



ECONOMIC CRISIS, EMOTIONAL EXHAUSTION, DEPERSONALIZATION AND PERSONAL ACCOMPLISHMENT OF TEACHERS IN GREECE

 Sophia Anastasiou

Faculty of Social Sciences, University of Ioannina, Ioannina, Greece.
Email: anastasiou@yahoo.com



ABSTRACT

Article History

Received: 30 March 2020

Revised: 4 May 2020

Accepted: 2 June 2020

Published: 18 June 2020

Keywords

Economic crisis
Teachers
Human resources
Emotional exhaustion
Depersonalisation.

This study compares the level of teachers' professional burnout before and after the onset of the prolonged economic crisis in Greece. Scores of burnout components (Emotional exhaustion (EE); Depersonalization (DP) and lack of Personal accomplishments (PA) were used to compare the periods before (1995-2005; 2005-2010) and after (2010-2015; 2015-2020) the onset of the current economic crisis in Greece. There were significant differences (ANOVA) among different periods, in the scores of EE ($P=0.006$) and DP ($P<0.001$). Post hoc comparisons using the Tukey HSD test indicated significant differences in the scores for EE before and after the onset of the economic crisis. EE was increased ($P<0.05$) after the onset of the economic crisis. In the same manner, DP increased significantly ($P<0.0001$) in papers published five years after the onset of the economic crisis. The level of PA remained similar during the entire period examined in the present analysis but was consistently well above the norms for this component of burnout compared to other countries. Burnout teachers will have difficulty in coping with changes and innovation, reducing the prospects for them to cope with the new and demanding conditions of their job. This could have a significant effect on teaching effectiveness. This dramatic change in two burnout components of teachers has significant implications for school management. EE is considered as an indication of professional stress and be a precursor of depersonalization which requires monitoring and implementation of possible proactive human resources policies.

Contribution/Originality: This study documents an increased risk of professional burnout of teachers in Greece. A rise in Emotional exhaustion and a reduction in level of Personal accomplishment of teachers can be associated with dramatic changes in working conditions at schools after the onset of a prolonged economic crisis.

1. INTRODUCTION

Today, human resource plays a vital role in organizations. The success of any organization or workplace environment directly depends on Human Resource Management (HRM), (Ganapathy & Ashokkumar, 2017). One of the significant parameters which concerns HRM, is the phenomenon of occupational stress which can gradually be established as a condition of chronic workplace stress and gradually lead to burnout (Puertas-Molero et al., 2018).

Burnout is a condition resulting from *emotional exhaustion*, *depersonalization*, and *reduced personal achievement* (Rautakivi, Siriprasertchok, & Korng, 2019). Several parameters affect *job satisfaction* and *burnout*. *Job burnout* occurs as a result of prolonged exposure of workers to physical and psychological stress, which can progressively lead to physical and psychological exhaustion, depersonalization, and a low sense of professional accomplishment.

Subsequently to the exposure to prolonged physical and psychological stress, employees get into "a professional burnout zone" characterized by a decrease in productivity and a lack of job satisfaction (Anastasiou & Papakonstantinou, 2014; Anastasiou & Garametsi, 2020; Sergiovanni, 1967). Occupational stress is a frequent phenomenon that can lead to burnout irrespective of teachers' income (Anastasiou & Papakonstantinou, 2014; Desouky & Allam, 2017). It can reduce the performance of employees and expose them to the risk of professional burnout (Rasool, Wang, Zhang, & Samma, 2020). It is the length of exposure which determines the magnitude of the problem. The severity of the symptoms of burnout increases with the length of exposure, job demands and the severity of adverse working conditions, which increases the likelihood of occupational stress development (Maslach, 2003; Rasool et al., 2020).

High levels of exhaustion characterize stressed employees and negative attitudes toward their work, absenteeism, reduced productivity, low morale, and low job satisfaction. Long term exposure of workers to physical and psychological stress may result in physical and emotional fatigue.

Symptoms of burnout include frustration, mental fatigue, and lack of motivation to perform simple tasks and socialize (Maslach, 2003; Maslach, Schaufeli, & Leiter, 2001; Rasool et al., 2020).

According to Maslach et al. (2001) burnout syndrome is documented based on its three components:

- 1) Emotional exhaustion (characterised by physical and psychological fatigue).
- 2) Depersonalization (characterised by cynical behaviour and detachment from the job).
- 3) Reduced personal accomplishment (characterised by feeling inefficient/incompetent at work).

The MBI-educators survey is used to investigate the risk for burnout of teachers. This tool has been widely used and validated for using it in several countries including Greece. The "norms" for each county may slightly vary and can be used as a reference for assessing the risk of burnout in teachers.

Table-1. An example of national norms for the scores of Burnout components of the MBI-educators survey.

Country	EE	DP	PA	Reference
US	21.5	11.0	33.54	Maslach et al. (2001)
HK Chinese	22.37	6.36	29.79	Schwarzer, Schmitz, and Tang (2000)
German	19.54	5.71	34.93	

Different studies indicate that in Greece, teachers' burnout has been an issue of concern in the profession over the past years (Kamtsios & Lolis, 2016a; Kamtsios. & Lolis, 2016b; Panagopoulos, Anastasiou, & Goloni, 2014; Stagia & Iordanidis, 2014). As a result of the economic problems in Greek central government, austerity measures resulted in the introduction of changes in the working conditions of public servants in Greece. Changes included a reduction in salaries and the number of teachers working in public schools (OECD, 2016, 2018). These changes may have an impact on teachers' job satisfaction and stress. For example, a combination of austerity measures, taxation, reduction of the gross income, and purchasing power disparity of teachers may create conditions that could lead to an increase in job burnout.

