of school advisors in Greece. *Journal of Educational Administration*. 2011;49(3):314-335.
44. Tsigilis N, Zachopoulou E, Grammatikopoulos V. Job satisfaction and burnout among Greek early childhood educators: A comparison between public and private sector employees. *Educational Research and Reviews*. 2006;1:256-261.
45. Kyriacou C. Teacher stress: Directions of future research. *Educational Review*. 2001;53:27-35.
46. Kantas A, Vassilaki E. Burnout in Greek teachers: Main findings and validity of the Maslach Burnout Inventory. *Work and Stress*. 1997;11:94-100.
47. Pomaki G, Anagnostopoulou T. A test and extension of the demand/control/social support model: Prediction of wellness/health outcomes in Greek teachers. *Psychology and Health*. 2003;18(4):537-550.
48. Koustelios A, Theodorakis N, Goulimaris D. Role ambiguity, role conflict and job satisfaction among physical education teachers in Greece. *International Journal of Educational Management*. 2004;18(2):87-92.
49. Nadeem Bhatti, Muhammad Aamir Hashmi, Shoukat Ali Raza, Faiz M. Shaikh. Empirical Analysis of Job Stress on Job Satisfaction among University Teachers in Pakistan. *International Business Research*. 2011;4:3.
50. Agolla JE, Ogori H. An assesment of academic stress among university students: The case of University of Botswana, *Educational Research and Review*. 2009;4(20):63-70.
51. Sujith S, Manoj TI, Ajith Mohan KR. Burnout among Physical Education Teachers working in upper Primary and Secondary Schools of Government and Private sector in Kerala. *J of Physical Education Sports and Management and Yogic Sciences*. 2014;4(1):1-6.

52. Kruger E, Roets HE. Guidelines for the management of job related stress amongst secondary school teachers in the Limpopo Province. *Online J Edu Res.* 2013;2(3):41-49.
53. Maslach C, Leiter MP. *The truth about burnout.* San Francisco: Jossey Bass; 1997.
54. Näring G, Vlerick P, Ven B, Van De. Emotion work and emotional exhaustion in teachers: The job and individual perspective. *Educational Studies.* 2012;38:63-72.

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