During a prolonged period of the financial crisis in Greece, teachers' gross income and generally public servants' salaries were cut by at least 30% as the country was being faced with rising taxation, increased working hours, and job insecurity (Anastasiou & Anagnostou, 2020; Botou, Mylonakou-Keke, Kalouri, & Tsergas, 2017; Panagopoulos et al., 2014). Therefore, the situation altered the public sector's safe working environment as it was before the economic turmoil in Greece and teachers faced severe pay cuts. Since 2008 and during the long period of the financial crisis, teachers' gross income in Greece has been drastically reduced with wage cuts as they were considered unproductive in comparison with other public servants.

After the onset of the current economic crisis, employees in several organizations of the public sector in Greece, were faced with limited resources and were obliged to work with dramatically reduced wages and lack of resources. For example, in school and hospitals, salaries were cut by 40%, shortages in staff and lack of resources became a

norm. These conditions can result in emotional resource depletion leading to emotional exhaustion. Indeed, this was exhibited in public hospitals in Greece, where medical supply shortages correlated with the level of emotional exhaustion (Rachiotis et al., 2014). There is some evidence that a similar problem may be observed in Greek schools where there are reports of high level of emotional exhaustion of teachers (Anastasiou & Anagnostou, 2020; Botou et al., 2017; Kamtsios & Lolis, 2016a; Kamtsios & Lolis, 2016b; Panagopoulos et al., 2014; Stagia & Iordanidis, 2014) which can be linked to changes in their working conditions occurred during the current economic crisis in this country.

The current economic crisis resulted in major reorganization of the public sector and the introduced changes in the working conditions in may have had an impact on some parameters of teachers' job satisfaction and occupational stress. For example, after the economic crisis and the implementation of austerity policies and the introduction of changes in the Greek Public Schools, teachers experience school 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 (Kamtsios & Lolis, 2016b; Kyriacou, 2001; Stagia & Iordanidis, 2014) and may have changed the status quo of the historically established Public Sector's job security in Greece, including public school teachers (Botou et al., 2017; Tsigilis, Zachopoulou, & Grammatikopoulos, 2006). As discussed above, exposure for a prolonged period to work stress and unfavourable working conditions can subsequently lead to emotional exhaustion (Maslach, 2003; Rasool et al., 2020).

The global financial crisis had a negative impact on growth, employment and income in many countries. Countries in Central and Eastern Europe were particularly affected by the global economic crisis leading to a dramatic reduction in public spending, lowering of salaries, redundancies and public sector employment freezes including education (Filippidis, Anastasiou, & Mavridis, 2014; Skrbinjek, Lesjak, & Šušteršič, 2018).

The financial crisis in several countries disrupted the balance between effort and reward of public servants including teachers and this was also reflected in teachers' salary cuts and increased work load (Perrone, Player, & Youngs, 2019; Stagia & Iordanidis, 2014) which can affect the health and wellbeing of teachers (Solis-Soto, Schön, Parra, & Radon, 2019) and their risk for occupational burnout (Kamtsios & Lolis, 2016b) and affect decision-making processes (Leslie & Canwell, 2010; Niessen, Mäder, Stride, & Jimmieson, 2017).

In times of financial crisis, there are changes in the work environment of educational units that may lead to an increase in teachers' job burnout levels and affect decision-making processes (Leslie & Canwell, 2010; Niessen et al., 2017).

As a result of the economic problems of the Greek central government, austerity measures resulted in the introduction of changes in the working conditions of public servants in Greece. These changes included reduction in the salaries and the number of teachers working in public schools (Anastasiou, Filippidis, & Stergiou, 2015). These changes may have an impact on teachers' job satisfaction and stress. For example, a combination of austerity measures, taxation, reduction the gross income and *purchasing* power parity of teachers may create conditions which could lead to increases job stress (Kyriacou, 2001). During a long period of financial crisis in Greece, teachers' gross income was dramatically reduced experiencing at the same time financial disrespect for their job. In Greece, public servants' salaries were cut by at least 30% with the country being faced with rising taxation, increased working hours and job insecurity (Panagopoulos et al., 2014) altering the public sector's safe work environment as it was prior to the economic turmoil in Greece (Grigoriadis & Klefaras, 2017).

A proactive Human resources policy should include monitoring indicators of professional burnout. Emotional exhaustion is a precursor to depersonalization which subsequently can lead to lack of personal accomplishment (Babakus, Cravens, Johnston, & Moncrief, 1999; Maslach, 2003). As a result of the prolonged economic crisis in Greece, teacher may have experience for over a decade, unfavorable working conditions which can lead to occupational stress and burnout. The hypothesis of the present work is that the chronic effects of economic crisis

may increased the risk of Teachers' to exhibit emotional exhaustion compared to the situation before the onset of the current economic problems in the country.

2. MATERIALS AND METHODS

A systematic literature research was used to validate the hypothesis on the effect of economic crisis on the risk for Professional burnout of Teachers in Greece. The present work analyzed a random sample of research results on teacher's burnout in Greece. Published papers were retrieved from the Google scholar database. Search terms used were: Greece, Teachers and Maslach Burnout Inventory. The first two pages of the Google scholar bibliographical research were used to obtain a random sample of published results from two different periods: 1) 1995 to 2010 and 2) 2010 to 2019. The online research was carried out during the first week of December 2019 and only papers in first two pages of google scholar search engine results were screened and used to select published works which had used the Maslach Burnout Inventory (MBI) and were published between 1995-2020. Studies were selected according to the following predetermined inclusion criteria:

- (i) Results were reported in full-length peer-reviewed sources. Postgraduate research dissertations which had been graded with 80% or above and were published in online Universities Repositories were also included.
- (ii) A randomized selection methodology was used, using only papers listed in the first two pages of the google scholar database research results.
- (iii) The results reported were based on a minimum sample size of $n \geq 50$ teachers.
- (iv) MBI scale was used to report the results.
- (v) The Internal consistency was reported using Cronbach's α coefficient
- (vi) The main text of the research work was published in Greek or in English language.

Maslach Burnout Inventory (MBI) is widely used for estimating the levels of burnout in teachers. It includes 22 questions which estimate the level of three components of burnout: emotional exhaustion; depersonalization and lack of personal accomplishment. The score is calculated according to the responses of participants to each question using a 7-point Likert-scale ranging from 0 (never) to 6 (daily). For each component of burnout, the scores are calculated from the corresponding questions and classified to low, moderate and high level. For example the scores of emotional exhaustion can be classified as above normal when ≥ 21.5 , depersonalization when ≥ 11 , and lack of personal accomplishment when ≤ 33.54 (McLean, Eklund, Kilgus, & Burns, 2019). Three burnout components, *Emotional exhaustion*; *depersonalization* and *Personal accomplishment* were used to compare the period before and after the onset of the current economic crisis in Greece. The data were grouped according to the year of the publication in four datasets with papers published between:

- Period 1995-2005 (Bibou-Nakou, Stogiannidou, & Kiosseoglou, 1999; Kantas & Vassilaki, 1997; Mouzoura, 2005).
- Period 2005-2010 (Antoniou, Polychroni, & Vlachakis, 2006; Kokkinos, 2007; Tsigilis et al., 2006).
- Period 2010-2015 (Anastasiou & Papakonstantinou, 2014; Panagopoulos et al., 2014; Stagia & Iordanidis, 2014).
- Period 2015-2019 (Anastasiou & Anagnostou, 2020; Kamtsios & Lolis, 2016a; Kamtsios & Lolis, 2016b; Kollitiri, 2018; Kopanou, 2019; Panagou, 2017).

The scores of each burnout component, for the different chronic periods, were compared with one way ANOVA and Post Hoc Tukey's multiple comparison tests with a 0.05 significance level.

3. RESULTS

The mean values of the three burnout components assessed with the MBI were plotted against four different periods. The level of Emotional Exhaustion exhibited a historical low score (19.77 ± 0.50) between 1995-2005 and peaked (26.07 ± 4.00) during 2015-2019 Figure 1.

The level of Depersonalization exhibited a historical low score (3.89 ± 1.01) between 2005-2010 and peaked (10.13 ± 1.54) during 2015-2019 [Figure 2](#).

The level of Personal Accomplishment exhibited similar levels and remained above the score of 33 [Figure 3](#) which is classified to high scores of lack of Personal Accomplishment according to the MBI.

Significant differences (one way ANOVA) were observed in two components of Teachers' burnout (Emotional Exhaustion $F(4,13)=4.131$, $P=0.031$ and Depersonalization, $F(4,13)=24.540$, $P<0.0001$) over the four different periods examined in the present analysis. Post Hoc Tukey's multiple comparison tests (with a 0.05 significance level) showed a difference across Emotional Exhaustion between the different periods, with scores of Emotional exhaustion exhibiting significantly higher scores after the onset of the current economic crisis in Greece.

The level of Emotional exhaustion of teachers was significantly lower in papers published between: the periods of 1995-2005 and 2005-2010 compared to the next two periods (2010-2015; 2015-2019).

The level of Depersonalization of teachers was significantly lower in papers published between: the periods of (i) 1995-2005; (ii) 2005-2010 and (ii) 2010-2015 compared to the 2015-20 period.

There was no significant difference in the reported score of Personal accomplishment between the different periods analysed in the present work.

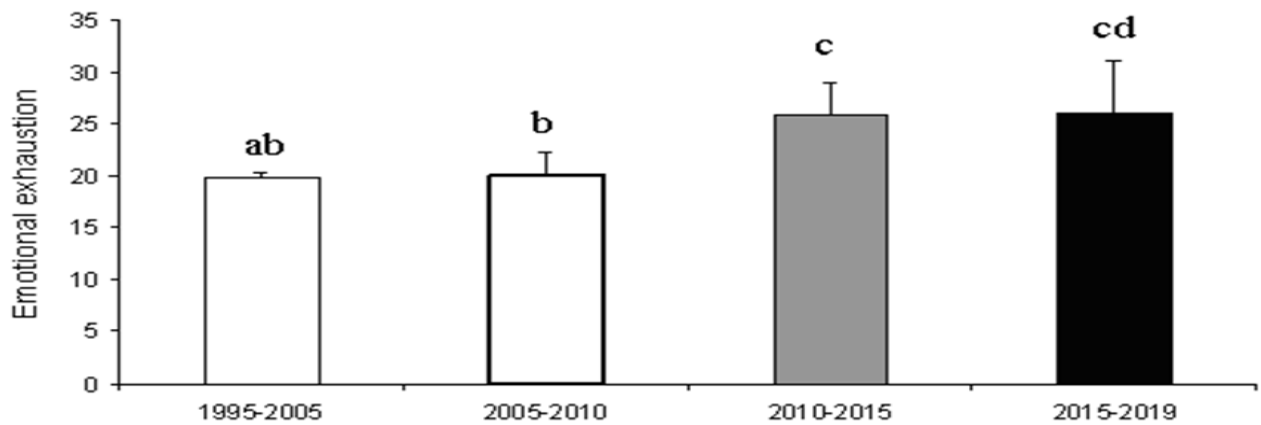


Figure-1. Teachers' emotional exhaustion before (1995-2000 and 2000-2005) and after (2010-2015 and 2015-2019) the onset of the current economic crisis in Greece. Vertical bars indicate the standard error of the mean. Significant different scores are indicated with at least one different letter.

- Period 1995-2005 (Bibou-Nakou et al., 1999; Kantas & Vassilaki, 1997; Mouzoura, 2005).
- Period 2005-2010 (Antoniou et al., 2006; Kokkinos, 2007; Tsigilis et al., 2006).
- Period 2010-2015 (Anastasiou & Papakonstantinou, 2014; Panagopoulos et al., 2014; Stagia & Iordanidis, 2014).
- Period 2015-2019 (Anastasiou & Anagnostou, 2020; Kamtsios & Lolis, 2016a; Kamtsios. & Lolis, 2016b; Kollitiri, 2018; Kopanou, 2019; Panagou, 2017).

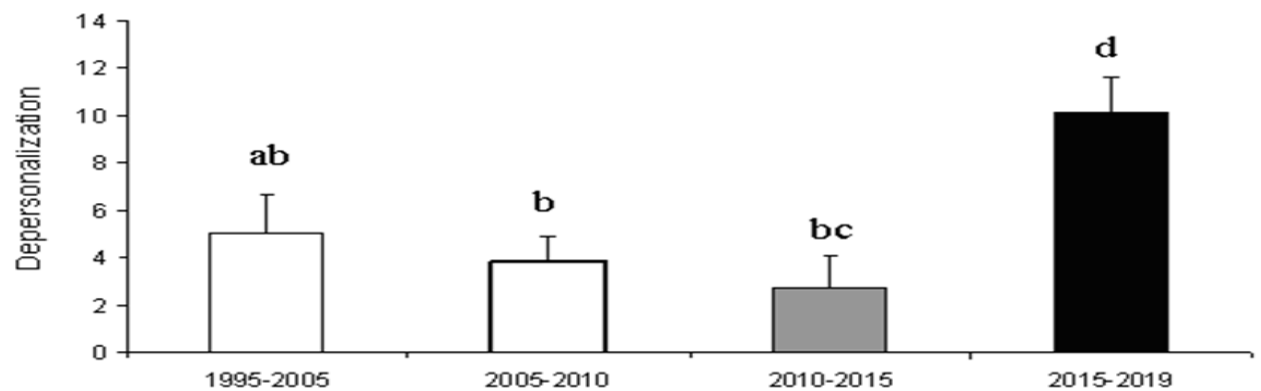


Figure-2. Teachers' Depersonalization before (1995-2000 and 2000-2005) and after (2010-2015 and 2015-2019) the onset of the current economic crisis in Greece. Vertical bars indicate the standard error of the mean. Significant different scores are indicated with at least one different letter.

- Period 1995-2005 (Bibou-Nakou et al., 1999; Kantas & Vassilaki, 1997; Mouzoura, 2005).
- Period 2005-2010 (Antoniou et al., 2006; Kokkinos, 2007; Tsigilis et al., 2006).

- Period 2010–2015 (Anastasiou & Papakonstantinou, 2014; Panagopoulos et al., 2014; Stagia & Iordanidis, 2014).
- Period 2015–2019 (Anastasiou & Anagnostou, 2020; Kamtsios & Lolis, 2016a; Kamtsios. & Lolis, 2016b; Kollitiri, 2018; Kopanou, 2019; Panagou, 2017).

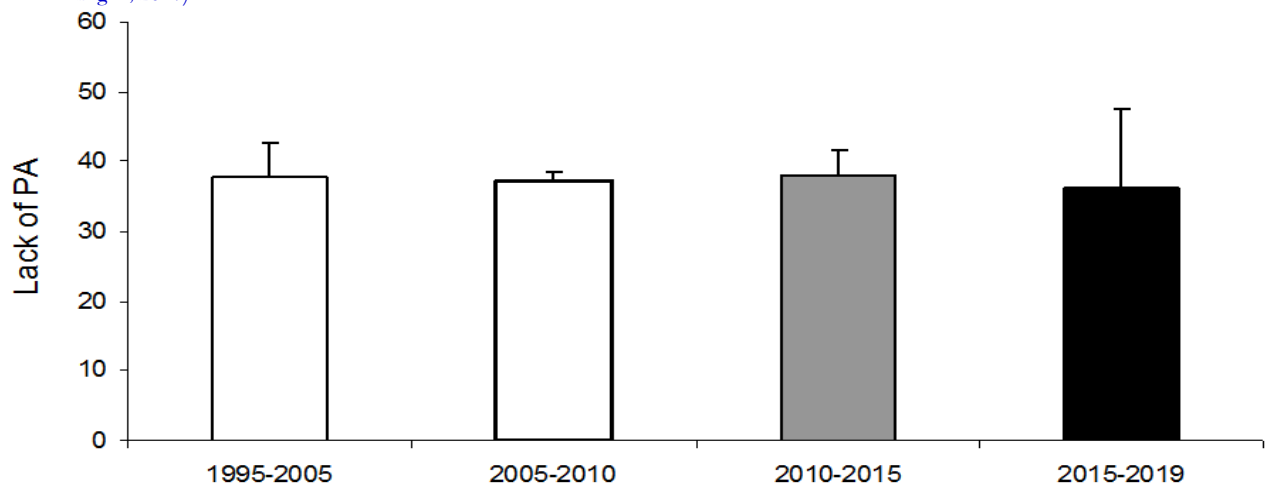


Figure-3. Teachers' lack of personal accomplishment (PA) before (1995–2000 and 2000–2005) and after (2010–2015 and 2015–2019) the onset of the current economic crisis in Greece. Vertical bars indicate the standard error of the mean.

- Period 1995–2005 (Bibou-Nakou et al., 1999; Kantas & Vassilaki, 1997; Mouzoura, 2005).
- Period 2005–2010 (Antoniou et al., 2006; Kokkinos, 2007; Tsigilis et al., 2006).
- Period 2010–2015 (Anastasiou & Papakonstantinou, 2014; Panagopoulos et al., 2014; Stagia & Iordanidis, 2014).
- Period 2015–2019 (Anastasiou & Anagnostou, 2020; Kamtsios & Lolis, 2016a; Kamtsios. & Lolis, 2016b; Kollitiri, 2018; Kopanou, 2019; Panagou, 2017).

4. DISCUSSION

The MBI is widely used to index three complex components of burnout: Emotional exhaustion (EE); Depersonalization (DP) and Reduced personal accomplishments (PA)

After the onset of the current economic crisis in Greece, the scores of EE were significantly increased and reached values which are considered a alarming according to the classification of the MBI scores for this component of burnout. The score of DP increased five year later during the economic crisis, and reached equally alarming levels according to the classification of MBI scores. The rise in the level of EE preceded the rise in DP and this is in accordance with the relevant literature (Goddard, O'brien, & Goddard, 2006). After 2010, teachers exhibited EE scores well above 21.5 which is the norm for this burnout component. The score of DP was 10.13(± 1.54) this score is above the score of 11.0 which is the norm score according to the classification of MBI scores. The score of PA remained unchanged over the period studied in the present analysis but was consistently well above the value of 33.5 which is considered as “norm” according to the classification of MBI scores. The high levels of *emotional exhaustion* exhibited in the teachers who participated in the present work can be a first step prior to *depersonalisation* and reduced *personal accomplishment* (Steinhardt, Smith Jaggars, Faulk, & Gloria, 2011).

The current economic crisis in Greece is characterised by cuts in public spending, including teachers salaries which decline by 36% in nominal terms over the past decade (OECD, 2018). After a long period of salary cuts and underfunding of public schools, teachers no longer have the former historically established confidence of job security they enjoyed before the onset of the deep financial crisis in Greece (Panagopoulos et al., 2014; Tsigilis et al., 2006). The results of the present analysis indicate that after the onset of the Greek economic crisis, significant increased level of Emotional exhaustion is reported. Emotional exhaustion is a significant burnout component and has been frequently used to assess the risk of burnout (Bekker, Croon, & Bressers, 2005; Burke & Greenglass, 1995; Corbin, Alamos, Lowenstein, Downer, & Brown, 2019; Macias-Velasquez, Baez-Lopez, Maldonado-Macias, Limon-Romero, & Tlapa, 2019; Schwarzer et al., 2000). Emotional exhaustion is considered as an indication of professional stress and be a precursor of depersonalisation which requires monitoring and implementation of possible proactive human resources policies (Anastasiou & Garametsi, 2020) which could prevent the development of working conditions which generate such problems. The present analysis indicates a similar pattern. With the onset of

economic crisis, Teachers EE increased to unprecedented levels, this increase in EE was later followed by an increase in the level of DP, confirming that EE can be a precursor to DP.

This dramatic change in teachers' two burnout components has significant implications in school management. Emotional exhaustion is considered as an indication of professional stress and be a precursor of depersonalisation which requires monitoring and implementation of possible proactive human resources policies. The possible link between financial crisis, teachers income and burnout components is supported by evidence in other countries where professional burnout can be indirectly related to the income (Azman, Yusof, Zalina, Clara, & Tan, 2009; Desouky & Allam, 2017) of teachers.

The unprecedented levels of teachers' Emotional exhaustion and Depersonalisation in Greece reported in paper published during the period 2015-2020 are well above the "norm" for the profession in comparison to the historical values in Greece and according to the norms of the MBI Table 1. If it is assumed that working conditions changed dramatically in Greece during the prolonged period of economic crisis (Anastasiou & Garametsi, 2020; Macias-Velasquez et al., 2019) then it is possible to explain the current rise in teachers' Emotional exhaustion in Greece, particularly in public schools where austerity measures had a severe impact (Anastasiou & Garametsi, 2020; Christopoulou & Monastiriotis, 2016; Zahariadis, 2016). During this period, public school teachers are facing unprecedented job stressors such as job insecurity, relocation and salary reductions (Anastasiou & Garametsi, 2020; Botou et al., 2017). It is unfortunate that this problem coincides with a period which creates the opportunity to reorganize Greek educational system and improve its efficiency.

Burnout teachers will have difficulty in coping with changes and innovation, and perhaps will further be exposed to extra work stress, eliminating prospects for them to cope with the new and demanding conditions of their job. This could have a significant effect on their teaching effectiveness. Proactive human resources policies could help teachers cope with the challenging and demanding conditions they experience in their schools. Pay cuts and disruption of the established relationship between effort and reward, may have a negative impact on teachers' commitment and performance (Azman et al., 2009; Solis-Soto et al., 2019) but leadership initiatives (Arokiasamy, Abdullah, Ahmad, & Ismail, 2016; Eriksson, Orvik, Strandmark, Nordsteien, & Torp, 2017) can help in safeguarding teachers' wellbeing and effectiveness.

One of the limitations of the present work was the absence of enough data to investigate the effect of gender, age, work experience and economic hardship on the burnout components investigated in the present systematic literature review. For example, in Greece, male teachers may be considered as *bread winners* and some are now unable to fulfil the financial expectations of their families. Furthermore, compared to older and more experienced teachers who approach retirement age, young teachers may exhibit increased level of emotional exhaustion and they are the ones which face a long teaching career until retirement. Further research is required to investigate a range of demographic and professional parameters which could moderate the effect of changing working conditions on teachers working in Greece.

5. CONCLUSIONS

The data analysed in the present work, indicate that teachers in Greece exhibited gradually rising levels of Emotional Exhaustion and Depersonalization during the current prolonged economic crisis in this country. These two components of professional burnout indicate that teachers are in risk of burnout. This is an alarming issue which requires proactive initiatives to support teachers during the current prolonged economic turmoil.

Funding: This study received no specific financial support.

Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.

REFERENCES

- Anastasiou, S., & Anagnostou, L. (2020). Variability in indices of economic hardship and burnout of primary school teachers in Greece. *IBIMA Business Review*, 2020(2020), 1-11. Available at: [10.5171/2020.303976](https://doi.org/10.5171/2020.303976).
- Anastasiou, S., & Papakonstantinou, G. (2014). Factors affecting job satisfaction, stress and work performance of secondary education teachers in Epirus, NW Greece. *International Journal of Management in Education*, 8(1), 37-53. Available at: <https://doi.org/10.1504/ijmie.2014.058750>.
- Anastasiou, S., & Garametsi, V. (2020). Perceived leadership style and job satisfaction of teachers in public and private schools. *International Journal of Management in Education*, 14(3).
- Anastasiou, S., & Garametsi, V. (2020). Teachers' views on the priorities of effective school management. *Journal of Educational and Social Research*, 10(1), 1-1. Available at: <https://doi.org/10.36941/jesr-2020-0001>.
- Anastasiou, S., Filippidis, K., & Stergiou, K. (2015). Economic recession, austerity and gender inequality at work. Evidence from Greece and other Balkan countries. *Procedia Economics and Finance*, 24, 41-49. Available at: [https://doi.org/10.1016/s2212-5671\(15\)00610-3](https://doi.org/10.1016/s2212-5671(15)00610-3).
- Antoniou, A. S., Polychroni, F., & Vlachakis, A. N. (2006). Gender and age differences in occupational stress and professional burnout between primary and high-school teachers in Greece. *Journal of Managerial Psychology*, 21(7), 682-690. Available at: <https://doi.org/10.1108/02683940610690213>.
- Arokiasamy, A. R. A., Abdullah, A. G. K., Ahmad, M. Z., & Ismail, A. (2016). Transformational leadership of school principals and organizational health of primary school teachers in Malaysia. *Procedia-Social and Behavioral Sciences*, 229, 151-157. Available at: <https://doi.org/10.1016/j.sbspro.2016.07.124>.
- Azman, I., Yusof, I., Zalina, I., Clara, O. G. L., & Tan, C. K. (2009). Relationship between pay level, pay structure and job commitment in Malaysian public community college: The mediation role of distributive justice relationship between pay level, pay structure and job commitment in Malaysian public community college: The mediation role of distributive justice. *South East Asian Journal of Management*, 3(2), 99-111.
- Babakus, E., Cravens, D. W., Johnston, M., & Moncrief, W. C. (1999). The role of emotional exhaustion in sales force attitude and behavior relationships. *Journal of the Academy of Marketing Science*, 27(1), 58-70. Available at: <https://doi.org/10.1177/0092070399271005>.
- Bekker, M. H., Croon, M. A., & Bressers, B. (2005). Childcare involvement, job characteristics, gender and work attitudes as predictors of emotional exhaustion and sickness absence. *Work & Stress*, 19(3), 221-237. Available at: <https://doi.org/10.1080/02678370500286095>.
- Bibou-Nakou, I., Stogiannidou, A., & Kiosseoglou, G. (1999). The relation between teacher burnout and teachers' attributions and practices regarding school behaviour problems. *School Psychology International*, 20(2), 209-217. Available at: <https://doi.org/10.1177/0143034399020002004>.
- Botou, A., Mylonakou-Keke, I., Kalouri, O., & Tsergas, N. (2017). Primary school teachers' resilience during the economic crisis in Greece. *Psychology*, 8(1), 131-159. Available at: <https://doi.org/10.4236/psych.2017.81009>.
- Burke, R. J., & Greenglass, E. (1995). A longitudinal study of psychological burnout in teachers. *Human Relations*, 48(2), 187-202. Available at: <https://doi.org/10.1177/001872679504800205>.
- Christopoulou, R., & Monastiriotis, V. (2016). Public-private wage duality during the Greek crisis. *Oxford Economic Papers*, 68(1), 174-196. Available at: <https://doi.org/10.1093/oep/gpv054>.
- Corbin, C. M., Alamos, P., Lowenstein, A. E., Downer, J. T., & Brown, J. L. (2019). The role of teacher-student relationships in predicting teachers' personal accomplishment and emotional exhaustion. *Journal of School Psychology*, 77, 1-12. Available at: <https://doi.org/10.1016/j.jsp.2019.10.001>.
- Desouky, D., & Allam, H. (2017). Occupational stress, anxiety and depression among Egyptian teachers. *Journal of Epidemiology and Global Health*, 7(3), 191-198. Available at: <https://doi.org/10.1016/j.jegh.2017.06.002>.

- Eriksson, A., Orvik, A., Strandmark, M., Nordsteien, A., & Torp, S. (2017). Management and leadership approaches to health promotion and sustainable workplaces: A scoping review. *Societies*, 7(2), 1-17. Available at: <https://doi.org/10.3390/soc7020014>.
- Filippidis, K., Anastasiou, S., & Mavridis, S. (2014). *Cross country variability in salaries' changes of teachers across Europe during the economic crisis*. Paper presented at the Proceedings of the 5th International Conference on International Business (ICIB), University of Macedonia, Thessaloniki, Greece, 23-25 May 2014.
- Ganapathy, S., & Ashokkumar, M. (2017). A study on organizational factors for successful execution of human resource management (HRM) practices in private hospitals. *International Journal of Engineering, Science and Technology*, 7(1.1), 52-55. Available at: <https://doi.org/10.14419/ijet.v7i1.1.8922>.
- Goddard, R., O'Brien, P., & Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal*, 32(6), 857-874. Available at: <https://doi.org/10.1080/01411920600989511>.
- Grigoriadis, M., & Klefaras, G. (2017). Depressive symptomatology, attachment style, job insecurity and burnout of civil servants in the Greek economic crisis. *The European Journal of Counselling Psychology*, 6(1), 96-112.
- Kamtsios, S., & Lolis, T. (2016a). Do Greek teachers experience professional burnout? The role of demographic characteristics and daily stressful events. *Journal of Research in Education and Training*, 9(1), 40-87.
- Kamtsios, S., & Lolis, T. (2016b). Investigating burnout in Greek teachers: Are there any teachers at risk. *Hellenic Journal of Psychology*, 13(3), 196-216.
- Kantas, A., & Vassilaki, E. (1997). Burnout in Greek teachers: Main findings and validity of the Maslach Burnout Inventory. *Work & Stress*, 11(1), 94-100. Available at: <https://doi.org/10.1080/02678379708256826>.
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77(1), 229-243. Available at: <https://doi.org/10.1348/000709905x90344>.
- Kollitiri, E. (2018). *The effect of leadership style on the burnout of teachers. A case study*. M.A. Dissertation. The Hellenic Open University.
- Kopanou, A. (2019). *Self-efficacy and burnout of primary education teachers*. MA Dissertation, The Hellenic Open University, 2018.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 27-35. Available at: <https://doi.org/10.1080/00131910120033628>.
- Leslie, K., & Canwell, A. (2010). Leadership at all levels: Leading public sector organisations in an age of austerity. *European Management Journal*, 28(4), 297-305. Available at: <https://doi.org/10.1016/j.emj.2010.05.006>.
- Macias-Velasquez, S., Baez-Lopez, Y., Maldonado-Macias, A. A., Limon-Romero, J., & Tlapa, D. (2019). Burnout syndrome in middle and senior management in the industrial manufacturing sector of Mexico. *International Journal of Environmental Research and Public Health*, 16(8), 1467. Available at: <https://doi.org/10.3390/ijerph16081467>.
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science*, 12(5), 189-192. Available at: <https://doi.org/10.1111/1467-8721.01258>.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422.
- McLean, D., Eklund, K., Kilgus, S., & Burns, M. (2019). Influence of teacher burnout and self-efficacy on teacher-related variance in social-emotional and behavioral screening scores. *School Psychology*, 34(5), 503-511. Available at: <https://doi.org/10.1037/spq0000304>.
- Mouzoura, E. (2005). *Sources of teachers' professional emotional burden and coping: Connection of individual and social stressors*. PhD Thesis, Aristotle University of Thessaloniki, Greece.
- Niessen, C., Mäder, I., Stride, C., & Jimmieson, N. L. (2017). Thriving when exhausted: The role of perceived transformational leadership. *Journal of Vocational Behavior*, 103, 41-51. Available at: <https://doi.org/10.1016/j.jvb.2017.07.012>.
- OECD. (2016). *PISA 2015 results. Policies and practices for successful schools* (Vol. 2). Paris: OECD.
- OECD. (2018). *Education for a bright future in Greece*. Paris: OECD.

- Panagopoulos, N., Anastasiou, S., & Goloni, V. (2014). Professional burnout and job satisfaction among physical education teachers in Greece. *Journal of Scientific Research and Reports*, 3(13), 1710-1721. Available at: <https://doi.org/10.9734/jsrr/2014/8981>.
- Panagou, D. (2017). *Occupational stress and professional Burnout of secondary education teachers in Chania*. M.A. Dissertation. The Hellenic Open University.
- Perrone, F., Player, D., & Youngs, P. (2019). Administrative climate, early career teacher burnout, and turnover. *Journal of School Leadership*, 29(3), 191-209. Available at: <https://doi.org/10.1177/1052684619836823>.
- Puertas-Molero, P., Zurita-Ortega, F., Chacón-Cuberos, R., Martínez-Martínez, A., Castro-Sánchez, M., & González-Valero, G. (2018). An explanatory model of emotional intelligence and its association with stress, burnout syndrome, and non-verbal communication in the university teachers. *Journal of Clinical Medicine*, 7(12), 1-12. Available at: <https://doi.org/10.3390/jcm7120524>.
- Rachiotis, G., Kourousis, C., Kamilaraki, M., Symvoulakis, E., Dounias, G., & Hadjichristodoulou, C. (2014). Medical supplies shortages and burnout among greek health care workers during economic crisis: A pilot study. *International Journal of Medical Sciences*, 11(5), 442-447. Available at: <https://doi.org/10.7150/ijms.7933>.
- Rasool, S. F., Wang, M., Zhang, Y., & Samma, M. (2020). Sustainable work performance: The roles of workplace violence and occupational stress. *International Journal of Environmental Research and Public Health*, 17(3), e912-e912. Available at: <https://doi.org/10.3390/ijerph17030912>.
- Rautakivi, T., Siriprasertchok, R., & Korng, V. (2019). Extrinsic work motivation of urban secondary school teachers: A case study of public secondary schools and a model secondary school in Phnom Penh, Cambodia. *International Journal of Management in Education*, 13(2), 156-169. Available at: <https://doi.org/10.1504/ijmie.2019.098189>.
- Schwarzer, R., Schmitz, G. S., & Tang, C. (2000). Teacher burnout in Hong Kong and germany: A cross-cultural validation of the Maslach Burnout inventory. *Anxiety, Stress, and Coping*, 13(3), 309-326. Available at: <https://doi.org/10.1080/10615800008549268>.
- Sergiovanni, T. (1967). Factors which affect satisfaction and dissatisfaction of teachers. *Journal of Educational Administration*, 5(1), 66-82. Available at: <https://doi.org/10.1108/eb009610>.
- Skrbinjek, V., Lesjak, D., & Šušteršič, J. (2018). Impact of the recent economic crisis on tertiary education funding—a comparative study. *International Journal of Innovation and Learning*, 23(2), 123-144. Available at: <https://doi.org/10.1504/ijil.2018.10010234>.
- Solis-Soto, M., Schön, A., Parra, M., & Radon, K. (2019). Associations between effort-reward imbalance and health indicators among school teachers in Chuquisaca, Bolivia: A cross-sectional study. *BMJ Open*, 9(3), e025121-e025121. Available at: <https://doi.org/10.1136/bmjopen-2018-025121>.
- Stagia, D., & Iordanidis, I. (2014). Occupational stress and professional burnout of Greek teachers during a period of economic crisis (in Greek). *Scientific Yearbook of the Pedagogical Department of Kindergarten Teachers of the University of Ioannina*, 7, 56-82. Available at: <https://doi.org/10.12681/jret.855>.
- Steinhardt, M. A., Smith Jaggars, S. E., Faulk, K. E., & Gloria, C. T. (2011). Chronic work stress and depressive symptoms: Assessing the mediating role of teacher burnout. *Stress and Health*, 27(5), 420-429. Available at: <https://doi.org/10.1002/smi.1394>.
- Tsigilis, N., Zachopoulou, E., & Grammatikopoulos, V. (2006). Job satisfaction and burnout among Greek early educators: A comparison between public and private sector employees. *Educational Research and Review*, 1(8), 256-261.
- Zahariadis, N. (2016). Powering over puzzling? Downsizing the public sector during the Greek sovereign debt crisis. *Journal of Comparative Policy Analysis: Research and Practice*, 18(5), 464-478. Available at: <https://doi.org/10.1080/13876988.2013.861971>.

Views and opinions expressed in this article are the views and opinions of the author(s), Humanities and Social Sciences Letters shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.